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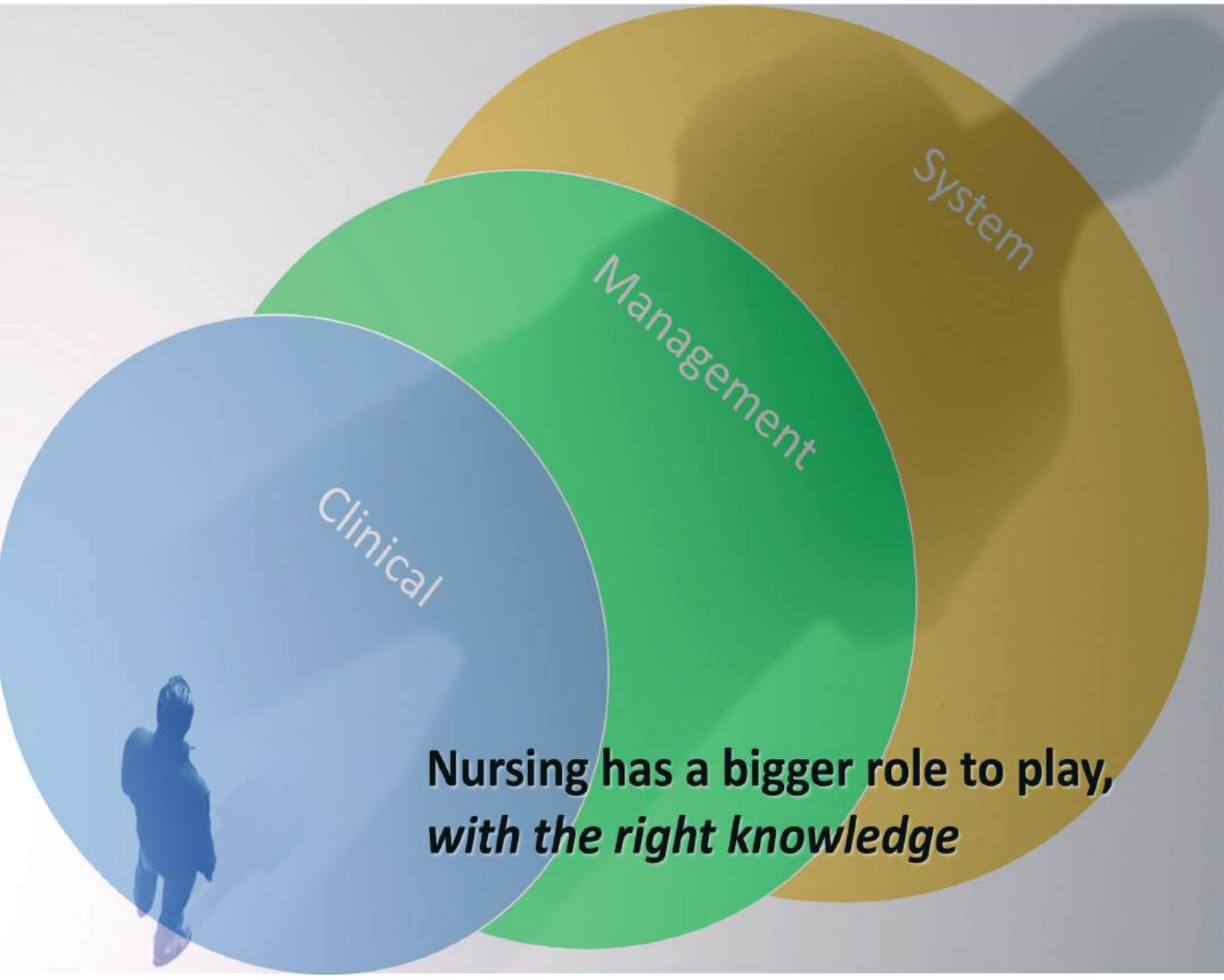

WILEY

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EDITORIAL

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Leadership: Directions for sustaining ethical practice

Internationally, nurses serve a broad spectrum of the community through the provision of healthcare. The nursing profession is generally trusted by this community. Trust is achieved through ethical nursing practice. Recently, in 2021, the ICN published the revised edition of the Code of Ethics for Nurses. The ICN Code of Ethics for Nurses is a 'statement of the ethical values, responsibilities and professional standards of nurses'. It guides nurses to acknowledge the vulnerability of the people that we serve. It emphasizes the fundamental importance of being aware, and appropriately responding to ethical issues and concerns is commensurate with professional practice. Specifically, for nurse leaders and managers, the ICN code advocates that leaders seek to create environments where ethical conduct is sustained. By this, reference is made to leaders being sensitive to others needs, encouraging open dialogue and providing support to their teams (https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web_0.pdf).

Nurses' interest in ethics is many and varied—as evident in this special issue that the *Journal of Nursing Management* has compiled. Historically, nursing ethical discussions have largely focused on ethical dilemmas and the ethical considerations in the forthcoming decisions from these specific dilemmas. Discussions around treatments and the delivery of care in relation to what we 'can' or 'ought' to do are critical as the impact of decisions can be enormous. These are sometimes referred to as 'dramatic ethics'. Increasingly, evident in this current compilation of this JNM volume is that nurses are also especially attentive to ethics in everyday practice. 'Everyday ethics' refers to the values that are embedded in the regular interactions that nurses have with their patients/clients, their families, significant others and other healthcare providers. The papers in this special issue refer to many of these everyday ethical considerations of nurses, such as integrity, empathy, autonomy, dignity, honesty, moral sensitivity and freedom of speech. The extensive exploration and discussion of behaviours that contribute to the maintenance of ideals and standards such as integrity, empathy, autonomy, dignity, honesty and moral sensitivity by nurses indicates the significance and prominence that nurses ascribe to them. These papers are illuminating in their findings and discussions and in many cases will validate to readers the circumstances that they may find themselves.

There is a strong pervading theme in the papers that recognizes that the practice of everyday ethics does not occur in a vacuum. Reference is made to ethical climate, ethical responsibilities and ethical activity that are all influential in shaping how these considerations are given a voice or represented in care provision. Further to this, the focus for JNM is nursing leadership and management; therefore, it is not surprising that a majority of these papers are interested in leadership and the role of leadership in facilitating nurses to enact their desired behaviours commensurate with sound ethical practice. Across the leadership literature, it is well established that leaders hold a position of influence, and accordingly depending on the style of leadership can be persuasive in encouraging nurses to uphold professional values that align with the ethical codes. Within the suite of papers, reference is made to authentic leadership, organizational support, support to leaders, workload management and conflict management and the interplay of these with professional nursing practice. Associated concerns that can concurrently emerge are moral distress, ethical challenges and ethical conflict that are also divulged as intertwined and discussed in detail in the suite of papers. While it is important for leaders to support their teams, the leaders themselves are in need of assistance from their supervisors in relation to ethical issues as there can be many competing demands in relation to healthcare provision. We need to recognize the many layers of leadership and their contribution to promoting ethical practice. Clinical leaders are located in units providing direct patient care, and they are led by middle managers who organize the day-to-day affairs in their respective units; these middle managers are then responsible to supervisors. Continuing support for ethical practice needs to be assisted at all levels so that leaders continue to grow their understanding and contribution of emotional and material support to their teams to sustain ethical practice.

Any collection of papers at this time cannot be published without recognition of the impact of COVID. Given its prominence over the past 3 years, the implications of COVID in ethical practice cannot be ignored. As is evident to the broader society, COVID has created unprecedented challenges, and alongside, these are many ethical issues and concerns. Of significance are mental health challenges, job stress and workload burdens arising from the extraordinary demands that have been placed on nurses over the last 3 years. The confronting situations that nurses have encountered are described at length; yet, what is remarkable is our learning about leadership and the innovations and adaptations that are notable in providing leadership teams with direction in effective management of these strained circumstances to aid prevention of worsening situations in the future.

Awareness and understanding of ethics is pertinent to making sense of the simple actions that constitute so many activities integral to our daily practice. As the values informing our behaviours and actions can be implicit or taken for granted, these considerations are often not accorded the recognition that more visible aspects of care provision are bestowed. Developing ethical awareness is the first step

to assist nurses to understand the potential impact of their behaviours. Awareness, guidance and discussions are critical in advancing the work of nurses as 'moral agents' in care provision. In creating this awareness, it is essential to acknowledge that empowering nurses and advocating for patients can create a form of stress—moral distress. This accentuates the role of leaders who are in positions to create the conditions whereby this distress can be effectively managed. Initiatives leaders adopt should be diverse. Leaders can be critical in ensuring that the patient charter is put into operation, procedural justice is the guiding principle for managing workers, and processes and structures facilitate everyone's voice and collaboration, all of which are fundamental to creating conditions for ensuring practice is ethical. Additional to this, moral courage is paramount in difficult situations, for example, when our nursing voice is often silenced in favour of simpler solutions, that involve less money, time and effort. Scholarship and research in moral courage is further warranted for future publications.

Helena Leino-Kilpi RN, MEd, PhD, Professor[1]
Amanda Henderson RN, MScSoc, PhD, Professor[2,3]

[1]*Department on Nursing Science, University of Turku, Turku, Finland*
[2]*Nursing Practice Development Unit, Princess Alexandra Hospital, Woolloongabba, Australia*
[3]*Central Queensland University, Rockhampton, Australia*

Correspondence
Amanda Henderson, Nursing Practice Development Unit, Princess Alexandra Hospital, Woolloongabba, Australia.
Email: amanda.henderson@health.qld.gov.au

ORCID
Helena Leino-Kilpi https://orcid.org/0000-0003-2477-971X

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ORIGINAL ARTICLE

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The effectiveness of the Ethics Quarter intervention on the ethical activity profile of nurse managers: A randomized controlled trial

Laura Laukkanen RN, MN SC, PhD candidate, Nurse manager[1,2] |
Riitta Suhonen RN, PhD, FEANS, Professor, Director of Nursing[1,2,3] |
Tarja Poikkeus RN, PhD, Director of Nursing[4] |
Eliisa Löyttyniemi MSc Mathematics, Biostatistician[5] |
Helena Leino-Kilpi RN, PhD, FAAN, FEANS, MAE, Professor, Nurse Director[1,2]

[1]Department of Nursing Science, University of Turku, Turku, Finland

[2]Turku University Hospital, Turku, Finland

[3]City of Turku, Welfare Division, Turku, Finland

[4]Emergency Medical Services, Emergency Department and Wards, Hospital District of Northern Savo, Kuopio University Hospital, Kuopio, Finland

[5]Department of Biostatistics, University of Turku, Turku, Finland

Correspondence
Laura Laukkanen, Department of Nursing Science, University of Turku, 20500 Turku, Finland.
Email: lslauk@utu.fi

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Abstract

Aim: To test the effectiveness of a new ethics educational e-learning intervention, Ethics Quarter, in supporting nurse managers' ethical activity profile.

Background: Health care organisations need evidence-based ethics interventions to support nurse managers' ethical activity profile.

Methods: A parallel-group, individually randomized controlled trial was conducted in 2020. Finnish nurse managers nationwide [members of the Union of Health and Social Care Professionals in Finland (Tehy) trade union] were randomly allocated to intervention ($n = 169$) or control group ($n = 172$). The intervention group participated in the Ethics Quarter comprising twelve 15-min evidence-based educational 'quarters' spread over 6 weeks. The control group had standard organisational ethics structures. The primary and secondary outcomes were ethical activity profile and ethics knowledge, respectively. The Consolidated Standards of Reporting Trials (CONSORT) statement for study design and reporting was adopted.

Results: Ethical activity profile showed statistically significant differences in mean changes between the groups from baseline to 10 weeks: all five dimensions were statistically significantly higher in the intervention group compared with the control group ($p = <.0001$).

Conclusion: The Ethics Quarter was effective in increasing nurse managers' ethical activity profile.

Implications for Nursing Management: Applying this ethics educational e-learning intervention would benefit nursing management education and health care organisations.

Trial Registration: clinicaltrials.gov: NCT04234503.

KEYWORDS
education, distance, ethics, internet-based intervention, nurse administrators, nursing

1 | INTRODUCTION

Nurse managers are responsible for the realization of the health care value base and for performing various ethical activities. In this study, these ethical activities, based on previous literature, have been theoretically outlined, and using deductive reasoning, summarized into a new construct defined as the ethical activity profile of nurse managers consisting of five dimensions: (1) developing one's own ethics knowledge, (2) influencing ethical issues, (3) conducting or implementing ethics research, (4) identifying and (5) solving ethical problems (Laukkanen, Leino-Kilpi, & Suhonen, 2016; Laukkanen, Suhonen, & Leino-Kilpi, 2016, Data S1). All dimensions of the profile require different kinds of ethical activities from nurse managers, are equally important, and can be summarized. To have a high ethical activity profile, nurse managers have to perform activities from all dimensions.

Nurse managers themselves have found ethical activities to be central in their work (Kantanen et al., 2017; Makaroff et al., 2014), albeit challenging, and they would like more guidance on how to perform ethical activities (Devik et al., 2020; Schick-Makaroff & Storch, 2019). It is also known that nurse managers lack support on ethics issues from their superiors and organisations (Makaroff et al., 2014), even though the need for ethics support is evident in all health care (Tallis et al., 2015) and organisations play an important role in strengthening nurse managers' ethical sensitivity and decision-making (Roshanzadeh et al., 2020). To support nurse managers to have a high ethical activity profile, there is a globally recognized, urgent need to create and test ethics interventions for the use of health care organisations (Aitamaa et al., 2021; Barkhordari-Sharifabad et al., 2018a; Devik et al., 2020; Markey et al., 2020; Poikkeus et al., 2020; Roshanzadeh et al., 2020). However, it is not known what kind of ethics intervention would be effective in supporting the ethical activity profile of nurse managers.

2 | BACKGROUND

In the current era, ethical activities of nurse managers receive increasing international attention in health care administration (Keselman & Saxe-Braithwaite, 2020; Markey et al., 2020). Nurse managers' ethical activities seem to have a positive impact on health care personnel in terms of higher work engagement (Zappalà & Toscano, 2020) and job satisfaction (Barkhordari-Sharifabad et al., 2018b; Zappalà & Toscano, 2020). Ethical activities of nurse managers also have positive impacts on patient outcomes, bringing higher patient satisfaction (Barkhordari-Sharifabad et al., 2018b; Wong et al., 2013) and quality of care (Barkhordari-Sharifabad et al., 2018b; Shirey, 2005; Zaghini et al., 2020). Ethical activities of managers also benefit organisational performance in terms of overall organisational success (Shirey, 2005). However, based on earlier studies, the ethical activity profile of nurse managers is partly low. Only a limited number of managers develop their own ethics knowledge (Aitamaa et al., 2021: Laukkanen, Leino-Kilpi, & Suhonen, 2016), influence ethical issues or conduct or implement ethics research (Laukkanen, Leino-Kilpi, & Suhonen, 2016). Nevertheless, nurse managers identify many work-related ethical problems (Aitamaa et al., 2021) and engage in a variety of activities to solve these problems (Aitamaa et al., 2019; Laukkanen, Suhonen, & Leino-Kilpi, 2016). Thus, we can assume nurse managers to be sensitive to ethics issues, and offering them support should strengthen their ethical activity profiles in the future.

There are few earlier ethics intervention studies (Stolt et al., 2018) searching for ways to support nurse managers in the field of health care and nursing ethics (Eide et al., 2016; Storch et al., 2013), and almost nothing involving online courses or e-learning. Recently, however, there have been some promising results concerning the possibilities of these interventions, also involving ethics (Edmonson, 2015; Eide et al., 2016; Jeon et al., 2018). In this study, we aim to strengthen the ethics intervention area. A new ethics educational e-learning intervention, the Ethics Quarter, developed by researchers for research purposes at the University of Turku to support the ethical activity profile of nurse managers, was tested for the first time in this study in clinical environment using a randomized controlled trial. The detailed research questions and hypothesis of this study were as follows: Is the Ethics Quarter effective in increasing (1) the development of nurse managers' own ethics knowledge, (2) nurse managers' influence on ethical issues, (3) the conduct or implementation of ethics research by nurse managers, (4) the identification of ethical problems by nurse managers and (5) nurse managers' ability to solve ethical problems. It is hypothesized that participating in the Ethics Quarter intervention supports nurse managers' ethical activity profile (in all five dimensions) compared with control group.

3 | METHODS

3.1 | Design

The study design involved a parallel-group, individually randomized controlled trial with two arms: intervention group (for the Ethics Quarter) and control group (with a standard organisational ethics structure, meaning that the participants' organisation may have had clinical ethics committees such as ethical advisory committees and other working groups discussing ethical issues, excluding research ethics committees), with baseline (=M0, before intervention), post intervention (=M1, after the intervention, Week 6) and follow-up (M = 2, 4 weeks after the intervention) measurements.

Based on a statistical power analysis, it was estimated that a sample size of 87 nurse managers per group ($n = 174$ in total) would be needed to provide the study with 80% power at a significance level of 0.05 (two-tailed, SD 0.7). Managers were randomly allocated to intervention or control group after baseline measurement, with the support of a randomization table drawn up by a statistician. Randomization was performed using random permuted blocks, with a block size of 8, using the SAS System for Windows (Version 9.4). The results of the randomization were imported into the Research Electronic Data Capture (REDCap) software platform (Harris et al., 2019) where randomization for each subject was executed by a researcher. Major imbalances between the groups were prevented in the design stage by using stratified randomization (Lamb & Altman, 2015). Two nurse manager background factors, participating in continuing ethics education and having standard organisational ethics structure (Aitamaa, 2020; Sietsema & Spradley, 1987), were known to correlate with one dimension of the ethical activity profile (identifying ethical problems). Thus, to achieve equal representativeness, participants were stratified into intervention and control groups according to these background factors measured at the baseline.

The inclusion criteria for the participants were that they should (1) be working as nurse managers and (2) have sufficient command of the Finnish language.

The study was registered on the ClinicalTrials.gov website with the identifier: NCT04234503. The Consolidated Standards of Reporting Trials (CONSORT) statement for study design and reporting was adopted (Schulz et al., 2010).

3.2 | Recruitment of the participants

Participants were recruited, with permission from the Union of Health and Social Care Professionals in Finland (Tehy) (https://www.tehy.fi/en), from January to September 2020 in Finland. The Tehy trade union is a national professional interest group for registered nurses, nurse managers and advanced consultants/specialists in the social and health care sector. The recruitment was stopped when there were $n = 341$ participants as the sample size was estimated to be large enough, also considering possible drop-outs. Finally, 211 participants completed the study: 97 participants in the intervention and 114 in the control group (Figure 1). The loss of follow-up in the intervention group was 42.6% ($n = 72$). However, the nurse managers who signed in ($n = 119$) had very strong commitment to the Ethics Quarter, and 80.7% ($n = 96$) completed the intervention. The sample loss in the control group was 33.7% ($n = 58$).

3.3 | Intervention and control groups

The intervention group participants had support provided by their possible standard organisational ethics structures. Furthermore, they participated in the Ethics Quarter intervention consisting of 12 educational quarters in a virtual learning environment. The 'quarters' were evidence-based text slides, including real-life role model experiences on each presented issue. Using role models may be one way to explicitly bring learning about ethical leadership to a wider group of managers in the organisation (Brown & Treviño, 2006). In the intervention, the participants completed two educational quarters (2×15 min), exploring one dimension of the ethical activity profile per week. The structure of the overall intervention was based on the five dimensions of nurse managers' ethical activity profile, also including orientation and summary quarters. After each presented dimension, the participants made self-reflection and development plans (Data S2). The control group did not participate in the Ethics Quarter. They had support provided only by their possible standard organisational ethics structures.

3.4 | Data collection

Nurse managers received the Tehy trade union management information letter with an ad of the study including a short description of the study intervention and a web-link to the website: https://etiikanvartti.fi/?tutkimus. The website contained complete information about the study, and if a manager wanted to take part in the study, s/he gave informed consent, and all filled in all the study measurements. The data were collected and managed using the REDCap tools hosted at the University of Turku (Harris et al., 2019). After randomization, information about the study group and user rights concerning the Ethics Quarter virtual learning environment for the intervention group participants were e-mailed via REDCap.

3.5 | Outcome measures

The primary outcome was nurse managers' ethical activity profile level assessed in two ways:

- The ethical activity profile level was assessed using the Ethical Activity-Instrument (EAI) (developed by LL, RS & HL-K, 2019). Higher scores indicate a higher self-assessed ethical activity profile level.
- Dimensions 1–3 of the ethical activity profile level were assessed using the Developing, Influencing and Implementing Ethics Instrument (DIIEI, developed by LL, RS & HL-K, 2019), dimension 4 was assessed using the Ethical Sensitivity Scale Questionnaire (ESSQ, Tirri & Nokelainen, 2011) and dimension 5 using the Nurses' Moral Courage Scale (NMCS, Numminen et al., 2019). All the instruments were 5-point Likert scales (1 = *totally disagree*; 5 = *totally agree*/1 = *Does not describe me at all*; 5 = *Describes me very well*), with higher scores indicating higher self-assessed ethical activity level.

The secondary outcome was the level of ethics knowledge assessed with the Nursing Management Ethics Knowledge-Test (NMEKT, developed by LL, RS & HL-K, 2019). Higher scores indicate higher level of ethics knowledge. Furthermore, background factors

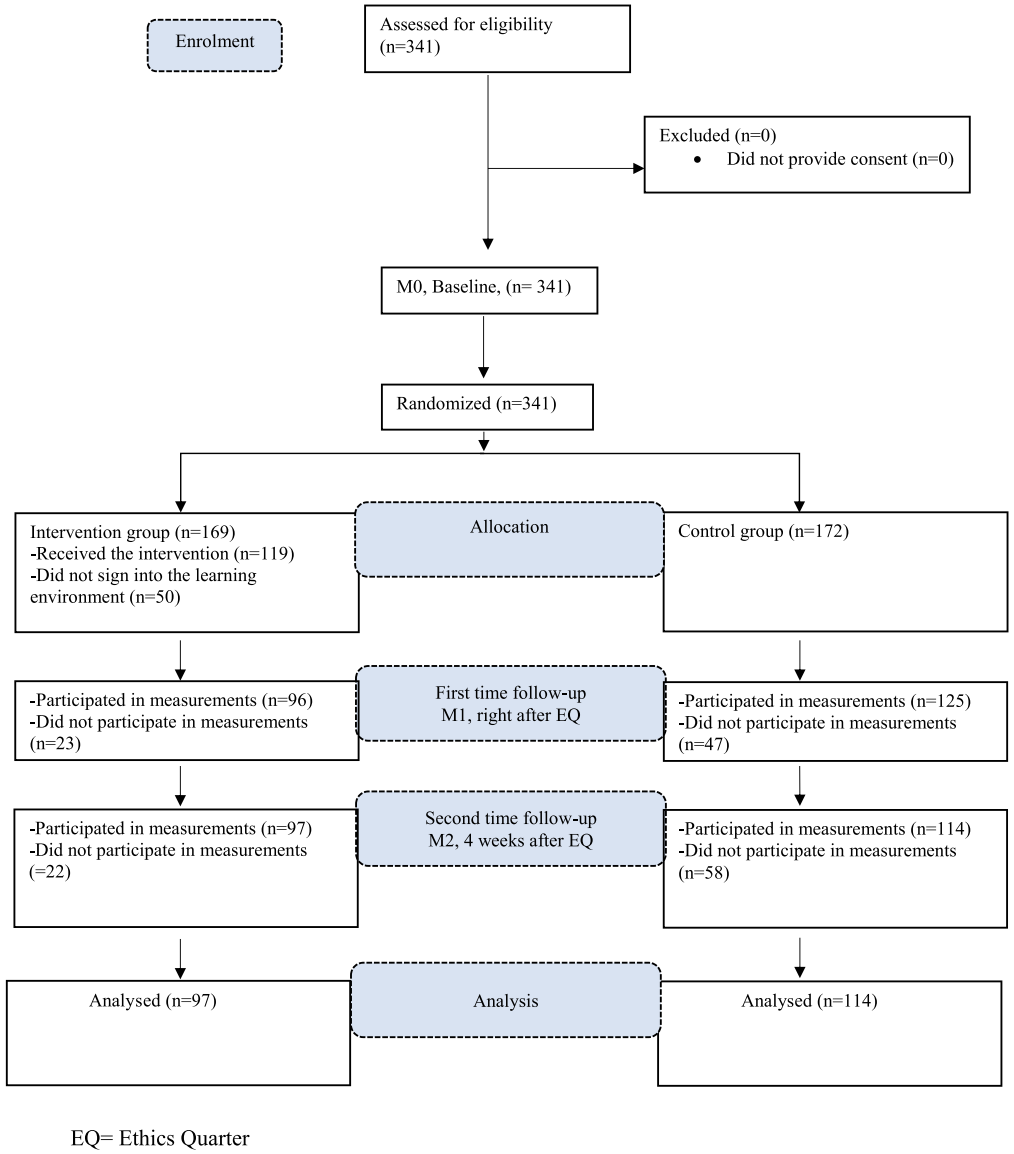

FIGURE 1 Nurse manager participant CONSORT flowchart through the study. EQ, Ethics Quarter

were inquired. The outcomes and psychometric properties of the instruments are reported in Table 1.

3.6 | Data analysis

The data analysis was performed using SAS software, Version 9.4 of the SAS System for Windows (SAS Institute Inc., Cary, NC, USA). A significance level of .05 (two-tailed) was used. Categorical variables were summarized with counts and percentages, whereas continuous variables were summarized with the median and range.

The analysis followed the intention-to-treat principle (as randomized). The baseline demographic characteristics were compared between the intervention group and control group using a chi-square test or Fisher's exact test (if needed) for categorical variables and the Mann–Whitney *U* test for continuous variables if normality assumption was not met.

The total ethical activity profile and dimensions were analysed using a linear mixed model where time was handled as within factor and group as between factor in the statistical model. Additionally, the group-by-time interaction was included in the model to examine whether the mean change over time was different between the intervention groups. A computed symmetry covariance structure was used for repeated measures. The data included some missing values, but they were assumed to be completely random. Model-based means as well as 95% confidence intervals (CI) are shown.

3.7 | Ethical considerations

Responsible Conduct of Research [ALL European Academies (ALLEA), 2017] was followed in all study phases. The study protocol was approved by the Ethics Committee of the University of Turku (Decision number 4/20) and by the (Tehy) trade union 1/2020.

TABLE 1 Outcomes and psychometric properties of instruments

Study outcomes	Measurements	Number of items and scores	Psychometric properties	
			Cronbach's alpha	Validities
Primary outcomes				
The ethical activity profile level	Ethical Activity-Instrument (EAI, LL, RS & HL-K 2019), a visual analogue scale measuring all five dimensions of ethical activity	5 items (score: 0–100), ↑ scores ↑ ethical activity profile	$\alpha = 0.86$	S-CVI clarity 0.92. S-CVI relevance 1.
The ethical activity profile level dimensions 1–3	Developing, Influencing and Implementing Ethics Instrument (DIIEI, LL, RS & HL-K, 2019), a 5-point Likert-scale (1 = *never*; 5 = *very much*)	12 items (4 developing knowledge, 4 influencing ethics issues and 4 implementing ethics research), ↑ scores ↑ ethical activity	$\alpha = 0.88$	S-CVI clarity 0.94. S-CVI relevance 0.99.
The ethical activity profile level dimension 4, ethical sensitivity	Ethical Sensitivity Scale Questionnaire (ESSQ, Tirri & Nokelainen, 2011), a 5-point Likert-scale (1 = *totally disagree*; 5 = *totally agree*)	16 items, ↑ scores ↑ ethical sensitivity	$\alpha = 0.85$	The ESSQ is used earlier with teachers and students, but operates on a general level and can be used in all contexts (Kuusisto et al., 2012).
The ethical activity profile level dimension 5, moral courage	Nurses' Moral Courage Scale (NMCS, ©Numminen et al., 2019), a 5-point Likert-scale (1 = *Does not describe me at all*; 5 = *Describes me very well*)	21 items, ↑ scores ↑ moral courage	$\alpha = 0.93$	The NMCS has been validated with nurses. Nine items were further developed for this study to accurately measure the moral courage of nurse managers. S-CVI clarity 0.98. S-CVI relevance 0.98.
Secondary outcome				
Ethics knowledge level	Nursing Management Ethics Knowledge-Test (NMEKT, LL, RS & HL-K, 2019), a self-reporting instrument to test nurse managers' knowledge of the terms and principles of ethics	10 items, [yes/no, correct responses score 1 point and incorrect responses 0 (zero), summative score range 0–10], ↑ scores ↑ ethics knowledge		S-CVI clarity 0.93. S-CVI relevance 0.99.

The nurse managers received written information about the purpose and practical implementation of the study. The participating nurse managers gave their informed consent.

4 | RESULTS

4.1 | Demographic characteristics of the sample

A total of $n = 341$ participants were included in the study, of whom $n = 169$ were randomly allocated to the intervention group and $n = 172$ to the control group (Figure 1). There were no statistically significant differences (all $p > .005$) in the demographic characteristics between the groups (Table 2).

4.2 | Ethical activity profile

The ethical activity profile showed statistically significant differences in the mean changes between the groups from baseline to 10 weeks. The overall ethical activity profile showed an improvement of 8.12 (95% CI = 6.17–10.06, $p < .001$) measured with the EAI, for dimensions 1–3, there was an improvement of 0.30 (95% CI = 0.22–0.37, $p < .001$) measured with the DIIEI; for dimension 4, an improvement of 0.18 (95% CI = 0.12–0.24, $p < .001$) measured with the ESSQ; and for dimension 5, an improvement of 0.18 (95% CI = 0.11–0.23, $p < .001$) measured with the NMCS in the intervention group, whereas the control group showed no statistically significant changes. The results are shown in Table 3 and Figure 2.

TABLE 2 The demographic characteristics of the nurse managers at the baseline ($N = 335–341$)

Variables	Total, $N = 335–341$ *n* (%)	IG, $N = 142–144$ *n* (%)	CG, $N = 145–147$ *n* (%)	*p* value
Age				.731
Years, median (range)	50 (26–64)	50 (28–64)	49 (26–64)	
<40	63 (18.5)	32 (18.9)	31 (18.1)	
40–49	104 (30.6)	49 (29.0)	55 (32.1)	
50–59	146 (43.0)	72 (42.6)	74 (43.3)	
≥60	27 (7.9)	16 (9.5)	11 (6.4)	
Gender				.593
Female	324 (95.9)	158 (95.2)	166 (96.5)	
Male	14 (4.1)	8 (4.8)	6 (3.5)	
Highest education				.139
Registered nurse's (or corresponding) degree	152 (44.5)	80 (47.3)	72 (41.9)	
Master's degree (university of applied sciences)	99 (29.0)	53 (31.4)	46 (26.7)	
Master's degree (university)	72 (21.1)	27 (16.0)	45 (26.2)	
Licentiate degree/doctoral degree (university)	1 (0.3)	1 (0.6)	0 (0)	
Other	17 (5.0)	8 (4.7)	9 (5.2)	
Employment sector				.791
Public	246 (72.2)	124 (73.4)	122 (70.9)	
Private	90 (26.3)	43 (25.4)	47 (27.3)	
Trust	5 (1.5)	2 (1.2)	3 (1.8)	
Position in organisation				.961
Unit-level management	245 (84.5)	120 (83.9)	125 (85.0)	
Middle management	37 (12.7)	19 (13.3)	18 (12.3)	
Strategic management	8 (2.7)	4 (2.8)	4 (2.7)	
Length of work experience				1.000
Years, median (range)	8 (0–37)	8 (0–37)	8 (0–32)	
<5	105 (31.0)	53 (31.4)	52 (30.6)	
5–10	109 (32.1)	54 (31.9)	55 (32.3)	
>10	1125 (36.9)	62 (36.7)	63 (37.1)	
Number of subordinates				.376
Number, median (range)	26 (0–5000)	28 (0–5000)	25 (0–400)	
<21	120 (35.8)	56 (33.1)	64 (38.6)	
21–50	161 (48.1)	84 (49.7)	77 (46.4)	
51–100	38 (11.3)	18 (10.7)	20 (12.0)	
>100	16 (4.8)	11 (6.5)	5 (3.0)	
Participation in continuing ethical education				.775
Yes	59 (17.3)	28 (16.6)	31 (18.0)	
No	282 (82.7)	141 (83.4)	141 (82)	
Participation in an ethics working group/committee				.853
Yes	32 (9.4)	15 (8.9)	17 (9.9)	
No	307 (90.6)	153 (91.1)	154 (90.1)	
Having an official ethics-related post				.389
Yes	23 (6.8)	9 (5.4)	14 (8.1)	
No	317 (93.2)	159 (94.6)	158 (91.9)	
Participating in an ethics research project				.248

(Continues)

TABLE 2 (Continued)

Variables	Total, $N = 335–341$ *n* (%)	IG, $N = 142–144$ *n* (%)	CG, $N = 145–147$ *n* (%)	*p* value
Yes	3 (1.0)	0 (0)	3 (1.0)	
No	286 (98.9)	142 (49.1)	144 (49.8)	
Participating in an ethics development project				1.000
Yes	10 (3.0)	5 (3.0)	5 (2.9)	
No	328 (97.0)	163 (97.0)	165 (97.1)	
Having an ethics organisational structure				1.000
Yes	91 (26.7)	45 (26.6)	46 (26.7)	
No	250 (73.3)	124 (73.4)	126 (73.3)	

Note: *p* values are calculated between the total IG and CC. Categorical variables tested with Fisher's exact test, continuous with Mann–Whitney *U* test.
Abbreviations: CG, control group; IG, intervention group; SD, standard deviation.

4.3 | Ethics knowledge

The level of ethics knowledge was already high in both groups at baseline. The intervention group baseline mean score according to the NMEKT was 9.30, (95% CI = 9.20–9.41), and the control group baseline mean was 9.34 (95% CI = 9.24–9.44).

5 | DISCUSSION

The Ethics Quarter educational e-learning intervention succeeded in strengthening the participating nurse managers' ethical activity profile in all its dimensions. The 6-week Ethics Quarter was statistically significantly effective in increasing the participating nurse managers' ethical activity profile in terms of developing their own ethics knowledge, influencing ethical issues, conducting or implementing ethics research, and identifying and solving ethical problems. At the beginning of the study, the intervention and control group did not differ in terms of background (Table 2), but both right after the intervention and at the follow-up measurement, the intervention group had a statistically significantly higher ethical activity profile. The increase was valid for all five dimensions of the activity profile.

Our findings show that the Ethics Quarter is an effective intervention for supporting nurse managers in their ethical activities. Even though clinical ethics support (such as clinical ethics committees) has become widespread in Europe (Magelssen et al., 2016) and it is known that clinical ethics committees can establish a supportive network and provide ethical leadership (Ong et al., 2020), it seems that clinical ethics support is not enough for nurse managers regarding their more challenging ethical activities. Moreover, managers have indicated that health care organisations provide suboptimal levels of support (Poikkeus et al., 2020). Additionally, in this study, the organisational ethics structures available to the participants (referring to different kinds of clinical ethics committees) were weak. Most of the participants reported that there were no organisational ethics structures (73%). Thus, organisations globally would benefit from taking the Ethics Quarter into use as an ethics structure for nurse managers: it offers systematic, evidence-based education, as well as guidance on how to carry out ethical activities, and it increases the level of ethics knowledge. Even though the participants scored well in this study on the knowledge level already before the implementation of the intervention and the NMEKT was not able to show increased ethics knowledge in either group, the participants evaluated their ethics knowledge to be increased in the feasibility evaluation of the study. The participants were asked whether the Ethics Quarter learning intervention increased their ethics knowledge, and their views were measured using a 5-point Likert-scale (1 = *totally disagree*; 5 = *totally agree*). They rated the intervention highly, awarding a score of 4.59 (Laukkanen et al., 2021, unpublished results) in answer to this question.

The effectiveness of the Ethics Quarter might result from several advantages. It provided new continuing educational possibilities to the participants. Participation was easy as the participants only needed access to the Internet. The time needed was moderate, and participation was free of charge, and there were no costs for the organisation (despite the nurse managers' participation time). This intervention was tailored for research and clinical support purposes, not for business purposes. The Ethics Quarter consisted of only 12 quarters, each lasting only 15 min. Additionally, the e-learning education was felt to be feasible and usable (Laukkanen et al., 2021, unpublished results) according to the participants. The contents of the Ethics Quarter were evidence-based and written in everyday language using real-life case examples with engaging stories (Brown & Treviño, 2006) in every dimension to highlight the ethical activities of nurse managers. Self-reflection and development plans might also provide participants with an easy opportunity to link their everyday experience to the new ethical theory they have just studied. A multimethod intervention allowing combining theory and practice (Cannaerts et al., 2014) seemed to be an effective way of learning for the participants. To develop the learning outcomes of Ethics Quarter even further, interactivity and feedback could be a promising amendment (Cook et al., 2010).

The findings of this study comply with previous studies, (Barkhordari-Sharifabad et al., 2018a; Devik et al., 2020;

TABLE 3 Main outcomes, improvements in ethical activity profile and dimensions in IG and CG with different instruments

	Intervention group			Control group			Change in outcomes		
Scale and dimension	Baseline, M0, mean, 95% CI, $n = 156–169$	After intervention, M1, mean, 95% CI, $n = 96$	Follow-up, 10 weeks after intervention, M2, mean, 95% CI, $n = 95–97$	Baseline, M0, mean, 95% CI, $n = 157–172$	After intervention, M1, mean, 95% CI, $n = 116–125$	Follow-up, 10 weeks after intervention, M2, mean, 95% CI, $n = 106–114$	Group by time interaction, p	Baseline-after intervention M1, p	Baseline-follow-up 10 weeks after intervention, M2, p
Ethical activity profile level, Ethical Activity-Instrument (EAI)	64.53 62.59–66.47	71.34 69.07–73.61	72.65 70.39–74.91	66.99 65.05–68.93	67.85 65.76–69.95	67.59 65.45–69.73	<.001	<.001	<.001
Developing one's own ethics knowledge, dimension 1	60.79 58.30–63.28	70.31 67.30–73.32	71.36 68.37–74.35	63.84 61.35–66.34	62.83 60.09–65.58	63.79 60.96–66.61	<.001	<.001	<.001
Influencing ethical issues, dimension 2	67.29 64.90–69.67	73.70 70.85–76.55	75.82 72.99–78.66	68.50 66.12–70.88	69.17 66.58–71.76	67.65 64.98–70.32	<.001	.002	<.0001
Conducting or implementing ethics research, dimension 3	52.80 50.01–55.59	59.45 56.05–62.85	60.87 57.47–64.27	56.70 53.86–59.54	58.84 55.76–61.91	57.70 54.50–60.89	.0082	.005	.003
Identifying ethical problems, dimension 4	74.82 72.71–76.93	79.16 76.57–81.75	80.16 77.62–82.75	75.47 73.36–77.57	77.17 74.83–79.50	76.38 73.98–78.79	.038	.130	.012
Solving ethical problems, dimension 5	67.42 65.08–69.75	75.20 72.38–78.01	76.31 73.52–79.10	68.97 66.64–71.30	71.29 68.72–73.85	71.95 69.33–74.57	.001	.003	.001
The ethical activity profile dimensions									
Developing Influencing and Implementing Ethics instrument (DIIEI), dimensions 1–3	3.60 3.52–3.68	3.80 3.71–3.89	3.90 3.80–3.99	3.75 3.67–3.83	3.77 3.69–3.86	3.80 3.71–3.89	<.001	.001	<.001
Ethical Sensitivity Scale Questionnaire (ESSQ), dimension 4	4.17 4.11–4.22	4.29 4.22–4.35	4.35 4.28–4.41	4.17 4.11–4.23	4.14 4.08–4.20	4.19 4.13–4.26	<.001	.003	.001
Nurses' Moral Courage Scale (NMCS), dimension 5	4.36 4.30–4.43	4.50 4.43–4.58	4.54 4.47–4.61	4.40 4.34–4.47	4.39 4.32–4.46	4.46 4.39–4.53	.001	.003	.004

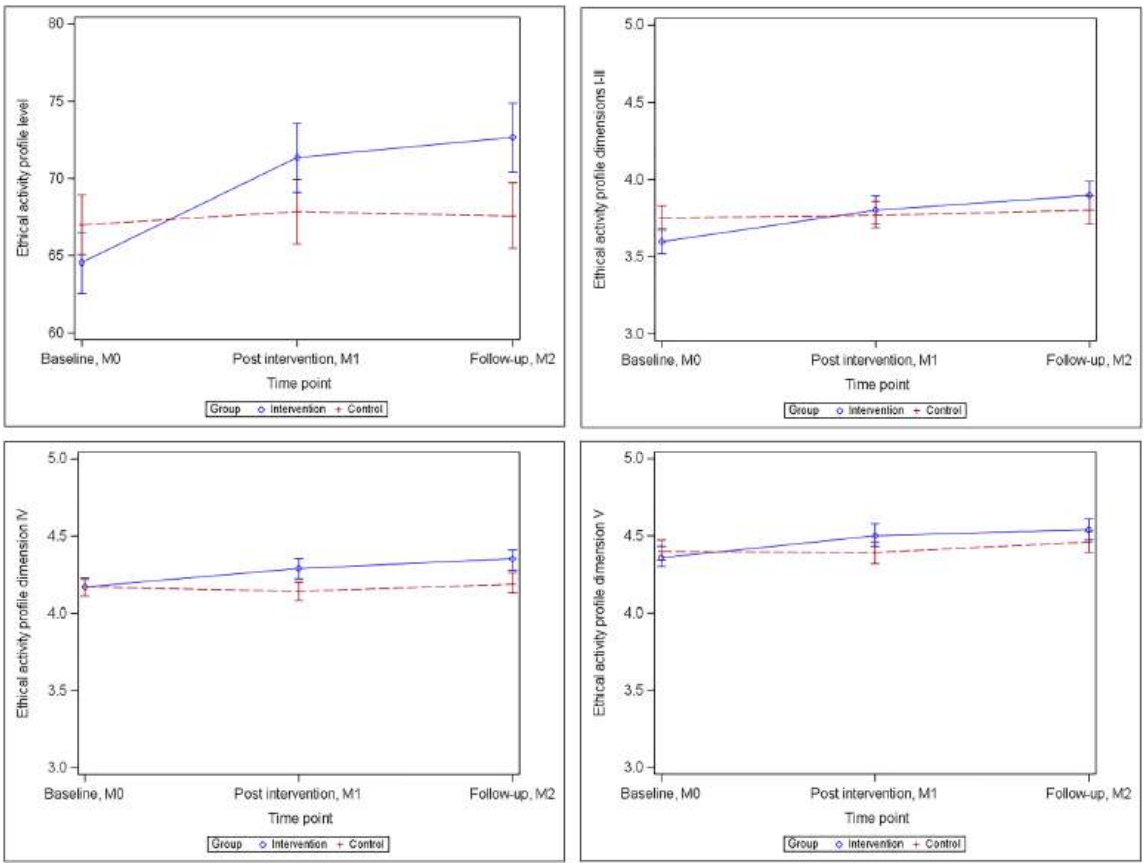

FIGURE 2 Model-based means and 95% confidence intervals (CI) at the baseline, after intervention and at the follow-up

Markey et al., 2020; Poikkeus et al., 2020; Roshanzadeh et al., 2020) and indicate the need for ethics education for nurse managers. Surprisingly, nearly half of the participants (44.6%) in this study had only a registered nurse (or corresponding) degree, in other words, a baccalaureate (bachelor) degree. American Organisation of Nurse Executive (AONE) (2010) suggests that nurse managers should have at least a bachelor's or master's degree. However, earlier studies have concluded that a bachelor's degree is not sufficient for the role of a nurse manager (Shirey et al., 2010) and at least some management training is needed (McCallin & Frankson, 2010; Ramseur et al., 2018). In this study, the participants also had a low level of continuing education in ethics. Only 17% had participated in continuing ethics education, even though 69% had five or more years of work experience. This finding is even lower than in earlier study results; Aitamaa et al. (2021) found that 28% of managers, and Laukkanen, Leino-Kilpi, and Suhonen (2016) found that 48% of nurse managers had participated in continuing ethics education. Based on these background factors, the respondents' development of their own ethics knowledge seemed to be alarmingly low. Nurse managers should develop their ethics competence throughout their careers (Stievano et al., 2012) to be ethically skilled (Eide et al., 2016; Stievano et al., 2012) and to have the most up-to-date knowledge (Ravaghi et al., 2020).

In this study, most of the participants were working in unit-level management, where of all the management levels, nurse managers seem to encounter the most ethical problems (Aitamaa et al., 2021). In unit-level management, managers are responsible for running a unit and have the most direct contacts with patients. Thus, unit-level managers might have more patient-related ethical problems to solve than other management levels (Aitamaa et al., 2016), and acknowledging this, it is essential to support unit-level management. Nevertheless, it must be noticed that the expectations of ethical activities seem to increase with authority and responsibility; for example, the higher one is in the hierarchy, the higher the expected use of moral courage to do the right thing in the organisation (Edmonson, 2015). Thus, it is important to ensure that senior managers in middle and strategic level management are also educated to exhibit high levels of ethical behavior (Schaubroeck et al., 2012). Thus, directing the Ethics Quarter towards upper management and chief nursing first would help to disseminate the effects of the intervention to wider levels within the organisation.

5.1 | Limitations

There is a lack of validated instruments for the measurement of abstract ethics issues in the nursing management context. Thus, we had to develop three new instruments and used only two validated ones. Operationalizing the ethics concept was demanding, and expert

panel expertise was used to strengthen the development. However, the content validity (S-CVI) and furthermore, internal consistency (Cronbach's alpha) of these new instruments were estimated to be good (Table 1). To ensure the construct validity and reliability of the instruments, the data were collected from a large and appropriately representative sample of the target population. However, the instruments used were mostly self-evaluation instruments, and the participants might have wanted to demonstrate a higher ethical activity profile than they actually have. Thus, the study aimed to avoid any possible social desirability response bias by using anonymous participation, as well as mostly forced choice items and computer administration (Randall & Fernandes, 1991). The generalizability of the results for the nurse manager population is reasonable, although it is possible that the data included managers who were already interested in ethics issues while less interested managers did not participate. Furthermore, the COVID-19 pandemic may have increased the need for ethical activities of nurse managers during data collection, and it may also have disrupted existing organisational ethics structures. For unknown reason, 50 participants received the password to the learning area, but never signed in. The COVID-19 pandemic may have had a negative effect on nurse managers' ability to participate. However, those who signed in had a high level of commitment. Participation caused reasonable burden. Future research may consider evaluating the effect of adapting the Ethics Quarter intervention to all management levels in one organisation to get an idea of how a high ethical activity profile could be spread to all management levels in one organisation. In any case, wider implementations and constant development of the intervention are necessary to strengthen this intervention even further.

6 | CONCLUSION

This randomized controlled trial demonstrated that a 6-week e-learning educational ethics intervention, the Ethics Quarter, proved to be effective in supporting nurse managers' ethical activity profile and its related dimensions. However, further cumulative evidence is needed.

6.1 | Implications for nursing management

Nurse managers at all management levels in educational and health care organisations are encouraged to apply the Ethics Quarter intervention to support their ethical activity profile. Ethics Quarter can be used as organisational ethics structure and continuing ethics education possibility for nurse managers.

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CONFLICT OF INTEREST

None declared.

ETHICS STATEMENT

The Ethics Committee of the University of Turku (Decision number 4/20) and the Tehy trade union 1/2020.

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DATA AVAILABILITY STATEMENT

Due to the sensitive nature of the questions asked in this study, survey respondents were assured raw data would remain confidential and would not be shared, hence, data are not available as it is confidential.

ORCID

Laura Laukkanen https://orcid.org/0000-0002-5776-5704
Riitta Suhonen https://orcid.org/0000-0002-4315-5550
Eliisa Löyttyniemi https://orcid.org/0000-0002-7278-6511
Helena Leino-Kilpi https://orcid.org/0000-0003-2477-971X

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

The effectiveness of the Ethics Quarter intervention on the ethical activity profile of nurse managers: A randomized controlled trial

Laura Laukkanen RN, MN SC, PhD candidate, Nurse manager[1,2] |
Riitta Suhonen RN, PhD, FEANS, Professor, Director of Nursing[1,2,3] |
Tarja Poikkeus RN, PhD, Director of Nursing[4] |
Eliisa Löyttyniemi MSc Mathematics, Biostatistician[5] |
Helena Leino-Kilpi RN, PhD, FAAN, FEANS, MAE, Professor, Nurse Director[1,2]

[1]Department of Nursing Science, University of Turku, Turku, Finland

[2]Turku University Hospital, Turku, Finland

[3]City of Turku, Welfare Division, Turku, Finland

[4]Emergency Medical Services, Emergency Department and Wards, Hospital District of Northern Savo, Kuopio University Hospital, Kuopio, Finland

[5]Department of Biostatistics, University of Turku, Turku, Finland

Correspondence
Laura Laukkanen, Department of Nursing Science, University of Turku, 20500 Turku, Finland.
Email: lslauk@utu.fi

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Abstract

Aim: To test the effectiveness of a new ethics educational e-learning intervention, Ethics Quarter, in supporting nurse managers' ethical activity profile.

Background: Health care organisations need evidence-based ethics interventions to support nurse managers' ethical activity profile.

Methods: A parallel-group, individually randomized controlled trial was conducted in 2020. Finnish nurse managers nationwide [members of the Union of Health and Social Care Professionals in Finland (Tehy) trade union] were randomly allocated to intervention ($n = 169$) or control group ($n = 172$). The intervention group participated in the Ethics Quarter comprising twelve 15-min evidence-based educational 'quarters' spread over 6 weeks. The control group had standard organisational ethics structures. The primary and secondary outcomes were ethical activity profile and ethics knowledge, respectively. The Consolidated Standards of Reporting Trials (CONSORT) statement for study design and reporting was adopted.

Results: Ethical activity profile showed statistically significant differences in mean changes between the groups from baseline to 10 weeks: all five dimensions were statistically significantly higher in the intervention group compared with the control group ($p = <.0001$).

Conclusion: The Ethics Quarter was effective in increasing nurse managers' ethical activity profile.

Implications for Nursing Management: Applying this ethics educational e-learning intervention would benefit nursing management education and health care organisations.

Trial Registration: clinicaltrials.gov: NCT04234503.

KEYWORDS
education, distance, ethics, internet-based intervention, nurse administrators, nursing

1 | INTRODUCTION

Nurse managers are responsible for the realization of the health care value base and for performing various ethical activities. In this study, these ethical activities, based on previous literature, have been theoretically outlined, and using deductive reasoning, summarized into a new construct defined as the ethical activity profile of nurse managers consisting of five dimensions: (1) developing one's own ethics knowledge, (2) influencing ethical issues, (3) conducting or implementing ethics research, (4) identifying and (5) solving ethical problems (Laukkanen, Leino-Kilpi, & Suhonen, 2016; Laukkanen, Suhonen, & Leino-Kilpi, 2016, Data S1). All dimensions of the profile require different kinds of ethical activities from nurse managers, are equally important, and can be summarized. To have a high ethical activity profile, nurse managers have to perform activities from all dimensions.

Nurse managers themselves have found ethical activities to be central in their work (Kantanen et al., 2017; Makaroff et al., 2014), albeit challenging, and they would like more guidance on how to perform ethical activities (Devik et al., 2020; Schick-Makaroff & Storch, 2019). It is also known that nurse managers lack support on ethics issues from their superiors and organisations (Makaroff et al., 2014), even though the need for ethics support is evident in all health care (Tallis et al., 2015) and organisations play an important role in strengthening nurse managers' ethical sensitivity and decision-making (Roshanzadeh et al., 2020). To support nurse managers to have a high ethical activity profile, there is a globally recognized, urgent need to create and test ethics interventions for the use of health care organisations (Aitamaa et al., 2021; Barkhordari-Sharifabad et al., 2018a; Devik et al., 2020; Markey et al., 2020; Poikkeus et al., 2020; Roshanzadeh et al., 2020). However, it is not known what kind of ethics intervention would be effective in supporting the ethical activity profile of nurse managers.

2 | BACKGROUND

In the current era, ethical activities of nurse managers receive increasing international attention in health care administration (Keselman & Saxe-Braithwaite, 2020; Markey et al., 2020). Nurse managers' ethical activities seem to have a positive impact on health care personnel in terms of higher work engagement (Zappalà & Toscano, 2020) and job satisfaction (Barkhordari-Sharifabad et al., 2018b; Zappalà & Toscano, 2020). Ethical activities of nurse managers also have positive impacts on patient outcomes, bringing higher patient satisfaction (Barkhordari-Sharifabad et al., 2018b; Wong et al., 2013) and quality of care (Barkhordari-Sharifabad et al., 2018b; Shirey, 2005; Zaghini et al., 2020). Ethical activities of managers also benefit organisational performance in terms of overall organisational success (Shirey, 2005). However, based on earlier studies, the ethical activity profile of nurse managers is partly low. Only a limited number of managers develop their own ethics knowledge (Aitamaa et al., 2021: Laukkanen, Leino-Kilpi, & Suhonen, 2016), influence ethical issues or conduct or implement ethics research (Laukkanen, Leino-Kilpi, & Suhonen, 2016). Nevertheless, nurse managers identify many work-related ethical problems (Aitamaa et al., 2021) and engage in a variety of activities to solve these problems (Aitamaa et al., 2019; Laukkanen, Suhonen, & Leino-Kilpi, 2016). Thus, we can assume nurse managers to be sensitive to ethics issues, and offering them support should strengthen their ethical activity profiles in the future.

There are few earlier ethics intervention studies (Stolt et al., 2018) searching for ways to support nurse managers in the field of health care and nursing ethics (Eide et al., 2016; Storch et al., 2013), and almost nothing involving online courses or e-learning. Recently, however, there have been some promising results concerning the possibilities of these interventions, also involving ethics (Edmonson, 2015; Eide et al., 2016; Jeon et al., 2018). In this study, we aim to strengthen the ethics intervention area. A new ethics educational e-learning intervention, the Ethics Quarter, developed by researchers for research purposes at the University of Turku to support the ethical activity profile of nurse managers, was tested for the first time in this study in clinical environment using a randomized controlled trial. The detailed research questions and hypothesis of this study were as follows: Is the Ethics Quarter effective in increasing (1) the development of nurse managers' own ethics knowledge, (2) nurse managers' influence on ethical issues, (3) the conduct or implementation of ethics research by nurse managers, (4) the identification of ethical problems by nurse managers and (5) nurse managers' ability to solve ethical problems. It is hypothesized that participating in the Ethics Quarter intervention supports nurse managers' ethical activity profile (in all five dimensions) compared with control group.

3 | METHODS

3.1 | Design

The study design involved a parallel-group, individually randomized controlled trial with two arms: intervention group (for the Ethics Quarter) and control group (with a standard organisational ethics structure, meaning that the participants' organisation may have had clinical ethics committees such as ethical advisory committees and other working groups discussing ethical issues, excluding research ethics committees), with baseline (=M0, before intervention), post intervention (=M1, after the intervention, Week 6) and follow-up (M = 2, 4 weeks after the intervention) measurements.

Based on a statistical power analysis, it was estimated that a sample size of 87 nurse managers per group ($n = 174$ in total) would be needed to provide the study with 80% power at a significance level of 0.05 (two-tailed, SD 0.7). Managers were randomly allocated to intervention or control group after baseline measurement, with the support of a randomization table drawn up by a statistician. Randomization was performed using random permuted blocks, with a block size of 8, using the SAS System for Windows (Version 9.4). The results of the randomization were imported into the Research Electronic Data Capture (REDCap) software platform (Harris et al., 2019) where randomization for each subject was executed by a researcher. Major imbalances between the groups were prevented in the design stage by using stratified randomization (Lamb & Altman, 2015). Two nurse manager background factors, participating in continuing ethics education and having standard organisational ethics structure (Aitamaa, 2020; Sietsema & Spradley, 1987), were known to correlate with one dimension of the ethical activity profile (identifying ethical problems). Thus, to achieve equal representativeness, participants were stratified into intervention and control groups according to these background factors measured at the baseline.

The inclusion criteria for the participants were that they should (1) be working as nurse managers and (2) have sufficient command of the Finnish language.

The study was registered on the ClinicalTrials.gov website with the identifier: NCT04234503. The Consolidated Standards of Reporting Trials (CONSORT) statement for study design and reporting was adopted (Schulz et al., 2010).

3.2 | Recruitment of the participants

Participants were recruited, with permission from the Union of Health and Social Care Professionals in Finland (Tehy) (https://www.tehy.fi/en), from January to September 2020 in Finland. The Tehy trade union is a national professional interest group for registered nurses, nurse managers and advanced consultants/specialists in the social and health care sector. The recruitment was stopped when there were $n = 341$ participants as the sample size was estimated to be large enough, also considering possible drop-outs. Finally, 211 participants completed the study: 97 participants in the intervention and 114 in the control group (Figure 1). The loss of follow-up in the intervention group was 42.6% ($n = 72$). However, the nurse managers who signed in ($n = 119$) had very strong commitment to the Ethics Quarter, and 80.7% ($n = 96$) completed the intervention. The sample loss in the control group was 33.7% ($n = 58$).

3.3 | Intervention and control groups

The intervention group participants had support provided by their possible standard organisational ethics structures. Furthermore, they participated in the Ethics Quarter intervention consisting of 12 educational quarters in a virtual learning environment. The 'quarters' were evidence-based text slides, including real-life role model experiences on each presented issue. Using role models may be one way to explicitly bring learning about ethical leadership to a wider group of managers in the organisation (Brown & Treviño, 2006). In the intervention, the participants completed two educational quarters (2×15 min), exploring one dimension of the ethical activity profile per week. The structure of the overall intervention was based on the five dimensions of nurse managers' ethical activity profile, also including orientation and summary quarters. After each presented dimension, the participants made self-reflection and development plans (Data S2). The control group did not participate in the Ethics Quarter. They had support provided only by their possible standard organisational ethics structures.

3.4 | Data collection

Nurse managers received the Tehy trade union management information letter with an ad of the study including a short description of the study intervention and a web-link to the website: https://etiikanvartti.fi/?tutkimus. The website contained complete information about the study, and if a manager wanted to take part in the study, s/he gave informed consent, and all filled in all the study measurements. The data were collected and managed using the REDCap tools hosted at the University of Turku (Harris et al., 2019). After randomization, information about the study group and user rights concerning the Ethics Quarter virtual learning environment for the intervention group participants were e-mailed via REDCap.

3.5 | Outcome measures

The primary outcome was nurse managers' ethical activity profile level assessed in two ways:

- The ethical activity profile level was assessed using the Ethical Activity-Instrument (EAI) (developed by LL, RS & HL-K, 2019). Higher scores indicate a higher self-assessed ethical activity profile level.
- Dimensions 1–3 of the ethical activity profile level were assessed using the Developing, Influencing and Implementing Ethics Instrument (DIIEI, developed by LL, RS & HL-K, 2019), dimension 4 was assessed using the Ethical Sensitivity Scale Questionnaire (ESSQ, Tirri & Nokelainen, 2011) and dimension 5 using the Nurses' Moral Courage Scale (NMCS, Numminen et al., 2019). All the instruments were 5-point Likert scales (1 = *totally disagree*; 5 = *totally agree*/1 = *Does not describe me at all*; 5 = *Describes me very well*), with higher scores indicating higher self-assessed ethical activity level.

The secondary outcome was the level of ethics knowledge assessed with the Nursing Management Ethics Knowledge-Test (NMEKT, developed by LL, RS & HL-K, 2019). Higher scores indicate higher level of ethics knowledge. Furthermore, background factors

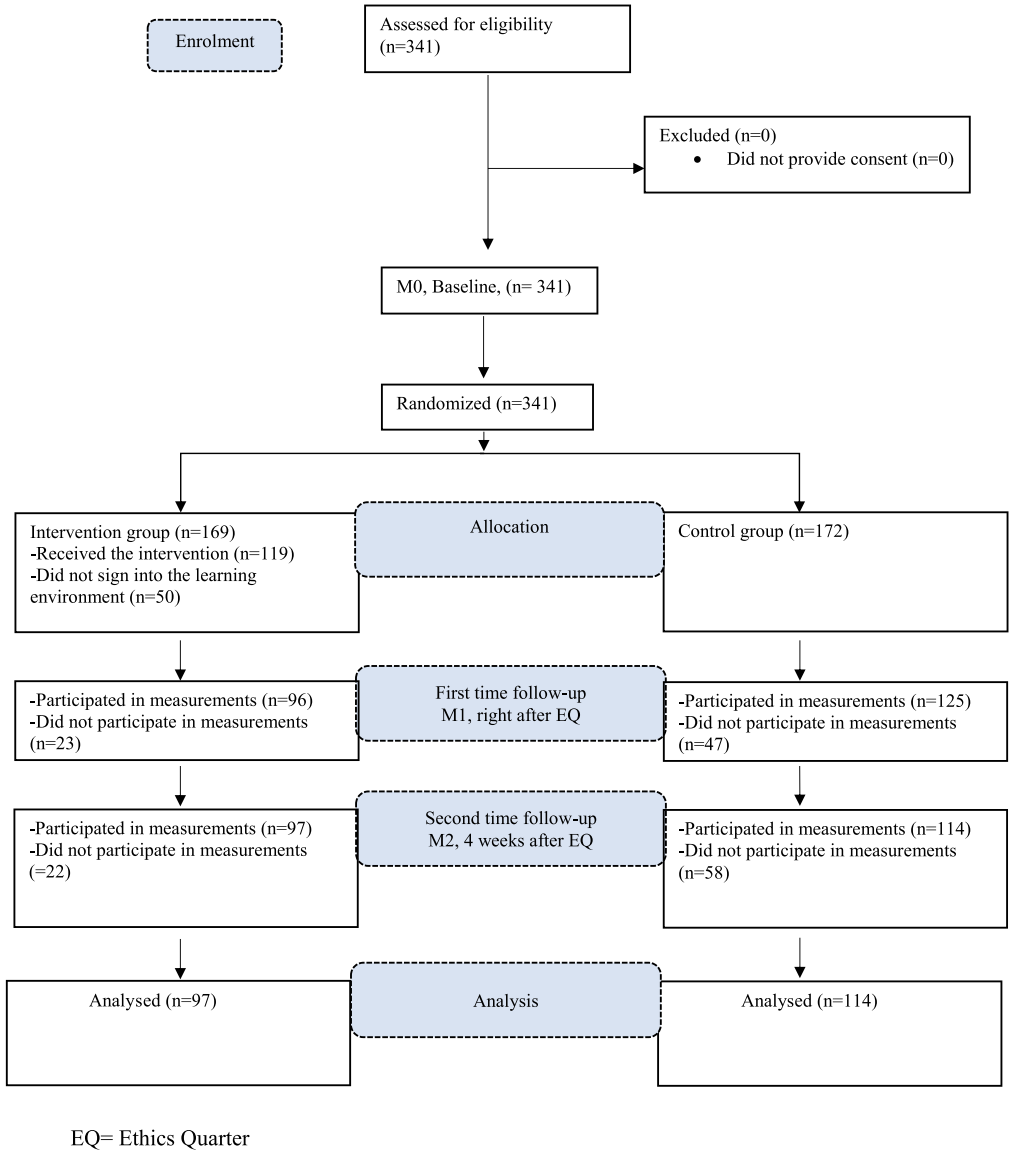

FIGURE 1 Nurse manager participant CONSORT flowchart through the study. EQ, Ethics Quarter

were inquired. The outcomes and psychometric properties of the instruments are reported in Table 1.

3.6 | Data analysis

The data analysis was performed using SAS software, Version 9.4 of the SAS System for Windows (SAS Institute Inc., Cary, NC, USA). A significance level of .05 (two-tailed) was used. Categorical variables were summarized with counts and percentages, whereas continuous variables were summarized with the median and range.

The analysis followed the intention-to-treat principle (as randomized). The baseline demographic characteristics were compared between the intervention group and control group using a chi-square test or Fisher's exact test (if needed) for categorical variables and the Mann–Whitney *U* test for continuous variables if normality assumption was not met.

The total ethical activity profile and dimensions were analysed using a linear mixed model where time was handled as within factor and group as between factor in the statistical model. Additionally, the group-by-time interaction was included in the model to examine whether the mean change over time was different between the intervention groups. A computed symmetry covariance structure was used for repeated measures. The data included some missing values, but they were assumed to be completely random. Model-based means as well as 95% confidence intervals (CI) are shown.

3.7 | Ethical considerations

Responsible Conduct of Research [ALL European Academies (ALLEA), 2017] was followed in all study phases. The study protocol was approved by the Ethics Committee of the University of Turku (Decision number 4/20) and by the (Tehy) trade union 1/2020.

TABLE 1 Outcomes and psychometric properties of instruments

Study outcomes	Measurements	Number of items and scores	Psychometric properties	
			Cronbach's alpha	Validities
Primary outcomes				
The ethical activity profile level	Ethical Activity-Instrument (EAI, LL, RS & HL-K 2019), a visual analogue scale measuring all five dimensions of ethical activity	5 items (score: 0–100), ↑ scores ↑ ethical activity profile	$\alpha = 0.86$	S-CVI clarity 0.92. S-CVI relevance 1.
The ethical activity profile level dimensions 1–3	Developing, Influencing and Implementing Ethics Instrument (DIIEI, LL, RS & HL-K, 2019), a 5-point Likert-scale (1 = *never*; 5 = *very much*)	12 items (4 developing knowledge, 4 influencing ethics issues and 4 implementing ethics research), ↑ scores ↑ ethical activity	$\alpha = 0.88$	S-CVI clarity 0.94. S-CVI relevance 0.99.
The ethical activity profile level dimension 4, ethical sensitivity	Ethical Sensitivity Scale Questionnaire (ESSQ, Tirri & Nokelainen, 2011), a 5-point Likert-scale (1 = *totally disagree*; 5 = *totally agree*)	16 items, ↑ scores ↑ ethical sensitivity	$\alpha = 0.85$	The ESSQ is used earlier with teachers and students, but operates on a general level and can be used in all contexts (Kuusisto et al., 2012).
The ethical activity profile level dimension 5, moral courage	Nurses' Moral Courage Scale (NMCS, ©Numminen et al., 2019), a 5-point Likert-scale (1 = *Does not describe me at all*; 5 = *Describes me very well*)	21 items, ↑ scores ↑ moral courage	$\alpha = 0.93$	The NMCS has been validated with nurses. Nine items were further developed for this study to accurately measure the moral courage of nurse managers. S-CVI clarity 0.98. S-CVI relevance 0.98.
Secondary outcome				
Ethics knowledge level	Nursing Management Ethics Knowledge-Test (NMEKT, LL, RS & HL-K, 2019), a self-reporting instrument to test nurse managers' knowledge of the terms and principles of ethics	10 items, [yes/no, correct responses score 1 point and incorrect responses 0 (zero), summative score range 0–10], ↑ scores ↑ ethics knowledge		S-CVI clarity 0.93. S-CVI relevance 0.99.

The nurse managers received written information about the purpose and practical implementation of the study. The participating nurse managers gave their informed consent.

4 | RESULTS

4.1 | Demographic characteristics of the sample

A total of $n = 341$ participants were included in the study, of whom $n = 169$ were randomly allocated to the intervention group and $n = 172$ to the control group (Figure 1). There were no statistically significant differences (all $p > .005$) in the demographic characteristics between the groups (Table 2).

4.2 | Ethical activity profile

The ethical activity profile showed statistically significant differences in the mean changes between the groups from baseline to 10 weeks. The overall ethical activity profile showed an improvement of 8.12 (95% CI = 6.17–10.06, $p < .001$) measured with the EAI, for dimensions 1–3, there was an improvement of 0.30 (95% CI = 0.22–0.37, $p < .001$) measured with the DIIEI; for dimension 4, an improvement of 0.18 (95% CI = 0.12–0.24, $p < .001$) measured with the ESSQ; and for dimension 5, an improvement of 0.18 (95% CI = 0.11–0.23, $p < .001$) measured with the NMCS in the intervention group, whereas the control group showed no statistically significant changes. The results are shown in Table 3 and Figure 2.

TABLE 2 The demographic characteristics of the nurse managers at the baseline ($N = 335–341$)

Variables	Total, $N = 335–341$ *n* (%)	IG, $N = 142–144$ *n* (%)	CG, $N = 145–147$ *n* (%)	*p* value
Age				.731
Years, median (range)	50 (26–64)	50 (28–64)	49 (26–64)	
<40	63 (18.5)	32 (18.9)	31 (18.1)	
40–49	104 (30.6)	49 (29.0)	55 (32.1)	
50–59	146 (43.0)	72 (42.6)	74 (43.3)	
≥60	27 (7.9)	16 (9.5)	11 (6.4)	
Gender				.593
Female	324 (95.9)	158 (95.2)	166 (96.5)	
Male	14 (4.1)	8 (4.8)	6 (3.5)	
Highest education				.139
Registered nurse's (or corresponding) degree	152 (44.5)	80 (47.3)	72 (41.9)	
Master's degree (university of applied sciences)	99 (29.0)	53 (31.4)	46 (26.7)	
Master's degree (university)	72 (21.1)	27 (16.0)	45 (26.2)	
Licentiate degree/doctoral degree (university)	1 (0.3)	1 (0.6)	0 (0)	
Other	17 (5.0)	8 (4.7)	9 (5.2)	
Employment sector				.791
Public	246 (72.2)	124 (73.4)	122 (70.9)	
Private	90 (26.3)	43 (25.4)	47 (27.3)	
Trust	5 (1.5)	2 (1.2)	3 (1.8)	
Position in organisation				.961
Unit-level management	245 (84.5)	120 (83.9)	125 (85.0)	
Middle management	37 (12.7)	19 (13.3)	18 (12.3)	
Strategic management	8 (2.7)	4 (2.8)	4 (2.7)	
Length of work experience				1.000
Years, median (range)	8 (0–37)	8 (0–37)	8 (0–32)	
<5	105 (31.0)	53 (31.4)	52 (30.6)	
5–10	109 (32.1)	54 (31.9)	55 (32.3)	
>10	1125 (36.9)	62 (36.7)	63 (37.1)	
Number of subordinates				.376
Number, median (range)	26 (0–5000)	28 (0–5000)	25 (0–400)	
<21	120 (35.8)	56 (33.1)	64 (38.6)	
21–50	161 (48.1)	84 (49.7)	77 (46.4)	
51–100	38 (11.3)	18 (10.7)	20 (12.0)	
>100	16 (4.8)	11 (6.5)	5 (3.0)	
Participation in continuing ethical education				.775
Yes	59 (17.3)	28 (16.6)	31 (18.0)	
No	282 (82.7)	141 (83.4)	141 (82)	
Participation in an ethics working group/committee				.853
Yes	32 (9.4)	15 (8.9)	17 (9.9)	
No	307 (90.6)	153 (91.1)	154 (90.1)	
Having an official ethics-related post				.389
Yes	23 (6.8)	9 (5.4)	14 (8.1)	
No	317 (93.2)	159 (94.6)	158 (91.9)	
Participating in an ethics research project				.248

(Continues)

TABLE 2 (Continued)

Variables	Total, $N = 335–341$ *n* (%)	IG, $N = 142–144$ *n* (%)	CG, $N = 145–147$ *n* (%)	*p* value
Yes	3 (1.0)	0 (0)	3 (1.0)	
No	286 (98.9)	142 (49.1)	144 (49.8)	
Participating in an ethics development project				1.000
Yes	10 (3.0)	5 (3.0)	5 (2.9)	
No	328 (97.0)	163 (97.0)	165 (97.1)	
Having an ethics organisational structure				1.000
Yes	91 (26.7)	45 (26.6)	46 (26.7)	
No	250 (73.3)	124 (73.4)	126 (73.3)	

Note: *p* values are calculated between the total IG and CC. Categorical variables tested with Fisher's exact test, continuous with Mann–Whitney *U* test.
Abbreviations: CG, control group; IG, intervention group; SD, standard deviation.

4.3 | Ethics knowledge

The level of ethics knowledge was already high in both groups at baseline. The intervention group baseline mean score according to the NMEKT was 9.30, (95% CI = 9.20–9.41), and the control group baseline mean was 9.34 (95% CI = 9.24–9.44).

5 | DISCUSSION

The Ethics Quarter educational e-learning intervention succeeded in strengthening the participating nurse managers' ethical activity profile in all its dimensions. The 6-week Ethics Quarter was statistically significantly effective in increasing the participating nurse managers' ethical activity profile in terms of developing their own ethics knowledge, influencing ethical issues, conducting or implementing ethics research, and identifying and solving ethical problems. At the beginning of the study, the intervention and control group did not differ in terms of background (Table 2), but both right after the intervention and at the follow-up measurement, the intervention group had a statistically significantly higher ethical activity profile. The increase was valid for all five dimensions of the activity profile.

Our findings show that the Ethics Quarter is an effective intervention for supporting nurse managers in their ethical activities. Even though clinical ethics support (such as clinical ethics committees) has become widespread in Europe (Magelssen et al., 2016) and it is known that clinical ethics committees can establish a supportive network and provide ethical leadership (Ong et al., 2020), it seems that clinical ethics support is not enough for nurse managers regarding their more challenging ethical activities. Moreover, managers have indicated that health care organisations provide suboptimal levels of support (Poikkeus et al., 2020). Additionally, in this study, the organisational ethics structures available to the participants (referring to different kinds of clinical ethics committees) were weak. Most of the participants reported that there were no organisational ethics structures (73%). Thus, organisations globally would benefit from taking the Ethics Quarter into use as an ethics structure for nurse managers: it offers systematic, evidence-based education, as well as guidance on how to carry out ethical activities, and it increases the level of ethics knowledge. Even though the participants scored well in this study on the knowledge level already before the implementation of the intervention and the NMEKT was not able to show increased ethics knowledge in either group, the participants evaluated their ethics knowledge to be increased in the feasibility evaluation of the study. The participants were asked whether the Ethics Quarter learning intervention increased their ethics knowledge, and their views were measured using a 5-point Likert-scale (1 = *totally disagree*; 5 = *totally agree*). They rated the intervention highly, awarding a score of 4.59 (Laukkanen et al., 2021, unpublished results) in answer to this question.

The effectiveness of the Ethics Quarter might result from several advantages. It provided new continuing educational possibilities to the participants. Participation was easy as the participants only needed access to the Internet. The time needed was moderate, and participation was free of charge, and there were no costs for the organisation (despite the nurse managers' participation time). This intervention was tailored for research and clinical support purposes, not for business purposes. The Ethics Quarter consisted of only 12 quarters, each lasting only 15 min. Additionally, the e-learning education was felt to be feasible and usable (Laukkanen et al., 2021, unpublished results) according to the participants. The contents of the Ethics Quarter were evidence-based and written in everyday language using real-life case examples with engaging stories (Brown & Treviño, 2006) in every dimension to highlight the ethical activities of nurse managers. Self-reflection and development plans might also provide participants with an easy opportunity to link their everyday experience to the new ethical theory they have just studied. A multimethod intervention allowing combining theory and practice (Cannaerts et al., 2014) seemed to be an effective way of learning for the participants. To develop the learning outcomes of Ethics Quarter even further, interactivity and feedback could be a promising amendment (Cook et al., 2010).

The findings of this study comply with previous studies, (Barkhordari-Sharifabad et al., 2018a; Devik et al., 2020;

TABLE 3 Main outcomes, improvements in ethical activity profile and dimensions in IG and CG with different instruments

	Intervention group			Control group			Change in outcomes		
Scale and dimension	Baseline, M0, mean, 95% CI, $n = 156–169$	After intervention, M1, mean, 95% CI, $n = 96$	Follow-up, 10 weeks after intervention, M2, mean, 95% CI, $n = 95–97$	Baseline, M0, mean, 95% CI, $n = 157–172$	After intervention, M1, mean, 95% CI, $n = 116–125$	Follow-up, 10 weeks after intervention, M2, mean, 95% CI, $n = 106–114$	Group by time interaction, p	Baseline-after intervention M1, p	Baseline-follow-up 10 weeks after intervention, M2, p
Ethical activity profile level, Ethical Activity-Instrument (EAI)	64.53 62.59–66.47	71.34 69.07–73.61	72.65 70.39–74.91	66.99 65.05–68.93	67.85 65.76–69.95	67.59 65.45–69.73	<.001	<.001	<.001
Developing one's own ethics knowledge, dimension 1	60.79 58.30–63.28	70.31 67.30–73.32	71.36 68.37–74.35	63.84 61.35–66.34	62.83 60.09–65.58	63.79 60.96–66.61	<.001	<.001	<.001
Influencing ethical issues, dimension 2	67.29 64.90–69.67	73.70 70.85–76.55	75.82 72.99–78.66	68.50 66.12–70.88	69.17 66.58–71.76	67.65 64.98–70.32	<.001	.002	<.0001
Conducting or implementing ethics research, dimension 3	52.80 50.01–55.59	59.45 56.05–62.85	60.87 57.47–64.27	56.70 53.86–59.54	58.84 55.76–61.91	57.70 54.50–60.89	.0082	.005	.003
Identifying ethical problems, dimension 4	74.82 72.71–76.93	79.16 76.57–81.75	80.16 77.62–82.75	75.47 73.36–77.57	77.17 74.83–79.50	76.38 73.98–78.79	.038	.130	.012
Solving ethical problems, dimension 5	67.42 65.08–69.75	75.20 72.38–78.01	76.31 73.52–79.10	68.97 66.64–71.30	71.29 68.72–73.85	71.95 69.33–74.57	.001	.003	.001
The ethical activity profile dimensions									
Developing Influencing and Implementing Ethics instrument (DIIEI), dimensions 1–3	3.60 3.52–3.68	3.80 3.71–3.89	3.90 3.80–3.99	3.75 3.67–3.83	3.77 3.69–3.86	3.80 3.71–3.89	<.001	.001	<.001
Ethical Sensitivity Scale Questionnaire (ESSQ), dimension 4	4.17 4.11–4.22	4.29 4.22–4.35	4.35 4.28–4.41	4.17 4.11–4.23	4.14 4.08–4.20	4.19 4.13–4.26	<.001	.003	.001
Nurses' Moral Courage Scale (NMCS), dimension 5	4.36 4.30–4.43	4.50 4.43–4.58	4.54 4.47–4.61	4.40 4.34–4.47	4.39 4.32–4.46	4.46 4.39–4.53	.001	.003	.004

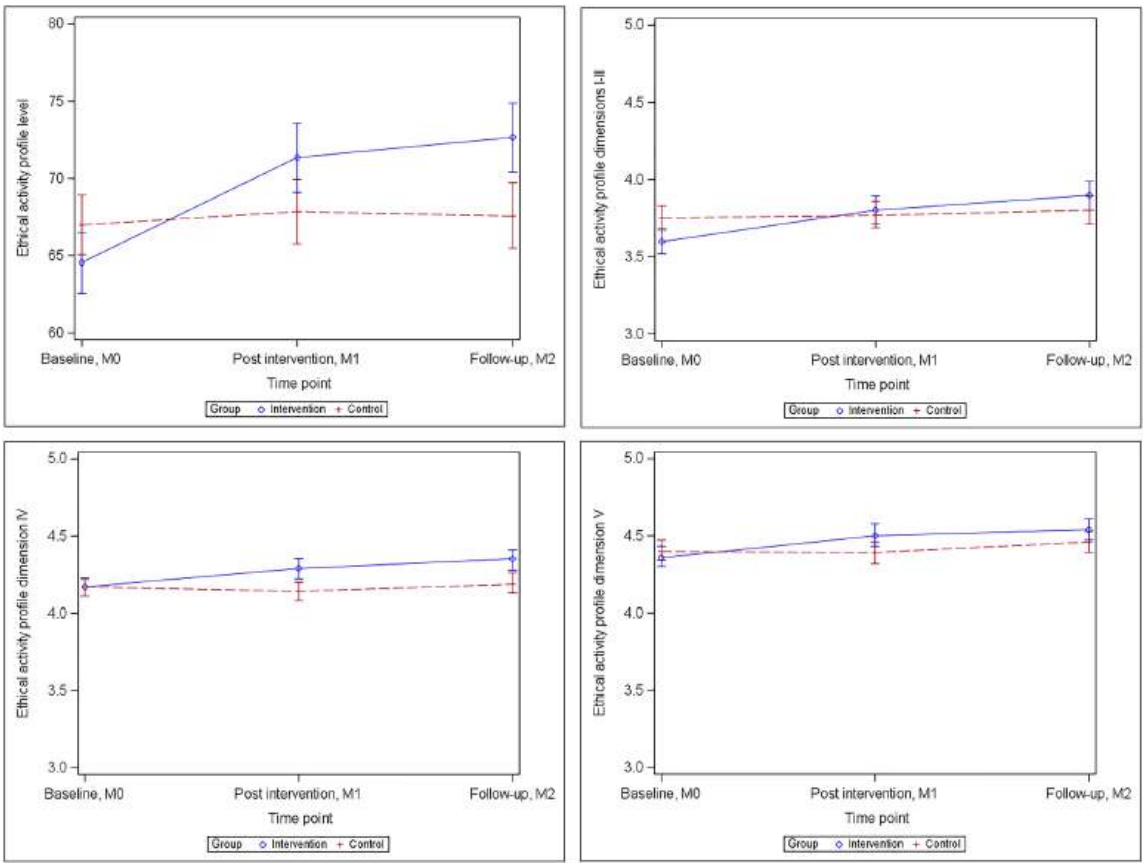

FIGURE 2 Model-based means and 95% confidence intervals (CI) at the baseline, after intervention and at the follow-up

Markey et al., 2020; Poikkeus et al., 2020; Roshanzadeh et al., 2020) and indicate the need for ethics education for nurse managers. Surprisingly, nearly half of the participants (44.6%) in this study had only a registered nurse (or corresponding) degree, in other words, a baccalaureate (bachelor) degree. American Organisation of Nurse Executive (AONE) (2010) suggests that nurse managers should have at least a bachelor's or master's degree. However, earlier studies have concluded that a bachelor's degree is not sufficient for the role of a nurse manager (Shirey et al., 2010) and at least some management training is needed (McCallin & Frankson, 2010; Ramseur et al., 2018). In this study, the participants also had a low level of continuing education in ethics. Only 17% had participated in continuing ethics education, even though 69% had five or more years of work experience. This finding is even lower than in earlier study results; Aitamaa et al. (2021) found that 28% of managers, and Laukkanen, Leino-Kilpi, and Suhonen (2016) found that 48% of nurse managers had participated in continuing ethics education. Based on these background factors, the respondents' development of their own ethics knowledge seemed to be alarmingly low. Nurse managers should develop their ethics competence throughout their careers (Stievano et al., 2012) to be ethically skilled (Eide et al., 2016; Stievano et al., 2012) and to have the most up-to-date knowledge (Ravaghi et al., 2020).

In this study, most of the participants were working in unit-level management, where of all the management levels, nurse managers seem to encounter the most ethical problems (Aitamaa et al., 2021). In unit-level management, managers are responsible for running a unit and have the most direct contacts with patients. Thus, unit-level managers might have more patient-related ethical problems to solve than other management levels (Aitamaa et al., 2016), and acknowledging this, it is essential to support unit-level management. Nevertheless, it must be noticed that the expectations of ethical activities seem to increase with authority and responsibility; for example, the higher one is in the hierarchy, the higher the expected use of moral courage to do the right thing in the organisation (Edmonson, 2015). Thus, it is important to ensure that senior managers in middle and strategic level management are also educated to exhibit high levels of ethical behavior (Schaubroeck et al., 2012). Thus, directing the Ethics Quarter towards upper management and chief nursing first would help to disseminate the effects of the intervention to wider levels within the organisation.

5.1 | Limitations

There is a lack of validated instruments for the measurement of abstract ethics issues in the nursing management context. Thus, we had to develop three new instruments and used only two validated ones. Operationalizing the ethics concept was demanding, and expert

panel expertise was used to strengthen the development. However, the content validity (S-CVI) and furthermore, internal consistency (Cronbach's alpha) of these new instruments were estimated to be good (Table 1). To ensure the construct validity and reliability of the instruments, the data were collected from a large and appropriately representative sample of the target population. However, the instruments used were mostly self-evaluation instruments, and the participants might have wanted to demonstrate a higher ethical activity profile than they actually have. Thus, the study aimed to avoid any possible social desirability response bias by using anonymous participation, as well as mostly forced choice items and computer administration (Randall & Fernandes, 1991). The generalizability of the results for the nurse manager population is reasonable, although it is possible that the data included managers who were already interested in ethics issues while less interested managers did not participate. Furthermore, the COVID-19 pandemic may have increased the need for ethical activities of nurse managers during data collection, and it may also have disrupted existing organisational ethics structures. For unknown reason, 50 participants received the password to the learning area, but never signed in. The COVID-19 pandemic may have had a negative effect on nurse managers' ability to participate. However, those who signed in had a high level of commitment. Participation caused reasonable burden. Future research may consider evaluating the effect of adapting the Ethics Quarter intervention to all management levels in one organisation to get an idea of how a high ethical activity profile could be spread to all management levels in one organisation. In any case, wider implementations and constant development of the intervention are necessary to strengthen this intervention even further.

6 | CONCLUSION

This randomized controlled trial demonstrated that a 6-week e-learning educational ethics intervention, the Ethics Quarter, proved to be effective in supporting nurse managers' ethical activity profile and its related dimensions. However, further cumulative evidence is needed.

6.1 | Implications for nursing management

Nurse managers at all management levels in educational and health care organisations are encouraged to apply the Ethics Quarter intervention to support their ethical activity profile. Ethics Quarter can be used as organisational ethics structure and continuing ethics education possibility for nurse managers.

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CONFLICT OF INTEREST

None declared.

ETHICS STATEMENT

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DATA AVAILABILITY STATEMENT

Due to the sensitive nature of the questions asked in this study, survey respondents were assured raw data would remain confidential and would not be shared, hence, data are not available as it is confidential.

ORCID

Laura Laukkanen https://orcid.org/0000-0002-5776-5704
Riitta Suhonen https://orcid.org/0000-0002-4315-5550
Eliisa Löyttyniemi https://orcid.org/0000-0002-7278-6511
Helena Leino-Kilpi https://orcid.org/0000-0003-2477-971X

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Negative and positive psychological experience of frontline nurses in combatting COVID-19: A qualitative study

Xin Peng MD, Deputy Chief Nurse[1] | Yi Yang Undergraduate, Registered Nurse[1] | Ping Gao Undergraduate, Registered Nurse[1] | Yi Ren Undergraduate, Chinese Registered Nurse[2] | Deying Hu PhD, Chief Nurse[3] | Qin He Undergraduate, Registered Nurse[4]

[1]Cancer Center, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

[2]Department of the Wise Group, Pathways Health, Hamilton, New Zealand

[3]Department of Nursing, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

[4]Public Health Department, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Correspondence
Hu Deying, MD, Department of Nursing, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Jiefang Avenue 1277, Wuhan 430022, China.
Email: hudeying2006@126.com

He Qin, Undergraduate, Public Health Department, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Jiefang Avenue 1277, Wuhan 430022, China.
Email: heqinzz@163.com

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Abstract

Aims: To qualitatively explore potential experience among frontline nurses who had been fighting against the COVID-19 infection since the outbreak.

Background: Disasters are often sudden and uncertain. Since the COVID-19 outbreak in Wuhan city, local frontline nurses had been responsible for treatment of COVID-19 for several months. Qualitative study was required to assess complex multi-component psychological experiences among frontline nurses.

Methods: Twenty local frontline nurses were recruited from a designated hospital of COVID-19 treatment. We conducted semi-structured interview using phenomenological method. Descriptive phenomenological method was applied for thematic analysis.

Results: Twenty female frontline nurses (aged 24 to 43 years old) were interviewed. Two broader themes, negative and positive, were identified. Negative experience included refusal and helpless (refusal to work at frontline, shortage of confidence in working and helpless), fear and anxiety, excessive miss, and other health issues. Positive experience included improved interpersonal relationship, sublimation of personal faith and strength, changes in understanding meaning of life and new possibility.

Conclusion: Both positive and negative psychological response were observed, which can provide evidence based clues for making essential strategies and policy.

Implications for Nursing Management: Understand subjective experience of frontline nurses can establish evidence for development of effective psychological intervention. Nursing administrator should consider the nurses' psychological experience comprehensively to promote psychological growth and lower post-traumatic psychological burden.

Xin Peng and Yi Yang contribute equally and share first authorship.

KEYWORDS
frontline nurses, novel corona virus pneumonia, psychological experience, qualitative research

1 | BACKGROUND

Since early December, 2019, the first coronavirus disease 2019 (COVID-19) case was detected in Wuhan, China. The COVID-19 had a basic reproduction number (R0) of 5.7 and required timely diagnosis and effective treatment to prevent progression and lower mortality (Jin et al., 2020; Sanche et al., 2020). Person-to-person transmission of the disease made the first-wave outbreak spread quickly, and it had evolved into a global pandemic. Although countries have tried their best to implement effective restrictions and promote vaccination, the global epidemic was not still contained (Han et al., 2020). Some countries had experienced a second wave or even the third wave of COVID-19 (Asrani et al., 2021). As of August, 2021, the COVID-19 had infected more than 200,000,000 cases worldwide. The global pandemic might be a long lasting problem; it is worthwhile and beneficial to study COVID-19 related topics, including topics triggered at the beginning of the outbreak.

Since the outbreak, the healthcare workers (HCWs) have been responsible for the frontline fight against the COVID-19 for several months. Necessity and importance of psychological status among frontline nurses have been emphasized (Chen et al., 2020). Negative psychological status might prevent nurses from caring for patients with COVID-19 (Joo & Liu, 2021). A systematic review including 16 quantitative articles found that the frontline HCWs suffered from high prevalence of post-traumatic stress symptoms (D'Ettorre et al., 2021). Qualitative studies reported psychological disturbances, powerless, depression and anxiety among frontline HCWs (Al Ghafri et al., 2020; Fang et al., 2021; Liu et al., 2020a). Higher anxiety and stress were observed among frontline HCWs who were female, married and had children (Celmece & Menekay, 2020; Huang et al., 2021). The conflict between family and work, increase in family care responsibilities, and constant worry that oneself and family members would be infected might explain this phenomenon.

While, coping with trauma events also might develop positive psychological experience (Meichenbaum, 2017). During the COVID-19 pandemic, psychological resilience and effective coping strategies promoted positive psychological health outcomes among HCWs (Labrague, 2021). A quantitative study suggested frontline nurses experienced a moderate and high-level post-traumatic growth (PTG) (Peng et al., 2021). Both positive and negative elements in psychological responses were urgent and noteworthy that required comprehensive research. However, previous studies investigated either negative or positive experience separately; a comprehensive study on HCWs' mental health was inadequately understood. Qualitative study can give a comprehensive and in-depth understanding of phenomenon and experience by exploring natures of research subjects and establishing relationship between them (Busetto et al., 2020). So qualitative method can equip us with a better tool to assess complex multi-component psychological experiences among frontline nurses.

Disasters and crises on earth are often sudden and uncertain, including lessons Learned from COVID-19 pandemic (Miller, 2020). At beginning of the outbreak as the first wave in Wuhan city, many hospitals were designated as the first-line hospital for treatment of critical patients infected with COVID-19. However, unavoidably increased workloads, shortage of personal protection equipment (PPE), uncertainty of curative treatment, risk of infection and death and impact of patients' pessimism had posed a great and significant threat on these frontline nurses (Huang et al., 2021). Some nurses in Wuhan city had been working at frontline since the city lockdown, and they might need to play the role of both a clinical nurse and a family caregiver. With the increase in support, they were required to quarantine in designated hotel after work, direct contact with families decreased. Compared with general population and nurses in the subsequent waves, more profound and comprehensive psychological experience might be observed among these frontline nurses. HCWs were limited and scarce resources to fight against current and future crisis; their initial response to the sudden disaster was worth studying to provide evidence for developing customized intervention and protect them from the next crisis.

In this study, a tertiary Grade A hospital of Wuhan city was selected, in which more than 5200 COVID-19 patients and 30,000 fever patients were treated since the outbreak. We recruited 20 female frontline nurses from fever outpatient and isolation ward. The subjects were interviewed through semi-structured interview. The objective of this qualitative study was to provide in-depth insights into comprehensive experiences of frontline nurses from epidemic center. It would not only generate new knowledge regarding psychological development to sudden disaster but also establish evidence for development of effective psychological intervention.

2 | METHODS

The consolidated criteria for reporting qualitative research (COREQ) guideline was implemented in this study for reporting methods and results structurally and clearly (Tong et al., 2007).

2.1 | Study design and setting

To capture and describe the frontline nurses psychological experience compressively and veritably, we chose a qualitative method by in-depth semi-structured face-to-face interview. A descriptive phenomenological method was applied to understand aspects of experiences and generalizing the individual's reports in qualitative study of psychology (Englander, 2016; Matua & Van Der Wal, 2015).

Since January 23, 2020, the COVID-19 outbreak was declared as a public health emergency and caused lockdown of the Wuhan city because of its high contagion and great uncertainty. Many local hospitals were reconstructed into designated hospitals for treating the COVID-19. Many local nurses were arranged to support the treatment with limited source since the lockdown. A tertiary Grade A and designated hospital in Wuhan city was selected to recruit participants.

2.2 | Ethical approval

This study was reviewed and approved by the Ethics Committee of the Union Hospital of Tongji Medical College, Huazhong University of Science and Technology (2020) Lunshenzi (0025), moreover, special approval was obtained from the new coronavirus pneumonia emergency in 2020 project (number 2020kfyXGYJ001). Written informed consensus was documented for each included participant and information confidentiality was guaranteed.

2.3 | Study participants and data collection

Female frontline nurses who had been fighting against the COVID-19 from the beginning of the pandemic to 15 March 2020 were recruited for face-to-face interview. Invitation was distributed in an online nursing resource group, and a convenience sampling method was adopted based on ease of availability. Inclusion criteria included the following: (1) registered nurse who had worked in this hospital at least 1 year; (2) the duration of frontline work was above 14 days; (3) nurses who had signed the consent form and volunteered to participate in this study. Nurses who was on sick leave and personal leave, was excluded from interview. Average of 16–24 interviews could reach the saturation in a qualitative study (Hennink et al., 2017). Interviews were conducted until thematic saturation was reached. Finally, 23 frontline nurses were connected, 3 participants declined the interview because of additional work. Twenty nurses, ageing from 24 to 43 years old, agreed to participate in the interviewed during March 17 to March 20.

P. X. was a female nurse in chief with experience in psychology and qualitative study and worked as the interviewer. Y. Y. was a female clinical nurse and worked as the facilitator. Y. Y. contacted the participants and re-introduced the study purpose and arrangement before official interview. After treatment work, the interview was held in the hotel where frontline nurses were quarantined. To guarantee data saturation, each interview was conducted without time limit until no new topic was represented.

2.4 | Contents of the interview

A semi-structured guide with open-ended questions was developed based on both existing literatures on nurses' psychological experience and nursing experts in this designated hospital (Bastos et al., 2018; Yuwanich et al., 2015). The guide included five questions: (1) What is your first reaction when you knew that you would be transferred to the frontline COVID-19 ward? (2) What impressed you the most during the COVID-19 epidemic? (3) What were your concerns when you were working on the frontline? (4) How did your family think about that you were going to the frontline? (5) How did you think about your future life after working on frontline? The Preliminary guide was piloted with one targeted frontline nurse and no change was made for the interview guide, the pilot interview was included in the final analysis.

2.5 | Data analysis

All interviews were audio-recorded and transcribed verbatim, and relevant memo notes were made during and after the interviews for further analysis. A seven-step phenomenological analysis method developed by Colaizzi was carried out for content analysis (Abalos et al., 2016). After being familiar with the data, two researchers (P. X. and R. Y.) independently coded the transcript. Discrepancies between the two independent coders were discussed and refined with the third research (H. D. Y.) for consistency. Identified topics were discussed among all authors and then categorized through several iterations.

3 | RESULTS

Basic characteristics about the 20 nurses were presented in Table 1. Negative and positive experiences were determined preliminary based on previous studies and coders' self-experience.

3.1 | Theme 1: Negative experience

3.1.1 | Refusal and helpless

Refusal to work at frontline and helpless

COVID-19 was a highly contagious disease. During the start of the COVID-19 outbreak, no effective treatment was found, and the personal protective equipment was limited. However, these nurses had to work with great vulnerability and workload. Most nurses stated that they did not want to work in the fever clinic.

> This disease was too terrible, I did not want to go to the fever clinic, I would resign if I has been assigned to the fever clinic. (Nurse C)

Another participant further added

> I heard that there was a shortage of personal protective equipment (PPE) from the nurses who have worked in the fever clinic; I did not know how to

TABLE 1 Demographic characteristics of the participants ($n = 20$)

ID	Education level	Nursing experience (year)	Working against COVID-19(day)	Title	Married	Having child/children
A	Diploma	6	21	Nurse practitioner	Yes	Yes
B	Bachelor	6	21	Nurse practitioner	No	No
C	Bachelor	7	14	Nurse practitioner	Yes	Yes
D	Bachelor	13	14	Supervisor nurse	Yes	Yes
E	Bachelor	10	21	Supervisor nurse	Yes	Yes
F	Bachelor	17	21	Nurse practitioner	Yes	Yes
G	Bachelor	18	21	Supervisor nurse	Yes	Yes
H	Diploma	6	21	Nurse	No	No
I	Bachelor	6	21	Nurse	Yes	No
J	Bachelor	6	20	Nurse practitioner	Yes	No
K	Diploma	6	14	Nurse	No	No
L	Bachelor	10	14	Nurse practitioner	Yes	Yes
M	Bachelor	7	21	Nurse practitioner	Yes	Yes
N	Bachelor	7	21	Nurse practitioner	Yes	Yes
O	Bachelor	13	14	Supervisor nurse	Yes	Yes
P	Bachelor	25	21	Supervisor nurse	Yes	Yes
Q	Postgraduate	5	21	Nurse practitioner	Yes	No
R	Bachelor	8	14	Nurse practitioner	Yes	Yes
S	Bachelor	4	21	Nurse	No	No
T	Bachelor	3	21	Nurse	No	No

> protect herself from COVID-19, thus she did not want to work there. (Nurse Z)

The COVID-19 required timely diagnosis and effective treatment to prevent progression and lower mortality. However, in addition to supporting treatment, there was no effective curative treatment and nursing management at that time. These nurses felt helpless.

> There was no specific medicine to treat COVID-19, all I could do was watching the patients suffering. (Nurse M)

Nurse N further added a self-example:

> an elderly patient talked jokes with the nurses when I just came in to the clinic, however, after two days, I lost my ability of speech and motor. (Nurse N)

Shortage of confidence in working

The COVID-19 outbreak was a public health emergency during the Chinese Spring Festival. There was a sudden and rapid rise in the number of suspected, confirmed and death cases. However, the number of respiratory nurse specialist was seriously insufficient, and other nurses are temporarily trained and arranged to participate in treatment.

> it was the first time that she acknowledges this kind of disease, I was doubting about her nursing ability in terms of COVID-19, and I concerned if I could keep up with the work pace of other colleagues. (Nurse Y)

> when rescuing critically patients, I was not confident with my ability to manipulate the ventilator and high-flow oxygen equipment, I was afraid of dragging down her colleagues. (Nurse B)

3.1.2 | Fear and anxiety

Almost all participants had experiencing fear and anxiety because they were working with real risk of being infected and in the special working environment with heavy equipment.

> It was hard to sleep when she saw the news about the death of the doctors and nurses from infection. I had older people and children in her family, I was afraid of infecting her family members. (Nurse L)

Meanwhile, the continuous increase in infected cases suggested that the pandemic did not seem to end, which further deteriorated the condition.

> Recently, the increase of patients in my clinic made me always think about these patients, even after getting off work. (Nurse A)

3.1.3 | Excessive miss

The majority of respondents had families and children. They were separated from their family at least 3 weeks. Participants expressed their miss and guilty to their families.

> I had not seen my daughter for 2 months, my daughter called my auntie instead of mother when video chatting. My daughter could not recognize her now. (Nurse H)

Another nurse N further added

> when I came to the frontline, my son was too young to walk. A few days before the interview, my mother sent me a video that my son could walk now, I felt so guilty for passing my son's growth. (Nurse N)

3.1.4 | Other health issues

Heavy protective equipment, high-intensity workload and closed working environment, fear and anxiety caused them to suffer from various physical symptoms. Participants mentioned discomforts during their work and rest.

> When I was working in the isolation ward, I always felt difficulty in breathing, weakness and dizziness. (Nurse Y)

Another participant suffered from circadian rhythm disturbance because of continuous work.

> When I took rest at the hotel, I felt that the day and night were reversed, and suffered from appetite and sleeping problems. (Nurse B)

Another nurse reported lack of appetite caused by stress and anxiety, which led to abnormal weight loss.

> Sometimes, I felt very hungry but had no appetite, and I had lost 5 kg in the last month. (Nurse Z)

3.2 | Theme 2: positive experience

After experiencing the COVID-19 epidemic, these frontline nurses expressed growth in this adversity.

3.2.1 | Improved interpersonal relationship

The collaborative practice within health-care team was critical for treating the emergent COVID-19. The participants would keep an open mind and establish mutual trust with colleagues and patients.

> I was too competitive before, but now I knew I could ask for help when I got in trouble. My colleagues and nurse in chief always brought food for me. I felt that relationship between myself and colleges became closer since I worked in frontline. (Nurse Z)

Meanwhile, social support assisted HCWs to cope with the COVID-19 by warm interpersonal relationship and the honour of being a nurse.

> When I went to work, my neighbors gave smile to me every morning after knowing she was a nurse, the sense of approval and respect warmed me. (Nurse P)

Another nurse further added

> 'thank you' was a simple but beautiful word where the canteen lady delivered food for me, the security tested my body temperature every day and the volunteer drove me to work for free. (Nurse C)

3.2.2 | Sublimation of personal faith and strength

National medical aid mission was implemented by the government, and the whole country tried its best to fight against the pandemic. Powerful support from the country encouraged the participants greatly. They found that they were much stronger mentally and physically than they thought.

> I felt scared and stressed about the frontline job at the beginning. However, I was no longer afraid after so many medical teams and colleagues from all over the country joined frontline work. I was proud of my contribution when my motherland encountered the disaster. (Nurse C)

3.2.3 | Change in understanding meaning of life

These frontline participants were at risk of infection and death every day, and they experienced both success and failure, both life and death during treatment of the COVID-19.

> I felt that nothing was more important than being alive after seeing life and death. Maintaining a positive attitude and being happy every day were the most important thing for me. (Nurse Z)

Participants expressed their emphasis on life.

> Good health was the foundation of everything. I would cherish life more and pay more attention to my health than before. (Nurse Y)

> My husband should slow down work pace and spend more time with me and our children. (Nurse R)

3.2.4 | New possibility

The epidemic was a new and unexpected life event, which prompted participants to re-plan their future lives after reflecting on their past experiences.

> After the epidemic, I wanted to try new things which I did not dare to do before, such as skydiving and bungee jumping. (Nurse E)

4 | DISCUSSION

The COVID-19 pandemic was an emergent public health event. In this qualitative study, the recruited nurses were local in the epicentre and had worked at frontline since the COVID-19 outbreak in Wuhan city. Most of previous studies focused on HCWs' negative experiences, whereas their positive experiences were largely neglected. We documented lived experiences of these nurses and observed both positive and negative experiences among these frontline nurses.

The epidemic broke out suddenly, and the local health organisation might have insufficient professional experience with this new virus. In the early stages of the outbreak, frontline nurses were temporarily recruited and trained. High contagion of the COVID-19 and uncertainty in treatment and prevention made them under considerable psychological stress. Meanwhile, the personal protective equipment was limited seriously, including N95/FFP2 respirators, face shields or goggles. These frontline nurses had to work under high risk of occupational exposure to the infection (Zhan, Anders, et al., 2020). The unprecedented challenge would make them hesitant to work and feel helpless in the high-risk environment. Previous study in India reported that more than 70% HCWs hesitate to work during the COVID-19 pandemic (Khasne et al., 2020). The majority of them were not specialist in communicable disease, and shortage of confidence in caring for patients was observed. In a previous qualitative study, nine frontline nurses who were recruited and had no infectious disease expertise also stated lacked confidence and felt powerless when caring for patients (Liu et al., 2020b).

Fear and anxiety were observed as negative experience, which had been described in many previous studies (Hu et al., 2020; Shen et al., 2021). Dr Wenliang Li, a key figure in the COVID-19 epidemic in China and a hero for the HCWs, died on 7 February 2020, aged 33 years (Petersen et al., 2020). Other countries documented medical workers' infection and death on duty, even suicide (Montemurro, 2020; Sohrabi et al., 2020). Colleague's infection and death presented a direct and specific challenge to uninfected HCWs and may further worsen their mental situation. Excessive miss was a special but reasonable experience among these participants. With the management of COVID-19 epidemic increased, the frontline staffs were arranged to live alone in the designated hotels. They worked with high-density and long-duration nursing workload, they also worried about family members who were quarantined at home, but they only could contact family members occasionally through online tools. Another study on HCWs also reported missing of direct contact with intimate people (Al Ghafri et al., 2020).

Negative physical issues were also discussed. Frontline nurses worked with heavy equipment and long shift-time work during the COVID-19 outbreak; they tended to presented burnout and emotional exhaustion (Wang et al., 2021; Zhang et al., 2020). A large sample and multicentre study reported that more than 50% frontier nurses suffered from insomnia during their frontline works (Zhan, Liu, et al., 2020). In this study, loss of appetite was observed. Previous study showed that nurses in Wuhan city had higher score in poor appetite or overeating than nurses in other cities (Ren et al., 2021). These health issues were associated with the negative psychological experiences and might further the conditions.

Although trauma caused negative experience, negative experiences also catalysed the development of positive change, while positive changes acted as a buffer against the negative experiences (Tedeschi et al., 2018). Coping with and adaption to trauma brought about the post-traumatic growth (Wu et al., 2019). In a previous study, nurses demonstrated high positive growth when worked with war victims (Lev-Wiesel et al., 2009). During treatment of COVID-19 infected patients, nurses should trust and collaborate effectively with team members. After work, a social distance was also required, but video communication allowed them to be connected to their loved ones. Supports from colleagues, supervisors and families were the fundamental, which could encourage HCWs to fight with confidence, help HCWs control negative thoughts and relieve their psychological burden and miss (Blanco-Donoso et al., 2020). Support from society gave a great and warm respect to HCWs' contribution and encouraged HCWs to seek mental help, which might increase HCWs' self-efficacy and turn the trauma into positive growth (She et al., 2021).

After the outbreak, the Chinese government carried out 'one province to aid one city' medical aid by recruiting HCWs outside Hubei province who possessed advance clinical experience to assist the fight. By March 2020, there were 42,000 HCWs from 31 provinces participating in the national mission. Meanwhile, many companies donated sufficient materials to support frontline HCWs. The national solidarity promoted the development of strong sense of national pride and psychological affiliation with the country (David & Bar-Tal, 2009). Collaboration with supportive human resources strengthened local HCWs' power. Many special welfares were given to these frontline HCWs, including anti-epidemic memento and commendation conference organised by government, which affirmed their contrition to the combat against the COVID-19 pandemic.

The COVID-19 trauma was an unexpected event; HCWs faced the risk of infection and death during their work. The normal life had been drastically changed. After a trauma, finding meaning in a traumatic event made sense of what had happened. Previous study showed that finding the meaning of life could help recovery from a grief and improve post-traumatic growth instead of post-traumatic stress (de Jong et al., 2020). In our study, the experience made participants feel a sense of life's inherent value and hope to have a life worth living. Meanwhile, they embraced new possibility and make changes, which will enrich their future life. Similar findings were found in cares of children during the COVID-19 pandemic (Stallard et al., 2021).

4.1 | Implementation in nursing management and future crisis

Our study showed that both negative and positive experiences were present among HCWs. Because the COVID-19 pandemic was still continuing, future crisis was possible. Essential strategies and policy were needed to support frontline HCWs: (1) accessibility to formal psychological support and intervention, which maintain frontline nurses' mental health, especially male HCWs (Huang et al., 2021); (2) establishment of comfortable communication and effective collaboration environment to reduce burnout; (3) assurance of support from family, colleague and society to improve professional identity; (4) reasonable shift arrangement and attractive nutrition to maintain frontline HCWs' physical power.

Our study had several limitations. Firstly, even though participants were given the opportunity to share their personal experiences of risk and resilience, only 20 frontline nurses were interviewed; possible selection bias might exist in the qualitative study. Secondly, only female nurses were included; gender asymmetry limited the generalizability of the study. Finally, only a single time point was applied; the change in psychological experience could not be observed.

5 | CONCLUSION

Prevention and control of COVID-19 was a special and heuristic mission related to human life and health. This study showed that these frontline nurses experienced both negative and positive experiences as response to the COVID-19 outbreak. Nursing professionals were recommended to provide reasonable manpower arrangement and humanistic care to support development of psychological growth and to lower post-traumatic psychological burden.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

AUTHOR CONTRIBUTIONS

P. X. initiated and conceived this research article, collected data and supported with the first-line nurses' interviews, and participated in writing the original article. Y. Y., G. P. and R. Y. wrote the original article. D. Y. H. and Q. H. supervised the study and reviewed final manuscript.

ETHICS STATEMENT

This study has been approved by the Ethics Committee of Drug Clinical Trials of Huazhong University of Science and Technology. It has been carried out in the city of Wuhan, located in the middle south of China, with the registration number 1900022422. The participants who have been involved in this study have signed the informed consent form before being included in the study.

CONSENT FOR PUBLICATION

Not applicable.

DATA AVAILABILITY STATEMENT

The data being used and analysed during the current study are available from the corresponding authors upon reasonable request.

ORCID

Xin Peng https://orcid.org/0000-0002-8061-2335

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REVIEW ARTICLE

WILEY

The integration of care ethics and nursing workload: A qualitative systematic review

Denise Waterfield PhD, Nurse Specialist | **Susan Barnason, Professor**

College of Nursing, University of Nebraska Medical Center, Omaha, Nebraska, USA

Correspondence
Denise Waterfield, College of Nursing, University of Nebraska Medical Center, Omaha, Nebraska, USA.
Email: denise.waterfield@unmc.edu

Abstract

Aim: The aim of this review was to explore literature from January 2017 to December 2021 for specific aspects of care ethics related to nursing workload in the acute care setting.

Background: High nursing workload is associated with adverse outcomes for nurses as well as patients. Nursing workload goes beyond patient-to-nurse ratios and encompasses patient, nurse and organizational factors.

Evaluation: This qualitative systematic review was conducted according to the Joanna Briggs Institute Manual for Evidence Synthesis. The four features of care ethics related to nursing workload guided the review of qualitative studies in MEDLINE, CINAHL and PsycINFO, and synthesized findings were presented in the four phases of caring.

Key Issues: Key issues include ethical dilemmas, time pressure, shared moral burden and managerial support.

Conclusion: To reduce nursing workload, a care ethics perspective can provide solutions through fortifying interprofessional relationships and enhancing empathetic actions.

Implications for Nursing Management: Situational, individual and team approaches to management allows for incorporation of personal values and ethics of care to support patient-centred care. Leadership initiating conversations and being proactive about workload can lead to an improved work environment for both the nurse and the nurse manager.

KEYWORDS
culture, decision making, ethics, nurse manager, workload

1 | THE INTEGRATION OF CARE ETHICS AND NURSING WORKLOAD: A QUALITATIVE SYSTEMATIC REVIEW

High nursing workload is associated with adverse outcomes for nurses as well as patients. Workload influences patient outcomes and is associated with less reporting of adverse events, workarounds, increased patient length of stay, increased patient falls, higher rates of in-hospital mortality, hospital-acquired infection, medication errors, abandonment of treatment, and needle-stick and sharps injuries (Assaye et al., 2020; Carayon & Gurses, 2008; Granados-Plaza et al., 2021). High nursing workload also impacts the nursing

workforce as manifested by stress, burnout, the intent to leave and absenteeism (Aiken et al., 2001; Assaye et al., 2020; Berlinger, 2017; Carayon & Gurses, 2008). Compounding these workload challenges is the crises of current nurse shortage and COVID-19 pandemic. Although the body of theoretical and empirical literature on nursing workload has significantly increased over the last two decades (Aiken et al., 2001; Assaye et al., 2020; Berlinger, 2017; Carayon & Gurses, 2008; Granados-Plaza et al., 2021), an understanding of the multidimensionality of workload requires inclusion of qualitative approaches to the subject. The aim of this review was to explore the qualitative literature over the past 5 years related to nursing workload in the acute care setting. More specifically, qualitative findings about the care relationship between nurse managers and nurses were examined in regard to workload.

A preliminary search of PROSPERO, CINAHL and Cochrane Review Database of Systematic Reviews was conducted, and no current or underway systematic reviews on nursing workload and managers were identified. One literature review exists that examines the perceived and experienced role of the nurse unit manager in supporting the well-being of intensive care unit nurses (Adams et al., 2019). The review presented here differs in that it reviewed qualitative studies only and focused on workload and acute care nurses.

2 | BACKGROUND

2.1 | Nursing workload

From a management perspective, workload is controlled through nurse staffing and involves patient-to-nursing staff ratios, hours of direct patient care and overtime use. Occasionally, the types of nurses, years of experience, availability of support staff and team interdisciplinarity are also considered. Nursing managers often track staff retention variables include workforce absenteeism, use of float teams and nurse turnover (Thériault et al., 2019) to evaluate nursing workload.

Organizational factors that contribute to workload consist of availability of resources, average daily census, patient turnover, caseload, mandatory reporting of data, documentation, use of technology and organizational decisions like mandatory education and meetings (Junttila et al., 2019; Lebet et al., 2021; Myny et al., 2012). Unfortunately, when workload exceeds care that can be reasonably provided by resources, organizational factors can potentially contribute to nurses' deliberate deviations from policies or written procedures (Jam et al., 2018). Also, cost constraints are ubiquitous in health systems, but these constraints increase pressure upon nurses to do more with less and sometimes with a reduced skill set that does not match patient acuity (Harvey et al., 2020).

Workload from a nurse's perspective not only encompasses the variables of staffing but also includes psychosocial and physical factors related to the organization, patient characteristics, cognitive burden (Ng & Curley, 2012), work interruptions (Myny et al., 2012) and perceptions of adequacy of resources and quality of care (Junttila et al., 2019). Patient factors include acuity of illness (Alghamdi, 2016), dynamic patient events like rapid responses and transporting patients for procedures (Moore et al., 2016), patient dependency, patient age and weight, number of medication doses per day, and overall complexity of care (Junttila et al., 2019). Overall, nurse workload is situational and dynamic. Health care organizations would benefit from a human-factors approach to work systems by recognizing that benefits for both patients and nurses improve nurse well-being and system performance (Carayon & Gurses, 2008).

2.2 | Care ethics

Definitions of care ethics by theorists in the field are generally broad. In the early development of care ethics, Noddings (1988) identified caring as an ethical orientation and a form of relational ethics. Tronto (1993) devised a definition that views caring as a species activity that includes everything humans do to live as well as possible in a complex world. At the core of all the care ethics definitions is the notion that humans are a part of a system of associations and are fundamentally relational.

The care ethics criteria proposed by Klaver et al. (2014) place ethical emphasis on relationships as a source of knowing and the place to receive recognition and care. The criteria also describe care ethics as context bound and situation specific. Relationships are broader than personal relationships and involve institutional and systemic realities. Leget et al. (2019) expanded on criteria offered by Klaver et al. (2014) and proposed a view of limiting research of care ethics to qualitative methods studying lived experiences, practices of care and the way society is organized. Leget et al. (2019) did not consider their way as the only way but a fruitful epistemological approach for care ethics. More specifically, focusing on lived experiences and studying structures and power relations in society as a whole prevent political naivety and allow delivery of optimal care.

Although the onus of nurses' workload is not solely on nurse managers, analysis must include the understanding of the dependence of the nurse upon the nurse manager and the value of their relationship and shared world of patient care. By deliberately focusing on the relationships between nurse managers and nurses from this care ethics perspective, the issue of nursing workload can be addressed through shared experience. Therefore, the review question for this qualitative systematic review was, "What are the specific care ethics aspects related to nursing workload in the acute care setting?" Because care ethics is relational, the focus was on the nurse as the care receiver and the nurse manager as the caregiver. The review subquestions are found in Table 1.

3 | METHODS

3.1 | Study design and strategy

This qualitative systematic review was conducted according to the Joanna Briggs Institute (JBI) Manual for Evidence Synthesis (Figure 1)

TABLE 1 Review subquestions with explanatory statements

Phases of caring	Subquestions	Explanatory statement
Caring about	Is there a need regarding workload? Should this need be met?	Care erosion and hardship on nurses due to heavy workload are two major needs.
Taking care of	What is the responsibility of nurse managers for the need? How do nurse managers respond?	Nurses and managers share a moral burden for decreased workload.
Caregiving	What is the actual, visible work done by the nurse managers in response to needs?	Nurses need support and role models from nurse managers for managing workload.
Care receiving	How are the nurses affected by the care they receive?	Due to lack of care received, nurses have adopted defensive and proactive strategies to get work done.

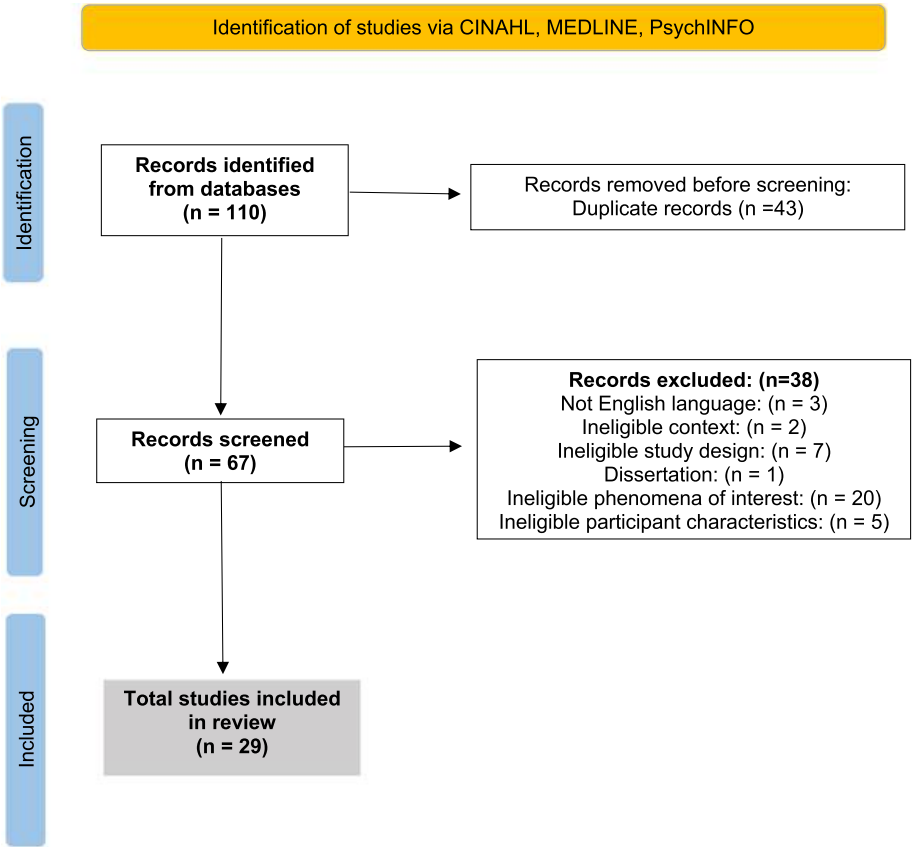

FIGURE 1 Results of the search of databases and the study inclusion process

(Aromataris & Munn, 2020). The review is registered on PROSPERO (ID CRD42022302322). An initial review of MEDLINE, CINAHL and PsycINFO was conducted to determine appropriate subject headings, search words or phrases, and MESH terms. This informed the development of a search strategy that was tailored for each information source. A full search strategy for the databases is detailed in Table 2.

TABLE 2 Search strategy of databases

Database	Search strategy
CINAHL	CINAHL subject headings: 'workload' and 'nursing staff, hospital' Key term in abstracts: 'qualitative'
MEDLINE	MESH terms: 'workload', 'nursing staff, hospital' and 'qualitative research'
PsychINFO	Key terms in abstracts: 'workload', 'nursing' OR 'nurse' OR 'nurses', 'qualitative', 'acute care' or 'hospital' or 'inpatient care'

3.2 | Inclusion criteria

Only studies published in English were included. Studies published from January 2017 to December 2021 were included because this systematic review was interested in capturing the current relational contexts between nurses and nurse managers. For review of the initial group of studies ($n = 110$), the four features of care ethics (Klaver et al., 2014) guided the inclusion criteria and were as follows: (1) concrete feedback of lived experiences by both nurses and

managers of the relationship between nurses and nurse managers (i.e., relationship-based programming); (2) context and situation details; (3) institutional and systemic realities; and (4) empirical evidence of care as a practice. Studies that reported findings related to any of these criteria were included in the study.

3.3 | Study selection

Only English language published studies that reported first-hand experiences, perceptions, perspectives or views on nursing workload from nurses or nurse managers in the acute care setting were included. This review considered studies that focused on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research (Aromataris & Munn, 2020; Leget et al., 2019). Mixed method studies that reported rich qualitative descriptions were also included.

All identified citations were collated and uploaded into JBI System for the Unified Management, Assessment and Review of information (JBI SUMARI) (Aromataris & Munn, 2020) and duplicates removed. Titles and abstracts were then screened for assessment against the inclusion criteria for the review. Studies that met the inclusion criteria were retrieved in full and their details. The full text of selected studies was assessed in detail against the inclusion criteria. Full-text studies that did not meet the inclusion criteria were excluded and reasons for exclusion are provided in Figure 1. There were 29 eligible studies. The settings of the studies included Australia (2), Belgium, Canada (3), China (2), Denmark, England, Finland, Greece, Iran (2), Japan, New Zealand, Norway (2), South Korea, Southwest Asia, Sweden (2), Taiwan, Turkey, United States (3) and Vanuatu. The methods for data collection included focus groups (6), individual interviews (15), both interviews and focus groups (3), ethnography (2), and open-ended survey questions or incident reports (3).

3.4 | Assessment of methodological quality

Eligible studies ($n = 29$) were critically appraised by the authors for methodological quality using the standard JBI Critical Appraisal Checklist for Qualitative Research (Munn et al., 2019). The authors agreed a priori that if any studies scored 'no' or 'unclear' on three or more criteria, the two reviewers would meet to discuss whether these studies would be included. None of the studies met the criteria to be excluded.

3.5 | Data extraction and synthesis

The data extracted included specific findings of nurses' perspective of workload in the context of any of the four features of care ethics. Findings and illustrations were extracted verbatim. Only findings and their corresponding illustrations relevant to the phenomena of interest and from participants who met the inclusion criteria were extracted (Tables 3–6). The synthesized findings were then organized and presented in the four phases of caring—caring about, taking care of, caregiving and care receiving (Tronto, 1993) and expressed as statements of recommendations for policy or procedures regarding nursing workload (Tables 1 and 3–6).

4 | RESULTS

4.1 | Caring about: Care erosion and hardship

The first phase of caring is "noting the existence of a need and making an assessment that this need should be met" (Tronto, 1993, p. 105). In the context of the relationship between the nurse manager and the nurse, the authors sought to first discover if there is a need regarding workload and should this need be met. Significant needs were found in the qualitative studies to decrease workload. Heavy workloads are often caused by time restraints, large patient-to-nurse ratios and lack of resources.

The cause and effect of time restraints on acute care nurses vary. In their study of capacity strain in the hospital workplace, Womack et al. (2019) reported multiple shifts between workload demand through a shift, adaptive strategies that may not be consistent with policies or procedures, and some tasks may be deferred. Time pressure on patient care sometimes forces nurses to ration care—to give up work that should be done in favour of work that must be done (Bishop & Macdonald, 2017; de Casterlé et al., 2020; Martin & Bouchard, 2020). Lack of time was also described as contributing to self-harming incidents by patients to attract nurses' attention (Lindgren et al., 2021). In contrast, nurses indicate that capacity strain was manageable if they could address self-care needs like eating, drinking and using the restroom and often clinical documentation while sitting at the computer doubled as time for rest and rehydration (Womack et al., 2019).

Large patient ratios have notable negative impacts on nurses and patients. This is often due to inadequate staffing (Cengiz et al., 2021; Chua et al., 2019; Lee et al., 2021; Tamata et al., 2021), but also an overall higher number of patients admitted and lack of coverage of sick calls or annual leave (Tamata et al., 2021). Contributing to the large patient ratios is the current coronavirus pandemic. Reflecting to the sustained influx of acute care patients due to the pandemic, one participant responded, "The number of patients has increased a lot. A 24-hour shift is quite tiring, insomnia and insufficient rest are at the peak level! I used to get tired before. Now, I get tired twice as much" (Cengiz et al., 2021, p. 2008).

Time scarcity and inadequate staffing and resources lead to patient care erosion and hardship on the nurses. Nurses reported no longer having access to their role as caregivers (Martin & Bouchard, 2020) leading to ethical dilemmas. Psychosocial care of patients is deprioritized, and empathetic care is considered a luxury (Siyun Chen et al., 2017; Stavropoulou et al., 2020). These dilemmas create a gap for nurses between the anticipated and lived work experience (Womack et al., 2019). Further hardships included emotional exhaustion, fatigue, insomnia, lack of confidence, increased workplace

TABLE 3 Extracted findings related to 'caring about' phase of caring

Authors (year)	Verbatim extracts of authors' analytic interpretations	Accompanying illustrations
Bishop and Macdonald (2017)	"Encountering roadblocks"	*"… you have a limited amount of time … you have to cut the conversation off."*
Bryant et al. (2018)	"Perceived increase in workload for nurses."	*"… nowadays nurses don't have the time or the stomach to educate Drs who are indifferent or patronizing when their prescribing errors are pointed out to them or when they are asked to rewrite illegible medication prescriptions."*
Cengiz et al. (2021)	"Severe fatigue due to increased workload and insomnia"	*"I used to get tired before. Now, I get tired twice as much."*
Cengiz et al. (2021)	"Environmental pressure caused depressive emotions and obsessive behaviours in many nurses"	*"I feel like a robot that is worried about its own life"*
Charette et al. (2019)	"Participants attributed this significant workload to the limited financial and human resources of the organization; some participants talked about a work overload that was even felt by experienced nurses."	*"Experienced nurses already have difficulty doing everything they have to do and finishing on time"*
Charette et al. (2019)	"NGNs [new graduate nurses] should not have the same workload as other nurses, but that their load should be progressively increased over a few more weeks. However, according to participants, contextual factors preventing this are recurrent."	*"Because we are understaffed, the NGN must take on the same workload as the other nurses."*
Charette et al. (2019)	"One nurse manager said that the number of forms to complete constantly increases and can have a negative impact on direct care."	*"There are so many forms and paperwork. When a patient is admitted, they have 13 forms to fill out!" (nurse manager)*
Harvey et al. (2020)	"Emotional exhaustion"	*"There's nothing wrong with this nurse - at times she is running, and she can't run anymore … she's had enough."*
Lee et al. (2021)	"Insufficient staffing and concerns about overtime"	*"I feel like [I have to decide whether] to wait for one hour to [get a lift] team delivered to my room, [or whether to wait] for the second person to come here … just quick do this and get on with it rather than get in trouble."*
Martin and Bouchard (2020)	"Decrease in quality of care … increase the number of patients supported by each staff nurse"	*"We do not have time to lift them up anymore. We put them in disposable incontinence adult diapers, to save time."*
Martin and Bouchard (2020)	"Hospital management is obsessed with economic imperatives that dictate all managerial behaviours … does not take into account the point of view of the staff nurses and fails to inform them of changes, even when these new procedures would affect them directly."	*"OK, this one work 12-hour shifts on weekends, and it works for me." "so, I will not move him/her to a different shift." well, let's see, according to the convention, it's the youngest [that should be moved], this one is in surplus, and you say it works for you on a 12-hour shift on weekends, so you will not move that person?"*
Martin and Bouchard (2020)	"Fear-based management"	*"There is a coordinator who wanted to force me to work overtime. She threatened me to send an act of insubordination to the order. I do not know if you know, when you're a young person coming out of school, how scary it can be.."*
Martin and Bouchard (2020)	"limited flexibility that nurse managers have to improve the prevailing working conditions in various hospital care units"	*"More often than not, heads of care units in the throes of any situation of conflict, they have very little ammunition to battle with only just the back of a spoon…"*
Stavropoulou et al. (2020)	"The routines seemed to continue without critical reflection and the management did not get involved."	*"The leadership on the ward does not get involved. When it comes to dying patients, treatment is not stopped in time. Medication continues. The physicians would like us to try this and that, and we do. Nutrition is started. Intravenous or by probe. We follow the treatment until the day before the patient dies."*
Tamata et al. (2021)	"Lack of support from the leaders causes low working morale and low motivation"	*"We always confront our nursing managers … but they always give excuses and no action taken seriously which affects our morale of work."*
		"We hardly see the managers or supervisors doing regular visitation to support nursing staff and to assess nurses work performance, this causes low staff motivation."

Note: With the JBI approach, the first step is to extract findings from the studies. Findings are verbatim extracts of the authors' analytic interpretation. Authors and year are in bold. Each verbatim finding is then accompanied by an illustration which is a direct quotation from the study (in italics).

TABLE 4 Extracted findings related to 'taking care of' phase of caring

Authors (year)	Verbatim extracts of authors' analytic interpretations	Accompanying illustrations
Charette et al. (2019)	"[new graduate nurses] may not have sufficiently developed leadership skills, self-confidence, and professional identity to be able to meet this requirement in the first months of their practice."	*"… the newly hired nurse freshly out of school doesn't have a well-developed sense of leadership and she has little confidence in her actions and in herself."*
Charette et al. (2019)	"One [new graduate nurse] felt that, even though she learned a great deal from her floating experiences, she always felt excluded from the rest of the team and felt she was assigned a heavier workload than she would normally have."	*"Constantly changing units, teams, specialties, it is very stressful. When you go back on the same units, you start to know the teams, so it's easier … and sometimes you know that you have the heaviest patients and that you would not have that section if you were a part of the regular team."*
Chua et al. (2019)	"The perceived complexity, time and workload pressure, lack of confidence, and lack of role models to correct their practice were also seen as barriers to nurses use of 'complex' physical assessment skills."	*"We learnt ['complex'] physical assessment in school, but I don't think we have the time to do [them]. I don't think we are empowered to do ['complex'] physical assessments, and were not confident to do them as well."*
Chua et al. (2019)	"Missing the big picture – 'Blinded' by overwhelming workload … impaired their capabilities to 'see' clinical deterioration."	*"Sometimes, we are held up with something else. We won't know how the other patients are. We won't know that the patient deteriorates unless another staff passes by [and says], 'patient XX doesn't look good.'"*
Gao et al. (2020)	"Adjust shift patterns dynamically according to workload"	*"At the beginning, [it was a] mess. We adjust[ed] our schedules dynamically. At first, we worked an 8-hour shift, then we worked a six-hour shift, finally we settled on a four-hour shift…"*
Gao et al. (2020)	"Communication should be strengthened to adjust shift patterns appropriately taking front line nurses perspectives into consideration"	*"The head nurse should consider my physical and mental health and listen to my opinions, and then make appropriate scheduling, which is more conducive to my nursing work."*
Gao et al. (2020)	"Pay attention to nurses physical and psychological well-being"	*"I feel uncomfortable. I wear the protective gear all the time. And I have to wear diapers. I try to adapt to it both physically and mentally."*
Harvey et al. (2020)	"Emotional exhaustion"	*"This low resource of nursing numbers doesn't take into account that actually people [nurses] are going over and above what they're required to do … for a … manager, what they see is actually these guys are doing relatively well on what they've got."*
Tamata et al. (2021)	"Work overload and work for long hours causes more physical and medical risks"	*"Shortage of nurses affects our physical body very badly … we felt tired and cannot provide the best quality nursing care to our patients."*
Tamata et al. (2021)	"They dont have enough time to rest and eat or drink due to too much workload and limited nurses"	*"Most of the time our ward is busy and those times I don't have enough time to rest and eat or even drink which affects my physical health."*
Tamata et al. (2021)	"Most nurses reported that high job demands increase physical and mental health problems."	*"When we have too many patients and lack of skills especially for us inexperienced nurses, it affects us psychologically as well which can affect our performance."*
Tamata et al. (2021)	"Medical errors are one of the common risks that occur due to stress from working long hours or work overload"	*"Most of the time due to frustration and too much workload I don't practice infection control rules and regulations which cause more medical risk to my patients."*
Womack et al. (2019)	"Activity patterns … temporal shift rhythms"	*"The morning is usually a very busy time because each of us has 4 patients that need something right off the bat. There are usually new orders coming in right at 6 or 7 am; all the meds are due, somebody needs something. And right when you're about to leave a patient room, something else happens…."*
Womack et al. (2019)	"Signs of manageability—ability to address self-care needs including hydration, nutrition and restroom breaks was the most frequently reported sign of a 'good shift'."	*"I got to eat lunch, yeah, just 30 minutes."* *"Got to go to the bathroom when I needed to."*
Womack et al. (2019)	"3.2.3. Demand bursts… Workload escalation may occur as a result of a single large event, multiple small events, or a gradual increase in aggregate patient demand."	*"Sometimes I'm having a great day, and all of a sudden it gets busy for 20 minutes, so I procrastinate those meds for 45 minutes."*

Note: With the JBI approach, the first step is to extract findings from the studies. Findings are verbatim extracts of the authors' analytic interpretation. Authors and year are in bold. Each verbatim finding is then accompanied by an illustration which is a direct quotation from the study (in italics).

TABLE 5 Extracted findings related to 'caregiving' phase of caring

Authors (year)	Verbatim extracts of authors analytic interpretations	Accompanying illustrations
Charette et al. (2019)	"One new graduate nurse also believed that the nurse manager wanted her to finish her orientation as quickly as possible to be given a full workload."	*"The nurse manager wanted us to finish our orientation as quickly as possible … so, to be "functional" faster, well, I was switching from one preceptor to the other."*
Chua et al. (2019)	"The most challenging issue reported by nurses was struggling to provide close vigilance to patients during night shifts when there were significantly fewer staff."	*"We can't monitor patients so closely. … I had to accompany one patient to the toilet. My EN was on break and other staff were occupied. When my EN returned from break, she found [that] patient X [had] collapsed."*
de Casterlé et al. (2020)	"… to some nurses, doing the work in a routine manner offered structure and support when working under time pressure. Routine disruption, on the contrary, acted as a source of extra stress and time pressure."	*"Normally, you know that you can do it within that time frame because it's nothing new [it's routine]. And then you think, 'yes, I can do it'. Unless, of course, something comes up, which interferes with that routine, and then the workload increases."*
Keers et al. (2018)	"Working environments that were noisy, chaotic, and/or busy. This type of environment led to distractions and interruptions, high workload and rushing …"	*"Rushed, there were lots of people milling around in the corridor, there were doctors running on and off the ward requesting prescription charts … it was really crowded, it just felt … really rushed, I had to get the medication round finished to get on with the rest of the day."*
Keers et al. (2018)	"Low staffing was reported to be commonplace and appeared chronic in some cases, with causes including sickness, annual leave and wards acting as a staff 'donor' … to others requiring personnel."	*"… Which is another issue, agency staff only. They don't know the ward, they don't know the patients, so you're the only qualified with three or four agency staff only, who don't have the ward, who don't know the patients. So, you can't rely on them."*
Lee et al. (2021)	"At the beginning of the shift, you are assigned a 'buddy' nurse co-worker [based] on the proximity of your patient assignments. So, when she needs help lifting, you go help, and vice versa. Without consideration for what your individual workload was, your availability [to help],… That system failed us."	*"I've been a nurse for 20 years, and I'm more and more frustrated every day at work because were expected to do more with less every day."*
Liang et al. (2021)	"Many hospitals implemented isolation and triage measures requiring additional training."	*"We had to conduct actual exercises after work in case the epidemic became serious."*
Lindgren et al. (2021)	"..Lack of time sometimes contributing to self-harming incidents at the ward as patients sought the staffs attention."	*"..It had been possible to avoid many incidents if you had the opportunity to acknowledge them before they had harmed themselves."*
Martin and Bouchard (2020)	"… they no longer have access to their caregiver roles. These phenomena included the fact of constantly feeling like they are putting out fires and to be forced to omit certain nursing interventions, even essential ones."	*"A blood test …, it is prescribed and nurses will not do it. Or dressings,… Are not done three times a day, [but] once a day. Hence nurses are called to make professional mistakes."*
Martin and Bouchard (2020)	"Prioritizing care over others"	*"The employer [tells you] to prioritize. … "If he wants to cut his veins, stop him, but leave it at that, for today."*
Najafi et al. (2018)	"… difficult for them to provide effective care to patients and caused dissatisfaction among patients/relatives and physicians."	*"… the more tired the nurses are, the more there is tension and conflict."*
Siyun Chen et al. (2017)	"Medical care and routine bedside care were prioritized over providing psychosocial care … they would only provide psychosocial care if there was extra time"	*"We cannot sit down and talk to the patient and find out more."* "
Stavropoulou et al. (2020)	"Heavy workload and understaffing were … impeding factors for the integration of empathic care in practice. Elimination of these barriers, was considered essential for being able to integrate empathic care to practice."	*"…Most of the nurses think that (empathic care) it is a luxury…Time is not enough…"*

(Continues)

TABLE 5 (Continued)

Authors (year)	Verbatim extracts of authors analytic interpretations	Accompanying illustrations
Storaker et al. (2016)	"… only a marginal opportunity to live out their ethical values in their daily practice, and this led to ethical challenges. They characterized a general working day as a state of chaos without any opportunity to have a say concerning improvement."	*"It is inexhaustible, isn't it? As soon as the patient is discharged, I don't even have time to wish them a good recovery; three new patients are beside me, ready to be admitted and put in the room I haven't even had the time to clear out yet."*
Storaker et al. (2016)	"… professional nursing values seemed to fade and even vanish in the process of adapting to the existing culture."	*"… you learn almost to ignore the feeling that OK, ethics is not that important. Of course, it is terrible. It definitely is, but after a while, you do not bother. In the end, you will find that there are other things to worry about instead… it is tragic."*
Tamata et al. (2021)	"All the participants also reported that the workload is increasing because of the high number of patients admitted."	*"In the past, the population was less but now the population increases due to the high number of disease cases that causes more patients admission and more workload to us nurses."*
Tamata et al. (2021)	"… workload when only one nurse worked to cover for nurses who were on various leaves."	*"Workload is too much as most of the time only two nurses working in each shift is not enough, if one staff on sick leave or annual leave then we must double the shift."*
Tamata et al. (2021)	"Increased workload compared to a smaller number of nurses working in the hospitals causes nurses physical exhaustion leading to job dissatisfaction"	*"Workload is too much in the hospital wards and we cannot do all our work at one time… I normally experienced tiredness and exhaustion and not interested to work due to incomplete jobs seen each day."*
Valizadeh et al. (2018)	"Unsupportive organizational culture … nurses value compassion, but there are many factors that can gradually destroy these values. 'Excessive workload alongside inadequate staffing' and 'the lack of value on compassionate care.'"	*"I I assess patients needs, control vital signs,… In this situation I ignore psychological aspects and compassionate care, I only focus on physical care."*
Valizadeh et al. (2018)	"As the number of patients is more, I can't communicate with them all … I have not more time to listen to them."	*"… the system gives more importance to paperwork, rather than giving importance on providing high quality care."*
Waltz et al. (2020)	"High priority … the ratio of nurses to patients, acuity levels, increasing numbers of tasks that they are being asked to complete and the number of nursing assistants available."	*"It is like they are always coming up with something new for you to do. It's like 'just add that to my list' (chuckling). … it is an extra weight on you to do those things so that really affects your job satisfaction. You feel more overwhelmed."*
Womack et al. (2019)	"… demand bursts that create unsafe patient situations or inability to provide high-quality care result in workplace frustration. … time-sensitive, technical tasks such as passing medications crowd out time for therapeutic interaction and whole-person care.	*"I think nursing attracts people with personalities that are a lot of times type A, or like gung-ho, or like yeah, yeah, yeah. We just keep saying yes, I can do that, I can do that, I can do that. And then it's like, (whispers) 'no, you can't.'"*

Note: With the JBI approach, the first step is to extract findings from the studies. Findings are verbatim extracts of the authors' analytic interpretation. Authors and year are in bold. Each verbatim finding is then accompanied by an illustration which is a direct quotation from the study (in italics).

TABLE 6 Extracted findings related to 'care receiving' phase of caring

Authors (year)	Verbatim extracts of authors analytic interpretations	Accompanying illustrations
de Casterlé et al. (2020)	"(pro)active strategies … belief in their own ability to influence the workload and its impact on care was at the heart of these nurses strategies."	*"I like to do a lot myself because then, I am in control over what happens… But you also have to – If you dont have time – Learn to distribute the work and reduce the workload for yourself … Handing tasks over to others so that you can do something else without rushing, while they can continue … "*
Kang et al. (2018)	"Being busy with catching up with … frequently changing guidelines"	*"We promptly communicated and shared updated information among nurses within the unit, thoroughpaced talk (a free mobile instant messaging application for smartphones with free texting)."* *"We had a notice note summarized about new information on MERS. We change shifts, we read the note and were also told what we have to be cautious because of what has been changed and it helped. It helped because we never had MERS …"*
Liang et al. (2021)	"Participants believed robotics could reduce their workloads. An important factor affecting participants perception of the advantages of robotics was their sense that intelligent devices were ideal for performing repetitive actions and assisting with precision treatment."	*"Usually while new patients are admitted, we have to do a physical assessment and a family assessment. We also have to do a unit orientation; it usually takes a lot of time…. I think robotics can help us in this area."*
Martin and Bouchard (2020)	"Solution for management performance: Proximity and possibilities"	*"It [would help] if administrators would be more present in the field and less often in meetings …. They could see the whole scheme of things [that are done by staff nurses]. It would help [to] give some feedback to people."*
Martin and Bouchard (2020)	"… administrators are not constantly monopolized by meetings. But these meetings, in her opinion, have the effect of making them lose contact with the reality in the field … the meetings should not be abolished, but they should be succinct and directly relate to what happens within the hospital wards."	*"It does not take money to do that … it just takes some administrators, who are able to drop their paperwork, to look at the reality and to say: "No, this way [to work], it doesn't make sense!" and probing around: "You, what are you thinking? [and you,] what do you think?*
Martin and Bouchard (2020)	"…Nurse administrators, like other physicians, have the opportunity to adopt a mixed practice through which they would be able to act as nurse administrators while remaining active at the clinical level."	*"I find that interesting to see physicians who may have mixed practices will continue to … follow their patients and … will be able to manage at the same time. But for staff nurses … From that moment on, if we do nursing management … bygones would be bygones with respect to … the caring."*
Stavropoulou et al. (2020)	"Getting organizational support in terms of a good working environment, provision of training, less workload and more facilities were mentioned as means of enabling participants to integrate empathic care in practice."	*"…We need more facilities, more nurses…And the opportunity to study, to have a seminar, or some formal training…"* *"….Facilities to preserve patients dignity and intimacy are important"* *"*

Note: With the JBI approach, the first step is to extract findings from the studies. Findings are verbatim extracts of the authors' analytic interpretation. Authors and year are in bold. Each verbatim finding is then accompanied by an illustration which is a direct quotation from the study (in italics).

violence, and other physical and mental risks and problems (Cengiz et al., 2021; Chua et al., 2019; Harvey et al., 2020; Liang et al., 2021; Najafi et al., 2018; Tamata et al., 2021).

Patient care erosion and medical errors are other unfortunate results of heavy workloads (Chua et al., 2019; Lindgren et al., 2021; Martin & Bouchard, 2020; Tamata et al., 2021; Womack et al., 2019). Minimal and deferred care was reported with blinding to clinical deterioration (Chua et al., 2019; Martin & Bouchard, 2020; Womack et al., 2019). Although current literature often focuses on the outcome of care left undone, the causative elements of resource and time scarcity and a lack of a normative framework for decision making by nurses to prioritize care have not been studied sufficiently (Scott et al., 2019). However, Renolen et al. (2018) studied nurses' struggle with maintaining workflow by task juggling and with implementing new scientific knowledge by "battling counter current" (p. 185) of insufficient support and lack of time.

4.2 | Taking care of: Shared moral burden

The second phase of caring is "taking care of" or "assuming some responsibility for the identified need and determining how to respond to it" (Tronto, 1993, p. 105). This phase of caring about nursing workload means finding what the responsibility of nurse managers concerning the identified workload needs is and how do the nurse managers respond. In some instances, the values of a workplace differ from the values of the nurse. This can result in role conflict when incongruous organizational resources or expectations compromise professional standards (Harvey et al., 2020). Harvey et al. (2020) also reported nurses who described how they were treated as commodities to accomplish checklists and mandatory reporting and felt devalued. Nurse managers are also often in "the throes of any situation of conflict, [and] they have very little ammunition to battle with, only just the back of a spoon" (Martin & Bouchard, 2020, p. 312).

The moral burden of care compromising or care rationing needs to be shared at the organizational level and not solely placed on individual nurses (Scott et al., 2019). Pressures from patients, other professionals, supervisors, organizational demands and other environmental factors can shape ethical practice. At times, the logic of managers that prioritizes rationing efficiency clashes with the autonomy and expertise of professionalism (Livingstone et al., 2021). However, it is imperative to acknowledge that "nurse managers' consciousness is being bifurcated—what they know from experience, from being there, is overruled by authoritative institutional information" (Fast & Rankin, 2018, p. 8). Harvey et al. found a need among nurses to for managers to understand their exhaustion and their dilemmas like waiting on resources at the risk of overtime hours (Harvey et al., 2020). Managers who have reconciled the clash between professionalism and managerialism by prioritizing one over the other or blending the two may have lessened conflict and tension (Livingstone et al., 2021). Open communication between managers and nurses that takes the nurses' perspective into consideration can optimize and humanize shift patterns (Gao et al., 2020).

4.3 | Caregiving: Need for support and role modelling

The third phase of caring is caregiving. This is the actual, visible work done in response to needs. To address nursing workload, staffing decisions need to be based on evidence regarding impact on the assigned nurses and patients. Unfortunately, this review found evidence of actual, visible actions by management that was uncaring. Nurses who are new graduates have reported a desire to finish orientation periods before working independently, but contextual factors sometimes do not allow for full orientation (Charette et al., 2019). Martin and Bouchard (2020) presented a predominantly negative impression of managers' behaviour with fear-based management, forced overtime and obsession with finances. Ethical dilemmas occurred on the units without role modelling or involvement from managers, and organizational culture often emphasizes documentation or compassionate care (Chua et al., 2019; Stavropoulou et al., 2020; Valizadeh et al., 2018). Respondents indicated that this lack of support from the leaders causes low morale and low motivation (Tamata et al., 2021). Additionally, when nurses go above and beyond what they are required to do, managers often overlook the strain and conclude that nurses do well with what they have (Harvey et al., 2020).

4.4 | Care receiving: Survival or proactive strategies

The final phase of caring is care receiving or recognizing that "the object of care will be affected by the care it receives" (Tronto, 1993, p. 107). This review sought to find how nurses are affected by the care they receive from nurse managers but found more adaptations due to lack of care received. If this final phase fails, nurses adopt survival strategies like increased pace of work, completion of care beyond allocated hours and sacrificing health and well-being to do what needs to be done (de Casterlé et al., 2020; Scott et al., 2019). Care rationing compromises ethical values and leads to feelings of failures (de Casterlé et al., 2008, 2020) The resulting stress is known to lead to burnout that results in emotional exhaustion, depersonalization and lack of personal accomplishment (Andela & Truchot, 2017; Maslach & Leiter, 2008). Two solutions proposed were for management to not be monopolized by meetings to allow time for presence on the units and for management be encouraged to have mixed practices that allow for direct patient care (Martin & Bouchard, 2020).

5 | CONCLUSION

Nursing workload is complex and contributing factors are sometimes not addressed in the workplace. Competing priorities for nurses cause ethical dilemmas that can compromise professional values, moral agency and patient-centred care. Most nurses are nurses for the caring aspects. If the four phases of care succeed, nurses are allowed

some control over their workload and can include in their patient care things they enjoy the most (de Casterlé et al., 2020; Gaudine, 2000). To reduce nursing workload, a care ethics perspective can provide solutions through fortifying interprofessional relationships and enhancing empathetic actions.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

The conflict between reducing health care costs and mandates of quality patient care has created on-going decision making at the bedside and the managerial level. Care ethics challenge the depersonalization of nurse managers caring for nurses and encourage a view of the detailed, everyday experiences. Situational, individual and team approaches to management allow for incorporation of personal values and ethics of care to support patient-centred care. Leadership initiating conversations and being proactive about time pressures, care rationing and managerial logic can lead to balanced workloads, reduced tensions and increased job satisfaction for both the nurse and the nurse manager. Bujacz et al. (2021) reported that nurses moving from early to mid-career remain in jobs in which they experience increased control and support with a reduction of job demands. Conversely—in the same group of nurses—adverse health outcomes were associated with low autonomy, low support and moderated job demands.

Nurse autonomy can be expanded to a unit characteristic of collective efficacy that can guide manager efforts. Collective efficacy is defined as the capacity of a group of nurses to solve problems and correlates with an improved work environment and less missed care (Scott et al., 2019; Smith et al., 2018). Markey et al. (2022) show that this necessary problem-solving environment is created when leadership fosters open, meaningful and respectful dialogue. Focus on dialogue, the work environment and collective efficacy aligns well with the relational aspects of care ethics that are quality of interactions, space for human connection and reflective practice for improvement (ORourke et al., 2019).

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CONFLICT OF INTEREST

Both authors have no conflicts of interest to declare.

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DATA AVAILABILITY STATEMENT

Data sharing is not applicable—No new data are generated, or the article describes entirely theoretical research.

ORCID

Denise Waterfield https://orcid.org/0000-0001-6354-8071

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ORIGINAL ARTICLE

WILEY

Nursing leaders' perceptions of the state of nursing leadership and the need for nursing leadership education reform: A qualitative content analysis from South Korea

Hae-Ok Kim Ph.D., RN[1] | Insook Lee Ph.D., RN[2] | Byoung-Sook Lee Ph.D., RN[3]

[1]Department of Nursing, Kyungnam University, Changwon, Republic of Korea

[2]Department of Nursing, Changwon National University, Changwon, Republic of Korea

[3]College of Nursing, Keimyung University, Daegu, Republic of Korea

Correspondence
Insook Lee, Ph.D., RN, Department of Nursing, Changwon National University, 20 Changwon Daehak-ro, Uichang-gu, Changwon, Gyeongnam 51140, Republic of Korea.
Email: dobest75@changwon.ac.kr and dobest75@gmail.com

Abstract

Aim: This study aimed to clarify nursing leaders' perceptions of nursing leadership education and practice.

Background: Leadership is an essential competency that is required in nursing practice. It is also necessary to pay more attention to the development of nurses' leadership to improve patient safety and outcomes.

Methods: Participants were 15 nursing leaders. We adopted qualitative content analysis for data collected through individual and/or focus group interviews and analysed using the process of coding, condensing and categorizing.

Results: The results revealed the following five major themes with categories: (1) nursing leadership—commitment to nurses, the nursing profession and the organisation; (2) nursing leadership abilities—competency and compatibility, personality and traits; (3) importance of nursing leadership education to enhance educational efficiency and to nurture next-generation nursing leaders; (4) difficulties in nursing leadership education: lack of perception and difficulty of implementation; and (5) strategies for nursing leadership education: contents and methods.

Conclusions: Nursing leaders' perception of nursing leadership was extended to nurses, organisations and nursing professions. Competency, capability, innate personality and traits are required nursing abilities that are acquired through education.

Implications for Nursing Management: Experience and theoretical-based nursing leadership education should be introduced gradually and systematically from the beginning of nurses' careers.

KEYWORDS
education, leadership, nursing, qualitative research

1 | BACKGROUND

Nurses play an important role in transforming health care; therefore, effective nurse leadership is required (Page et al., 2021). Rising medical costs, increased competition among medical institutions and high demand for quality medical services are particularly calling for the efficient management of medical institutions, subsequently increasing the demand for nurses with management and leadership skills (Berez et al., 2015). Due to the nature of their duties in collaboration with patients, medical personnel and multidisciplinary experts, nurses are

expected to demonstrate leadership skills in various contexts. Furthermore, the National Academy of Medicine (NAM) in the United States emphasized that nurses should develop their leadership capabilities throughout their careers (NAM, 2011). A 2016 NAM report highlighted the need to improve nurses' leadership development to promote patients' safety and health outcomes (National Academies of Sciences, Engineering, and Medicine, 2016). However, nurses may not be afforded the opportunity to undertake leadership education to develop the skills and behaviours to effectively manage themselves, their patients and other health care team members (Page et al., 2021).

Leadership is defined as the process and ability of a leader to positively impact the achievement of an organisation's goals and to bring about changes in its members' behaviour (J. S. Kim, Kim, Jang, et al., 2015; Roussel et al., 2006). Within nursing contexts, leadership creates an environment that both influences nurses to improve the quality of nursing care and motivates and empowers them through a clear vision (Cook, 2001; Finkelman, 2012; Y. M. Kim, Kim, Kim, et al., 2015). It is a skill that improves the performance of the nursing organisation (J. S. Kim, Kim, Jang, et al., 2015). Effective leadership from management inspires positive behaviours in staff, such as organisational citizenship behaviours, further job satisfaction and organisational commitment (Cummings et al., 2018).

Education is necessary to continuously improve nursing leadership abilities (Cope & Murray, 2017). Moreover, nurses can effectively incorporate their leadership education into their nursing practices and enhance nursing organisations' performance, while advancing the profession by providing leadership opportunities (Curtis, de Vries, & Sheerin, 2011; Curtis, Sheerin, & de Vries, 2011). Accordingly, it is necessary to provide more systematic education to develop the leadership required in nursing practice. However, it is necessary to ensure that this systematic education specifically highlights nursing leadership, its relevant abilities and the corresponding strategies required to disseminate nursing leadership education from experts, to promote the leadership crucial to the practice. In particular, understanding the perceptions of nursing leaders who work in nursing administration and education is meaningful in that they can influence nursing leadership education.

Previous studies focusing on clinical nurses' nursing leadership have identified various types of nursing leadership: self-leadership, transformational leadership and authentic leadership (Choi & Ahn, 2016; Lee & Kim, 2012; Miles & Scott, 2019). Additionally, quantitative studies have also examined the impact of nursing managers' leadership style on nurses' job satisfaction and organisational commitment (Choi & Ahn, 2016; Cope & Murray, 2017). Although some studies have conducted concept analyses of nursing leadership (S. M. Kim et al., 2019) and clinical nurses' leadership experiences (Lee et al., 2015), studies concerning nursing leaders' perceptions of nursing leadership and nursing leadership education are sparse.

Research should be conducted to examine nursing leaders' awareness of nursing leadership and nursing leadership education to develop systematic and effective strategies for nursing leadership education. This study aimed to clarify the perspectives of nursing leaders who have abundant experience as leaders in nursing management and education, regarding nursing leadership and nursing leadership education. This study provides useful information for constructing more effective and systematic nursing leadership education strategies by identifying nursing leaders' perceptions of nursing leadership and nursing leadership education.

1.1 | Research purpose

This study aimed to clarify nursing leaders' perceptions of nursing leadership and its education. This study focused on the following questions selected through a literature review and expert group discussion: What is nursing leadership? What are the abilities required for nursing leadership? What is the importance of nursing leadership education? What are the difficulties in nursing leadership education? What are the strategies required for nursing leadership education?

2 | METHODS

2.1 | Study design

This study conducted a qualitative content analysis using the inductive approach of Elo and Kyngäs (2008) to understand nursing leaders' perception of nursing leadership. Qualitative content analyses provides a comprehensive understanding of the external and intrinsic meaning of given data and identifies the themes and categories through a systemic classification method (Choi et al., 2016).

2.2 | Participants

According to Bandura's social learning theory (Grusec, 1992), learning occurs by interacting with others. Most nursing professors are performing the roles of leaders and teaching leadership in various fields of the nursing. They also have a profound impact on future nurses, that is, nursing students. Therefore, this study included nursing professors as nursing leaders. Participants in this study included a group of experienced nursing leaders who are qualified to discuss the topic. The following inclusion criteria were implemented for participant recruitment: (1) more than 20 years of clinical field experience as a nurse and (2) clinical nursing leader (director of nursing or team manager) or nursing professor with at least 10 years of relevant job experience.

We recruited participants using the snowball sampling method. Participants were nursing professionals, including nursing administrators, working in hospitals, faculty members of departments/colleges of nursing in universities, leaders of nursing professional organisations and nurses working in public institutions. Fifteen participants were recruited, with 12 (80%) having served as executive directors of nursing organisations, such as the Korean Nursing Association. Of these, seven (46.7%) nursing professor participants had clinical experience as nurses at tertiary university hospitals, while eight (53.3%) clinical

nursing leaders were managers at secondary hospitals with over 500 beds. No primary hospital-level nursing leaders were included.

2.3 | Data collection

We conducted independent individual and focus group interviews (FGIs) with participants. We made the results more reliable by asking open-ended questions to get the participants' unfiltered views on their lived experiences. A total of 10 face-to-face individual interviews were conducted spanning 1.5–2 h each. More details information that required explanation after the interview was obtained by individually contacting participants via telephone or email. A total of 17 follow-up interviews were conducted; each participant was interviewed one to three times. The FGI was conducted with a group of five participants and lasted for 2 h and 20 min. Similar to the individual interviews, more details information that required explanation was obtained by individually contacting participants via telephone or email after the FGI.

The individual interview focused on the perceptions of nursing leadership and nursing leadership education, while the FGI focused on identifying the importance and problems of nursing leadership education and practical strategies and methods for implementing nursing leadership education. The FGI was employed to understand the perception of nursing leadership education to promote active discussions among participants through group interviews and obtain more diverse data on nursing leadership education.

Participants were informed of the study purpose and aim to ensure smooth interviews. We also informed them about the topics we wanted to explore and sent them the interview questions ahead of time by email or phone to give them the opportunity to consider their responses in advance and participate more fully.

We recorded participants' statements during the interviews and noted their main contents, thoughts and feelings. The FGI included six participants and lasted 2 h and 20 min. Data were collected between 28 November 2019 and 10 February 2020. We discontinued participant sampling when our interview data reached a saturation point where no new data were generated. All participants were women. On average, they were 52.33 years old (±6.33), had worked in nursing-related jobs for 27.89 years (±6.47) and had been nursing leaders for 13.97 years (±3.77) (Table 1).

2.4 | Data analysis

Data analysis was conducted in three stages: reading the transcribed data, gaining an overall understanding of the original data and then performing qualitative content analysis (Graneheim & Lundman, 2004). We coded key statements from the transcribed interviews after describing them as words or phrases that best expressed their content. Second, we condensed these words or phrases to be more abstract after grouping words or phrases created in the coding stage into concepts or phrases with higher abstractions and naming them with a code. Third, we created subcategories within the data according to the research themes and then reclustered them into more comprehensive and mutually exclusive categories.

2.5 | Securing the validity of research results

We secured the validity of the results by considering their reliability, suitability, auditability and verifiability as presented by Lincoln and Guba (1985). The first analysis was shown to one of the two participants along with the original data, and by checking whether the results of the analysis reflected the interview, the reliability of the data analysis was secured. We validated the results by receiving and reaffirming feedback on it from the participants. We secured the validity of our results by selecting participants with extensive and meaningful experience as nursing leaders and collecting data until we reached a saturation point. Our data collection and analysis processes were described in detail in the event of an audit by two nursing scholars with extensive experience in conducting qualitative research. We quoted participants' statements directly below so that readers can verify our interpretations and analyses.

2.6 | Ethical considerations

We obtained ethical approval from Kyungnam University's institutional review board (IRB; Approved No. 1040460-A-019-055). Participants were made aware of the study's purpose and provided their informed oral and written consent before participating. Interview data were recorded with participants' permission, and the anonymity of transcribed interviews was guaranteed by assigning participants a number rather than their name.

3 | RESULTS

We derived 11 categories and 25 subcategories from our analysis. They are also described in Table 2.

3.1 | Perceptions of nursing leadership

Perceptions of nursing leadership comprised three categories—commitment to nurses, commitment to the nursing profession and commitment to the organisation—and six subcategories.

3.1.1 | Commitment to nurses

This category included 'invigorating energy (Korean term *Gi*)' and 'establishing the environment for showing one's ability'. The former not only encourages nurses to endure complex nursing practice but also motivates nurses by giving precedence to their difficulties and

TABLE 1 Participants characteristics ($N = 15$)

ID	Interview type	Professional position	Highest education level	Age (years)	Affiliated institution	Total nursing career (years)	Nurse leader career (years)	Leadership experience in a nursing professional organisation
01	FGD	Professor	Ph.D.	47	University	25.4	10.0	Yes
02	FGD	Professor	Ph.D.	53	University	21.0	10.0	Yes
03	II	Team manager	Masters	43	University and secondary hospital	20.4	10.0	Yes
04	II	Director of nursing	Masters	61	University and secondary hospital	39.1	20.8	Yes
05	II	Director of nursing	Masters	48	University and secondary hospital	25.5	12.0	Yes
06	II	Team manager	Ph.D.	50	Secondary hospital	28.0	15.0	Yes
07	II	Professor	Ph.D.	63	University	40.0	15.0	Yes
08	II	School commissioner	Ph.D.	60	Education office	28.0	20.0	Yes
09	II	Professor	Ph.D.	53	University and tertiary hospital	23.2	13.2	Yes
10	II	Professor	Ph.D.	52	University and tertiary hospital	30.0	16.0	Yes
11	II	Director of nursing	Masters	56	Secondary hospital	32.8	13.0	Yes
12	II	Team manager	Masters	52	University and tertiary hospital	28.0	12.6	No
13	FGD/II	Unit manager	Masters	43	Secondary hospital	20.0	10.2	No
14	FGD	Professor	Ph.D.	46	University	22.0	11.8	Yes
15	FGD	Professor	Ph.D.	58	University	35.0	20.0	No
M ± SD				52.33 ± 6.33		27.89 ± 6.47	13.97 ± 3.77	

Abbreviations: FGD, focus group discussion; II, individual in-depth interview; M, mean; SD, standard deviation.

taking care of them when they feel incompetent and confront problems in nursing practice. When new or junior nurses who lack nursing experience perform their work, 'invigorating energy' involves considering the expected difficulties in advance so that they can adapt well to the nursing practice and feel supported, thereby preventing them from leaving the job. The latter refers to the need to distribute work tasks correctly and fairly, have nurses help one another grow and develop as nursing professionals and provide them with various opportunities to demonstrate their abilities. 'Establishing the environment for showing one's ability' is about providing a better working environment for junior nurses and allowing them opportunities for professional development.

> The new nurses are here, rather than just letting them go and saying, 'Do it!' Say, 'What does he feel uncomfortable about?' Like a mother taking care of a child … I think we should leave a happy nursing environment/nursing practice for our juniors. (Participant 13)

3.1.2 | Commitment to the nursing profession

This category includes 'practicing the basics of nursing' and 'becoming a bridge for the development of nursing professions'.

TABLE 2 Perception of nursing leadership and leadership education among participants ($N = 15$)

Themes	Categories	Subcategories
Perceptions of nursing leadership	Commitment to nursing	Invigorating energy (Korean term *Gi*)
		Establishing the environment for showing one's ability
	Commitment to the nursing profession	Practicing the basics of nursing
		Becoming a bridge for the development of nursing professions
	Commitment to the organisation	Creating organisational performance
		Directing members of the organisation
Abilities for nursing leadership	Competency and capability	Problem-solving ability
		Interpersonal relationship and communication skills
		Organisational management skills
	Personality and traits	Human-centred values
		Self-reflective mindset
		Professional ethics and morals/ethics and morality as a professional
		Mission for nursing
Importance of nursing leadership education	To enhance educational efficiency	To reduce trial and error
		To improve the effectiveness of leadership competency
	To nurture next-generation nursing leaders	To produce proactive nurses
		To propose a nursing leadership model
Difficulties in nursing leadership education	Lack of perception	Lack of awareness about nursing leadership education
		Barriers to nursing leadership
	Difficulty of implementation	Lack of organisational support and rewards[a]
		Difficulties for narrowing the generation gap
Characteristics of strategies for nursing leadership education	Contents	Content inspiring dreams as a leader
		Multidisciplinary and integrated content
	Methods	Cooperative experience-driven education
		Continuous and gradual education

[a]Clinical nurses.

The former refers to maintaining the basics of nursing practice by demonstrating their professional knowledge and skills as a fundamental principle of nursing and a bastion of patients' life and safety. It refers to creating a nursing-friendly environment in order that nurses can work with pride without forgetting the essence of nursing as a profession. The latter refers to becoming a nursing leader and being dedicated to the nursing profession, preventing it from falling behind in the changing health and medical environment and creating harmony between different professions, interest groups and generations of practitioners. Participants recognized that nursing leadership encompasses multiple generations by conveying lessons learned from senior nurses and conveying junior nurses' opinions to senior nurses:

> I think it is also important to instill a sense of duty about the importance of nurse work to do nursing well. This makes nurses focus on nursing practice. For good results for the patient, nurses should be guided in the right direction. (Participant 13)

3.1.3 | Commitment to the organisation

This category includes 'creating organisational performance' and 'directing members of the organisation'. The former refers to organising and leading organisational capabilities to understand and achieve organisational goals through problem-solving strategies and

enhancing organisational performance. The latter refers to presenting visions and goals to members of nursing organisations, sympathizing and moving forward, sharing values and experiencing achievements/results together to attain shared values. This prevents organisation members from getting lost in their work by presenting a clear vision and goals of the organisation. It can improve their work efficiency and induce high work performance:

> If there is not leadership, the organization is like a ship floating in the open sea without a destination. A leader should present a vision of the organization's future, improve organizational engagement and satisfaction, improve the quality of care, lead to patient satisfaction, and ultimately improve the organization's performance. (Participant 4)

3.2 | Abilities for nursing leadership

Abilities for nursing leadership comprised two categories—competency and capability and personality and trait—and seven subcategories.

3.2.1 | Competency and capability

This category includes 'problem-solving ability', 'interpersonal relationship and communication skills' and 'organisational management skills'. The first includes nursing practice and expertise related to management: the various political, socio-economic and environmental factors that affect nursing practice and the ability to leverage this expertise to think logically and critically, solve problems from a holistic perspective and present creative alternatives. The second refers to the ability to establish smooth interpersonal relationships between nurses and various other supportive professionals based on the ability to empathize and cooperate to ensure a win–win situation by maintaining this relationship. It also includes having the ability to use one's voice concerning nursing practice and to advocate for junior nurses and having sufficient energy/competence to be self-assertive and to communicate and persuade others. The third refers to the ability to collaborate with, motivate and influence members of a given organisation through example. It also refers to the ability to read the flow of internal and external changes surrounding the organisation and to manage and wield these flows in a way that achieves the organisation's goals and changes arising from challenges:

> As a leader, it is important to see the bigger picture and have comprehensive problem-solving abilities that encompasses the whole. In other words, not only on a personal level, but as a nursing professional, you should be aware of all nursing and administration practices. Leading [a] ward is never easy. (Participant 11)

3.2.2 | Personality and traits

This category includes 'human-centred values', a 'self-reflective mindset', 'professional ethics and morals/ethics and morality as a professional' and 'a sense of a mission for nursing'. The first refers to the dignity of being a person who responds with sensitivity and empathizes with others based on an understanding of humankind and who faces, respects and cares for others with a warm heart and language. The second refers to having an honest and sincere heart, being humble enough to admit to your own mistakes and reflecting on and changing yourself to continue growing. It reflects a wide range of direct and indirect experiences and in-depth contemplation. The third refers to building trust and taking responsibility for patients, fellow nurses and other medical professionals to promote patient safety. The fourth describes persistence, dedication and passion toward one's nursing work:

> As a nursing leader, we need to be more error-free than any other leader, more precise, and more detailed. I have to be passionate about nursing, take care of myself, and have the ability to do better ethically and morally. That's how you develop a high sense of duty as a nursing leader and with other like minded leaders, develop the nursing profession. (Participant 13)

3.3 | Importance of nursing leadership education

Importance of nursing leadership education comprised two categories—to enhance educational efficiency and to nurture next-generation nursing leaders—and four subcategories.

3.3.1 | To enhance educational efficiency

This category contains 'to reduce trial and error' and 'to improve the effectiveness and competency of leadership'. The first refers to the importance of inculcating leadership competency in nurses early on in their education from the preceptor curriculum to both prevent errors and shorten the period of nursing leadership competency development. The second refers to the importance of improving nursing staff's overall leadership levels by providing opportunities for nurses to develop their leadership competencies in a safe and supportive educational environment. Nursing leadership education is an opportunity for nurses to strengthen their nursing leadership capabilities and to adequately demonstrate the necessary leadership in the right places according to the situation:

> The leadership course needs to develop leadership from the time preceptors educate new nurses. New nurses or preceptor nurses may still think that they are far from leadership and not leaders yet. It is necessary to instill such awareness as: 'You are a leader!' or 'You are a leader during this practice!' (Participant 12)

3.3.2 | To nurture next-generation nursing leaders

This category contains 'to produce proactive nurses' and 'to propose a nursing leadership model'. The first refers to the need to train leaders who speak out in the nursing field and produce nurses who have a sense of duty for nursing. Participants said that improved nursing leadership education would allow them to develop creative problem-solving approaches and coping skills that cannot be solved using knowledge only and, by extension, foster effective, influential and assertive nursing leaders. The second refers to the need to develop a new nursing leadership role model and study focused on inculcating leadership within nursing disciplines. Participants not only highlighted the importance of nursing leadership education for developing a sustainable flow of nursing leaders and role models and for fostering the next generation but also suggested that research is required to improve nursing leadership education and eventually propose a systematic model for it:

> I think nursing leadership education is vital for the creation of a role model that I want to resemble in nursing leadership. I think we need leadership that reflects nursing characteristics; in this sense, we have used nursing leadership research in the fields of business administration and so on. However, it is also a unique aspect of nursing itself and requires the creation of a leadership model. (Participant 15)

3.4 | Difficulties in nursing leadership education

Difficulties in nursing leadership education comprised two categories—lack of perception and difficulty of implementation—and four subcategories.

3.4.1 | Lack of perception

This category includes 'lack of awareness about nursing leadership education' and 'barriers to nursing leadership'. The first refers to the perception that there is no systematic form of nursing leadership education because the current educational methods of nursing leadership are largely theoretical and remote from practical nursing. The second refers to the reality that there are cultural or institutional barriers to cultivating leadership within the nursing profession even if nurses want to exercise nursing leadership—that managers and institutions prefer obedient and compliant nurses rather than leaders. In particular, these realities are reflected in nursing education:

> These days in the industry, 'Listen to me carefully!' 'Be a yes man!' 'Do not look like you are standing out!' 'If I stand out, I am the target!' 'Adapt well to the hospital situation!' and say, 'Yes, I understand', and tell them to 'Do well for the hospital without showing your personality'. In my opinion, this organizational culture is designed to prevent nurses' leadership (Participant 2)

3.4.2 | Difficulty of implementation

This category includes 'lack of organisational support and rewards' and 'difficulties in narrowing the generation gap'. The former refers to the lack of institutional support and adequate compensation for nursing leadership education efforts. Participants cited a lack of financial support to properly perform nursing leadership education and institutional support, such as recognizing individual performance based on leadership education. The latter refers to the fact that it is difficult to narrow the generational gap between nursing managers and junior nurses. The generational and cultural differences between nursing leaders and junior nurses make nursing leadership education more difficult:

> I think there is a generational gap each year. Now, students are getting much information from videos on their smartphones, and our older generation, professors, were taught the concepts a long time ago, so it does not make sense. That is why leadership education is increasingly difficult. (Participant 2)

3.5 | Characteristics of strategies for nursing leadership education

Characteristics of strategies for nursing leadership education comprised two categories—contents and methods—and four subcategories.

3.5.1 | Contents

This category includes 'content inspiring dreams as a leader' and 'multidisciplinary and integrated content'. The former refers to exploring a vision of the future, a view of the whole and a model of nursing leadership. Nursing leadership education intends to instil dreams and hopes in juniors by including the future nursing vision and nursing leadership's role models. The latter refers to a pedagogical approach of linking and converging nursing education with other disciplines to engage alternative ideas and perspectives:

> Leadership education should be understood as an integrated concept, and such a curriculum is needed. This kind of networking will be good, not with nursing students, but with engineering students or design students. That way, students' vision will not only be buried in nursing only and they will be able to expand their vision. (Participant 14)

3.5.2 | Methods

This category includes 'cooperative experience-driven education' and 'continuous and gradual education'. The former refers to a pedagogical approach of learning collaboratively and actively in actual situations; taking the initiative to problem-solve; and working by sharing activities with colleagues, seniors, juniors and people in other disciplines via group activity. The latter refers to the need to begin nursing leadership education as early as possible in nursing college. Participants noted that they should implement nursing leadership education continuously and in a step-by-step manner:

> Mentoring, tutoring, and team tasks are also used as part of leadership education. The most important thing is to show leadership in the confronted situations with support. (Participant 10)

4 | DISCUSSION

Our participants recognized nursing leadership as a multidimensional and wide-ranging concept that applies to all nurses' and organisations' practice, performance and professional development. Participants possessed a much broader understanding or perception of nursing leadership compared with previous studies' participants, who defined nursing leadership as directly participating in clinical care and influencing others to improve the quality of care or creating an environment to motivate and empower employees with a clear vision (Cook, 2001). This might be because these previous studies interviewed clinical nurses, rather than leaders in the profession as our study did. We suggest that experienced leaders have a broader view of leadership. Although some other studies defined leadership through an organisational lens by focusing on leadership vis-à-vis problem-solving, professional duty and development (Lee et al., 2015), our findings show that nursing leaders' perceptions of nursing leadership consider both organisational performance and professional development and are focused largely on improving these aspects of nursing.

Our findings also suggest that our participants prized a particular kind of cooperation, communication and relationship building between nurses and medical support professionals based on empathy. Participants highlighted the importance of making their voices heard—a result that is unique to our study. These results indicated that our participants prized particular personality traits that help foster strong interpersonal relationships as a key leadership quality. The competency and capability of nursing leaders represent the minimum qualifications that a nursing leadership should possess.

These results are largely corroborated by previous studies, which have found that beyond clinical expertise, problem-solving and so on, nursing leaders' interpersonal and relationship-building skills are key markers of their effectiveness (Curtis, de Vries, & Sheerin, 2011; Finkelman, 2012; J. S. Kim, Kim, Jang, et al., 2015; Y. M. Kim, Kim, Kim, et al., 2015; Patrick et al., 2011). Leaders' ability to build relationships and foster effective communication with other professional departments has also been identified as an important indicator of their effectiveness. In particular, it should be noted that the most cited competencies for nursing managers' leadership capabilities in scoping reviews are communication and financial management (González-García et al., 2021). Nursing leaders should be charged with overseeing the operations of the organisation (budgets, facilities and human resources), sustaining the organisation's missions and representing the department of nursing within the greater hospital.

Nursing leadership education is required to foster these qualities, in particular, smooth cooperation experience and self-assertion training requires further strengthening. These leadership goals are aligned with the current predominating concepts of transformational leadership (Afsar & Masood, 2018; Giddens, 2018) and authentic leadership (Alilyyani et al., 2018). Because all our participants were women, we believe that there is a gendered dimension to perceptions of leadership. Our participants prized warm and inclusive leadership styles that address the unique characteristics of the nursing profession. However, in reality, nursing leadership in South Korea is male dominated and does not have the same focus on cooperation and inclusivity.

Participants stated that nursing leadership education can contribute to the nursing organisation's effective performance by reducing the period of nursing leadership competency development and improving the overall leadership level of nursing staff. They also highlighted the need to groom next-generation nursing leaders and role models who are both aware of the changing needs of the nursing profession today and can tailor their leadership education to nursing-specific contexts. Participants did not explicitly refer to student leaders but said that it is important to educate nursing students about the role and implementation of leadership and provide them with opportunities to demonstrate this skill. Nurse managers play an important role, not only in ensuring their own leadership capabilities, but also in fostering the leadership capacity of the next generation of nurses (Page et al., 2021). Having an awareness of nursing leadership and nursing education is important in the field of clinical nursing. Nurse practice leaders can contribute to the clinical learning of nursing students and nurses by being responsible for educating them in clinical practice and becoming role models as nursing leaders.

These results are largely corroborated by previous studies, which suggest that all nurses—not just managers—should have leadership-specific training (J. S. Kim, Kim, Jang, et al., 2015). Our participants' insistence on 'making their voices heard' as a means of improving nursing leadership education is mirrored in some studies that suggest that self-leadership and communication are key competencies of high-performing nurses (Im et al., 2012). Understanding what comprises a successful leadership programme would enhance leadership capacity building across the nursing profession (Page et al., 2021). We suggest that to improve nurses' sense of belonging to an organisation, strengthen their communication skills and build their self-leadership skills, nurses require both educational initiatives and more comprehensive and active support from hospitals and nursing organisations.

The difficulties in nursing leadership education indicate that there is no systematic nursing leadership education, that such education is largely theoretical and remote from nursing practice and that

practitioners observe various institutional barriers to making systemic changes. These results are largely corroborated by previous studies that maintain that nursing leadership education needs to be taught and updated continuously in university curricula and clinical institutions, and throughout nurses' careers, because nursing leadership is a journey that begins at nursing college (Curtis, Sheerin, & de Vries, 2011; Jefferies, 2018). Other studies have suggested that there is a lack of systematic nursing leadership education and nursing students lack practical nursing leadership in clinical practice, even if they become clinical nurses after graduation (Al-Dossary, 2017). Therefore, nursing colleges' curricula and nursing professionals' continuing education should be amended to raise awareness of the importance of leadership, provide support for professional development initiatives and work to implement nursing leadership education.

The content of such educational efforts should inspire a new generation of leaders to work together; thus, a multidisciplinary approach emphasizing the need for practical knowledge and collaborative problem-solving across multiple disciplines should be implemented throughout the curriculum. Such efforts should be sensitive to nurses' experience, field of specialty and the ever-changing nature of medicine and should be conducted continuously, step by step and regularly, similar to 'getting wet in the drizzle'. These findings are largely corroborated by studies in the literature that suggest that practical education is better at fostering nursing leadership (Curtis, de Vries, & Sheerin, 2011). According to the results of Alilyyani et al. (2018), nursing leadership development in undergraduate education should include a focus on authentic leadership to serve as a foundation for effective leadership by preparing students. The competencies of authentic leadership will enable them to become effective practitioners and potential future leaders. Given the centrality of nursing leadership to effective nursing practice, we suggest that nursing educators integrate continuous and practical leadership into nursing curricula. Some studies have suggested that a discussion-based (J. Kim et al., 2011) or situated learning model (Ailey et al., 2015) could be helpful in this respect. Others have suggested that peer-mentoring programmes can help nursing students experience leadership and develop their leadership skills (Bright, 2019). In general, both the literature and our participants suggest that traditional, lecture-based education does not breed leadership or help students internalize what they have learned and make considerable behavioural changes.

Bloom's new classification method is a step-by-step approach to education that helps the capabilities of application, analysis, evaluation and creation beyond simple memory and understanding (Krautscheid, 2008). In other words, applying learning methods such as effective leadership analysis or demonstrating leadership through teamwork activities using situation-oriented learning or action learning for effective nursing leadership education can help develop a higher level of application and analysis at Bloom's stage. Nurses will be able to identify and judge the changing patient's condition using logical reasoning and demonstrate necessary nursing leadership. Because the process of demonstrating nursing leadership is not just a level of memory or understanding, students should apply the practice or role play as an education method to identify important nursing problems and demonstrate the nursing leadership necessary to solve them through nursing scenarios. If students implement a nursing leadership education programme to demonstrate the necessary leadership through nursing cases, it will be effective as it will comprise the stages of application, analysis, evaluation and creation, which is the upper level of Bloom's new classification.

In summary, 'invigorating energy' and 'establishing the environment for showing one's ability' reflects the commitment of nursing leadership to educational strategies aligned with transformational leadership that comprises idealized influence, inspirational motivation, intellectual stimulation and individual consideration. Furthermore, 'human-centred values', 'self-reflective mindset', 'professional ethics and morals' and 'a calling to nursing' as part of nursing leaders' personalities and traits correspond to authentic leadership. Therefore, nursing leadership should pay attention to transformational leadership or authentic leadership among various nursing leadership types, and nursing leadership education at academic and clinical levels should be focused on to assist leaders to perform well.

4.1 | Limitations

This study examined nursing leadership and effective measures of nursing leadership education based on Korean culture/sentiment. Hence, the perception of universal nursing leadership and suggestions for nursing leadership education may be limited. In future research, it is necessary to explore the universal perception of nursing leadership and effective methods of nursing leadership education through cross-national research projects with different cultural backgrounds.

We suggest that although nursing education and leadership can be improved through educational reform, further research on nursing leadership needs to be conducted from a different perspective to establish the ideal content and format of nursing leadership education. We also suggest that future researchers develop and verify nursing leadership education programmes suitable for the ever-changing nursing and medical environment and intergenerational study. This includes the use of virtual reality and other digital technology suitable for the fourth industrial revolution. Delphi and survey research on nursing leaders to develop effective leadership education strategies should be performed.

5 | CONCLUSIONS

Nursing leaders view nursing leadership as a broad, multidimensional concept and are keenly aware of the importance of education in its improvement over the long term. They also realize that there are some institutional and practical obstacles to implementing effective nursing leadership education. During interviews, our participants suggested various pedagogical content and methodologies that should be gradually, steadily and repeatedly applied in any reform or intentional application of nursing leadership education. In general, our

nursing leaders felt that effective leadership is essentially encouraging in character, and they recommended that steps be taken to improve and ensure encouraging, empathetic communication and relationship building between nurses, nursing professionals, hospitals and other organisations.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

This study contributes to the literature by making the first attempt to gather nursing leaders' opinions and perspectives on nursing leadership, the role of education in improving nursing leadership, and suggesting future directions for such education. These results can help develop a more practical nursing leadership education system to foster leadership behaviour. Experience-based and theoretical nursing leadership education should be introduced gradually and systematically from the beginning of nurses' careers.

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CONFLICT OF INTEREST

The authors report no actual or potential conflicts of interest.

ETHICAL APPROVAL

Ethical approval was obtained from a Kyungnam University's IRB (No. 1040460-A-019-055). The researchers explained the study purpose to the participants, and all participants gave informed oral and written consent before participating. The study was carried out in accordance with the 1995 Helsinki Declaration and the ethical standards of National Research Committee.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Hae-Ok Kim https://orcid.org/0000-0002-6973-4753
Insook Lee https://orcid.org/0000-0001-6090-7999
Byoung-Sook Lee https://orcid.org/0000-0002-2737-2248

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COMMENTARY

WILEY

Time to re-envisage integrity among nurse leaders

Kathleen Markey PhD., MSc., RGN[1] | Mairead Moloney MSc., PG Dip., RGN[2] | Owen Doody PhD, MSc, RNID[1] | Simon Robinson PhD, Emeritus Professor of Applied and Professional Ethics; Hon Research Fellow, Philosophy, Religion and History of Science[3,4]

[1]Department of Nursing and Midwifery, Faculty of Education and Health Sciences, Health Research Institute, University of Limerick, Limerick, Ireland

[2]Department of Nursing and Midwifery, Faculty of Education and Health Sciences, University of Limerick, Limerick, Ireland

[3]Leeds Beckett University, Leeds, UK

[4]University of Leeds, Leeds, UK

Correspondence
Dr. Kathleen Markey, Department of Nursing and Midwifery, Faculty of Education and Health Sciences, Health Research Institute, University of Limerick, Limerick, Ireland.
Email: kathleen.markey@ul.ie

Abstract

Aim: This paper highlights integrity as a central tenet in the journey of ethical leadership among nurse leaders and dialogue as a way of working within integrity.

Background: Nurse leaders play a critical role in ensuring ethically sound, safe patient care by supporting staff and fostering positive working environments. Although there is an abundance of literature on leadership, no universally accepted leadership theory exists. Hence, it can be difficult to apply leadership theory and principals to real-life clinical practice.

Evaluation: From the literature, it is evident that integrity is a crucial aspect of leadership. This paper proposes suggestions for nurturing integrity and fostering open and honest dialogue.

Key issues: Globally, public health care is complex and evolving and effective nursing leadership is paramount to meet public health needs and support health care systems.

Conclusion: This paper explores integrity with leadership, re-envisaging personal and professional integrity as a portal to authentic leadership, which has human relationships and dialogue at its core.

Implications for Nursing Management: Nurse leaders need support in guiding the nursing profession and promoting ethically sound patient care. The true nature of leadership is dialogue, and nurturing a culture of listening and openness at different levels within an organisation is crucial.

KEYWORDS
courage, dialogue, honest, integrity, nurse leadership

1 | INTRODUCTION

In an increasingly multifaceted, uncertain and evolving health care systems, the need for resilient nurse leaders who can respond to expanding demands in innovative, ethical and solution focussed ways is paramount. The recent global COVID-19 health care crisis illuminated multiple deep underlying problems within health care organisations that were unaddressed and highlighted their lack of preparedness to manage in a crisis. The lack of personal, professional and organisational learning from previous health care failings perhaps contributed to the lack of preparedness for the crisis. Continuing suggestions of deficient standards of nursing care (Chaboyer et al., 2021)

suggest systematic failures that remain unresolved and highlight some of the stark realities facing nurse leaders.

In an era of evolving health care services and challenging environments, the need for effective leadership is crucial. Recognition needs to be given to the growing demands on nurses and nurse leaders in busy and complex environments, which are intensifying at a rapid pace in a system that is slow to respond, adapt and learn lessons (Wills et al., 2015). Krichbaum et al. (2007) refer to this phenomenon as 'complexity compression', which is a term used to illuminate the additional and sometimes unplanned responsibilities on top of normal responsibilities leading to impossible circumstances if the appropriate action is not considered. Consequently, it is time to think differently about leadership and this calls for new ways of navigating leadership within increasingly complex health care systems, to adapt more speedily in ethically sound ways. One way to do this is by re-envisaging integrity, a crucial aspect of leadership, which is often discussed but rarely defined. This paper considers integrity a central tenet in the journey of ethical leadership and dialogue as a philosophy and a way of working within integrity where leaders manage both society of mind and society of members through a reciprocal exchange.

2 | LEADING WITH INTEGRITY

Nurse leaders play a critical role in ensuring the delivery of safe, compassionate and quality patient care through supporting staff (Markey et al., 2020) and fostering positive working environments (Kim et al., 2018). Effective leaders are charismatic, inspirational and have integrity and consideration for the needs of individuals (Copeland, 2016). Although there is an abundance of literature on leadership concepts and theories, no universally accepted leadership theory exists. Harris and Mayo (2018) draw many comparisons on various leadership theories and models showing their evolution and also highlighting how different approaches work in different contexts. Historically, nursing leadership was rooted in hierarchical authoritarian styles (Doody & Doody, 2012), which conjured a following of people with unwavering respect and unquestioning of authority. With respect to nursing history, unpeeling from this hierarchical cultural matrix is sometimes difficult. Transformational leadership (Wang et al., 2018), ethical leadership (Markey et al., 2021), authentic leadership (Avolio & Gardner, 2005) and complexity leadership (Khan et al., 2018) have dominated the nursing literature. Although these leadership theories come from different philosophies, they are all grounded in positive relational styles and focus on human relationships to promote positive change. However, implementing these theories in daily leadership practice remains difficult and abstract (Harris & Mayo, 2018).

One way to re-envisage leadership is to explore integrity, a common thread within leadership literature (Bauman, 2013). Despite many different meanings of integrity having been offered, the focus is on identity, taking responsibility and owning one's history and character expressed in one's commitments (to purpose, ideals, values, goals, projects) to one's reputation (Robinson, 2016). This offers a view of integrity that is holistic and interpersonal, involving ongoing learning and creative response. To function with integrity, one's words, thoughts and actions must engage morally, emotionally, psychologically and spiritually. This suggests that integrity can be viewed as a journey of learning and growth and a journey of continuously realigning oneself with core purpose and values. Hence, Western (2008) writes about the 'formation' of leaders. This process involves engaging complex identities, including nurse, nurse leader, male/female and parent. Moreover, integrity at all levels (individual, group and organisation) is codependent and can never be mutually exclusive (Palanski & Yammarino, 2007). This suggests that integrity is cocreated at multilevels of an organisation and taking ownership of that cocreation is where leaders awakening and growth lies.

Integrity thus is focused on critical agency (reflecting critically, basing professional judgements on core purpose and ethical values), mutual accountability (within and beyond the profession) and shared responsibility for creatively embodying the core professional purposes. It is embodied in attention to narrative building, critical deliberation and dialogue, enabling the practice of interrelated personal, professional, organisational and interorganisational responsibility (Robinson & Doody, 2021).

Much has been written about integrity as a virtue (moral disposition or capacity), ranging from a discrete virtue (Curzer, 2014) to an epistemic virtue, enabling perceptual distance (Scherkoske, 2013), to a 'mega-virtue' which connects all the other virtues (Solomon, 2008). The last of these suggests that integrity is the capacity (virtue) to take responsibility for critical reflection on identity and practice and that this interrelates with all the holistic virtues: moral (courage, fairness, respect, honesty etc.), psychological/affective (empathy), intellectual (practical wisdom) and practical (competency). Palanski et al. (2015) provide an example of this interrelationship, indicating courage and integrity as intertwined in effective leadership. Courage is needed to question perceived integrity at various levels, and leaders who critically review the beliefs and values underpinning their leadership approaches are more likely to be courageous. Courage involves honesty (candour) about actions and omissions, being able to admit when you have made poor decisions and have the resilience (psychological virtue) to question oneself and others. However, the impact of organisational processes and hierarchical management structures can negatively impact integrity and with that courageous behaviour (Pajakoski et al., 2021). Management that focuses on narrow targets and related isomorphism aim to determine the behaviours of nurses (Robinson & Doody, 2021) and thus constrain nurse leaders' ability to fulfil their role. The emphasis is precisely on unthinking practice with professional purpose uncritically assumed (Roberts & Ion, 2015). Dialogue in this light comes to be seen as an expression of conflict, and thus as a threat both to trust and success, rather than an embodiment of shared support and creativity, actually enabling trust. Hence, the need to nurture courageous leaders to initiate dialogue at various levels becomes critical, at board level, in teams, between individual colleagues and between professions. It takes courage to examine integrity at an individual level while remaining open to the perspectives of the wider team and the

institution. It takes courage to push boundaries, become a pattern disrupter, respond to criticisms evenly, and even greater courage to recognize one's own biases and failings as a leader. Importantly, this recognizes that no leadership is free from these problems, and no system or institutional culture can obviate the need to practice such virtues, and thus, any cultural change should focus on how to nurture them (Moore, 2012). Integrity is at the heart of leadership (Sahraei Beiranvand et al., 2021), and leaders need to own the chasm between how things have become and how they should be, to move forward individually and collectively.

3 | FOSTERING DIALOGUE

To begin moving with integrity, nurturing a culture of listening and open dialogue at the different levels within an organisation is crucial (Macnamara, 2015). The true nature of leadership with integrity is dialogue, which forms a complex web of lived experience (personal, professional and cultural) which the leader continuously engages (consciously and unconsciously). It is the sum of the individual's lived experiences that determines how an individual leader at a specific time, place and situation will respond or choose to act. No one leadership 'technique' or 'style' can fully inform an individual leaders' actions. Yet, it is sometimes difficult to be a catalyst of change and approach dialogue with others in a way that is perceived as open, meaningful and respectful rather than as a denunciation of power and thus a threat to leadership. However, professional agency can only be developed through respectfully engaging difference and its associated affective dissonance and cognitive challenge (both critical to learning).

Dialogue is also ontological (Bakhtin, 1984) involving the encounter between individuals, the profession or institution. Each then becomes responsible for the worth and meaning of that world, naming it. Avoiding dialogue narrows the perspective, values and relational awareness of leadership, leading in many cases to exclusion and dehumanization of the stakeholders (Freire, 1972), including fellow professionals, patients and patients' families (Francis, 2013). Dialogic leadership is both a philosophy and a way of working where the leader manages both the society of mind and the society of members through a reciprocal exchange. A leader needs to create a constructive thought pattern within their team by establishing a team-thinking and problem-solving mechanism that is team-based. This will offset groupthink syndrome, as the team becomes a dynamic living system with potentials for creative ideas and can perform beyond expectations. Dialogue in this process is unrehearsed, stressing genuine accountability and openness to ideas, concerns and people. Arguments against this are dominated by the belief that there is not enough time for such engagement. This view of time, however, is based on linear thinking and limited narrow deadlines (Gardiner et al., 2021). In any case, the attention to dialogue can ensure both shared responsibility and positive engagement with dissonance, without which the professional culture can lose focus and subsequently develop a negative culture (Francis, 2013). At organisation level, dialogue and deliberation could focus on the different perspectives of core purpose and principles, not simply achieving narrow objectives, embodying the virtues of governance (Moore, 2012).

Dialogic leadership enables the leader to adapt and reflect changing circumstances remaining focused in personal/professional identity, and thus their core shared worth, and related ethical principles. The future depends partly on leaders' ability to find intelligent and imaginative solutions to complex and difficult issues and create the conditions for dialogue in the context of the organisation, profession, team and society. Isaacs (1999) suggests four qualities/abilities needed to support this dialogue leadership: (1) to evoke people's genuine voices, (2) to listen deeply, (3) to hold space for and respect as legitimate other people's views and (4) to broaden awareness and perspective. Nurse leaders need to balance the embodying of all these qualities while enabling them in others. However, this is not without its challenges. Nurse leaders need to nurture inclusive and inviting spaces that bring team members together to openly think, talk and share ideas about problems and solutions in a reciprocal (iterative) learning environment. Incorporating Kantor's (2012) four-player model (move, follow, oppose and bystand) is a framework that can guide meaningful dialogue and nurture cross-fertilization of ideas and shared sense-making. Applying system theory to Kantor's (2012) four-player model, an effective team is one that works with each of the four players reinforcing each other's role, as domination by any player can hamper or undermine the performance of the team. Therefore, through dialogue, leaders maintain a healthy atmosphere of divergence by creating an environment of trust and openness, where team members speak up and critique each other's ideas and opinions without fear. A leader having a planning or brainstorming session, here they first assume a mover stance, acting as a host and stage-setter. After outlining the purpose and focus of the meeting, the leader may then shift into the bystander stance. Thus, creating the stage for engagement of team members to occur where the conversation proceeds, opinions and ideas are raised. By operating as a bystander, the leader can observe others' participation and watch for tensions that may exist and how effectively the team manages collective decision making. During the process, the leader can move to the opposer stance to ask critical questions to focus the discussion and ensure coverage of key aspects. As the discussion progresses, the leader may assume a follower stance to signal agreement with what others have said, progress discussion momentum and summarize the discussion and priorities that have surfaced. When the discussion has run its course, the leader then reverts to a bystander stance to make general process comments and identify if further discussion is needed. Finally, the leader returns to a mover stance to summarize the work the group has done and to suggest consensus on a topic has been reached and that the team is ready to act.

4 | CONCLUSION

This paper illuminates the importance of re-envisaging integrity, as a central tenet in the journey of effective leadership in increasingly complex health care environments and dialogue as a way of integrating ethical principles, creative practice and holistic virtues, focused on shared responsibility.

5 | IMPLICATIONS FOR NURSE MANAGERS

In an era of evolving health care services and challenging environments, the need for open and honest dialogue at all levels is paramount. Reflection on core purpose can be developed through genuine dialogue across the institution, not simply 'consultation' (usually not reciprocal). Team meetings can focus on reflective dialogue, both reinforcing core worth and purpose and enabling the exercise of imagination and creative responses in increasingly complex health care settings. Nurse leaders play a critical role in nurturing dialogue that encourages meaningful critical thinking and collective action steeped in professional purpose and ethical principles. Listening deeply, seeking to consciously understand and responding honestly may be the first steps on the leadership journey, enabled by virtues such as courage, honesty and empathy.

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The authors declare no conflict of interest.

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ORCID

Kathleen Markey https://orcid.org/0000-0002-3024-0828

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ORIGINAL ARTICLE

WILEY

Nurse entrepreneurs' ethical concerns: A qualitative inquiry of the pursuit of opportunity

Gunn-Berit Neergård BSN, MSc, PhD, Researcher[1,2]

[1]Department of Industrial Economics and Technology Management, Faculty of Economics and Management, Norwegian University of Science and Technology, Trondheim, Norway

[2]Engage Centre for Engaged Education through Entrepreneurship, Norwegian University of Science and Technology, Trondheim, Norway

Correspondence
Gunn-Berit Neergård, Department of Industrial Economics and Technology Management, Faculty of Economics and Management, Norwegian University of Science and Technology, 7491 Trondheim, Norway.
Email: gunn-berit.neergard@ntnu.no

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Abstract

Aim: This study explores how nurse entrepreneurs' ethical concerns influence their pursuit of entrepreneurial opportunities.

Background: Nurse entrepreneurs break norms to challenge the status quo in health care, and entrepreneurship in health care is associated with dubious morals. Thus, nurse entrepreneurs have struggled to gain support and acceptance for their work.

Method: This qualitative study relies on in-depth, narrative interviews with 11 nurse entrepreneurs developing nine different ventures. The interviews are analysed using theoretical thematic analysis, leaning on the ethics of care theory.

Results: The analysis reveals two stages of ethical concerns: (1) ethical concerns leading to an entrepreneurial opportunity and (2) ethical concerns while engaged in an opportunity formation.

Conclusion: This study shows that nurse entrepreneurs respond to health care issues in line with ethics of care and the ICN Code of Ethics. Nurse entrepreneurs are particularly concerned with doing no harm when developing their ideas and this fear could potentially deter nurses from acting entrepreneurially. 'The mantra of caring ethics' is a more suitable ethical guideline for (future) nurse entrepreneurs.

Implications for Nursing Management: This study has implications for the moral image of nurse entrepreneurs. This is important for nursing managers, as several of them are nurse entrepreneurs themselves or employ and lead nurses who wish to pursue entrepreneurial opportunities to improve health care.

KEYWORDS
entrepreneurship, ethics, health care, nurse

1 | BACKGROUND

Ethics has been a fundamental aspect of medical professions since the classical Greek era. The Hippocratic Oath emphasizes the importance of clinical judgement to shield patients 'from harm and injustice' (Antoniou et al., 2010, p. 3076). In the 17th century, this ethical tradition was continued, as Sydenham allegedly wrote 'Primum non nocere': Above all, do no harm (Smith, 2005). This ethical principle was also embedded in the nursing profession early on (Nightingale, 1863). However, it has been suggested that *primum non nocere* is a simplistic and insufficient guide for health care ethics (Smith, 2005). Rather, modern-day nursing standards are continually improved through adherence to new research findings, and care ethics has gained a new mantra: 'I was there, I saw, I witnessed and became

responsible' (Eriksson, 2013, p. 70). Eriksson explains the ethical mantra as being present in a situation, realizing and understanding the situation, invoking the truth, and to take responsibility for the good (Eriksson, 2013). Influenced by Heraclitus' Fragments, Eriksson found that caring ethics is, in its essence, about truth: 'Seeking truth, uncovering it and living in it' (Eriksson, 2013, p. 69). Thus, nurses experiencing an ethical situation are 'drawn into an event of truth.' (Eriksson, 2013, p. 69). Ethical situations occur in all levels of health care. Clinical practice involves ethical situations in the day-to-day relationships between nurses, colleagues and patients (Haahr et al., 2020). Nurse managers face ethical situations tied to patient safety culture (Levine et al., 2020; Lotfi et al., 2018), staff empowerment (Ishihara et al., 2022; Sahraei Beiranvand et al., 2021) and leading by nursing values (Jenkins et al., 2021). Ethical situations that do not require immediate action or ethical situations where the nurse has questions about how to provide the best care can be defined as ethical concerns. These are non-dilemma ethical concerns. In the first situation, ethical choices have been made by others, for instance, the organization, a manager or a medical doctor. In the second situation, the nurse might need guidance in performing their duties. Non-dilemma ethical concerns are often 'related to a violation of the ethical principle that everyone has the right to receive the care they need' (Hopia et al., 2016, p. 667). In some situations, nurses might need to choose between ethical guidelines (ethics of justice) and what they believe to be right based on their personal experience (ethics of care) (Östman et al., 2019). A feminist analysis of this dual approach to ethics is seen in Gilligan (1982). Gilligan linked the ethics of justice to logic, law and a 'mathematical' approach to human dilemmas and the ethics of care to communication and relationships. Although ethics of justice implies that harm arises from action (aggression), ethics of care implies that harm arises from a lack of action (Gilligan, 1982). Both considerations of care and justice are important for nurses' decision making (Juujärvi et al., 2019). An over-emphasis on the ethics of justice, following laws and regulations, may lead nurses to act without reflection. Mechanically doing 'what they are supposed to do' may impede nurses from upholding nursing values (Östman et al., 2019, p. 33). In ethics of care, being responsible implies responding to ethical concerns and dilemmas with flexibility and creativity (Reiter, 1996). The focus is not to limit action, but to extend it (Gilligan, 1982). Thus, failure to respond to a moral challenge is the essence of unethical behaviour. A moral response requires the individual to understand others and their circumstances, 'to respond appropriately to needs and concerns, while simultaneously fulfilling one's own potential' (Reiter, 1996, p. 41). With this backdrop, ethics of care is applicable in both business and nursing (e.g., French & Weis, 2000; Juujärvi et al., 2019).

1.1 | The nurse entrepreneur

This study defines entrepreneurship as a process where an individual seizes an entrepreneurial opportunity and acts on it to create value (Baron, 2004; Fletcher, 2006; McMullen et al., 2007; Shane & Venkataraman, 2000). The value can be financial, social and/or cultural, in the form of an innovation or a new organization (Bruyat & Julien, 2001). An entrepreneur can be seen as a result of this process, being the individual 'who creates new wealth and new opportunities via the acquisition and innovative use of existing resources' (Atherton, 2004, p. 126). 'Wealth' is meant to include financial, social and societal wealth, underpinning that entrepreneurship is relevant in private, public and nongovernmental sectors (ibid). Drawing from this, a nurse entrepreneur is a registered nurse who is pursuing an entrepreneurial opportunity, aiming to create new value and wealth (Neergård, 2021b). Nurses have acted entrepreneurially since the dawn of the profession; they have challenged practices, redesigned health care services and established nursing schools (Lyden, 2017; McSherry & Douglas, 2011; Nightingale, 1859, 1863; Rafferty & Wall, 2010). Still, the term nurse entrepreneur has evoked negative connotations for decades (Scruby & Farrell, 1987), and nurse entrepreneurs struggle to gain acceptance for their work (Silva et al., 2019; Wall, 2014). This relates to the public's—and nurses'—perception of entrepreneurship and nursing.

Entrepreneurship is an abstract concept, and entrepreneurs are often portrayed caricatured, as heroes or clowns (Anderson & Warren, 2011; Atherton, 2004). Entrepreneurs are also frequently associated with villains; exploiters who take advantage of others for their own gain (Atherton, 2004). This representation of entrepreneurs in popular culture and press influences nurses' perception of entrepreneurs. Nursing students have described entrepreneurship as unfamiliar and unappealing—an extraordinary act performed by only a few people (Neergård et al., 2022). Nurses have associated entrepreneurship with greed and indifference (Qvistgaard & Jakobsen, 2019). The stereotypical image of a profit-driven, male entrepreneur (Meyer et al., 2017) is a stark contrast to the stereotypical care-centred, feminine nurse (Lyden, 2017). Nursing is an archetypical female occupation, with a history of being subordinate to doctors and managers (Elango et al., 2007; Porter, 1992). Being a nurse involves expected behaviours, such as being a dutiful, risk-averse employee with soft values (Qvistgaard & Jakobsen, 2019). The traditional hierarchical structures and behavioural norms of health care tell a story of what a nurse can do or not, and this does not involve entrepreneurial activities (Neergård, 2021a). After all, being 'entrepreneurial' implies breaking norms, as it 'acts as a licence to challenge the status quo and bring about entrepreneurial change' (Anderson & Warren, 2011, p. 591). Thus, nurse entrepreneurs are not always doing 'what they are supposed to do', and they are known to face significant resistance due to their non-traditional approach to nursing practice (Wall, 2014). Nurse entrepreneurs experience that peers raise questions about their loyalty to the nursing profession and their future as clinical nurses (Qvistgaard & Jakobsen, 2019). Nurse entrepreneurs often face scepticism, negative attitudes, lack of support (Wall, 2014) and stigmatization from other health professionals (Silva et al., 2019).

Ethics specific to nurse entrepreneurs is addressed in just a few ethical guidelines. The International Council of Nurses (ICN) has emphasized the need for nurse entrepreneurs to be competent and accountable, to avoid profit-seeking measures that may hinder equal access to health care and to be careful when employing other nurses

to avoid ethical issues (ICN, 2004; Sanders & Kingma, 2012). The Norwegian Nurses Organisation states that a nurse 'does not participate in marketing, commercial activities or other influences that weaken the patient's and society's trust in the profession' (Norsk Sykepleierforbund, 2019, paragraph 1.9). Few studies have explored the actual ethical concerns raised by nurse entrepreneurs.

1.2 | Research question

How do ethical concerns influence the pursuit of entrepreneurial opportunities for nurse entrepreneurs? As entrepreneurial opportunities are associated with an aspiration for economic profit (Baron, 2004), a contrast to the free health care ideal and the ethical guidelines for nurses (ICN, 2004; Sanders & Kingma, 2012), this phase of entrepreneurship represents a particularly interesting scope for researching the ethics of nurse entrepreneurs.

2 | METHODS

This study is part of a larger research project on entrepreneurial nursing that includes interviews, timelines, and secondary data sources about nurse intrapreneurs and nurse entrepreneurs. The aim has been to explore the complete entrepreneurial processes of entrepreneurial nurses in new and established organizations in the private and public sectors.

The participants for this study were selected using the following inclusion criteria: (1) being a registered nurse (2) who has created a new, private venture (3) that is still developing and (4) recognized by society as an entrepreneur (e.g., through newspaper articles or prize awards). I searched for eligible participants through Google, using the Norwegian words for nurse, entrepreneur, innovator and business. Twenty-one nurse entrepreneurs in 18 private ventures were identified via online media reports and asked to participate; 11 nurse entrepreneurs in nine private ventures agreed to be interviewed. Their

TABLE 1 Sample characteristics

Nurse entrepreneur (age)	Venture (established)	Product/service	Industry code (NACE)
Agnethe (40s)	Lasting Joy (2005)	Activity services for the elderly	79.903 Adventure, event and activities operators
Beathe (40s)	Youth Aid (2017)	Health information for youth	86.909 Other human health services
Cornelia (50s)	Cleancare (2015)	Personal care products for patients	23.420 Manufacture of ceramic sanitary fixtures
Dina (40s)	Health.Ed (2011)	Courses for health care personnel	62.010 Computer programming activities
Erica (40s)	Erica's Clinic (2020)	Skin treatment services	86.909 Other human health services
Frida (40s)	Your Therapy (2012)	Cognitive therapy	86.909 Other human health services
George (30s)	Murse (2019)	Products for health care professionals	47.919 Other retail sale of specialized assortment of goods via mail or via internet
Harry, Ina, and Jenny (20s and 30s)	Educational Playoff (2018)	Educational material for nurses	47.919 Other retail sale of specialized assortment of goods via mail or via internet
Klara (60s)	Yoga Residence (2016)	Yoga retreat centre and sales of yoga equipment	47.912 Retail sale of textiles, clothes, footwear, travel accessories, and leather goods via mail or via internet

TABLE 2 Sample of interview questions

Interview phase	Conversational topic	Information and questions from the interviewer
Introduction	Getting to know the participant	Can you please start by telling me who you are? How did you become a nurse?
Main questions	Starting the venture	Let us talk about your venture. I would like to know how and why you started it? What kind of actions did you perform on the very first day of your venture creation? What happened during the very first week? During the first month? The first year? What has been the most important milestones in your entrepreneurial journey? Who was involved in your venture creation? How has money influenced your venture creation? How did you experience your steepest learning curves?
Main questions	Ambitions	Please describe your ambitions when starting this venture. How are your ambitions today?
End	Additional information	Is there any information you would like to share that we have not touched upon yet? Are there any questions you would have wanted to answer that I did not ask?

ventures are related to health care; however, they are diverse in that they are in different industries, deliver different products and services and have different target groups (Table 1). The sample aims to illustrate diversity in nurses' ventures, as former literature has often been limited to service provision (e.g., ICN, 2004).

This study follows an exploratory design using narrative interview techniques and an interview guide with open-ended questions focusing on the nurse entrepreneurs' opportunity formation in the beginning of the entrepreneurial process. The participants were encouraged to speak freely about life experiences tied to the venture creation (Anderson & Kirkpatrick, 2016; Eriksson & Kovalainen, 2011; Polkinghorne, 1988). This allowed for a contextual exploration of why the nurse entrepreneurs choose to engage in entrepreneurial ideas (Fletcher, 2007), including their motivations and ethical concerns starting their venture. An excerpt from the interview guide is presented in Table 2. Each participant was interviewed once using the digital video conversation tool Zoom, creating an egalitarian and comfortable research setting (Howlett, 2021). On average, the interviews lasted for 1 h and 41 min. The interviews were audio-recorded. Secondary data sources (documentaries, books, news items and blog posts) were used to prepare for the interviews and to identify coherence in the participants' stories. The participants' names and companies are pseudonyms.

2.1 | Ethical considerations

The Norwegian Centre for Research Data approved the data collection, the data management and the overall ethics of this methodological approach. The approval is stated in 'Notification Form 203764'.

2.2 | Analysis

Theoretical thematic analysis (Braun & Clarke, 2006) was used to detect the themes in the interviews. The research question and the theoretical foundation in ethics of care guided the analysis. The steps in the analysis are visualized in Figure 1 and followed the six-step guide by Braun and Clarke (2006), involving (1) familiarizing with the data, (2) generating initial codes (cues), (3) searching for initial themes, (4) reviewing themes, (5) defining and naming themes and (6) producing the report. The interviews were transcribed verbatim and carefully read. The generation of cues followed two steps. I started by looking for cues from ethical guidelines, as ethical concerns imply that ethical choices are pre-made by others (Hopia et al., 2016). The ICN code of ethics serves as guidance for all nurses (International Council of Nurses, 2021). Thus, the coding process started by identifying cues of ethical concerns in line with the international ethical guidelines for nurses (ICN, 2021). I looked for cues tied to (1) the patient or other people requiring care or services, (2) the practice, (3) the profession and (4) global health. In the second step, I looked for cues of ethics of care. Ethical concerns imply a need for ethical guidance, and there might be a violation of the ethical principle of care for all (Hopia et al., 2016). I looked for cues identifying whether or not the nurses' ethical decisions came from personal experience, values, beliefs and emotions, and whether this could be linked to creativity, flexibility and relationships (in line with French and Weis (2000), Gilligan (1982), Östman et al. (2019) and Reiter, 1996). Table 3 presents examples of the concerns and how they were coded into the ICN ethical codes and the ethics of care. In thematic analysis, a 'theme' captures important information concerning the data and the research question, 'and represents some level of patterned response or meaning within the data set' (Braun & Clarke, 2006, p. 82). Two themes emerged from the analysis: (1) ethics → entrepreneurship (ethical concerns leading to an entrepreneurial opportunity) and (2) entrepreneurship → ethics (ethical concerns as a result of opportunity formation).

3 | RESULTS

The analysis showed that the nurse entrepreneurs raised ethical concerns in line with ethical guidelines about patient care, nursing practice and the nursing profession during their pursuit of opportunities. They did not express ethical concerns regarding global health. According to their quotations, the participants made ethical decisions based on personal and professional experiences, values and emotions; rooted in the ethics of care. Their relationship with patients, colleagues, the nursing profession and themselves served as a fundament for action. The analysis shed light on two different stages of ethical concerns: (1) ethics → entrepreneurship and (2) entrepreneurship → ethics. The first stage regards ethical concerns made by the nurses in clinical practice before venture creation. The participants noticed issues in their meetings with patients, in their nursing practice and the nursing profession. These issues were often violations of the ICN code of ethics, and a violation of the ethical principle of care for all. Such issues prompted an opportunity pursuit, as the nurses reacted to their ethical concerns and aspired to create change. The second stage of ethical concerns occurred when the nurses began working with their entrepreneurial opportunities. They explain how they worry about causing harm rather than positive changes for their patients, their fellow nurses, or themselves. Table 3 summarizes examples of ethical concerns the nurse entrepreneurs made when initiating their ventures.

3.1 | Ethics → entrepreneurship

Participants expressed ethical concerns during the conduct of their day-to-day work in health care institutions, psychiatric care, school nurse care and home-based care. The two participants Agnethe and Dina struggled with such concerns from their very first encounters with health care that happened decades ago. In her first experience with nursing practice at a nursing home, Agnethe observed that the elderly were inactive, lethargic and seldom experienced cultural activities or time outdoors. This stirred her emotions, and accepting their

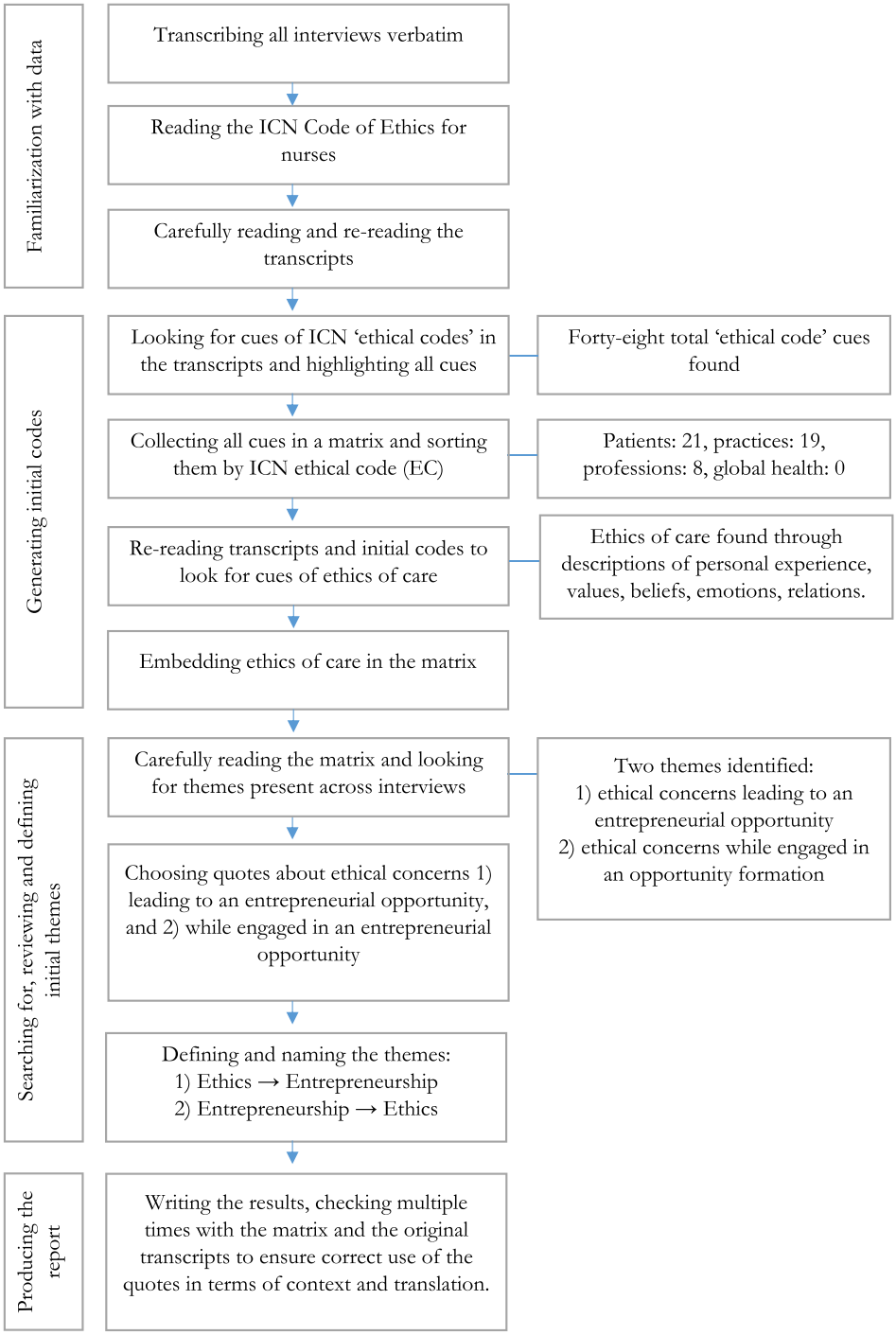

FIGURE 1 Thematic analysis of ethical concerns in opportunity pursuit.

care routine was against her values. After the death of a lonely, 84-year-old woman that Agnethe had cared for in her spare time, Agnethe was overwhelmed by emotions and a need for action:

> This was a reminder that we cannot wait! We need action now! We cannot avoid doing things. We cannot accept the state of affairs in the everyday life of the elderly. *We need to do something!* And we need a change of attitude, providing the elderly with the same human rights as the rest of us. We would never accept this level of care for our children. Sitting still, indoors, day after day. The elderly live like this every day. In nursing homes, and their own homes. It is so fucking sad that we humans accept it.

Her emotional reaction to this ethical concern is an example of ethics of care, and so is her actionable response. To influence change, she established the organization Lasting Joy, arranging events for elderly people living at home or in institutions. The events ranged from small dinner invitations to huge festivals with several thousand

TABLE 3 Examples of ethical considerations before and during opportunity pursuit

	Ethical considerations leading to opportunity formation	Ethics of care	Ethical considerations during opportunity formation	Ethics of care	ICN ethical codes
Agnethe	Agnethe observed that institutionalized elderly people were lethargic because they experienced too few cultural or physical activities during the daytime. As a response, she created Lasting Joy.	Concern based on personal and professional experiences and values. Handled with creativity.	Agnethe considered the risk of causing death or severe illness to elderly due to their participation in unfamiliar activities. As a response, she involved health care personnel and nursing students in all events.	Concern based on emotions (fear of causing harm). Handled with flexibility and relationships.	1.2 1.6 1.8 1.10
Beathe	Beathe observed that there was a lack of resources in the public school system—there were too few school nurses, and they had too few office ours at high schools. The service seemed inaccessible to the youth. As a response, she created Youth Aid, which provides online service and health information from the school nurse.	Concern based on professional experience. Handled using flexibility, creativity and relationships.	Beathe considered the risk of receiving messages with violent content or suicidal threats, as she was working online with youth who might experience mental health issues. She responded to the concern by setting up guidelines and talking to relevant actors and authorities.	Concern based on emotions (fear of causing harm).	1.3 1.4 1.6 1.9 1.11 2.4 2.5 2.7 3.7
Cornelia	Cornelia observed that patients with cognitive challenges struggled with personal hygiene and dreaded showering. Being showered by someone else might also negatively affect people's dignity and privacy. As a response, she created Cleancare.	Concern based on professional experience and values. Handled with flexibility and creativity.	Cornelia feared causing harm to her patients with her innovation (e.g., by creating the conditions for legionella). As a response, she designed a new solution that would never cause bacterial infections or other harm to patients.	Concern based on emotions (fear of causing harm). Handled with flexibility, creativity and relationships.	1.2 1.6 1.8 1.9 1.11 2.1
Dina	Dina observed that unskilled assistants in health care were not given the education and training needed to deal with challenges at work. This led to dangerous situations for patients and caregivers. As a response, she created Health.Ed.	Concern based on professional experience and emotions. Handled with flexibility and creativity.	Dina feared developing a product that provided false security. For instance, if people learned the basics of first aid through her online education but never practiced cardiac pulmonary resuscitation in authentic situations, they might not know what to do in an emergency.	Concern based on emotions (fear of causing harm).	1.6 1.9 2.3 2.4 2.6 2.10 2.11
Erica	Erica learnt that acne leads to severe psychological challenges for youth, such as depression and loneliness. Making a difference for youth with skin issues was a main motivation for starting her skin clinic.	Concern based on belief and emotions. Handled with relationships.	Erica was worried that her interest in beauty procedures might cause negative body image in youth. She has taken an active stance not to market injections, although this is a part of her service offering for adults.	Concern based on emotions (fear of causing harm).	1.6 1.8 2.4

(Continues)

TABLE 3 (Continued)

	Ethical considerations leading to opportunity formation	Ethics of care	Ethical considerations during opportunity formation	Ethics of care	ICN ethical codes
Frida	Frida noticed that psychiatric health care is increasingly oriented towards doctors and psychologists, although nurses can provide cost-effective and good treatment. As a response, she created Your Therapy.	Concern based on professional experience. Handled with relationships.	Frida noticed several positive effects from the patients paying for her psychiatric services (they 'absorb everything' she has to offer); however, she has been worried about those who cannot afford treatment and is examining ways to include them in her services.	Concern based values (fear of violating the principle of care for everyone).	1.6 1.7 2.3 2.5 3.1 3.2 3.4 3.5
George	George found that the nursing union was not portraying male nurses and masculine ideals. As a response, he created Murse.	Concern based on professional experience and emotions. Handled with creativity.	George started creating index cards for health care personnel, but he feared providing a product with errors and misguiding information. As a solution, he cross-checked all information with several clinical specialists.	Concern based on emotions (fear of causing harm).	1.3 2.1 2.3 2.6 3.4 3.5
Harry, Ina, and Jenny	Harry, Ina and Jenny wanted to 'create something' for nurses. They knew that a huge percentage of nursing students failed their exams in physiology, anatomy, and pathology, so they created a new learning tool, educational playoff, to help students learn.	Concern based professional experience and values. Handled with creativity.	They feared providing a product with errors and misguiding information, so they cross-checked all their information with several medical doctors working in education.	Concern based on emotions (fear of causing harm).	2.1 2.3 2.6 3.4
Klara	Klara wanted to take care of her own health after struggling with depression while working for years as a psychiatric nurse in a burdensome job. She wanted to work with healthier individuals and to nurture her identity. As a response, she created Yoga Residence.	Concern based on personal experience.	Klara did not describe ethical considerations when developing her venture. However, she had concerns about using the term 'entrepreneur', associating it solely with profit-seeking activities. Klara would rather call herself a teacher or guide and focus on love rather than money.	Concern based on emotions and values (fear of being misunderstood).	2.4

senior participants. She and her team raised several million Norwegian kroner in funding and travelled the country to establish local associations. Agnethe faced severe resistance in her community for creating this service, as Lasting Joy represented a critique of health care institutions. However, the organization grew nationwide and became widely recognized for its contribution to public health. Agnate's responses are tied to ICN Ethical Code (EC) 1.2: 'Nurses promote an environment in which the human rights, values, customs, religious and spiritual beliefs of the individual… are acknowledged and respected by everyone' (ICN, 2021, p. 7). They are also linked to EC 1.8: 'Nurses demonstrate professional values such as respect, justice, responsiveness, caring, compassion, empathy, trustworthiness, and integrity.

They support and respect the dignity and universal rights of all people…' (ICN, 2021, p. 7).

Dina experienced a lack of competence in home-care services since her very first day at work—at that time being, an 18-year-old, unskilled assistant. The responsibility that came with the job felt unbearable, as Dina had to care for frail and dying elderly without the competence to do so. The experience frightened her and affected her sleep and well-being. She tried to raise her voice about the issues to a local politician, but her ethical concerns were not responded to. She found that if she wanted to see any changes, she had to initiate them herself. Dina took her nursing education and worked as a consultant and as a nurse manager for some years. When she returned to clinical nursing, Dina found that there was still a lack of competence in nursing practice that could compromise patient safety and personnel's well-being:

> We were responsible for up to 100 patients, another nurse and I, and we had eight unskilled assistants in our team. It is not the assistants' fault, they want to do so much, they want to learn! (…) My shift, I remember we lagged hours behind in our work schedule, and there were so many incidents. I yelled in the hallway when I got back home. I threw off my uniform and said, 'I will never, never, enter this field work again before anyone creates a system that makes people safe at work'.

Dina responded to her ethical concern with creativity and created an organization that provided digital educational material for health care assistants. Dina's ethical concerns are linked to EC 2.3 'use professional judgement when accepting and delegating responsibility' (ICN, 2021, p. 12) and EC 2.11, 'Nurses are active participants in the promotion of patient safety'(ICN, 2021, p. 12). The example of Dina serves as a reminder that nursing conduct also relates to the nurses' own health. Feeling worn out by nursing practice was the main motivation why Erica and Klara started their ventures. They both wished to work with healthier individuals to experience less pain in their (work) life. Erica reflects upon her many years working at a closed dementia ward: 'It creates despair. I have shed tears a thousand times… I am a bit too emotional, actually, for this occupation. I can't put it all away when I get back home from work'. Erica and Klara explain that their change in practice has allowed them to provide care and services to others without risking burnout. This relates to EC 2.4: 'Nurses value their own dignity, well-being, and health' (ICN, 2021, p. 12).

While the former examples portray ethical concerns about patient care and nursing practice, others highlighted ethical concerns about the nursing profession. As an example, George thought that the national nurses' union did not create a constructive learning or working environment for male nurses. His emotions led to action, aiming to promote and fight for the image of male nurses in particular. George's concerns were tied to EC 3.4, which calls on nurses to create 'a positive and constructive practice environment'(ICN, 2021, p. 15).

3.2 | Entrepreneurship → ethics

The participants portrayed a variety of concerns while developing their ventures, with one striking commonality: fear of doing harm rather than good. Agnethe, Beathe, Cornelia, Erika and Frida all describe a fear for the health of their patients while testing, providing and marketing their care products and services. Cornelia feared that her solution could increase the risk of legionella: 'I felt so alone, I buried myself in negative worst case scenarios… People trust you, and it is your call to assess the quality of everything. That was very challenging'. As another example, Beathe works with youth online, focusing on mental health. When starting her venture, she feared that she would receive messages with violent content: 'I was very concerned about safety and how to act as correctly as possible'. Her first move was to run a risk analysis, visiting organizations working online with mental health issues and creating ethical guidelines for her work. She also contacted the National Criminal Investigation Service to prepare herself for safety threats. Other participants feared causing harm indirectly through other health care personnel. Harry, Ina and Jenny worried about the educational quality of their product. As nursing students practice for their exams using this product, they need every element of the product to be free of errors and misguiding statements.

Table 3 presents examples of the ethical concerns different participants mentioned. The right-hand column lists the various ethical codes present in the interviews in accordance with the ICN Code of Ethics for Nurses (2021).

4 | DISCUSSION

This study shows that, when starting and managing new ventures, nurse entrepreneurs experience a range of ethical concerns. Their initial ethical concerns leading to opportunity pursuit are often examples of ethics of care, as they are motivated by personal experiences, values and emotions, and as the nurses cause action to solve their concerns (Reiter, 1996). After starting their ventures, their ethical concerns shift into a fear of doing harm rather than good with their actionable response. They analyse the worst-case scenario consequences of their actions, such as endangered patient safety and public critique. The stories of Beathe, Cornelia, Erica, George, Harry, Ina and Jenny show that nurse entrepreneurs choose pathways that lead to added iterations, more financial risk, prolonged work processes and less income—all to keep patients safe and to work by their personal values, beliefs and emotions. Some nurse entrepreneurs acted with flexibility and creativity to solve their ethical concerns, in line with ethics of care. One example is Cornelia, who completely redesigned her product to eliminate the risk of harmful bacteria threatening patients. Other nurse entrepreneurs responded to the ethical concerns during opportunity pursuit with actions that comply with ethics of justice rather than ethics of care. As an example, Beathe sought solutions in ethical guidelines set by other organizations and checked laws and regulations with authorities. Adding to that, Erica stated that she would refrain from marketing certain beauty procedures, and

Frida was concerned about the equity and fairness of private psychiatric health care. Both ethics of care and ethics of justice strive to avoid harm (Gilligan, 1982). This study shows that care and justice are integrated in nurse entrepreneurs' natural decision making, in line with previous qualitative studies exploring the ethics of general nurses (e.g., Juujärvi et al., 2019).

The fear of doing harm rather than good is in line with the ECs linked to patient safety, such as 1.11: 'Nurses ensure that the use of technology and scientific advances are compatible with the safety, dignity and rights of people' (ICN, 2021, p. 8). Such concerns date back to the classical Greek era (Antoniou et al., 2010), and they have played an important role in the development of health care professions and health care institutions (Nightingale, 1863; Smith, 2005). Trying to comply with this historical ethical stance may serve as an important reminder that all decisions in health care carry the potential for harm. However, *primum non nocere* seems to be an inadequate guide for health care ethics, as doing harm is often an inevitable consequence of curing disease and prolonging life (Smith, 2005). Furthermore, 'above all, do no harm' represents a rather passive approach to nursing, implying that doing nothing is better than the potential of causing harm. In terms of nurse entrepreneurship, this old care mantra could cause unnecessary worry and hinder progress, deterring nurses from acting entrepreneurially. This impedes their ability to act in accordance with the ethics of care (Gilligan, 1982) and their ability to act in accordance with ethical guidelines. After all, nurses are responsible for *initiating action* 'to meet the health and social needs of all people' (ICN, 2021, p. 7).

This study exemplifies that nurse entrepreneurs may play critical roles in forecasting and responding to gaps in health care. Responding to ethical issues in health care indicates responsibility, which is an essential value in nursing and care (Gilligan, 1982; Östman et al., 2019). The participants in this study used their professional experiences and ethical concerns as a fundament for change. Nurses need to act upon such concerns, as their experiences might be unique to the nursing profession, and other professions might not register the concern or recognize its significance. Responding to such profession-based ethical concerns is in line with 'the mantra of caring ethics', developed by Eriksson: 'I was there, I saw, I witnessed and became responsible' (Eriksson, 2013, p. 70). The participants' entrepreneurial actions led to new products and services that may improve patient care, elevate the quality of nursing practice and professionalize nursing. These activities are important motivations for 'scientific advances and [the] professionalisation of nursing' (ICN, 2004, p. 31).

This study shows that nurse entrepreneurs are dutiful in their ethical nursing responsibilities by not accepting the status quo of systemic issues in health care (Gilligan, 1982). However, such entrepreneurial action carries the risk of stigmatization. Nurse entrepreneurs are aware of the negative associations related to their occupation, and they worry that their business is unethical or opposes nursing norms and values (Elango et al., 2007). As an example, Klara would rather call herself a teacher than an entrepreneur and focus on love rather than money. The societal traditional understanding of what nursing and entrepreneurship 'is' and 'is not' may hinder nurses from acting entrepreneurially.

5 | CONCLUSIONS

Nurse entrepreneurs often create their ventures as a reaction to ethical concerns in clinical practice to improve a given situation for patients, for nursing practice or the nursing profession. Seizing entrepreneurial opportunities becomes an act of responsibility, a way of initiating action to support health needs. Thus, ethics of care serves as the basis for change. This study shows that nurses become nurse entrepreneurs out of ethical concerns in line with the ICN Code of Ethics. Furthermore, nurse entrepreneurs are concerned with doing no harm when developing their ideas. They make use of ethics of justice and ethics of care to solve this concern. While *primum non nocere* is a fundamental ethical concern in health care disciplines, 'the mantra of caring ethics' is a more suitable ethical guideline for nurses considering opportunity pursuit to solve an ethical concern.

5.1 | Limitations and future research

The sample illustrates a variety of nurse entrepreneurship venture creation; however, it does not portray *all* potential outcomes of nurse entrepreneurship, as this is continuously developing in line with nurses' formation of new entrepreneurial opportunities. The participants are all located in Norway, and perspectives on entrepreneurship and health care systems differ extensively between countries. All participants in this study have considered ethical issues when establishing their ventures, but perceived ethical behaviour was not an inclusion criterion for this sample. There is a need for further research on how nurse entrepreneurs experience and deal with ethical concerns and ethical dilemmas in venture creation.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

This study reimagines the image of nurse entrepreneurs and illustrates that ethics of care may serve as a powerful foundation for entrepreneurial activity and change in health care. This is important for nursing managers, as several of them are nurse entrepreneurs themselves or employ and lead nurses who wish to form entrepreneurial opportunities that improve health care.

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CONFLICT OF INTEREST

None.

ETHICS STATEMENT

The Norwegian Centre for Research Data has assessed and approved the data collection, the data management and the ethics of this study. The ethical approval number for this study is 203764.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Gunn-Berit Neergård https://orcid.org/0000-0001-8226-2917

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COMMENTARY

WILEY

Guiding nurse managers in supporting nurses in dealing with the ethical challenge of caring

Claire O'Donnell PhD, MSc, BSc, Lecturer | Kathleen Markey PhD, MSc, BSc, Lecturer | Brid O'Brien PhD, MSc, BNS, Lecturer

Department of Nursing and Midwifery, Faculty of Education and Health Sciences, Health Research Institute, University of Limerick, Limerick, Ireland

Correspondence
Claire O'Donnell, Department of Nursing and Midwifery, Faculty of Education and Health Sciences, Health Research Institute, University of Limerick, Limerick, Ireland.
Email: claire.odonnell@ul.ie

Abstract

Aim(s): This study aims to present the theory of resigning in supporting nurse managers in dealing with nurses' ethical challenge of caring.

Background: In a COVID-19 era, nurses continue to be ethically challenged in maintaining safe patient care. Nurse managers play a critical role supporting staff in responding to the complexities of working in, under resourced environments.

Evaluation: Literature suggests care delivery is compromised in times of staff shortages, lack of resources and increased demands on nurses. Examining caring behaviours through the theoretical lens of the theory of resigning enables nurse managers to understand nurses' behaviours, cultivating supportive working environments.

Key issue(s): Nurses strive to provide quality, safe care but are sometimes unable to give the level or type of care they wish, due to the presence of constraints.

Conclusion(s): This paper provides suggestions for nurse managers in dealing with nurses' daily moral distress arising from working within constraints while still trying to provide safe care.

Implications for Nursing Management: Nurse managers need to develop greater insights into the ethical dilemmas nurses experience and support them to temporarily realign beliefs and values, while continuing to work within constraints. Understanding ethical dilemmas of prioritizing care is required to address and manage this concern.

KEYWORDS
care, ethical dilemmas, moral distress, nurse managers, nurses

1 | INTRODUCTION

A fundamental part of work for all health care professionals is operationalizing ethical values (Haddad & Geiger, 2022), which is critical in preserving patient safety. During COVID-19, ethical considerations of care have been challenged by overwhelming workloads and workplace shortages (Lai et al., 2020). When working in environments experiencing constraints a reduced level of care is often delivered (Zelenikiva et al., 2020). Prior to COVID-19, reports within the literature demonstrated the struggles nurses experienced in providing care (Markey et al., 2019; O'Donnell & Andrews, 2020) and the negative impact this has on patient care (Gustafson et al., 2020). Collectively, this evidence highlights how nurses are challenged in maintaining their ethical viewpoint, values and beliefs in maintaining safety of their patients and themselves. Health care systems need to take responsibility for deficiencies in standards of care and demonstrate

genuine commitment to making improvements. In particular, there is a need to examine care delivery in the context of working within constraints (O'Donnell & Andrews, 2021), 'habituation to thoughtlessness' (Roberts & Ion, 2015) and indifference to the needs of patients (Markey et al., 2019), which highlight the widespread occurrence of substandard care that often goes un-noticed and subsequently unchanged.

While constraints in the care environment have a consequential impact on care provision, they also negatively affect nurses' morale influencing their ethical compass of care. Nursing management also encounter such ethical issues on a daily basis (Aitamaa et al., 2016), which is further exacerbated by COVID-19 (Markey et al., 2021). Ethics is a fundamental element within nursing leadership, yet nurse managers are challenged with nurturing an ethical environment and supporting staff in dealing with and responding appropriately to ethical concerns in delivering safe care (Barkhordari-Sharifabad et al., 2017).

This commentary paper draws attention to the critical role nurse managers' play in supporting staff in dealing with the ethical concern of prioritizing safe care delivery when working within constraints. Examining caring behaviours through the lens of the theory of resigning (O'Donnell & Andrews, 2021) is proposed as an approach that can create greater awareness of the realities of working within constraints. This theory helps nurse managers understand nurses' experiences of working within constraints providing a platform for managers to help in their response to creating supportive and respectful working environments. It provides a framework to consider ethical issues that nurse managers need to be cognisant of when exploring the practical application of strategies in supporting safe care delivery and supportive working environments. Casper (2021) identifies that when nurses recognize factors beyond their control, this can then motivate them to take action and empower them. The theory of resigning explains how nurses can take action, remaining motivated to continue to provide the best care possible within their ethical realm, thus providing new insights for consideration for nurse managers. The ethical struggle of providing best care for patients will be reviewed in each category of the theory of resigning, highlighting practical suggestions for nurse managers to consider in times where working within constraints remain a daily reality.

2 | THE THEORY OF RESIGNING AND THE ETHICAL CHALLENGE OF CARING

The theory of resigning explains the unwilling acquiescence and imposed compromise for nurses when unable to give the level or type of care they wish (O'Donnell & Andrews, 2021). It consists of three categories: idealistic striving, resourcing and care accommodation. Resigning acts as conserving and a surviving mechanism enabling nurses to continue working within constraints (O'Donnell & Andrews, 2020, 2021).

The ethical challenge of caring arises for nurses when they experience the need to provide best care but are not able to do this due to the presence of constraints. Morley et al. (2020) describe nurses' ethical conflict between obligations in care provision and competing demands of inadequacies in health care, challenging nurses' to keep themselves safe while also providing safe quality care. This ethical conflict for nurses results in turmoil between personal and professional values and beliefs (Maffoni et al., 2019). The theory of resigning offers new insights for nurse managers in considering ways of exploring how nurses respond to the challenges experienced and how nurses can continue to provide care in such situations, supporting their personal and professional values and beliefs. It helps nurse managers understand the importance of supporting nurses to temporarily realign their beliefs and values while continuing to work within constraints. When management can identify nurses' ethical concerns, it helps in recognizing nurses' distress and motivates management to find ways of improving this situation.

3 | IDEALISTIC STRIVING

Idealistic striving is the first phase of the theory of resigning where nurses aim to provide best care. Many nurses have experienced the ethical dilemma of the challenge of caring during this pandemic (Moghaddam-Tabrizi & Sodeify, 2021) with their commitment reported to have weaned through exhaustion and fear for their own safety (Morley et al., 2020). Nurses holding a commitment to providing the best care possible are essential to idealistic striving. Prior to COVID-19, such commitment described a dedication to work, influenced by nurses' attitude and desire of wanting to provide best care (Skirbekk et al., 2018). This was influenced and often challenged by the care environment (Zelenikiva et al., 2020). While some report COVID-19 to negatively influence their commitment (Morley et al., 2020), others report no reduction in nurses professional commitment to their role (Moghaddam-Tabrizi & Sodeify, 2021). Literature supports this finding where a sense of duty and commitment to patient care is increased during a pandemic (Fernandez et al., 2020). However, this only fuels nurses' ethical challenge of care delivery. Nurse managers need to capitalize on this commitment and provide supportive and nurturing environments that encourage nurses to flourish.

Idealistic striving as part of the theory of resigning provides insights for nurse managers in identifying ways of maintaining best care. This occurs through connecting with other professionals, having expert knowledge and being aware. Gizaw et al. (2016) support idealistic striving as they found in supporting professional commitment nurses engaged in reassuring patients, reducing patients' uncertainty and allaying any fears patients may have. This supports the concept of idealistic striving demonstrating how nurses adapt to working within constraints. This is more evident when supportive nurse leadership is present. Moghaddam-Tabrizi and Sodeify (2021) advocate for nursing management to provide supports such as psychological supports to help nurses overcome their moral challenges. Managerial strategies such as reducing the length of shifts for nurses could also be considered in helping nurses have time to recover and maintain their commitment to caring (Choi & Kim, 2018). Through professional

connecting, dialogue can be opened between nurses and management, permitting nurses' concerns to be heard; thus, management can then acknowledge these concerns and act on them (O'Donnell & Andrews, 2021).

4 | RESOURCING

The second phase of the theory of resigning is resourcing where nurses and nurse management highlight requirements necessary to provide best care. Nursing is recognized as a fast paced business, carrying significant workload at an increasing work rate intensity (Fradelos et al., 2014). This situation however, has been significantly compounded due to the pressures of working with reduced staff, reduced resources as a result of the pandemic (Smith et al., 2020). Resourcing as a concept of the theory of resigning explains how nurses are trying to resist the presence of constraints by engaging in activities such as 'time borrowing' (taking time from one care activity to give to another) and badgering of senior management and others in attempting to deliver the best care possible. Resourcing occurs as nurses are ethically challenged in providing the best care; thus, conflict exists between ideal care delivery and the reality of a reduced level of care when lacking resources. Nurse managers need to cultivate an awareness of these complexities within the team, while nurturing a collective commitment to ethical values including the courage to continue reporting through badgering and advocating for actions when there are resource deficiencies. Nurses' ethical values offer a compass in identifying what types of actions, goals and motivations are appreciated (Östman et al., 2019), driving time borrowing and badgering.

Resourcing involves a high outlay of personal energy that can result in burnout; therefore, continuously pursuing resources can only be sustained temporarily. Nursing management must recognize and respond appropriately by increasing resources when needed and by creating and maintaining an ethical working environment. The latter occurs through supporting nurses by organizing moral case deliberation meetings as a structured approach to deliberating ethical concerns (Aitamaa et al., 2019). Another approach is that of identifying ethical champions in everyday life (Fitzgerald et al., 2018). Such mechanisms help nurses in navigating their ethical concerns when trying to prioritize care delivery. Resourcing demonstrates how nurses are trying to provide better care, validating their commitment to examining ways of improving standards of care when working within constraints which needs to be acknowledged and rewarded by managers. Badgering management and others was found by Moghaddam-Tabrizi and Sodeify (2021) during COVID-19 as nurses sought help from health benefactors and other authorities. Badgering can positively support care environments and care delivery while also supporting the ethical strain of acknowledging a lesser level of care delivery. When management are aware of these resource-constrained environments and respond with positive supportive atmosphere, this reduces staff emotional exhaustion (Maffoni et al., 2020) supporting care accommodation.

5 | CARE ACCOMMODATION

The third phase of the theory of resigning is care accommodation where nurses adapt their care to meet the patients' needs when working within constraints. Maffoni et al. (2020, p. 1121) support this concept when referring to a 'climate characterised by a respectful approach to patient care'. Care accommodation accepts that various levels of care exist, identifying three differing levels of care: fundamental care, assisted self-care and ideal care, all dependent on the degree of constraints present at that time (O'Donnell & Andrews, 2020). Nurse managers need to remain vigilant for care accommodation which requires taking a non-judgemental and supportive stance. Moral courage by nurses and management is required in such situations as described by Kleemola et al. (2020) to maintain focus on best care and the safety of patients. Care accommodation supports this through presenting differing types of care delivery.

It is important that nurse managers understand the circumstances surrounding care delivery. The concept of care accommodation creates an awareness for nurse managers in understanding the complexities for nurses when working within constraints. Management should ideally respond creating an 'ethical climate' which supports staff and generates an ethical vision of patient care (Maffoni et al., 2020). Such support demonstrates a protective role by management showing that it acknowledges and appreciates the ethical challenges that exist in care delivery (Velando-Soriano et al., 2020). Nurses strive to ensure that fundamental care needs of patients are always met. However, nurse managers need to understand the impact and response to the diverse range of constraints that impact on how nurses accommodate care, adapting how they deliver care to support patient's needs. In particular, there is a need to appreciate that the greater the increase in constraints the greater the engagement in the concept of care accommodation, consequently reducing the level of care provided.

6 | CONCLUSION

The conceptual framework of the theory of resigning provides a strategy for understanding and managing the ethical challenge of caring experienced on a daily basis. Ethical leaders while being aware of moral dilemmas that affect patient care (Barkhordari-Sharifabad et al., 2017) should endeavour to guide and encourage nurses in ethical care delivery.

7 | IMPLICATIONS FOR NURSE MANAGERS

Nursing leadership is now more than ever required to steer nurses through the ethical dilemmas experienced in providing safe care delivery. Nursing managers are central in facilitating safe ethical care through using the framework of the theory of resigning. Nurse managers need to help to develop and create ethical supports such as moral deliberation groups, promote ethical champions and seek

resources on a regular basis. Feedback from these need to be shared to all staff helping with moral decision making and allowing for best practice to occur.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

ETHICAL APPROVAL

No ethical approval was required for this paper as this is not a primary research study but a commentary paper using the literature published on the area of guiding nurse managers in supporting nurses to deal with the ethical challenge of caring.

AUTHOR CONTRIBUTIONS

All authors meet the criteria for authorship as outlined below. All entitled to authorship are listed as authors. No other authors were involved with this paper.

1. Have made substantial contributions to conception and design, acquisition of literature or analysis and interpretation of literature (CO, KM and BO).
2. Been involved in drafting the manuscript or revising it critically for important intellectual content (CO, KM and BO).
3. Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content (CO, KM and BO).

DATA AVAILABILITY STATEMENT

Authors do not wish to share the data.

ORCID

Claire O'Donnell https://orcid.org/0000-0003-2386-7048
Kathleen Markey https://orcid.org/0000-0002-3024-0828
Brid O'Brien https://orcid.org/0000-0001-6924-1548

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ORIGINAL ARTICLE

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Experiences with dignity among older people confined to beds living in a nursing home: A qualitative descriptive study

Zvonka Fekonja RN, MSc, PhD candidate, Teaching assistant[1] |
Sergej Kmetec RN, MSc, PhD candidate, Teaching assistant[1] |
Mateja Lorber RN, PhD, Associate professor[1] |
Janja Lavrač RN, MSc, PhD candidate[2] |
Wilfred McSherry PhD, PGCRM, PGCE, RGN, NT, FHA, Professor[3] |
Nataša Mlinar Reljić RN, PhD, Senior lecturer[1]

[1]Faculty of Health Science, University of Maribor, Maribor, Slovenia

[2]FlawlessCode, Maribor, Slovenia

[3]Faculty of Health, Staffordshire University, Stafford, UK

Correspondence
Nataša Mlinar Reljić, Faculty of Health Sciences, University of Maribor, Žitna ulica 15, Maribor 2000, Slovenia.
Email: natasa.mlinar@um.si

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Abstract

Aim: The aim of this study is to explore the concept of dignity from the experience of older people with limited mobility and confined to beds while living in a nursing home.

Background: Nursing staff have an important impact on the dignity of those older people confined to beds in nursing homes. Individuals' uniqueness with respecting dignity should be ensured.

Methods: A qualitative descriptive study was conducted. The study was carried out with 19 older people who were immobile and confined to bed and living in nursing homes. The individual in-depth interviews were conducted between July and October 2021. Inductive thematic analysis was used to synthesize data.

Results: The main theme 'Dignity of older people confined to bed' emerged from subthemes 'Emotions', 'Lived experience' and 'Failure to maintain care'. The participants expressed their dissatisfaction towards the nursing staff's disrespectful care, which evoked feelings of insignificance and inferiority.

Conclusion: Undignified and disrespectful nursing care can cause feelings of suffering, sadness and anger in older people confined to their beds. Nurses must listen to this group of older people and learn from their experiences. Compassionate, person-centred care with kindness and empathy should be provided by all those providing and receiving care in nursing homes.

Implications for Nursing Management: To provide dignified care, nursing staff must understand the importance of person-centred, individually oriented nursing care for older people living with immobility in nursing homes.

KEYWORDS
confined to bed, dignity, experiences, nursing homes, older people

1 | BACKGROUND

Many older people living in nursing homes are frail, especially those with restricted mobility and confined to bed. The aetiology of immobility includes physical, psychosocial factors and environmental changes. The effects of these factors result in older people being confined in beds. Older people with limited mobility are defined as being confined to bed for at least 15 days, and 90% of this time is spent in bed, requiring nursing care with all their daily activities (Normala & Lukman, 2020).

Nursing staff working in nursing homes can substantially impact the dignity of older people confined to bed and the quality of their daily interactions (ICN, 2021; Ostaszkiewicz, Dickson-Swift, et al., 2020). Nursing staff must ensure the whole person's body, mind and spirit are respected and preserved from any violation of their dignity. It is a professional requirement and competence to ensure individuals are treated equally and that their uniqueness and dignity are safeguarded (Clancy et al., 2020). Nursing management must enable and ensure a clinical environment that supports providing dignified care (McSherry et al., 2012).

Dignity is primarily defined as the quality or state of being worthy, honoured or esteemed (Chochinov et al., 2012). Dignity is based on personal values, like holiness, freedom, responsibility, duty and serving one's fellow humanity (Lindwall & Lohne, 2020). Maintaining dignity is closely connected with the feeling of freedom and one's autonomy and independence (Fenton & Mitchell, 2002). Also, the experience of confirmation, faith and hope is crucial to preserving the dignity of older people (Tranvåg et al., 2015). Dignity can also be provided through friendships, social inclusion (Clancy et al., 2020) and nursing staff caring, giving older people confined to bed feelings of self-worth. Older people, especially those confined to bed, are more exposed to the risk of dignity violation. Lack of respecting dignity is a reason for distrust between nursing staff and older people and causes a sense of humiliation (Elvish et al., 2013). Nursing and caring which do not preserve dignity can lead to psychological and spiritual distress (Mlinar Reljić et al., 2021).

Some research has been conducted exploring the dignity of older people in nursing homes (Oosterveld-Vlug et al., 2014). However, this focus has been disease related (Torossian, 2021) or end of life oriented (Caspari et al., 2014). In Slovenia, nursing care for older people is organized as a community nursing care, home care, home care assistance, personal assistant care, day-care in nursing homes, long-term care and nursing care in nursing homes (Črnak Meglič et al., 2014). Registered nurses lead nursing care teams in Slovenian nursing homes, but most nursing interventions provide nurse assistants and professional caregivers. The educational level of nursing staff has a significant impact on the quality of care (Aiken et al., 2017), and dignified care is one of the quality indicators. This research emphasizes essential themes related to dignities, such as fragility, dependency and illness-related aspects of care. Since many older people in nursing homes are confined to their beds, nursing staff needs to understand the concept of dignity from their perspective.

Therefore, this paper describes the experience of older people confined to their beds and receiving nursing care in nursing homes in Slovenia. The paper addressed the following research question: 'What kind of experiences have older people confined to bed living in nursing homes about their dignity?'

2 | METHODS

2.1 | Study design

A qualitative descriptive approach was used based on phenomenology (Lindseth & Norberg, 2004). Such research design enables authors to illuminate lived experiences (Lindseth & Norberg, 2004) with dignity among older people confined to beds in a nursing home. This approach is useful as this study describes a phenomenon and comprehensively details how older people confined to bed experience the concept of dignity. The Consolidated Criteria for Reporting Qualitative Research (COREQ) was used (Tong et al., 2007).

2.2 | Settings and participants

Purposive sampling (Polit & Beck, 2021) was used to collect data. Purposive sampling is commonly used to identify the in-depth experiences of a typical representative of the target population. The suggestion that the required sample size in qualitative studies is between 5 and 25 participants was followed (Creswell & Creswell, 2018). The study was carried out in four nursing homes in Slovenia. The inclusion criteria were (1) people of both genders with a non-cognitive impairment aged above 65 years, (2) the ability to verbal communicate and (3) having lived experiences of being confined to bed for at least 1 year. The exclusion criteria were (1) people with cognitive and/or behavioural impairment, (2) inability for verbal communication and (3) people receiving end-of-life care. Based on eligibility criteria, 19 participants were included in the study. No one refused to participate or withdrew from the study.

2.3 | Data collection and analysis

Individual in-depth interviews with older people confined to bed living in the nursing home were conducted. Based on the eligibility criteria, the head nurse of each nursing home recruited the participants. Data collection was conducted between July and October 2021. All participants were interviewed two times. Before the first interview, the confidence between participant and researcher was created. Discussion about dignity started in the first interview. In the second interview, we gained in-depth meanings and captured the experience dignity of older people confined to bed. All the interviews were digitally recorded and lasted approximately 35–40 min. Data collection ended after 35 interviews when data saturation was reached (Polit & Beck, 2021). Additionally, three more interviews were conducted to ensure that no new themes emerged. The researcher used an interview guide containing the question: 'What does dignity mean to you?'

and 'What experiences do you have about your dignity here in the nursing home?' Interviews were held in a participant's room, ensuring privacy and the absence of interruption. The interviews were transcribed verbatim and imported into the MAXQDA program for organizing data and systematic coding. The inductive thematic analysis based on Braun and Clarke (2021) was used. Any discrepancies were discussed until a consensus was reached.

2.4 | Rigour and trustworthiness

To ensure the rigour and reliability of this qualitative study, we followed the criteria from Lincoln and Guba (1985). The four researchers independently read the transcripts repeatedly to ensure credibility. After the transcripts were created, the participants were revisited to confirm the transcripts of the interviews. Also, the designed themes and subthemes were discussed with participants. The translated transcripts were reviewed by a nursing expert fluent in English and Slovene and experienced in qualitative research to ensure dependability. To provide confirmability, the authors adhered to the original interviews of participants and added quotations to present the originality of the discussions. The audio-digital recordings and transcribed interviews were securely stored with passwords in the computer and anonymized. The findings of this study are transferable and may be helpful for management, nurses and caregivers of those older people, confined to bed in nursing or residential homes and long-term care facilities.

2.5 | Ethical considerations

Ethical approval was obtained from the Ethical Committee University of Maribor, Faculty of Health Sciences (No. 038/2018/2733-5/504). Also, approval for the study was obtained from the participating institutions. All the participants were informed about the aim and objectives of the study, and informed consent was obtained. They were also informed that they could withdraw at any time without consequences. All the interviewees' identities were hidden and changed into pseudonym names.

3 | RESULTS

Older people confined to bed ($n = 19$; 12 female and 7 male) while living in a nursing home participated in the study. The minimum period of living in a nursing home was 14 months, and the longest was 37 months. Thirteen participants were dependent on nine daily physically living activities, according to Henderson (1997). The data analysis resulted in the main theme 'Dignity of older people confined to bed' emerged from three secondary subthemes themes: (1) Emotions, (2) Lived Experience, (3) Failure to Maintain Care and seven primary subthemes as displayed in Figure 1. Emotions, like anger and sadness with failure to maintain care, substantially impact experiencing dignity. When people do not have the autonomy of their lives, they experience this as disrespect and dehumanized care.

3.1 | Emotions

Secondary theme Emotions were comprised of three primary subthemes: (1) Anger, (2) Sadness and (3) Hope and Faith.

The results show that older people are confronted with a sense of selflessness. All participants identified states or situations that indicate limited mobility, inferiority, lack of independence and inability to take care of themselves. They experience such feelings as losing control of their own lives. They found it very difficult to cope with the

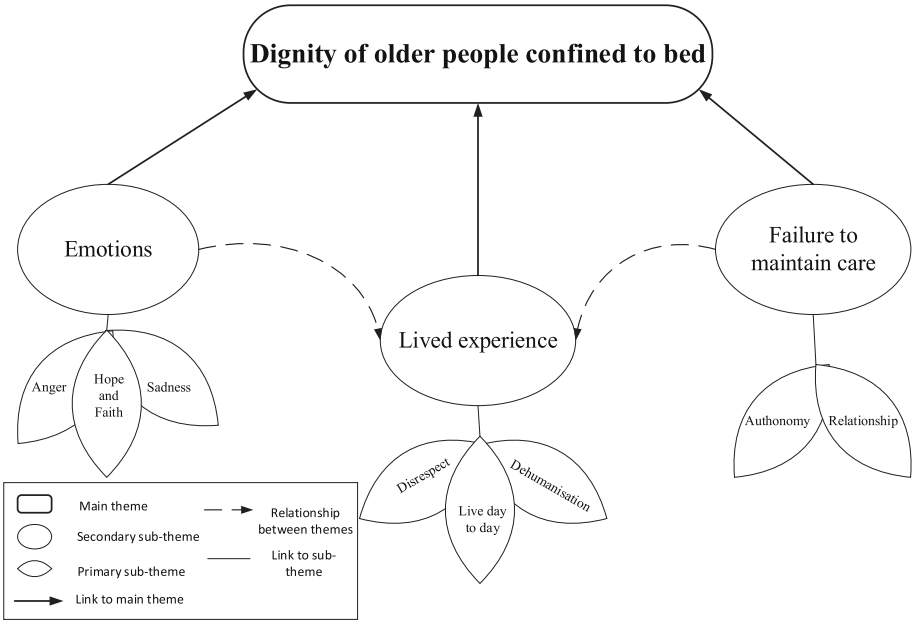

FIGURE 1 Main theme and relations between subthemes

loss of their mobility and the need to depend on others to maintain their daily living activities. This sense of frustration and anger is reflected in the following:

> No, it is tough for me to accept that I cannot stand on my own feet and that I cannot walk anymore. If I could walk again, I would not be here, but I would rather live at my home. It is hard for my wife because she cannot take care of me anymore while immobile. (Charles)

> I feel angry because you always have to call someone for something you need. (Brian)

Participants described how they sometimes felt inferior. They expressed a sense of dependence on the nursing staff. Feelings of lack of independence are consequences of involuntary adjusting to the current life situations in the nursing home. This often led to feeling sad, as evident in the following:

> I feel like I am just one thing for them. If you were incontinent of faeces, they change the diapers, and that's it. (Amanda)

Participants spoke about how they had lived in their own house with loving family members and hospitable environments, for example, animals, domesticity and things that made sense of life and made them happy. The loss of this was a cause of sadness:

> I am so sad because I cannot have my dear dog here with me. I feel very attached to my dog. At home, it always lying at my feet. (Gary)

The participants felt sad when they remembered their past life and were independent and could take care of themselves. Being independent at home gave them a sense of worth and personal satisfaction.

Some participants indicated how they still strived to maintain hope, faith:

> Yeah, it would be great if I could walk without help. I hope it will come a time when I can walk without help again. (Linda)

3.2 | Lived experience

The subtheme "Lived Experience" was comprised of three primary subthemes: (1) Disrespect, (2) Dehumanization and (3) Live Day Today, which are explained below.

Feelings of inferiority are the worst when changing underwear, as it reminded them of early childhood, which they experience as infantile. Comparison with other, healthy older people further deepens, reinforcing feelings of powerlessness as expressed:

> I'm like a little child who needs to be rewound. […] I am like a baby. You depend on everyone, you just watch how others can walk and you cannot. (Carol)

The immobility also represents the feeling of being forgotten. They receive very few but essential visits as outlined below:

> It is nice when someone visits you and caresses you a little. Do you know how much this is worth? (Betty)

The participants suffered distress if they had to ask the nursing staff for help for every little thing. This causes sadness and emotional distress as participants were taken off the opportunity to decide for themselves, thus affecting their dignity.

Nursing staff in nursing homes are very rigid in adapting and organizing nursing interventions, which participants in the study describe as limiting their desires, needs and freedom, as indicated in the following:

> Yes, but I cannot. Now I'm in bed, I cannot go anywhere. Today, for example, I cannot go anywhere. The nurse cannot transfer me into the wheelchair anymore. I'm not going anywhere today. (Roger)

The loss of freedom, weakness and helplessness evoke a sense of inferiority, which is exacerbated by the feeling that the person is superfluous, dependent on the help of others, which the participants understand as a burden to another person. The notion of burden was manifest in the following:

> I felt like one heap of misfortune. Someone else has to take care of me for once. (Jane)

The participants highlighted the fear of the nursing staff's disrespectful care, which aroused insignificance and inferiority. For participants, dignified nursing care should be individualized, with an emphasis on conversation as conveyed below:

> Some nurses come, they do not even talk to me, they do their job and then leave the room. It means a lot to me if they take some time and talk to me. (Debra)

The loss of dignity was experienced in many ways but especially associated with sudden and unexpected immobility that was a source of severe distress due to loss of pride and self-worth. This was explicit in the response by Lily:

> When I realised that I would never walk again …. I cried. (Lily)

Participants stated that the loss of dignity was caused by distress due to devaluation while performing personal hygiene. Feelings of embarrassment, shame and worthlessness were expressed:

> … when they take me to the bathroom with that big recumbent bathing trolley, I feel like a corpse. (Mary)

> Well, I feel fine in a clean diaper, but it is very uncomfortable in a full diaper, I'm ashamed …. (Paul)

Some participants expressed that they live just day today. They lost their faith and hope for a better future. Their dignity is affected because they must ask the nursing staff for help in every activity. They feel hampered (restricted) and unable to control their daily activities. Saly described this living day by day:

> We meet and sing down there at the table. We have singing lessons every Thursday, which I like to go to. We have a raffle on Tuesdays, and so time goes by. (Saly)

3.3 | Failure to maintain care

Failure to maintain care as the main theme consisted of two subthemes: (1) Authonomy and (2) Relationship.

The participants mostly expressed losing a sense of control and autonomy over their lives. Such losing control and independence causes feelings and emotions like anger and sadness. Furthermore, failure to maintain care with frailty and confining to bed contribute to losing dignity among older people:

> … since I am confined to the bed, I have to ring the bell for every little thing and wait for someone to take care of me …. (John)

Some participants articulated the importance of positive and respectful relationships by nursing staff. Participants spoke about how negative attitudes and relationships held by the nursing staff made them feel inferior to the nursing staff. They highlighted the sense of dependence upon the nursing staff. Some of them also referred to the rudeness of the nursing staff and the powerlessness they experienced having to wait for care. The participants experienced distress while waiting for incontinence aids to be changed. This had a severe impact on their sense of dignity, especially when they had to wait for long periods:

> Only three times a day, they came and changed the 'diaper'. At half-past four in the afternoon, I get a diaper for the night. That is a long time for me to wait for changing if the diaper is full. (Roy)

The participants highlighted how these activities and attitudes affected their dignity due to the disrespectful caring by the nursing staff. It was evident that such care evokes unworthy, unimportance and inferiority. Participants wished to have individual, personal care, which preserves their dignity.

4 | DISCUSSION

This study presents older people's confined-to-bed experience of dignity while living in nursing homes. The results from this study were derived from individual interviews with older people confined to bed resulting in the identification of one main theme: 'Dignity of older people confined to bed' and three secondary subthemes themes: (1) Emotions, (2) Lived Experience and (3) Failure to Maintain Care and seven primary subthemes.

This study found that sadness relates to suffering because of loneliness and dull days in the nursing home. Older people living in nursing homes experience intensifying physical pain caused by psychological suffering factors like loneliness, vulnerability, loss, fear, helplessness and hopelessness (Naik & Ueland, 2020). The helplessness and anger of older people are also evident because of being confined to be and dependence on nursing staff. Anger and sadness are also problems in other nursing homes in different countries (Amzat & Jayawardena, 2016), while researchers identify loneliness, boredom and anger of people living in nursing homes. Causes can be found in the lack of involvement of older people in daily activities and social life in nursing homes. Therefore, nursing staff needs to be aware of the effects of being confined to bed on older people's well-being, dignity and self-worth.

Disrespectful and undignified nursing care for older people being confined to bed can make them feel worthless and lose self-value. Moreover, it causes distrust between the patient and the nurse, leading to feelings of humiliation and inferiority among patients (Clancy et al., 2020). Our results show that intimate personal care with changing underwear causes the most disrespectful feelings expressed by older people confined to bed. Intimate personal care with changing incontinence aids is one of the nursing staff activities that affect older people's dignity and self-worth. Similar results were also highlighted by Šaňáková and Čáp (2019), who called these feelings the sense of fractured dignity. Participants in this study also encountered rudeness by the nursing staff. This type of behaviour is unacceptable and unprofessional. It highlights the importance of Chochinov's A, B, C, D model of dignity conserving care (Chochinov, 2007). This model reinforces the importance of positive attitudes and behaviours and should always be based on compassion and dialogue.

Caring in nursing homes should be person-centred, dignified, and provided with a great sense of compassion and caring (Fekonja et al., 2021). One of the nurses responsibilities is promoting and sensitivity for persons dignity (Barclay, 2016; Caldeira et al., 2017). It is crucial to protect the dignity of older people living in nursing homes, especially when they need assistance in managing intimate personal care (Ostaszkiewicz, Dunning, et al., 2020). Establishing a compassionate relationship between older people confined to bed while living in a nursing home and nursing staff is very important for them both (Roberts, 2018). Some of them express terrible relationships and carelessness. On the other hand, good experiences were reported, such as nursing staff showing empathy; kindness and responsiveness were also described. Nursing staff need to understand that dignity can also be promoted through relationships between older people and staff,

friendships and social interactions (Clancy et al., 2020). King (2014) also highlighted the importance of building relationships and providing connectedness to better understand and deliver compassionate care based on individual needs, values and beliefs. This approach affirms recognizing the four notions of dignity (dignity of the human being, dignity of merit, dignity of moral stature and dignity of the individual) developed by Nordenfelt and Edgar (2005) because these four notions encourage a person-centred approach to care. When nursing care is provided without professional relationships and disrespect, older people confined to bed can experience suffering (Lindwall & Lohne, 2020).

Suffering is mainly understood as undignified care (de Vries, 2021). Our findings should encourage and motivate nursing staff to provide individual, person-centred care based on dignified, compassionate and caring nursing. Such an approach allows the maintenance of self-respect and coping with immobility and dependence in people living in a nursing home.

Vaismoradi et al. (2016) report that older people may have a sense of helplessness feel ignored when they are dependent and unable to plan or perform their care and participate in daily living activities. We found that dependency on nursing staff and constantly begging for assistance also gives older people confined to bed a sense of diminished dignity and self-worth. The feeling of uselessness contributes to a sense of unworthiness that can violate their dignity (Šaňáková & Čáp, 2019).

Šaňáková and Čáp (2019) suggest that good quality nursing care depends on an individual approach and satisfying older people's wishes, expectations and nursing care needs. Nursing management must ensure that nursing staff in nursing homes have the appropriate educational level. Research shows (Aiken et al., 2017) that education level significantly impacts upon patient safety and quality of care, including ensuring dignified care is provided. Furthermore, we found nursing care is mainly provided routinely, as the daily pre-planned schedule of nursing activities like making beds, bathing, meals and changing underwear. When nursing care is provided routinely, under time pressure and staff shortages (Dierckx de Casterlé et al., 2020) and less compassionate care (Nathoo et al., 2021), the dignity of older people confined to bed is severely impaired. Routine care and unmet needs can result in depersonalized care experiences (Torossian, 2021). Furthermore, nursing management must prevent paternalistic nursing practices that foster a sense of dependence, lack of decision-making control and involvement in daily activities. Nurse management must provide a person-centred culture that enhances equality, shares decision-making that promotes the older person's active role and considers the older person's wishes (Kmetec et al., 2022). Therefore, a person-centred management style leads to higher nursing care staff satisfaction, which improves care in nursing homes (Kmetec et al., 2022).

We found that older people confined to bed can lose hope and faith for a better future. On the other hand, some older people maintain their inner power to be as active as possible. Our findings show that older people enjoy chatting, singing in the choir and playing table or parlour games. Daily activities enable older people to deal with their lives in changing circumstances, such as adjusting to living in a nursing home (King, 2014). Being confined to bed has a substantial negative impact on older people's daily living activities and dignity. Vaismoradi et al. (2016) pointed out the importance of social activities and nourishment as tools in taking control of their changed life situations, especially in the case of being confined to bed, which caused dependency and threatened their dignity. Effective management of changed life circumstances can be a source of hopefulness to older people living in nursing homes. Suhonen et al. (2019) noted that practices that increase connections and interaction among people are needed for better resident outcomes.

4.1 | Limitations of the study

There are some limitations to the findings of this study. The length of living in the nursing home also contributes to the different dignity experiences in daily living activities. Being confined to bed may influence how older people reflect on their history, personal characteristics, values and beliefs. Also, because of the disease-orientated focus in this research, the finding may not reflect the lived experience of all older people, especially those who are confined to bed. Older people with no cognitive decline were included in the study. Many people with cognitive impairment live in nusing homes in Slovenia. Therefore, it is imperative to explore how dignity is preserved in the nursing care provided to them.

The inclusion of older people from different cultural backgrounds might influence their feelings about dignity preserving care. The findings cannot be generalized because the study was conducted in one nursing home. The findings might differ if the study was conducted in many nursing homes or other countries.

5 | CONCLUSIONS

Older people confined to their beds have diverse experiences of nursing care. Many older people expressed the nursing care as undignified and disrespectful. This can cause feelings of suffering, sadness and anger. Nurses need to listen to older people confined to bed to learn from their experiences. All nursing homes should provide compassionate, person-centred care with kindness and empathy. This can contribute to dignified care and nursing care practice that preserve and uphold the identity and self-worth of older people confined to bed while receiving care in nursing home settings.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Our findings have significant practical implications for management and nursing staff. Nursing home managers have a key role in creating resources and environments for ensuring dignified nursing care of older people confined to bed. The results from our study should be

used to improve nursing care of older people confined to beds in countries with similar health and social care systems. Management in nursing homes must ensure the technical and organizational resources for providing dignified care. Nursing management is responsible for the employment of nursing staff enabled to provide person-centred care. Management also must recognize the value and importance of advanced nurse practitioners in caring for older people in nursing homes. Such understanding can lead to preserving the dignity of older people and promoting person-centred caring in nursing homes. Nursing home management must ensure and provide evidence-based standards and monitor performance quality according to care standards. Continuous nursing staff training is necessary to promote professional development encouraging interdisciplinary teamwork.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

ETHICS STATEMENT

Ethical approval (No. 038/2018/2733-5/504) was obtained from the Ethical Committee University of Maribor, Faculty of Health Sciences, prior to beginning the study.

AUTHOR CONTRIBUTIONS

Zvonka Fekonja, Nataša Mlinar Reljić and Sergej Kmetec provide research theme and designed the research. Janja Lavrač and Mateja Lorber collected the data. Zvonka Fekonja, Nataša Mlinar Reljić and Sergej Kmetec analysed the data. Wilfred McSherry, Zvonka Fekonja, Nataša Mlinar Reljić, Mateja Lorber and Sergej Kmetec wrote the manuscript.

DATA AVAILABILITY STATEMENT

The data are available from the corresponding author upon request.

ORCID

Zvonka Fekonja https://orcid.org/0000-0002-4224-8843
Sergej Kmetec https://orcid.org/0000-0002-5601-0940
Mateja Lorber https://orcid.org/0000-0001-7200-5204
Wilfred McSherry https://orcid.org/0000-0003-0932-5875
Nataša Mlinar Reljić https://orcid.org/0000-0003-1148-0831

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ORIGINAL ARTICLE

WILEY

RESPONDER: A qualitative study of ethical issues faced by critical care nurses during the COVID-19 pandemic

Georgina Morley PhD, MSc, RN, Nurse Ethicist[1] |
Dianna Jo Copley DNP, APRN-CNS, ACCNS-AG, Clinical Nurse Specialist[1] |
Rosemary Field MS, APRN, AOCNS, Clinical Nurse Specialist[2] |
Megan Zelinsky MA, Clinical Project Manager[3] |
Nancy M. Albert PhD, CCNS, FAAN, Associate Chief Nursing Officer[4]

[1]Center for Bioethics, Stanley S. Zielony Institute for Nursing Excellence, Cleveland Clinic, Cleveland, Ohio, USA

[2]Stanley S. Zielony Institute for Nursing Excellence, Cleveland Clinic Marymount Hospital, Garfield Heights, Ohio, USA

[3]Center for Neurological Restoration, Neurological Institute, Cleveland Clinic, Cleveland, Ohio, USA

[4]Office of Nursing Research and Innovation, Stanley S. Zielony Institute for Nursing Excellence, Cleveland Clinic Health System, Cleveland, Ohio, USA

Correspondence
Georgina Morley, PhD, MSc, RN, Center for Bioethics, Stanley S. Zielony Institute for Nursing Excellence, Cleveland Clinic, Cleveland, OH 44195, USA.
Email: morleyg@ccf.org

Abstract

Aims: To identify and understand ethical challenges arising during COVID-19 in intensive care and nurses' perceptions of how they made "good" decisions and provided "good" care when faced with ethical challenges and use of moral resilience.

Background: Little is known about the ethical challenges that nurses faced during the COVID-19 pandemic and ways they responded.

Design: Qualitative, descriptive free-text surveys and semi-structured interviews, underpinned by appreciative inquiry.

Methods: Nurses working in intensive care in one academic quaternary care centre and three community hospitals in Midwest United States were invited to participate. In total, 49 participants completed free-text surveys, and seven participants completed interviews. Data were analysed using content analysis.

Results: Five themes captured ethical challenges: implementation of the visitation policy; patients dying alone; surrogate decision-making; diminished safety and quality of care; and imbalance and injustice between professionals. Four themes captured nurses' responses: personal strength and values, problem-solving, teamwork and peer support and resources.

Conclusions: Ethical challenges were not novel but were amplified due to repeated occurrence and duration. Some nurses' demonstrated capacities for moral resilience, but none described drawing on all four capacities.

Implications for Nursing Management: Nurse managers would benefit from greater ethics training to support their nursing teams.

KEYWORDS
bioethics, COVID-19, ethics, intensive care, moral resilience, nursing ethics

1 | BACKGROUND

Nurses have been at the forefront of responses to the SARS-CoV-2 (COVID-19) pandemic. Nurses adapted to the ever-changing environmental circumstances, cared for patients with a novel respiratory disease for which there was little clinical guidance and dealt with an overwhelming number of high acuity patients. In the United States, between 1 August 2020 and 13 February 2022, 4,449,166 individuals were hospitalized due to COVID-19, and intensive care unit (ICU) admissions ranged from 14.8% to 37.5% (AHA, 2022; COVID-NET Network, 2022). Nurses provided medically complex care, including proning and extracorporeal membrane oxygenation, and were witness to ongoing suffering and death during a time when they were challenged by staffing shortages that compromised safe, high-quality care.

The pandemic generated ethical questions that were previously less frequently encountered in the United States such as fair distribution of scarce resources, maintaining safety of health care workers when personnel and protective equipment were limited, and expanding hospital capacity (Truog et al., 2020). Less is known about the particular ethical challenges encountered by ICU nurses during the pandemic and the way in which they aimed to overcome them. Researchers captured the negative impact of the pandemic on nurses, for example, additional stress and anxiety that resembled post-traumatic stress disorder (Couper et al., 2022; Saragih et al., 2021) and moral distress (Silverman et al., 2021). Moral distress is the psychological distress that occurs when nurses encounter morally challenging situations and can arise when nurses feel unprepared to address ethically complex situations (Morley et al., 2020).

In recent systematic reviews, authors discussed interventions developed in response to moral distress. Interventions included reflective debriefs, mindfulness exercises, yoga, ethics education and programmes to build moral resilience (Imbulana et al., 2021; Morley et al., 2021). Moral resilience is "an individual's ability to sustain or restore [their] integrity in response to moral complexity, confusion, anguish or setbacks" (p. 581, Young & Rushton, 2017). Building capacity for moral resilience is thought to enable individuals to pause, listen, develop awareness of ethical issues, engage in ethical analysis and engage in strategies to support one's own well-being (Rushton, 2018). Exercising moral resilience may enable an individual to overcome ethical challenges productively and mediate the negative effects of moral distress (Spilg et al., 2022). Moral resilience is constructed of multiple capacities but when constructing the Rushton Moral Resilience Scale to empirically capture moral resilience, Heinze et al. (2021) focused on four domains: personal integrity, relational integrity, moral efficacy and response to moral adversity. Since these are considered to be measurable, these core domains will be the focus of our analysis.

The aims of this study were to identify and understand: ethical challenges nurses encountered during COVID-19 in the ICU; nurses' perceptions of how they made "good" decisions and provided 'good' care when faced with ethical challenges; and whether nurses drew upon moral resilience to overcome ethical challenges encountered. For the purpose of this study, ethical challenges were defined as situations that (a) gave nurses cause for professional concern or (b) made it difficult to decide the right action to take. We did not define a "good decision" or "good care" to enable participants to bring their own understanding of terms when responding. Exploring perceptions of perceived good decisions enabled us to learn about possible moral resilience strategies that supported decision-making and action and whether moral resilience was a quality that participants drew upon in response to ethical challenges encountered.

2 | METHODS

The RESPONDER (Responding to Ethical Issues during the COVID-19 Pandemic and Operationalizing Nurses Insights to Develop Ethical Resilience) study used a qualitative design of narrative survey responses and one-time semi-structured interviews, analysed using summative content analysis. The project was underpinned by the theoretical perspective of appreciative inquiry that takes a strength-based approach to consider how we might improve contexts and processes (Trajkovski et al., 2013). Rather than focusing on deficits, appreciative inquiry assumes that good clinical practice exists. The RESPONDER study was developed by international nursing scholars (including the first author) to explore the impact of the pandemic on ICU nurses. Individuals within the collaboration gave permission for investigators to conduct local research when funding for international collaboration was not granted. Reporting adheres to the consolidated criteria for reporting qualitative studies (COREQ) guidelines (Tong et al., 2007).

2.1 | Ethical considerations

The health system institutional review board gave approval to conduct the study (#21-284).

2.2 | Setting and sample

Research was conducted at a large academic quaternary care medical centre and three community hospitals in the Midwest United States. Purposive sampling was used to recruit nurses from all adult intensive care units to understand the impact on COVID-cohort units and non-cohort units. Inclusion criteria were nurses who worked in ICU during the recruitment period. In total, 798 nurses met inclusion criteria. The survey link was distributed via email using Research Electronic Data Capture (REDCap) database system, a secure, password protected, Health Insurance Portability and Accountability Act compliant web-based program designed for building and managing web-based projects.

2.3 | Data collection

Qualitative, descriptive free-text surveys were divided into two parts. Part 1 contained six questions to capture short narratives about

nurses' experiences with ethical challenges during COVID-19 and how they responded. Informed by appreciative inquiry, when participants indicated that they had encountered an ethical challenge, they were prompted to provide more detail about what happened, how they made "good" decisions and provided "good" care. Participants could indicate willingness to be contacted to potentially participate in one-time semi-structured interviews to explore the same question in more depth. Survey questions and an interview guide can be found in supporting information, Appendices S1 and S2. Participant demographic data were also collected as part of the survey.

Data were collected between April and October, 2021. The survey participant information sheet was linked at the top of the survey, and participants were informed that completion would be considered consent to participate.

Respondents who indicated willingness to be contacted to participate in an interview provided their email address and were sent the interview participant information sheet. Participants could select face-to-face (using face masks and following social distancing guidance) or virtual using Microsoft Teams. Of the 21 respondents who agreed to be contacted for an interview, five were completed virtually, two in person and 14 did not respond to two email follow ups with requests to finalize a date and time. Interviews were conducted by GM, DC and RF, all of whom had prior training and experience in qualitative research interviewing. Participants were assigned to interviewers to minimize interactions between participants and interviewers who had previously established working relationships. All participants were provided an opportunity to request a different interviewer. Participants were informed that participation was voluntary and they could withdraw their survey contribution without giving a reason for up to 4 weeks following completion. No participants requested their data be withdrawn. Confidentiality was maintained and data were de-identified.

2.4 | Data analysis

Data were analysed using content analysis, a systematic coding and categorization approach to analyse text and identify patterns in words used to develop larger themes (Vaismoradi et al., 2013). Drawing on summative content analysis as described by Hsieh and Shannon (2005), keywords associated with each theme were counted in survey responses. Identifying patterns in word usage enabled us to prioritize and group themes.

The analysis approach was appropriate since data were free text, descriptive responses of varying depth and length from a few sentences to paragraph narratives. Three authors coded the data in REDCap according to the steps described in Table 1. Given how little was known about the ethical challenges experienced by nurses during the COVID-19 pandemic, an inductive data analysis was used. Survey data were coded to generate initial themes. Interviews were analysed to determine whether descriptions of themes needed to be amended or new themes created. One investigator coded in NVivo 11, and two investigators used a colour coding system.

TABLE 1 Data analysis process

Content analysis steps	Application
1. Familiarization with the data.	Reading and re-reading the qualitative survey data and making notes of initial ideas.
2. Generating initial codes.	Making a note of initial ideas and codes in REDCap. Investigators met regularly to review the generation of labels of codes and discussed different interpretations of the data.
3. Identification of key words/ phrases.	Survey data reviewed for frequency of particular keywords and phrases. One investigator conducted searches of words to identify the number of times each word/phrase associated with codes were used. Research team members met to discuss themes to be deprioritized, deleted or combined. Word and phrases were refined and another search of words was conducted.
4. Searching for themes.	Codes identified in the survey data were used to code the interviews and new codes/themes were identified and discussed by the research team. Interpretations were discussed and challenged by investigators to enhance credibility.
5. Generating new codes.	New codes were added that did not fit initial codes. When all codes were identified, all narratives were re-coded to ensure no new codes.
6. Summarizing and refining.	Codes reviewed, summarized and a hierarchy of codes developed based upon frequency and significance.

2.5 | Trustworthiness

To enhance trustworthiness, the research team met weekly to review data interpretations and discuss appropriate terms for coding and theme development. Investigators were not clinical caregivers assigned to deliver patient care; however, they supported teams during the pandemic. As members of the community living through the pandemic, analysing data could be influenced by knowledge of leadership responses in the organization, media and scientific updates. The team practiced reflexivity to minimize the effect of personal experiences on data analysis and interpretation. The team captured reflexive notes in REDCap and shared these reflections and possible biases at research meetings for broader discussion (Rolfe, 2006).

3 | RESULTS

Of the target population of 798 ICU nurses who were invited via email to participate, 49 completed part one of the survey, and 29 completed the demographic and work characteristics section (59.2%).The

majority of participant responders were female ($n = 24$, 82.8%) and worked at a community hospital ($n = 17$, 63.0%). Other characteristics are in Table 2. Of seven participants who completed interviews, five (71.4%) worked at a community hospital; other characteristics are in Table 2.

3.1 | Ethical challenges

3.1.1 | Implementation of the visitation policy

Fourteen nurse participants described challenges associated with implementing the visitation policy, related to both general enforcement and the provision of equitable exceptions. A nurse manager from one community hospital described attempts to make exceptions for compassionate reasons, such as end-of-life scenarios or acute changes in clinical status. This attempt at meeting situational needs was perceived as a "flavor of the day" by another colleague. Participants stated that visitation exception decisions frequently became the responsibility of nurse managers. Some clinical nurses described feeling frustrated that nurse managers took control of visitation decisions (P7, Table 3); however, two nurse managers described their perceptions that clinical nurses preferred that they took responsibility since there was too much ethical complexity, and they "don't really know the right answer."

> [They] asked me what the flavor of the day was in regards to visitation. That was the first time this [healthcare provider] had ever approached me that way, and I was very kind of shocked at first, so I didn't lay down the law like I probably should've … but I was just like "Well there's no 'flavor of the day'. I take every situation, just dig myself into that specific situation. That's the only thing I can do in order to attempt to keep this fair, if we're going to make exceptions to guidelines that we currently have." So sometimes it was one person. Sometimes it was four people that we allowed … I have told our leadership team … one of the biggest challenges for me throughout this entire thing is "my staff are still not willing to make those decisions in regards to visitation. They don't want to be the bad person. They want to support the patient. They want the patient to have somebody to be able to do that for them, and they might not be able to. They want somebody holding that patient's hand, but they also don't want to put themselves at risk. They don't want to put other visitors at risk. They don't really know. We don't really know the right answer. We just try to come up with the best answer that we can with the information that we have, but I find that it's still on me on a daily basis, when those decisions are made." (P3 – interview)

Five participants described their perception that enabling visitation was irresponsible and put the nursing team and public at greater risk of transmission. Participant 39, an experienced clinical nurse, expressed the view that allowing visitation for patients with COVID-19 did not represent the "greatest good":

> The visitation issue is not a specific situation, it's every COVID + patient we have had since the visiting policy was changed; I do not have a say in this decision in my role; I think it is irresponsible to allow contagious COVID patients on high flow oxygen to have visitors who are not fitted for n95 masks, it might be good for that one patient, but it is not good for the visitor and their other contacts. It is not the greatest good for the most people. (P39)

TABLE 2 Participant demographics and work characteristics

Factors[a]	Surveys ($n = 29$)[b]	Interviews ($n = 7$)
Gender, female; *n* (%)	24 (82.8)	7 (100.0)
Highest nursing degree; *n* (%)		
RN/BSN	21 (72.4)	4 (57.1)
MSN/APRN/CNP	6 (20.7)	2 (28.6)
Tenure, years; mean ± standard deviation		
Nursing	12.5 ± 11.1	10.7 ± 9.9
In current unit	8.2 ± 9.0	5.6 ± 1.7
In current health care system	11.5 ± 10.0	9.0 ± 4.2
Primary shift; *n* (%)		
Days	13 (44.8)	6 (85.7)
Nights	9 (31.0)	0 (0.0)
Alternating	7 (24.1)	1 (14.3)
Campus; *n* (%)		
Quaternary care site	10 (37.0)	2 (28.6)
Community site	17 (63.0)	5 (71.4)
Current setting; *n* (%)		
Inpatient	26 (92.9)	7 (100.0)
Outpatient	1 (3.6)	0 (0.0)
Both	1 (3.6)	0 (0.0)
Intensive care unit type		
Medical	15 (51.7)	4 (57.1)
Surgical	2 (6.9)	0 (0.0)
Medical-surgical	7 (24.1)	2 (28.6)
Cardiovascular/coronary	5 (17.2)	1 (14.3)

[a]Missing data by factor: Highest nursing degree: survey $n = 2$; interview $n = 1$; Campus: survey $n = 2$; Current setting: survey $n = 1$.
[b]49 participants completed section one of the survey; 29 provided demographic data.

TABLE 3 Verbatim quotations to support themes

Themes and subthemes	Verbatim quotations to support theme
Implementation of the visitation policy	"Staff is being exposed more and more to COVID positive patients and their visitors … I was the bedside nurse. A patient was positive COVID and their family member was as well. I expressed my concern for my safety, the unit safety and other staff member safety being exposed to the visitor coming to see the patient. Nurse Manager asked me if I was comfortable with the visitor coming in. I said no. The nurse manager ignored my concern and allowed the visitor to come in. This happened to me twice." (P7)
	"I have told our Leadership Team throughout this entire pandemic, I think that was one of the biggest challenges for me throughout this entire thing is 'My staff are still not willing to make those decisions in regards to visitation. They do not want to be the bad person. They want to support the patient. They want the patient to have somebody to be able to do that for them, and they might not be able to. They want somebody holding that patient's hand, but they also do not want to put themselves at risk. They do not want to put other visitors at risk. They do not really know. We do not really know the right answer. We just try to come up with the best answer that we can with the information that we have, but I find that it's still on me on a daily basis, when those decisions are made'." (P2 – interview)
Patients dying alone	"Having patients pass without their loved ones. That still makes me cry thinking of that memory and having to discuss that aspect." (P25)
	"Patients dying in the hospital without any visitors allowed during their last weeks of life early in the pandemic. Absolutely soul crushing." (P33)
	"So I cannot even count how many people. Whose hands I hold, and they I knew that they would rather have their family. You know, I'm holding, you know, an iPad or whatever it was." (P4 – interview)
	"I've had patients who I've watched slowly wither away and die alone." (P34)
Surrogate decision-making	"They tell you the things that are important to them and the people who are important to them and you kind of get stuck in this kind of limbo where you become the patient's emotional support as well as their nursing support so it turns into this thing where you are the only person that goes in that patient's room for 12 hours …. At the same time you have another patient that's in the same exact boat, if not sicker and maybe a third because we have no staff, because everybody left, because everything sucks … And then you take over again in two weeks and they are intubated and they are paralyzed and they are proned and they are getting everything that we can possibly do to keep them oxygenating. And you get to like the 4th or 5th prone and you know that they are not going to recover from this … and it's the family keep saying, 'yeah, keep going'." (P6 – interview)
	"End of life situations in which patient's wishes are unknown or family decisions do not align with patient's wishes." (P39)
	"Lack of family access to be advocates/POA …. When patients cannot speak for themselves or make decisions and family does not have access, they have not been able to see the patient's condition or make adequate decisions on their care." (P10)
	"Ethics not being involved or helping in a situation in which the patient is suffering and their personal wishes are ignored while intubated because the family feels differently." (P36)
Diminished safety and quality of care	"Staffing issues leading to patient safety concerns have been relevant during the last year. It has been challenging for us to be short staffed and try to care for all the patients. Many medication errors and patient safety event have occurred during the last year." (P3)
	"Early in the pandemic, we were making changes to our protocol to limit/prevent exposure to staff – but these changes were at the cost of patient safety." (P46)
	"I feel as though management (unit management and higher) showed that they do NOT care about how safe or unsafe we feel, they do not care about us reaching our limits, and put very little effort into ensuring that our patients were safe, and we were in a good place mentally. We were treated like numbers, and expected to be 'yes' men, and never complain or strive for change. We were expected to take on 2-3 patients at a time that would have been 1:1 prior to COVID." (P14)
	"It was as these resources are stretched, how do you possibly provide the high-quality care that we are trained and know we want to do and want to give? All of those. When you have two-proned, COVID, vented patients and now you are getting a third patient, how do you possibly do all the quality care that you want to for those three patients?" (P1 – interview)
Imbalance and injustice between professionals	"Dealing with physicians who refused to enter COVID rooms or personally communicate with the patients. It then fell on nursing … Most other services and providers did not enter rooms accept in code situations, so the team dynamic was not really enhanced." (P33)
	"I had to work with physicians who were vaccinated first and refused to provide patient care …. I watched a 48 year old man die alone. I asked the Resident on our floor to come pronounce him. He told me that he will not go in the room to pronounce because physicians cannot just go into these rooms and be exposed because 'we need to limit exposures'. He pronounced him from an office on the other side of the unit without looking at him or his monitor." (P34)

(Continues)

TABLE 3 (Continued)

Themes and subthemes	Verbatim quotations to support theme
Personal strength and values	*Good decisions*:
	"I just try to do the best I can for each patient. I try to respect their wishes and see if I can continue to offer the quality of life they desire." (P37)
	"How I was raised. My values." (P4)
	"Personal ethics." (P8)
	Good care:
	"Treating every patient as if they were my family member. Going above and beyond even when it feels like I have little left to give." (P19)
	"Thinking about the care I would want for myself or my family." (P39)
Problem solving	*Good decisions*:
	"Being aware of personal bias" (P26)
	"Time to identify, critically evaluate and choose or accept possible problem solutions" (P30)
	"Experience and critical thinking." (P5)
	"Thinking through the situation and figuring what the appropriate outcome would be" (P16)
	"I try to identify the key stake holders and try to make the best decision with the information that is given to me …" (P2)
Teamwork and peer support	*Good decisions*:
	"The support and collaboration of my co-workers" (P15)
	"Discussing with coworkers and doctors that I respect." (P43)
	Good care:
	"I work with an amazing team in ICU. We all helped each other tremendously. Occasionally, we would get helping hands from other floors and that helped too." (P20)
	"Relying on help from co-workers & managers. Working as a team." (P35)
	"Good staffing and support from nursing assistants." (P38)
Resources	*Good decisions*:
	"Knowing all my resources." (P29)
	"Usually talk it over with the NM. Try to be consistent and stick with established guidelines. If I am following the guidelines then I feel like I am less likely to 'play favorites'." (P40)
	Good care:
	"Having adequate staffing, resource and competent people." (P44)
	"I have no choice but to follow hospital policy. That way it takes me out of the decision making, which would have just caused guilt to an already dire situation." (P20)
	"Good management, resources, personal support from co-workers and family." (P43)

3.1.2 | Patients dying alone

By contrast, eight participants described the negative impact of restricted visitation being that many patients died alone or without family physically present. Some participants described using virtual technology to facilitate goodbyes (also P4, Table 3).

> It's always about having no family members at bedside. Patient's die without family, or die on FaceTime. (P20)

An experienced clinical nurse from a community ICU described taking on additional personal risk to be with a patient as they died but then being chastised by the nurse manager. They describe how a few months later their colleagues received awards of recognition for being with patients as they died. The experience described by participant 6 seemed to negatively impact their perception of the healthcare organization as they described the organization as two-faced.

> … we agreed no one should die alone. However, I was chastised for holding the hand of my patient (being present for 30 min). Within 30 min of the death, I was assigned my 3rd COVID patient and was later chastised for sitting at my patient's bedside, being told, "You had another patient." I questioned my belief about patient's dying alone and how our [department] agreement was dismissed. In sum, it seemed as though "It were a 2-faced image the [hospital] was presenting to the public." Months later, co-workers were receiving "Hero" awards for sitting w/their dying patients. (P6)

3.1.3 | Surrogate decision-making

Nine participants described their perception that surrogates were making decisions that did not reflect the patient's wishes. Participant 1, a clinical nurse working in a community ICU, described feeling that she was "torturing" the patient because family were motivated to see their loved one again.

> Multiple times this year there were situations when family chose to prolong care for patients because they wanted to see their loved one again, and due to the visitation guidelines could not do so. These choices frequently went against a patient's established living will and led to patients suffering on life support that they never wanted … Emotionally as the patients nurse this was frustrating and made me feel like I was abusing or torturing the patient …. Reflecting on these kinds of situation now still cause me distress and make me question if my actions as a nurse were really to help the patient and aligned with the concept of "do no harm" because my conscious tells me that I did hurt these patients. (P1)

In the United States, family are legally recognized as surrogate decision-makers and are obligated to make decisions that reflect the patient's wishes (using either substituted judgement or best interest's standards). Participants 1 and 8 (below) do not explicitly use the term "moral distress" but do describe scenarios in which they experienced moral-constraint distress because they perceived the life-sustaining treatments provided were contrary to the patient's wishes and contributing to the patient's suffering because they were constrained by the surrogates decisions (Fourie, 2015; Morley et al., 2020).

> Patient was a do not resuscitate/do not intubate maxed out on BiPAP [bilevel positive airway pressure support] and developed respiratory arrest. I, the nurse, and the intensivist thoroughly explained the situation to the family and encouraged transition to comfort care, yet the family refused. The patient suffered for another day and a half before she died. I was furious at the family and heartbroken for the patient, she deserved a more dignified death than she received. (P8)

3.1.4 | Diminished safety and quality of care

Eight participants described their perception that resource scarcity impacted safety and quality of care which was most frequently attributed to understaffing. Participant 4, a nurse with 4 years' experience in a community ICU, describes managing three patients and feeling unable to monitor them as frequently as required.

> I think that some of the hardest things we went through ethically was like understaffing, because we're taking care of patients who are at baseline the sickest patients we've probably ever seen, and we're taking care of two or three of those patients. … … I feel like I'm only able to give sometimes, not even half of myself to these people, and I think that … we expressed to management, like how understaffed we were. Other ethical issues we faced were … like rigging equipment … when have you ever heard about having IV tubing outside of a room or a vent outside of the room? We found these to be actually really dangerous situations. (P4 – interview)

Participant 4 described their perception that these challenges exacerbated burnout.

> I felt as if I needed to choose which patient was more important to care for instead of being able to care for. The more frequent moral and ethical decisions to be made while working accelerates burnout tremendously. (P4 – survey)

3.1.5 | Imbalance and injustice between professionals

Five participants described injustice between professionals because physicians were not going into patient rooms and assessing patients, stating that they had to limit their exposure, and yet ICU nurses were frequently in patient rooms. Participant 38, a nurse with 4 years' experience in the coronary ICU, stated:

> Doctors would not want to go into COVID positive rooms and see their patients. … my responsibility is to provide care to my patients. … We had multiple attending's that would not go into patient rooms to assess patients, give updates to patients and families. Things/care was sometimes missed. Nursing spoke to management and unfortunately nothing changed. (P38)

An experienced nurse manager describes her perception that this only occurred at the start of the pandemic and suggests that physicians justified this on the basis of scarcity. Participant 2 describes how the nursing team were overburdened with additional tasks because they were the only ones going into patient rooms.

> The expectation that the providers only went into the room one time per shift definitely impacted the nurses' thoughts on the support that they had. They avoided it [having to go into rooms] at first. Like there aren't as many providers as there are nurses. We have to keep everybody safe. Not only were my nurses doing that,

> they were taking out garbage. They were changing the sharps containers. Everything was being put on them because they were the ones providing the most care at the bedside. (P2 – interview)

3.2 | Responses to ethical challenges

In the following section, illustrative quotations are provided to clarify themes. Additional quotations are found in Table 3.

3.2.1 | "Good" decisions and "good" care

Participants described their responses to ethical challenges by describing how they made "good" decisions and provided "good" care.

3.2.2 | Personal strength and values

Nine participants described drawing upon their own strength and ethical values to make "good" decisions, and eight participants indicated that this enabled them to provide "good" care. Participant 14, a nurse with 5 years' experience in a community ICU, described making decisions that were in the "best interest" of patients, making personal sacrifices to prioritize patient care, and relying upon their own strengths—work ethic and faith—to provide care as if the patient were family.

> I always think in the best interest of the patient. I never turned down an assignment, and always got through my night as best as I could. I spoke out about unsafe situations, and tried to help where I could. My patients are my biggest priority, I skip lunches and breaks to ensure they are safe, my work is done, and they are treated with as much care and respect as I would care for my loved one. (P14)

Six of the nine participants described drawing upon their own personal values to make good decisions on behalf of patients.

> My personal religious beliefs. (P43)

> My ethical and spiritual views that keep me accountable to myself. (P38)

3.2.3 | Problem solving

Nine participants described metacognitive methods to making good decisions and overcoming ethical challenges, for example, critical analysis, introspection, recognizing personal biases, assessing and identifying possible solutions. Participant 1, a nurse with 5 years' experience in a community ICU, describes their process:

> When I am making a decision at work that concerns patient care, my first priority is to always ensure patient safety. This requires me to critically think (what is the problem), plan the next few steps (how can I fix the problem), assess and decide how to utilize resources (what resources do I need and do I actually have those resources, if not what can I do to substitute them), and then acting on my conclusion. (P1)

3.2.4 | Teamwork and peer support

Seven participants described the ways in which peer support and teamwork enabled them to make good decisions.

> Discussing situations with colleagues/management. (P10)

Several participants also indicated seeking input from the interdisciplinary team to make decisions.

> Support of my coworkers and sharing ideas with the interdisciplinary team. (P3)

Fifteen participants provided examples of cohesive teamwork (peer support) that supported nurses' ability to provide good care and overcome COVID-19 challenges.

> I believe my coworkers help more than anything. Without teamwork we would be lost. Hence why understaffing was such an issue. It was hard to have teamwork when each of us were overwhelmed with our patient load. (P14)

3.2.5 | Resources

To make good decisions, 10 participants described drawing upon resources such as policies and consult services to supplement their own problem-solving skills. A nurse manager with 10 years' experience describes consulting the Ethics Consultation Service even when others might be reluctant to and engaging in reflection.

> I'm probably a little bit more confident than others in those situations navigating resources. Like I did not have a problem saying, "We need palliative care on this case," or you know, "The family has a strong religious background. We need spiritual care," or you know we are at this point where I would talk to the physicians

and the advance practice providers. If I could not get them to say "We need to at least have a conversation," if I could not get them to that point, I did not have a problem consulting ethics [the Ethics Consultation Service]. I would like to say that across the board, people are comfortable with that. I do not know that they are. I mean we know that sometimes those resources aren't used as soon as they should, but those were the

TABLE 4 Four facets of moral resilience

Facet of moral resilience	Participant examples
Personal Integrity: moral wholeness that is maintained when an individual is able to maintain their ethical norms, values and commitments when facing adversity.	"How I was raised. My values." (P4) "I spoke out about unsafe situations." (P14) "Right now with COVID and the Delta variant, it's frustrating when you have a patient that's COVID-positive and they do not believe that they are COVID, or they pass away and their family says, 'What did they die from?' and they still do not believe it's COVID. … I'm frustrated that they did not take the steps they could to protect themselves, but I have never been in a position where I'm like 'I'm not gonna take care of them.' … I take my oath very seriously …. But it's never crossed my mind that I'm not gonna take care of them." (P1 – interview) "I always think in the best interest of the patient. I never turned down an assignment, and always got through my night as best as I could. I spoke out about unsafe situations, and tried to help where I could. My patients are my biggest priority, I skip lunches and breaks to ensure they are safe, my work is done, and they are treated with as much care and respect as I would care for my loved one." (P14)
Moral Efficacy: belief and confidence in one's capabilities to effect change in response to ethical challenges even when faced with resistance.	"Being aware of personal bias, consulting ethics if needed, collaborative and respectful conversations, creating an environment where it is okay to speak up." (P26) "We try to spend a little bit of time decompressing, so like yeah, on your drive home you kind of zone out and you try to think about the good things that are happening. There was a couple of patients that did really well and you hold on to those couple of patients and you are like listen I know this thing work out for this patient. You kind of like rationalize it in your mind." (P2 – interview) "We do not really know the right answer. We just try to come up with the best answer that we can with the information that we have, but I find that it's still on me on a daily basis, when those decisions are made. I even hear the Residents and the physicians, 'I have to ask the Nurse Manager', and I'm just like 'I promise you guys can do this. You have all of the information that you need to make these decisions'." (P3 – interview)
Relational Integrity: the ability to enact and promote the patient's values while maintaining a sense of one's own beliefs.	"I just try to do the best I can for each patient. I try to respect their wishes and see if I can continue to offer the quality of life they desire." (P37) "I just try to do the best I can for each patient. I try to respect their wishes and see if I can continue to offer the quality of life they desire." (P37)
Response to Moral Adversity: constructed of "buoyancy" which is the ability to be courageous when faced with ethical challenges; and "self-regulation" which is the ability to recognize one's emotions and behaviours and manage one's response, such as managing strong emotional reactions.	"I think it's important, especially during COVID or working in the ICU, I mean you are gonna have challenging days, weeks, months, and at this point of year, so it is so easy to focus on the negative, but maybe I did have a negative situation like that where this patient had been suffering for two weeks. What did I do to advocate for them? Am I able to answer to myself that, 'Yes, I did everything'? If it's no, then I have to do better tomorrow. And then it's also focusing, for me as a Manager, it was 'What three things did I do well for my team today? What three things did I learn that I need to do for my team?' and then it was, 'What three things did I do well in general for myself, outside of the leader role?' and then 'What do I need? Am I tired? Am I burned out, or do I just need to recharge for a minute?'" (P1 – interview) "Take it day by day, 'cause you do not know what's gonna happen. You might be fine, and you might not', … 'When we get there, we'll get there, but until then, do not try to worry so much'." (P4 – interview)

> routes that I took, and then it was really a matter of me debriefing with myself at the end of the day, because "What can I not control?" and if there's a situation I was uncomfortable with, "Did I do everything I could?" (P1 – interview)

Participant 6, a community ICU nurse with 14 years' experience, describes "obedience" to policies to supplement their problem-solving:

> My experience and logical-mindedness and compassion and "obedience" to policy/agreements/protocol. (P6)

To provide good care, 12 participants stated the importance and need for resources such as equipment, supplies and supportive management. Participants 36, a nurse with 4 years' experience in a community ICU, and one other participant highlighted the inequity between night shift and day shift in regard to access to resources.

> Adequate supplies for cleaning; Safe staffing ratios; Adequate screening with visitors; Additional physician providers for rounding at beginning of day; Additional respiratory staff, especially on nightshift. (P36)

As described in Table 4, we found that some participants narratives mapped onto the four domains of moral resilience (see Table 4), but none of the participants described drawing upon all four. Significantly, we identified only one verbatim quotation that appeared to map onto the notion of relational integrity.

4 | DISCUSSION

This study explored the ethical challenges that nurses working in ICUs encountered during the COVID-19 pandemic. Four of the themes that we identified aligned with challenges reported in recent nursing studies: the ethical complexities related to restricted visitation (McMillan et al., 2021), compromised quality of care, staffing constraints (Maben et al., 2022), patients dying alone (Strang et al., 2020) and perceived injustices between professional role expectations of nurses, physicians and advanced practice providers (Jia et al., 2021).

One novel theme that had not been previously described as an ethical challenge experienced by nurses during the COVID-19 pandemic was surrogate decision-making. Though it has been previously established that surrogate decision-makers often incorrectly predict patient's wishes in various clinical scenarios (Shalowitz et al., 2006), there is limited research that captured nurses' perceptions of this issue during the pandemic. Spalding and Edelstein (2022) found that during the pandemic, uncertainty regarding illness trajectory exacerbated uncertainty about patient wishes amongst surrogate decision-makers. Since nurses in this study described perceptions that patient wishes were unknown or that surrogates decisions did not reflect patient wishes, it may be important to understand that visitation restrictions and surrogates' motivation to see loved ones are powerful motivators of decision making that may reappear in another pandemic. When nurses perceive that surrogates fail to understand the severity of patients' clinical status, they may need to initiate critical conversations that should be interdisciplinary when possible, including using ethics support services. More research is needed to learn the best methods of integrating visual information into decision making when discussions cannot occur in person.

An appreciative inquiry theoretical foundation allowed us to understand how participants overcame ethical challenges by making "good" decisions and providing "good" care. Though very few empirical studies have focused on how nurses made decisions or responded to the ethical challenges they encountered during the pandemic (Aydogdu, 2022), there are research findings available regarding nurses' approaches to ethical decision-making in non-pandemic times (Dierckx de Casterlé et al., 2008; Goethals et al., 2010). Both Dierckx de Casterlé et al. (2008) and Goethals et al. (2010) reported that nurses tended to draw upon preconventional reasoning that tended towards conformity, peer expectations and obedience, and many nurses lacked reflectivity and understanding of patient preferences and values. Similarly, we found that nurses infrequently described appealing to patient's values. Instead, they described drawing upon their own personal strengths and values when making perceived good decisions. As Johnstone and Hutchinson (2015) highlighted, when nurses appeal to their own values this can be problematic since it risks decisions being driven by nurses own values, biases and beliefs rather than by patients. Despite significant barriers to providing quality care, nurses described situations in which they perceived that their personal strengths and values enabled them to provide good care and they verbalized a commitment to treating patients as family members.

Goethals et al. (2010) described how some expert nurses were able to break away from conformist decision-making and behaviours, combining critical thinking and identification of patient needs to identify a pathway forward. Our findings also indicated that a subset of nurses were able to exercise critical thinking skills to make perceived good decisions. Perceived good (high quality) care and good decisions reflected some nurses' ability to overcome moral adversity and address ethical challenges. Nurses would benefit from pre- and post-licensure ethics education that teaches them how to effectively respond to ethical challenges during crisis (and non-crisis) times and would overcome noted variabilities and deficiencies in nurses' ethics education (Hoskins et al., 2018; Robichaux et al., 2022).

By gathering nurses' responses to the ethical challenges encountered, we aimed to understand if nurses drew upon, or exhibited moral resilience. As described by Rushton (2018), moral resilience is constructed of multiple capacities but there are four core, measurable domains that were the focus of our analysis (Heinze et al., 2021). Previous studies have utilized the Rushton Moral Resilience Scale to measure moral resilience and have not reported the results as they relate to the individual domains of moral resilience (Spilg et al., 2022). Since

only one nurse narrative in our study reflected the domain of relational integrity, further research is needed to understand whether nurses are able to exercise particular domains of moral resilience more readily than others. Struggling to exercise relational integrity may be interrelated with nurses' inability to identify patients' values and difficulties with disentangling their own values from patients' values. Finally, it is important to note that we ought not to regard nurses' inability to draw upon ethical reasoning skills and moral resilience as an individual failing but rather this reflects the lack of focus and attention on ethics education in nursing training.

4.1 | Limitations

The total population of ICU nurses was large, and those who participated represented a small sample. Low response rate may be due in part to time limitations and the emotional burden of recalling challenging experiences related to the pandemic. We recruited from one large health care system in the Midwest and while the sample size was reasonable for an exploratory, descriptive study, transferability of the findings may be limited. Overall, some narratives lacked depth, highlighting a limitation of using a survey method. We engaged in

TABLE 5 Implications and recommendations for nurse managers and leaders

Theme	Implications and recommendation for nurse managers and leaders
Ethical challenges in the ICU	
Implementation of the visitation policy	• Nurse managers would benefit from more concrete guidance about how to employ compassionate exceptions equitably. • Health care organizations should gather data to monitor compassionate exceptions to review for bias, especially racial bias.
Patients dying alone	• Some participants described using virtual means to facilitate goodbyes but it is not clear how widely available this technology was. While it is the personal preference of patients and loved ones whether they are comfortable using technology during such an intimate moment, there should be equitable access to this technology.
Surrogate decision-making	• Additional training and education regarding the required standards for surrogate decision-making (substituted judgement and best interests) should be provided to the entire health care team to promote decision-making that reflects patient values.
Diminished safety and quality of care	• Normalizing the impact on safety and quality of care during times of contingency and crisis within organizations should be encouraged so that nurses and other health care workers do not carry guilt about care left undone. • Continuous review of redundant and workflow inefficiencies to preserve the essential safety and quality care characteristics of care valued by patients, families and organization.
Imbalance and injustice between professionals	• While many clinical ICU nurses are primarily responsible for providing direct patient, unnecessary imbalances between health care professionals should be addressed. • If there is guidance in place to reduce interactions with patients who are COVID positive, this guidance should be clear and transparent to mitigate feelings of injustice between professionals.
Strategies and responses to ethical challenges	
Personal strength and values	• While it is admirable that participants were driven by their work ethic and willing to make sacrifices to prioritize patient care, such behaviours risk exhaustion and burnout. Nurses should be reminded to take breaks and leaders be transparent about the fact that some necessary care will be missed because of insufficient staffing and high acuity. • Some participants talked about making decisions for patients based upon their own personal values which indicates there is a need for more robust ethics education.
Problem solving	• Many participants described drawing upon their problem-solving skills, nurse managers and leaders should continue to recognize and cultivate nurses with strong analytical, problem-solving skills.
Teamwork and peer support	• Strong teamwork and peer support were frequently mentioned as crucial for overcoming ethical challenges, nurse managers and leaders should continue to enhance teamwork and recognize and reward strong teams.
Resources	• Nurse managers and leaders should leverage the resources available to them such as palliative medicine and clinical ethics support services to assist with surrogate decision-making. • Many participants described the importance of available policies and evidence-based guidance to reduce the burden of decision-making and to provide good care. It is important for leaders to make these visible and readily accessible for ease of use. • All nurses, nurse managers and leaders need access to supportive resources to help them deal with the stressors of the pandemic.
Moral resilience	• If cultivating moral resilience continues to demonstrate utility as a way to overcome ethical challenges and mitigate the negative effects of moral distress, then it needs to be taught to clinical nurse and nurse managers.

reflexivity during data collection and analysis; however, the relationship of authors to social structures within the institution represents a limitation.

5 | CONCLUSION

We captured ethical challenges encountered by nurses in an ICU setting. Although the challenges were not completely new, they were amplified due to their repeated occurrence and duration. Some nurses' demonstrated capacities for moral resilience, but none described drawing on all four capacities. Nurses described an ability to overcome and address some ethical challenges encountered through teamwork, problem-solving, using resources and drawing on inner strength and values. However, nurses also struggled to disentangle patients' values from their own and use ethical reasoning to inform their decision-making. If cultivating moral resilience continues to demonstrate utility as a way to overcome ethical challenges and mitigate the negative effects of moral distress, it will need to be taught to nurses. One approach might be integrating moral resilience into ethics education and teaching nurses ethical analysis for more robust decision-making.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

We have made a number of specific recommendations for nurse managers and leaders (see Table 5). Our findings suggest that nurse managers would also benefit from more ethics education, guidance and support so that when faced with complex decisions, such as applying compassionate exceptions equitably, they would feel more equipped to communicate their reasoning to others.

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CONFLICT OF INTEREST

All authors declared no conflicts of interest. This single site research was internally funded.

ETHICS STATEMENT

This study was approved by the Cleveland Clinic Institutional Review Board (IRB number 21-284).

AUTHOR CONTRIBUTIONS

GM and NMA wrote the research protocol. GM, DC, RF and MZ analysed the data. All authors contributed to preparing and finalizing the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Georgina Morley https://orcid.org/0000-0002-0099-3597

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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COMMENTARY

WILEY

Promoting nurses' and midwives' ethical responsibilities towards vulnerable people: An alignment of research and clinical practice

Adele Baldwin PhD, MNSt, RN, RM, Associate Professor[1] | **Tanya Capper PhD, MMid, GradDipMid, L.LB, DipHEMid, RM, Head of Course, Midwifery**[2] | **Clare Harvey PhD, RN, BA, MA, Professor**[3] | **Eileen Willis PhD, MEd, BEd, Emeritus Professor**[4] | **Bridget Ferguson BNurs, MMid, GradCertMid, RN/RM, Lecturer**[5] | **Natalie Browning BA, MEd, BN/Mid, RN, RM, Associate Lecturer**[1]

[1]School of Nursing, Midwifery and Social Sciences, CQUniversity, Townsville, Queensland, Australia

[2]School of Nursing, Midwifery and Social Sciences, CQUniversity, Brisbane, Queensland, Australia

[3]School of Nursing, Massey University, Wellington, New Zealand

[4]Flinders University, Adelaide, South Australia, Australia

[5]School of Nursing, Midwifery and Social Sciences, CQUniversity, Rockhampton, Queensland, Australia

Correspondence
Tanya Capper, School of Nursing, Midwifery and Social Sciences, CQUniversity, Brisbane, Qld 4000, Australia.
Email: t.capper@cqu.edu.au

Abstract

Aim: To stimulate discussion and debate about the inclusion of vulnerable populations in primary research to inform practice change and improve health outcomes.

Background: Current research practices to safeguard vulnerable people from potential harms related to power imbalances may in fact limit the generation of evidence-based practice.

Evaluation: The authors draw on their experience working and researching with a recognized group of vulnerable people, incarcerated pregnant women, to provide insight into the application of ethics in both research and clinical practice. In a novel approach, the ethical principles are presented in both contexts, articulating the synergies between them. Suggestions are presented for how individuals, managers and organizations may improve research opportunities for clinical practitioners and enhance the engagement of vulnerable people to contribute to meaningful practice and policy change.

Key Issues: Ethical practice guidelines may limit the ability to create meaningful change for vulnerable populations, who need authentic system change to achieve good health outcomes.

Conclusion: Inclusive research and practice are essential to ensuring a strengths-based approach to healthcare and addressing health needs of the whole population. Health systems and models of care recognizing the diverse lives and health needs of the broader population demand practical, sustainable support from clinical managers.

Implications for Nursing Management: Practical suggestions for clinical managers to support point of care research is provided, embedding vulnerable voices in policy, practice development and care provision.

KEYWORDS
case study, ethical nursing practice, research ethics, vulnerable populations

1 | INTRODUCTION

Nursing and midwifery practice is framed by professional codes of conduct, ethics and standards of practice. These frameworks seek to ensure the provision of care meets the expectations of the community, the professions and individuals, contributing to the best possible health outcomes for the recipient. The International Council of Nurses (ICN) and the International Confederation of Midwives (ICM) provide the overarching ethical frameworks within which all nurses and midwives must practise. Specifically, the ICN Code of Ethics for Nurses (ICN, 2021) identifies four principal elements for ethical conduct: nurses and patients or other people requiring care or services; nurses and practice; nurses and the profession; and nurses and global health (p. 3). The ICM (2014) International Code of Ethics for Midwives bases its core ethical code on the recognition of women's human rights and the role of the midwife in supporting and advocating for women. Point 1c of the code states 'Midwives empower women/families to speak for themselves on issues affecting the health of women and families within their culture/society' (ICM, 2014 p.1).

The concept of advocacy is foregrounded throughout both professional frameworks, explicitly as per Element 1.7 of the ICN Code of Ethics (ICN, 2021, p.7) or in a more nuanced manner throughout the International Code of Ethics for Midwives (ICM, 2014). Accordingly, it is expected that nurses and midwives build trusting relationships with the recipients of care, support them in their healthcare decision making and advocate for change to provide the best possible health outcomes.

People from disadvantaged or vulnerable backgrounds are overrepresented in poor health statistics (Ford et al., 2021) and are often the most frequent seekers of care (Cruwys et al., 2018). For many, engaging with health care providers is fraught with challenges, including, but not limited to, access to care, understanding of need and adaptability of services (Byrne et al., 2022; Lewis et al., 2012). For many, non-engagement with healthcare providers is reflective of an overall disengagement with institutions more broadly and demonstrates a level of structural vulnerability for the individual. Structural vulnerability is a term that describes the complex social determinants that contribute to factors that result in poor health outcomes (Bourgois et al., 2017). Further Bourgois et al describes structural vulnerability as 'the outcome of a combination of socioeconomic and demographic attitudes, in conjunction with assumed or attributed status' (p. 4). Therefore, the vital role that nurses and midwives play in confronting these factors and in facilitating patient engagement cannot be overstated.

Contemporary healthcare practice is based on evidence-based knowledge (Boswell & Cannon, 2022). However, in order to build an appropriate evidence base, rigorous and credible research that meets a strict ethical criterion is essential. The fundamental importance of research informing clinical practice is mentioned, albeit briefly, in both aforementioned codes of ethics. Howe

ever, despite this, the role of nursing and midwifery *researchers* is often overlooked. Whilst there is a strong focus on the ethics of providing quality clinical care, less consideration is given to nurses and midwives involved in research. Hayes (2006) clearly links the Code of Ethics requirement that nurses should treat all people as equals, considering individual circumstances to promote inclusivity and addressing 'hidden coercive influences' (p. 87). It is therefore imperative that nurse and midwife researchers contribute to the building of a body of knowledge in order to best advocate for all recipients of care.

The authors draw on their experiences of evaluating a project that included working alongside and conducting research with a vulnerable population of pregnant women in prison (Baldwin et al., 2018). Pregnant women in prison are considered vulnerable by their gender, incarceration, pregnancy, culture and socio-economic background (Baldwin, Sobolewska, et al., 2020). The juxtaposition of clinical practice and the importance of engaging vulnerable populations in primary research to hear the voices of those who may be silenced by complex social, cultural and political influences is explored. The authors' new insights demonstrate how practice and research with vulnerable people are aligned, enhancing outcomes for theoretical understanding and practical application. The need for primary research, centred around the most vulnerable is highlighted, and suggestions will be made for future research involving vulnerable people, without compromising the research process or compounding the participants vulnerabilities.

2 | BACKGROUND

Ethical practice in research is not a new concept. In the aftermath of WWII, the urgent need to protect the vulnerable resulted in the Nuremberg Code, followed in 1964 by the Helsinki Declaration (Mandal et al., 2011). It is beyond doubt that the events leading up to the development of these cornerstone documents dictated the need for regulation to prevent further research activity that could result in harm, maim or even kill innocent participants. Since then, formal ethics committees have become embedded into organizations that engage in research (Brown et al., 2020). Alongside the growth of ethics committees, the definition of vulnerability has evolved to recognize the many layers of vulnerability more accurately across communities.

Over time, restrictions on vulnerable people participating in research due to concerns about causing them harm have increasingly been called into question, raising issues about the exclusion of vulnerable groups from being represented in research (Hayes, 2006). For example, non-participation or exclusion from participating in research

may in fact be placing vulnerable populations at a further increased risk of harm (Juritzen et al., 2011). Using healthcare provision in prison as an example of vulnerability in context, the lack of primary research with offenders is apparent. There is an overall dearth of research about health in prisons, with most of the evidence being drawn from statistical data provided by health services or research around medical chart audits and reviews. This absence of the person and their lived experience of healthcare delivery within prison indicates a significant gap in knowledge, particularly when considered from the perspective of person-centred care.

The complexities of vulnerability are well illustrated in the cases of incarcerated pregnant women, with the recent development of formal recommendations to improve health and well-being outcomes for this group of mothers and babies (Baldwin, Capper, et al., 2020; Birth Companions, 2016). The number of incarcerated women around the world is increasing, many of which are of childbearing age, (Alirezaei & Roudsari, 2022; Gibson, 2022), are from poor socio-economic backgrounds and have higher levels of emotional and mental health trauma than the general population (World Health Organization, 2014). Often women moving through the criminal justice system lead chaotic lives, involving complex social issues, resulting in prison sentences related to illicit drugs, violence and robbery (Breuer et al., 2021).

Pregnant women are regarded as a vulnerable population due to a perceived lack of capacity to give informed consent for an unborn child and thereby are seen to pose a greater potential for harm. Because of this classification of vulnerability, there has been a reluctance to undertake research involving them. Despite this hesitancy, it has been suggested that the exclusion of vulnerable populations may, in fact, cause them more harm as it further suppresses their voices, thereby contributing further to their marginalization (Aldridge, 2015). Incarcerated women have been described as 'the most vulnerable population of women' (Hayes, 2006, p. 84). Therefore, incarcerated *pregnant* women may be categorized as an *even more* vulnerable population.

The paradox of this situation is that pregnancy alone should not be considered the causation of increased vulnerability as it is considered a state of well-being rather than illness. Therefore, it could be argued that it is in fact unethical not to undertake research with vulnerable populations, such as pregnant incarcerated women as the need to elicit meaningful findings is paramount with enormous potential benefits (Alexander, 2010; Krubiner & Faden, 2017). Further, current evidence suggests that the prison environment may contribute to improved birthing outcomes and being pregnant whilst 'inside' provides the incentive for a woman to transform her life with positive birthing and effective parenting experiences offering an opportunity to interrupt the cycle of recidivism (Shaw et al., 2015).

3 | DISCUSSION

Our experience foregrounds the often-avoided topic of doing ethical research with vulnerable people (Gordon, 2020). Recognition of a population such as incarcerated pregnant women as a vulnerable group contributes to the lack of evidence-based understanding of their situation, from analysis of primary data rather than the more commonly used data sources of document review or research with people who are not the primary concern. We support the view that it is unethical *not* to undertake research with vulnerable populations (Alexander, 2010; Krubiner & Faden, 2017) as the need to elicit meaningful findings is paramount to those concerned. In fact, the exclusion of this group may, cause harm as it represses their voices, further contributing to their isolation (Aldridge, 2015). Vulnerability is not static, its levels fluctuate in response to the environment and other physical and emotional factors that are at play at any specific time (Biros, 2018).

Usually, there is a distinction made between research ethics and clinical practice ethics. However, our experiences demonstrate the necessary links that nurses and midwives must make between research and practice in order to operationalize best evidence, contribute to new knowledge, provide high-quality care and align with ethical clinical practice. Our novel approach to this complex situation is illustrated in the following table. Table 1 shows how our methodological approach addressed all four basic ethical principles for research and how those concepts may be operationalized in the clinical environment.

The application of the ethical principles in both contexts is a novel illustration of how ethics underpins all aspects of nursing and midwifery. Further, it demonstrates the inextricable links beyond that of evidence informing practice. It shows that the ethical conduct of research could be considered a natural extension of ethical nursing and midwifery practice. There is scope for nursing and midwifery managers to support the conduct of research, involve clinical staff in research and extend the concept of woman-centred care by placing vulnerable women at the centre of new understandings as well as at the centre of their care.

Contemporary strategies implemented by all levels of government around the world centre on the concept of inclusivity. It is our assertion that these strategies promote inclusion on multiple levels: one, to actively engage clinicians in research and two, to design research to uphold the ethical principles allowing for both protection and participation with vulnerable groups. Our insights demonstrate a need for these same organizations to extend inclusion strategies to ensure that all voices are heard. It seems reasonable that, whilst upholding the ethical principles, nurses and midwives are well positioned to seek out and embed ways of engaging the disenfranchised and marginalized in research studies. Engagement and inclusion may increase self-worth and perception of self within the broader community and thereby increase power status for those who have the least. As outlined in Table 1, building relationships is fundamental to creating a research culture in practice, and these relationships should be across disciplines, contexts, organizations and regions, drawing on the formal and informal networks that nurses and midwives are part of. Adopting a research-engaged culture and providing support for clinicians to be actively involved in research are essential elements to increasing nurses' and midwives' ownership of the evidence for their practice. Redesigning old strategies such as journal clubs is one way in which

TABLE 1 Ethical principles in nursing and midwifery research and practice

Ethical principle	Ethical research design	Ethical clinical practice
Autonomy—Seeks to uphold the individual's right to self-determination without bias or influence	Relationships built between researcher and participant Researchers are not employed by the government or by corrective services Information sheets and consent forms will be worded to an agreed literacy level All consenting participants will be invited to participate in all aspects of the study	The ethical principles for nurse and midwives are visible and embedded into organizational policy and clinical practice expectations Considerations and respect for different ways of knowing and understanding are foregrounded in organizational and clinical practice All recipients of care are given the option to make informed decisions and if they choose, decline or redefine their care All clinical decision making places the recipient of care at the centre and prioritizes their individual choices, empowering them to be active participants, rather than passive recipients Professional relationships between the clinician and the recipient of care are established and nurtured, supported by nurse and midwife managers and organizational governance processes
Justice—Research outcomes must be fairly and equally distributed	Findings will not be disseminated without full consent from the participants Transcripts of are the collective property of the participants and research team	Full and accurate explanations of care management options are given, clarified and confirmed with all recipients of care Equity in access to appropriate services is enhanced by individual and organizational practice Clinicians ensure that current evidence is embedded in practice to ensure consistent, quality care across settings for all recipients of care Nurse and midwife managers, in consultation with all staff, ensure that adequate resources are available to meet the standard-of-care expectations
Non-maleficence—No harm comes to those who participate in the research or in the broader community	Fact checking with the participants conducted prior to final publication and dissemination of findings All precautions will be taken to protect confidentiality, privacy and identity of participants with ongoing review during the research process Data collection methods promote the creation of safe spaces Researchers will adopt a reflexive stance	When providing education, clinicians clarify understandings with the recipient of care, redirecting or explaining where required All recipients of care are offered the opportunity to participate in research and policy development where appropriate. Similarly, all recipients of care can decline or withdraw participation without impact on their care All nurses and midwives, across all levels of practice, including nurse and midwife managers, engage in reflection and reflexivity as part of their continuing professional development
Beneficence—Research must be conducted with the intent to do good	The research team are already known to the potential participants and have built relationships over a period of time All researchers will demonstrate reflexivity in their research practices and keep a journal during the study Opportunities will be provided for participants and researchers (separately) to debrief Findings will be disseminated to the academic community, funding/supporting agencies, and the participants with opportunities to discuss and debrief	All healthcare professionals involved in the provision of care establish respectful relationships with recipients of care Clinicians at all levels, and across disciplines, will support each other and provide regular opportunities for debriefing in safe environments Nurses and midwives, at all levels, will engage with and contribute to policy development and implementation Nurses and midwives, at all levels, will engage with and support the ethical conduct of research to improve health outcomes and reduce risk. This may include actively seeking out opportunities to be involved in research Nurse and midwife managers will create a supportive environment that promotes research as a practice improvement and continuous professional development opportunity

organizations (and managers) may contribute to the shift in clinicians' thinking (Cooper & Brown, 2018; Leonard et al., 2022).

4 | CONCLUSIONS

The conduct of research with vulnerable populations remains the subject of much debate, despite many now believing that to exclude vulnerable cohorts from research participation contributes to the perception of them as vulnerable and further perpetuates their sense of powerlessness.

This paper has provided experiential understandings upon which to build and support future practice, policies and procedures in research and clinical practice. It is imperative to conduct robust research to provide the evidence for continual practice improvement. Whilst serious ethical consideration must be given to support studies that promote the voice of the vulnerable in research and consider the circumstances in context, they should not be excluded on the basis of their vulnerability. The justification for such considerations by nurses and midwives in practice is apparent when the ethical principles are shown to be embedded in both professions across both research and practice contexts. This highlights that the divide between building evidence and operationalizing it may not be as wide as previously thought.

5 | IMPLICATIONS FOR NURSING MANAGEMENT

This paper provides a rationale and guidance for nursing and midwifery managers to support research at the point of care ensuring that the voices of the most vulnerable are heard in policy and practice development and care provision.

ETHICS STATEMENT

Ethical approval was gained from the CQUniversity Human Ethics Committee for the project that this commentary was based upon (approval number: 0000021132).

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ORCID

Adele Baldwin https://orcid.org/0000-0002-6325-4142
Tanya Capper https://orcid.org/0000-0003-3464-1423
Clare Harvey https://orcid.org/0000-0001-9016-8840
Eileen Willis https://orcid.org/0000-0001-7576-971X
Bridget Ferguson https://orcid.org/0000-0002-7440-3609

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EDITORIAL

WILEY

Nursing leadership from crisis to postpandemic

For more than 2 years, health care systems all over the world have been struggling with the COVID-19 pandemic. Nurse leaders and their staff have had to make rapid decisions in unprecedented situations and swiftly change work programs and procedures. It has been a time of crisis leadership (Turnipseed & VandeWaa, 2022).

In a concept analysis carried out pre-COVID-19, Kim (2021) defined the core attributes of crisis leadership from a nursing perspective as: clear, fast, honest communication; a high degree of collaboration; information sharing; decision-making and fair prioritization; trust building; and competency. More recent studies (Heide & Simonsson, 2021; Lake et al., 2021; Lord et al., 2021; Turnipseed & VandeWaa, 2022) have shown that communication is one of the most important competences for successful leadership during the pandemic. Clear, regular, authentic, effective and valid communication has been found to prevent panic, reduce the stress of the unknown, and create trust (Losty & Bailey, 2021). Communication is also one of the six standards recommended by the American Association of Critical-Care Nurses (AACN) for building a healthy work environment and is obviously desirable in health care professionals. The other AACN standards are true collaboration, effective decision-making, appropriate staffing, meaningful recognition and authentic leadership, and all six closely match the definition of crisis management given above (AACN, n.d.). So, can a healthy work environment be achieved for nurses with crisis leadership?

Good communication has been a key issue and an indicator of successful management during the COVID-19 pandemic. Reciprocal communication is needed between leaders and staff, and clear, rapid, truthful, trustworthy and empathic communication has been seen to promote resilience in both leaders and staff during demanding circumstances, as well being beneficial to their work well-being (Turnipseed & VandeWaa, 2022). One lesson that surely has been learned over the last 2 years is that being attentive and studying communication skills, within basic nursing education, additional training at work and at universities, are necessary for current and future leaders.

Coping with the pandemic has required effective collaboration, which also relies on good communication. Successful collaboration between nursing professionals, and with physicians and other professionals, is fundamental to the care of critically sick patients and results in mutual empowerment. In a healthy work environment, there is both good communication and constructive collaboration, with all professionals involved enabled to contribute to effective decision making. This can be regarded as professional governance (Kanninen et al., 2021; Porter-O'Grady & Pappas, 2022), which can come close to professional autonomy. During times of crisis, leaders may have to make decisions without the time to listen to their staff, and nurses have to respond directly to doctors' instructions during the course of frontline patient care. Clearly, this can be necessary if it is a question of life or death, for example, but in general, effective decision-making takes everyone's view into account, even if the final, official, decision is taken by one person.

Many countries are also struggling with inadequate staffing. A challenging time has led many nurses to consider leaving the profession, and many have already left. At the same time, there is the question of how, if the war in Ukraine, other political crises, new pandemics or climate crises escalate, health services will manage when their nurses, and other health care professionals, are already exhausted. Those nurses who remain in the profession are getting older, as are the populations of developed countries, while the younger generation, the millennials, are showing less interest in nursing (WHO, 2020). Having a calling to nursing is no longer so common among young nurses (Kallio et al., 2022), and changes are needed that will make nursing an interesting and attractive profession.

As well as developing better working conditions and salaries, attention also needs to be given to appropriate recognition for nursing. During the COVID-19 pandemic, with heavy workloads and a stressful working atmosphere, levels of recognition for the work carried out by nurses have been perceived as low (Jeleff et al., 2022). Meaningful recognition of the work carried out by staff is highlighted in a healthy work environment. Nurses greatly appreciate positive feedback from patients, which is important for job satisfaction (Seitovirta et al., 2018), but a lack of official recognition affects work motivation and can accelerate a nurse's intention to leave the profession. It is important for professionals to know that their good work will be recognized, and what reward strategy an organisation has. However, successful recognition involves both the individual and the entire workplace community (Seitovirta et al., 2018). Although we know that an appropriate salary and work evaluation scheme provide important types of recognition, nurses' personal wishes for recognition also need to be considered.

Leaders of a healthy work environment have an authentic leadership style. One study with a large body of data about nurses and leaders (Raso et al., 2021) demonstrated this positive relationship during the pandemic. Could this follow after crisis leadership? Authentic leaders are genuine and honest and enable reciprocal communication between leaders and staff. Authentic leadership is on the continuum from transformational leadership, which for decades we have known is an aspirational leadership style that has still to be fully implemented in practice (Northouse, 2021).

So, what should good leadership of postpandemic nursing look like? Nursing leadership appears to have taken a few steps back during the last 2 years, towards a more administrative, transactional style, where leaders say what and how things are to be carried out. Before any further development can be achieved, it could take some years to return to the same level of nursing leadership as before the pandemic. Relational leadership styles, such as transformational and authentic leadership, have previously been dominant styles, and both Feistritzer et al. (2022) and Grubaugh and Bernard (2022) suggest that complex relational leadership (CRL) is needed for postpandemic nursing, combining effective leadership with engaged clinical nurses who are accountable for decision-making. CRL is a leadership model that has been identified as a conceptual foundation for navigating Complex Adaptive Systems (CAS), in which nurses at all levels can function. CRL looks towards transformational leadership, where relations between staff, leaders and organisations can co-occur (Feistritzer et al., 2022).

Strong relationships are therefore central to cocreating the future environment of nursing practice (Feistritzer et al., 2022). Specifically, nurse leaders need to focus on good communication, teamwork and professional governance (Porter-O'Grady & Pappas, 2022). Visibility and listening are key to communication, being and discussing with nursing staff in different spontaneous and organized meetings gives important information what is working well and eliminates rumours and misunderstandings. Encouraging, listening and welcoming contributions creates trust, openness and respect (Grubaugh & Bernard, 2022; Turnipseed & VandeWaa, 2022). While it is possible to participate in traditional shared governance, focusing on responsibility, where nurses and managers share locally based decisions, Grubaugh and Bernard (2022) suggest there is a need to move on and progress to true professional governance. This encompasses an expectation of real expertise, autonomy and participation in intra-professional decision making (Kanninen et al., 2021). Building relationships, creating partnerships, and working with numerous teams is required in complex health care. It is also important to improve health care professionals' well-being through increased resilience and professional success after a crisis (Grubaugh & Bernard, 2022).

In conclusion, it is currently unknown whether nursing leadership will return to a complex relational leadership style or remain in crisis leadership, in particular transactional leadership. However, there is strong pressure, especially from younger generations, to change the current work environment and dominant leadership styles. Ultimately, we need to remember why transformational leaders are needed: their work is transparent and empathic, they are visible, and communication with nurses is open. Transformational leaders empower nurses to achieve a high quality of care for patients, which is at the core of nursing and nursing leadership.

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Tarja Kvist RN, PhD, Professor[1]
Jaana Seitovirta RN, PhD[1,2]
Anu Nurmeksela RN, PhD[1]

[1]*Department of Nursing Science, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland*
[2]*School of Health Care, Health Promotion, Metropolia University of Applied Sciences, Helsinki, Finland*

Correspondence
Tarja Kvist, Professor, PhD, RN, Department of Nursing Science, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland.
Email: tarja.kvist@uef.fi

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ORCID

Tarja Kvist https://orcid.org/0000-0001-5974-8732
Jaana Seitovirta https://orcid.org/0000-0001-5050-1952
Anu Nurmeksela https://orcid.org/0000-0003-0474-0404

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EDITORIAL

WILEY

The Covid-19 pandemic and cultural competence: Global implications for managers, nurses and healthcare workers during major health disasters and emergencies

On 24 March 2022, the European Transcultural Nursing Association (ETNA) delivered its first virtual conference titled 'Global nursing, midwifery and social care responses and challenges to Covid-19 pandemic during 2020-21'. As the president of ETNA, I invited speakers from every continent to address the focus of the conference from the lens of their national culture, emphasizing challenges and responses of their choice. It was no surprise that they all spoke about the enormity of this health catastrophe that caught everyone unprepared. They all spoke about the confusion and the lack of guidance and resources, but surprisingly, they all spoke about the existence of inequalities, discrimination and exclusion, all of which are inextricably linked to cultural competence (http://europeantransculturalnurses.eu/conference/).

Although cultural competence has been defined in many different ways, and it is often conceived in terms of gaining cultural knowledge about diverse population groups and having an understanding of how a group's culture or one's cultural identity influences their world view, cultural competence is also about social justice, a mechanism to assure the adoption of equality and human rights and the eradication of discrimination in the health and social care institutions.

There is no doubt that the coronavirus pandemic—the largest and most deadly major health disaster of our times—exposed the best and the worse in human beings whilst also spot-lighting the fault lines and fissures of society. At the ETNA conference, the South African keynoter (Mulaudzi, 2022) spoke about 'Ubuntu', an African philosophy that emphasizes the importance of solidarity, especially during trying times. This solidarity helped the population to cope with the devastating effects of the pandemic. The compassion and support they provided to each other emanates from the Ubuntu philosophy and belief that they are connected to each other: 'I am because you are' and 'a person is a person through other people'. A message of hope.

The speaker from India (D'souza, 2022) provided a sad and disturbing message. Her story was about the extensive level of discrimination, racism, hate, conflict and crime endured during the peaks of the Covid pandemic by ethnic and religious minorities, particularly the Muslim groups and Chinese people living in India. Minorities were stigmatized and blamed for the spread of the coronavirus. They were physically and verbally attacked; they were excluded and denied treatment and care.

The speaker representing the USA (Emami, 2022) praised the technological innovations adopted by the healthcare system during the pandemic. Although she did not mention the famous slogan originated by the Seattle and King County Public Health, 'Viruses do not discriminate and neither should we', she provided statistics that clearly showed that the various ethnic minorities in the United States were far more affected by Covid-19 than the majority White population. This situation has been reported globally, and it is generally attributed to discrimination that impacts on numerous sociocultural indicators such as limited access to health care due to poverty, place and type of residence, accessible accurate and timely information and so on.

My presentation (Papadopoulos, 2022) addressed the spiritual care provision to hospitalized Covid-19 patients in England. The two studies I conducted with my colleagues at the Research Centre for Transcultural Studies in Health (Papadopoulos et al., 2020, 2021) revealed, among many other challenges, three main issues related to equality, diversity and inclusion (EDI). The first lockdown in the UK was implemented in early 2020. Overnight, all hospitals lost their volunteer chaplains as only staff members were allowed to enter them. This meant that patients from minority faiths needing specific cultural–religious support could not receive it, as customarily this was provided by volunteer chaplains. Another EDI issue reported by some of the senior nurses and chaplains we interviewed was that of the very strict visiting policy imposed by the lockdown rules. Staff found the visiting draconian rules unacceptable, unjust and inhumane, and consequently, some staff did not equally adhere to them for all patients and in all hospitals. The third main EDI concern was about the provision of adequate technology and support to those spiritual providers and relatives who were not familiar with using such devices to connect with their very sick and dying relatives in hospital. It is easy to see how those with the resources and skills had a huge advantage over those without these.

One of the issues reported globally was that of vaccine hesitancy, which had hugely negative implications on many aspects of the Covid pandemic. Several studies have addressed the reluctance of people to be vaccinated and reported its link to sociocultural and economic determinants of health. For example, Cascini et al. (2021) conducted a systematic review of the literature to investigate the attitudes, acceptance and hesitancy among the general population worldwide specifically about the Covid-19 vaccines. They found that overall, vaccine hesitancy rates ranged widely among different populations, across different countries and cultures. A variety of concerns were reported such as the vaccine efficacy, safety, side effects, convenience, price and beliefs that the vaccine is not necessary to combat the pandemic,

that the testing for the vaccine was insufficient and that the pace of its development was too quick, as well as the financial motivation of the authorities/pharmaceutical companies. Another issue worth noting was that of mistrust with authorities. Misinformation also had a drastic effect on the public; specific reference was made about the Internet and different forms of social media, which did not only allowed the rapid and ubiquitous sharing of information, but also promoted conspiracy theories, myths, fake Covid treatments and so on. The same study found that many of these concerns were most prominently associated with certain socio-demographic variables such income (e.g. being low-income population), age (e.g. younger patients were more hesitant, partially as they perceived being at lower risk compared with older people), education (e.g. having a lower level of education), area of residence (e.g. those in rural areas were more hesitant) and race and/or ethnicity (e.g. those who identified as minorities).

The Cascini et al. (2021) study emphasized the importance of informing the public about the rigorous process of vaccine development using health communication techniques on a variety of media platforms as well as by utilizing community leaders and influential characters within a given community in order to provide accurate, culturally appropriate and accessible information.

Returning to the EDI findings of the two spirituality-related studies conducted during the Covid pandemic by myself and colleagues (Papadopoulos et al., 2020, 2021), we have recommended that public health policymakers, managers, nurses and other healthcare workers including spiritual care providers must urgently collaborate to:

- Provide training related to major health disasters and emergencies in order to enhance health workers' knowledge and culturally competent and compassionate skills for effective and equitable care, including spiritual support;
- Review policies such as visiting of patients and accessible and effective protective equipment for health and spiritual providers as well as for the public;
- Embrace the adoption of artificial intelligent devices and robotics, making their availability equitable and their operation user friendly;
- Develop a comprehensive national strategy for major health disasters and emergencies, which includes the provision of culturally competent spiritual care for patients, the public and the staff.

We all know that the world was caught unprepared for the arrival of the Covid pandemic. Preparing for the next major health disaster must start now. I believe that the above recommendations could be applied globally. They have the potential to prevent deaths and suffering and will pave the way to regaining the trust of the public and of health workers, thus reducing vaccine hesitancy and its huge negative impact on vulnerable groups.

Despite the death of over 6 million people globally, the repeated lockdowns, the huge vaccination global programme and the billions of pounds, dollars, euros, etc., spent on eradicating the coronavirus, the Covid pandemic is still with us, and millions of people continue to be affected by it. Many global challenges and implications have not yet been addressed, so urgent research and understanding of them is needed to illuminate effective, culturally competent responses and solutions. The pandemic experiences of 2020–2021 must not be forgotten, and lessons must be learnt. This is the only way to prepare for the future major health disasters, which, as the experts repeatedly tell us, are increasing in frequency.

KEYWORDS

Covid-19 pandemic, Cultural competence, Major health disasters, Nurses

Irena Papadopoulos, Professor

Research Centre for Transcultural Studies in Health, Faculty of Health Social Care and Education, Middlesex University, London, UK

Correspondence

Irena Papadopoulos, Research Centre for Transcultural Studies in Health, Faculty of Health Social Care and Education, Middlesex University, London NW4 4BT, UK.

Email: r.papadopoulos@mdx.ac.uk

ORCID

Irena Papadopoulos https://orcid.org/0000-0001-6291-4332

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EDITORIAL

WILEY

Recruitment of internationally trained nurses: Time for a global model for shared responsibility

1 | INTRODUCTION

The World Health Organization (WHO) has highlighted an estimated shortfall of about 6 million nurses worldwide (Organization, 2020). This nursing shortage threatens the quality, effectiveness, and sustainability of health care systems and is expected to increase post-COVID, particularly in low- and middle-income countries (Aluttis et al., 2014; Buchan & Catton, 2020; Shaffer et al., 2020). The global mobility of nurses and associated recruitment competition compounds this problem (Aluttis et al., 2014; Buchan & Catton, 2020; Shaffer et al., 2020), and low-income countries may be disproportionally impacted by nurses migrating for better opportunities (Rolle Sands et al., 2020; Shaffer et al., 2020). Generally, health care professionals, especially nurses and physicians, are highly mobile and global. A deeper understanding of global health workforce mobility is necessary to mitigate shortages and ensure adequately staffed health care systems. This paper explores current global trends in nurse mobility and offers insights into challenges and solutions to ensure adequate staffing and mitigate shortages in the post-COVID era.

2 | INTERNATIONAL RECRUITMENT, THE "QUICK FIX"

Targeted action is needed to address nursing shortages. However, existing initiatives focus on importing talent rather than overarching strategies or long-term solutions. The United Arab Emirates relies on international nurses (approximately 96% of the nursing workforce) (Al-Yateem et al., 2020) and is currently recruiting more nurses to support health care delivery. Other countries also depend on international recruitment. For example, 14.5% of nurses working in the United Kingdom in 2019 were from outside the country (mostly from India and the Philippines), and this proportion is growing steadily (Royal College of Nursing - UK, 2020). In the United States, around 5% of RNs are foreign-trained, with many from the Philippines, Canada, and India (U.S. Department of Health and Human Services, 2018), while around 8.9% of the Canadian nursing workforce (Government of Canada, 2021), 17.7% of RNs in Australia, and 14% of currently registered nurses and midwives in Ireland were trained overseas.

Despite benefits for individuals, professional groups, and health systems, international recruitment remains insufficient to address current nursing deficits. There is also limited information on the impact of international recruitment on source countries. Given the persisting global nursing shortages and pandemic-related health workforce pressures, international nurse recruitment may increase in many countries. This may have catastrophic consequences for health care systems in developing countries, which should be assessed and collectively addressed by all parties concerned. International dialogue is necessary to coordinate and regulate the recruitment of nurses from developing countries—where they are greatly needed. COVID-19 highlighted the importance of international collaboration and the equitable distribution of resources between rich and developing countries.

3 | DETRIMENTAL EFFECTS OF NURSE MIGRATION

Typically, nurses move from developing to developed countries (Aluttis et al., 2014; Rolle Sands et al., 2020), which is driven by nurses seeking better personal and professional lives (Alameddine et al., 2020)'(Davda et al., 2018). However, health care systems in source countries cannot compensate for lost nurses (Emanuel-Frith, 2018). In addition, remaining nurses often face higher patient–nurse ratios and increased workloads, which may compromise the quality of services provided. There are also concerns regarding the impact of foreign-trained nurses on the quality of health care services in destination countries. The movement of skilled, qualified nurses (e.g., those who work in intensive/critical care units, operating theatres, and emergency rooms; Lorenzo et al., 2007, Yan, 2006) from developing to developed countries results in a brain drain and leaves less skilled nurses to deliver nursing services. Furthermore, it depletes the pool of senior and experienced nurses in critical, specialized, leadership, and academic positions in source countries (Alameddine et al., 2017). This brain drain has also escalated into a "brain waste." For example, many doctors in the Philippines have retrained as nurses/nurse medics to pursue employment in Western countries (Khaliq et al., 2008); many of these doctors had ≥10 years' experience or specialty training (Khaliq et al., 2008).

Southeast Asia and Africa have significant shortages of health workers, especially nurses and midwives (International Center on Nurse Migration, 2018), but many nurses are recruited internationally from these countries. Both the Philippines and India have very low nurse to population ratios (0.24 and 0.34 nurses/1000 population,

respectively) (Statistics, 2022). In comparison, the top nurse importing countries, including Australia, Ireland, the United Kingdom, and New Zealand, have much higher ratios (12.57, 12.4, 8.42, and 11.15 nurses/1000 population, respectively) (Statistics;, 2022; WHO-The Global Health Observatory, 2018). However, recruitment of nurses from India and the Philippines continues. This is commercially driven and yields significant profits for stakeholders in the education, training, and exporting process (Khadria, 2007). Unfortunately, economic returns from such migration do not reach the source country's health care system (Efendi et al., 2017; Rolle Sands et al., 2020). International recruitment is expected to continue, as the WHO estimated an additional 9 million nurses and midwives are needed for all countries to reach Sustainable Development Goal 3 (health and well-being) by 2030 (International Center on Nurse Migration, 2018). However, it is likely that richer countries will continue to attract nurses to the detriment of source countries.

The COVID-19 pandemic emphasized nurses' importance in maintaining well-performing and resilient health systems and exposed the risks associated with staffing and skills shortages (Kuhlmann et al., 2021; Zapata et al., 2021), especially as nurses continued to provide all essential health services. The effects of the pandemic were magnified in areas with nursing shortages; more suffering was endured, and more lives were lost. The leading health care workforce exporters were among the countries that experienced shortages of staff to fight the pandemic (Kuhlmann et al., 2021, Zapata et al., 2021).

4 | ETHICAL ISSUES OF NURSE MIGRATION

Nurse migration raises ethical issues, including its impact on health care systems in source (often developing) countries, the responsibilities of destination countries, and effect on nurse employment in destination countries. Other issues are nurses' rights to travel and advance their careers, developing countries' right to retain nurses they educate, discrimination against migrant nurses, and the value of remittances migrant nurses send home (O'Connor, 2016). Additional global concerns are the shortage and migration of nursing faculty, which has resulted in international competition to attract nursing faculty (Thompson et al., 2014). Nursing faculty migration can impact a country's ability to secure an adequate, stable, and high-quality nursing workforce (Thompson et al., 2014).

5 | SHARING RESPONSIBILITIES

Developed countries can play an important role in exchanging nursing knowledge and innovations with developing countries. As migrating nurses contribute to developments in destination countries (e.g., educational models, technological innovations), destination countries should reward these contributions by supporting source countries in acquiring the latest developments. This support can be through direct training and scholars from developed countries visiting developing countries and building capacity, or through opportunities for faculty/leaders from developing countries to visit developed countries, participate in professional development activities, and gain exposure to current developments.

Finding and developing senior nursing researchers and educators are major challenges for developing countries. International faculty exchange programs and mentoring faculty in developing countries would allow junior scholars to learn and grow with experienced Western mentors. Important avenues for such exchanges include joint postgraduate programs and national training programs for nurse executives and leaders (Harrowing et al., 2010; Shultz & Aiken, 2010; Xu, 2012). Another important strategy is for nursing education institutions to engage with the global nursing community, which will develop the capacity of nursing scholars/institutions, facilitate knowledge transfer, and improve the visibility of institutions/scholars internationally. This could be achieved by exchange programs, shared postgraduate programs, collaborating in conferences and research, and supporting publications from developing countries. Facilitating publications in high-quality peer-reviewed international journals is essential given the importance of such publications in securing research grants, promotion, and institutional visibility. This will help developing countries retain faculty and develop capacity, thereby positively influencing the nursing profession (Xu, 2012). Ethical considerations when working toward these objectives include avoiding ethnocentrism and maintaining cultural awareness, sensitivity, mutuality, and respect. It is also essential that source and destination countries acknowledge they are in a joint effort with shared goals and objectives (Andrews & Fargotstein, 1986; Furuta et al., 2003; Xu, 2012).

6 | CONCLUSION

Without local and international nursing workforce management and migration policy changes, the global maldistribution of nurses may be exacerbated. Source countries face crises in nursing capacity and are unable to ensure adequate health care access for their populations. Balancing domestic health workforce needs, employment, and training opportunities for international nurses while acknowledging nurses' right to migrate are challenges for both source and destination countries. The current scenario puts low-income countries at risk and threatens global efforts to achieve universal health coverage. The global nursing migration pattern has sparked international debate about the consequences for health care systems worldwide, including questions about sustainability, justice, and global social accountability. It has also highlighted the need to share responsibility globally and work collaboratively to address the situation. Nursing and health care authorities in destination countries need to consider health service challenges and ethical issues in source countries. Nursing faculty migration also requires urgent investigation to support health system stability. Nursing management should develop innovative strategies to attract more new nurses and train and retain nurses locally. Nursing professionals worldwide, especially in developed countries, should collaborate to develop their fellow nurses and the nursing profession internationally.

Nabeel Al-Yateem PhD, Associate Professor[1,2]
Fiona Timmins PhD, Dean[3]
Mohamad Alameddine PhD, Professor, Dean[2,4]
Jacquline Maria Dias PhD, Associate Professor, Chair[1]
Ahmad Saifan PhD, Associate Professor[5]
Mohanad AbuRuz PhD, Professor[5]
Muhammad Arsyad Subu PhD, Assistant Professor[1]
Syed Azizur Rahman PhD, Associate Professor[6]
Heba Hijazi PhD, Associate Professor, Chair[6,7]

[1]*Department of Nursing, College of Health Sciences, University of Sharjah, Sharjah, United Arab Emirates*
[2]*Health and Workforce Studies Research Group, Research Institute for Health and Medical Sciences, Sharjah, United Arab Emirates*
[3]*School of Nursing, Midwifery and Health Systems University College Dublin, Dublin, Ireland*
[4]*College of Health Sciences, University of Sharjah, Sharjah, United Arab Emirates*
[5]*Faculty of Nursing, Applied Sciences Private University, Amman, Jordan*
[6]*Department of Health Service Administration, College of Health Sciences, University of Sharjah, Sharjah, United Arab Emirates*
[7]*Faculty of Medicine, Department of Health Management and Policy, Jordan University of Sciences and Technology, Irbid, Jordan*

Correspondence
Nabeel Al-Yateem, Department of Nursing, College of Health Sciences, University of Sharjah, Sharjah, United Arab Emirates.
Email: nalyateem@sharjah.ac.ae

ORCID
Nabeel Al-Yateem https://orcid.org/0000-0001-5355-8639
Fiona Timmins https://orcid.org/0000-0002-7233-9412

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EDITORIAL

WILEY

Embracing and sustaining telehealth progress: The role of the nurse manager

The World Health Organization (WHO, 2010) views telehealth as the delivery of care by health professionals, where distance is a critical factor, using information and communication technologies for the exchange of valid information for the diagnosis, treatment and prevention of disease and injuries, research, and evaluation. The WHO (2021) also uses the term 'digital health' in relation to telehealth and posits that this is the field of knowledge and practice associated with the development and use of digital technologies to improve health. For this editorial, the term telehealth will be used to encompass a range of terms used, including telemedicine/digital health.

Telehealth is not new. Shirzadfar and Lotfi (2017) suggest that it has been around since the 1970s. Van Dyk's (2014) framework views telehealth as being preventative, promotive, and curative. Telehealth is now being used to deliver health care across a wide range of specialities and through varied means including remote monitoring, and real-time video consultations. It has been proven to contribute to the efficacy of health care systems, for example, in remote/rural locations or primary care. The Telemedicine Industry Benchmark Survey highlighted that telehealth could improve patient satisfaction, and increase engagements, which improves the overall patient experience (Klingler, 2018). There is, however, limited research on the extent of the usage of telehealth by nurses. Beauséjour and Hagens (2022) in a Canadian study using data collected in 2017 and 2020, identified that nurses who delivered care using telehealth were, predominantly, nurse practitioners and were more likely to work in urban primary or community care settings. The COVID-19 pandemic impacted worldwide in 2020 and spread to every inhabitable continent within weeks, outpacing the health system's ability in many countries to test track and contain people with suspected infection. Initially, there were no effective interventions that could stop the spread of the virus except implementing a lockdown, social distancing, the wearing of masks and hand hygiene. People were instructed to quarantine in -place to reduce exposure to the SARS-CoV-2 virus (Monaghesh & Hajizadeh, 2020). The world was put on 'pause' as businesses, education, social and religious gatherings, travel, and all forms of transportation shut down to halt the spread of COVID. However, people with acute and chronic health conditions still required medical care and treatment, while the health care systems struggled to operate under the weight of the additional COVID-19 burden.

To maintain health care delivery, health professionals had to rapidly re-think modes of patient contact and they introduced and implemented telehealth solutions across a range of settings, patient groups and conditions (Islam et al., 2020; Murphy et al., 2022). Therefore, in many countries, health systems and clinical settings had to take an exponential leap forward to incorporate greater use of technology or previously unthought of modes of patient engagement to ensure health care delivery continued. Nurses, who may not have been using telehealth solutions previously had to rapidly adjust to using innovative technologies, in hospital and community setting (Monaghesh & Hajizadeh, 2020).

Health care literature is replete from 2020 with papers capturing how telehealth has been used and utilized by health professionals, including nurses, with multiple reviews conducted. For example, a review undertaken by Levoy et al. (2022) provided a synthesis of palliative care during the pandemic evidencing the increased utilization of telehealth, which was critical in circumventing the barriers and challenges imposed by COVID-19. They recommended that palliative care services should continue to embrace and sustain the changes with respect to telehealth interventions in oncology care. Baldwin-Medsker and Skwira-Brown (2022) undertook a literature survey on the use of technology in oncology care and the changes in practice resulting from the pandemic. They identified that telehealth had become an integral tool for the oncology care team and provided many new opportunities to improve the lives of patients. Positive benefits from telehealth were also reported in Kwok et al.'s systematic review and meta-analysis (Kwok et al., 2022) compared nurse-led telehealth interventions for symptom management in patients with cancer receiving systemic or radiation therapy cancers to more traditional care provision. They identified that most patients receiving telehealth interventions had reduced symptom severity and no difference in health services use.

The positive benefits of telehealth are not only unique to oncology or palliative care. For example, León et al. (2022) undertook a scoping review on the impact of perioperative remote patient monitoring on nurses and other health professional workflows. The benefits they identified included improvements in data management and analysis, which improved timely detection and treatment of conditions and optimized health care resources, resulting in a reduction of in-hospital visits and stays. They further identified how patient relationships could be improved by increasing satisfaction and convenience of care using these technologies.

A common theme emerging from these recent reviews has been the key role of management in introducing telehealth solutions and sustaining the associated changes. It is essential that nursing services

both embrace and lead telehealth. Nurse managers are well established as the gatekeepers and enablers of change and improvement (Draper et al., 2008; Stefancyk et al., 2013). They have a responsibility to introduce, test and evaluate change and improvement in the clinical environment (Kodama & Fukahori, 2017). However, much of the change and improvement efforts in health care and by nurse managers tends to be reactive rather than proactive, focusing on real-life problems in the now rather than abstract or unfamiliar solutions for the future. Readiness for change, improvement and implementation often has to join the lengthy list of competing clinical environment readiness and demands for many nurse managers (Rafferty et al., 2013; Weiner et al., 2008; White et al., 2017). New and exciting digital or telehealth solutions may seem a lesser priority when compared to the many clinical demands and the daily busyness of clinical environments.

There are very few barriers as to why telehealth should and could not become an integral part of routine nursing care. The regulatory authorities controlling entry to the profession of nursing are open to nurses adopting and using technology in practice often directing pre-registration nurse education programmes to expose students to a diversity of digital innovations to ensure that newly qualified graduates are open to, prepared and ready to use technology in health care delivery. For example, the Nursing and Midwifery Council UK (2018) requires that the graduate effectively and responsibly use a range of digital technologies to access, input, share, and apply information and data within teams and between agencies. Both the Nursing and Midwifery Board of Ireland (2016) and the Australian Nursing and Midwifery Accreditation Council (2019) also require pre-registration programmes to ensure that graduates are responsive to emerging trends, including technology.

Singh et al. (2022) suggested that telemedicine's underutilisation could have ended with the COVID-19 pandemic but concluded by saying that by 2021 there was already a drastic decline in utilization as people went back to pre-pandemic modes of health care delivery. It seems therefore that despite some progress, the barriers to implementing and sustaining telehealth in everyday nursing practice remain. These barriers may be related to the competencies of registered nurses to deliver specific telehealth interventions; poor communication between services; a perceived lack of encouragement from nurse leaders; cybersecurity and/or privacy concerns; and a lack of appropriate policies in place to support them (Beauséjour & Hagens, 2022; Chen et al., 2021; Garber & Chike-Harris, 2019; Sensmeier, 2019).

der Cingel et al.'s (2021) study identifies a cohort of nurses that held some strong opinions on telehealth, regarding it not being as suitable for use with older people, even though many nurses acknowledged that some older clients had the skills or could easily learn to use the devices if they were user friendly. From this study, many nurses identified that telehealth could positively impact the health care relationship between nurse and patient and the building of nurse/patient trust. Nurses in this study still valued physical presence, and the need to have face-to-face contact, particularly when providing emotional support. However, when technology can be used to support a person-centred approach, many nurses believed it could an asset and a helpful aid or tool to support the care they want to provide (der Cingel et al., 2021).

It is evident in the literature that there are some reservations when it comes to introducing and providing telehealth solutions and Nurse Managers should therefore be cognisant of these concerns before promoting or implementing any telehealth initiative. While there may be a determined emphasis from senior managers to drive forward with telehealth solutions to benefit health care practice there are well documented risks with top-down change approaches (Lin et al., 2018). The reservations of nurses, who inevitably become the technology users and implementers, should be recognized, and pre-implementation efforts must clearly articulate how any telehealth solution being introduced will support the important fundamentals of nursing care, enhance patient-centredness and strengthen the nurse–patient relationship. Attention should also be afforded to how telehealth improvements and changes will be maintained, evaluated, and sustained.

Implementing telehealth solutions additional to other health service change and improvement initiatives runs the risk of change fatigue amongst nurses and midwives, to the detriment of its many benefits. It is therefore important that any telehealth initiatives being promoted are evidence and outcome based and clearly articulate the benefits. A readiness audit should be conducted to identify any other competing change or improvement initiatives and priorities considered. We are therefore not suggesting a 'blind adoption' approach, but an open-mindedness to consider where telehealth can support/enhance nursing practice, patient-centredness and the strengthening of the nurse–patient relationship. Following their review, Abdolkhani et al. (2022), stated that further research was required to understand the strategies required to empower the nursing workforce to be actively involved in digital health, its design, development, implementation, use and evaluation. Evaluation not just of the intervention, but also of its implementation, adoption and spread is essential and must combine a rigorous assessment of the causal effect of the intervention on the outcomes (internal validity) while also considering external validity, appreciating the contextual and organizational factors that mediate that causal effect (Hashiguchi, 2020). Nurse managers could and should play a role in the evaluation of the intervention/s. Singh et al. (2022) suggests one particular goal should be focused on establishing the parity of care between face to face and telehealth delivery.

Understanding the confidence and attitudes of health care professionals regarding the use of telehealth is another important aspect of evaluation. In Kuek and Hakkennes (2019) and Mills et al.'s (2021) studies, respondents were moderately confident in their ability to use digital health and overall had positive beliefs. Fronczek et al. (2017) outlines the importance of education and familiarity and believe that providing nurses with additional education and experience equips them with the skills required to practice using telehealth and ensure its success.

To conclude, most people now use digital technologies in their day-to-day life and have grown to expect the same level of responsiveness and ease of use in their health care provision and in health care settings. Telehealth is as much about future-proofing the health

care landscape as it is about improving its delivery. It is not about supplanting face-to-face to face care but making health care more accessible, efficient, equitable, and person-centred. It is important that the nursing profession is not just open to evidence-based technological innovations and their many benefits but that they advocate for them too. Telehealth education programmes for nurses should therefore not just include the technical elements but should also incorporate the many benefits for health care systems, staff, and patients. Like all change and improvement initiatives, sustaining any new telehealth intervention should be a key consideration. It is vital that nursing care does not just revert automatically to traditional or pre-COVID modes of delivery of care. Many nursing services got an opportunity during the COVID-19 pandemic to digitally transform and experience the values and benefit that technology and telehealth can bring to health care delivery. Health services need to build on the best elements of this transformation, evaluate them and the many benefits they have brought to health care delivery and the patient experience. Nurse managers play a key role in making sure that this happens.

KEYWORDS

barriers, care delivery, change management, confidence, education, telehealth health

Suzanne Denieffe PhD, Dean of Humanities[1]
Margaret Denny PhD, Associate Professor[2]
Mark White PhD, Vice President for Research[1]

[1]*South East Technological University, Ireland*
[2]*Faculty of Nursing, University of Maribor, Maribor, Slovenia*

Correspondence
Suzanne Denieffe, South East Technological University, Ireland.
Email: suzanne.denieffe@setu.ie

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REVIEW ARTICLE

WILEY

Improvement of the psychosocial support for frontline nurses in public hospitals during COVID-19 pandemic

Khalaeng Frans Thobane Masters in Nursing Science, PHD Candidate[1] | **Fhumulani Mavis Mulaudzi DLitt et Phil, South African Research Chair in Nursing**[1] | **Miriam Mamphamo Moagi PHD, Professor**[2]

[1]Department of Nursing, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa

[2]School of Nursing, Faculty of Health Sciences, North-West University, Potchefstroom, South Africa

Correspondence
Khalaeng Frans Thobane, Department of Nursing, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa.
Email: frans.thobane@tuks.co.za

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Abstract

Aim: The aim of this study was to explore and describe the psychosocial support for frontline nurses during the COVID-19 pandemic in the Tshwane district, Gauteng Province, South Africa.

Background: The COVID-19 pandemic has brought a lot of psychosocial distress for frontline nurses taking care of COVID-19 patients. The frontline nurses were scared of being infected with COVID-19, or exposing their families and loved ones to the risk of infection. A high number of nurses were infected with COVID-19, and some died due to the virus.

Evaluation: This study followed a qualitative, explorative, and descriptive research design. Data were collected using semi-structured interviews and individual interviews were conducted. Seventeen participants, who consisted of all categories of nurses taking care of COVID-19 patients, were interviewed until data saturation was reached. Non-probability sampling method was used as a technique to select the participants. Data were analysed using Tesch's method of open coding.

Key issues: The following five themes are identified: (1) acknowledgement, appreciation, and recognition of frontline nurses, (2) conducive managerial practices, (3) debriefing and training of frontline nurses, (4) human resources support, and (5) psychological and social support for frontline nurses and their families.

Conclusion: The implementation of the psychosocial support for frontline nurses taking care of COVID-19 patients is critical in improving patient care.

Implications for nursing management: The findings of this study should alert nurse managers to plan the best way to support frontline nurses caring for COVID-19 patients.

KEYWORDS
COVID-19, nurses, personal protective equipment, psychosocial support

1 | INTRODUCTION

Nurses are at the centre of the fight against Corona Virus Disease 2019 (COVID-19) pandemic, and they are also scared for their lives and those of their loved ones. As frontline workers, nurses are some of the important people in any health system to fight against the COVID-19 and their psychosocial well-being is vital. As such, health care workers (HCWs), including nurses, have experienced significant occupational stressors and challenges associated with the risk of exposure to COVID-19 when rendering services (Buselli et al., 2021). Psychosocial problems manifest in different ways and among others, include stress, anxiety, fear, post-traumatic stress disorder, while related social problems, include poor family relations, isolation, stigma, and lack of family support. A study conducted in Wuhan, China, revealed that nurses are facing the fight of COVID-19 head on and are at risk of contracting COVID-19 infection that exposes them to significant stress, which, in turn, causes them to have psychosocial problems (Lai et al., 2020). Lai et al. (2020) revealed that health care workers present with symptoms of depression anxiety (insomnia and distress). This shows that the nurses and other HCWs are seriously affected by the COVID-19 pandemic.

The study conducted by Van Bortel et al. (2016) also reported negative psychological effects on HCWs after the 2013–2016 Ebola outbreak in Guinea, Liberia, and Sierra Leone due to the traumatic course of the infection, fear of death, and the experience of witnessing others dying. In Africa, the psychosocial problems of nurses are related to lack of resources and equipment, poor support from government and hospital management, and lack or unavailability of counselling programmes for frontline nurses (Shah et al., 2021).

The above is also applicable to South African nurses. Studies have revealed that many African countries are struggling with the increasing cases of COVID-19 due to lack of, or limited, medical resources and infrastructure, inadequate health care workers, and minimal intensive care unit (ICU) beds. Psychosocial support is necessary to provide coping mechanisms for people during difficult times and for maintaining good physical and mental health of affected individuals (ICRC, 2017). It is imperative to explore the importance of psychosocial support for nurses taking care of COVID-19 patients so that strategies can be developed to support them.

One of the stressors that nurses face is to treat COVID-19 patients with shortage and/or unavailability of personal protective equipment (PPE), which exposes them to the possibility of personal or family infection (Akkuş et al., 2021). The existing global supply of PPEs has not been enough to satisfy the global demand (WHO, 2020) and that has contributed to the nurses' psychosocial problems. Shortage of the PPEs is often experienced in low- and middle-income countries (LMICs) like South Africa, where it is projected that the pandemic's impact will be high (Risko et al., 2020).

Another stressor is spending a long time wearing PPEs, such as masks, which causes them to experience excessive sweating and some breathing difficulties (Loibner et al., 2019). Other stressors include the lack of an approved treatment for COVID-19 and the inability to tell how long the pandemic will last (Wu et al., 2020).

Furthermore, the shortage of staff as a result of quarantining or the isolation of COVID-19 positive nurses has added an additional burden to the nurses on duty (Gavin et al., 2020). The increased workload has led to work-related burnout and stress, which, in turn, compromises the quality of patient care.

It is evident that psychosocial support is important for the physical and mental well-being of the COVID-19 frontline nurses. This is essential because when the support is not offered, this may affect how nurses render services to the patients and their willingness and commitment to their work. COVID-19 is a new infectious disease globally and to South African nurses and other HCWs. Therefore, there is less or no knowledge about its psychological impact on nurses in South African context; therefore, the new knowledge will assist South Africa and other low- and middle-income countries to plan better for the future pandemics like COVID-19.

The Provincial Government in Gauteng has always been providing psychological support services for employees' inclusive of nursing staff through the Employee Health and Wellness Programme (EHWP) and Employee Value Proposition (EVP) programme. The EHWP services ranged from psychological counselling, substance abuse programmes, work related stress, and financial problems while EVP programme is meant to improve health care staff morale while creating an environment where employees feel valued. It is however not evident whether the nurses working with COVID-19 patients did receive the psychological services or the EVP programme.

Therefore, the overall aim of this study was to explore and describe the psychosocial support for frontline nurses during the COVID-19 pandemic in the Tshwane district of the Gauteng Province, South Africa.

2 | METHODS

2.1 | Research design

A qualitative, explorative, and descriptive research design was used for this study. This design strategy was adopted in order to gain an in-depth understanding of the psychosocial support for frontline nurses during the COVID-19 pandemic in the Tshwane district of the Gauteng Province. The advantage of qualitative methods is that qualitative research approach produces the thick (detailed) description of participants' feelings, opinions, and experiences and interprets the meanings of their actions (Rahman, 2020).

However, above the advantages, there are some limitations. According to Rahman (2020), it is argued that qualitative research approaches sometimes leave out contextual sensitivities, and focus more on meanings and experiences rather than any other imperative issues in the context. Additionally, the disadvantage of qualitative methods is that the researcher's subjectivity and biasness based on the strong prior believes can be a serious problem in the analysis of the information (Ehrlich & Joubert, 2017). In order to mitigate the disadvantages above, an independent coder was used during data analysis to compare, merge and agree on the independently analysed data.

2.2 | Setting and sample of the study

The study was conducted in South Africa, Gauteng Province, Tshwane district. South Africa has nine provinces and Gauteng is one of these provinces and the most populous. Gauteng is divided into five districts and Tshwane is one of the districts. The district has 11 public hospitals, which include two mental health hospitals, and nine general hospitals. The study was conducted in one of the general hospitals that is taking care of the COVID-19 patients. The COVID-19 wards and the accident and emergency department of the general hospital in Tshwane District was used for the interviews. The rationale for choosing this one hospital was because when Covid-19 started in South Africa in 2020, this particular hospital was repurposed as a field hospital for COVID-19 patients. Therefore, majority of the nurses working in the hospital would be familiar with the subject study.

In this study, the target population was all nurses (professional nurses, staff nurses, and auxiliary nurses) working with COVID-19 patients. Professional nurses are nurses who have been trained for a 4-year diploma, training done in nursing colleges or a bachelor of nursing degree done at universities. Staff nurses have completed a 2-year diploma in nursing, while auxiliary nurses have completed a 1-year certificate. Non-probability sampling was used in the study. The technique that was used to select the participants was convenience sampling (Polit & Beck, 2017). The professional nurses, staff nurses, and auxiliary nurses who are working in other units, such as the accident and emergency unit and are taking care of patients with COVID-19 and willing to participate, were included in the study.

2.2.1 | Sample size

During the time of the study, there were 26 professional nurses, 7 enrolled nurses, and 18 enrolled auxiliary nurses working with COVID-19 patients, and only 17 agreed to participate in the study. The size of the sample was also determined by the saturation after 14 participants were interviewed. After reaching saturation, the researcher interviewed three additional participants to determine that indeed there was no new information emerging (Creswell & Poth, 2016).

2.3 | Participants

A total of 17 COVID-19 frontline nurses participated in the study as depicted in Table 1. The participants' ages ranged from under 40 to over 50 years. Under 40 years ($n = 6$), between the ages of 41 years and 50 years ($n = 7$) while over 50 years ($n = 4$). All participants were black females. All different categories of nurses taking care of COVID-19 patients participated in the study. Enrolled auxiliary nurses ($n = 4$), enrolled nurses ($n = 3$), and professional nurses ($n = 10$) were interviewed.

TABLE 1 Demographic profile

Criterion	Characteristics	Frequency	Percentage
Age	<40 years	6	35%
	41–50 years	7	41%
	>50 years	4	24%
Gender	Males	-	-
	Females	17	100%
Race	Black	17	100%
	Coloured	-	-
	White	-	-
Category of nursing	Enrolled auxiliary nurse	4	24%
	Enrolled nurse	3	18%
	Professional nurse	10	58%
Type of employment (current status)	Permanent	13	76%
	Contract	4	24%
Work experience	<5 years	1	6%
	6–10 years	5	29%
	11–20 years	6	36%
	21–30 years	5	29%
	>31 years	0	0%

2.4 | Data collection

In this study, an individual in-depth, or unstructured interviews, were used as a method of data collection. Data collection or interviews of all participants were conducted by telephonically—while the participants were off duty and at their respective homes to ensure privacy and observe COVID-19 regulations. The following guiding question was used during the interviews: *What are the psychosocial support services that you are receiving from the Department of Health or hospital management? If you could make any suggestions or recommendations to improve the psychosocial support for nurses working with COVID-19 patients, what would it be?* Probing questions, seeking more clarity, were also included in the interviews. The duration of the interviews varied between 40 and 60 min. A tape recorder was used with the consent of participants during the telephone interviews and the data were transcribed verbatim.

3 | ETHICAL ASPECTS OF THE STUDY

The study was approved by the Faculty of Health Sciences Ethics Committee of the University of Pretoria with the ethics reference number 586/2020. The second approval was sought from the Tshwane Research Committee with the reference number GP_202010_020. The researcher also requested permission to carry out the study from the Chief Executive Officer (CEO) of the facility where the study was conducted. All COVID-19 protocols were observed.

4 | TRUSTWORTHINESS

Measures to ensure trustworthiness were adhered to by applying the five framework described by Denzin and Lincoln (2005). These criteria are as follows: credibility, transferability, dependability, confirmability, and authenticity (Polit & Beck, 2017). Credibility was ensured through prolonged engagements with participants during data collection. Transferability was ensured, as the researcher used purposive sampling to ensure that participants provided rich descriptions and gave dense descriptions of the demographics and dense descriptions of the results. The researcher used step-wise-replication code recoding of data and a dependability audit to ensure dependability. The researcher used a dependability audit, field notes, observation, and transcripts of the whole research process as the evidence chain to ensure confirmability. Authenticity was ensured, as the researcher ensured quality of balance by reflecting the views, perspectives, claims, concerns, and voices of all participants in the study.

5 | DATA ANALYSIS

Data were thematically analysed. The process of data analysis, that is reading of transcripts, in-depth individual interviews and field notes, was done by the researcher. Participants explained their own views about what resources can be put in place for them to cope with the stress related to COVID-19 pandemic. The steps of data analysis were followed as described by Tesch's method of open coding (Creswell, 2014). Themes were identified and controlled with literature. An independent coder was used to enhance trustworthiness.

6 | RESEARCH FINDINGS

Five themes emerged from the data analysis: acknowledgement, appreciation and recognition of frontline nurses, conducive managerial practices, debriefing and training for frontline nurses, human resources support, psychological and social support for frontline nurses and their families, as depicted in Table 2.

6.1 | Theme 1: Acknowledgement, appreciation, and recognition of frontline nurses

Some COVID-19 frontline nurses feel that they are not being appreciated, acknowledged, and recognized by government, hospital, and nursing management for their work in the fight against COVID-19. They mentioned that they are not supported physically. Physical support means that the nursing and/or hospital management should regularly visit the COVID-19 units to support the nurses and assess the following: how are the nurses doing, are they having any challenges, are the nurses experiencing any family challenges? However some COVID-19 frontline nurses mentioned that they are being acknowledged and supported by management who frequently check if they are well and fit to work inside COVID-19 ward.

TABLE 2 Themes that emerged

Themes
Acknowledgement, appreciation, and recognition of frontline nurses
Conducive managerial practices (planning and organization)
Debriefing and training of frontline nurses
Human resources support
Psychological and social support for frontline nurses and their families

In this study, psychosocial problems refers to the psychological and social problems experienced by nurses due to caring for COVID-19 patients. COVID-19 frontline nurses proposed the following should be implemented to show acknowledgement, appreciation, and recognition of frontline nurses:

The participants verbalized that they need to be compensated for risking their lives by working in COVID-19 wards. They further gave options on how the government can implement the compensation for COVID-19 frontline nurses, the options are as follows: option 1, the government should allow the COVID-19 frontline nurses not to pay tax for at least a few months; or option 2, the government should implement the danger allowance for COVID-19 frontline nurses; or option 3, the government should at least compensate the family should the COVID-19 frontline nurses die from COVID-19 complications. This is supported by the comments from the participants who said:

> We need something like a compensation. There must be something for nurses who were working with COVID-19 patients who were dying. The Government must say "thank you." We are not in the hunt for money, but the Government must do something. The Government can allow us not to pay tax for at least five months. The Government can also increase the salaries of the COVID-19 front line nurses who risked their lives since last year March (2020) when COVID-19 was first traced in South Africa. That will make us feel happy. If government is taking care of us, we will feel that we are recognised, and we will become happy. If there is another pandemic, we will be free to go the frontline again (P5).

> The Government can pay danger allowance and maybe just a bit of recognition for frontline nurses. The work that COVID-19 frontline nurses do and the pay that we get is very, very unfair. Another thing is that maybe if a frontline nurse contracts COVID-19 and dies from it or becomes chronically ill, the Government should pay a compensation (P9).

Other participants mentioned that they need the hospital and nursing management to provide motivation and support to COVID-19 frontline nurses to encourage them to continue with the good work. They also requested the nursing management to offer study opportunities. The following is what was said:

> Hospital and nursing management should also come to the wards to encourage us and motivate us to work harder (P10).

> The frustration of being on the same post for many years. So, I wish that we can be given the opportunity to further our studies (P9).

However, some participants mentioned that they are being acknowledged and supported by management who frequently check if they are well and fit to work inside COVID-19 ward. This is supported by the comments from the participants who said:

> The support from the nursing and operational managers who phoned me was appreciated. The Provincial and National Department of Health also phoned after i have received the results of having diagnosed COVID-19 positive (P8).

> Another thing is that management is supportive (P3).

6.2 | Theme 2: Conducive managerial practices (planning and organization)

COVID-19 frontline nurses verbalized that they are stressed by working in the inconducive or unfavourable work environment. The hospital and nursing management should provide good managerial practices and offer effective psychosocial support to nurses working in the frontline during the COVID-19 pandemic. There are several suggestions that the participants have presented to achieve conducive management practices for COVID-19 patients.

One participant strongly suggested that a separate ward to manage mental health care users with COVID-19 infection should be created because it is difficult for nurses to manage such patients and critically ill patients, and the following participant was said:

> The hospital is mixing patients, medical and psychiatry. Therefore, I wish the Department of Health could make a provision or create a ward for mental health patients who are COVID-19 positive. The COVID-19 frontline nurses will continue to provide care and treatment to them because as nurses we are trained in general nursing, psychiatry, and midwifery. But they need to be separated from the medical patients (P2).

Nurses are always confronted by families when their family member has passed on that they were never given a chance to say their goodbyes. This causes the frontline nurses to experience the stress of having to explain to the aggrieved family members about COVID-19 protocols and hospital policy which is outside their scope of practice. The following participant verbalized that:

> The hospital and nursing management should give families chance to say their goodbyes to loved ones. It can be one visitor per patient who will be provided with full PPE. This is important because if the patient dies, the families always raise complains to nurses that they should have at least been given a chance to see their family member before dying. The complaint is raised with nurses and who unfortunately do not have the authority to allow families inside COVID-19 wards. Therefore, the hospital and nursing management are the ones who can change hospital policies. At least one family member must be allowed to come in the COVID-19 ward, wear PPE and say their goodbyes … (P3).

The participants suggested that the hospital and nursing management should reduce the times that staff spends inside the COVID-19 ward. They mentioned that if they spent longer times in full PPE, it becomes hot and this is unbearable. The following participant verbalized that:

> I wish that the hospital and nursing management can reduce the number of hours that we work inside COVID-19 ward. Currently we are working inside COVID-19 ward uninterrupted for four hours and the PPE is not comfortable. PPE makes you feel hot, and when you get out of there, you do not want anything. The hot PPEs make you to become tired and exhausted. The four hours working inside COVID-19 is too long. At least if the hospital and nursing management can reduce the time to three hours. It is also difficult to go to the bathroom when you are pressed … If you are already inside the COVID-19 ward and in full PPE, should you go to the bathroom, when you come back, you need to wear another PPE, which is a waste. So, four hours is too long for us (P3).

A suggestion box to be created for the staff to raise their suggestions and/or inputs for hospital and nursing managements. The COVID-19 frontline nurses feel that their opinions or suggestions are never taken into consideration when decisions are made. The participant said:

> The hospital and nursing management should create suggestion box or complaint or something for the employees to raise issues, so that the ideas of nurses and other HCWs are taken into account when planning at a higher level. There will be issues that are

frequently raised that will assist management in decision making and policy development (P6).

6.3 | Theme 3: Debriefing and training for frontline nurses

The COVID-19 frontline nurses' stress was related to insufficient information about the novel corona virus and they are expected to nurse the COVID-19 patients without any training.

Most participants expressed the need for continuous training on COVID-19, to be able to give the best care possible to COVID-19 patients. There is a lot of new information coming in, continuous training and updating is necessary. The participants said the following:

> Nurses need more education about COVID-19. The other thing before we started to work in COVID-19 wards, the government, hospital, and nursing management were supposed to prepare us psychologically by training us on what to expect. When we started to work in COVID-19 wards, we did not know anything. We were only taught about the wearing of the PPE and how to protect ourselves (P12).

> Training on COVID-19 should be provided every week or every month, because new information is coming regularly as COVID-19 is new (P7).

The participants expressed the need for debriefing sessions on a regular basis since they are dealing with a new virus that is life threatening. They also feel that sharing experiences and ideas will be helpful and ease their stress. The following was said:

> Nursing teams from all shifts should find time where they can meet and discuss what is it that we experienced from the beginning of the month until to the end? What are the issues that we have encountered that made our daily tasks difficult? How best can we tackle certain issues (P6).

6.4 | Theme 4: Human resource support

COVID-19 frontline nurses verbalized that they are stressed by problems relating to human resources and staffing. The human resource challenges ranges from shortage of staff and temporary contract nurses' contracts not being renewed. COVID-19 frontline nurses suggested that the following can be done to improve human resource challenges.

Effective human resource management and support is key to win the battle against the virus. Adequate or enough staff with the required skills needs to be available. One participant mentioned that the DoH needs to improve staff shortages, which they did, however, the people were not skilled.

> The Department of Health, hospital and nursing management should hire properly skilled people as the temporary contract workers. Not people that will hang around and not do anything because that cost a burden on permanent employees (P15).

The COVID-19 temporary contract nurses recommended that the DoH should extend their contracts and/or employ them permanently.

> I wish that the department can appoint us on a permanent basis because we have offered ourselves to work with COVID-19 patients. The least they can do is to employ us permanently (P11).

> The government must give us the permanent jobs or extend our contract (P10).

6.5 | Theme 5: Psychological and social support for frontline nurses and their families

The majority of participants suggested that hospital and nursing management should organize psychologists to assist them and their families to deal with the psychological challenges they are facing as frontline nurses during COVID-19 pandemic. Participants said:

> The hospital and nursing management should arrange the psychologist to talk to us. When you talk to someone about some problems or challenges that you are experiencing, you feel better and relieved, and you feel like there is someone who values what you are doing … (P16).

Most participants mentioned that the support should also be extended to their families. The following comments were made:

> Yes, we need psychological assistance. … because I do not know. … about me only? What about my family? … I can do that with them (P8).

> I think for the family, if I am infected with COVID-19, the family will also be affected. They must also get in touch with the families to give them support (P17).

In addition to the support from the psychologists most participants expressed that the hospital and nursing management should arrange the social workers to give the COVID-19 frontline nurses and their family the support. Participants indicated that:

> The hospital and nursing management can call the social workers to come and talk to us including our family members (P14).

> I suggest maybe the social worker or psychologist can come to give us support (P10).

Most participants expressed the need for counselling and support for the nurses who come back from sick leave due to COVID-19 infections. The following participants indicated that:

> Like when you tested positive, when you come back to work, at least you should be referred to counselling (P7).

Another participant said that after coming back from COVID-19 sick leave, nurses should not be allocated in the COVID-19 ward again and said:

> So actually, my wish is that maybe after being diagnosed with COVID-19, the hospital must not let us work in the COVID-19 area again. Maybe they must allocate us to other departments like the Outpatients Department (OPD) or in the antiretrovirals (ARVs) clinic whereby we are not going to work with people with COVID-19 again (P8).

Some participants suggested that a support group should be formed for nurses who came back from COVID-19 sick leave and those that were infected. The following participant said:

> I think they should call us those who have been infected with COVID-19 to establish a support group. I think the staff clinic and the occupational nurse should organise a support group for us (P8).

7 | DISCUSSION

Our study aimed to explore and describe the psychosocial support for frontline nurses during the COVID-19 pandemic. Participants during data collection, felt that the South African Government, and the hospital management are not doing enough to recognise and appreciate their work as frontline nurses during COVID-19 pandemic. Furthermore, the frontline nurses indicated that they did not have regular visits from hospital management to provide psychosocial support. Psychosocial support in the form of one-to-one or group support can be provided to frontline nurses (Chen et al., 2021), in order for them to feel acknowledged and appreciated. Furthermore, the frontline nurses emphasised that the acknowledgement and appreciation that they wish to receive from the Government and hospital management should to be in the form of compensation.

Additionally, these frontline nurses, wished the compensation to be in form of care for their families, reduction in tax, risk allowance and appreciation. Maben and Bridges (2020) support the above expressions by participants and mentioned, "when nurses' occupational stress levels are high, supporting them practically and psychologically is very important in preserving their health in both short and long term." Jiang et al. (2020) support the above finding where they recommended that it is important for the COVID-19 frontline nurses to be compensated for their role in the fight against corona virus. Chersich et al. (2020) said that it is important for the nursing management, hospital management, the DoH, politicians, and other public figures to visit the frontline nurses, acknowledge their commitment and sacrifices, and deal with any challenges or negative perceptions towards nurses.

Most of the participants, who were temporary contract nurses, raised the concern that their contracts were coming to an end, and they were not sure if their contracts were going to be renewed. The COVID-19 temporary contract nurses requested that at least the DoH should consider extending their contracts and/or employing them on a permanent basis. COVID-19 frontline nurses also advised that the nursing and hospital management should at least listen to their views. This finding discloses that the COVID-19 temporary contract nurses feel that they deserve to be employed permanently by the Department of Health or their contracts be extended because they have risked their lives and responded to the call from the DoH.

The study by Jackson et al. (2020) revealed "authorities in both Australia and United Kingdom (UK), are considering several mechanisms such as accelerating the return to registration of qualified nurses who may have recently retired to return to practice." "Adequate staffing is needed to ensure that nurses are able to relieve each other during breaks, take leave when they are ill and provide appropriate skill mix" (Fernandez et al., 2020).

Another strong point is the lack of conducive environment for both patients and the nurses. The participants have provided some suggestions to create a conducive managerial/work practices/environment to improve COVID-19 patients' outcomes. Among those are the following: a separate ward be created to manage mental health care users with COVID-19 infection; one family member wearing full PPE should be allowed to visit their loved one during the patient's last days to say their goodbyes; a suggestion box be created for the staff to raise their suggestions or inputs; and review the time that the frontline nurses spend inside the COVID-19 ward.

The findings reveal that nurses want to improve the care of COVID-19 patients, which will, in turn, improve the nurse's psychosocial well-being through the suggestions that they put forward to the nursing management, hospital management and the DoH. The above expressions by participants are supported by Shanafelt et al. (2020), who stated that tangible actions must be taken to address the nurses' concerns, for example, nurses desire the support of their managers during this turbulent time. In their article, they suggested that hospital executives, and nursing managers, need to consider innovative ways to be present and connect with their nursing teams, given the constraints of social distancing. The authors emphasized that it is critical

that leaders understand the sources of concerns, assure nurses that their concerns are recognized, and work to develop approaches that mitigate their concerns.

The participants expressed that they need to be trained on COVID-19 for them to be able to give the best care possible for patients. The participants also advised that training on the COVID-19 vaccine should be conducted for frontline nurses because some are not sure about the information they have about the vaccines and as such, cannot make informed decisions about being vaccinated. This finding illustrates that frontline nurses need to be empowered with information for them to carry out their work with diligence and pride; since COVID-19 is new and more research is done continuously, updating nurses on a regular basis will be beneficial for all. The above expressions by participants are supported by Shanafelt et al. (2020) when they recommended that "the hospital management and the DoH must provide COVID-19 frontline nurses with rapid training to support them with a basic, critical knowledge base of COVID-19." In the study by Jiang et al. (2020), it is revealed that, "it is very importance to conduct COVID-19 training programs for nurses." The results of their study showed that 97.9% of nurses wish to be trained on COVID-19, to improve care and treatment for patients.

The participants expressed that they need to be counselled and supported when they come back from COVID-19 sick leave. They requested that the nursing and hospital management should arrange the psychologists and social workers for them and their families. This finding shows that the frontline nurses request the nursing management, hospital management and the DoH to extend the support to their families. Jiang et al. (2020) support the above expressions by recommending that it is important for the DoH and hospital management to provide credible support to frontline nurses' families. According to the study by He et al. (2021), "the hospital in Wuhan provided an isolation ward for the nurses who were infected with COVID-19, and participants in their study said that they felt safe with doctors and nurses close by and avoided exposing their family members." The authors further mentioned, "the nursing managers in Wuhan provided appropriate screening, care, treatment and psychological counselling to the COVID-19 infected nurses to ensure that they maintain their emotional stability."

8 | CONCLUSION

The aim of this study was to explore and describe the psychosocial support for frontline nurses during the COVID-19 pandemic in the Tshwane district of the Gauteng Province. The activity of this study was to propose recommendations to improve the psychosocial support for nurses working in the frontline during COVID-19 pandemic. The qualitative, explorative, and descriptive research design and five themes were identified. Recommendations were developed, based on the participants' inputs.

The implementations for psychosocial support for frontline nurses will assist in improving the care for COVID-19 patients. Most of the frontline nurses were experiencing psychosocial stress, which was related to directly taking care of COVID-19 patients. The frontline nurses are experiencing psychological problems because of witnessing the high number of people dying on a daily basis. Some frontline nurses and their families were infected with the COVID-19 virus and they are experiencing stigma from both colleagues and the community; people think that they are carrying the virus. The findings of this study have significant implications for the DoH, hospital, and nursing management to improve the psychosocial support for the frontline nurses and extend the support to their families.

9 | IMPLICATIONS FOR NURSING MANAGEMENT

The nurse managers should organize the psychologists and social workers to offer psychosocial services for the COVID-19 frontline nurses and their families. Employee Health and Wellness Programmes, through the support of nursing management and hospital management, should start support groups for the frontline nurses, especially those who have been infected with COVID-19. The nursing or hospital management should create a suggestion box for the staff, where they can write down their suggestions on how to improve the service. The DoH should communicate their plans about the temporary contracts well in advance to reduce the stress levels of temporary contracted nurses to enhance their productivity.

Nursing and hospital management should enhance their support to the nurses by discovering innovative methods of always being by their side, while at the same time, maintaining social distancing. The mental health nurses should provide training to nurses and student nurses on the mental health topics, including, dealing with anxiety, insomnia, self-care, and peer support. It is recommended that more qualitative research be conducted to explore and describe the psychosocial support for COVID-19 frontline nurses and that the study be conducted in other parts of South Africa.

10 | STRENGTH AND LIMITATIONS

All research participants were African; other race groups were not represented. However, the researchers assume that findings would have been similar since the conditions of employment are the same. Telephone interviews had some limitations as the non-verbal communications cues would not be observed; however, the emotions surrounding a particular topic could be sensed in the tone of voice.

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CONFLICT OF INTEREST

The authors declare that they have no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

ETHICS STATEMENT

The paper is part of a bigger study that is approved by the University of Pretoria, Ethics Research Committee and the ethics reference number is 586/2020.

CONSENT TO PARTICIPATE

Not applicable.

CONSENT FOR PUBLICATION

Not applicable.

DATA AVAILABILITY STATEMENT

The data used to support the findings of the study are available upon request.

ORCID

Khalaeng Frans Thobane https://orcid.org/0000-0003-3424-2553
Fhumulani Mavis Mulaudzi https://orcid.org/0000-0001-5144-0266
Miriam Mamphamo Moagi https://orcid.org/0000-0001-7291-1418

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ORIGINAL ARTICLE

WILEY

The impact of COVID-19 on long-term care facilities and their staff in Israel: Results from a mixed methods study

Jiska Cohen-Mansfield PhD, Professor[1,2,3]

[1]Department of Health Promotion, School of Public Health, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

[2]Minerva Center for Interdisciplinary Study of End of Life, Tel Aviv University, Tel Aviv, Israel

[3]Igor Orenstein Chair for the Study of Geriatrics, Tel Aviv University, Tel Aviv, Israel

Correspondence
Jiska Cohen-Mansfield, Department of Health Promotion, School of Public Health, Sackler Faculty of Medicine, Tel Aviv University, P.O.B. 39040, Ramat Aviv, Tel Aviv 6139001, Israel.
Email: jiska@tauex.tau.ac.il

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Abstract

Aim: We examined the impact of COVID-19 regarding organizational and management issues at Israeli long-term care facilities.

Background: Residents in facilities were very vulnerable to significant disease and mortality during COVID-19.

Methods: A survey of 52 facilities in Israel was conducted in 2020, consisting of closed- and open-ended questions. Mixed methods were used to analyze data both quantitatively and qualitatively.

Results: Three main effects emerged: worsened financial status of long-term-care facilities resulting from high expenditures for preventive measures and reduced revenue due to deaths and fewer resident admissions, increased workload due to decreased workforce and additional duties, and negative mental health effects on staff because of increased workload and the conflict between maintaining good clinical practice and following COVID-19 regulations.

Conclusion: The development of government directives needs to take into account potential conflicts between the directives and quality care principles and to provide a balanced approach that assures humane care. Facilities and their staff lacked adequate pandemic-related guidance and support.

Implications for Nursing Management: The results highlight the need to address staff shortages and training, to provide more support and clearer guidance to facilities and their staff, and to devise a framework and strategies for future health crises.

KEYWORDS
COVID-19, nursing homes, pandemic, personal protective equipment, quality care, staff burnout

1 | BACKGROUND

Long-term-care facilities [hereinafter, 'facilities'] for older persons in Israel consist of three main types: nursing homes, which are the most controlled institutions on the autonomy-control continuum, for older persons with functional and/or mental impairments; facilities for functionally independent and semi-dependent frail older persons; and continuing care retirement communities (CCRCs) mostly for functionally independent older persons, which represent the other end of the autonomy-continuum in terms of freedom of choice and self-determination (Lev & Ayalon, 2018). Prior to the outbreak of coronavirus disease 2019 (COVID-19), the disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, nursing homes experienced high transmission rates of

infectious diseases due to overcrowding; sharing of resources, such as bathrooms; and suboptimal infection control practices (Lee et al., 2020; Strausbaugh et al., 2003). Among workers at facilities, one sixth had a second job (which added an average of 20 hours to their work week), and over 60% maintained double- or triple-duty caregiving roles, increasing the risk of spreading COVID-19 among patients (Van Houtven et al., 2020). Lack of staff trained in infection control, insufficient infection control and general understaffing in facilities were known challenges prior to the pandemic (Kim & Jang, 2018; Matheï et al., 2007). COVID-19's rapid spread affected health care institutions and their staff. Some nursing home administrators identified lack of supplies and shortages of staff among their greatest and most common concerns (Quigley et al., 2020). The Health Ministry in Israel limited workers' ability to move between units and prohibited staff from working in more than one facility. Such regulations were reported to result in an abrupt decrease in staffing (Duan et al., 2020).

Although residents of facilities comprise a small portion of the general population, as of June 2020, many countries reported that between 40% and 85% of their COVID-19 fatalities occurred in facilities (over 80% in Canada and Slovenia; between 60% and 80% in New Zealand, Belgium and Ireland; between 40% and 60% in Norway, France, Sweden, Finland, United States of America, Israel, United Kingdom and Portugal) (Comas-Herrera et al., 2020). Yet few studies have examined the experiences of facility staff during the pandemic. Those studies which did, found emotional exhaustion and burnout among staff (Leskovic et al., 2020; Martínez-López et al., 2021; White et al., 2021). Whereas administrators struggled with confusing and contradictory guidelines from various health agencies, frontline workers labored under increased workloads, feared becoming infected, and experienced the emotional burden of caring for residents who were subject to isolation, illness and death (White et al., 2021).

This paper aims to expand the body of research which examines COVID-19's effect on facilities and their staff. Specifically, we investigated both how the pandemic affected facilities and how it impacted the routine and well-being of facility staff.

2 | METHODS

This research is part of a larger comprehensive study on the impact of COVID-19 on facilities, staff and residents. The analysis of the impact on residents is summarized in a separate paper (Cohen-Mansfield & Meschiany, 2022a). The study involved a cross-sectional online survey, and in this paper, we focus on the sections of the survey pertaining to the impact of COVID-19 on the facilities and their staff. Whereas most of the survey pertained to the time of completing the survey, it also included a retrospective section that queried about experiences during the first month of the pandemic, during the second month and at the time of completing the survey. Data collection took place between mid-July and mid-October, 2020.

2.1 | Participants

The Israel Ministry of Health website lists 250 facilities that provide older person care. Phone calls were attempted to all 250 facilities. Fifty facilities were never reached, and for nine, closure or invalid contact information prevented contact. Of the 191 facilities reached, 61 (32%) declined to participate in the survey. We sent online questionnaires and follow-up reminders to the remaining 130 facilities that had agreed to participate. Complete responses were collected from 52 facilities.

We endeavored to elicit responses from facility directors, but some directors authorized other knowledgeable staff to respond on their behalf (including occupational therapists, nurses, a social worker and a gerontologist). Presumably well positioned to respond with expertise and insight, these staff members (some serving in more than one role) added perspectives that likely provided a fuller understanding of COVID-19's effects on the facilities and their staff. In order to determine whether the 52 long-term-care facilities that participated were representative of the larger long-term-care facility population in Israel, we entered the data concerning size of facility and its for-profit or non-profit status for all the facilities that did not participate. We then compared the 52 participating facilities to two groups: (1) all other facilities on the list and (2) all other facilities that answered the phone (given that those that did not answer the phone may have been closed or in the process of closing). The comparisons of the 52 participating facilities to the two groups and for the two variables (size and profit status) were conducted via chi-square analyses. These analyses showed that the sample was representative of the larger population.

2.2 | Assessment

The questionnaire, developed specifically for this study, included background questions about the responding participant's long-term-care facility, about the responding participant, and multiple questions about the impact of COVID-19. It was developed on the basis of prior research on facilities in Israel and North America (Cohen-Mansfield, 1995, 1997; Cohen-Mansfield et al., 2012; Cohen-Mansfield & Bester, 2006; Cohen-Mansfield & Meschiany, 2022b), information gleaned from news media at the start of the pandemic, and discussions with a nursing home director, a nursing home social worker, and an activist involved in nursing home issues. This paper reports on the questionnaire results regarding the impact of COVID-19 on the facilities and their workforce. The topics include the staff turnover rate during COVID-19 and how employees experienced changes instituted by facilities in response to the pandemic.

The survey included both closed- and open-ended questions. The closed-ended questions inquired into facility demographic characteristics such as number of residents, number and type of units, and the responder's position at the facility. It included questions like: 'Facility classification: a. For profit, b. Non-profit. c. Other, please specify'; 'Reasons for leaving: Please specify how many employees left for each reason: a. Already working at another facility, b. Fear related to

increased risk of illness/death due to old age, c. Having diseases that place them at heightened risk if infected, d. Took unpaid leave, e. Contracted COVID-19, f. Contracted other illness, g. Other, please specify'; and 'For the following time periods, please describe how the pandemic and staff turnovers affected the stress levels of the remaining staff, compared to the period before COVID-19. Please use the following scale: 1—Stress decreased to a large extent; 2—stress decreased to a small extent; 3—stress decreased to a moderate extent; 4—stress level has not changed; 5—stress increased to a small extent; 6—stress increased to a moderate extent; 7—stress increased to a large extent; 9—other, please specify. a. The beginning of the pandemic (first month) ___ b. Second month ___ c. Today (time of interview) ___'.

The open-ended questions included questions such as, 'what was the greatest challenge posed by the pandemic?'; 'Please specify whether and what changes were made in work routines during the COVID-19 pandemic (shifts, contraction/extension of working hours, changes in work procedures, etc.)'; and 'In the aftermath of the pandemic, what actions would you suggest for the present and in the future that will benefit the facility/residents?'

2.3 | Analysis

2.3.1 | Quantitative approach

Responses to closed-ended questions were analyzed quantitatively, using *IBM® SPSS®* Statistics 26. Differences between groups were compared via *t* tests for ordinal and interval data, and through chi-square for nominal level data. Differences between measurement times of stress level from COVID-19 were compared via repeated measures ANOVA, with post-hoc tests using Bonferroni corrections.

2.3.2 | Qualitative approach

Responses to open-ended questions and interviewee comments were analyzed qualitatively, by way of the following steps: (1) acquiring a sense of each open-ended response, (2) extracting significant statements, (3) formulating meanings, (4) organizing formulated meanings into clusters of themes, (5) exhaustively describing the investigated phenomenon and (6) describing the fundamental structure of the phenomenon. These steps were guided by emergent coding strategy (Stemler, 2000), whereby two research staff members read, coded and categorized responses independently and then revised the codes through discussion until agreement was reached. The proposed coding was reviewed by another staff member, and the main themes were ultimately agreed upon by all research staff involved. Themes are illustrated via quotes. Quotes in this paper are identified by facility number, for-profit versus not-for-profit status and facility size: (small, medium or large). Finally, coded data were used to build a process map reflecting the explanations given by the interviewees and diagrammatically depicting the relationships between the themes that emerged.

TABLE 1 Facility and respondent characteristics ($n = 52$), Israel

	n		
Type of facilities			
For profit	37/52 (71%)		
Not for profit	15/52 (29%)		
Nursing home	28/52 (54%)		
Assisted living facilities	14/52 (27%)		
Geriatric long-term hospital	10/52 (19%)		
Facility size			
# of beds, range, *mean* (*SD*)			
Small 9–38, 25.7 (8.6)	17/50 (34%)		
Medium 39–120, 75.6 (22.3)	17/50 (34%)		
Large 121–450, 207.4 (81.5)	16/50 (32%)		
Responder gender (female)	30/52 (58%)		
Responder role			
Facility manager	41/51 (80%)		
Activity worker	4/51 (8%)		
Nurse	3/51 (6%)		
Doctor	1/51 (2%)		
Social worker	1/51 (2%)		
Gerontologist	1/51 (2%)		
	Mean (*SD*)	**Min**	**Max**
Total departments per facility	3.0 (2.2)	1	10
Types of units per facility			
Skilled nursing	1.8 (1.2)	0	5
Nursing	1.0 (2.5)	0	10
Dementia unit for mobile residents	0.9 (0.8)	0	3
Assisted living	0.9 (0.8)	0	2
Independent	0.5 (0.5)	0	1
Residents			
# in the facility	100.8 (90.1)	9	450
Beds			
# standard geriatric nursing	52.6 (39.7)	14	180
# dementia unit for mobile residents	12.3 (20.5)	0	90

2.4 | Ethical considerations

During the recruitment telephone calls and at the beginning of the questionnaire, potential participants were informed of the purpose of the research, assured that their participation was voluntary and advised that they could stop answering the questionnaire at any time. Informed consent to participate was obtained verbally on the phone

and also inferred by completion of the online questionnaire. Ethical approval was obtained from the Institutional Review Board of Tel Aviv University, Number 0001467-1.

3 | RESULTS

3.1 | Characteristics of participants and facilities

The 52 facilities that completed the online questionnaire included 28 nursing homes (54%), 14 assisted living facilities (most having nursing care units) (27%) and 10 long-term geriatric hospitals (19%). Of the facilities, 34% were small (S) (9–38 residents, $M = 25.7$, $SD = 8.6$). The same percentage of facilities were medium (MED) (39–120 residents, $M = 75.6$, $SD = 22.3$), and 32% were large (L) (120–450 residents, $M = 207.4$, $SD = 81.5$). Most facilities ($n = 37$, 71%) were for-profit (P) and 29% ($n = 15$) not-for-profit (NP), of which four were kibbutz (collective community)-sponsored facilities for community members (K). Most of the responders (80%) were facility directors. Others were occupational therapists (8%), nurses (6%), a social worker (2%) and a gerontologist (2%). Characteristics of the facilities and respondents who completed the questionnaire are presented in Table 1.

3.2 | Effects of the pandemic on the economic status of facilities

When facility administrators were asked to describe the effects of the pandemic, 31% answered that it led to significant economic damage: 'We are unable to cope with the large expenses from COVID-19, and we did not receive any help from the government' (#2241, non-profit [NP], small facility [SM]).

Fiscal difficulties were also raised when respondents were asked about the types of assistance they wished to receive. Whereas 15% of respondents indicated the need for direct financial help: 'an extra budget to compensate for huge expenses and to recognize the [extra effort provided by] employees' (#3192, for-profit [P], large facility [LG]), others indicated more generally that higher funding would have enabled facilities to meet the unusual needs that arose. Requests included a wide range of needs, including personal protective equipment (PPE) (25%), 'We would appreciate receiving a stock of protective equipment on a regular basis' (#1961, P, medium-sized facility [MED]), additional support to hire staff (15%), such as nursing assistants, '[we] need nursing assistants, but they need to be trained and allowed to continue working overtime [hours]' (#2531, P-LG), non-professional staff for running leisure activities for residents (13%), 'assistance of activity personnel, of music providers' (#1081, P-MED), external support for assuring adherence to pandemic guidelines (10%), 'assistance in supervising family visits' (#2691, P-SM), psychological support for staff (4%), 'psychological counseling in coping' (#1392, P-MED), and staff transportation (#1611, P-MED) (2%).

About 27% of facilities reported a significant problem with PPE shortages and PPE costs: 'In the first stage [of the pandemic], the need to buy protective equipment at excessive prices—up to 20 times greater than pre-pandemic prices—posed a very significant financial challenge' (#1641, NP-LG). Shortages were also reported concerning disposable gloves (64% of respondents) and disinfectant products (53%).

The crisis posed by increased operating expenses was worsened by the drying up of new admissions: 'The biggest problem today is the lack of residents—besides the deaths, there are almost no admissions of new residents, which makes it very difficult for the home [facility]' (#3501, P-LG).

3.3 | Effects of the pandemic on facility workforce and workload

A quarter of the facilities reported staff shortages: 'the facility is run with shortages and lack of permanent nursing staff' (#3111, NP-SM). The shortages of staff are shown in Table 2.

TABLE 2 Turnover characteristics

	Left			Joined			
Profession	Mean (*SD*)	Min	Max	Mean (*SD*)	Min	Max	*T*
Total	6.0 (7.9)	0	37	4.6 (5.5)	0	24	1.33
Nursing assistants	2.5 (3.9)	0	21	2.7 (2.7)	0	10	0.41
Nurses	1.8 (3.6)	0	20	1.6 (2.6)	0	15	0.33
Activity worker (TA)	1.1 (1.8)	0	10	0.4 (0.8)	0	4	2.36*
Physiotherapists	0.5 (0.9)	0	3	0.2 (0.4)	0	2	2.52*
Social worker	0.3 (0.6)	0	2	0.2 (0.6)	0	3	1.07
Occupational therapist	0.4 (0.6)	0	2	0.1 (0.3)	0	1	2.18*
Doctors	0.2 (0.5)	0	2	0.2 (0.5)	0	2	0.00
Communication clinician	0.3 (0.5)	0	1	0.1 (0.2)	0	1	2.51*
Dietitians	0.2 (0.4)	0	1	0.1 (0.3)	0	1	1.14
Other	0.3 (0.8)	0	3	0.0 (0.0)	0	0	1.67

*$p < .05$.

Per facility, an average of 6.0 employees left ($SD = 7.9$, min = 0, max = 37), of whom 3.4 took unpaid vacation ($SD = 4.0$, min = 0, max = 15), whereas only 4.6 were newly hired ($SD = 5.5$, min = 0, max = 24). Therefore, only a portion of the staff that stopped working at these facilities could be replaced at a time of increased workload, and therefore, a time during which higher than normal staff levels were needed.

The main reason for staff departures was a new government regulation prohibiting employment of workers at more than one facility in order to reduce the risk of infection among facilities. On average, 4.5 employees ($SD = 3.9$, min = 0, max = 20) left facilities because they worked at another facility. Some workers left because they contracted COVID-19 ($M = 1.6$, $SD = 5.5$, min = 0, max = 25), others because of fear of older staff related to their increased health risk ($M = 1.5$, $SD = 1.1$, min = 0, max = 4), because of personal health conditions that placed them at heightened risk of serious outcomes if infected ($M = 0.9$, $SD = 0.8$, min = 0, max = 2), or due to other illness ($M = 0.1$, $SD = 0.3$, min = 0, max = 1).

The departure of the staff described above left remaining staff with a greater workload. Due to staff shortages, facilities reported switching to double or longer shifts: 'nursing assistants work 12–13 hours a day, with breaks' (#1261, P-SM). Workers were compelled to extend the scope of their professional responsibilities: 'everyone worked in all roles according to tasks, regardless of job title' (#2371, P, MED), and nursing assistants were asked to step in to the role of missing activity workers: 'The staff was asked to do double shifts and also to run activities for the residents' (#2081, P-SM). Managerial staff also experienced a significant increase in their working hours: 'the truth is that since the beginning of March, I have been almost living at the facility. Hours upon hours, no days and no nights' (#1961, P-MED).

3.4 | Psychological effects of the pandemic on staff

COVID-19 created fear and uncertainty, leading to a significant increase in negative emotions among staff, as reported by 67% of respondents who were asked directly about the impact of the pandemic on staff. For example, 'the biggest problem is the mental stress and anxiety of the staff from the pandemic …' (#2621, NP-SM); 'staff are in constant anxiety' (#1522, P-MED); or 'dealing with increased anxiety or with employees' misunderstandings' (#1451, P-MED). Two thirds (66%) of respondents reported increased feelings of stress, worry and frustration: 'I have been under stress for half a year. At the end of February, a very great fear and very great uncertainty began' (#2081, P-MED), and 'there is uncertainty and ignorance regarding proper conduct, and guidelines vary' (#2791, P-SM).

The negative feelings of staff members were due not only to the uncertainty and direct consequences of COVID-19 but also to various preventive measures implemented to try to curb the rate of infection. For example, at the beginning of the pandemic, family visits with residents were stopped. When asked about the cessation of visitation, about 25% of respondents reported an increase in their workload due to the need to accommodate residents' emotional difficulties with isolation and loneliness, a role particularly problematic for unskilled staff: 'It had a big effect, as the residents shared their difficulties with the staff regarding the distance from the families and sometimes also projected their difficulties on them' (#1392, NP, MED). Due to increased workload, opportunities for employees to carry out activities that contributed to their own well-being were curtailed, as described by the director of one facility:

> Avoiding activities that I would do, and I now feel that they are dangerous—especially exercise in the gym. I would go several times a week, and this is a favorite activity of mine, which contributes a lot to my mental well-being. Now, I have stopped going to gym classes due to the fear of infection. (#1392, NP-MED)

Another cause for staff discontent was the contradiction between COVID-19-related requirements and staff perceptions of good quality care. 'One of the regulations is that [when] a resident goes to, or returns from the hospital, he needs to be isolated for two weeks, how can this work for a person with dementia? It's two weeks of abuse …' (#1501, P-MED), or 'The behaviors to prevent … infection conflict with the values and foundations of the therapeutic professions and all those involved in promoting well-being of the geriatric patient…' (#2231, NP-LG).

When asked to rate their stress levels at three time periods (in the first month of the pandemic, second month and as of the interview date) on a scale from 1 (*stress decreased to a large degree*) to 7 (*stress increased to a large degree*), in comparison with pre-pandemic levels, the first month was associated with a sharp increase in the level of stress compared with pre-pandemic levels ($M = 5.7$, $SD = 0.8$). In the second month, the reported increase in stress was lower ($M = 5.2$, $SD = 1.2$), and as of the interview date, the lowest increase in stress was reported ($M = 4.5$, $SD = 1.9$) ($F_{(2,92)} = 12.29$, $p < .001$), though the reported rates still showed increases in comparison to pre-pandemic levels. Post-hoc Bonferroni comparisons showed that the increase in stress level was significantly higher in the first month than in the second ($p < .05$) and that these were higher than the stress levels in the third period ($p < .05$). However, even the levels of stress in the third period were significantly different from the pre-pandemic levels, that is, as compared with '4'—no difference, ($t_{(46)} = 1.83$, $p < .05$, one-tailed comparison).

4 | DISCUSSION

Three main themes emerged from the responses to the study survey concerning the impact of the COVID-19 pandemic on facilities and their staff: worsened financial status for facilities, increased workload for staff and negative mental health effects on staff. The explanations of these effects and the inter-relations among them are presented in Figure 1.

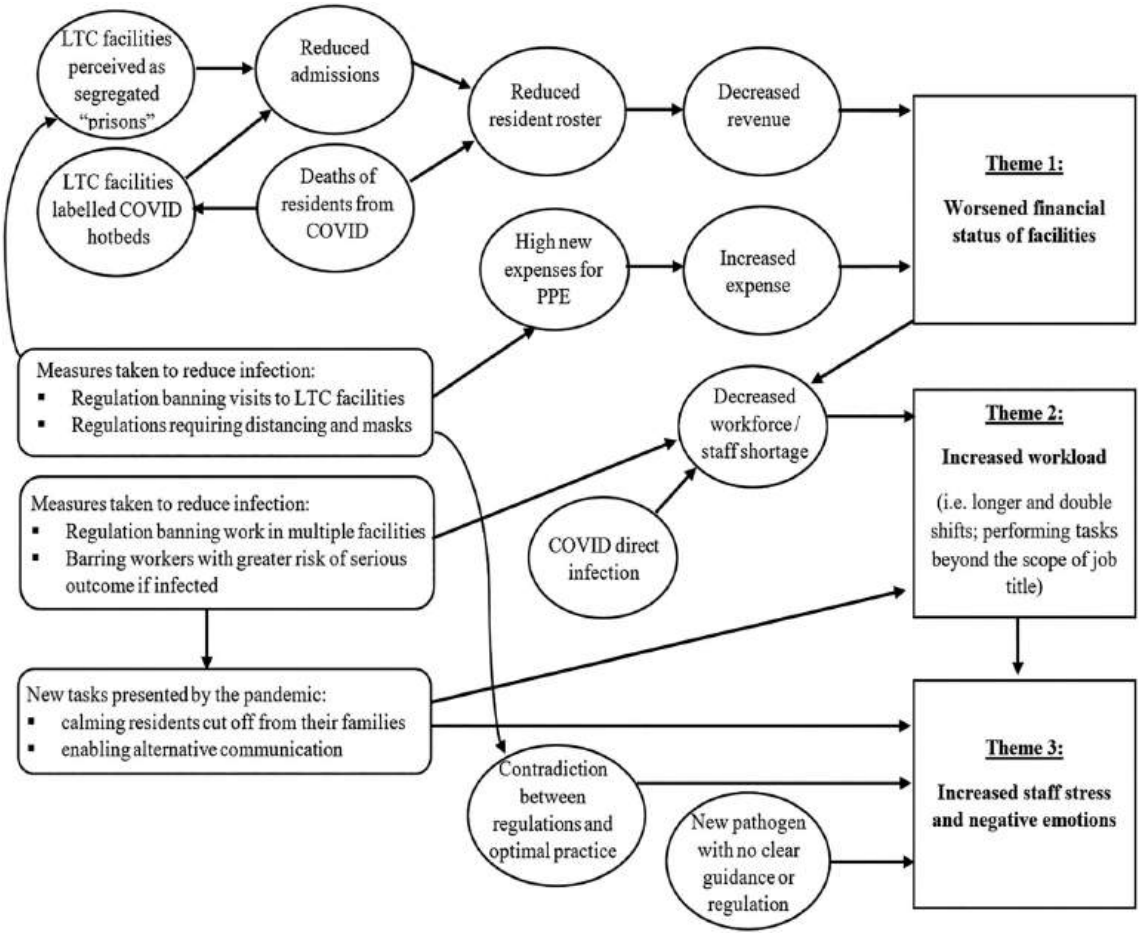

FIGURE 1 The impact of the COVID-19 pandemic on long-term care facilities and their staff

The deterioration in facility finances resulted from increased expenses pertaining to PPE and other supplies and decreased revenue based on diminished resident population due to COVID-19 deaths and reduced resident admissions. The latter was influenced by the general perception that facilities were hotbeds for COVID-19 deaths and that they resembled prisons since visitation was prohibited. Reduced admissions to facilities have been reported previously (Barnett et al., 2020).

The second theme, that of increased workload on staff, resulted from a decreased workforce, some of which was directly related to COVID-19, that is, infection. The more potent influences on the workforce decrease were the measures taken to reduce infections, such as the prohibition on working at more than one facility, or the barring of older workers or those whose medical conditions placed them at greater risk of serious outcomes if infected by COVID-19. The departure of staff exceeded the number of new hires possibly because the general pool of nursing home workers had shrunk as well, and the facilities' financial strains may have hindered recruitment. Staff shortages resulted in double and longer shifts and required staff to perform tasks beyond the scope of their previous duties or skill set. A study conducted in New York City also reported increased workload and short-staffing issues that arose after the onset of the pandemic (Fisher et al., 2021).

The third theme, that of increased staff stress, burnout, and negative emotions, may be directly attributed to the increased workload and increased scope of responsibilities at a time of workforce shortage. Additional factors were mentioned by respondents in explaining the impact on mental health. Staff found themselves needing to respond to the escalated emotional needs of residents in the face of the residents' isolation from friends and family, coupled with fear of mortal illness. Staff needed to calm those residents and try to facilitate alternative communication with loved ones (Cohen-Mansfield & Meschiany, 2022a). Other studies have reported negative emotions such as fatigue, discomfort and helplessness among staff due to heightened concern for residents and families (Sun et al., 2020) and even posttraumatic stress disorder symptoms associated with being a frontline health care worker (Rossi et al., 2020).

Another source of negative emotions was the sense of fear and uncertainty when dealing with a new disease for which clear guidance and standard regulation were lacking. Even when there was no question of clarity, such as the need for PPE, facilities encountered shortages and inflated costs. A related obstacle was the contradiction

between regulations and optimal practice. A face mask decreases an older adult's ability to recognize staff members, and banning relatives from facilities detracts from normal social activity, likely the most important types of activities, particularly for those with dementia (Cohen-Mansfield et al., 2010). Other reasons for the negative impact on staff's mental health included fear and anxiety about the pandemic itself, likely amplified by working in a location with a greater risk of infection, crowded conditions, insufficient testing and limited provision of PPE. Fear of being infected and infecting others were also described by White et al. (2021).

Several papers have reported on the provision of support services for staff. For example, psychological services have been provided, including assistance hotlines and around-the-clock online counseling services (Liu et al., 2020) and other services, such as educational training sessions, mental health services, and advocacy for provision of emotional and practical support (e.g., childcare, and access to showers and lodging) (Miotto et al., 2020). In contrast, none of our respondents mentioned receipt of these kinds of staff support, similar to what Fisher et al. (2021) have reported. The lack of these types of staff support in Israel likely contributed to the negative psychological effects of COVID-19 on staff.

This paper complements that of Lyman et al. (2022). Lyman points to the crucial necessity of an adequate infrastructure in order for organizations to adapt to the changes caused by the pandemic. Our paper exemplifies how the issues of chronic inadequate staffing and the stigma associated with facilities stood in the way of organizational learning. The deficit in infrastructure affected facilities' ability to compensate for missing resources, such as the absence of family members or activity leaders who were not permitted to work at more than one facility. Similarly, whereas some facility directors were able to exercise leadership skills to devise and communicate a strategy for handling some of the new challenges, most did not report creating or executing such plans.

This study is unique in comparison with other reports on the effect of COVID-19 on facilities and staff in that it studies a diverse and relatively large population of facilities, including for-profit and not-for-profit facilities, as well as those of varying sizes. It is the first study to track changes in staff stress as a function of time after the beginning of the pandemic.

The study's use of a mixed methods design included quantitative and qualitative analyses of closed- and open-ended question data, enabling this study to offer the first comprehensive model of factors involved in explaining COVID-19's impact on facilities and their workforce.

4.1 | Limitations

Our sample responded to the study's online questionnaire between mid-July and mid-October 2020, and therefore, early responses may have differed from later ones given changes in regulations and rates of illness. Indeed, when we specifically asked questions relating to different stages of the pandemic, responses varied by timing. Another limitation is our retrospective evaluation of staff stress at different points in time during the pandemic, rather than having studied it by means of repeated testing. The fact that 80% of responses were provided by facility managers may explain respondents' focus on facilities' finances. The high proportion of manager responses may limit a fuller understanding of the phenomenon of COVID-19-related staff turnover. Future research should aim to interview a broader range of nursing home employees, especially those who resigned during the pandemic. The study was conducted in only one country, Israel. The sample may be biased in that less than half of those who agreed to participate completed the questionnaire, suggesting that the respondents were more conscientious and perhaps more positive about the potential impact of a survey. On the other hand, our sample was representative of the larger pool of long-term-care facilities in Israel in terms of size and for-profit status. These limitations notwithstanding, the sample size is large compared with others on this topic. Future studies should examine the impact of COVID-19 on facilities and their staff in a still larger sample that would allow comparisons among different subtypes of facilities, based on size or the level of function of residents.

5 | CONCLUSION

Government directives to cope with a pandemic need to take into account potential conflicts between the directives and quality care principles and to provide a balanced approach that assures humane care. Facilities and their staff lacked adequate pandemic-related guidance and support. Future encounters with pandemics need to include both balanced guidelines and supportive (rather than punitive) guidance. Facility staff and residents will be better served in the future if policy leaders in the government and health care sectors assure the development of an infrastructure that facilitates the formulation of facility strategies to maintain good clinical practice in the face of unique pandemic challenges.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

The results highlight the need to (1) address staff shortages and training, (2) provide more support and clearer guidance to facilities and their staff and (3) devise a framework and strategies for future health crises.

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CONFLICT OF INTERESTS

The author declares no conflicts of interest.

ETHICS STATEMENT

This study received ethical approval from the Institutional Review Board of Tel Aviv University, Number 0001467-1.

DATA AVAILABILITY STATEMENT

Upon reasonable request, numerical data used for this study are available from the author in anonymized form after approval for sharing the data has been obtained from the institutional review board. The open-ended data are not publicly available due to privacy and ethical concerns.

ORCID

Jiska Cohen-Mansfield https://orcid.org/0000-0003-0209-7304

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ORIGINAL ARTICLE

WILEY

A cross sectional study of nurses' perceptions of nurse leaders' internal crisis communication during the COVID-19 pandemic

Petra-Maria Kämäräinen RN, MHS Student |
Anu Nurmeksela RN, PhD, University Lecturer |
Tarja Kvist RN, PhD, Professor, Preventive Nursing Science, Head of Department of Nursing Science

Department of Nursing Science, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland

Correspondence
Petra-Maria Kämäräinen, Department of Nursing Science, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland.
Email: petra.kamarainen@gmail.com

Abstract

Aim: The aim of this study is to describe nurse perceptions of nurse leaders' internal crisis communication during the COVID-19 pandemic.

Background: Internal communication is a vital part of nurse leaders' work, even more so during crises such as the COVID-19 pandemic.

Method: This is a cross-sectional study design. The data were collected from 204 Finnish nurses in February 2021. A questionnaire developed in this study consisted of 29 items measuring internal crisis communication and seven demographic variables. The relationships between the variables were examined with cross-tabulation, a chi-squared test and non-parametric tests. Factor structure was evaluated with exploratory factor analysis and reliability with Cronbach's alpha.

Results: Nurses perceived the *timeliness* of communication highest and *interaction* the lowest. Nurses from intensive care, acute care and operative rooms gave highest evaluations for the *content* of communication and *timeliness*. Nurses working with COVID-19 patients daily or weekly evaluated the highest level of *false communication*.

Conclusion: Nurse leaders' internal crisis communication was timely, especially in the most critical units dealing with the pandemic. The study highlighted the importance of considering a unit's special needs for internal crisis communication. Interaction between nurse leaders and nursing staff during periods of crisis needs improvement.

Implications for Nursing Management: Nurse leaders' successful and emphatic communication is important in supporting nurses in managing a crisis.

KEYWORDS
COVID-19 pandemic, internal crisis communication, nurse, nursing leadership, questionnaire

1 | BACKGROUND

The COVID-19 pandemic has created unique demands and new concerns for crisis management and crisis communication in the health care sector (Coombs, 2020). A 'crisis' can be defined as a sudden and unexpected event that causes human, material and economic or environmental losses that disrupt and exceed the community's or society's ability to cope. An organisational crisis can be defined as an emergency condition which affects stakeholders and causes instability in the organisation (Buama, 2019). However, no universally accepted definition of a crisis exists (Coombs & Holladay, 2010).

Crisis management is a process of dealing with a threat to an organisation's efficiency, the lives of its employees and the image of the organisation among its various stakeholders (Buama, 2019). It can be divided into three phases: pre-crisis, crisis and post-crisis. The pre-crisis phase includes planning, preparing and managing expectations of future crises. The crisis phase is the actual real-time response to a crisis event as it unfolds. The post-crisis phase concentrates on learning from the crisis (Coombs & Holladay, 2010). This three-stage model has been criticized—perhaps with some justification—for giving a simplified view of a crisis, but it can still be useful in considering the scope of crisis communication (Coombs & Holladay, 2010; Heide & Simonsson, 2014).

According to Coombs and Holladay (2010), communication is a critical element in effective crisis management: It can be defined as gathering, processing and then sharing required information with others. The pre-crisis phase concentrates on reducing risks and identifying potential crises. During the actual crisis phase, how and what an organisation communicates has significant effects on the outcomes of a crisis. Post-crisis communication focuses on managing the longer-term effects of the crisis (Buama, 2019; Coombs & Holladay, 2010).

The goal of internal crisis communication is to provide accurate, timely and clear information and thus avoid potentially damaging rumours and inaccuracies (Buama, 2019). This can be difficult because when an organisation faces a crisis, employees' need for information increases dramatically (Coombs & Holladay, 2010; Heide & Simonsson, 2014). Internal crisis communication is at the same time a prerequisite for crisis management and an opportunity for preventing future crises and learning from those which do occur. In short, then, during a crisis, employees need accurate information, clearly communicated, to help them make sense of a situation and ensure that they know how to act appropriately. Yet internal crisis communication is often ignored in spite of its importance, and it is certainly an under-researched topic—a wider understanding of internal crisis communication is much needed (Heide & Simonsson, 2021).

A complex crisis such as the current pandemic poses new demands for leadership and makes internal crisis communication one of the most important tasks of organisations (Heide & Simonsson, 2021). Two years after discovering the COVID-19 virus, the ensuing crisis phase of the pandemic is still going on: From the end of December 2020 to the beginning of 2022, there were almost 298 million cases of COVID-19, including more than 5 million deaths. At the beginning of 2022, there has been more than 300,000 COVID-19 cases in Finland and more than 1,600 deaths; the numbers are constantly growing (WHO, 2022).

The COVID-19 pandemic has severely tested the capacity of health care services worldwide: Finland is no exception. Finnish health care professionals have worked under severe pressure and faced unpredictable challenges throughout. According to Mattila et al. (2021), 17% of nurses in two Finnish hospitals have been transferred to work in another clinical unit because of the pandemic. More than one in five nurses have reported feeling that their workload has increased during the pandemic. In addition, COVID-19 has increased anxiety symptoms and work-related stress among Finnish hospital workers (Mattila et al., 2021).

Administrative staff have been encouraged to work from home to maintain physical distance (Mattila et al., 2021), and it has challenged supporting staff. The importance of effective communication as a means to help and motivate employees and to manage chronic uncertainty has been highlighted like never before (Li et al., 2021).

1.1 | Nurse leaders' communication during the COVID-19 pandemic

Nurses are at the sharp end of the pandemic, and nurse leaders have been handling uncertainty and learning from their experiences to help manage crisis events in the future (Bergeron et al., 2006; Catania et al., 2021). In studies focusing on nursing leadership in the COVID-19 pandemic, the importance of effective communication has been widely recognized (Catania et al., 2021; Digby et al., 2021; Kagan et al., 2021; Lake et al., 2021; Lord et al., 2021; Simonovich et al., 2021). Communication is described as nurse leaders' most vital tool and core responsibility (Lake et al., 2021); indeed, one study found that leadership communication is the *only* predictor of a nurse's willingness to care during the COVID-19 pandemic (Lord et al., 2021). Nurse leaders' interaction throughout this difficult period has been very meaningful to nurses (Digby et al., 2021; González-Gil et al., 2021; Lord et al., 2021; Ness et al., 2021; Simonovich et al., 2021; Zorn et al., 2021). Listening to nurses (Digby et al., 2021; Lord et al., 2021; Ness et al., 2021; Simonovich et al., 2021; Zorn et al., 2021) and showing respect (Digby et al., 2021; Simonovich et al., 2021) and support (Catania et al., 2021; Ness et al., 2021; Simonovich et al., 2021; Zorn et al., 2021) are also essential.

Being a source of accepted truth(s) during a crisis event is another important function for leaders; their communication skills are crucial in this respect. Constantly updated and clear information relayed through different communication channels has been important to nursing staff trying to navigate the uncertain environment which the COVID-19 pandemic has created (Zorn et al., 2021). Previous research has revealed that lack of communication and constantly changing and unclear information increased the fear, anxiety, stress and distress experienced by nurses (Catania et al., 2021; Crowe et al., 2021; González-Gil et al., 2021; Kagan et al., 2021; Lake et al., 2021; Ness et al., 2021). Lake et al. (2021) found that transparent, timely and effective communication tended to decrease nurses' moral distress

and improve poor mental health symptoms. Transparency and reliability of communication were key elements in managing fear and uncertainty (Lake et al., 2021). Supportive communication from nurse leaders developed trust and togetherness (Freysteinson et al., 2021; Simonovich et al., 2021).

The COVID-19 pandemic has vividly demonstrated the importance of effective crisis communication. An effective communication strategy is essential in providing high-quality patient care and to support optimal nurse performance during a crisis event (Catania et al., 2021; Digby et al., 2021; Lord et al., 2021; Ness et al., 2021; Zorn et al., 2021). It is important to examine and develop an organisation's crisis communication procedures and policies, including leadership crisis communication, in order to better deal with future health emergencies (Catania et al., 2021; Simonovich et al., 2021). In this study, the term 'nurse leaders' can mean chief nurse officers, nurse directors, nurse managers, head nurses and ward sisters.

2 | METHODS

2.1 | The aim of the study

The aim of this study is to describe nurse perceptions of nurse leaders' internal crisis communication during the COVID-19 pandemic.

2.2 | Design

This is a cross-sectional study design.

2.3 | Instrument

The questionnaire for this study was developed based on relevant literature. The literature search was conducted in January 2021. The assistance of an information specialist was sought over the connected issues of the search terms, inclusion criteria and databases. The search terms settled on were *crisis**, *leader**, *manag**, *communication* and *nurs**. The search was conducted in the CINAHL, PubMed and Scopus databases. Inclusion criteria included studies about nurse leaders' internal communication, peer-reviewed scholarly journals and studies published in English between 2003 and 2021.

In all, seven research articles fulfilled the inclusion criteria (Bergeron et al., 2006; Digby et al., 2021; González-Gil et al., 2021; Halcomb et al., 2020; Lau & Chan, 2005; Tseng et al., 2005; Zhuravsky, 2015) (Figure S1). Each article was evaluated using the Joanna Briggs Institute's Critical Appraisal Tools. The quality of all of the included articles was evaluated to be good.

Based on close content analysis of the seven articles, the themes of the nurse leaders' internal crisis communication were revealed. The questionnaire itself was based on the results of the content analysis and consisted of 29 items (Table S2). Respondents perceived internal crisis communication using a 5-point Likert scale: 1 = *Strongly disagree*; 2 = *Disagree*; 3 = *Neither agree nor disagree*; 4 = *Agree*; 5 = *Strongly agree*. The questionnaire had the following seven demographic variables: age, gender, profession, employer, working unit, contact with COVID-19 patients and communication channels where respondents had got information about COVID-19.

The questionnaire was pre-tested by nurses ($n = 10$). Pre-testing revealed that the questionnaire was comprehensible, logical and grammatically correct: Consequently, no changes were made.

2.4 | Data collection

The data were collected from 204 Finnish nurses working in the public and private sectors in February 2021 with a developed questionnaire. The online self-report questionnaire link was distributed via the social media used by Finland's professional nursing communities.

2.5 | Data analysis

Percentages, frequencies, means and standard deviations were calculated for all items. The relationships between demographic variables and single items were examined with cross-tabulation and a chi-squared test. For the chi-squared test, the 5-point Likert scale was recategorized to three categories. *Strongly agree* (5) and *Agree* (4) were combined into one category as *Agree* (3), and *Strongly disagree* (1) and *Disagree* (2) were combined into *Disagree* (2); *Neither agree nor disagree* formed *Neither* (3), and part of the demographic variables was recategorized so that the conditions of using the chi-squared test were filled. Others from gender ($n = 1$), non-profit sector from occupational group ($n = 1$) and open answers from occupational group ($n = 4$) were deleted.

The information provided by the items was summarized by using exploratory factor analysis (EFA) (Watson & Thompson, 2006). The Bartlett sphericity test ($p < .0001$) and the Kaiser-Meyer-Olkin measure were used (.941) to ensure that the assumptions associated with EFA. Significance was set at the $p < .05$ level (Rattray & Jones, 2007). The communalities that explain variance of the items using the factors ranged from .344 to .747 (Watson & Thompson, 2006). All items' loadings were more than .3 and considered significant. Four factors accounted for 65% of total variation. Internal crisis communication was divided into four sub-areas based on the results of EFA: *interaction*, *contents*, *timeliness* and *false communication*. *Interaction* refers to the acts of communicating between nurse leaders and nursing staff. *Content* refers to the information that is expressed through communication. *Timeliness* refers to communication occurring at an opportune time. *False communication* refers to rumours or misinformation occurring in the organisational communication. Construction of the sub-areas, factor items' loadings and Cronbach's alpha values are presented in Table 1.

For further analysis mean scores of sub-areas were calculated. The relationships between demographic variables and mean scores of sub-areas were examined with non-parametric tests (a Mann–Whitney *U* test and a Kruskall–Wallis *H* test) and

TABLE 1 Construct of the factors, items loadings, and Cronbachs alpha values

Factor/item	Loadings	Cronbach's alpha
1. Interaction		**.931**
Nurse leaders have shown support to the nurses	.789	
Nurse leaders were open to nurses' views	.783	
Nurse leaders have listened to nurses	.765	
Nurse leaders have shown empathy to the nurses	.764	
Nurse leaders have shown respect to the nurses	.738	
Nurse leaders' internal crisis communication has increased the feeling of togetherness in the work community	.709	
Nurse leaders' internal crisis communication has maintained a positive ambiance	.683	
Nurse leaders' internal crisis communication has decreased stress caused by the COVID-19 pandemic	.587	
Nurse leaders' internal crisis communication has decreased fears caused by the COVID-19 pandemic	.565	
Nurse leaders' internal crisis communication has been two-way between leaders and nurses	.527	
2. Content		**.941**
Nurse leaders' internal crisis communication has been unequivocal	.777	
Nurse leaders' internal crisis communication has been clear	.773	
Nurse leaders' internal crisis communication has been of high quality	.716	
Nurse leaders' internal crisis communication of COVID-19 has been practical	.706	
Nurse leaders' internal crisis communication has been logical	.649	
The communication channels used by the nurse leaders have been logical	.640	
Nurse leaders' communication of COVID-19 has been easy to find	.635	
Nurse leaders' internal crisis communication has been effective	.622	
Information from nurse leaders has been easy to manage	.596	
Nurse leaders' internal crisis communication has inspired trust	.542	
Nurse leaders' have been calm in communication situations	.479	
Nurse leaders' communication of the COVID-19 pandemic has been based on facts	.464	
Nurse leaders have communicated openly	.433	
3. Timeliness		**.878**
Nurse leaders' internal crisis communication has been regular	.737	
Nurse leaders have communicated quickly	.694	
Nurse leaders' internal crisis communication has been updated	.634	
Nurse leaders have communicated daily	.587	
4. False communication		**.837**
There has been misinformation in the organisation during the COVID-19 pandemic	.723	
There have been rumours in the organisation during the COVID-19 pandemic	.722	

Bonferroni-adjusted post hoc tests (Rattray & Jones, 2007). Cronbach's alpha coefficient for the overall questionnaire was .957. Cronbach's coefficient for the sub-areas ranged from .837–.941 (Rattray & Jones, 2007).

Analyses were performed with the statistical software SPSS for Mac (version 27.0, IBM Corporation, Armonk, NY).

2.6 | Ethical considerations

According to Finnish guidelines, this study did not require ethical permission, as it was a questionnaire study for nursing staff, involving no patients, causing no harm and not intervening in the physical integrity of a person (Finnish National Board on Research Integrity [TENK], 2019). A fact sheet provided information about the study and the voluntary nature of the research and a clear statement that the data would be analysed anonymously. The respondents were asked to sign an electronic consent form before filling in the questionnaire (European Commission, 2021).

3 | RESULTS

3.1 | Nurse demographics

Altogether, 204 nurses completed the questionnaire. Most respondents were female (93.5%) and registered nurses (72.5%); their average age was 37.4 years (SD 10.1). Most of nurses, 82.6%, worked in

TABLE 2 Nurses perceptions of the nurse leaders internal crisis communication (*n*, %, mean and SD)

	Strongly disagree *n* (%)	Disagree *n* (%)	Neither agree nor disagree *n* (%)	Agree *n* (%)	Strongly agree *n* (%)	Mean	SD
Interaction						**2.168**	**.843**
Nurse leaders' internal crisis communication has decreased fears caused by the COVID-19 pandemic	41 (20.1)	72 (35.3)	60 (29.4)	23 (11.3)	8 (3.9)	2.436	1.056
Nurse leaders' internal crisis communication has been two-way between leaders and nurses	53 (26.0)	67 (32.8)	40 (19.6)	35 (17.2)	9 (4.4)	2.411	1.173
Nurse leaders have shown respect to the nurses	70 (34.3)	70 (34.3)	31 (15.2)	28 (13.7)	5 (2.5)	2.157	1.116
Nurse leaders have listened to nurses	69 (33.8)	75 (36.8)	26 (12.7)	28 (13.7)	6 (2.9)	2.152	1.124
Nurse leaders' internal crisis communication has maintained a positive ambiance	61 (29.9)	73 (35.8)	51 (25.0)	16 (7.8)	3 (1.5)	2.152	0.989
Nurse leaders were open to nurses' views	64 (31.4)	81 (39.7)	29 (14.2)	24 (11.8)	6 (2.9)	2.152	1.084
Nurse leaders have shown support to the nurses	71 (34.8)	72 (35.3)	33 (16.2)	23 (11.3)	5 (2.5)	2.113	1.084
Nurse leaders' internal crisis communication has decreased stress caused by the COVID-19 pandemic	70 (34.3)	71 (34.8)	42 (20.6)	15 (7.4)	6 (2.9)	2.098	1.050
Nurse leaders' internal crisis communication has increased the feeling of togetherness in the work community	74 (36.3)	72 (35.3)	41 (20.1)	14 (6.9)	3 (1.5)	2.012	0.987
Nurse leaders have shown empathy to the nurses	83 (40.7)	67 (32.8)	34 (16.7)	15 (7.4)	5 (2.5)	1.980	1.046
Content						**2.807**	**.843**
Nurse leaders' internal crisis communication of the COVID-19 pandemic has been based on facts	4 (2.0)	14 (6.9)	42 (20.6)	107 (52.5)	36 (17.6)	3.755	0.925
Nurse leaders have keeping calm in communication situations	20 (9.8)	41 (20.1)	43 (21.1)	84 (41.2)	16 (7.8)	3.172	1.138
The communication channels used by the nurse leaders have been logical	28 (13.7)	39 (19.1)	41 (20.1)	85 (41.7)	11 (5.4)	3.059	1.173
Nurse leaders have communicated openly	24 (11.8)	57 (27.9)	52 (25.5)	54 (26.5)	17 (8.3)	2.912	1.161
Nurse leaders' communication of COVID-19 has been easy to find	27 (13.2)	62 (30.4)	35 (17.2)	64 (31.4)	16 (7.8)	2.902	1.208
Nurse leaders' internal crisis communication of COVID-19 has been practical	27 (13.2)	65 (31.9)	60 (29.4)	48 (23.5)	4 (2.0)	2.691	1.035
Nurse leaders' internal crisis communication has been logical	32 (15.7)	66 (32.4)	44 (21.6)	55 (27.0)	7 (3.4)	2.701	1.129
Nurse leaders' internal crisis communication has been clear	32 (15.7)	73 (35.8)	40 (19.6)	51 (25.0)	8 (3.9)	2.657	1.132
Nurse leaders' internal crisis communication has been effective	31 (15.2)	68 (33.3)	54 (26.5)	46 (22.5)	5 (2.5)	2.637	1.067
Nurse leaders' internal crisis communication has inspired trust	38 (18.6)	64 (31.4)	51 (25.0)	41 (20.1)	9 (4.4)	2.589	1.148
Nurse leaders' internal crisis communication has been of high quality	34 (16.7)	69 (33.8)	55 (27.0)	39 (19.1)	7 (3.4)	2.589	1.081
Nurse leaders' internal crisis communication has been unequivocal	33 (16.2)	80 (39.2)	46 (22.5)	41 (20.1)	4 (2.0)	2.524	1.048

(Continues)

TABLE 2 (Continued)

	Strongly disagree *n* (%)	Disagree *n* (%)	Neither agree nor disagree *n* (%)	Agree *n* (%)	Strongly agree *n* (%)	Mean	SD
Information from nurse leaders has been easy to manage	49 (24.0)	79 (38.7)	45 (22.1)	28 (13.7)	3 (1.5)	2.299	1.026
Timeliness						**2.917**	**1.028**
Nurse leaders' internal crisis communication has been regular	13 (6.4)	41 (20.1)	40 (19.6)	76 (37.3)	34 (16.7)	3.378	1.167
Nurse leaders' internal crisis communication has been updated	18 (8.8)	43 (21.1)	59 (28.9)	66 (32.4)	18 (8.8)	3.113	1.111
Nurse leaders' communicated quickly	32 (15.7)	51 (25.0)	49 (24.0)	53 (26.0)	19 (9.3)	2.882	1.226
Nurse leaders have communicated daily	76 (37.3)	53 (26.0)	26 (12.7)	37 (18.1)	12 (5.9)	2.294	1.295
False communication						**2.734**	**1.205**
There has not been misinformation in the organisation during the COVID-19 pandemic	32 (15.7)	76 (37.3)	31 (15.2)	39 (19.1)	26 (12.7)	2.760	1.285
There have not been rumours in the organisation during the COVID-19 pandemic	58 (28.4)	78 (38.2)	20 (9.8)	24 (11.8)	23 (11.3)	2.389	1.318

public sector. Nearly one third (30.9%) worked in emergency medical outpatient care or primary care, 20.1% inpatient ward, 17.2% intensive care, acute care or operating room, 13.7% long-term care, 9.3% clinic or appointment and 8.8% outpatient care units. A total of 32% of respondents had never been in contact with COVID-19 patients, 29.1% few times a year, a few times a month 17.7% and 21.2% daily or weekly.

Most respondents had received information about COVID-19 by email (88.2%), intranet (80.4%), newsletter (72.1%) and through an info or briefing event (51.5%), meeting (42.4%), memo (32.8%), social media (18.1%) and from other source (4.9%).

3.2 | Nurse leaders' internal crisis communication

The mean score for nurse leaders' internal crisis communication was 2.616 (SD .757) (range 1–5). The sub-area with highest mean score was *timeliness* of nurse leaders' internal crisis communication (mean 2.916 and SD 1.208) and lowest was for *interaction* (mean 2.168 and SD .843). Table 2 describes the results of individual items.

Statistically significant differences between demographic variables and individual variables are reported below. Practical nurses (86%) agreed more than registered nurses (69%) that nurse leaders did not show empathy, and they agreed more (77%) than registered nurses (57%) that nurse leaders' communication had not taken place daily. Registered nurses agreed slightly more (39%) with regularity compared to practical nurses (29%). Registered nurses agreed slightly more with rumours (69%) than practical nurses (61%), and they agreed more with misinformation (54%) than practical nurses (50%). Also, registered nurses agreed more with fact-based communication (76%) compared to practical nurses (56%). Nurses aged 41–50 years agreed more with fact-based communication (82%); the most disagreement was found in nurses older than 50 years (62%) (Table 3).

Nurses from the public sector (25%) agreed clearly more than nurses from the private sector (4%) that nurse leaders' communication was ambiguous. The nurses that found the communication most unambiguous worked in intensive care, acute care and operating rooms (31%) whereas nurses from clinics and appointments disagreed most (11%). Nurses from clinics and appointments agreed most with fact-based communication (40%); nurses in long-term care disagreed most (22%). Nurses from intensive care, acute care and operating rooms agreed most with the clarity of nurse leaders' communication (43%); nurses from clinics and appointments disagreed most (14%), and they agreed most with the regularity of communication (77%); nurses from emergency care (43%) disagreed most. Also, nurses in intensive care, acute care and operating rooms agreed clearly more (40%) that nurse leaders' communication had taken place daily; nurses from clinics and appointments disagreed most (11%). Nurses working in intensive care, acute care and operating rooms agreed most with the effectiveness of communication (34%); nurses from clinics and appointments disagreed most (21%) (Table 3).

Nurses from emergency agreed most that there have been rumours at their workplace (84%), and nurses from outpatient care units disagreed the most (41%). Nurses who were in contact with COVID-19 patients daily or weekly agreed more with rumours (81%) than nurses who had never been in contact with COVID-19 patients (52%). Women agreed slightly more with misinformation (54%) than men (46%) (Table 3).

3.3 | Relationships between nurses' demographic variables and nurse leaders' internal crisis communication sub-areas

The working unit and contact with COVID-19 patients were significantly associated with nurses' perceptions of the nurse leaders'

TABLE 3 Statistically significant results of chi-squared tests

	Nurse leaders' communication of the COVID-19 pandemic has been based on facts	Nurse leaders' internal crisis communication has been effective	Nurse leaders' internal crisis communication has been clear	Nurse leaders' internal crisis communication has been regular	Nurse leaders have communicated daily	Nurse leaders' internal crisis communication has been unequivocal	Nurse leaders have listened to nurses	Nurse leaders have shown empathy to the nurses	There has been misinformation in the organisation during the COVID-19 pandemic	There have been rumours in the organisation during the COVID-19 pandemic
Age	**.028**	.185	.114	.141	.510	.344	.308[a]	.623	.986	.218
Gender	1.000[a]	.572[a]	.601[a]	.138[a]	.835[a]	.632[a]	1.000[a]	1.000	.019[a]	.114[a]
Occupational group	**.013**	.258	.993	**.022**	**.040**	.932	.946	**.044**	**.010**	**.022**
Employer	.130	.560	.691	.284	.413	**.035**	.551[a]	.698[a]	.583[a]	.155[a]
Working unit	.027[a]	**.027**	**.019**	.018[a]	**.038**[a]	.070[a]	.668[a]	.373[a]	.252[a]	.020[a]
Contact with COVID-19 patients	.125	.315	.917	.638	.568	.984	.702	.095	.230	**.048**

Note: Chi-squared test unless otherwise noted. Statistically significant ($p = <.05$) results bolded.
[a]Fisher exact test used.

internal crisis communication. A post hoc test showed that nurses from intensive care, acute care and operating room gave the higher perceptions for the content (mean 3.14) than the nurses from long-term care (mean 2.52) ($p = .028$). Also, nurses from intensive care, acute care and operating room gave the higher perceptions for the timeliness (mean 3.35) than the nurses from emergency medical out-patient care or primary care (mean 2.53) ($p = .043$) and the nurses from long-term care (mean 2.66) ($p = .046$). Nurses working with COVID-19 patients daily or weekly (mean 2.25) perceived a higher level of false communication (mean 2.25) than nurses who had never been contact with COVID-19 patients (mean 2.90; $p = .028$) (Table 4).

4 | DISCUSSION

Based on the questionnaire development, it was found that nurse leaders' internal crisis communication consisted of four sub-areas: *interaction*, *content*, *timeliness* and *false communication*. This study revealed that there has been significant variance in nurse leaders' internal crisis communication during the COVID-19 pandemic.

The *timeliness* of nurse leaders' internal crisis communication was found to be the highest perceived sub-area by nurses. Timeliness in general has been recognized as a critical element of internal crisis communication by other scholars (Lake et al., 2021; Lord et al., 2021). Regular communications from their leaders reassured nurses and was needed to decrease the anxieties caused by the crisis (Digby et al., 2021).

The most satisfied with *timeliness* and *content* were nurses in intensive care, acute care and the operating room. A potential explanation for this result is that working in the forefront of the COVID-19 pandemic has placed special importance on communication and nurse leaders have taken the resulting demands that have been placed on them well into account. Altogether, it is a significant result, because timely communication has been seen as the only predictor of intensive care nurse willingness to provide care during the COVID-19 pandemic (Lord et al., 2021).

Nurses in intensive care, acute care and the operating room considered nurse leaders' communication the most effective. The lowest perceptions for *timeliness* were given by nurses from emergency medical out-patient care or primary care. A different image of the job, the greater physical distance from nurse leaders and general limitations placed on interpersonal communication by the pandemic may explain these lower perceptions. This explanation is supported by Kagan et al.'s study (2021), which revealed that nurse leaders have felt difficulties leading and communicating to and with staff through screens during the pandemic.

Interaction was the lowest perceived sub-area in this study. Previous studies have shown that nurses have longed to be heard, supported and appreciated by their nurse leaders (Lord et al., 2021; Ness et al., 2021; Simonovich et al., 2021). The emotional support provided by nurse leaders has been shown to improve nurses' coping skills and reliance; it has also helped to develop mutual trust and commitment during the crisis (Digby et al., 2021; Simonovich et al., 2021). This

TABLE 4 Relationships between demographic variables and the subareas and full measuring instrument of internal crisis communication (mean, SD and *P*)

Demographic variable	*n* (204)	% (100)	Interaction Mean (SD) *P*	Content Mean (SD) *P*	Timeliness Mean (SD) *P*	False communication Mean (SD) *P*	Internal crisis communication Mean (SD) *P*
Gender	199	100.0					
Male	13	6.5	1.85 (1.00)	2.71 (.85)	2.67 (2.67)	2.92 (1.54)	2.54 (.90)
Female	186	93.5	2.19 (.82)	2.80 (.85)	2.94 (1.01)	2.56 (1.19)	2.62 (.75)
			.060	.744	.430	.445	.589
Age	204	100.0					
<30	66	32.4	2.09 (.79)	2.73 (.82)	2.75 (1.04)	2.41 (1.06)	2.50 (.72)
31–40	61	29.9	2.20 (.80)	2.86 (.85)	3.03 (.90)	2.73 (1.32)	2.70 (.75)
41–50	51	25.0	2.17 (.93)	2.92 (.87)	3.07 (1.10)	2.43 (1.10)	2.65 (.79)
>50	26	12.7	2.28 (.92)	2.66 (.83)	2.76 (1.40)	2.90 (1.39)	2.65 (.81)
			.781	.382	.169	.410	.455
Occupational group	200	100.0					
Practical nurse	52	26.0	2.03 (.84)	2.70 (.96)	2.69 (1.10)	2.75 (1.36)	2.54 (.85)
Registered nurses	148	74.0	2.21 (.85)	2.84 (.80)	3.01 (1.00)	2.51 (1.15)	2.64 (.73)
			.130	.348	.072	.313	.423
Employer	202	100.0					
Public sector	175	86.7	2.19 (.86)	2.84 (.84)	2.95 (1.01)	2.51 (1.18)	2.62 (.75)
Private sector	27	13.3	2.07 (.78)	2.62 (.88)	2.78 (1.17)	3.00 (1.35)	2.61 (.80)
			.567	.203	.405	.080	.979
Working unit	204	100.0					
Intensive care, acute care or operating room	35	17.2	2.30 (.96)	3.14 (.80)	3.35 (.96)	2.36 (.99)	2.79 (.73)
Emergency medical outpatient care or primary care	19	30.9	1.97 (.99)	2.60 (.80)	2.51 (1.02)	2.29 (1.08)	2.34 (.75)
Inpatient ward	63	20.1	2.38 (.82)	2.91 (.83)	3.12 (.96)	2.62 (1.22)	2.76 (.77)
Long-term care	41	13.7	1.93 (.68)	2.52 (.94)	2.67 (1.14)	2.72 (1.42)	2.45 (.78)
Clinic or appointment	28	9.3	2.08 (.82)	2.66 (.62)	2.62 (.80)	2.59 (1.27)	2.49 (.62)
Outpatient care units	18	8.8	2.05 (.73)	2.87 (.86)	2.80 (1.10)	2.75 (1.05)	2.61 (.78)
			.052	.017*	.003*	.722	.083

(Continues)

TABLE 4 (Continued)

Demographic variable	*n* (204)	% (100)	Interaction Mean (SD) *P*	Content Mean (SD) *P*	Timeliness Mean (SD) *P*	False communication Mean (SD) *P*	Internal crisis communication Mean (SD) *P*
Contact with COVID-19 patients	203	100.0					
Daily or weekly	43	32.0	2.24 (.96)	2.76 (.87)	2.70 (.98)	2.25 (1.06)	2.50 (.76)
A few times a month	36	29.1	2.05 (.81)	2.88 (.86)	3.11 (1.07)	2.47 (1.13)	2.62 (.73)
A few times a year	59	21.2	2.20 (.84)	2.81 (.76)	2.94 (1.00)	2.51 (1.27)	2.61 (.73)
Never	65	17.7	2.16 (.79)	2.80 (.88)	2.92 (1.05)	2.90 (1.23)	2.70 (.79)
			.780	.829	.433	.031*	.619

Note: Kruskall-Wallis Test used.
*Statistically significant ($p = <.05$).

study shows that practical nurses agreed more than registered nurses that nurse leaders did not show empathy. Hierarchical 'chain of command' means of communication in health care organisations can explain this result. Improved non-hierarchical communication patterns in units will increase interprofessional understanding, respect and trust (Thompson et al., 2021). It must be noted that there is a shortage of studies that examine different communication priorities, needs and expectations between registered nurses and practical nurses which also could explain such results. This study shows that nurse leaders' internal crisis communication needs more supportive and nurturing elements alongside merely presenting the facts about, for example, the latest developments. A complex crisis such as the pandemic has inevitably placed new demands on internal crisis communication. More than simply repurposing old tools and communication practices, leaders need to be more creative and flexible with their communication strategies, focusing on sense-making and listening (Heide & Simonsson, 2021).

This study has shown that there has been *false communication* in health care organisations during the pandemic: *False communication* has been described as a negative phenomenon associated with internal crisis communication failure (Bergeron et al., 2006; Tseng et al., 2005). In this study, nurses who treated COVID-19 patients daily or weekly experienced the most *false communication*, while nurses who had never treated COVID-19 patients reported experiencing this phenomena the least. One potential explanation for *false communication* is uncertainty and lack of information, especially at the beginning of the crisis; this was reported in previous recent studies that have been undertaken during the COVID-19 pandemic (Catania et al., 2021; Simonovich et al., 2021).

Summarizing this study, we may emphasize once again the important role of nurse leaders in internal crisis communication during the COVID-19 pandemic. Additionally, this study has highlighted the fact that internal crisis communication has been an important part of nurse leaders' daily work routine throughout the pandemic. Indeed, it has played a key role at all stages for nurse leaders that have managed the crisis. The COVID-19 pandemic has increased the pressure to focus on internal crisis communication (Heide & Simonsson, 2021). It is important to note that this study has shown beyond doubt that internal crisis communication has succeeded at the forefront of the pandemic battle and within the most critical units dealing with its effects.

4.1 | Strengths and limitations

This study is the first, to the best of our knowledge, to describe in detail nurse leaders' internal crisis communication. It can thus be thought of as a pilot study, one that has produced significant results and shown the need for further systematic research—for example, the further development of the questionnaire. This study produced new research data about nurse leaders' internal crisis communication. One particular strength of this study is that the data were collected *during* the pandemic crisis. Cronbach alpha tests revealed that the reliability of questionnaire was good.

The study has several limitations. The average age of the participating nurses was 37 years, which is significantly younger than the average age of Finnish nurses, which is 43 years (Finnish Institute for health and welfare, 2018). In addition, data in the collected sample were small, and therefore, the results are not generalizable to all Finnish nurses. Furthermore, only a few nurses had been in contact with COVID-19 patients.

The data were collected via a questionnaire that was distributed by using social media. Because of the open platform, it was not possible to calculate the sample size. It might be possible that all of the respondents were not included (some of the responses having gone astray), and all potential respondents were not reached. Another limitation was that the data collecting started in mid-February 2021, more than a year after the pandemic started, and some perceptions could have been inconsistent.

5 | CONCLUSIONS

This study showed that the quality of nurse leaders' internal crisis communication varies across different units. Nurse leaders' internal crisis communication was on the whole timely, especially so in the most critical units that were dealing with the effects of the pandemic. Our results highlighted the importance of considering different units' special needs for internal crisis communication. In addition, we suggest that there should be more dialogue between units so that good communication practices can be widely shared within organisations.

Interaction between nurse leaders' and nursing staff during the crisis needs more development and improvement. The study findings suggest that nurse leaders' internal crisis communication style needs more emotionally supportive elements alongside the dispassionate presentation of facts and figures.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse leaders play a key role in internal crisis communication in social and health care organisations. They should be fully aware of their responsibilities in this regard. This study especially showed a demand for supportive emotional elements of communication. In addition, it is very beneficiary that nurse leaders develop their communication based on different types of units and with different professions. Especially, nurses, who do the bedside work, need to be paid more attention in communication.

Once the COVID-19 crisis is finally over, nurse leaders should be encouraged to learn from these events. This study can help nurse leaders to consider their style of internal crisis communication and honestly assess all aspects of its implementation—both good and bad.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

According to Finnish guidelines, this study did not require ethical permission, as it was a questionnaire study for nursing staff, involving no patients, causing no harm and not intervening in the physical integrity of a person.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Anu Nurmeksela https://orcid.org/0000-0003-0474-0404
Tarja Kvist https://orcid.org/0000-0001-5974-8732

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

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Burnout, resilience and psychological flexibility in frontline nurses during the acute phase of the COVID-19 pandemic (2020) in Madrid, Spain

Raquel Jiménez-Fernández RN, PhD, Full Professor[1] |
Inmaculada Corral-Liria RN, PhD, Full Professor[1] |
Bibiana Trevissón-Redondo RN, PhD, Assistant Professor[2] |
Daniel Lopez-Lopez Bachelor in Podiatry, PhD, Full Professor[3] |
Marta Losa-Iglesias RN, Bachelor in Podiatry, PhD, Full Professor[1] |
Ricardo Becerro-de-Bengoa-Vallejo RN, DPM, PhD, Full Professor[4]

[1]Faculty of Health Sciences, Universidad Rey Juan Carlos, Madrid, Spain

[2]SALBIS Research Group, Faculty of Health Sciences, Universidad de León, León, Spain

[3]Research, Health and Podiatry Unit, Department of Health Sciences, Faculty of Nursing and Podiatry, Universidade da Coruña, Ferrol, Spain

[4]Facultad de Enfermería, Fisioterapia y Podología, Universidad Complutense de Madrid, Madrid, Spain

Correspondence
Marta Losa-Iglesias, Faculty of Health Sciences, Universidad Rey Juan Carlos, Madrid 28933, USA.
Email: marta.losa@urjc.es

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Abstract

Background: In April 2020, Spain was the country with the highest number of patients infected by COVID-19 in Europe. The pressure on health care providers has had a direct impact on nurses and their mental health.

Aim: The aim of this study is to demonstrate the causal relationship between resilience, acceptance, experiential avoidance, psychological inflexibility and burnout syndrome, all of which are measured with validated questionnaires.

Methods: This was designed as a transversal correlational study with nurses who worked during the acute phase of the pandemic in public hospitals in the Community of Madrid with patients diagnosed with COVID-19 in COVID-19 medical hospitalization units, emergency services and intensive care units. Google Forms was used to obtain an informed consent sheet, socio-demographic variables and the following questionnaires: 10 CD-Risk, Connor-Davidson Risk Resilience Scale, Acceptance and Action Questionnaire-II and the Maslach Burnout Inventory.

Results: The final sample included 375 nurses with a high number of consecutive days of direct exposure to an infected patient and a very high number of consecutive days without rest; almost 18% suffered from COVID-19. The nurses presented medium levels of resilience, medium levels of experiential avoidance and medium levels as measured for emotional exhaustion, personal accomplishment and depersonalization. We also found a predictive correlation between all the dimensions of the burnout questionnaire in relation to the data obtained from the resilience questionnaire.

Conclusions: There is a direct and predictive relationship between the resilience that nurses had during the acute phase of the pandemic and their capacity for acceptance, experiential avoidance, psychological inflexibility and burnout syndrome.

Implications for Nursing Management: The scores show the necessity to implement preventive measures to avoid fatal psychological consequences for nurses.

KEYWORDS
burnout, quality of work environment, stress

1 | BACKGROUND

Coronaviruses (CoV) are a huge family of known viruses whose infection is associated with severe respiratory diseases in humans and infected animals. A novel coronavirus was identified as the cause of an ordinary form of pneumonia of unknown cause, common cold or flu in Wuhan, the most populated city (11 million inhabitants) in the central region of China at the end of December 2019 and was firstly named '2019-nCoV'. There was a striking resemblance of SARS-CoV-2 (Wu et al., 2020) (Cucinotta & Vanelli, 2020) with SARS-CoV and MERS-CoV identified in 2003 and 2012, respectively (Paules et al., 2020). On 11 March 2020, the WHO Director General Dr Tedros Adhanom announced WHO's highest level of alarm (Cucinotta & Vanelli, 2020).

In April 2020, Spain had the highest number of patients infected by COVID-19 in Europe, 30% of whom required hospitalization and 4% of these were admitted to an intensive care unit (Plaza-Ramos et al., 2020). From 3 January 2020 to 22 March 2021, there were 3,206,116 confirmed cases of COVID-19 with 72,793 deaths, reported to WHO (WHO, 2021).

The ICN data set in 2020 estimated that around 1.6 million health care workers have been infected in 34 countries (Setiawati et al., 2021). The percentage of professionals affected is different from country to another. A report conducted by the Centers for Disease Control and Prevention dated 2 June 2020 reported 69,761 cases and 368 deaths in the United States among health professionals (Kang et al., 2020; Mubarak et al., 2021).

Organizationally, COVID-19 pandemic has also meant the greatest health crisis of all time in Spain, revealing a lack of expertise in the pandemic management, limited human and material resources, a significant shortage of intensive or acute care beds and distance or ignorance of symptoms, diagnosis and treatment of the disease (ISCIII, 2021).

During that time, nurses were mainly working in a hostile environmental with long and gruelling shifts. Their procedures were subject to quick organizational changes with no tests and inadequate individual protective equipment to protect them from COVID-19. A high proportion of non-specialized teams in their last year of the bachelor's degree in nursing were recruited because of the reduction in the workforce, and they were put in positions to address end-of-life decisions and everchanging situations, replacing the patients' families in providing emotional support (Setiawati et al., 2021).

Such circumstances generated a huge emotional and psychological impact manifested by anxiety, job stress, helplessness and fear of being infected. There was an imbalance between their own desires and safety and the needs of patients or even their own families (Luceño-Moreno et al., 2020). Nurses felt uncertainty and had difficulty managing the workload. They suffered from energy loss, low self-esteem and often had little interest in patients due to their mental and emotional fatigue for lengthy periods of time, and this resulted in burnout syndrome (El-Hage et al., 2020) (Restauri & Sheridan, 2020).

In order to protect the psychological well-being of frontline nurses and minimize the impact of burnout or traumatic events, interventions promoting resilience and psychological flexibility were developed. Psychological flexibility represents a key element of Acceptance and Commitment Therapy (Hossain & Clatty, 2021) (Hou et al., 2020) (Barello et al., 2020). It is often offered to people whose emotional balance can handle situations according to their own strong values and goals, which have led to the growth and strengthening of the organization even when unwanted feelings and memories appear (Hossain & Clatty, 2021).

Resilience relates to an individual's capacity to adapt and quickly overcome adversities or stressors with minimal psychological impact, maintain social support and not sink into pessimism (Ren et al., 2018).

Consequently, there have been no studies that report burnout and two coping strategies together: resilience and experience avoidance and acceptance or psychological flexibility developed to overcome this traumatic experience in frontline nurses during the COVID-19 pandemic in Spain.

Knowledge of identification of stressors and coping strategies are essential for strengthening the mental health of frontline nurses during the crisis. This is also required to minimize the impact of turnover, lower achievement, absenteeism and high costs (El-Hage et al., 2020) and could generate an empowered health care system performance for future pandemics (Restauri & Sheridan, 2020). We cannot ignore that poor mental health of nurses can result from accidents, medical errors, damage to patient safety or a poor standard of care (Alahdab et al., 2020).

For all these reasons, we hypothesize that there is a direct and predictive relationship between the resilience that nurses had during the acute phase of COVID-19 pandemic (2020) and their ability for acceptance, experiential avoidance, psychological inflexibility and burnout syndrome. Therefore, the main objective is to demonstrate this causal relationship between resilience, acceptance, experiential

avoidance, psychological inflexibility and burnout syndrome, all of which are measured with validated questionnaires.

2 | MATERIALS AND METHODS

2.1 | Design and sample

This study used a transversal correlational approach. The nurses from public and university hospitals in Madrid (Spain) were informed of the nature and aim of the study, and their participation was voluntary. Data were obtained through this link: https://docs.google.com/forms/d/e/1FAIpQLSdR9x9FkaQoiwLEt-TaixKgq-sBlOSq-s8UnWySCLOl8oIllA/viewform?vc=0&c=0&w=1&flr=0 from 1 June to 30 September, 2020.

Google Forms was used to obtain an informed consent sheet and sociodemographic variables including age, sex, smoking status, marital status, weight, height and body mass index (BMI). Work environment variables included the number of years worked, the number of consecutive workdays without pay, days of exposure to COVID-19 and COVID-19 patients (Wollesen et al., 2019).

The inclusion criteria were (a) women aged 18 years or older, (b) adequate understanding of Spanish at an oral and written level and (c) nurses who had worked in the acute phase of the pandemic in public hospitals in the Community of Madrid with patients diagnosed with COVID-19, in COVID-19 medical hospitalization units, emergency services and intensive care units. The exclusion criterion was inadequate completion of the questionnaires.

2.2 | Sample size

The sample size was calculated with software from Unidad de Epidemiología Clínica y Bioestadística, Complexo Hospitalario Universitario de A Coruña, and Universidade A Coruña (www.fisterra.com). The calculations were based on the total nurses working in Spain on 1 July 2021, which amounted to 255,473 nurses, and a total of 50.955 of them are from Madrid-Spain (https://www.ine.es/jaxi/Datos.htm?path=/t15/p416/a2016/l0/&file=s08004.px). It was determined that with an α level of .05, with a confidence interval of 95%, based on a desired power of 80% with a β level of 20%, and a precision of 6% for a proportion of 50%, at least 267 nurses must be recruited. Assuming a loss of 10%, a minimum of 296 participants had to be included in the study.

2.3 | Survey setting/tools

2.3.1 | 10 CD-Risk, Connor–Davidson Risk Resilience Scale (CD-RISC)

Resilience was evaluated using the short version of the CD-RISC in the Spanish adaptation of Notario-Pacheco et al. (2011). It consists of 10 items (those items numbered 1, 4, 6, 7, 8, 11, 14, 16, 17, 19) of the original scale elaborated by Connor and Davidson (2003). With the use of this scale, participants were asked to answer to what extent they agreed with each of the sentences presented to them (For example, item 1: 'I am able to adapt to changes'.) The form of response is a 5-point Likert-type scale from 0 (*totally disagree*) to 4 (*totally agree*). It evaluates resilience from five spheres: personal competence, self-demand and tenacity; confidence in one's intuition and tolerance for adversity; positive acceptance of change and establishment of safe relationships; control and spiritual influences. The final score is the sum of all the responses obtained on each item (range 0–40), and the highest scores show us the highest level of resilience. The reliability of Spanish adaptation 10-item CD-RISC: Cronbach's alpha = .85, and the weights in factor analysis were within the range of .48–.76 (Notario-Pacheco et al., 2011).

2.3.2 | Acceptance and Action Questionnaire-II, AAQ-II

AAQ-II evaluates the concept of acceptance, experiential avoidance and psychological inflexibility. This questionnaire assesses the extent to which people, in the face of their private events, associated with psychological distress, manage to accept them and keep their goals and values present, directing their actions towards them. This test has an internal consistency of $\alpha = .74$ and was adapted from English to Spanish. It consists of 10 items that are evaluated using a 7-point Likert scale and where items 1, 6 and 10 are inverse. Therefore, the range varies from 10 to 70. High scores indicate less acceptance, that is, greater experiential avoidance (Barajas, 2015; Valencia, 2019).

2.3.3 | Maslach Burnout Inventory

This questionnaire assesses the syndrome of emotional exhaustion, depersonalization and lack of personal fulfilment at work that can develop as a consequence of continued exposure to work stressors (Wollesen et al., 2019).

To measure the degree of professional burnout, the Spanish version of the MBI was used. This questionnaire consists of 22 items. The participants responded according to the frequency of experience of the feelings expressed: never (0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week (4), a few times a week (5), every day (6). The sum of the scores determines three dimensions of professional burnout: emotional exhaustion (9 items), depersonalization (5 items) and personal accomplishment (8 items). The score is inverse in items 1, 4, 5 and 6. To interpret the scores obtained on the three scales, we used the following cut-off points: For emotional exhaustion, the values are between 15 and 24 (<15 low, 15–24 medium and >24 high), for depersonalization between 4 and 9 (<4 low, 4–9 medium and >9 high) and for personal accomplishment between 33 and 39 (<33 high, 33–39 medium and >39 low).

Burnout was measured using the version validated in Spanish (Seisdedos, 1997) and has been used in previous studies (Yuguero, Forné, et al., 2017; Yuguero, Ramon Marsal, et al., 2017; Yuguero Torres et al., 2015) showing a Cronbach's alpha coefficient for the emotional exhaustion scale of .92, for depersonalization .83 and for personal fulfilment .82.

2.4 | Ethical aspects

The study was approved by the Ethics Committee of the Universidad Rey Juan Carlos (Registration number: 0906202014120). All participants signed informed consent forms prior to completing the questionnaire thought this link: https://docs.google.com/forms/d/e/1FAIpQLSdR9x9FkaQoiwLEt-TaixKgq-sBlOSq-s8UnWySCLOl8oIIlA/viewform?vc=0&c=0&w=1&flr=0.

2.5 | Data analysis

All variables were examined for normality of the distribution using the Kolmogorov–Smirnov test, and the data were considered normally distributed if $p > .05$. Independent student's t tests were performed to determine if there were statistically significant differences when a normal distribution is shown. Measurements that were not normally distributed were analysed using the nonparametric Mann–Whitney U test. For the statistical analysis, the SPSS 20.0 package for Windows was used.

For the cross-sectional analytical study, an analysis of quantitative variables was carried out using means and deviations, with respect to categorical variables, counts and percentages. Pearson's correlation was performed in order to measure the strength of association between two quantitative variables, and linear regression analysis was used to determine the predictive value of significant Pearson correlations. A p value of <.05 was considered statistically significant (SPSS for Windows, version 20.0; SPSS Inc., Chicago, IL).

3 | RESULTS

3.1 | Participants

The final representative sample included 375 nurses who completed the questionnaires correctly.

3.2 | Descriptive data

Nurse demographic characteristics and professional and questionnaire variables of the sample are shown in Table 1, which presents the descriptive data of the sample and the study questionnaires variables. Regarding the professional variables in which the overload of consecutive days of direct care for COVID-19 patients, consecutive days without rest with COVID-19 patients and years of experience as a nurse are explored among other aspects. This sample is composed of married and unmarried nurses with sufficient years of nursing

TABLE 1 Nurses' information and professional and questionnaire variables of the sample $N = 375$

Variables	*n* (%)	Mean ± SD	Range (min–max)
Sex (male/female)	375 (38/337)		
Age (years)		34.62 ± 10.31	21–64
Height (cm)		165.37 ± 7.01	150–190
Weight (kg)		63.96 ± 14.44	51–170
BMI		23.3 ± 4.82	16.8–60.9
Marital status (unmarried/married)	259 (69.1%)/116 (30.9%)		
Smoker (no/yes)	279 (74.4%)/96 (25.6%)		
Have you been a COVID-19 patient? (no/yes)	310 (82.7%)/65 (17.3%)		
Years of professional experience		23.10 ± 16.26	1–25
Number of days with direct exposure to patients with COVID-19		90.48 ± 16.67	1–100
Number of consecutive days of work without rest		9.41 ± 11.68	1–18
10 CD-RISC Total Score		28.75 ± 5.50	6–40
AAQ-II YUC Total Score		30.31 ± 9.93	11–60
Maslach scale: Emotional Exhaustion Score		23.85 ± 10.27	3–48
Maslach scale: Personal Accomplishment Score		39.08 ± 6.39	18–48
Maslach scale: Depersonalization Score		7.66 ± 5.79	0–30

Abbreviations: 10 CS-RISC, 10-item Connor–Davidson Resilience Scale; AAQ-II YUC, Acceptance and Action Questionnaire-II; BMI, body mass index; max, maximum; min, minimum; SD, standard deviation.

TABLE 2 Pearson correlation coefficients between all variables

	Age	Body mass index	Years of professional experience	Number of days with direct exposure to patients with COVID-19	Number of consecutive days of work without rest	10 CD-RISC Total Score	AAQ-II YUC Total Score	Maslach scale: Emotional Exhaustion	Maslach scale: Personal Accomplishment	Maslach scale: Depersonalization
Age	1									
Body mass index	.212**	1								
Years of professional experience	.111*	.014	1							
Number of days with direct exposure to patients with COVID-19	−.054	−.031	−.005	1						
Number of consecutive days of work without rest	−.058	−.054	−.001	.073	1					
10 CD-RISC Total Score	.066	−.083	−.047	.067	.052	1				
AAQ-II YUC Total Score	−.004	.054	−.041	.094	.085	−.433**	1			
Maslach scale: Emotional Exhaustion	−.007	−.017	−.025	.028	.006	−.332**	.406**	1		
Maslach scale: Personal Accomplishment	.100	−.009	.027	−.018	−.035	.484**	−.402**	−.391**	1	
Maslach scale: Depersonalization	−.168**	−.019	−.040	.163**	.053	−.200**	.409**	.463**	−.423**	1

Abbreviations: 10 CS-RISC, 10-item Connor–Davidson Resilience Scale; AAQ-II YUC, Acceptance and Action Questionnaire-II.

**Bilateral correlation significant *p* value .01.

*Bilateral correlation significant *p* value .05.

experience to meet the criteria. They had a high number of consecutive days of direct exposure to an infected patient and also a very high number of consecutive days without rest; almost 18% suffered from COVID-19.

Regarding the analysis of the means obtained in the different questionnaires, we found that the nurses in the sample presented medium levels of resilience, measured with 10 CD-RISC; likewise, medium levels of experiential avoidance were obtained in the AAQ-II YUC questionnaire. Analysing the three dimensions of the burnout questionnaire, we have found that the sample presents medium levels for emotional exhaustion, personal accomplishment and depersonalization.

3.3 | Correlation and regression analysis

We used P-Pearson and linear regression analyses to evaluate the relationship between all variables. Table 2 shows the correlation statistical analysis. In this table, we found positive significant correlations between the personal accomplishment dimension score and the 10 CD-RISC total score (.484, $p < .01$), Maslach scale: depersonalization dimension score and number of days with direct exposure to patients with COVID-19 (.166, $p < .01$) and BMI and age, but this significant correlation is not relevant for the research objective. In addition, we found negative significant correlations between the depersonalization dimension score and age (−.1668, $p < .01$), depersonalization dimension score and the 10 CD-RISC total score (−.200, $p < .01$), emotional exhaustion dimension score and the 10 CD-RISC total score (−.332, $p < .01$) and AAQ-II YUC total score and 10 CD-RISC total score (−.433, $p < .01$).

After determining the significant correlations (positive and negative), a linear logistic regression analysis was performed to determine if their value was predictive.

In Table 3 are shown the linear regression analyses to evaluate the relationship between the following two variables. depersonalization score and age; depersonalization score and the number of days with direct exposure to patients with COVID-19; relationship between the depersonalization score and the 10 CD-RISC total score; AAQ-II YUC total score and the 10 CD-RISC total score; emotional exhaustion score and the 10 CD-RISC total score; 10 CD-RISC total score and personal accomplishment total score; depersonalization score and the AAQ-II YUC; personal accomplishment score and the AAQ-II YUC and the last emotional exhaustion score and the AAQ-II YUC, and all of these relationship showing a statistically significant negative or positive correlation ($p < .01$). The significant association suggests that a linear regression model is optimal for predicting the relationship of those two variables mentioned above.

4 | DISCUSSION

The data obtained in the study showed that the sample of nurses, mainly women, middle-aged, single and non-smokers, with a more than acceptable professional experience showed medium levels of resilience, experiential avoidance and burnout. Regarding the correlations on the variables analysed, predictive correlations (positive and negative) are shown in all the dimensions of the burnout questionnaire in relation to the data obtained from the resilience questionnaire. Significant and predictive correlations also have been obtained with respect of the experiential avoidance questionnaire in relation to the resilience questionnaire. The age and days of direct exposure to COVID-19 also showed significant and predictive correlations with respect to the depersonalization dimension of the burnout questionnaire. Finally, the three dimensions of the burnout questionnaire also obtained positive and predictive correlation with the AAQ-II YUC scores.

These results are in the same line with many other studies. Lai et al. (2020) documented the psychological damages suffered in Wuhan as symptoms of depression, anxiety, insomnia and distress. Likewise, in Germany, Zerbini et al. (2020) detected high burnout scores on the tests administered to nurses who worked with COVID-19 infected patients, scores higher than our sample.

In a study on Italian nurses, a country similar to Spain in its prevalence and severity of COVID-19 cases in the first wave, 'high emotional burnout, work-related pressure …', similar to our results (Barello et al., 2020), was found.

TABLE 3 Linear regression between two variables

Linear regression between two variables	R^2 (p) equation	Linear regression between two variables	R^2 (p) equation
10 CD-RISC Total Score/AAQ-II YUC Total Score	$R^2 = .18$ ($p < .01$) $Y = -0.77 + 52.68$	AAQ-II YUC Total Score/Maslach scale: Depersonalization	$R^2 = .16$ ($p < .01$) $Y = 0.69X + 24.98$
AAQ-II YUC Total Score/Maslach scale: Emotional Exhaustion/	$R^2 = .163$ ($p < .01$) $Y = -0.38X + 21.02$	10 CD-RISC Total Score/Maslach scale: Depersonalization	$R^2 = .03$ ($p < .01$) $Y = -0.21X + 13.70$
Maslach scale: Emotional Exhaustion/10 CD-RISC Total Score	$R^2 = .11$ ($p < .01$) $Y = -0.62X + 41.68$	Maslach scale: Personal Accomplishment/AAQ-II YUC Total Score	$R^2 = .15$ ($p < .01$) $Y = -0.61X + 54.21$
Maslach scale: Personal Accomplishment/10 CD-RISC Total Score	$R^2 = .23$ ($p < .01$) $Y = -0.56X + 22.87$	Maslach scale: Depersonalization/number of days with direct exposure to patients with COVID-19	$R^2 = .02$ ($p < .01$) $Y = 0.01X + 6.54$
Maslach scale: Depersonalization/age	$R^2 = .02$ ($P < .01$) $Y = -0.09X + 10.91$		

Regarding resilience joined with burnout, Roberts et al.'s study Roberts et al. (2021) aimed to assess frontline nurses' burnout level and the influencing factors, which included knowledge about COVID-19, workplace environment and demographics during the first wave of the COVID-19 pandemic in the public hospitals. It also aimed to evaluate the coping strategies developed to overcome this traumatic experience: resilience, experience avoidance, acceptance or psychological flexibility and the relationship between each variable to the burnout level (Roberts et al., 2021). In our study, experiential avoidance had an important influence on the levels of resilience. In addition, our nurses were at medium to low levels of resilience, which, together with experiential avoidance, can predispose them to negative consequences.

This study has limitations, and the results should be considered in light of these. First, the sample was not randomized, and the results are related to the first wave. Currently, the nurses' score for variables such as resilience, burnout, depression and anxiety may be different due to the fatigue from the past 2 years working in poor conditions, so a comparative study should be performed.

5 | CONCLUSION

After analysing the data, we concluded there is a direct and predictive relationship between the resilience that nurses had during the acute phase of the COVID-19 pandemic (2020) and their capacity for acceptance, experiential avoidance, psychological inflexibility and syndrome of burnout.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

The implications for nursing management are that the scores show the necessity to implement preventive measures to avoid fatal psychological consequences for nurses. For this reason, nursing managers must take this evidence into account in order to implement early detection measures and subsequently implement prevention and/or treatment programmes for affected nurses.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

ETHICAL CONSIDERATIONS

The study was approved by the Ethics Committee of the Universidad Rey Juan Carlos (Registration number: 0906202014120).

AUTHOR CONTRIBUTIONS

Marta Losa-Iglesias performed the conceptualization, methodology, software, data curation and writing—original draft preparation. Raquel Jiménez-Fernándeu performed the data curation, visualisation and investigation. Bibiana Trevissón-Redondo, Inmaculada Corral-Liria and Daniel Lopez-Lopez performed the validation and writing—reviewing and editing. Ricardo Becerro-de-Bengoa-Vallejo helped in the writing—reviewing and editing.

DATA AVAILABILITY STATEMENT

Authors do not wish to share the data.

ORCID

Inmaculada Corral-Liria https://orcid.org/0000-0002-4872-4660
Daniel Lopez-Lopez https://orcid.org/0000-0002-9818-6290
Marta Losa-Iglesias https://orcid.org/0000-0001-7588-2069

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WILEY

ORIGINAL ARTICLE

Changes in distress and turnover intentions among hospital-based nurses working during the first 8 months of the COVID-19 pandemic in Denmark: A prospective questionnaire study

Berit Kjærside Nielsen PhD, Senior researcher[1] | **Caroline Trillingsgaard Mejdahl PhD, Researcher**[1] | **Morten Deleuran Terkildsen PhD, Senior researcher**[1,2] | **Mimi Mehlsen PhD, Associate professor**[3]

[1]Department of Public Health and Health Services Research, DEFACTUM, Aarhus, Denmark

[2]Department of Forensic Psychiatry, Aarhus University Hospital Psychiatry, Aarhus, Denmark

[3]Department of Psychology and Behavioural Sciences, Aarhus University, Aarhus, Denmark

Correspondence
Berit Kjærside Nielsen, Department of Public Health and Health Services Research, DEFACTUM, Central Denmark Region, Olof Palmes Alle 15, DK-8200m Aarhus N, Denmark.
Email: berini@rm.dk

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Abstract

Aim: To describe changes in distress among Danish hospital-based nurses during the early month of the COVID-19 pandemic and to examine predictors of distress and turnover intentions.

Background: Outbreak of infectious diseases such as the COVID-19 pandemic can increase the likelihood that health professionals suffer from poor mental health even after the outbreak.

Methods: A prospective study among 426 Danish hospital-based nurses during the early month of the pandemic. Participants completed self-administered questionnaires regarding mental health and COVID-19 worries, as well as turnover intentions.

Results: Nurses with brief work experience reported higher increase in distress. Feeling unsafe at work, having low trust in management and being anxious for relatives were associated with increased distress. Finally, feeling unsafe at work, being anxious for relatives and having low trust in management were predictors of intention to change job.

Conclusion: This study suggests that the subjective experiences of uncertainty in work during the COVID-19 pandemic have more impact on nurses' distress than COVID-19 related conditions at hospitals. Finally, the study provides empirical support for the association between COVID-19-related worries and turnover intentions.

Implication for nursing management: Knowledge of risk factors for psychological distress as well as predictors of turnover intention is necessary and may provide nurses and health-care systems with the ability to respond better against future pandemics and to retain nurses in the organization and in the profession.

KEYWORDS
COVID-19 pandemic, follow-up survey, nurses, psychological distress, turnover intentions

1 | INTRODUCTION

In December 2019, in Wuhan, China, an unknown and potentially life-threatening disease caused by SARS-CoV-2 was discovered. The disease was named Coronavirus disease 2019 (COVID-19) and is a viral respiratory infection. COVID-19 spread rapidly throughout the world, and on March 11, 2020, the World Health Organization declared COVID-19 a pandemic (WHO, 2020). Health professionals are under physical and psychological pressure when facing largescale health crises such as COVID-19. Studies from previous pandemics have found that these events can lead to extraordinary pressure on health professionals (Liu et al., 2012). One of the major problems health professionals faced during the onset of COVID-19 was the uncertainty associated with the disease arising from the different ways of transmission of the virus, uncertainty regarding protective measures and the difficulty in implementing physical distancing in clinical practice. Moreover, factors such as increased workload, lack of protective equipment, physical exhaustion, risk of infection and ethical issues can significantly affect health professionals' physical and mental state (Chen et al., 2020; Vizheh et al., 2020). Poor mental health can manifest in adverse psychological reactions such as depression, anxiety, stress or insomnia, collectively termed distress. Negative aspects of work-related distress include burnout and feelings of personal and professional inadequacy (Maslach et al., 2001). It has been demonstrated that health professionals are particularly vulnerable to developing work-related distress during pandemics (Lung et al., 2009; Wu et al., 2009). Moreover, studies have found that nurses represent the group among various health professions where the prevalence of adverse psychological reactions is highest (Benfante et al., 2020; Luo et al., 2020; Pappa et al., 2020; Sanghera et al., 2020; Vizheh et al., 2020). One of the first studies investigating mental health among health professionals in Wuhan during COVID-19 identified adverse psychological reactions such as anxiety, stress, depression and sleep problems (Lai et al., 2020). The same pattern has since been found in several studies (Cabarkapa et al., 2020; Krishnamoorthy et al., 2020; Luo et al., 2020; Pappa et al., 2020; Salari et al., 2020; Sanghera et al., 2020; Vizheh et al., 2020). Since the emergence of the COVID-19 pandemic, nurses all over the world have had major work tasks, and while the majority have been dedicated to the job, the extraordinary pressure brought on by the pandemic on health-care systems worldwide may affect well-being and work performance. A study among nurses in Danish hospitals during the first wave of the COVID-19 pandemic showed that mental health was strained (Mejdahl, Mehlsen, et al., 2022; Mejdahl, Nielsen, et al., 2022). In order to be able to carry out one's work tasks in an appropriate manner during major health crises such as COVID-19, it is necessary for nurses to uphold good mental health (Catton, 2020; Mo et al., 2020). However, COVID-19 related distress may lead to long-term effects on nurses' job satisfaction and, ultimately, turnover (Labrague & de Los Santos, 2021). Turnover intention is argued to start with psychological reactions to negative aspects of organizations or jobs, but the relationship and the mediating effects among variables related to turnover are complex (Hayes et al., 2012). Negative psychological reactions related to COVID-19 could therefore lead to long-term effects on nurses' work performance and satisfaction, which may initiate thoughts of leaving one's job (Labrague & de Los Santos, 2021). The International Council of Nurses has underlined the unfortunate impacts of the COVID-19 situation on the nursing workforce, including the potential to increase burnout and increase the number of nurses leaving the profession (James Buchan, 2020). In Denmark, a 36% decrease in applicants for nursing education is recently documented (Dahlmann, 2022).

Potential long-term distress and intention to turnover experienced by nurses is vital to investigate, but most of the existing studies on nurses' mental health during COVID-19 are cross-sectional and have been conducted in contexts other than Danish. Insight in local nurses' reactions to the pandemic is critical to inform and develop the local support of nurses during and after the pandemic. Therefore, the present study aimed to analyse changes in symptoms of depression, anxiety, stress and sleep problems among hospital-based nurses during the first 8 months of the pandemic in Denmark and to examine what predicted (a) increased distress and (b) turnover intentions.

2 | METHODS

2.1 | Study design

A prospective questionnaire was conducted among Danish hospital-based nurses during the first 8 months of the COVID-19 pandemic. In addition, a small sample also participated in in-depth interviews. Results from the qualitative study have been published elsewhere (Mejdahl, Nielsen, et al., 2022).

2.2 | Study sample and data collection

Participants were recruited through targeted advertising on social media. We invited hospital-based nurses in Denmark to participate in a survey investigating nurses' mental health during COVID-19. The survey was to be answered electronically via SurveyXact and was available from 18 May 2020 until 7 June 2020. The only criteria for participating was currently working as a hospital-based nurse with sufficient mastery of Danish to complete a questionnaire. A follow-up survey was sent to those who agreed to receive a second questionnaire, which was available from 30 November 2020 until 31 December 2020. Technical procedures regarding answering the online questionnaire and the understanding of the individual questions were tested among a small group of nurses prior to the launch.

2.3 | Measures

The questionnaire consisted of demographic questions (sex, age, region of employment, years working as a nurse and ward type), four internationally validated scales measuring mental health and seven

single-item questions related to the participant's specific experience with and concerns regarding COVID-19.

The primary outcome measures were the occurrence of depressive symptoms, anxiety, insomnia and stress. *The Patient Health Questionnaire* (PHQ-9) was used to determine the presence of depressive symptoms (Kroenke et al., 2001). PHQ-9 consists of nine statements, where the respondent indicates on a 4-point Likert scale the extent to which they have been bothered by a problem within the last 2 weeks. Then a total score of between 0 and 27 is calculated, with a higher score indicating more depressive symptoms. PHQ-9 has proven to be a valid and reliable questionnaire but has not been validated in Danish (Martin et al., 2006). Cronbach's alpha in the present study was .86.

Generalized Anxiety Disorder (GAD-7) was used to measure anxiety symptoms (Spitzer et al., 2006). GAD-7 consists of seven questions in which the respondent on a 4-point Likert scale evaluates the frequency of anxiety symptoms within the past 2 weeks. A total score is calculated with values from 0 to 21, where a higher score indicates a higher degree of anxiety. Thus far, there are no validation studies of the Danish version of the GAD-7 scale, but it is widely used in Danish populations. Cronbach's alpha in the present study was .89.

The Insomnia Severity Index (ISI-7) includes seven questions that measure the severity of insomnia seen over the past 2 weeks (Bastien et al., 2001). The respondent evaluates on a 5-point Likert scale the degree of difficulty in falling asleep, staying asleep, waking up early, satisfaction with current sleep and the degree of worry or anxiety caused by difficulty sleeping. The overall score goes from 0 to 28, a higher score indicating greater insomnia severity. Preliminary validation of the Danish translation of ISI-7 has been conducted, showing good psychometric properties (Dieperink et al., 2020). Cronbach's alpha in the present study was .92.

Finally, we included the *Perceived Stress Scale* (PSS-10), a general measure of perceived stress that expresses how a person experiences their life as unpredictable, uncontrollable and stressful (Cohen et al., 1983). The PSS-10 consists of 10 items, and the respondent is asked to rate feelings and thoughts within the last month. PSS-10 has been translated and validated in a Danish context and used in several Danish studies, including the National Health Profile (Eskildsen et al., 2015). The PSS-10 score ranges from 0 to 40, a higher score indicating a higher degree of perceived stress. Cronbach's alpha in the present study was .89.

2.3.1 | COVID-19 items

The COVID-19 single-item was developed based partly on items used in one of the first studies involving frontline health professionals (Lai et al., 2020) and partly on a dialogue involving hospital-based nurses, who, 1 month into the pandemic in Denmark, had practical experience of working after the outbreak. The COVID-19 items consisted of seven questions concerning work-related worries regarding COVID-19. Four questions were asked to the participants in both surveys, whereas three questions concerning flexibility, recognition and consideration of changing jobs were only asked in the second survey (see Table 2). Results based on cross-sectional data from the first survey have been published elsewhere (Mejdahl, Mehlsen, et al., 2022). In the following, consideration of changing jobs is labelled turnover intentions, defined as an employee's intention to change jobs voluntarily. If the participants answered yes to the question, they were asked to elaborate on the reasons in an open text box.

2.4 | Data analysis

The age of the participating nurses was calculated based on their reported date of birth. Seniority was based on the number of years the respondent reported working as a nurse. On the scales, missing items resulted in incomplete scores for 12–19 participants. Missing data were treated with listwise deletion. To examine if changes in distress differed between subgroups of nurses, we conducted a series of mixed analyses of variance (ANOVAs), testing the time x group interaction. These subgroups included nurses reporting long and short work experience, being high and low on their ratings of being anxious for relatives, feeling unsafe at work, having trust in management, caring for COVID-19 patients and being deployed to another ward. Emerging evidence suggests that less experienced nurses have an increased risk of stress, depression and burnout during COVID-19 (Sriharan et al., 2021). Nurse seniority (0–2 years nurse vs. > 2 years nurse) was therefore viewed as a subgroup. The COVID-19 questions relating to being anxious for relatives, feeling unsafe at work and having trust in management were recurring themes in the qualitative statements in the open text box and provided in-depth perspectives of why and how the work as a nurse gave rise to distress (data not shown). Therefore, the themes were considered indicators of COVID-19-related job burden together with having cared for COVID-19 patients and being deployed to another ward. We grouped the nurses based on their responses to the COVID-19 having feeling unsafe at work, being anxious for close relatives and having trust in management. For the questions concerning feeling unsafe and feeling anxious for relatives, we created a highly unsafe and highly anxious category to compare the most extreme responders with the other groups. For the trust in management question, this was not feasible because only 3% reported the most extreme answer 'No trust in management'. Therefore, we chose to collapse this group with the group answering 'Little trust in management'.

Finally, to test the combined effect of these factors on distress in a multivariate analysis, we conducted a series of linear regressions including the above variables as independent variables with follow-up stress, depression, anxiety and insomnia as dependent variables, while controlling for the baseline level of the respective distress measure. We also tested combined predictors of turnover intentions in a binary logistic regression. The significance level was set at $p < .05$. Data were processed and analysed in SPSS version 27.

2.5 | Ethical statements

According to Danish law, this kind of self-reported questionnaire study does not require notification to the Committee on

Biomedical Research Ethics. The study followed the ethical principles of research involving people, as set out in the Declaration of Helsinki. Data were collected anonymously via a web-based, public questionnaire link. Participation was voluntary. Written information about the study, including contact information for the research leader, accompanied the study. The study was registered in the

TABLE 1 Participant characteristics

Variables	Baseline sample ($N = 1165$)	Follow-up sample $N = 426$ (100%)
Sex		
Male	38 (3%)	16 (4%)
Female	1125 (97%)	410 (96%)
Other	3 (<1%)	0 (0%)
Age		
Mean (SD)	43.2 (11.7)	45.4 (10.9)
Min–max	20–76	24–68
Years of working as a nurse		
<3 yrs.	150 (13%)	42 (10%)
3–10 yrs.	269 (23%)	90 (21%)
11–20 yrs.	350 (30%)	144 (34%)
20 yrs.<	367 (32%)	150 (35%)
Region		
Capital	251 (22%)	99 (23%)
Central Denmark	594 (51%)	230 (54%)
North Denmark	77 (7%)	20 (5%)
Zealand	103 (9%)	32 (8%)
Southern Denmark	110 (9%)	43 (10%)
Not registered	31 (3%)	2 (<1%)
Department		
Outpatient clinic	176 (15%)	80 (19%)
Anaesthetics, perioperative care or surgical areas	172 (15%)	64 (15%)
Children's ward	34 (3%)	11 (3%)
Intensive care unit	66 (6%)	39 (9%)
Surgical	150 (13%)	55 (13%)
General medicine	182 (16%)	69 (16%)
Psychiatry	41 (4%)	21 (5%)
Emergency department	87 (8%)	31 (7%)
Other	166 (14%)	52 (12%)
Not registered	92 (8%)	4 (1%)
Current work situation		
I have been deployed to a ward transformed into a COVID-19 unit	266 (23%)	33 (7.7%)
I have been deployed to a ward that *does not* care for patients with COVID-19	88 (7%)	14 (3.3%)
I have only been on my permanent ward, which has been transformed into a COVID-19 unit	254 (22%)	125 (29.3%)
I have only been on my permanent ward that *does not* care for patients with COVID-19	444 (38%)	243 (57.0%)
Not registered	113 (10%)	11 (3%)
Currently caring for patients infected with COVID-19		
Yes	Not asked	265 (62.2%)
No	Not asked	129 (30.3%)
I do not know	Not asked	26 (6.1%)

TABLE 2 Work-related worry and attitude towards COVID-19 in overall sample

	Number (%)	Subgroups based on dichotomized items Number (%)
I have had COVID-19[a]	419	
Yes (I tested positive)	43 (10%)	
Yes (I believe so but not tested)	6 (1%)	
Maybe (I was not tested but I had symptoms)	7 (2%)	
No (I had no symptoms)	354 (84%)	
Do not know	9 (2%)	
I have felt unsafe in my work because of COVID-19[a]	417	
To a high degree	60 (14%)	Highly $n = 60$ (14%)
Somewhat	179 (43%)	All others $n = 357$ (86%)
To a lesser degree	142 (34%)	
Not at all	36 (9%)	
I have been worried about my close relatives because of my work as a nurse during COVID-19[a]	419	
To a high degree	118 (28%)	Highly $n = 118$ (28%)
Somewhat	166 (40%)	All others $n = 301$ (72%)
To a lesser degree	106 (25%)	
Not at all	29 (7%)	
I have trust in the management's handling of COVID-19[a]	419	
To a high degree	130 (31%)	High or Some $n = 325$ (78%)
Somewhat	195 (47%)	
To a lesser degree	81 (19%)	No or Little $n = 94$ (22%)
Not at all	13 (3%)	
The flexibility expected during the COVID-19 pandemic by nurses as a professional group is adequate[b]	418	
Strongly agree	9 (2%)	
Agree	36 (9%)	
Neither agree nor disagree	74 (18%)	
Disagree	185 (44%)	
Strongly disagree	114 (27%)	
As a professional group, nurses receive sufficient recognition for their work during the COVID-19 pandemic[b]	418	
Strongly agree	7 (2%)	
Agree	28 (7%)	
Neither agree nor disagree	50 (12%)	
Disagree	157 (37%)	
Strongly disagree	176 (42%)	
The management of COVID-19 in my workplace has made me consider changing jobs[b]	418	
Yes	149 (36%)	149 (36%)
No	232 (56%)	232 (56%)
I Do not know	37 (9%)	

[a]Measured in both surveys.
[b]Measured in the second survey.

Central Denmark Region's research notification system (journal number: 1-16-02-193-20). The participants gave electronic informed consent to participate and did not receive any financial compensation.

3 | RESULTS

A total of 1165 completed the baseline survey (Mejdahl, Mehlsen, et al., 2022) and of those, 426 (36.6%) completed the follow-up 6 months

later and were included in the present study (see Table 1). Compared to those only participating in the baseline survey ($n = 739$), the participants in the follow-up were more likely to be older ($p < .05$). Concerning years working as a nurse or levels of distress measured at baseline, no statistically significant differences were found. The number of nurses deployed to other departments was the same in the baseline-only and the follow-up sample, whereas nurses working in outpatient clinics or intensive care units were more likely to participate in the follow-up survey than those who only participated at baseline ($p < .05$). Feeling unsafe because of COVID-19 at baseline was the same in the baseline-only and follow-up sample ($p > .05$), but the participants in the follow-up reported at baseline were more concern about their relatives and had less trust in the management's handling of COVID-19 ($p < .001$).

3.1 | COVID-19-related worry

More than half of the participants (57%) expressed that they had felt somewhat or highly unsafe during their work because of COVID-19, and two-thirds (68%) reported having been anxious for their relatives because of their job (see Table 2). The majority expressed trust in the way their management handled the situation (78%). However, an almost equal amount of the participants (71%) did not agree that the flexibility expected from nurses during the pandemic was appropriate, and 80% did not agree that nurses as a group received proper recognition for their efforts. No less than 36% had turnover intentions because of the management of COVID-19, and another 9% was uncertain. Of those who indicated turnover intentions, 121 (81%) provided in-depth explanations for their considerations. These could be divided into themes such as feeling unsafe because of the disease, poor well-being, work–life balance, dissatisfaction with COVID-19 management and considerations about job change even before the pandemic. Concerning the latter, several wrote that COVID-19 became the trigger to truly consider resigning. Finally, 22% of those indicating turnover intentions write that they are considering altogether leaving the nursing profession (qualitative data not shown).

3.2 | Development in distress

For the overall sample, the average level of distress was slightly increased from baseline to follow-up, although only changes in symptoms of depression and insomnia were significant and with small effect sizes (see Table 3).

Dividing the sample into subgroups revealed that some participants experienced a larger increase in distress than others. Number of years working as a nurse and trust in management's handling of COVID-19 were associated with changes in distress. Nurses with more than 2 years of experience reported stable levels of distress, whereas more inexperienced nurses increased in symptoms of depression and insomnia. In addition, nurses who reported to have been highly anxious for their relatives had significantly higher increases in symptoms of depression than the remaining nurses. No other subgroup difference in development of distress were observed (see Table 4).

3.3 | Predictors of change in distress

We conducted a series of linear regression models to examine multivariate patterns of predictors of distress symptoms at follow-up while controlling for baseline distress scores. These revealed that nurses with less than 2 years of experience working as a nurse reported higher levels of all kinds of distress at follow-up. In addition, feeling unsafe and having low trust in how the management handled COVID-19 were associated with increased anxiety, and low trust in management was also associated with higher stress levels at follow-up. Being anxious for relatives was associated with more depressive, stress and insomnia symptoms. Neither having COVID-19 patients at the ward

TABLE 3 Difference in stress, and symptoms of depression, anxiety and insomnia between baseline and follow-up

Outcome	Time point	*N*	Mean	SD	*T*	*p*	Effect size *d*
Stress PSS (0–40)	Baseline	407	13,4226	735,438	−0.844	.399	−0.042
	Follow-up	407	13,6806	706,836			
Depression PHQ-9 (0–27)	Baseline	414	49,879	470,355	−2.147	**.032**	−0.106
	Follow-up	414	54,517	473,218			
Anxiety GAD-7 (0–21)	Baseline	413	34,939	389,586	−1.381	.168	−0.068
	Follow-up	413	37,191	386,590			
Insomnia ISI (0–28)	Baseline	414	73,285	595,124	−3.809	**<.001**	−0.187
	Follow-up	414	82,609	619,807			

Note: Statistically significant values are shown in **bold**.
Abbreviations: ISI, insomnia severity index; GAD-7, generalized anxiety disorder; PHQ-9, patient health questionnaire; PSS, perceived stress scale.

TABLE 4 Development in symptoms of stress, depression, anxiety and insomnia from baseline to follow-up in different subgroups of nurses

	Stress Mean (SD)		Depression Mean (SD)		Anxiety Mean (SD)		Insomnia Mean (SD)	
	Baseline	FU	Baseline	FU	Baseline	FU	Baseline	FU
Nursing experience								
<2 yrs ($n = 42$)	16.8 (7.7)	17.6 (7.4)	6.3 (4.5)	8.6 (5.6)	5.1 (4.8)	5.9 (5.0)	8.0 (6.8)	11.1 (7.3)
>2 yrs ($n = 369$)	13.1 (7.2)	13.3 (7.4)	4.9 (4.7)	5.1 (4.5)	3.3 (3.8)	3.5 (3.7)	7.3 (5.9)	8.0 (6.0)
Time x group F (p)	0.281 (.596)		**7.768 (.006)**		1.104 (.294)		**8.103 (.005)**	
Trust in management								
Some/High ($n = 325$)	12.4 (7.1)	12.6 (6.9)	4.4 (4.2)	4.8 (4.5)	3.0 (3.7)	3.2 (3.7)	6.8 (5.7)	7.8 (6.0)
No/Little ($n = 94$)	16.7 (7.4)	17.2 (6.6)	7.1 (5.6)	7.6 (5.0)	5.1 (4.2)	5.5 (3.8)	9.2 (6.4)	10.0 (6.5)
Time x group F (p)	0.146 (.702)		0.004 (.949)		0.493 (.483)		0.075 (.784)	
Feeling unsafe								
Highly unsafe ($n = 60$)	18.2 (7.5)	18.3 (6.8)	7.8 (6.0)	8.3 (5.1)	5.8 (5.0)	6.4 (4.1)	10.5 (6.9)	11.3 (6.1)
Others ($n = 357$)	12.6 (7.0)	12.9 (6.8)	4.5 (4.3)	5.0 (4.7)	3.1 (3.6)	3.3 (3.6)	6.8 (5.6)	7.8 (6.1)
Time x group F (p)	0.037 (.849)		0.001 (.975)		0.875 (.350)		0.049 (.825)	
Anxious relatives								
Highly anxious ($n = 118$)	16.2 (7.6)	16.9 (6.7)	6.6 (5.1)	7.8 (5.1)	5.0 (4.6)	5.3 (4.0)	8.9 (6.6)	10.5 (6.2)
Others ($n = 301$)	12.3 (7.0)	12.4 (6.8)	4.4 (4.4)	4.6 (4.3)	2.9 (3.4)	3.1 (3.6)	6.7 (5.6)	7.4 (6.0)
Time x group F (p)	0.581 (.447)		**4.540 (.034)**		0.147 (.701)		2.855 (.092)	
Turnover intentions								
Yes ($n = 147$)	17.4 (7.3)	16.9 (6.6)	7.5 (5.4)	8.1 (5.0)	5.5 (4.6)	5.7 (4.1)	9.6 (6.4)	10.9 (6.4)
No ($n = 230$)	10.8 (6.2)	11.5 (6.7)	3.2 (3.1)	3.7 (3.7)	2.1 (2.6)	2.4 (3.1)	5.4 (4.8)	6.3 (5.3)
Time x group F (p)	2.744 (.098)		0.018 (.893)		0.009 (.923)		0.576 (.448)	
COVID patients								
Yes ($n = 261$)	13.6 (7.2)	13.8 (7.1)	4.9 (4.5)	5.6 (4.9)	3.4 (3.8)	3.7 (4.0)	7.5 (5.9)	8.4 (6.3)
No + do not know ($n = 153$)	13.2 (7.7)	13.5 (7.1)	5.1 (5.0)	5.2 (4.5)	3.6 (4.0)	3.7 (3.6)	7.1 (6.0)	8.0 (6.1)
Time x group F (p)	0.071 (.790)		1.287 (.257)		0.186 (.666)		0.017 (.896)	
Deployed								
Yes ($n = 47$)	14.5 (7.4)	13.6 (7.0)	5.9 (5.3)	6.0 (4.7)	3.8 (4.0)	3.8 (3.8)	7.5 (5.6)	8.4 (6.0)
No ($n = 361$)	13.3 (7.4)	13.7 (7.1)	4.9 (4.6)	5.4 (4.8)	3.5 (3.9)	3.8 (3.9)	7.3 (6.0)	8.3 (6.2)
Time x group F (p)	1.760 (.185)		0.500 (.480)		0.278 (.598)		0.017 (.896)	

nor being deployed to other departments was associated with changes in distress (see Table 5).

3.4 | Turnover intentions

Finally, we tested whether the same parameters predicted nurses' turnover intentions, and we found that being anxious for relatives, feeling unsafe and having little trust in management, but not years of experience working as a nurse, being deployed at other wards or having COVID-19 patients predicted intention to change job (see Table 6).

4 | DISCUSSION

To our knowledge, this is the first study to report on longitudinal mental health in a Danish sample of hospital-based nurses 8 months after the COVID-19 outbreak in Denmark. The study finds that the mental health of nurses in Danish hospitals during the beginning of the pandemic was strained, as the nurses reported distress in the form of symptoms of depression, anxiety, stress and sleep problems. The results are in line with several international studies investigating the impact of the pandemic on nurses' mental health, which demonstrates that nurses around the world have been mentally burdened by the pandemic (Pappa et al., 2020; Sanghera et al., 2020; Vizheh et al., 2020). A significant proportion of the nurses in our study reported having felt unsafe at work and even more had worried about unintentionally infecting their relatives. These findings have also been found and described qualitatively in studies exploring the experiences of nurses during the COVID-19 pandemic (Galehdar et al., 2020; Liu et al., 2020). For the participants to be distressed by worries both at work (feeling unsafe) and at home (anxious about relatives) poses an additional burden in relation to their mental health, because there is no place to recover.

TABLE 5 Linear regression models predicting nurses' stress, depression, anxiety and insomnia symptoms at follow-up

	Change in stress Model $F = 43.501^{***}$ Adj. $R^2 = 0.431$ (Standardized coefficients Beta)	Change in depression Model $F = 34.131^{***}$ Adj. $R^2 = 0.368$ (Standardized coefficients Beta)	Change in anxiety Model $F = 44.326^{**}$ Adj. $R^2 = 0.432$ (Standardized coefficients Beta)	Change in insomnia Model $F = 48.831^{**}$ Adj. $R^2 = 0.456$ (Standardized coefficients Beta)
Baseline distress[a]	.559***	.491***	.577***	.626***
Anxious for relatives	.098*	.103*	.016	.092*
Feeling unsafe	.067	.067	.104*	.032
Trust in management	−.097*	−.084	−.093*	−.015
0-2 yrs nurse versus > 2 yrs nurse	−.091*	−.159***	−.102**	−.119**
Deployed at other ward	−.034	−.002	−.009	−.006
COVID patients at ward	−.022	.010	−.009	−.021

[a]Baseline distress score is entered in the respective model.
*$p < .05$.
**$p < .01$.
***$p < .001$.

TABLE 6 Predictors of turnover intentions in binary logistic model

	Model $Chi^2 = 71.513$ $p < .001$ Odds ratio	95% Confidence interval	
		Lower	Upper
Anxious for relatives			
Low	1		
High	2.529	1.440	4.443
Feeling unsafe			
Low	1		
High	2.726	1.374	5.411
Trust in management			
Low	1		
High	3.837	2.190	6.722
Work experience			
0–2 yrs. nurse	1		
>2 yrs. nurse	0.618	0.282	1.352
Deployed at other ward			
No	1		
Yes	1.222	0.581	2.569
COVID patients at ward			
No	1		
Yes	1.569	0.961	2.562

Although several studies have examined the psychological impact of working as a nurse during the COVID-19 pandemic, only a small number have evaluated the impact over time, and of those, most have short follow-up periods (Abdalla et al., 2021; Sampaio et al., 2021). One of the few studies with a long follow-up period found an overall decrease in depression, anxiety and post-traumatic stress symptoms among Italian health professionals 14 months into the pandemic. Although they observed an overall worsening in insomnia symptoms, the increase was not clinically relevant (Rossi et al., 2021). Although COVID-19 appeared to have a substantial and immediate negative impact on the mental health of nurses, the results of our study and the study by Rossi et al. suggest that for the majority of health professionals, including nurses, a psychological adaptation is taking place over time. A few studies even observed positive variation in

psychological distress during the initial months of the pandemic. A Portuguese study found decrease in distress concerning sleep quality and symptoms of depression, anxiety and stress, whereas a study on sleep quality among health professionals found that the initial high rates of insomnia symptoms improved as more time passed from the peak of local COVID-19 cases 10 weeks after baseline (Abdalla et al., 2021; Sampaio et al., 2021). However, in our study, although a psychological adaptation may have taken place, we found that the baseline level of distress was elevated, indicating that the participating nurses were already burdened early in the pandemic, and this did not improve. In the wake of past pandemics, it has been pointed out that the role of nursing management is crucial in supporting initiatives to address the mental health of nurses who have been under enormous strain (Lau & Chan, 2005). In our study, inexperienced nurses and those with low or no trust in management increased in distress during the first 8 months of the pandemic. These results highlight the importance of long-term follow-up to respond to and ease the potential continuing mental health impact of the pandemic. A recent two-year impact assessment among 12,000 American nurses finds that younger nurses and nurses with less experience struggle more with poor mental health than older and more experienced nurses. The study also found that almost two-thirds of nurses under the age of 25 and more than half of nurses aged 25–34 do not believe their organization cares about their well-being and generally feel unsupported (COVID-19 Impact Assessment Survey - The Second Year, 2022). Special attention should be paid to newly qualified nurses and nurses who indicated low trust in how management handled COVID-19.

Concerns related to turnover intentions among nurses continue to challenge health-care managers, and they are influenced by many interrelated factors (Hayes et al., 2012). Our study provides empirical support for the association between COVID-19-related worries and turnover intentions. More than a third of the nurses had turnover intentions explained by the management's handling of COVID-19, and because nurses' turnover intention is a solid predictor of actual nurse turnover, that may give rise to concern (Yang et al., 2017). We found that feeling unsafe at work, worried about relatives because of one's work as a nurse and low trust in management's handling of COVID-19 significantly predicted the participants' considerations about job turnover. In a study by Labrague and de Los Santos, they found that after adjusting for nurse and hospital characteristics, an increased level of fear of COVID-19 was associated with increased psychological distress and turnover intentions (Labrague & de Los Santos, 2021). A recent review found that following the outbreak of COVID-19, the most reported factors predicting turnover intention among nurses included fear of the disease, stress and anxiety (Falatah, 2021). The review also examined factors predicting turnover intention prior to the COVID-19 pandemic, and the findings included satisfaction, commitment and leadership style (Falatah, 2021). We found that low trust in management's handling of COVID-19 predicted turnover intentions. Participating nurses' elaborations in the open text box, however, indicated that several had already considered job change before the pandemic because of dissatisfaction with management, and the extra pressure in the form of more shifts and involuntary deployment to other departments had merely confirmed them to really consider a turnover. Previous research on workplace-specific job attributes and voluntary employee turnover has shown that if the employer does not take the necessary measures to improve work conditions, employees will retain their intentions to change jobs (Cottini et al., 2011). Moreover, in a study of leadership styles among nurse managers, analysis revealed that participative and transformational leadership styles decreased turnover intention, whereas autocratic and laissez-faire leadership styles increased turnover intention (Magbity et al., 2020). Hence, the importance of poor work conditions, management and their relation to turnover intentions cannot be underestimated.

4.1 | Study limitations

Despite its longitudinal design, this survey has some limitations. Online surveys generally permit convenient and cost-effective research. However, the distribution through social media may have resulted in sampling bias. Although the anonymity of online surveys may be preferable for the participants, it creates methodological weaknesses as it makes non-response analyses impossible. We used targeted advertising on social media to increase the survey's visibility to the target population. However, the survey may have been primarily completed by nurses who had a strong opinion regarding the topic. Moreover, two-thirds of the participants from the baseline survey did not respond to the follow-up. Hence, the findings cannot be generalized. Another limitation was that we did not have data on the participants prior to COVID-19. Therefore, the results should be interpreted with caution as we do not know if the participants had symptoms of distress or turnover intentions before the pandemic. However, a study conducted among intensive care unit professionals in the Netherlands found an increase in burnout symptoms in the post-peak COVID-19 period, which on a timeline corresponds to the baseline in the present study, compared to before the outbreak (De Kock et al., 2021). Also, with turnover intentions, we asked the participants to describe why they were considering a job change and received 121 individual and mainly extended answers shedding light on why some of the 35% considered job changes.

5 | CONCLUSION

The present follow-up study found that exposure to work with COVID-19 patients or being deployed to another ward was not associated with increased distress in nurses. Feeling unsafe, being anxious for relatives, having low trust in management and limited experience as a nurse was associated with increased distress. This suggests that the subjective experiences of feeling unsafe in work under the COVID-19 pandemic have a larger impact on nurses' distress than the organizational conditions at hospitals. Moreover, the study provides empirical support for the association between COVID-19-related worries and turnover intentions.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Poor mental health and job burnout among nurses have been a crucial issue during the COVID-19 pandemic. Hospital management needs to be aware of and act on the mental well-being of health-care professionals in order to support those in need to overcome distress. Knowledge of risk factors for psychological distress and burnout is needed and may provide nurses and health-care systems with the ability to prioritize and respond better against pandemics or other health crises in the future.

Although current explanations for turnover intentions can be found in the light of COVID-19, it does not change the fact that the health-care system faces important tasks. The increasing pressure on the health-care system, combined with the fact that more nurses are considering leaving the profession, can lead to critical challenges. Therefore, identification of predictors of turnover intention would enable managers to direct attention to work-related changes in health-care organizations in order to retain nurses in the organization and in the profession.

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CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

ETHICS STATEMENT

According to Danish law, this kind of self-reported questionnaire study does not require notification to the Committee on Biomedical Research Ethics. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent were obtained and all general requirements for health science research were followed.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Berit Kjærside Nielsen https://orcid.org/0000-0003-2279-2291

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ORIGINAL ARTICLE

WILEY

Experiences of patients with rheumatoid arthritis during and after COVID-19-induced quarantine in terms of physical activity and health status: A qualitative study

Laura Ramos-Petersen PhD, Lecturer[1,2] | Jonatan García-Campos PhD, Lecturer[3,4] | George Banwell MSc, PhD candidate[5] | Ana Belén Ortega-Ávila PhD, Associate Professor[5,6] | Gabriel Gijon-Nogueron PhD, Associate Professor[5,6] | Andrés Reinoso-Cobo PhD, Lecturer[5]

[1]Department of Podiatry, Faculty of Health Sciences, Universidad Católica San Antonio de Murcia, Campus de Los Jerónimos, Murcia, Spain

[2]Research Team PODUMA, University of Malaga, Malaga, Spain

[3]Department of Behavioral Sciences and Health, Faculty of Medicine, Miguel Hernandez University, Alicante, Spain

[4]Institute for Health and Biomedical Research (ISABIAL), Alicante, Spain

[5]Department of Nursing and Podiatry, Faculty of Health Sciences, University of Malaga, Malaga, Spain

[6]IBIMA, Malaga, Spain

Correspondence
Jonatan García-Campos, Department of Behavioral Sciences and Health, Faculty of Medicine, Miguel Hernandez University. Ctra. Alicante-Valencia, km. 87-03550 Sant Joan d'Alacant, Alicante. Spain.
Email: jgarcia@umh.es

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Abstract

Aim: The aim of this study was to explore experiences of people with rheumatoid arthritis during and after COVID-19-induced quarantine in terms of physical activity and health status.

Background: Rheumatoid arthritis affects multiple facets of the person, both physically and psychologically. Physical activity is considered a safe and effective intervention to improve symptoms and systemic manifestations of rheumatoid arthritis. In the context of the COVID-19, countries like Spain were forced to impose restrictions on mobility, prohibiting outings even to perform physical activity.

Methods: Structured interviews were conducted and developed using the Tampa Scale for Kinesiophobia-11 questionnaire. Data were analysed using a six-step thematic analysis.

Results: The results make it clear that even though the patients declared that physical activity is essential for them to deal with their disease, most of the participants affirmed that they significatively reduced their levels of physical activity during the pandemic.

Conclusions: Physical activity should be promoted in people, even in difficult times, to improve disease outcomes, well-being and mental health.

Implications for Nursing Management: Knowing the experiences of these patients enables nursing managers to develop interventions that ensure the delivery of comprehensive nursing care regarding physical activity and health status, in future situations like this pandemic.

KEYWORDS
COVID-19, exercise, health status, rheumatoid arthritis

1 | BACKGROUND

Rheumatoid arthritis is an inflammatory, autoimmune and chronic disease that causes: destruction of synovial joints, local inflammation and joint pain, with associated comorbidity, disability and premature mortality (Aletaha et al., 2010; McInnes & Schett, 2017; Smolen et al., 2016). In Spain, a prevalence of 0.82% (95% CI: 0.59–1.15) was estimated (Silva-Fernández et al., 2020).

Rheumatoid arthritis affects multiple facets of the person, both physically and psychologically; gait adaptations have been identified in these patients (Carroll et al., 2015), as well as driving difficulties and the use of driving adaptations (Zhou et al., 2021) and high rates of work disability (Sokka et al., 2010). In some patients, there appears to be a relationship between disease activity and fatigue (Versteeg et al., 2022). Depression is also highly prevalent in this population (Matcham et al., 2013), as well as anxiety (Katchamart et al., 2020) and increased cardiovascular risk (Restivo et al., 2022), finding that rheumatoid arthritis has a significant impact on health-related quality of life (Matcham et al., 2014). In contrast, physical activity and exercise are considered safe and effective interventions to improve symptoms and systemic manifestations of rheumatoid arthritis, improving cardiovascular health (Metsios & Kitas, 2018), fatigue (Durcan et al., 2014; Katz et al., 2018; Rongen-van Dartel et al., 2015), sleep (Durcan et al., 2014), depressive symptoms (Kelley et al., 2015), pain (Durcan et al., 2014) and cognitive function (Azeez et al., 2020).

In response to the declaration of a global pandemic by coronavirus disease 2019 (COVID-19) decreed by the World Health Organization (WHO) in March 2020 (World Health Organization, n.d.), many countries were forced to impose restrictions on the mobility of citizens. In the case of Spain, a state of alarm was declared throughout the national territory where the freedom of movement of people was limited during its validity, prohibiting outings even to carry out physical activity (RD 463/2020, de 14 de marzo, n.d.). This confinement drastically affected the reduction in the practice of physical activity and the increase in sedentary lifestyle in the general population (Ammar et al., 2020; López-Bueno et al., 2020; Wunsch et al., 2022), and in people with rheumatoid arthritis in particular (Balchin et al., 2022; Lévy-Weil et al., 2021). In the case of people with rheumatoid arthritis, the decrease in sports and physical activity has been correlated with an increase in relapses (Ammar et al., 2020), an increase in body weight (World Health Organization, n.d.) and a worse quality of life (Lévy-Weil et al., 2021), while performing physical activity, especially light physical activity and walking, is positively associated with less mental and physical fatigue and better psychological well-being (Brady et al., 2021), and the European Alliance of Associations for Rheumatology (EULAR) in 2012 determined that the role of the nurse in the management of chronic inflammatory arthritis (CIA) is essential. These recommendations provide a basis for emphasizing and optimizing rheumatology nursing care in order to contribute to a more standardized level of professional nursing across Europe. The following is the 10th recommendation by EULAR: 'Nurses should carry out interventions and monitoring as part of comprehensive disease management in order to achieve cost savings' (van Eijk-Hustings et al., 2012).

Although few studies have raised this problem from a qualitative analysis, this analysis raises precisely in this population a very adequate research base due to the need for communication and not only raw quantitative data. Therefore, the objective of this study was to explore experiences of people with rheumatoid arthritis during and after COVID-19-induced quarantine in terms of physical activity and health status.

2 | METHODS

This study adopted a qualitative approach to explore experiences of people with rheumatoid arthritis during and after COVID-19-induced quarantine in terms of physical activity and health status.

2.1 | Ethical considerations

This qualitative study received ethical approval from the committee of Portal de Ética de la Investigación Biomédica de Andalucía (PEIBA) (SPAR-001), which was authorized and extended to a longitudinal study ARC0001. This study was carried out in full accordance with the provisions of the Declaration of Helsinki regarding ethical principles for medical research involving human subjects and was approved by the Ethics Committee.

2.2 | Participants

A convenience sample of people with rheumatoid arthritis was recruited from the Hospital Virgen de las Nieves, Granada (Spain).

Inclusion criteria were that the participant was consenting, participants aged 18 or over, satisfied the 2010 Rheumatoid Arthritis Classification Criteria (approved by the American College of Rheumatology and the European League Against Rheumatism) (Aletaha et al., 2010) and the ability to express themselves in Spanish in order to understand and respond to the questions.

Participants were excluded if they presented dementia, other rheumatic diseases, diabetes, cardiovascular diseases, previous lower limb surgery or amputation.

They all agreed to take part in the study and provided informed and written consent. Interviews took place from January to March 2021.

Eligible participants were contacted by phone to ascertain willingness to participate in the qualitative study.

2.3 | Data collection

Data were collected using a structured interview. Multiple interviews were carried out to achieve data saturation, meaning that the themes

are repeated in some interviews. The following quantitative data were also collected prior to the start of the study:

- Demographic information such as gender and date of birth.
- Levels of pain, both general and foot specific measured with the Visual Analogue Scale (VAS) (Sendlbeck et al., 2015).
- Fear of movement, health status and confidence level in performing daily activities were measured using the Tampa Scale for Kinesiophobia (TSK11) (Gómez-Pérez et al., 2011).

The TSK-11 is an 11-item self-report checklist using a 4-point Likert scale, being 1 *strongly disagree* and 14 *strongly agree*. Low scores mean no kinesiophobia, and high scores indicate there is kinesiophobia.

The interviews were conducted by phone, and they were recorded using a digital voice recorder. Field notes supplemented the data. The interviews were carried out by a researcher who had experience with patients with rheumatoid arthritis from both a clinical and research context of the interview, and participants were made aware that the researcher was also a podiatrist and nurse from the rheumatology department of the hospital (Richards & Emslie, 2000). A code was assigned for each patient, so they were anonymized or pseudonymized. There was only one person from the research team (data manager) who knew the relationship between the assigned code and the patient's clinical history, leading to a blind code. That member accessed the files with a password and was not part of the data collection process, to not interfere. All the reports are stored in the computer system used by the hospital, so the people who access that system must have permission from management, as they have passwords and individual credentials.

Informed consent forms were printed to be signed by the participants. All these signed consents, together with the evaluation and data collection sheets, are archived in an office for 5 years, to which only authorized members have access. After 5 years, those folders will go to a warehouse belonging to the hospital's rheumatology department, where all the documents related to studies that have been carried out are kept, and they will remain under lock and key for 15 years. Later, they will be destroyed.

Data analyses were conducted by two researchers.

The questions for the structured interview were developed using the questionnaire TSK-11 as a guide and from a review of the literature on COVID-19-induced quarantine in terms of physical activity and health status. The research question that was addressed in this qualitative study was as follows: *How were the physical activity levels and health status of people with rheumatoid arthritis during and after COVID-19-induced quarantine?* Therefore, the following questions were asked to the participants:

- Did you test positive for COVID-19?
- Has your level of physical activity been influenced by being positive for COVID-19 or by the COVID-19-induced quarantine?
- Did you suffer worse symptoms, pain or flares?
- Did the COVID-19-induced quarantine influence your level of physical activity?
- During the COVID-19-induced quarantine, did you have to make a change in your level of physical activity due to fear?
- Did the level of physical activity decrease, increase or was it the same?
- Have you felt motivated to increase your level of physical activity?
- Have you had to carry out any extra activity that requires a greater expenditure of energy? (e.g. taking care of the grandchildren)
- Have you felt more vulnerable to testing positive for COVID-19 due to your rheumatoid arthritis?
- Do you think that rheumatoid arthritis treatments could protect you against COVID-19?

No repeat interviews were conducted, and transcripts were not returned to participants for comment.

2.4 | Data analysis

The six-step thematic analysis framework from Braun and Clarke (2006) was followed for the data analysis. One researcher undertook a line-by-line analysis of the transcribed experiences of each participant.

From that work, another researcher (LRP) read the field notes and all the transcripts, and codes were developed. Initial codes were then collated to gather data into themes. Particular attention was paid to both the frequency of emerging codes and their importance for multiple participants. Coded extracts were reviewed within their themes and afterward defined and named. MAXQDA qualitative data analysis software was used to facilitate coding and analysis. The findings were then scrutinized by the co-authors.

The quantitative information obtained is reported as median and interquartile range (IQR) due to the non-normal distribution of the variables and as mean and standard deviation (SD) due to the normal distribution of the variables. Normality of the distribution was examined using the Shapiro–Wilk test. All statistical analyses were conducted using SPSS V.24.0 statistical software.

3 | RESULTS

A total of 23 interviews were analysed thematically. Eighty of the participants were female, and five were male, aged between 44 and 79 years old (mean 59.6 years old). The range of rheumatoid arthritis disease duration was between four and 40 years (mean 19.04 years). In terms of drugs for managing rheumatoid arthritis, 91% of participants were receiving biologics, 52% methotrexate, and 47% corticosteroids. The details of the participants are available in Table 1.

Seventy-seven codes were identified, which were then organized into four themes. The resulting themes were agreed by the researcher and co-authors to enhance the validity of the data:

- Physical activity detriment.
- Health detriment.

TABLE 1 Characteristics of the participants

	Mean (SD)/median [IQR]
RA duration	17[12–23]
Age	60[53–64]
Weight	68[61–78]
Height	168[160–170]
General VAS score	5.7(3.4)
Feet VAS score	5(3.9)
TSK11 score	31[28–36]
DAS 28	3.06[2–4.3]
SDAI	12.1[6.1–19.6]
ESR	21.7(18.9)
CRP	1.45(1.76)

Abbreviations: CRP, C-reactive protein; DAS, disease activity score; ESR, erythrocyte sedimentation rate; RA, rheumatoid arthritis; SDAI, Simplified Disease Activity Index; TSK-11, Tampa Scale for Kinesiophobia; VAS, Visual Analogue Scale.

- Social implications of COVID-19 pandemic.
- Vulnerability of testing positive for COVID-19 due to rheumatoid arthritis.

3.1 | Theme 1: Physical activity detriment

Some participants defend the importance of maintaining a good level of physical activity when suffering from rheumatoid arthritis (especially pilates, swimming and walking), emphasizing that they feel better when they do sports. Even so, only a minority of the participants have not reduced their level of physical activity, stating that they feel better, both physically and psychologically, even though they have been forced to change their activity due to confinement:

> I am completely sure that physical activity helps me with my illness, in confinement my ankles swelled and turned black. I didn't go out for a walk and every day I have to do quite a few kilometres to feel good. (COVAR00010)

> I was going to a gym, and I had to stop going. I have had to change activities. (COVAR0004)

Even so, the vast majority have declared a decrease in physical activity due to the pandemic. This is due both to restrictions, fear or lack of social interaction, not feeling in the mood to play sports alone:

> Before I used to walk a lot, but now I'm afraid to go out, it's hard for me, I get very nervous. (COVAR00010)

> I even bought a stationary bike, some dumbbells and equipment to exercise at home, but it's not the same, in the end I get lazy, and I don't do it. (COVAR00011)

> I did not dare to go out, I was afraid. Also, it is not the same to go for a walk alone. In general, I have felt very lonely. (COVAR0002)

> I have had a more sedentary phase. (COVAR0008)

In some cases, physical activity has not been reduced because it was already minimal before the pandemic, due to the pathology and the pain they suffer:

> It hasn't influenced me because I didn't do anything extraordinary either. (COVAR0006)

> In general, I am not very athletic. I do not like to exercise. (COVAR0009)

Once the confinement ended, some participants declared that they tried to increase the level of physical activity, but because it had decreased, they felt that the difficulty had increased, becoming impossible in some cases:

> We are starting to go for a walk, but it has to be little by little, because right now I feel that my joints are tight. I do what I can, but very limited. Compared to before, it is almost nothing, and I try it because I think that by exercising, I feel better. (COVAR0013)

> Before the pandemic I used to walk a lot and now it's hard for me, I'm suffocating. (COVAR0011)

> Everything is harder for me now, it's hard for me to climb the stairs, I can't walk like I used to, I have a hard time. Now I don't do half of the things I could do before, I feel very slow. (COVAR0002)

> After being stuck at home for so long without being able to go out, it shows that now everything is much harder for me than before. (COVAR0021)

3.2 | Theme 2: Health detriment

In the same way that the vast majority declared a decrease in physical activity due to the pandemic, in general, the participants declared that the level of pain had increased compared to their pre-pandemic state:

> That physical inactivity affected me a lot, it meant I had more pain and swollen ankles. Also, I ate more and

gained weight, having more stress, I guess that would be all …. (COVAR0010)

The pain has increased and also the outbreaks, my knees and lower back hurt more, everything in general, it hurts much more. My legs also hurt a lot. (COVAR0002)

The symptoms of my disease were increased, I had a lot of pain. My feet hurt a lot. (COVAR0003)

The pain keeps increasing if I try to do more activities. (COVAR0005)

In addition, several participants stated that they did not feel that their body had the same capacities as before, suffering from a worsening in their health and a decrease in their capacities:

I noticed how my legs did not respond to me as usual. (COVAR0007)

I felt more rigid, especially in the area of the hips and legs, from that routine from bed to chair and repeating that every day. (COVAR0009)

Now I feel suffocated. I also notice it when I go to the supermarket and bend down to pick up a product, that it is difficult for me to get up and I consider myself a young person. I see that I don't have the skills I had before, even doing housework, I don't have the strength I used to and many afternoons I have to sit down. (COVAR0011)

I had to go up a hill, but I couldn't, and I used to go up and down with no problem. (COVAR0017)

Now I spend more time locked up and I do little, I notice that it is more difficult for me, so I leave what I am doing halfway, and I sit or lie down. My legs have gotten worse. (COVAR0018)

As their heath had worsened, they could not perform physical activity, or vice versa, as they had become physically inactive their health had worsened.

I don't know if the pain is due to my illness or because I've spent so much time doing nothing. (COVAR0013)

I don't know if it's because I'm less active, but I find myself with less agility. I have lost agility and strength. (COVAR0011)

After the months of confinement, I couldn't even go out, I'm much worse now. So much time locked up, without being able to do anything and when we were able to get out I couldn't. (COVAR0019)

The disease is showing symptoms that are a bit out of control, before it affected my arms, elbows and shoulders more, and now my knees and feet are awful, but I don't know if it's a consequence of being inactive. (COVAR0014)

By not moving, it seemed that my joints hurt more, they bothered me more, as if they were stiffer in my feet and hands. It is as if the joints were asleep and in a lot of pain. (COVAR0021)

3.3 | Theme 3: Feelings and social implications of COVID-19 pandemic

The pandemic awakens many feelings, such as missing practicing physical activity with a group of friends:

I really missed the walks, because I didn't go alone, I went with other people. I've had a bad time locked up. (COVAR0001)

Before I was walking, and it was good for me to relate and distract myself. But now, I'm more depressed, because I can't go out and not see my friends. It was horrible not being able to go out at all and I had a terrible time. I felt sadder and more tired. (COVAR0016)

The pandemic has caused most of the participants to be afraid and are still afraid. In some cases, there is even talk of depression. Sometimes, this fear is due to considering themselves more vulnerable due to their illness:

I'm going to stay locked up at home and go out just enough, because I'm very scared. (COVAR0016)

With the fear that I have, I don't even want to go out on the street. It has changed my behaviour. (COVAR0017)

What I have had has been a depression that I have been dragging ever since. (COVAR0019)

I don't know if my defences will respond well or not because I'm like this. I suffer from stress. (COVAR0011)

Also, some participants take fewer risks (e.g. avoid climbing stairs) for fear of injuring themselves and having to go to the hospital:

> Not being able to do anything and the fear of catching COVID has made me very depressed. For me the worst thing has been, not even being able to see my doctor, that has created a lot of anxiety in me. (COVAR0013)

> Before I used to climb a ladder, but now it scares me, because I'm scared of falling and having to go to the hospital. I feel like a deflated balloon now. (COVAR0020)

3.4 | Theme 4: Vulnerability of testing positive for COVID-19 due to rheumatoid arthritis

Some participants felt more vulnerable to COVID-19 due to having rheumatoid arthritis, since the treatment of their own condition weakens the immune system.

> I have always been told that my defences go down with the treatments. (COVAR0001)

> I was very scared because of my illness because we take so many things … The medications are very strong. (COVAR0002)

> Those of us who have an autoimmune disease and with treatments that lower our defences don't know what can happen either, and that makes me feel insecure. They told me that I was immunosuppressed, and it scared me a lot. (COVAR0011)

> I felt that it could be worse because of the disease I have and the consequences that it could have in the case of catching it scared me. (COVAR0003)

> I was very afraid that with my disease they would have to admit me because I know that I have a higher risk than other people. I have felt more vulnerable, that is why I take better care of myself. (COVAR0016)

On the other hand, some participants felt the opposite: by having their immune system compromised, they felt less vulnerable to potential serious complications related to COVID-19:

> At first I thought I was going to have much more risk, but I think it has protected me. (COVAR0008)

> At first, I was very scared because we didn't know how the virus behaved, but in general, I haven't felt vulnerable because of my illness. (COVAR0006)

They really do not know if their treatments protect them or not, although some suspect they do.

4 | DISCUSSION

This qualitative study has achieved its aims of exploring experiences of patients with rheumatoid arthritis in terms of physical activity and health status during and after the COVID-19-induced quarantine. It has also revealed information about the social implications of the COVID-19 pandemic and vulnerability of testing positive for COVID-19 due to rheumatoid arthritis.

The results of this study make it clear that even though the patients declared that physical activity is essential for people with rheumatoid arthritis to deal with their disease, most of the participants affirmed that they significatively reduced their levels of physical activity during the pandemic. Balchin et al. (2022) concluded in their cross-sectional study that more people with rheumatoid arthritis reported decreased physical activity than the general population during the COVID-19 lockdown. Overall, people with rheumatoid arthritis are less physically active and experience more barriers than the general population (Sokka et al., 2008; Veldhuijzen van Zanten et al., 2015), and sadly, the pandemic has exacerbated this inactive behaviour. The authors identified that this inactive habit may have implications for disease outcomes, as most of the participants claimed that their levels of joint pain have increased, as well as the difficulty of practising sport and fatigue. Currently, the problem is that some of the participants find themselves in a vicious circle of inactivity and fatigue. After being inactive for a long period of time, they felt that they were not able to carry out their typical pre-pandemic activities, suffering from more pain and a general health detriment; consequently, they became more physically inactive, being more difficult to escape from that vicious cycle.

We identified only two participants who claimed that they exercised during lockdown at the same level than pre-pandemic. Participants affirmed that their physical inactivity may be due to the restrictions, the lack of motivation and the fear of going outside, which made it impossible for them to go to the gym and practise sport with their friends. Also, they declared that they refused to carry out some activities, such as climbing a ladder, due to the fear of injuring themself and having to go to hospital.

The pandemic has affected participants' mental well-being, due to the lack of outdoor stimulation and social interaction and the fear of testing positive for COVID-19. Some of them even declared that they have been diagnosed with depression. It is important to highlight that previous studies reported that people with rheumatoid arthritis present difficulty managing negative emotions (Michaud et al., 2020). Brady et al. (2021) concluded that physical activity is associated with psychological well-being and mental health and in people with rheumatoid arthritis during COVID-19, showing a positive relationship and suggesting that maintaining physically active is necessary for maintaining mental functioning, meaning that physical activity counteracts depressive symptoms in people with rheumatoid arthritis. Therefore,

this could explain our results related to the association between psychological affects and the reduction in physical activity.

Consequently, it can be shown that the sedentary behaviour that participants claimed has made an impact on the participants quality of life. As Lévy-Weil et al. (2021) concluded in their study including participants with rheumatoid arthritis, the more physical active the patients continued doing during the pandemic, the greater the positive impact was on quality of life.

The vulnerability of testing positive for COVID-19 due to rheumatoid arthritis remained uncertain for the included participants. Some of the participants believed that they were under a greater risk of testing positive because their condition is commonly managed by immunosuppressive therapies. On the other hand, a minority of the participants believed that as their immune system is depressed, their treatments strengthen it; hence, they believe that they are more protected and less likely to test positive than the general population. Recent studies concluded that, regardless of preliminary evidence suggesting that infection risk was not increased in rheumatoid arthritis (Figueroa-Parra et al., 2020), the majority of people with rheumatoid arthritis are under immunosuppressive treatments, which means that they present with an increased risk for compromising their immune response and presenting infections due to COVID-19 (van Zanten et al., 2020).

This study has important strengths since it explores experiences of people with rheumatoid arthritis in terms of pain and foot health during the pandemic period. Also, this study could be the baseline for the nurse manager's role in educating staff, patients and family. This concept is pointed out in the following fourth recommendation by EULAR: 'Nurses should participate in the comprehensive management of the disease to control activity and reduce symptoms to improve established patient outcomes' (van Eijk-Hustings et al., 2012). Greater involvement of rheumatology nurses in the provision of comprehensive patient care may improve outcomes of disease activity and quality of life related to health (Ndosi et al., 2014). Therefore, it faithfully represents the sensations perceived by patients in situ and not as a memory of that period. However, this study has some limitations to highlight. Firstly, the sample is composed mostly of women, since rheumatoid arthritis has a higher prevalence in this gender. However, this may have influenced Theme 4, 'Vulnerability of testing positive for COVID-19 due to rheumatoid arthritis'. This vulnerability could have been influenced by the feeling of family burden, driven by a culture that adds more pressure on women to take care of their families. Secondly, previous studies have concluded that people with rheumatoid arthritis who are treated with biologics, reduce their disease outcomes and can reach remission (Gono et al., 2010). But the present study brings to light that the effectiveness of disease-modifying antirheumatic drugs (DMARDs) may be influenced by inactivity periods, as the included participants experienced stiffness, pain and loss of functionality after a long time without activity. This highlights again the importance of physical activity as a coadjuvant treatment.

Future work should aim to study the effectiveness of biologics considering the prolonged periods of inactivity in a more homogeneous sample. That future work should be studied through long-term quantitative studies where the real effectiveness of the treatment can be determined and the experiences of patients in terms of physical activity and foot health can be explored.

5 | CONCLUSIONS

The present study has revealed that physical activity should be promoted in all people with rheumatoid arthritis, even in difficult times, such as a pandemic, to improve disease outcomes, wellbeing and mental health, in spite of functional disability.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Knowing the experiences of these patients enable nursing managers to develop interventions that ensure the delivery of comprehensive nursing care in terms of physical activity and health status, in future situations like this pandemic. Like other nursing specialties, patients with rheumatoid arthritis are highly benefited from the progress in this area. This progress may be due to multidisciplinary teamwork, where nurses play a relevant role, leading and heading projects, giving their point of view in important situations such as the isolation management and restriction on patients' physical and social activity and its consequences, which have been demonstrated after an isolation progress due to the pandemic, and it also has led to kinesiophobia (Minnock et al., 2018).

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

This qualitative study received ethical approval from the committee of Portal de Ética de la Investigación Biomédica de Andalucía (PEIBA) (SPAR-001), which was authorized and extended to a longitudinal study ARC0001. This study was carried out in full accordance with the provisions of the Declaration of Helsinki regarding ethical principles for medical research involving human subjects and was approved by the Ethics Committee. All participants in the study provided informed and written consent.

AUTHOR CONTRIBUTIONS

LRP, ARC and JGC have made substantial contributions to conception and design, acquisition of data, analysis and interpretation of data. GGN, ABOA and GB have been involved in drafting the manuscript and revising it critically for important intellectual content. All authors have read and approved the final version of the manuscript. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. All authors agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Ana Belén Ortega-Ávila https://orcid.org/0000-0001-5738-5691
Gabriel Gijon-Nogueron https://orcid.org/0000-0003-4558-3548

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ORIGINAL ARTICLE

WILEY

Evaluation of the Brief Coping Orientation to Problems Experienced scale and exploration of coping among primary health care nurses during COVID-19

Elizabeth Halcomb RN BN(Hons), PhD, FACN, Professor of Primary Health Care Nursing[1,2] | **Ritin Fernandez RN, PhD, Professor of Nursing**[1,3] | **Ruth Mursa RN DipApplSc, GradDip(Continence), MN (NP), PhD Candidate**[1,2] | **Catherine Stephen RN BN(Hons), Lecturer**[1,2] | **Kaara Calma RN BN(Hons), Lecturer**[1,2,4] | **Christine Ashley RN, PhD, FACN, Project Officer**[1] | **Susan McInnes RN, BN(Hons), PhD, Adjunct Lecturer**[1] | **Jane Desborough RN, MPH, PhD, Senior Research Fellow**[5] | **Sharon James RN BN, MPH, PhD, Research Fellow**[6] | **Anna Williams RN, BHlthSc(Nursing) MPH, PhD, Professor of Aging**[7]

[1]School of Nursing, Faculty of Science, Medicine and Health, University of Wollongong, Wollongong, NSW, Australia

[2]Illawarra Health and Medical Institute, Wollongong, NSW, Australia

[3]School of Nursing and Midwifery, University of Newcastle, Gosford, NSW, Australia

[4]School of Nursing and Midwifery, Faculty of Health, Deakin University, Geelong, VIC, Australia

[5]Research School of Population Health, College of Health and Medicine, Australian National University, Canberra, ACT, Australia

[6]Department of General Practice, School of Public Health and Preventative Medicine, Faculty of Medicine, Nursing and Health Sciences, Monash University, Notting Hill, VIC, Australia

[7]School of Nursing and Midwifery, Western Sydney University, Sydney, NSW, Australia

Correspondence
Professor Elizabeth Halcomb, School of Nursing, Faculty of Science, Medicine and Health, University of Wollongong, Northfields Ave, Wollongong, NSW 2522, Australia.
Email: ehalcomb@uow.edu.au

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Abstract

Aim: This study aimed to explore primary health care nurses' coping strategies and evaluate the psychometric properties of the Brief Coping Orientation to Problems Experienced (COPE) scale.

Background: Primary health care nurses are experiencing significant COVID-19-related psychological impacts. Beyond understanding the impacts, there is a need to explore coping strategies.

Methods: This online cross-sectional survey was completed by 359 Australian primary health care nurses between October and December 2020.

Results: Factor analysis revealed seven factors (support, disengagement and venting, humour, positive reframing, acceptance, substance use and spiritual/religious beliefs)

(Cronbach's alpha > .69). There was an association between age, years of nursing and years of primary health care nursing and the factors of 'support', 'disengagement and venting' and 'positive reframing'. Years of experience were also associated with the factor 'humour'. Urban respondents had higher scores for the 'support' factor.

Conclusions: The Brief COPE scale is a valid and reliable tool for assessing primary health care nurses' coping. As demographic characteristics impact the coping strategies that nurses use, supports need to be tailored to optimize their impact.

Implications for Nursing Management: Nurse managers need to consider the workforce demographics when designing and implementing support strategies. The Brief COPE can identify current coping strategies and inform interventions to build coping capacity.

KEYWORDS
community, coping, mental health, nursing workforce, pandemic, primary health care

1 | INTRODUCTION

The impact of COVID-19, and previous respiratory epidemics, on nurses' psychological well-being has been well documented (Fernandez et al., 2020, 2021). In previous pandemics and epidemics, nurses globally have reportedly experienced increased levels of job stress, leading to burnout and workforce attrition (Fernandez et al., 2020). During the COVID-19 pandemic, hospital-based nurses are experiencing significant anxiety and depression across the globe (Fernandez et al., 2021; Labrague & Santos, 2020; Tokac & Razon, 2021). There has been far less reported about the psychological impacts of the pandemic on nurses working outside of the hospital setting (Ashley, James, Williams, et al., 2021; Crowley et al., 2021; Selçuk Tosun et al., 2021), yet this group is likely at high risk of psychological sequelae (Monsalve-Reyes et al., 2018).

Nurses are fearful of contracting respiratory pathogens and spreading these to family and friends (Ashley, James, Stephen, et al., 2021). They are also stressed by inadequate personal protective equipment (PPE) for their role, poor and inconsistent communication and limited job security (Ashley, James, Williams, et al., 2021; Crowley et al., 2021; Halcomb, McInnes et al., 2020; Labrague & Santos, 2021). The International Council of Nurses (2021) has identified the potential for such stressors to negatively impact nurses' job satisfaction and prompt them to consider leaving the profession, thus compounding existing workforce issues. Substantial loss of the nursing workforce has significant implications for nursing workload, service delivery, quality and safety of care and health outcomes (Halcomb, McInnes et al., 2020). By understanding the psychological impact of COVID-19 on nurses, healthy coping mechanisms to ameliorate or manage associated stressors can be implemented. This understanding can inform the strategies implemented by nurse managers and nurses themselves to adapt to and optimize the work environment (Middleton et al., 2021).

Much of the literature on the impact of the COVID-19 pandemic on the psychological well-being of nurses has focused on nurses employed in acute hospitals (Halcomb, Fernandez, Mursa et al., 2022; Labrague & Santos, 2020; Lorente et al., 2021). However, nurses who work in community-based, primary health care settings are also exposed to pandemic-related stressors that can impact their well-being, job satisfaction and intention to leave (Ashley, James, Williams, et al., 2021; Crowley et al., 2021; Halcomb, McInnes et al., 2020). In Australia, like many industrialized countries, the primary health care sector consists of a diverse range of community-based health settings, general/family practices and government-funded and non-government not-for-profit organizations (Australian Government Department of Health, 2018). Primary health care nurses comprise some 28% of the Australian clinical nursing workforce (Australian Institute of Health and Welfare, 2016) and operate in varying models of care. Whereas community health services are State or Territory government funded and are often extensions of hospital-based care, general practices are operated as small businesses or corporate chains and employ relatively small numbers of nurses. Given their important role in the health care system and on the health of the community (WHO and UNICEF, 2018), the workforce issues experienced by primary health care nurses are of importance. Models of nursing leadership are variable across primary health care settings depending on the size and structure of the nursing workforce. Nevertheless, nurse managers and leaders must be empowered with evidence to support their advocacy for the needs of nurses working in primary health care.

Internationally, primary health care nurses play a vital role during a pandemic in providing infection control education, screening undifferentiated symptomatic people, supporting vulnerable community members and reducing the demand for acute hospital services (World Health Organization, 2020). In addition to their role in pandemic management, primary health care nurses support ongoing health care in the community for non-pandemic-related health issues, including managing acute presentations and chronic conditions, providing preventive care and supporting end-of-life care (Halcomb, McInnes et al., 2020).

Coping is a cognitive or behavioural action undertaken to manage or reduce the impact of events that individuals perceive to be affecting their well-being (Dimunová et al., 2020). Whereas coping is often considered to equate to any successful management of a stressor, it is generally defined as any strategy that people use to manage stress (Kannis-Dymand et al., 2020). Coping strategies are how nurses manage the challenging situations that they face. Adaptive or problem-focused coping strategies focus on the problems and emotions, whereas maladaptive or emotionally focused strategies focus on avoidance (Dimunová et al., 2020). Successful coping leads to greater, positive long-term mental health outcomes and leads to improved long-term well-being after a significant life event (Carver et al., 1993; Kannis-Dymand et al., 2020). The absence of successful coping strategies is associated with a greater frequency of ongoing mental health issues including anxiety, depression and post-traumatic stress disorder (Kannis-Dymand et al., 2020).

The Coping Orientation to Problems Experienced (COPE) scale was originally developed by Carver et al. (1989), informed by the model of coping described by Lazarus and Folkman (1984). The COPE scale is an extensively used self-report coping measure that has been used across numerous stressful situations and in various population groups (Kannis-Dymand et al., 2020). More recently, the 28-item Brief COPE has been developed to reduce respondent burden by reducing the number of items in the tool (Carver, 1997). The Brief COPE has been used extensively in studies of coping in nurses (Abdul Rahman et al., 2021; Dimunová et al., 2020; Lee et al., 2019), although none of these have been with nurses specifically working in primary health care. The items of the Brief COPE have been reported to represent 14 distinct coping strategies, namely; denial, active coping, substance use, behavioural disengagement, use of emotional support, venting, use of instrumental support, religion/spiritual beliefs, positive reframing, planning, self-distraction, humour, acceptance and self-blame (Carver, 1997).

The presence of 14 coping strategies within the Brief COPE measure can present challenges for analyses (Baumstarck et al., 2017). Whereas some authors advocate that the measure's coping strategies should be dichotomized into adaptive and maladaptive strategies (Baumstarck et al., 2017), others argue that this is not appropriate (Lee et al., 2019). Additionally, the factor structure has been debated in the literature, with inconsistent approaches to analysis and various factor structures proposed (Baumstarck et al., 2017; Kannis-Dymand et al., 2020). Whereas Carver (1997) initially reported a nine-factor structure that accounted for 72.4% of the variance, Kannis-Dymand et al. (2020) identify factor structures for the Brief COPE ranging from 1 to 12 factors. Given the diversity in factor structures reported, this paper seeks to explore the Brief COPE in a sample of Australian primary health care nurses during the COVID-19 pandemic. Such psychometric exploration will provide evidence for the factor structure and reliability of the Brief COPE in this group and thus can be used with confidence to measure the coping mechanisms in primary health care nurses.

2 | METHODS

2.1 | Research design

During October and December 2020, an online survey was distributed to nurses employed in Australian primary health care settings. At this time, the second wave of COVID-19 in the state of Victoria had resolved and there were few COVID-19 cases across Australia. This prompted reductions in social distancing rules and movement restrictions, and a trans-Tasman travel bubble created opportunities for trips to New Zealand.

2.2 | Participants

Respondents were nurses working in primary health care across Australia. This included enrolled nurses (EN) (diploma prepared), registered nurses (RN) (baccalaureate prepared or equivalent) and nurse practitioners (NP) (masters prepared). Primary health care settings were any context where nurses worked outside of the hospital system and included any health services based in the community (e.g., schools and universities, prisons and children's health centres), community nursing services and general practice.

Social media (Facebook, LinkedIn and Twitter) was used to disseminate information about the survey and a direct link to participate. Additionally, emails and newsletters from national nursing organizations (e.g., Australian College of Nursing and Australian Primary Health Care Nurses Association) provided study information and a survey link. As there is no register of Australian nurses specifically working in primary health care, such convenience sampling is the only realistic strategy to facilitate the recruitment of this group (Halcomb, McInnes et al., 2020).

To calculate sample size, the principles described by Kline (2015) were used. This requires 10 participants for each item in the instrument. Given the 28 items within the Brief COPE scale, this equates to a minimum sample required of 280.

2.3 | Instrument

Based on a review of the literature, COVID-19 research undertaken previously by the research team (Fernandez, et al. 2020; Halcomb, McInnes et al., 2020; Halcomb, Williams et al., 2020) and expert input, a survey tool was developed. The tool combined validated scales and investigator-developed items in four discrete sections. Section 1 explored the demographic and employment characteristics of respondents. Items in Section 2 explored respondents' lifestyle behaviours, perceptions of safety, support and COVID-19 concerns. Section 3 measured respondents' emotional state using the Depression Anxiety Stress Scales (DASS-21) (Henry & Crawford, 2005) and coping strategies using the 28-item Brief COPE scale (Carver, 1997). Each item of the Brief COPE is rated on a 4-point Likert scale from *I haven't been*

doing this at all to *I've been doing this a lot*. The extent to which respondents' emotions were related to COVID-19 was also captured. In the final section of the tool (Section 4), the quality-of-care delivery was evaluated by measuring respondents' perceptions of the impact of COVID-19 and the safe and effective staffing tool (Borneo et al., 2017). The tool was pilot tested by a group of nurse researchers with expertise in primary health care nursing before dissemination.

Given the volume of disparate data gathered from the survey, this paper reports solely on the validation and exploration of the Brief COPE scale. Additional detail on other sections of the survey tool and findings related to nurses' mental health, safety and support and the impact of COVID-19 on quality of care are reported elsewhere (Halcomb, E., Fernandez, Ashley et al., 2022; Halcomb, Fernandez, Mursa et al. 2022).

2.4 | Data analysis

Following the export of survey data from Qualtrics into SPSS© Version 25.0, data were checked to identify respondents who did not meet the inclusion criteria of being employed in primary health care and any missing data. Data relating to respondent demographics were summarized using means, frequency distributions and standard deviations. The data were dichotomized at the mean for further analysis.

Best practices in exploratory factor analysis were used to evaluate the construct validity of the Brief COPE. This included (1) assessment of the response distribution using frequency, mean and standard deviations for the response options for every item; (2) affirmation of non-violation of the assumptions of normality, multi-collinearity and linearity; and (3) exploratory factor analysis using principal components analysis followed with varimax rotation (Williams et al., 2012). Inspection of the scree plots against established criteria informed extraction of components (Kaiser, 1960). Item loading was deemed large if ≥.80, moderate if between .79 and .41 and small if ≤.40.

The internal consistency of each subscale and the overall scale was determined using Cronbach's alpha. Values ≥ .9 were deemed excellent, .8 to <.9 were good and .7 to <.8 were considered acceptable, whereas values between .6 and <.7 were questionable, .5 to <.6 were poor and <.5 were unacceptable (Tavakol & Dennick, 2011). The factors identified were appropriately titled to reflect the underlying constructs of the Brief COPE. The differences between the demographic variables and coping factors were evaluated using *t*-tests, and one-way analysis of variance (ANOVA) with Bonferroni correction for multiple comparisons. Statistical significance was set at $p < .05$.

2.5 | Ethical considerations

The Human Research Ethics Committees at the University of Wollongong (Approval Number HE2020/161) and the University of Notre Dame Australia (Approval Number 2020-056S) approved the conduct of the study. Survey completion implied consent. Participation could be ceased at any time by exiting the survey.

TABLE 1 Demographics

	n	%
Employment setting		
General practice	167	46.5
Community nursing services	97	27.0
Other—e.g., aged care, maternal and child health and school/university	95	26.4
Designation		
Registered nurses	320	86.1
Other	39	13.9
Primary workplace location		
City/metropolitan (urban)	222	61.9
Rural/remote	137	38.1
Age		
20–40 years	74	20.6
41–60 years	221	61.6
>60 years	63	17.5
Missing	1	0.3
Years employed as a nurse		
≤20 years	158	43.9
≥21 years	200	55.7
Missing	1	0.3
Years employed as primary health care nurse		
≤12 years	226	63.0
≥13 years	129	35.9
Missing	4	1.1

3 | RESULTS

3.1 | Respondents

Three hundred and fifty-nine primary health care nurses completed the survey. Most respondents were female (95.0%; $n = 341$) and employed as RN (86.1%; $n = 320$) (Table 1). Thirty respondents (8.4%) were ENs and six respondents (1.7%) were NPs. Slightly fewer than half of the respondents worked in general practice (46.5%; $n = 167$). Whereas 44% ($n = 158$) respondents worked part-time, only 35.1% ($n = 126$) worked full-time, as the remaining 20.8% ($n = 75$) were employed as a casual or on a contract.

3.2 | Exploratory factor analysis

As the Kaiser–Meyer–Olkin measure of sampling adequacy was .851 and Bartlett's test of sphericity reached statistical significance ($\chi^2 = 4396.142$, $p = .000$), the data were considered suitable for factor analysis (Tabachnick & Fidell, 2014). The analysis demonstrated a seven-factor solution with eigenvalues > 1, accounting for 65.2% of the total variance. A clear departure from linearity, consistent with a seven-factor solution, was evident on the scree plot.

TABLE 2 Factor loadings rotated component matrix

Item no.	Item	Component						
		1	2	3	4	5	6	7
7	I've been getting emotional support from others.	.775	.001	.151	.146	.036	.158	.015
21	I've been getting comfort and understanding from someone.	.772	.01	.169	.135	.071	.107	.197
22	I've been getting help and advice from other people.	.744	.097	.316	.04	.066	.109	.08
8	I've been trying to get advice or help from other people about what to do.	.67	.171	.25	.028	.12	.003	.108
23	I've been doing something to think about it less, such as watching movies, TV, reading or sleeping.	.336	.164	.27	.301	.271	.076	.017
24	I've been refusing to believe that it has happened.	.151	.805	−.135	−.016	.001	.045	.103
13	I've been giving up the attempt to cope.	−.058	.728	.108	.078	.025	.186	.056
10	I've been saying to myself 'this is not real'.	.169	.709	.031	−.023	.028	.017	.093
27	I've been giving up trying to deal with it.	−.05	.637	.317	.098	−.037	.164	−.015
11	I've been saying things to let my unpleasant feeling escape.	.502	.527	.025	.129	.213	−.019	−.006
28	I've been blaming myself for things that happened.	−.139	.507	.45	.214	−.041	.291	−.049
14	I've been criticizing myself.	.121	.497	.448	.19	.02	.176	−.154
25	I've been expressing my negative feelings.	.269	.355	.176	.244	.225	.324	−.015
2	I've been trying to come up with a strategy about what to do.	.239	.141	.774	.148	.121	.009	.132
1	I've been concentrating my efforts on doing something about the situation I'm in.	.32	.101	.661	.006	.093	.039	.116
16	I've been taking action to try to make the situation better.	.42	−.06	.621	.081	.246	.007	.041
17	I've been thinking hard about what steps to take.	.323	.137	.573	.131	.371	−.024	.203
3	I've been trying to see it in a different light, to make it seem more positive.	.275	.005	.413	.406	.226	.121	.25
9	I've been turning to work or other activities to take my mind off things.	.254	.269	.38	−.025	.304	.092	−.217
19	I've been making fun of the situation.	.071	.15	.016	.867	.024	−.021	−.023
5	I've been making jokes about it.	.143	.073	.139	.859	.152	.04	.015
18	I've been looking for something good in what is happening.	.19	−.106	.284	.464	.396	.103	.39
4	I've been accepting the reality of the fact that it has happened.	.068	.009	.096	.093	.824	.004	.075
15	I've been learning to live with it.	.128	.026	.223	.131	.783	.047	.108
26	I've been using alcohol or other drugs to help me get through it.	.121	.157	.031	.018	.026	.936	−.017
12	I've been using alcohol or other drugs to make myself feel better.	.165	.249	.056	.017	.033	.892	.004
20	I've been praying or meditating.	.101	.051	.153	.033	.053	−.035	.879
6	I've been trying to find comfort in my religion or spiritual beliefs.	.153	.119	.022	.002	.118	.003	.874

Note: Shading denotes factor loadings.

Twenty-six of the 28 items had factor loadings > .4 (Table 2). The other two items, 'I've been doing something to think about it less, such as watching movies, TV, reading or sleeping' and 'I've been turning to work or other activities to take my mind off things', had factor loadings of .33 and .35, respectively. The factors were descriptively labelled support (five items), disengagement and venting (eight items), positive reframing (six items), humour (three items), acceptance (two items), substance use (two items) and religion/spiritual beliefs (two items) (Table 2). Based on previous literature reporting the Brief COPE (Kannis-Dymand et al., 2020), the factors were further classified and defined. Factor 1 'support' reflected emotion-focused coping, with items around 'seeking emotional support or guidance from others' (Kannis-Dymand et al., 2020, p. 131). Factor 2 'disengagement and venting' reflected unhealthy coping strategies (e.g., denial and avoidance). Problem-focused coping was demonstrated in Factor 3 'positive reframing', Factor 4 'humour' and Factor 5 'acceptance'. Items across these three factors focused on respondents actively seeking to either find a solution or adapt to the situation.

TABLE 3 Total scores and reliability

	Number of items	Mean	SD	Cronbach's alpha
Support	5	9.87	3.32	.814
Disengagement and venting	8	28.61	3.68	.810
Positive reframing	6	12.84	4.31	.834
Humour	3	5.82	2.17	.738
Acceptance	2	5.47	1.72	.694
Substance use	2	2.79	1.38	.923
Religion/spiritual beliefs	2	3.11	1.72	.855
Total score[a]	28	68.48	9.28	.903

[a]Factor 2 has been reverse coded.

3.3 | Internal consistency

The internal consistency of the total Brief COPE was high ($\alpha = .903$, $M = 38.2$). The Cronbach's alpha for the seven factors, support, disengagement and venting, positive reframing, humour, acceptance, substance use and religion/spiritual beliefs, was .814, .810, .834, .738, .694, .923 and .855, respectively (Table 3).

3.4 | Validation

Items in Factor 2 'disengagement and venting' all revealed a directionality opposed to the logic of the construct being measured. Therefore, for the final analysis, all items in Factor 2 were reverse coded so that a high value indicated the same response type on every item across the scale. The scores of the total Brief COPE were computed as a sum of the scores of all the factors. The mean total score for the total Brief COPE was 68.48 (±9.28). The mean scores for the individual factors are shown in Table 3.

3.5 | Association between demographics and coping strategies

Respondents aged over 60 years, those with ≥21 years' nursing experience and those with ≥13 years' primary health care nursing experience had significantly lower scores for the coping strategies relating to Factor 1 'support' and Factor 3 'positive reframing' (Table 4). Respondents with ≥21 years' nursing experience also had significantly lower scores for the coping strategies relating to Factor 4 'humour' (mean 5.56 ± 2.08) compared with those who had ≤20 years' experience as a nurse.

Those respondents older than 60 years, with ≥21 years' nursing experience or with ≥13 years' primary health care nursing experience had higher scores for the coping strategies relating to Factor 2 'disengagement and venting' (mean 29.96 ± 2.32) compared with other respondents. Respondents who worked in a metropolitan area had significantly higher scores for the coping strategies relating to Factor 1 'support' compared with those who worked in rural and remote settings. However, those who worked part-time had significantly higher scores for substance abuse.

There was no statistically significant association between age, or years of nursing experience or years of experience as a primary health care nurse or location of workplace and the total Brief COPE or the remaining factors.

4 | DISCUSSION

This study has provided an evaluation of the psychometric properties of the Brief COPE among Australian primary health care nurses during the COVID-19 pandemic and explored the impact of demographics on the coping styles used. The pandemic has been demonstrated to have had a significant psychosocial impact on these nurses (Crowley et al., 2021; Halcomb, McInnes et al. 2020; Halcomb, Fernandez, Mursa et al. 2022). Therefore, ensuring that they are utilizing effective coping strategies is important to minimize negative sequelae, such as burnout, that may result in nurses leaving the profession. Such findings are important to the global nursing workforce. The results of this study have added to the literature by demonstrating the desirable psychometric properties of Brief COPE among primary health care nurses in the context of a pandemic. This study has confirmed the applicability of the Brief COPE to assess the coping strategies of primary health care nurses. It has also highlighted the differences in coping between nurses with different demographics. This is vital information for nurse managers to understand when designing and implementing support strategies for nurses in the clinical setting to ensure that these strategies meet the needs of individuals and groups. It also helps to demonstrate that a one-size support intervention may not suit all primary health care nurses. These findings have implications for nurses working in primary health care settings and their managers internationally.

Whereas this study demonstrated a seven-factor solution, the factors were conceptually similar to those identified in other studies. In those studies that report fewer factors (Carver, 1997; Kannis-Dymand et al., 2020), there is less discrimination, with more items loaded together on a single factor. However, in those studies that found a greater number of factors, aspects such as humour and

TABLE 4 Association between demographics and the Brief COPE factors

	Support		Disengagement and venting		Positive reframing		Humour	
	Mean (SD)	*p* value	Mean (SD)	*p* value	Mean (SD)	*p* value	Mean (SD)	*p* value
Age								
20–40 years	10.60 (3.26)	.003[a]	27.35 (4.22)	.00[a]	13.58 (4.29)	.02[a]	6.09 (2.21)	ND
41–60 years	10.09 (3.39)		28.50 (3.77)		13.08 (4.28)		5.94 (2.20)	
>60 years	8.65 (2.88)		29.96 (2.32)		11.55 (4.21)		5.30 (2.00)	
Experience as a primary health care nurse								
≤12 years	10.15 (3.39)	.04[a]	28.01 (4.03)	.00[a]	13.26 (4.40)	.02[a]	5.97 (2.20)	.14
≥13 years	9.37 (3.17)		29.57 (2.81)		12.13 (4.13)		5.60 (2.11)	
Experience as a nurse								
≤20 years	10.44 (3.43)	.01[a]	27.48 (4.34)	.00[a]	13.65 (4.27)	.00[a]	6.21 (2.25)	.01[a]
≥21 years	9.47 (3.20)		29.40 (2.90)		12.26 (4.28)		5.56 (2.08)	
Location of primary workplace								
City/metropolitan	10.26 (3.37)	.006[a]	28.52 (3.76)	.57	12.95 (4.26)	.564	5.83 (2.14)	.957
Rural/remote	9.22 (3.16)		28.76 (3.56)		12.66 (4.42)		5.82 (2.24)	
Employment status								
Full-time	9.70 (3.62)	ND	28.71 (3.94)	ND	12.55	ND	5.70 (2.30)	ND
Part-time	10.03 (3.20)		28.77 (3.44)		12.95		5.91 (2.19)	
Other	9.85 (3.07)				13.10		5.85 (1.93)	
Employment setting								
General practice	9.68 (3.14)	.33	28.71 (3.37)	.67	12.71 (4.01)	.613	5.59 (2.15)	.078
Other	10.03 (3.47)		28.53 (3.93)		12.95 (4.56)		6.02 (2.18)	

Abbreviation: ND, no difference.
[a]Significant value.

TABLE 4 (Continued)

	Acceptance		Substance use		Religion/spiritual beliefs		Total COPE	
	Mean (SD)	*p* value	Mean (SD)	*p* value	Mean (SD)	*p* value	Mean (SD)	*p* value
Age								
20–40 years	5.28 (1.63)	ND	2.74 (1.38)	ND	3.00 (1.67)	ND	68.63 (8.41)	ND
41–60 years	5.58 (1.71)		2.89 (1.39)		3.10 (1.68)		69.11 (9.51)	
>60 years	5.31 (1.81)		2.55 (1.33)		3.23 (1.87)		66.54 (9.14)	
Experience as a primary health care nurse								
≤12 years	5.43 (1.66)	.60	2.83 (1.40)	.49	3.08 (1.70)	.79	68.68 (9.34)	.56
≥13 years	5.53 (1.82)		2.73 (1.35)		3.14 (1.76)		68.06 (9.19)	
Experience as a nurse								
≤20 years	5.40 (1.69)	.52	2.85 (1.40)	.51	3.05 (1.67)	.59	68.98 (9.65)	.42
≥21 years	5.53 (1.74)		2.75 (1.36)		3.16 (1.75)		68.13 (9.04)	
Location of primary workplace								
City/metropolitan	5.61 (1.70)	.055	2.88 (1.39)	.119	3.04 (1.63)	.378	69.03 (9.24)	.16
Rural/remote	5.24 (1.74)		2.64 (1.35)		3.22 (1.86)		67.56 (9.31)	
Employment status								
Full-time	5.33 (1.78)	ND	2.71 (1.21)	.04[a]	3.03 (1.80)	ND	67.61 (10.29)	ND
Part-time	5.66 (1.66)		3.01 (1.61)		2.98 (1.49)		69.31 (8.50)	
Other	5.34 (1.73)		2.51 (1.03)		3.10 (1.72)			
Employment setting								
General practice	5.38 (1.81)	.372	2.73 (1.25)	.446	3.04 (1.68)	.506	67.74 (9.27)	.19
Other	5.55 (1.64)		2.84 (1.48)		3.17 (1.75)		69.09 (9.27)	

Abbreviation: ND, no difference.
[a]Significant value.

substance use were identified as individual factors (Carver, 1997; Kannis-Dymand et al., 2020; Tang et al., 2016).

Findings from this study demonstrated that older respondents and those with greater nursing and primary health care experience used emotional and instrumental social support from others less than younger or less experienced respondents. Social support has been widely reported as a coping strategy employed by Australian nurses in the literature, with access to a social support network shown to enhance resilience, reduce job stress and increase job satisfaction (Labrague & Santos, 2020; Lim et al., 2010). There is conflicting evidence about the relationship between age and the use of emotional and instrumental support. This finding highlights a need for future research to explore intergenerational differences to understand how these might impact strategies required to support individuals and groups within the nursing workforce.

Additionally, those respondents who were living in a rural area had significantly lower use of emotional and instrumental support from others than those in metropolitan areas. Differences in emotional responses and coping strategies between nurses living in urban and rural areas have been previously reported in the international literature (Fluharty & Fancourt, 2021; Huang et al., 2020). This has been linked to perceived differences in population density and disease risk, as well as health resources and workforce constraints. Given the existing disparities in the mental health of people living in rural areas and difficulties recruiting nurses to work in these locations (Smith et al., 2019), there is a need to ensure that strategies are implemented to ensure that emotional and instrumental support from others is accessible in rural areas.

Factor 3 'positive reframing' included items from the original Brief COPE that comprised the subscales of active coping, planning and positive reframing. These strategies are generally considered to represent problem-focused coping strategies, that is, behaviours that seek to change the situation and/or remove the stressor (Dimunová et al., 2020; Lazarus, 1993). These kinds of problem-solving coping strategies are known to be the most effective in dealing with stress in the longer term (Lim et al., 2010). In this study, older respondents and those with greater experience as a nurse and as a primary health care nurse used positive reframing less than younger or less experienced respondents. This serves to further highlight the need to consider generational contexts and explore strategies to suit the spectrum of the nursing workforce.

Items within the factor 'disengagement and venting' represent dysfunctional or unhealthy coping behaviours such as denial, avoidance or giving up. Our findings reveal that older respondents and those with more nursing and primary health care experience used these strategies more than younger and less experienced respondents. The use of dysfunctional strategies by nurses has been previously reported, particularly in high-workload environments (Dimunová et al., 2020). In their study of critical care nurses, Alharbi et al. (2020) found greater use of avoidant coping strategies in those aged over 35 years. Although these strategies can sometimes reduce stressors in the short term by distancing oneself from the stressful situation, they do not address the underlying cause (Dimunová et al., 2020) and can be negatively correlated to quality of life (Baumstarck et al., 2017) and be associated with poorer longer term mental health and well-being outcomes (Lim et al., 2010).

Findings from this study demonstrated that older participants and those with longer work experience as a nurse and as a primary health care nurse used significantly different coping strategies than younger or less experienced nurses. There remains little evidence regarding the association between age and coping mechanisms (Chen et al., 2018). Whereas some studies report that older adults are more likely to use emotion-focused coping (Chen et al., 2018), others found that age is independent of coping strategies (Baumstarck et al., 2017). Findings from this study highlight that there is a need to consider focused support strategies based on demographic factors, such as age and experience level, to meet the needs of various groups. Given the importance of retaining nurses across the age and experience spectrum to maintain skill mix, further research is needed to examine age, stress and coping among nurses. Because the older and more experienced respondents in this study were using less support from others and positive reframing and more unhealthy strategies, there is an urgent need for nurse managers, employers and policymakers to respond. Interventions should target this group to support them to develop more problem-focused strategies to optimize their mental health and well-being outcomes.

5 | LIMITATIONS

This study has several limitations. Despite the national approach to data collection, responses were not evenly distributed across the country. However, there can be some confidence in the generalizability given the representation across both rural and metropolitan areas. Given that the use of self-report data can result in social desirability bias, this may be a study limitation. Although the collection of data during the COVID-19 pandemic meant that data were collected in real time and not impacted by recall bias, participation rates may have been influenced by the methods of convenience sampling, use of online survey delivery and the limited data collection period. Although the use of numerous social media platforms and several professional nursing organizations was intended to maximize reach, it may also have limited access to the survey for those disconnected from such networks. Given the disparate and numerous employers, without a register of nurses working in primary health care, this was the only feasible approach to recruit this group of nurses. At the time of the study, Australia was experiencing relatively low case numbers of COVID-19. Further research during periods of higher prevalence may extend and confirm the findings of this paper.

6 | CONCLUSIONS

The Brief COPE scale is a reliable and valid measure of assessing coping among primary health care nurses. A seven-factor solution emerged from this study to identify the coping mechanisms seen in

this group. Data about primary health care nurses coping highlighted the need to be cognizant of the impact of age, experience and rurality on the types of coping strategies used. Primary health care organizations and nurse managers need to use this information to assess coping in their workforce and implement strategies to promote positive coping by capitalizing on adaptive coping strategies that meet individual needs. This is vital to promote the well-being and retention of the primary health care nursing workforce. As the world emerges from COVID-19, it is important that research continues to be undertaken to track the psychological impacts and coping mechanisms of primary care nurses over time to optimize workforce outcomes and promote preparedness for future events.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

This study has provided validation of the Brief COPE as a valid and reliable measure of coping among primary health care nurses. Although the study was conducted in one country, these findings have implications internationally. Given the significant mental health impacts of the COVID-19 pandemic and the importance of the primary health care nursing workforce to the health of the community, understanding their coping mechanisms is vital to inform future support strategies.

Nurse managers play a key role in assessing current coping mechanisms and identifying areas where additional support could ensure that coping mechanisms are optimized to build resilience. This requires nurse managers to actively engage with individual primary health care nurses to open the discussion about mental well-being and coping. These discussions could prompt consideration of support plans for individuals or groups of nurses. This study has highlighted that the nurses' age, experience and rurality of location affect the types of coping strategies used. This reinforces the need for nurse managers to consider the individual nurses within their workforceto ensure that these differences are considered and incorporated in the development and implementation of support strategies.

Within the broader workplace context, nurse managers can support primary health care nurses by ensuring that workplaces themselves foster positive coping strategies. Nurse managers should advocate to ensure that workplaces provide the support, education and space to enable and foster positive coping.

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CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

ETHICS STATEMENT

The study was approved by the Human Research Ethics Committee at the University of Wollongong (Approval Number HE2020/161) and ratified by the University of Notre Dame Australia (Approval Number 2020-056S).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available because of privacy or ethical restrictions.

ORCID

Elizabeth Halcomb https://orcid.org/0000-0001-8099-986X
Ritin Fernandez https://orcid.org/0000-0002-6143-7703
Ruth Mursa https://orcid.org/0000-0002-5329-7181
Catherine Stephen https://orcid.org/0000-0002-3864-1300
Kaara Calma https://orcid.org/0000-0001-9011-368X
Christine Ashley https://orcid.org/0000-0003-0559-9553
Susan McInnes https://orcid.org/0000-0003-3113-2930
Jane Desborough https://orcid.org/0000-0003-1406-4593
Sharon James https://orcid.org/0000-0003-2211-3447
Anna Williams https://orcid.org/0000-0003-0349-4248

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ORIGINAL ARTICLE

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Nursing students' care of and attitudes towards lesbian, gay, bisexual, trans, and intersex people in times of COVID-19 in Spain: A cross-sectional study

Ramon-Sebastián Torrente-Jimenez MD, RN, Professor[1,2] | **Angel Gasch-Gallén PhD, RN, Professor**[3,4,5] | **Ariadna Graells Sans MD, RN, PhD candidate**[6,7] | **Eva Fernàndez Lamelas PhD, RN, Professor**[8,9] | **Maria Feijoo-Cid PhD, RN, Professor**[10,11]

[1]Departament de Medicina, Universitat Autónoma de Barcelona, Bellaterra, Spain

[2]Consejería de Educación de Canarias, Las Palmas de Gran Canaria, Spain

[3]Department of Physiatry and Nursing, Health Sciences Faculty, University of Zaragoza, Zaragoza, Spain

[4]Grupo Enfermería de Investigación en Atención Primaria Aragón (GENIAPA-GIIS094), Zaragoza, Spain

[5]Grupo Aragonés de Investigación en Atención Primaria (GAIAP-GIIS011), Zaragoza, Spain

[6]ESIMar (Mar Nursing School), Parc de Salut Mar, Universitat Pompeu Fabra-affiliated, Barcelona, Spain

[7]SDHEd (Social Determinants and Health Education Research Group), IMIM (Hospital del Mar Medical Research Institute), Barcelona, Spain

[8]Professora titular de l'Escola Universitària d'Infermeria i Teràpia Ocupacional de Terrassa, Terrassa, Spain

[9]Membre del GREUIT (Grup de Recerca de l'EUIT), Terrasa, Spain

[10]Department of Nursing, Faculty of Medicine, Universitat Autónoma de Barcelona, Barcelona, Spain

[11]Grup de Recerca Multidisciplinar en Salut i Societat (GREMSAS), (2017 SGR 917), Barcelona, Spain

Correspondence
Angel Gasch-Gallén, Department of Physiatry and Nursing, Health Sciences Faculty, University of Zaragoza, Zaragoza, Spain.
Email: angelgasch@unizar.es

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Abstract

Objective: The objective of this work is to measure the knowledge and attitudes of Catalan nursing students regarding lesbian, gay, bisexual, trans, and intersex (LGBTI) patients, as well as their perception of specific training in this area, according to their internship modalities, sociodemographic circumstances, and academic background during the COVID-19 pandemic.

Background: During the COVID-19 pandemic, the Spanish Government created the "Health-Aid" internship: A paid alternative to curricular internships. There is extensive evidence that paid work environments perpetuate negative attitudes towards LGBTI patients.

Method: A cross-sectional survey aimed at Catalan nursing students. The "Attitudes Towards and Knowledge About Lesbian, Gay, Bisexual, Trans and Intersex Patients"

Angel Gasch-Gallén, Ariadna Graells Sans, Eva Fernàndez I Lamelas, and Maria Feijoo-Cid are working on behalf of the Nursing, Gender and Diversity Working Group—ETIGID (Equip de Treball en Infermeria, Gènere y Diversitat).

questionnaire was adapted. A descriptive study and backward regression models were constructed.

Results: Three hundred thirty-seven students, mean age 23.80 years (SD: 5.17) participated; 85% women and 54 (16%) completing the Health Aid internship modality. More than 50% did not attend specific training on the care of the lesbian, gay, bisexual, trans, and intersex population. Differences between internship modalities showed higher values in the curricular internship group: Attitudes ($U = 6526.50$, $p = .031$) and training perception ($U = 5926.50$, $p = .008$).

Conclusions: Nursing students' attitudes towards lesbian, gay, bisexual, trans, and intersex patients and their perception of specific training on care for this population were negatively influenced by the paid Health Aid internship during the pandemic.

Implications for Nursing Management: Even under dire circumstances, clinical training must be properly managed to address the specific health needs of vulnerable populations, such as lesbian, gay, bisexual, trans, and intersex patients. Paid internships in emergency scenarios may impede these objectives.

KEYWORDS
COVID-19, curricula, gender identity, LGBTI people, nursing education

1 | BACKGROUND

Although there are international regulations and agreements that promote equality in education (Winkler & Satterthwaite, 2017) and health (Müller, 2016), evidence shows that discrimination still occurs against people with diverse affectional/sexual orientation and gender identity (Busby et al., 2020; Pichardo & Cabezas, 2019). Affectional/sexual and gender diversity encompasses various affectional and sexual orientations, gender expressions and identities, and sexual characteristics or developments (Gasch-Gallén et al., 2020). This includes lesbian, gay, bisexual, transexual, and intersex individuals (LGBTI) (Cabral Grinspan et al., 2017).

To understand how this discrimination occurs, comprehensive approaches must be used to analyse the impact of the conditioning factors of the sex/gender system on health. Aspects such as sex difference and gender roles (Sutherland et al., 2017), the gender-relational approach (Connell, 2012) and the beyond-the-gender-binary perspective must be addressed to respond to diverse care needs and avoid essentialist views (Eliason, 2017).

A recent review indicates that LGBTI individuals are more likely to experience health inequality due to heterosexism, stress from discrimination, and victimization (Zeeman et al., 2019). These inequalities may vary according to gender, age, income and disabilities (Zeeman et al., 2017). Therefore, it is essential to understand the specific health needs resulting from discrimination, concealment and clandestine living (Gasch-Gallén et al., 2018). A comprehensive approach to providing appropriate health care and service to these populations must include knowledge of the characteristics of LGBTI realities and the acquisition of specific competencies (Blondeel et al., 2016; Gasch-Gallén et al., 2020). The UN Report on the impact of the COVID-19 pandemic on the human rights of LGBT persons highlights determining factors at the global level: Social exclusion, violence, stigma, and discrimination make this population more vulnerable in situations such as the pandemic (ACNUDH, 2020).

There is evidence of the inequality experienced by LGBTI people within health science degrees (Crimmins, 2020; Fish et al., 2021). To date, research with university students shows contradicting results.

Although it is expected that university students would reject negative beliefs about LGBTI people, this population experiences greater rates of harassment and discrimination than their heterosexual peers in the higher education community (Greathouse et al., 2018). For example, LGBTI medical students in the United States are more likely than their heterosexual peers to experience burnout (Samuels et al., 2021). Northern Irish students who identify as LGBTI are more exposed to trauma and post-traumatic stress disorder (Travers et al., 2020).

Inclusive teaching with a focus on affectional/sexual and gender diversity is essential in health science education (Gasch-Gallén et al., 2020; Ruano-Casado & Ballestar-Tarín, 2015; Ruiz-Cantero et al., 2020). However, due to the expectations and demands of the health care system, health science education is heterocentric. It often fails to clearly recognize the implications of gender identity and affectional/sexual diversity in providing appropriate health care. (Kellett & Fitton, 2017). Although training in gender and health has been expanded in recent decades in university degrees and postgraduate education (Avci et al., 2021; Pratt-Chapman & Phillips, 2020), there are still gaps in these programmes. Thus, the need to explore how education on sexuality is provided has been highlighted (Castleberry, 2019; Eliason, 2017).

The COVID-19 pandemic has impacted this situation since the demands placed on the health care sector are multiplied during health crises (Boniol et al., 2019). It is known that pandemics affect vulnerable populations: In fact, the most vulnerable are those most affected (J. A. Smith & Judd, 2020). The LGBTI community is especially vulnerable not only to the risk of infection and barriers to accessing health care but also to the psychosocial consequences of the global lockdown (Banerjee & Nair, 2020). Furthermore, Mattei et al. (2021) point out that little attention has been paid to the impact of the COVID-19 financial recession on discrimination against LGBTI persons (Mattei et al., 2021). Additionally, given the scarcity of resources in our setting, the Health Aid internship modality (Ibáñez Barceló et al., 2020) allowed health care centres to hire senior nursing students to cope with the increasing demands for health care. Thus, fourth-year students joined the ranks as health care workers.

There are currently no studies on the differences between this type of contract and regular undergraduate curricular internships or the effects of these emergency actions on the training of nurses. These factors may ultimately lead to an increase in health inequalities (J. Smith, 2019).

The evidence presented above highlights the importance of identifying university students' attitudes towards and prejudices against affectional/sexual and gender diversity during the pandemic, as well as the training they received on gender and LGBTI communities (Keuroghlian et al., 2017). In our setting, there are no studies on the predisposition of nursing students, that is, on their knowledge about and attitudes towards providing care for affectional/sexual diverse people during their internships and the role of their training. This research is necessary both to expand our general knowledge of what happens in the academic environment and curricular internships and to facilitate the training needs of students to provide comprehensive care. These factors have been highlighted in various international studies on young populations (Bosse & Chiodo, 2016), as has the possibility of the COVID-19 pandemic affecting attitudes towards LGBTI people.

This study aims to measure undergraduate and postgraduate Catalan nursing students' knowledge about and attitudes towards LGBTI patients, as well as their perception of training in this area, and analyse the results based on their internship modality, sociodemographic circumstances and academic background. It forms part of a broader study focused on two complementary areas: The identification of legitimized everyday machismo, and knowledge about, attitudes towards and perceptions of the health and care of LGBTI people in nursing education.

2 | METHODS

We conducted an online, descriptive, cross-sectional study to understand knowledge about and attitudes towards affectional/sexual and gender diversity, as well as the perception of specific training in this area, using the survey tool Google Forms. The online survey was open from November 2020 to March 2021. It took an average of 7 min to complete.

The inclusion criteria were to be either a third- or fourth-year undergraduate or a first- or second-year postgraduate nursing student in Catalonia. There were no exclusion criteria. The study included a convenience sample recruited via snowball sampling. The coordinator committees and/or faculty deans invited their students to participate via e-mail or instant messaging regardless of gender identity. We asked student representatives and equality commission members to collaborate in publishing information about the study to circulate the invitation even further.

The following sociodemographic variables were collected: Age, gender, sexual identity, background (rural or urban), income source, last academic year completed, number of internships completed, previous or current student offices, and internship modality (curricular internship vs. Health Aid contract).

Subsequently, the "Attitudes Towards and Knowledge About Lesbian, Gay, Bisexual and Transgender Patients" (Strong & Folse, 2015) questionnaire was adapted to our study population and purposes. We tested it in a pilot study with 228 health professionals and obtained adequate internal consistency (Cronbach alpha: $\alpha = .74$) and good sample size suitability (Kaiser–Meyer–Olkin: KMO = .815) (Gasch-Gallen & Tomás-Aznar, 2017).

The questionnaire comprises 15 items with statements about knowledge of the health realities of LGBTI individuals (heteronormativity, homophobia and specific needs), attitudes towards LGBTI patients in clinical practice, and perception of the training received on caring for this population. A Likert scale with four options was used to score the responses, ranging from *Totally disagree* (1 point) to *Totally agree* (4 points). The higher the score, the greater the student's knowledge (knowledge subscale), the more positive their attitude towards LGBTI patients (attitudes subscale), and the better their evaluation of specific training on affectional/sexual and gender diversity (training perception subscale).

2.1 | Data analysis

Categorical variables were compared using the chi-squared test or Fisher's exact test when necessary. The association between categorical and continuous variables was studied using Student's *t*-test and ANOVA, and the Mann–Whitney *U* test and Kruskal–Wallis test in the case of nonparametric distributions. The Jonckheere–Terpstra test was used to study the effects of ordinal variables on continuous variables. The correlation of continuous data was tested with Pearson's correlation coefficient and Spearman's correlation coefficient for nonparametric distributions. Lastly, backward regression models were constructed to identify the most relevant variables that might have determined the score of the overall scale and each of its subscales. The level of significance was set at $p = .05$ for all operations. Statistical analysis was performed using SPSS 25.0.

2.2 | Ethical considerations

The study protocols and questionnaire were approved by the Human and Animal Experimentation Ethics Committee of the Universitat Autònoma de Barcelona (CEEA-5264-2020). There was a consent statement at the beginning of the survey, and it was implicitly granted by agreeing to complete the survey. Data anonymity and confidentiality were ensured following the requirements established by the Spanish and European data protection laws and directives.

3 | RESULTS

A total of 358 participants (Figure 1) were recruited from different universities in Catalonia. Twenty-one were excluded because they did not reply to all the survey items. The final sample included 337 subjects.

Table 1 shows sociodemographic and academic data. Students had a mean age of 23.80 years (SD: 5.17) and 85% identified as women. Most of the sample (83%) came from urban settings, and 70% paid for the cost of their education through salaried work. More than 33% were graduate students, and 54 participants reported having opted for the Health Aid internship modality. More than 50% did not attend specific curricular training programmes on caring for LGBTI patients; slightly less than 50% did not attend any extracurricular training either.

Table 2 shows differences in scale and subscale scores according to internship options (all scores ranging from 0 to 100). Overall score was significantly different between groups, with higher values in the curricular internship group. Regarding the subscales, there were no significant differences in knowledge across groups ($U = 6757.00$, $p = .177$), whereas the results for attitudes ($U = 6526.50$, $p = .031$) and training perception ($U = 5926.50$, $p = .008$) were significatively higher in the curricular internship group.

Table 3 shows the linear backward regression models constructed to explore variables that might have influenced the scale and subscale scores. For the knowledge subscale, a negative effect was found for older age ($B = -0.311$, $p = .039$) and currently working in the health care sector ($B = -4.607$, $p = .005$), while there was a positive effect for the number of internships ($B = 2.417$, $p = .001$). For the attitudes subscale, rural background ($B = -3.895$, $p = .040$) and the Health Aid internship option ($B = -4.429$, $p = .027$) had a negative impact on the score, whereas number of internships had a positive impact ($B = 2.382$, $p < .001$). In the final model, working in the health care sector had no significant negative impact on the attitudes subscale ($B = -2.789$, $p = .064$). For the training perception subscale, a higher salary decreased the predicted score ($B = -2.436$, $p = .001$), while having attended specific training courses increased it, with a greater impact for those who attended them as part of the nursing studies curriculum ($B = 13.310$, $p = .043$) than those who did so on an extracurricular basis ($B = 3.370$, $p = .020$). Overall score was negatively influenced by older age ($B = -0.215$, $p = .036$), currently working in the health care sector ($B = -3.489$, $p = .002$) and having opted for the Health Aid internship option ($B = -3.171$, $p = .032$), whereas it was positively impacted by a higher number of internships ($B = 1.832$, $p < .001$) and having received specific training as part of the nursing curriculum ($B = 2.141$, $p = .043$).

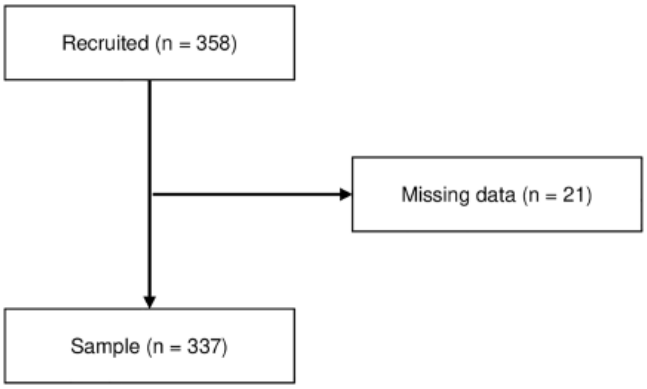

FIGURE 1 Study sample

4 | DISCUSSION

This study provides insight on the knowledge and attitudes of nursing students in Catalonia regarding the clinical care of LGBTI patients, as well as their perception of training in this area. The results show a general profile similar to that found in the literature, demonstrating the need for progress in providing education on care for LGBTI individuals (Mitchell et al., 2016). Given the lack of specific and standardized training programmes within the official nursing curriculum, students interested in these areas of knowledge seek training outside their official studies. This can be observed in the number of students who completed nonofficial educational and informational activities covering existing gaps in their nursing training (Keepnews, 2011).

Our findings show that Health Aid contracts were associated with lower scores in knowledge about, attitudes towards and perception of affectional/sexual and gender diverse patients. In this study, scores were better among younger participants, those who had completed more internships and those who had received specific training on affectional/sexual and gender diversity, in line with the results of previous studies (Cornelius & Carrick, 2015).

In addition, older age and currently working in the health sector were found to negatively influence the score. As some studies have previously noted, age seems to be a key factor in knowledge and attitudes since older professionals acknowledged the needs of LGBTI individuals less while their younger counterparts held more positive attitudes (Donisi et al., 2020). Nevertheless, the literature is inconclusive about the exact role of age (Aleshire et al., 2019).

A negative relationship was also found when students were involved in the Health Aid internship modality and/or currently working in the health care sector. Some studies point out that the Spanish and European health systems are permeated with heterosexist assumptions (McGlynn et al., 2020). Professionals may engage in

TABLE 1 Sociodemographic and academic data

	Curricular practices ($n = 283$)	Health aid ($n = 54$)	Total ($n = 337$)
Age, mean (SD)	23.83 (5.17)	23.67 (4.87)	23.80 (5.17)
Gender, *n* (%)			
Male	37 (10.98%)	7 (2.08%)	44 (13.06%)
Female	242 (71.81%)	47 (13.95%)	289 (85.76%)
Nonbinary	4 (1.19%)	0 (0.0%)	4 (1.19%)
Background, *n* (%)			
Urban	239 (70.92%)	42 (12.46%)	281 (83.38%)
Rural	44 (13.06%)	12 (3.56%)	56 (16.62%)
Salaried work earnings, *n* (%)			
None	97 (28.78%)	5 (1.48%)	102 (30.27%)
Less than 1000€ per month	88 (26.11%)	21 (6.23%)	109 (32.34%)
From 1000 to 1500€ per month	57 (16.91%)	22 (6.53%)	79 (23.44%)
More than 1500€ per month	41 (12.17%)	6 (1.78%)	47 (13.95%)
Working in the health care sector, *n* (%)			
Yes	138 (40.95%)	8 (2–37%)	146 (43.34%)
No	145 (43.03%)	46 (13.65%)	191 (56.68%)
Current year, *n* (%)			
Pregraduate, third year	99 (29.38%)	0 (0.0%)	99 (29.38%)
Pregraduate, fourth year	81 (24.04%)	38 (11.28%)	119 (35.31%)
Postgraduate, first year	50 (14.84%)	16 (4.75%)	66 (19.58%)
Postgraduate, second year	53 (15.73%)	0 (0.0%)	53 (15.73%)
Amount of internships			
None	15 (4.45%)	0 (0.0%)	15 (4.45%)
1–2	54 (16.02%)	4 (1.19%)	58 (17.21%)
3–4	66 (19.58%)	6 (1.78%)	72 (21.36%)
5–6	87 (25.82%)	23 (6.82%)	110 (32.64%)
More than 6	61 (18.10%)	21 (6.23%)	82 (24.33%)
Specific training within nursing studies, *n* (%)			
Yes	125 (37.09%)	34 (10.09%)	159 (47.18%)
No	158 (46.88%)	20 (5.93%)	178 (52.82%)
Specific training beyond nursing studies, *n* (%)			
Yes	152 (45.10%)	29 (8.61%)	181 (53.71%)
No	131 (38.87%)	25 (7.42%)	156 (46.29%)

Abbreviation: SD, standard deviation.

TABLE 2 Scores according to internship option

	Knowledge	Attitudes	Training perception	Overall
Curricular practice, mean (SD)	74.47 (14.47)	95.23 (11.78)	73.39 (14.79)	79.72 (9.39)
Health aid, mean (SD)	74.14 (14.26)	94.64 (13.00)	72.46 (14.91)	79.16 (9.80)
Difference, U (*p* value)	6757.00 (0.177)	6526.50 (0.031)	5926.50 (0.008)	6177.50 (0.025)

Note: U: Mann–Whitney's *U*.
Abbreviation: SD, standard deviation.

negative stereotyping towards LGBTI collectives (Aleshire et al., 2019; Fallin-Bennett, 2015) and/or deny the existence of specific barriers to those populations (Donisi et al., 2020; McGlynn et al., 2020; Semlyen et al., 2018). Additionally, in countries with legislation protecting LGBTI collectives, there is the widespread belief that inequalities for such individuals no longer exist or are insignificant; health

TABLE 3 Linear backward regressions

	B	95% CI		p value
		Lower	Upper	
Knowledge				
Age	−0.311	−0.607	−0.015	0.039
Currently working in the health care sector	−4.607	−7.794	−1.420	0.005
Number of internships	2.417	1.026	3.809	0.001
Attitudes				
Background (rural)	−3.895	0.183	7.607	0.040
Currently working in the health care sector	−2.789	−5.745	0.168	0.064
Number of internships	2.382	1.095	3.669	0.000
Internship option (health aid)	−4.429	−8.338	−0.520	0.027
Training perception				
Salaried work earnings	−2.436	−3.811	−1.061	0.001
Specific training within nursing studies	13.310	10.476	16.145	0.000
Specific training beyond nursing studies	3.370	0.537	6.203	0.020
Overall score				
Age	−0.215	−0.416	−0.014	0.036
Currently working in the health care sector	−3.489	−5.706	−1.273	0.002
Number of internships	1.832	0.874	2.789	0.000
Specific training within nursing studies	2.141	0.064	4.218	0.043
Internship option (Health Aid)	−3.171	−6.073	−0.268	0.032

Note: All study variables in Table 1 were included in all initial models. The table shows only final models. B: nonstandardized coefficient. CI: confidence interval.

professionals too are susceptible to such beliefs (Walters et al., 2011). In light of this, it can be deduced that the quality of care is even worse during health crises (Chatterjee et al., 2020).

The question that arises is why senior students and recent graduates develop more negative attitudes when they are all still quite young and have only had a working relationship with the health care system. One possible answer is found in McGlynn et al. (2019), who point to an unconscious reproduction of heterosexist views in professional settings that specifically affects recent graduates and salaried senior students employed through the Health Aid internship option. These heterosexist views respond to what Bourdieu et al. (1977) called *symbolic violence*, a central theory used to explain male domination (Bourdieu et al., 1977). In this sense, symbolic processes (words, images and practices) promote the interests of dominant groups (heterosexual men, in this case) and convince those who are dominated (women and other dissident gender identities) to accept the imposed hierarchy (Fernández, 2005). Two widely held assumptions from this explanation can be applied to the health system and, consequently, to health care professionals: (1) By default, the population served is heterosexual, cisgender, and not intersex; and (2) LGBTI individuals do not experience significant inequalities, so LGBTI subjective realities are irrelevant in health care provision (McGlynn et al., 2020).

Another possible answer is related to the demanding working conditions that health care professionals endured during the COVID-19 pandemic, which significantly impacted their health. Nurses experienced increased work stress. Professionals were driven to emotional exhaustion (Galanis et al., 2021) due to the greater working demands, workload, complexity of work, work pressure and increased working hours during the COVID-19 pandemic (Martínez et al., 2022). The pandemic contributed to high rates of burnout among professionals (Torrente et al., 2021), jeopardizing patient care and doubling the likelihood of providing suboptimal care due to poor professionalism (Panagioti et al., 2018). Exhaustion negatively affected the quality of nursing care (Bergman et al., 2021; Galanis et al., 2021). In addition, the organizational environment of the pandemic made this situation more complex, such that the worse the organizational context, the less empathetic the responses of its professionals (Elayyan et al., 2018). Furthermore, pandemics tend to disrupt health services, which affects vulnerable populations the most (Bowleg, 2020). Evidence suggests that financial recessions, including that caused by COVID-19, could increase discrimination against LGBTI people, since they form part of vulnerable groups or minorities (Mattei et al., 2021).

On the other hand, we have also found that attitudes are more often negative when students come from rural areas. Although coming from rural areas has been identified as a potentially decisive factor in many areas related to health, research in other countries suggest that more specific and contextualized studies are needed (Prairie et al., 2019). However, studies conducted in Spain have identified significant barriers to small-town dwellers (Aragó Navarro, 2019) in rural settings, particularly lesbian women (Fernández-Rouco et al., 2013).

There is also research highlighting socio-spatial precariousness as a result of the oppressive coexistence experienced by many LGBTI people (Ugidos et al., 2020).

Another finding of this study is the need for specific nursing training on health care for LGBTI people. In general, studies have identified inadequate knowledge on the subject, that is slightly better among those who continue their training, but less so than among undergraduates (Cornelius & Carrick, 2015). In this sense, previous research argues that undergraduate training on LGBTI health is inadequate and that specific interventions with case studies could improve knowledge about and attitudes towards proper health care for LGBTI people (Strong & Folse, 2015). Evidence shows that training health care workers to improve cultural competencies about the health care needs of LGBTI people is a critical step in addressing inequalities in health care settings (Donisi et al., 2020). Other studies found that a higher level of health-related knowledge about LGBTI people was not predictive of more positive attitudes (Aleshire et al., 2019). It has been recommended that they be incorporated into training and awareness-raising initiatives for health care professionals (McGlynn et al., 2020).

This study is not exempt from the limitations stemming from cross-sectional design. Convenience sampling with snowballing requires caution regarding its representativeness. We did not use any filters or barriers to prevent respondents from answering the same survey twice. However, we stressed that it should only be answered once, both in the wording and to the participants who started the snowball sampling. The sample was mainly female and, while representative of the characteristics of the student population from which it was drawn, the results must be interpreted carefully in the case of male and nonbinary subjects. Among its strengths, this study is the first to analyse nursing students' knowledge, attitudes and training perceptions in the context of the pandemic. It highlights specific gaps in emergency health situations and the need for new advances in the provision of excellent care to reduce health inequalities.

5 | CONCLUSIONS

Nursing students' knowledge about and attitudes towards LGBTI people, as well as their perception of specific training on adequate care for this population, are negatively influenced by the Health Aid paid internship modality established during the pandemic. This situation is worse in the case of older professionals and those already working in the health care sector. It is mitigated when respondents completed a greater number of internships and received specific training as part of undergraduate nursing curricula. Factors that promote negative attitudes towards LGBTI people include the heterosexist and heterocentric context of the health system, chaotic and complex working conditions in the midst of the pandemic, and the synergies of pandemics and financial crises that have a greater effect on the most vulnerable groups. It is necessary to adopt educational measures based on the rights of the LGBTI community to address their specific health needs, especially in times of pandemic or any type of crisis.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

LGBTI individuals experience health inequalities due to heterosexism and discrimination in health care settings. This is an ongoing situation that demonstrates the need to systematically review care protocols and procedures managed by nurses. New lines should be implemented in decision-making and intervention management during emergency situations to ensure that more comprehensive care is provided to vulnerable patients. Professional internships that place the student in positions more akin to the workforce could hinder the acquisition of proper competencies in the care of patients from vulnerable groups. These competencies that will ultimately be negatively affected once the professional is fully engaged in the labour market. These intricacies should be considered in future instances of paid internship options in emergency scenarios such as the Health Aid modality created specifically to face the pandemic.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

The study protocols and questionnaire were approved by the Human and Animal Experimentation Ethics Committee of the Universitat Autònoma de Barcelona (CEEA-5264-2020). There was a consent statement at the beginning of the survey, and it was implicitly granted by agreeing to complete the survey. Data anonymity and confidentiality were ensured following the requirements established by the Spanish and European data protection laws and directives.

AUTHOR CONTRIBUTIONS

Ramón-Sebastián Torrente-Jiménez: Data curation, Visualization, Formal Analysis. **Angel Gasch-Gallen**: Term, Conceptualization, Supervision. **Ariadna Graells-Sans**: Conceptualization, Methodology, Editing. **Eva Fernàndez-Lamelas**: Conceptualization, Methodology, Resources. **María Feijóo-Cid**: Conceptualization, Resources, Supervision. All the authors contributed writing and reviewing the original draft.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Angel Gasch-Gallén https://orcid.org/0000-0002-3087-8899

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ORIGINAL ARTICLE

WILEY

The perception of nursing leaders towards communication and relationship management competencies in using digital platforms during COVID-19 in Qatar: A cross-sectional study

Laith F. Daradkeh MSN, RN, Charge Nurse | Ralph C. Villar MSN, RN, Nurse Educator | Abdulqadir J. Nashwan MSN, RN, Director of Nursing for Education and Practice Development

Department of Nursing, Hazm Mebaireek General Hospital (HMGH), Hamad Medical Corporation (HMC), Doha, Qatar

Correspondence
Abdulqadir J. Nashwan, Department of Nursing, Hazm Mebaireek General Hospital (HMGH), Hamad Medical Corporation (HMC), PO Box 3050, Doha, Qatar.
Email: anashwan@hamad.qa

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Abstract

Aim: To evaluate nursing leaders' perception of communication and relationship management competencies while using digital platforms during the COVID-19 pandemic.

Background: Nursing leaders can achieve effective leadership by mastering these competencies leading to an overall improvement in the quality of nursing care. The COVID-19 pandemic has brought numerous challenges in communication, and digital platforms have been widely used in healthcare settings to mitigate contagion.

Design: Cross-sectional.

Methods: The study was conducted between February and March 2021. A survey was adopted from the American Organization of Nurse Executives (AONE) and was sent to nursing leaders in Qatar through email.

Results: A total of 250 nurse leaders were invited to participate, but only 116 responded (RR 46.4%). The male participants represented a more significant proportion of 64.10%. Influencing behaviour, relationship management and effective communication had the lowest scores, which indicates low competency.

Conclusions: Despite obtaining satisfying scores, nursing leaders in Qatar should strive for professional development and knowledge acquisition to improve their communications and relationship management competencies.

Implications for Nursing Management: Healthcare organizations must understand that nursing leaders should strive for professional development and knowledge acquisition to improve their communication and management.

KEYWORDS
nursing, leadership, COVID-19, management, communication

1 | BACKGROUND

Nowadays, nursing leaders must have advanced management talent to correspond to the continuously increasing demands and complexity in healthcare provision (Cheryl Lacasse, 2013; Uhl-Bien et al., 2020). Nursing leaders were expected to show measurable outcomes and efficiency to facilitate effective practice with evidence-based management. Most academic studies and nursing leadership programmes emphasize on competencies related to working environment effectiveness. The shift to evidence-based management has led to numerous efforts to define appropriate competencies for nursing leaders (Bianchi et al., 2018; Stefl, 2008). For example, communication and relationship management competency relates to how the leaders understand the individuals they work with and how they use their knowledge effectively in developing high-performance workplace relationships, in addition to how they utilize digital platforms to manage their working environment (Garman & Johnson, 2006; Temelkova, 2018). Overlooking the leadership skills for nurse executives and managers can have negative consequences, and self-reported competency can yield positive results (Flatekval & Corbo, 2019).

The American Organization of Nurse Executives (AONE), which was a member of the Healthcare Leadership Alliance (HLA), defined eight main domains correlated with this competency (Garman & Johnson, 2006). Most of these domains concentrate on communication and relationship management at the organizational level (e.g. understanding the corporation's structure and relationships, public relations and communicating the corporation's mission and vision). Other domains concentrate on the departmental level (e.g. promoting alternative conflict resolution, practising and evaluating shared decision making and building, engaging in and leading teams) (Reid Ponte, 2004). However, mastering these competencies was only an entry ticket for leadership effectiveness, and the competency should be continuously utilized within the daily practice as part of continuous professional development. Over time, with constant utilization, this competency can significantly improve the effectiveness of nursing leadership and thus the quality of nursing care delivered to service users.

The COVID-19 pandemic has created an urgent need for coordinated mechanisms to respond to outbreaks across health sectors, and digital health solutions have been identified as promising approaches to meet this challenge (Allobaney et al., 2020; Nashwan, Abujaber, Mohamed, et al., 2021; Nashwan, Abujaber, Villar, et al., 2021; Nashwan, Villar, Al-Qudimat, et al., 2021; Villar et al., 2021). Digital platforms are technologies used to boost interactions among people, offering more effective ways of transferring information (Caputo et al., 2018). The use of digital platforms during the pandemic has been a critical ally in addressing issues. Telemedicine was used to reduce the risk of infection as a successful healthcare model in both emergency and primary care (Fagherazzi et al., 2020). Official communication plans should promote accessible and varied channels to inform people of the epidemic, avoid rumours and reduce threats to public health. Social media platforms such as Microsoft Teams™ and Google Trends were beneficial for modelling trends in the epidemic and monitoring the evolution of patient symptoms or general reactions and outcomes of the epidemic over time. Numerous studies agree that the pandemic exacerbated and accelerated digital globalization, especially in healthcare (Alexopoulos et al., 2020; Liang, 2020; Parker et al., 2021; Popescu et al., 2021).

The purpose of this study was to identify the perceived level of nursing leaders' communication and relationship management competencies when using digital platforms. The objectives of the study were (1) to evaluate nursing leaders' perception towards communication and relationship management competencies while using digital platforms during the COVID-19 pandemic and (2) to compare different professional levels (executive director of nursing, assistant executive director of nursing, director of nursing and head nurses of various units) communication and management competencies. Specifically, the study wants to answer the following questions: What is the level of perception towards communications and relationship management in using digital platforms during COVID-19 among nursing leaders in Hamad Medical Corporation (HMC), and is there a difference in the level of perception towards communications and relationship management in using digital platforms during COVID-19 among nursing leaders in Hamad Medical Corporation? As of the researcher's knowledge, this was the first study on nursing leaders' perception of their communication and relationship management using digital platforms during the pandemic.

2 | MATERIALS AND METHODS

This study was conducted in different hospitals under Hamad Medical Corporation in Qatar, the largest healthcare provider in the country. A cross-sectional, descriptive study design was used to answer the research questions from February to March 2021. The survey was distributed to a purposive sample of nursing leaders in Hamad Medical Corporation (using their organizational contact information), including executive directors, assistant executive directors, directors of nursing and head nurses at various units/departments. The expected response rate according to Qualtrics Sample Size Calculator for 250 population (confidence level 95%) from executive director of nursing, assistant executive director of nursing, director of nursing and head nurses of various units; from the eligible participants, 116 responded with a 46.4% response rate.

2.1 | Data collection

An official email was sent from the researcher through the HMC research department to all targeted participants, explaining the nature and scope of the study and the voluntary nature of participation, including the right to withdraw at any time and the right to anonymity. Completion of the questionnaire was considered as approval of participation. Participants were informed that they had 2 weeks to fill in the questionnaire. Reminders were sent by email to complete the

survey to improve the response rate. A 5-item Likert-type questionnaire adopted from the AONE (2005) questionnaire to evaluate communication and relationship management competencies. Benner's (1982) beginner to expert theory provides the foundation for this instrument. For the professional nurse, Benner recognized five levels of development: novice, advanced beginning, competent, proficient and expert. The survey has two sections: (1) demographics such as gender, years of experience in general and particularly in HMC, as well as the current managerial role. The second part consists of eight competencies including (1) effective communication (three items), (2) relationship management (seven items), (3) influence of behaviours (three items), (4) ability to work with diversity (six items), (5) shared decision-making (three items), (6) community involvement (three items), (7) medical staff relationships (eight items) and (8) academic relationships (six items).

2.2 | Ethical approval

The study was conducted in full conformance with principles of the 'Declaration of Helsinki', Good Clinical Practice (GCP), and within the laws and regulations of MoPH in Qatar. Implied consent was obtained from the participants, and the researcher assured voluntary participation for the subjects. Also, the questionnaire was disseminated without names or corporation numbers to guarantee participant anonymity and data confidentiality. Original authors provided the researcher with permission to use the scales. The researcher adhered to the ethical codes and regulations of the University of Essex and got approval from the IRB of Hamad Medical Corporation (MRC-01-21-090).

3 | STATISTICAL ANALYSIS

The IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp., was used to analyze the data. Descriptive statistics, including percentages, frequencies, means and standard deviations, were used to describe the sample and answer the research questions about the perception of communication and relationship management competencies. In addition, ANOVA and Wilcoxon-rank sum tests were done to compare the status of communications and relationship management competencies.

Assumptions were checked and insured before using the inferential statistics. The researcher reviewed the outliers and the missing values and dealt with them appropriately. Then, the researcher ran the analysis. The data were considered significant when P value < .05.

4 | RESULTS

The majority of participants were male, consisting 63.8% of the sample size, whereas women were 36.2%. Nursing leaders were represented in all departments where 60.4% were head nurses, 28.4% were directors of nursing and 11.2% were executive directors and assistant executive directors of nursing. Years of experience ranged from 0 to above 10 years. The majority of the participants had over 10 years of experience (53.5%) (Table 1).

The results of the study showed that all the items revealed a sufficient level of internal consistency with Cronbach alpha ($\alpha > .987$) (Table 2).

This study was conducted in different hospitals under HMC in Qatar, the largest healthcare provider in the country.

4.1 | Descriptive statistics

A participant can gain a maximum mean score of 52.6, which is the highest level of perception on the communication and relationship skills, and a minimum of 0, which means the participant has the poorest communication and relationship skills. The participants of this study had the highest mean score on effective communication (21.14), followed by influencing behaviours (20.94), relationship management (20.76), academic relationship (20.46), medical staff relationship (20.36), community involvement (20.06) and the lowest mean score on shared decision making (19.98). The items of digital competency, effective communication, relationship management and influencing behaviour obtained the lowest scores, with 44.0, 42.0 and 43.0, indicating they have a low level of competency (Table 3).

TABLE 1 Participants socio-demographics and work-related factors ($n = 116$)

Variables		Frequency	Percentage
Gender	Male	74	63.8
	Female	42	36.2
Current position in HMC	Executive director of nursing	13	11.2
	Assistant executive director of nursing		
	Director of nursing	33	28.4
	Head nurse	70	60.4
Experience in current position	0–5 years	23	19.8
	5–10 years	31	26.7
	Above 10 years	62	53.5

TABLE 2 Reliability test

	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
Effective communication	122.560	13301.348	.996	.981
Relationship management	122.940	13529.473	.993	.981
Influencing behaviours	122.760	13529.068	.997	.981
Shared decision making	123.720	13465.312	.850	.991
Community involvement	123.640	13770.793	.865	.989
Medical staff relationship	123.340	13217.923	.975	.982
Academic relationship	123.240	13568.908	.982	.982
Cronbach's alpha	Cronbach's alpha based on standardized items			*N* of items
.986	.987			7

Note: The results of the study showed that all the items revealed consistency.

TABLE 3 Nursing leaders' communication and relationship management competency scores

	N	Minimum	Maximum	Mean	Std. deviation
Effective communication	5	.0	44.0	21.140	20.0486
Relationship management	5	3.0	42.0	20.760	19.1230
Influencing behaviours	5	3.0	43.0	20.940	19.0491
Shared decision making	5	.0	52.6	19.980	22.0819
Community involvement	5	2.0	52.0	20.060	20.3264
Medical staff relationship	5	.8	49.8	20.360	20.7963
Academic relationship	5	1.5	44.5	20.460	19.1346
Valid *N* (listwise)	5				

Notes: The participants of this study had the highest mean score on effective communication, followed by influencing behaviours, relationship management, academic relationship, medical staff relationship and community involvement, and the lowest mean score on shared decision making. The items of digital competency, effective communication, relationship management and influencing behaviour obtained the lowest scores, indicating they have a low level of competency.

4.2 | Differences in nurses' leaders perception of communication and relationship management competency in using digital platforms

The participants rated the overall communications and relationship management competencies and proficiency level related to digital platform utilization by nurse leaders. The items have an *F* value close to 1.0, indicating that the null hypothesis is true. The significance suggests that even though there is a difference in response on effective communication proficiency of nurse leaders, the difference is statistically significant because it is less than .05. That implies that it would occur 41.1% in influencing behaviour, 40.9% in relationship management, 40.4% in shared decision making, 40.1% in community involvement, 23.4% in medical staff relationship and 40.3% in an academic relationship (Table 4).

5 | DISCUSSION

This study identified the perceived level of nursing leaders' communication and relationship management competencies when using digital platforms. This result offered practical insight for evaluating expertise in crucial communication and relationship management competencies. Lucas et al. (2018) argue that the competency assessment tools may be utilized in various ways to detect strengths and improvement areas. This result can enhance the following areas: (1) Group or team development as the tool can help link individual goals of a team to the organizational objectives, resulting in corporate values, goals and objectives. (2) Organizational and self-assessment provide valuable information of strengths and weaknesses in communication and relationship management competencies to inform a professional improvement strategy. (3) Professional and academic development programmes can help uncover skills, knowledge and specific competencies that programmes should focus on when offering professional development programmes. This study revealed that there was no difference in the nursing leaders' perception of communication and management competencies in using digital platforms during COVID-19 in Qatar. Despite being competent in all aspects of communication and relationship management, it was essential to note that low levels were recorded in digital competency, effective communication, relationship management and influencing behaviour. Furthermore, in the proficiency level subscale, participants scored the highest mean on

TABLE 4 Differences in nurse leaders' perception of communication and relationship management competency

		Sum of squares	df	Mean square	*F*	Sig.
Influencing behaviours	Between groups	1451.472	4	362.868	.677	.411
	Within groups	.000	0			
	Total	1451.472	4			
Relationship management	Between groups	1462.752	4	365.688	.681	.409
	Within groups	.000	0			
	Total	1462.752	4			
Shared decision making	Between groups	1950.448	4	487.612	.887	.404
	Within groups	.000	0			
	Total	1950.448	4			
Community involvement	Between groups	1652.652	4	413.163	.729	.401
	Within groups	.000	0			
	Total	1652.652	4			
Medical staff relationship	Between groups	1729.952	4	432.488	.912	.234
	Within groups	.000	0			
	Total	1729.952	4			
Academic relationship	Between groups	1464.532	4	366.133	.793.	.403
	Within groups	.000	0			
	Total	1464.532	4			

Notes: Statistical significance determined by $P < .05$. The items have an *F* value close to 1.0, indicating that the null hypothesis is true.
Abbreviation: df, degree of freedom.

effective communication, and the lowest mean in shared decision making. Influencing behaviour scored the lowest standard deviation, and shared decision making had the highest standard deviation indicating minimal dispersion in the data. The digital platforms that enhance professional networking were only available and cater to individuals within these nursing professions (Krawczyk-Sołtys, 2017). In addition, discussions and clinical topics in such sites often address diverse subjects, including biostatistics, ethics, practice management, politics and career strategies (Chen, 2018). The results from this study indicated that digital platforms provide a supportive environment for nursing leaders. Digital platforms also enhance crowdsourcing and involve harnessing society's skills and knowledge to gather opinions and information or solve problems (Shum et al., 2018). According to Hernandez et al. (2018), social media connects nurse leaders in developing countries with those from more medically advanced nations. Digital platforms connect a broader nursing audience and magnify content and critical themes (Hernandez et al., 2018). From the responses in the survey, nurse leaders who use digital platforms, the assistance and information received were helpful. In the descriptive table, shared decision making and community involvement had the highest maximum values of 52.6 and 52.0.

According to Lucas et al. (2018), nurse leaders can ask questions on Twitter or stream surgical procedures through the Internet (Lucas et al., 2018). Therefore, digital platforms offer a new communication channel for nurse leaders to network, exchange and share medical information in ways and at a pace that was never possible before.

The improved communication provided by digital platforms plays a critical role in improving clinical education. Hernandez et al. (2018) argue that the high utilization rate of digital platforms by individuals between 18 and 29 years fostered the adaptation of clinical curricula to reflect incoming students' culture and changing habits (Hernandez et al., 2018). This study's results indicate that the *F* value of the academic relationship is .793, indicating the null hypothesis is true. That implies that nurse leaders actively use digital platforms to improve students' understanding of ethics, communication and professionalism.

The focus of the benefits of digital platforms in enhancing nursing leaders' work within the society came across strongly because of the need to provide integrated social and healthcare services in Qatar and the international emphasis to improve primary care to support patient self-management at home (Handtke et al., 2019). The nursing workforce needs to have a high level of generalized information and coordination, excellent communication and leadership skills, which will ensure they can navigate the complex online environment and effectively deliver healthcare services to the community. Furthermore, the advanced practice roles catering to the needs of patients will be critical for the aging population as it is now a global trend (Lucas et al., 2018). Therefore, there is a need to research the specialized healthcare services that the patients require, develop and implement them in nursing practice, education, the level of demand and policies governing the integration agenda, ensuring nurses were adequately equipped for the future.

COVID-19 increased the need to deliver care remotely through networked care delivery and mobile consultations to limit the need for direct contact. Mast et al. (2018) argued that because healthcare providers will not physically examine the patients, clear guidance and good support were critical to ensure effective treatment and diagnosis at a distance (Mast et al., 2018). The findings of the study showed that digital platforms allow nursing leaders to provide ongoing guidance and support. In addition, the digital platform creates a need for nursing leaders to provide knowledge to patients to ensure they can evaluate and interpret the information from monitoring mechanisms to empower their decision-making process.

Nursing leaders should ensure transparent and clear communication between the user and the professional. The clarity, listening skills and voice intonation of virtual communication information are essential as face-to-face support and prompts are absent. For example, healthcare professionals may communicate through video or audio connections provided on digital platforms (Collins et al., 2017). This study's findings indicated that specific competencies needed for remote healthcare service provision include providing consultations to the community, being an influential member of professional organizations, representing organizations of non-health within the community.

Chen (2018) argued that nurse leaders may be required to engage other healthcare providers when making healthcare-related decisions and should ensure that the patients' health information is shared responsibly. The study highlighted confidentiality concerns and argued that digital platforms should enhance the responsible sharing of information across and between organizations. However, nursing leaders should ensure regular communication to improve teamwork with other healthcare shareholders such as healthcare organizations, communities, caregivers, nurses, physicians and voluntary groups. In addition, nursing leaders must be aware of the implications of digital platforms across a broader integrated spectrum of healthcare services.

There is a risk of breaching patients' confidentiality and privacy when nurses share patient information during interactions on digital platforms (Krawczyk-Sołtys, 2017). Nurse leaders should be aware of the specific ways that digital platforms compromise patients' confidentiality and privacy and how patients' right to know how the information is viewed and shared. Although most healthcare organizations have standards for data sharing, digital platforms alter how healthcare providers view and share information. It results in unique patient data requirements and how they can be kept secure from others using online tools and mobile devices (Shum et al., 2018). Because digital platforms draw nursing leaders from various organizations, they must monitor information access (Handtke et al., 2019). They need to enhance effective information sharing across nurse leaders while considering legislation rules and national privacy laws.

6 | STRENGTHS AND LIMITATIONS

This research was generated within a short period; therefore, it might affect the generalization. In addition, the study had a small sample population, and the time of introduction of the survey may lead to information bias. The sample consisted of 116 participants, representing a 46.4% response rate. Similar research should be conducted with a larger sample size to ascertain the results.

7 | CONCLUSIONS

Qatar's nursing leaders should capitalize on communication and relationship management in using digital platforms because of their benefits and capability to generate critical discussions, especially during pandemics. Despite obtaining satisfying scores, nursing leaders in Qatar should strive for professional development and knowledge acquisition to improve their communications and relationship management competencies.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

Increased use of digital platforms in the healthcare setting creates a need for experts to research them to identify the bottlenecks associated with them and discover ways to successfully implement digital platforms in healthcare settings. Nursing leaders gain from including digital platforms in their engagement strategies, particularly during the COVID-19 pandemic, and should consider the following when using digital platforms to enhance healthcare service provision. First, they should consider the social media policies issued by a professional association or within the healthcare organization. Nurse leaders should also assess how analytics in digital platforms were driven and designed. There were some standard metrics, but the use and definition of platforms vary; therefore, they can be misleading. For instance, in Twitter, the term impressions refer to tweets posted to a tweeter stream. The impressions exclude social media information streamed to third-party applications such as Hootsuite. Therefore, the analytics reflect the size of the potential audience. A need for more nursing research will help understand the disadvantages and advantages of digital platform analytics, which will help educate nurse leaders and ensure nurses understand the drawbacks and benefits in interpreting virtual behaviours and online environments. In order to further understand the phenomena, a qualitative research methodology must be considered.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

ETHICS STATEMENT

The study was approved by the Medical Research Center (MRC) Institutional Review Board (IRB) at Hamad Medical Corporation (MRC-01-21-090). Implied consent was obtained from the participants, and the researcher assured voluntary participation for the

subjects. Also, the questionnaire was disseminated without names or corporation numbers to assure participant anonymity and data confidentiality.

AUTHOR CONTRIBUTIONS

Conceptualization: LFD. Methodology: LFD, RCV and AJN. Formal analysis: LFD. Manuscript draft writing: LFD, RCV and AJN. Manuscript final editing: LFD, RCV and AJN.

DATA AVAILABILITY STATEMENT

All data generated during this study are included in this published article.

ORCID

Ralph C. Villar https://orcid.org/0000-0002-8761-6777
Abdulqadir J. Nashwan https://orcid.org/0000-0003-4845-4119

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ORIGINAL ARTICLE

WILEY

In Nightingale's footsteps: A qualitative analysis of the impact of leadership development within the clinical learning environment

Carmel Bond BSc (Hons), MSc, RN (MH), PGCE, Research Associate & Doctoral Researcher[1,2] | Gemma Stacey PhD, RN (MH) PGCHE, Director of Academy[1] | Ashleigh Charles BA (Hons), MSc, MA, RN (MH), Research Associate & Doctoral Researcher[1,3] | Greta Westwood PhD, MSc, ONC, RN, CBE, CEO[1] | David Hearn BSc, MSc, RN (MH), PGCert, Workforce Education Transformation System Lead[4]

[1]The Florence Nightingale Foundation, London, UK

[2]Nottingham University Business School, The University of Nottingham, Nottingham, UK

[3]School of Health Sciences, Institute of Mental Health, University of Nottingham, Nottingham, UK

[4]Health Education England, Southeast, UK

Correspondence
Carmel Bond, Research Associate, The Florence Nightingale Foundation, 10-18 Union Street, London, UK.
Email: policy@florence-nightingale-foundation.org.uk

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Abstract

Aim: To identify and describe the impact areas of a newly developed leadership development programme focussed on positioning leaders to improve the student experience of the clinical learning environment.

Background: There is a need to consider extending traditional ways of developing leaders within the clinical learning in order to accommodate an increased number of students and ensure their learning experience is fulfilling and developmental. The Florence Nightingale Foundation implemented a bespoke leadership development programme within the clinical learning environment. Identifying the areas of impact will help to inform organisational decision making regarding the benefits of encouraging and supporting emerging leaders to undertake this type of programme.

Method: For this qualitative descriptive study, eight health care professionals who took part in a bespoke leadership development programme were interviewed individually and then collectively. The Florence Nightingale Foundation fellowship/scholarship programme is examined to determine impact.

Results: Two key themes were described in relation to impact of the programme. These were 'Personal Development' and 'Professional Impact'. The two key themes comprised several subthemes. The notion of time and space to think was subsumed within each theme.

Conclusion: Data highlights that the Florence Nightingale Foundation programme had a distinct impact on participants by transforming thinking and increasing self-confidence to enable changes to make improvements both within their organisations and at national level.

Implications for Nursing Management: Health care managers must continue to invest in building leadership capacity and capability through programmes that can help position individuals to realize their potential to positively influence health outcomes and wider society.

KEYWORDS
allied health professional, leadership development, midwives, nurses

1 | INTRODUCTION

This study provides insight into the experiences of a cohort of nurses, midwifes and allied health professionals (AHPs) who embarked on a novel 12-month programme of leadership development, with a focus on enabling change and improvements in the learning environment. In this paper, we draw upon participants' experiences and perspectives of *how* the programme facilitated their development as leaders. As far as we know, the approach to leadership development outlined here is innovative in that it is the first to extend traditional approaches to leadership development (Paton et al., 2021) by incorporating health care professionals (HCPs) from various specialties. It was anticipated that the programme would encourage participants to engage in a process of critical reflection whereby they would question their own leadership styles, as well as one another's points of view about leadership. This reasoning was underpinned by adult learning theory (Mezirow, 2000), which holds that a learner can transform their thinking by confronting and questioning theirs (and their peers) established preferences/worldviews. Therefore, we predicted that programme participants would motivate one another, through discussion and reflection on leadership challenges, and, ultimately, come to see these challenges in new ways (Bass & Riggio, 2006, in Echevarria et al., 2017).

1.1 | Programme overview

The programme was designed to respond to the specific context and development needs of clinical educators and comprised a series of experiential development days which focussed on (1) understanding of self and impact of self on teams; (2) personal presence and impact; (3) stepping into authority and having influence; (4) influencing change and measuring impact; and (5) writing for publication and disseminating learning. The programme was delivered remotely, online. Prior to the start of the programme (April 2021), programme participants were presented with a programme specification, outlining the key information and learning outcomes for the above-referenced experiential development days.

Programme participants were supported and encouraged throughout to pioneer change and improvements in patient and health outcomes, thereby, honouring Florence Nightingale's legacy that still resonates in nursing and health care today (Chatterton, 2019). Clinicians (programme participants) were seconded from their substantive role to undertake the programme, as well as complete a quality improvement (QI) project, which focussed on improving the experience and capacity of the clinical learning environment. Due to the uniqueness of this programme, there is a lack of existing literature on comparable programmes. It is therefore important to identify the areas in which this programme is reported to have been impactful for participants so that measurable influences can be determined for future programmes.

2 | BACKGROUND

There is continued concern regarding the shortage of nurses and midwives in the United Kingdom (UK) (Beech et al., 2019; National Audit Office, 2020). Even before the Covid-19 pandemic, there were reports of increased rates of stress, absenteeism, burnout and high numbers of health care students leaving courses (Bakker et al., 2019; Health Foundation, 2018; Nursing and Midwifery Council, 2020). In terms of health care students, team culture is a notable factor for the observed variance in the quality of HCPs' experiences, and subsequent levels of satisfaction (Labrague, 2021). Enhancing the experience for health care learners is vital to ensure the production and retention of a highly skilled and confident future health care workforce (Panda et al., 2021).

Research has emphasized the positive impact of leadership for shaping organisational cultures and producing positive outcomes for staff, students, and patients (Cummings et al., 2021; Kline, 2019; Sholl et al., 2017). However, workforce pressures often mean less time to devote to leadership development (Coventry et al., 2015; Nash & Garratt, 2021). It is important that leaders are invested in developed and positioned to positively influence, innovate and improve traditional models of clinical learning to support students and ensure their learning experience is fulfilling and developmental. This may be one way to improve retention and reduce attrition rates.

There is a need to find innovative approaches to leadership development in order to increase capacity for high-quality learning within the clinical environment, which students experience as both fulfilling and developmental. In the clinical learning environment, where traditional models have continued to be implemented, evidence suggests that the workforce feels a significant burden to support students' learning needs (Hanson et al., 2018). As a consequence, students may experience inadequate learning opportunities. In the United Kingdom, this burden has been mitigated by appointing clinicians who have a

dedicated role co-ordinating and supporting students, known as clinical educators or clinical placement managers (Magnusson et al., 2007). Clinical educators are at the centre of the learning process and can have a positive impact on student achievement and attrition rates (Arkan et al., 2018), often supporting students to navigate the challenges posed by clinical practice environment (Cant et al., 2021; Kalyani et al., 2019; Rafati et al., 2020). These individuals are in a position to influence change, implement innovations and drive improvements in both the clinical and academic learning environments (Scott, 2018). To meet these unique challenges, aspiring clinical educators must develop the relevant leadership skills. Regardless of the importance of these roles in both clinical education and practice (van Diggele et al., 2020), there is little leadership or career development available in this area, in the United Kingdom.

2.1 | Aim

To identify and describe the impact areas of a newly developed leadership development programme focussed on positioning leaders to improve the student experience of the clinical learning environment.

3 | METHODS

3.1 | Ethical considerations

The University of Nottingham research ethics committee granted ethical approval (FMHS 218-0321). Participants gave informed consent and were made aware that their involvement was voluntary and that they were free to withdraw consent at any time.

3.2 | Study design

We conducted a qualitative descriptive (QD) study using a sample of individuals who had joined a newly designed leadership development programme for clinical educators. QD was considered appropriate for this study as we sought to gain a broad insight into the impact of the Florence Nightingale Foundation (FNF) programme, while focussing on participants' views and experiences of developing leadership on the programme and planned to use multiple data sources (individual and focus group interviews) (Neergaard et al., 2009; Sandelowski, 2000).

3.3 | Participants

Participants ($n = 8$) were all female, nurses ($n = 4$), midwifes ($n = 1$) and AHPs ($n = 3$) working in the UK National Health Service (NHS) in the Southeast of England. No other demographic data were collected. All were seconded from their substantive role for 12 months to follow the FNF leadership development programme while simultaneously working on a QI project focussed on improving the student experience within the clinical learning and education environment.

3.4 | Data collection

Data were collected at three points over the course of a 9-month period from July 2021 to February 2022. Semi-structured interviews were undertaken by the lead author at 3 months into the programme and again at 6 months into the programme. The main exploratory questions for the interviews were the following:

- 'Can you describe your experience of transitioning from your clinical role to the leadership development programme?'
- 'What have your experiences of developing as a change agent been so far?'

All interviews were conducted online using video conferencing software and lasted between 35 and 50 min. One focus group was undertaken at 9 months into the project (length = 80 min). Only five ($n = 5$) participants attended the focus group. Interviews and focus group resulted in a total of 624 min of data. The main exploratory question for the focus group was as follows:

- 'From your experience of the programme so far, on reflection, what impact has the programme had?'

Follow up questions were used throughout to enhance to quality and richness of the data. Emerging specific topics were noted and discussed with participants to explore in more detail and generate detailed examples (Tong et al., 2007).

3.5 | Data analysis

The lead author, who had also conducted the interviews, transcribed the audio-recordings verbatim. This ensured in-depth familiarity with the text. Two analysts (CB & AC) then independently coded the first three transcripts, each creating separate interpretations and themes. The second analyst (AC) was independent from the project. A meeting then took place between the two analysts to discuss the initial coding and resolve any disagreements. Emerging themes were discussed in full and discussions were focussed on the refinement of themes. Draft themes were reviewed by the co-investigators. This process resulted in a high-level of agreement among the team. Once themes were established, extracts were taken from the five the remaining transcripts and organised under the derived codes. Participants were invited to comment on whether they felt the themes accurately reflected their experiences. Affirming comments from participants demonstrates the authenticity of the results. As an approach, qualitative description offered a practical straightforward method for understanding participants' perspectives regarding areas of the programme that were impactful for them (Sandelowski, 2000).

4 | RESULTS

Participants discussed two core themes in relation to impact of the programme. These were 'Personal Development' and 'Professional Impact'. The two core themes comprised subthemes (Figure 1). Subsumed within each theme was the idea that having the time and space to think was important for personal and professional growth to occur.

4.1 | Personal development

Participants reported being motivated to apply for to the FNF programme and had been actively searching for a route that could provide experience to help them develop a future strategic position and fulfill their passion for working in the clinical learning/educational environment. At each point of data collection, participants reflected on the impact of the course on their personal development.

> *'It's been such a journey, psychologically for me … having time to get to know what my leadership style is and how I cope with stress'* [P11]

> *'From a personal perspective, it has re-motivated me, it has changed me….prior to starting the programme I think I was in a bit of a personal rut…..and thinking that we were always doing things the same way'* [P19]

> *'I've learnt so much about myself … some of the session with RADA[1] have been really helpful because I am doing a lot of presenting and….I have learnt a lot out how to manage my anxieties and put things into perspective…. and I have done things and spoken to people that I would never have spoken to'* [P14]

Participants described the unique aspects of the programme and the influence these elements had on their personal development. This was evident in terms of developing openness to hearing new perspectives on leadership.

4.2 | Openness to new perspectives

Participants reflected that the design of the FNF programme, and how it had enabled them to share experiences of leadership with

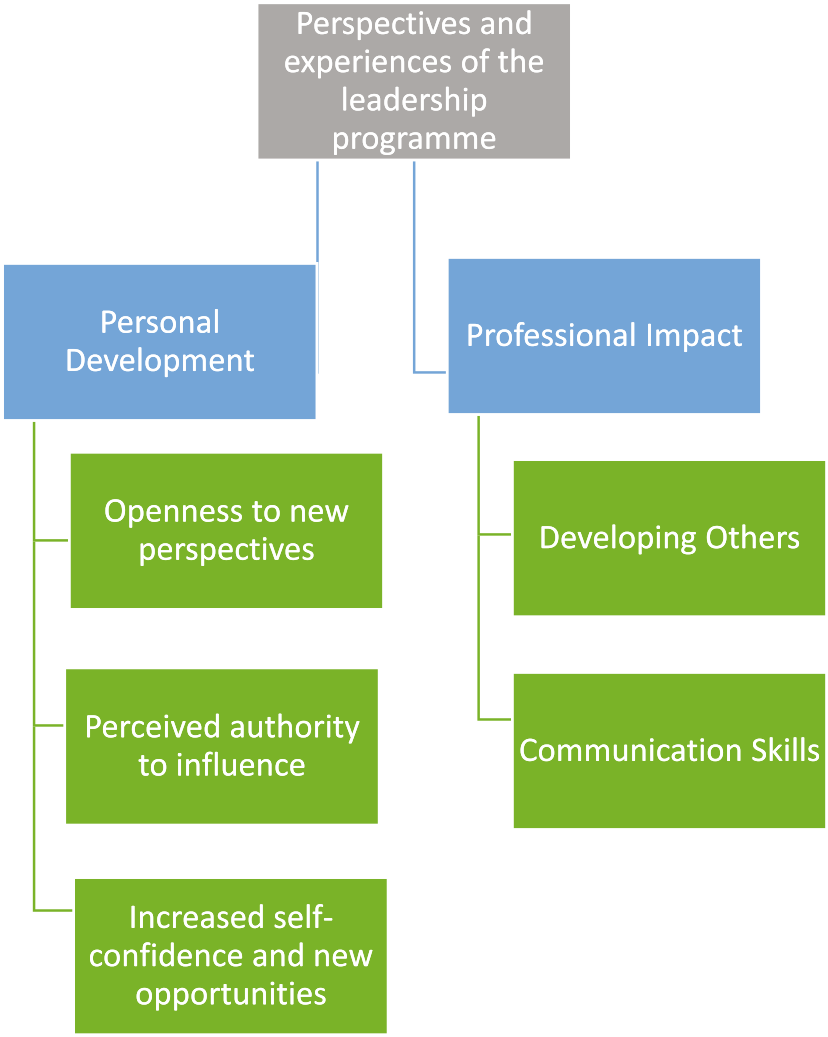

FIGURE 1 Overview of the two core themes and subthemes emerged during data analysis

HCPs from various backgrounds. This was felt to have facilitated an openness to new perspectives.

> *'To be with like-minded people who are really passionate for change, despite us coming from different backgrounds, it was just really refreshing… it makes me step back from what I know and to be open to their suggestions and their insights'* [P9]

> *'In the last action learning, I jotted down a couple of names of the other scholars and fellows, and thought I might actually speak to them and see if they have got any views on these things'* [P15]

> *'I am thinking more about how the changes that we want to see happen also benefit other people and their agendas and what they want. I think prior to the scholarship I perhaps would not really have thought about things from that angle'* [P19]

The programme days, where participants came together as a cohort, provided a sense of support and a space for feedback from peers. This was felt to be important in helping participants to develop thinking about how others perceived them as a leader; and to reflect on their own leadership style. Openness to various perspectives was felt to provide participants with an opportunity to 'reframe' how they view themselves as leaders and help them to change existing habitual ways of working.

> '*One of the things it's given me time not only to reframe me but reframe the way that I work and come away from the normal*' [P9]

Reflective space was something that all participants talked about in terms of having broadened their thinking, so much so that confidence was felt to have increased as a result of individuals beginning to see themselves as experts in their own right.

4.3 | Perceived authority to influence

Participants expressed a sense of increasing awareness of themselves as the expert in their particular field of clinical practice and how they had started to develop confidence and self-belief in their ability to influence as leaders.

> *'Some of the previous experiences have been trying to do some of this stuff. Particularly the QI work, I've been trying to do those things. It's so strange because now I feel like I've been given permission to do it. Which kind of, by default, makes me the expert. So, then it makes me feel like I have got a stronger voice to talk about those things'* [P12]

Moving beyond their established networks and becoming part of a wider national network helped participants engage in new conversations. The feeling of developing a sense of agency occurred because they believed they had permission to do something different.

> *'People are now listening to me, they are engaging in conversations. Not that they were not before, but I've got more free rein, I suppose, now. I'm allowed to ask those questions … I can ask those questions; I can ask them on a wider field as well. I have gone national with my project'* [P13]

Consequently, participants conveyed a feeling of being empowered. This enabled them to feel they could begin to implement change and make improvements. This was less about their day-to-day clinical performance but more about insights gained from the leadership course and their developing awareness of their existing expertise.

> *'I'm actually helping the Trust design a pathway at level 7 for nurses. And we are having our voice heard, which is wonderful… I've never really thought I'd have a voice, strategically. And I think because of the FNF programme, it's very slow, but I think that we are beginning to get a strategic voice, which would be incredible. I never would have had that before'* [P15]

4.4 | Increased self-confidence and new opportunities

Growing recognition of, not just themselves as leaders, but a recognition that other people have started to acknowledge them as the *'go to'* person led to increasing self-confidence and self-belief in relation to recognition of their extant wealth of tacit knowledge and experience.

> *'What has happened in the past six months is people have really recognized me as somebody … I guess having that knowledge it became a magnet on things, people would ask me questions that they feel I could answer'* [P11]

> *'I did not know I was relevant …. I suppose I have gained confidence to apply some of the skills I probably already had that were not given an opportunity or space to be used'* [P9]

> *'Now I think I'm definitely more confident in what I am bringing to those sorts of positions. And it feels that there's less mystery around this what is being a leader kind of thing, it has gone a little bit which is good'* [P19]

Participants reported how various opportunities had arisen from both becoming recognized as a source of expert knowledge and having access to a national network of health care leaders via the FNF programme.

> *'HEE[2] have come to me, national have come to me and asked me to lead on something, I never expected that conversation to happen'* [P9]

> *'What's interesting is the links that I've had with people that I never would have thought. Like, Health Education England. Who talks to anyone in Health Education England, honestly?'* [P14]

> *'At the moment now because I'm doing the FNF leadership programme I'm part of the senior management team, which obviously I wasn't before. And a couple of people have said that they need to really think about what I do next. Because they do not want me to leave the senior management team, they want me to have a role within it, and to think about that'* [P19]

Participants understood that the programme cohort of specialist HCPs had broadened their existing network. This was useful in terms of the opportunity to discuss the potential barriers to sustaining change within the learning environment. Thinking critically together and considering *how* other people *experience* them as a leader was made possible by time spent away from their substantive roles.

4.5 | Professional impact

4.5.1 | Developing others

Participants talked about using the skills they had developed on the FNF leadership programme to develop others. They also talked about the broader impact of the programme on the learning environment—as well as generating improvements to patient care.

> *'The impact has actually still been the ability to affect others and grow others'* [P9]

> *'Some of the leadership stuff that we have talked about, I've been able to share, and I've been able to share with senior nurses'* [P15]

> *'Within six months of doing the scholarship we have finally got our funding for an ICU psychologist. We've established a follow-up clinic so patients that have been discharged from ICU, now we have the resources and the opportunity to invite them back into clinic and see how they are'* [P11]

Participants were able to appreciate they were developing as leaders who could influence change, and they could see their agency in the change process.

4.6 | Communication skills

Time to reflect and think about 'the-self' as a developing leader was a welcome facet of the programme. Participants discussed the value of having opportunities to stop, pause and reflect on their leadership style. This provided headspace to reflect on communication skills and different ways of communicating as leaders.

> *'So much transferable skills if I had not done this programme, what stands out is the lean. … having the time and resources to learn lean has given me a lot of knowledge and empowered me to speak to a lot of senior people'* [P11]

> *'Some of the things around the different aspects of conversations that you might have with people, and how to get the best out of those, and how to prepare for them, that was all really quite educational. I'd never taken a step back and thought about that side of things at all'* [P19]

Participants reported that, prior to starting the programme, they rarely had time for reflection on leadership, or to work on specific projects that might improve the learning environment. The experience of having time was reported to be both physically and mentally refreshing.

The cohort of professionals for various backgrounds and specialities was felt to allow different conversations that participants felt they might not have otherwise had. This was felt to expand thinking by stepping out of silo working. Having various conversations within the cohort and sharing the leadership journey was also felt to induce confidence to communicate with people outside of their organisation. This increased confidence to communicate and network with external stakeholders was felt to be influential for creating positive change.

> *'I think that developing those relationships and being able to say to people this is why I'm suggesting this change, and this is what I want to achieve. So, I think probably the main skill is having the communication skills, the confidence, but also developing relationships with people, which I had perceived as being a barrier because it was an organisation that I wasn't used to'* [P14]

Thinking time gave participants the opportunity to unpick interpersonal interactions, and social processes, which form part of the culture of the health care teams more broadly.

> *'What the programme has taught me is in order to solve problems and in order to sustain the change that you want to see, you really need to step back and really study what's going on. What's driving this, what do the staff feel like, what does the patient feel like, and what are the things around us that we can really influence in order to sustain change?'* [P11]

5 | DISCUSSION

Proactively planning leadership programmes to meet the needs clinical educators is necessary for nurse, midwife and AHP leaders to respond to the challenges presented to them within the current workforce (Cummings et al., 2021; Kline, 2019; Sholl et al., 2017). Participants' accounts of their experiences on this newly develop programme affirmed how time away from clinical work helped them to gain clarity in respect to 'the self', and the impact of 'the self' on others. All participants described how having time and space to think was valuable for developing leadership skills and thinking more broadly about who they are as leader and how they can influence others. The benefits of having 'time and space to think' in the current study is supported in contemporary leadership development literature (Coventry et al., 2015; Nash & Garratt, 2021). This reflects the need for continued investment in protecting time for HCPs to focus on developing as leaders.

Participants identified how the FNF programme had provided a community where clinicians from various backgrounds were able to exchange knowledge and share ideas outside their own specialist area. This was reported to have increased confidence in leadership capability. Participants also indicated that the programme had been advantageous for developing a robust national network of health care leaders, which could support their career development. This was felt to have stimulated self-belief in participants' capacity to become successful health care leaders. Previous studies have noted that building and maintaining relationships have perceived importance for developing effective leadership (Hargett et al., 2017). While difficult to establish form a single study, the national network of established contacts, available to participants via the FNF programme, may be a contributory factor in the perceived effect on self-confidence and career action.

Critical self-reflection is thought to be a significant factor in facilitating transitions for health care students and promoting higher-order thinking (Brockbank & McGill, 2007; Gardner et al., 2006). In the current study, participants reported how the opportunity to reflect on their leadership style by developing openness to new perspectives meant that they were able to challenge exiting presuppositions and change established patterns of thinking (Mezirow, 2000). The distinct approach to leadership development described here may be crucial for changing existing cultures within health care teams more broadly and providing health care students with better learning experiences, consequently, helping to improve retention within the workforce in the longer term.

Participants reported increased openness to hearing the perspectives of others. They also recognized that developing relationships was an important element of authentic leadership and necessary for gaining the support for their QI projects and implementing change. Communication skills have been widely reported in previous studies as essential for health care leaders, particularly for creating organisational resilience and staff retention (see Sihvola et al., 2022). Arguably, in order to maintain these skills and to realize the positive effects of the FNF programme, the reflective processes noted by participants in the current study must involve a continual internal dialogue that is both honest and ongoing (Nesbit, 2012). A strong sense of 'self' has been noted (Gardner et al., 2005) as a crucial leadership attribute. However, this may be difficult to sustain when time is insufficient, that is, within dynamic and challenging clinical environments (Bakker et al., 2019). As such, it may not be possible for all of the reflective insights gained during the FNF leadership development programme to be acted upon. Moreover, it is difficult to know whether learning will be effectively transferred back to workplaces (Enos et al., 2003).

While programmes such as ours provide a stimulus for a concentrated effort to improve leadership skills, there is a need for knowledge and skills to be continuously updated. Contemporary leadership theorists argue that learning that occurs external to an individual's formal institution lacks understandings that are gained naturally within leaders' workplace environment through the act of conscious and intentional engagement within the workplace context (Marsick & Watkins, 1990). The format provided and positive outcomes reported by programmes external to organisations may not be as straightforward to transfer to the various NHS contexts, or indeed to reproduce internally in the future. However, participants in the current study valued time away from their everyday working environment, to appraise the repertoire of skills required for leadership within the wider context (e.g., the sub-theme 'communication skills' highlighted reflection on interactions for improving health care teams more broadly). These in-depth reflections illustrate the significance of investing in programmes that can produce effective and ethical (see Mango, 2018) future health care leaders.

5.1 | Limitations of the study

There are several limitations to the current study. First, the long-term effect(s) of the programme regarding participants' ability to sustain their influence as leaders within the learning environment cannot be fully determined from a single study. Second, we recognize that our sample was small ($n = 8$), which limits the extrapolation of data to a larger group. Third, our study participants were all female, which means that the results/experiences conveyed here may not translate in the same way to participants' male counterparts. Fourth, the length of participants' work experience in the NHS may also be a limiting factor to consider. Lastly, our sample is nonhomogeneous, it is therefore worth repeating this study with a sample of all nurses and the results compared. Having said this, our sample is ecologically valid since it better represents the real working-world context of individuals

employed within the UK NHS (i.e., multidisciplinary teams). Regardless of these limitations, we have obtained in-depth data, which indicated that perceived changes in self-confidence were believed to have been facilitated through the unique facets of the FNF programme. For example, participants referred to the collaborative aspect, action learning sets and developing presence as impactful in their self-reported growth in confidence. It may be beneficial for future studies to evaluate this type of programme using validated measures that can accurately demonstrate changes in self-confidence and further research is required to evaluate the longer-term impact of the FNF programme. Finally, participants were from a single geographical area (Southeast England), therefore, the results presented here cannot be assumed to be representative of the population as a whole. However, our results provide unique insight into the impact of providing leadership development where nurses, midwives and allied HCPs work through the challenges involved in implementing change together. Such insights can inform future studies and programmes of a similar structure.

6 | CONCLUSION

The qualitative analysis presented in this paper indicates that participants experienced significant shifts in thinking about leadership, personal development and career action as a result of their unique leadership journey. These data show the impact of the FNF leadership development programme and the potential for this type of programme to support individuals and organisations to implement change and potentially make improvements to the learning environment. Further study is required to strengthen the literature in terms of this approach and regarding the distinct impact the programme had on participants. This will help health care leaders and organisations to make strategic and informed choices regarding investment in leadership development and steer personnel to programmes that can evidence the production of distinct outcomes in terms of developing future nurse, midwife and AHP leaders.

6.1 | Implications for nursing management

It is important to continue to build nursing and midwifery leadership (and AHP) capacity and capability through programmes, which can help position emerging health care leaders to realize their potential. Unlike medical doctors, nurse and midwives have very few opportunities to develop leadership skills. The nurses, midwives and AHPs interviewed in this study demonstrated passion and ambition for positively impacting outcomes for patients, and wider society. Health care managers should consider supporting clinicians to undertake the type of leadership programme described here, which, through the Florence Nightingale Foundation's national and strategic connections, may help emerging health care leaders to realize their ambitions and make further valuable contributions.

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CONFLICT OF INTEREST

David Hearn is Workforce Education Transformation System Lead, Health Education England Southeast. The remaining authors have no conflict of interest to declare.

ETHICS STATEMENT

The University of Nottingham research ethics committee granted approval (FMHS 218-0321).

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Carmel Bond https://orcid.org/0000-0002-9945-8577

ENDNOTES

[1] Royal Academy of Dramatic Art

[2] Health Education England

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ORIGINAL ARTICLE

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Health and social care frontline leaders' perceptions of competence management in telemedicine in Finland: An interview study

Suvi Myllymäki MSc, Project Planner[1] |
Elina Laukka MSc, RN, Doctoral Researcher, Managing Consultant[1] |
Outi Kanste PhD, RN, Adjunct Professor[1,2]

[1]Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland

[2]Medical Research Center, Oulu University Hospital, Oulu, Finland

Correspondence
Elina Laukka, Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland.
Email: elina.laukka@oulu.fi

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Abstract

Aim: This work aims to describe competence management in telemedicine from the perspective of health and social care frontline leaders.

Background: The increasing use of services in health and social care is a challenging aspect of modern telemedicine; it requires staff to develop relevant professional competence and good telemedicine practices.

Methods: The study was conducted using thematic interviews of frontline leaders from primary health care, specialized medical care and social care ($n = 10$) in the spring of 2021. The data were analysed by inductive content analysis.

Results: The following main categories were identified: Activities of frontline leaders while managing competence in telemedicine, promotion of community learning, competence management in determining telemedicine content, and recognizing health and social care professionals' competence in telemedicine.

Conclusions: Achieving the goals set for telemedicine requires ensuring that knowledge from leaders is widely disseminated and shared and that staff are adequately trained. The results can be utilized in the practical work of other telemedicine and in the development of their operations.

Implications for Nursing Management: Managing competence in telemedicine requires from the leaders an encouraging attitude and improved personal interactions in the work community.

KEYWORDS
competence, competence management, content analysis, health and social care, knowledge management, telemedicine

1 | INTRODUCTION

The global COVID-19 pandemic has dramatically increased the level and use of telemedicine and transactions in health and social care in many countries among people of all ages, but especially among those at serious risk, such as people with chronic underlying illnesses, mental health problems and dementia (Vergara et al., 2020). The proliferation of remote services and transactions, such a telemedicine, has created a great and urgent need to develop adequate reception practices (Jiménez-Rodríguez et al., 2020) and professionals' competence within that setting (Ministry of Social Affairs and Health, 2016). The responsibility for managing and developing professionals' competence and arranging the necessary training lies with health and social care organisations and leaders (Kujala et al., 2018).

In this study, the term "telemedicine" refers to video-mediated remote communications, in other words real-time contact events between patients and health and social care professionals that occur other than through physical contact. A Telemedicine session may have more than one patient or more than one professional present at the same time (Finnish Institute for Health and Welfare, 2020).

Competence management refers to creating or acquiring, transferring, utilizing and managing human capital to achieve an organisation's strategic goals by combining and promoting planned competency management and learning processes (Kivinen, 2008; Kondratova et al., 2017; Medina & Medina, 2015). Basic competence meanwhile refers to people's knowledge, skills, attitudes and personal qualities that are perceptible and measurable and determine work outcomes (Gunawan et al., 2019; Kondratova et al., 2017; Lunden et al., 2017).

Competence management has been studied in innovative and knowledge-intensive organisations, where employees' competencies are a key resource (Loufrani-Fedida & Aldebert, 2020; Medina & Medina, 2016). It has been found that various factors related to organisational culture can either facilitate or inhibit the development of competencies. An appropriate leadership model, a leader's personal traits and professional competency can help to create an organisational culture that effectively facilitates and generates new competencies (Lunden et al., 2017; Medina & Medina, 2016).

Studies focusing on the digital competences of professionals and telemedicine have identified definite areas of professional competence and good practices (Jiménez-Rodríguez et al., 2020; Konttila et al., 2019; van Houwelingen et al., 2016). On the other hand, a lot of variation has been found in professionals' digital skills. At one extreme, some individuals do not practise telemedicine or use any digital tools at all, while others are far more confident and are mainly waiting for an upgrade to existing technologies or applications. The attitudes of professionals are often influenced by past experiences—good or bad—with technology. The inoperability of equipment, the extra work required by the technology, the better technical skills of the patients and whether the use of the technology is seen as justified in terms of the actual work, in turn, can make attitudes more negative (Koivisto et al., 2019.) It is a complex and nuanced area: the use of technology can lead to frustration and fear of a loss of practical skills, but it may also greatly influence for the better changing practices, peer support, adequate training and the social atmosphere in the workplace (Konttila et al., 2019).

The extensive digitalization of health and social care that has taken place in recent years requires professionals to have strong professional competence, acute ethical awareness and the ability to combine clinical experience with remote work as well as analytical thinking, knowledge of clinical practices and personal interaction skills (Konttila et al., 2019; van Houwelingen et al., 2016). It is critical to prepare for effective telemedicine by carefully planning its content in advance and making sure that the technology works. During telemedicine encounters, it is important for professionals to pay close attention to nonverbal communication and ensure consensus in all aspects of care (Jiménez-Rodríguez et al., 2020). Coaching skills and a supportive attitude towards patients are emphasized in the literature on telemedicine (van Houwelingen et al., 2016).

The purpose of the study is to accurately describe competence management in telemedicine from the perspective of health and social care frontline leaders. The specific research question was: What kind of perceptions do health and social care frontline leaders have of competence management in telemedicine? The ultimate objective is to produce new information to help improve the management of practical telemedicine work as well as to identify, assess, maintain and extend the competencies required in this context.

2 | MATERIAL AND METHODS

2.1 | Study setting and data collection

The data for this descriptive qualitative study were collected using thematic interviews. Employing a qualitative study design allowed us to explore the perceptions of health and social care frontline leaders of a phenomenon that is, in a general sense, understood poorly (Polit & Beck, 2017). Purposive sampling was used to recruit participants from three social and health care organisations based in Northern Finland in which the usage of telemedicine is more common than the norm due to the sheer size of their geographical coverage and dispersed settlement patterns (Syrjäpalo et al., 2004). Ten frontline leaders, who worked either in primary care, specialized medical care, or social care, and who led units that used telemedicine were interviewed. These leaders were responsible for leading and managing the receptions, mental and social care services, rehabilitation or home care. The participants were recruited using email or phone contact. The individual interviews were performed by one researcher (SM) using the Microsoft Teams communication platform. The mean age of the interviewees was 52 years, and their leadership experience varied from two to 20 years. Nine of the interviewees were female and one was male. Of the interviewed leaders, five had backgrounds in health care (nursing or physiotherapy) and five in social care. Three of the participants had a bachelor's degree, six had a master's degree and one had a doctoral degree. Nine of the leaders worked as frontline leaders and one as a profit area manager. The transcripts comprised 94 pages with a line spacing of 1.5, 12-point Times New Roman font.

The thematic interview guide concerned organisation culture, resources, data management processes, management and leadership (Khajouei & Khajouei, 2017; Sibbald et al., 2016), strategy (Huotari, 2009) and patient-centredness (Huotari, 2009; Moisanen, 2018), and these themes were attached to the specific context of telemedicine (Appendix S1). The interview guide was thoroughly pretested with one person, who confirmed that it was understandable.

To provide telemedicine services, the organisations utilized different communication platforms: VideoVisit, Teams and Arctic Communicator. The period of time that the organisations had provided telemedicine ranged from 1 to 3 years, and the number of telemedicine sessions varied remarkably between organisations. At its peak, there were about 1200 telemedicine sessions in one unit in a month. Each unit had provided telemedicine services at some point, but in some units, the number of telemedicine sessions was notably low, and one unit did not provide any telemedicine sessions at all during the interview period. None of the interviewees were able to evaluate the total number of telemedicine sessions in their unit. The number of professionals who provided telemedicine services ranged from three to several dozen.

2.2 | Data analysis

Data were analysed using inductive content analysis, which enabled us to describe competence management based on the interviewees' perceptions (Kyngäs et al., 2020). Phrases were used as the unit of analysis and reduced to simplified expressions by first author. These simplified expressions were then abstracted to subcategories, which were further abstracted into categories and finally main categories by first author (see Table 1). Two other researchers gave suggestions and confirmed the final analysis. During the different phases of the analysis process, the abstraction was discussed at length by the researchers.

2.3 | Ethical considerations

Research and ethical permissions were granted by each participating organisation. The individual participants received written information and privacy notices concerning the study. Participation was voluntary. Informed consent was obtained from each participant (ALLEA, 2020).

TABLE 1 Examples of the formation of inductive content analysis

Main category	Category	Subcategory	Simplified expression
The activities of frontline leaders while managing competence in telemedicine	The role of frontline leader	Encouragement by frontline leader	Encourage employees to try
	Characteristics of frontline leader	Accessibility	The leader must be easily approachable
	Professional competence management	Competence assessment	You need to evaluate with the employee what skills he or she needs
Promoting community learning	Managing knowledge related to telemedicine	Sharing information in meetings	The supervisor has held meetings
	Cooperation related to telemedicine	Multiprofessional cooperation	Telemedicine is a multiprofessional activity
	Implementing a strategy for telemedicine	Organisational remote service policies	Top management has set out to increase digital services
Competence management in determining telemedicine content	Patient orientation	Cooperation to identify customers	The working groups consider which customers are suitable for remote services
	Ensuring the quality of each telemedicine session	Defining the content goals of each telemedicine session	The telemedicine session aims to make it the same experience as it would be on the spot
	Arranging telemedicine session	Enabling daily activities	The leader also enables and accepts the job
Recognizing health and social care professional's competence in telemedicine	Information required for telemedicine	Professional competence	They are experienced professionals
	Skills required for telemedicine	Ability to make	Workers feared the use of technology
	Attitudes of professionals	Positive attitude	The staff are experimental and open-minded

2.4 | Rigour

The credibility was ensured by ensuring that the participants were appropriate in the terms of this study aim. In addition, the data started to saturate after eight interviews, and thus the sample size seemed sufficient (Kyngäs et al., 2020). Three researchers interpreted the results, which ensured the dependability of the study and respondent validation was not considered necessary. Finally, various quotations were used in result section to demonstrate the authenticity (Appendix S2).

3 | RESULTS

As a result, we are able to describe competence management in telemedicine in health and social care through: (1) The activities of frontline leaders while managing competence in telemedicine; (2) their promotion of community learning; (3) their competence management in determining telemedicine content; and (4) their recognition of health and social care professionals' competence in telemedicine (see Figure 1). These main categories included 12 categories.

3.1 | The activities of frontline leaders while managing competence in telemedicine

This main category contains three categories: The role of a frontline leader, the characteristics of a frontline leader and professional competence management.

The role of frontline leader is to support, to encourage, to require, be positive and an example. Professional staff needed support and encouragement in their work while providing telemedicine. In addition to encouraging professionals, the interest and support of senior management in telemedicine was important. Encouragement was needed the most during the initial phase of working remotely. Leaders require professionals to switch from regular receptions to telemedicine.

It was evident that leaders' positive attitudes towards telemedicine and technology in general was important. The genuine interest of the leaders in their staff, and the desire to reform and develop the operations clearly contributed to the development of telemedicine activities. The results showed that leaders themselves often run telemedicine and use dedicated technology to give professionals an example of how to act in a new situation.

The characteristics of frontline leaders were also important when supporting the telemedicine provided by professionals. The credibility and easy accessibility of the leaders were important. It was important for frontline leaders to receive feedback on their own activities as well as on the success—or otherwise—of telemedicine events.

Professional competence management means competence assessment, ensuring competence, arranging training and enabling learning. Certain challenges were identified concerning the activities of professionals during telemedicine. However, the assessment of competence during telemedicine was also perceived as challenging. Assessing the need for competence is done by the leaders together with the employees.

The skills required for successful telemedicine were ensured through proper recruitment procedures, the commitment of staff,

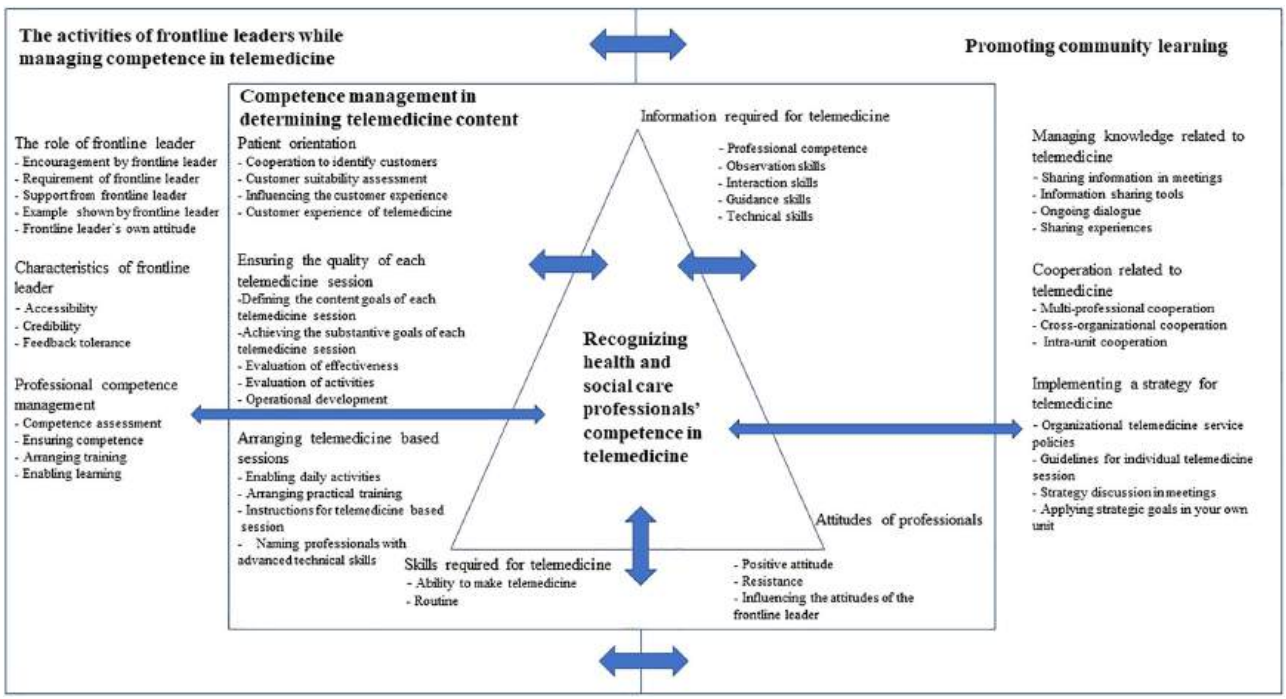

FIGURE 1 Summary of the results

giving people time to learn new things and ensuring an adequate level of technical know-how before starting operations.

> Because we are under pressure to hire more caregivers for telemedicine—so how to ensure competence? We have skilled staff there for basic work but we should also have skilled staff for telemedicine. It is definitely a challenge. (I2)

Frontline leaders encouraged employees to participate in training, where, for example, interaction and methodological skills can be increased and improved.

3.2 | Promoting community learning

The main category "promoting community learning" includes three categories: managing knowledge related to telemedicine, cooperation related to telemedicine and implementing a strategy for telemedicine.

The basic means of *managing knowledge related to telemedicine* activities are the handling of remote appointments and the regular sharing of information in face-to-face meetings, as well as through electronic means such as Teams, email and the patient information system. Good interaction between the leader and the professionals was seen as a key to successful telemedicine and competence management.

Frontline leaders regularly set aside time for staff meetings to share good experiences and practices. However, these discussions did not shy away from difficult issues where certain things did not work and were not suitable for telemedicine; the experiences of both patients and relatives with telemedicine were also considered in depth. Leaders considered it important to have the opportunity to discuss things face-to-face with professionals, but in the case of highly mobile workers, staff meetings organized remotely facilitated the sharing of information.

> … there was deliberate talk in the teams about sharing experiences of how employees have experienced it, and the customer experience has also come to the fore. (I3)

Cooperation related to telemedicine was strongly highlighted in the results. Successful telemedicine required input from—in addition to the frontline leaders and professionals—multiprofessional collaborative initiatives involving senior management, digital experts and other experts from the service industries, such as home care service counselors. Telemedicine activities were developed in various pilot projects and working groups whose members originated from several different organisations. The possibility for professionals to participate in such working groups was important for the implementation of telemedicine activities. Teamwork within the unit also played a significant role; the task of the leaders was to strengthen the atmosphere of working together.

Implementing a strategy for telemedicine is a part of promoting community learning. The strategic guidelines for telemedicine were perceived as a basic pillar supporting the work of the leaders. The work of frontline leaders was based on their organisation's strategic guidelines for the use of telemedicine and the practices in place during individual telemedicine events. All of the leaders discussed with staff what the strategic guidelines mean in the context of their unit and in the professional's own work.

> … we have discussed this strategy in staff meetings, … in this way, a clear idea is kept by both the supervisor and the staff about what is being done. (I1)

3.3 | Competence management in determining telemedicine content

This main category includes three categories, namely, patient orientation, ensuring the quality of each telemedicine session and arranging telemedicine sessions.

The results showed unambiguously that *patient orientation* was key to the success of telemedicine operations. However, determining the patient groups that are right for telemedicine is not straightforward. It requires close cooperation between leaders and professionals, and the suitability of patients for this sort of interaction must be assessed using appropriate criteria. A good way to achieve this is to try out a telemedicine for the patient, and make a decision based on this experience.

> … which patients are trying telemedicine, then evaluate it and if we see that this did not work then let us look at some other patient group. (I9)

The patient's own past experience of telemedicine or face-to-face reception often determined the mode of reception. The ability of leaders to influence the patient experience was therefore limited, although frontline leaders did strive to positively influence the atmosphere in the work unit, which is reflected to some extent in the customer experience of telemedicine. On the other hand, some feedback was collected from patients concerning their experiences with telemedicine.

Ensuring the quality of telemedicine begins with defining the content goals and evaluating their achievement. The realization of the goals of telemedicine was evaluated from the perspective of both the patient and the professional. Whether or not a telemedicine event was a success was dependent on the specific issues that were being addressed. In some cases, telemedicine was perceived as more suitable for the patient than face-to-face reception. The possibility of achieving the objectives was narrowed by the range of methods suitable for telemedicine.

The quality of telemedicine was assessed through their perceived effectiveness by leaders. Telemedicine services were viewed as the subject of continuous development, which is why frontline leaders

regularly evaluated telemedicine activities. Listening to the reasons for the resistance of professionals is also important for the ongoing development of operations, because by listening it is possible to find problem areas that require a solution.

> … as for the feedback from the staff and customers, it must be evaluated and possible changes made on the basis of it. (I8)

In *arranging telemedicine* work the role of the frontline leaders was emphasized as an enabler of daily activities; for example the leaders provided practical training for staff to ensure the smooth and efficient use of technical equipment. In addition to arranging training on practical matters, leaders issued various instructions to support telemedicine activities. The organisations studied here actually have named professionals with advanced technical skills, whose input and guidance are considered particularly important in determining the content of telemedicine.

3.4 | Recognizing health and social care professionals' competence in telemedicine

The "recognizing health and social care professionals' competence in telemedicine" main category includes three categories: information required for telemedicine, skills required for telemedicine and attitudes of professionals.

Information required for telemedicine is diverse. The leaders highlighted the importance of substantive competence levels among professionals working in telemedicine. The leaders identified the professionals' need for observation and interaction skills as well as guidance skills when advising the patient on technical and therapeutic matters during the telemedicine session. The professional had to monitor the patient more closely in telemedicine, because there were no close-up sensations and perceptions that usually arise from being in close personal proximity with someone.

Skills required for telemedicine are the ability to make telemedicine and routine. The leaders had observed a variation in the ability of professionals make telemedicine. Some professionals were very familiar with the use of technology and did not find it difficult to use it competently. On the other hand, some professionals found it difficult to change their way of working and start holding a telemedicine services.

> … the IT skills of others were weaker, and for those with not so good (skills), … are more afraid of using it (IT). (I9)

When telemedicine services were regularly arranged they became routine work, as familiar as any other operational aspect of the workplace, and professionals' technical competence was thereby enhanced. In those work units where telemedicine based services were arranged less frequently, there were no professionals with sufficient experience concerning telemedicine and no routine was formed.

Attitudes of professionals varied. The frontline leaders encountered both positive attitudes and varying degrees of resistance from professionals. Those with good digital skills as well as an intense desire to help patients tend to have a positive attitude. However, there were some professionals with negative and skeptical attitudes who had no desire to acquire the new skills required in telemedicine. Attempting to counter this negative skepticism, leaders sought to influence the attitudes of professionals and to impact the atmosphere in the work unit to become more positive towards telemedicine.

4 | DISCUSSION

This study yielded new information about competence management in telemedicine from the perspective of health and social care frontline leaders. Competence management in telemedicine was, essentially, described through the activities leaders engaged in while managing competence in telemedicine, their promoting community learning, their competence management in determining telemedicine content and in their recognizing health and social care professionals' competence in the context of telemedicine.

The support and encouragement provided by frontline leaders in the context of telemedicine was seen as a highly meaningful part of competence management. An earlier review verifies this finding by proposing that frontline leaders' support for health care professionals is important in the delivery of digital health services (Konttila et al., 2019). This review also corroborates our findings on the ability of leaders to impact attitudes and improve the atmosphere of the workplace. Cooperation between different professional groups was experienced as very important while implementing digital health services. The support provided by frontline leaders in enabling the participation of the staff and providing sufficient resources has been recognized in earlier studies (Koivisto et al., 2019; Kujala et al., 2018).

The results showed that by setting an example leaders may have an impact on how professionals deal with telemedicine. Another study also shows that leading by example seems to impact on other health care professionals' competence (Lunden et al., 2017). Furthermore, a couple of earlier studies have expressly proposed that leaders should indeed act as role models when implementing new digital tools (Laukka, Huhtakangas, Heponiemi, & Kanste, 2020).

According to the study, knowledge and experiences of telemedicine were shared in staff meetings but also via other information channels, such as the Teams communication platform. Medina and Medina (2016) have also found that it is important to establish a competence-sharing arena, where professionals can participate and learn from each other by sharing good practices, knowledge and experiences.

Our results also suggest that enabling telemedicine is one of the most important tasks of frontline leaders. When acting in this role of enablers, leaders had to provide enough time and resources to create new knowledge and enable knowledge-sharing to advance competence management (Ayatollahi & Zeraatkar, 2020; Khajouei & Khajouei, 2017). Our results indicate that constant dialogue and

exposing telemedicine activities advances the competence of the professionals involved. Here, as in earlier studies (Anonson et al., 2014; Lunden et al., 2017), the leader is seen as a key supporter and a facilitator of community learning, someone who with his/her own actions creates an ongoing dialogue that supports learning.

The most important methods for evaluation are the simple effectiveness of telemedicine and comparisons with face-to-face receptions, especially from the viewpoint of patients' needs. Our results suggest that the way of working should not impact on the way in which the general view of the patient is perceived. Professionals' coaching skills and human-centred attitudes were highlighted as two of the factors affecting patient experience in an earlier study (van Houwelingen et al., 2016). Interestingly, collecting patient experiences was not systematical in the organisations we studied. However, based on the results, the customer experience was valued and used as basis on which to develop the telemedicine operation. A broader collection of customer experiences would be even more beneficial in further developing telemedicine activities.

Patient orientation was identified as one of the most crucial factors in competence management because close observation, careful interaction and coaching competences all had an impact on patient experience and the quality of care provided. The significance of leadership was highlighted when selecting suitable patient groups for telemedicine. Referring to an earlier review strengthens this finding (Ayatollahi & Zeraatkar, 2020). According to our results patient selection requires multiprofessional cooperation and professionals' ability to evaluate accurately which patient groups would benefit from telemedicine. A previous review gave notice that recognizing the patients who might benefit from telemedicine and defining those particular matters which are suitable for telemedicine are essential tasks for health care professionals (Laukka, Huhtakangas, Heponiemi, Kujala, et al., 2020).

Based on our results, competence assessment of professionals was most definitely perceived as challenging. To assess competence in telemedicine, competence maps along with performance and input evaluations could be used (Lunden et al., 2019). Furthermore, leaders have for some time recognized variations in the ability of individual professionals to conduct telemedicine services. In our study, leaders already recognized the many different skills required for telemedicine, so they had the opportunity to assess the competencies of professionals based on them.

The specific areas of competence needed at telemedicine which were identified by frontline leaders in this study are consistent with previous research. According to these studies basic personal competence includes knowledge, skills, attitudes and personal qualities (Gunawan et al., 2019; Kondratova et al., 2017; Lunden et al., 2017). But in the context of telemedicine, professionals' competence expands to include clinical competence and knowledge of digital tools, and the skills necessary to combine these two discrete elements together. The role of interaction, observation and coaching is important to make telemedicine successful.

The leaders recognized that health care professionals required more training concerning the nature of successful personal interaction in telemedicine. Previous studies have also recognized the importance of adequate training when developing professionals' competence (Koivisto et al., 2019; Konttila et al., 2019; Kujala et al., 2018). Looked at another way, understanding the skills and actions that are needed in telemedicine is important to develop general levels of workplace training (van Houwelingen et al., 2016). Current training practice has mostly focused on technical competence, leaving the other essential competences required in telemedicine much less understood. When there is a lack of nonverbal interaction the importance of spoken interaction becomes emphasized. More training concerning interaction is needed (Laukka, Huhtakangas, Heponiemi, Kujala, et al., 2020).

4.1 | Limitations

Since Finland is ahead of many countries in health care digitalization (European Commission, 2021) transferring practical recommendations to other national contexts should perhaps be done with caution. However, because the participants had various kinds of backgrounds in health and social care, it might increase the transferability of the results. Also, since the interview guide was pretested with only one person, this might impact on the trustworthiness of this study. Finally, all of the units did not succeed in implementing telemedicine in their daily practice, which might have an effect on leaders' perceptions concerning competence management in this context.

5 | CONCLUSIONS

The burden of expectations placed on leaders in this field is considerable: They are expected to act as encouragers and supporters and set a personal example for professionals. In order to achieve the goals that are set for telemedicine, leaders should—and indeed must—collaborate closely with nurses and other professionals. Only together can leaders and professionals accurately assess the effectiveness of telemedicine and evaluate which patient groups may benefit from them.

In the future, it would be beneficial to examine competence management in other health and social care fields, such as in assessment of the need for treatment and services. In addition, intervention studies regarding the impacts of competence management are needed, for example, concerning work processes, patients or organisations.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Competence management in telemedicine from the perspective of health and social care frontline leaders requires a concerted effort to improve the workplace atmosphere, an upbeat and encouraging attitude and improved interactions in the work community. According to earlier studies, telemedicine requires various competencies, such as social and communication skills, from health professionals (Konttila et al., 2019; Laukka, Huhtakangas, Heponiemi, Kujala, et al., 2020). Nurse leaders should be able to recognize the required competencies

in order to assess the level of competence and to develop it if necessary. The most important factor behind effective competence management is probably constant interaction—between the professionals, and between the professionals and the leaders. According to Konttila et al. (2019), organisational and leaders' support influences technology usage among health professionals. We believe that competence management represents an example of this sort of support, and it may emphasize the use of telemedicine in daily clinical practices. As a consequence of competence management, it seems likely that the quality of telemedicine, patient care and safety increases.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interests.

ETHICS STATEMENT

Research and ethical permissions were granted by each participating organisation. The individual participants received written information and privacy notices concerning the study. Participation was voluntary. Informed consent was obtained from each participant (ALLEA, 2020).

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Elina Laukka https://orcid.org/0000-0003-3959-8591
Outi Kanste https://orcid.org/0000-0001-8634-0628

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Nurse leaders' experiences of professional responsibility towards developing nursing competence in general wards: A qualitative study

Signe Gunn Julnes RN, MD, Associate Professor[1] | **Tove Myrvang RN, MD, Lecturer**[1] | **Laila Solli Reitan RN, MD, Lecturer**[1] | **Gry Rønning RN, Section Manager**[2] | **Solfrid Vatne RN, PhD, Professor**[1]

[1]Department for Health and Social Care, Molde University College, Molde, Norway

[2]Department of Intensive Care Medicine, Molde Hospital Trust, Molde, Norway

Correspondence
Signe Gunn Julnes, Department for Health and Social Care, Molde University College, Britvegen 2, 6410 Molde, Norway.
Email: signe.g.julnes@himolde.no

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Abstract

Aim: To explore nurse leaders' experiences of professional responsibility to facilitate nursing competence in general wards.

Background: Nurse leaders are responsible for maintaining high levels of competence among nurses to improve patient safety.

Methods: Qualitative analysis was conducted between February and April 2019 using semi-structured interview data from 12 nurse leaders in surgical and medical wards at three Norwegian hospitals.

Results: Four main themes were identified: struggle to achieve nursing staff competence; focus on operational and budgetary requirements rather than professional development; demands to organize sick leaves and holiday periods; and challenges in facilitating professional development.

Conclusion: Nurse leaders felt that their responsibilities were overwhelming and challenging. They witnessed more support for current administrative tasks than for the implementation of professional development. Additionally, unclear work instructions from the employer provided few opportunities to facilitate professional development. Hospital management failed to ensure quality of care and patient safety in general wards by not supporting the strengthening of nurses' professional competence and preventing turnover.

Implications for Nursing Management: Management may integrate formal work instructions that clarify nurse leaders' responsibilities as professional developers, allowing nurse leaders to meet their obligation of maintaining adequate professional competence among nursing staff in general wards.

KEYWORDS
nurse leaders, nurses, nursing competence, qualitative research, supervisory

1 | BACKGROUND

Currently, hospitals face a large number of challenges, including new patterns of diseases, rapidly evolving medical technologies, growing aging populations, and continuing budget constraints. Consequently, health professionals are required to continually develop new skills to adapt to evolutions in healthcare (North, 2020). According to the World Health Organisation (2020), nurses are the largest part of the health workforce worldwide. Nurse leaders manage large budgets, coordinate with the nursing staff in hospitals and play vital roles in administrative and executive positions. They are therefore expected to have leadership and managerial competencies, as well as substantial professional knowledge (González García et al., 2020; Kantanen et al., 2017). Nurse leaders have diverse responsibilities across finance, human resources and operations and are also responsible for developing services in accordance with official regulations and social needs (Athlin et al., 2014; Berg & Byrkjeflot, 2014).

In Norway, nurse leaders' operational responsibilities involve employing staff with appropriate competencies around the clock to ensure patient safety (Norwegian Directorate of Health, 2017; Special Health Services Act, 1999; The Norwegian Directorate of Health, 2019). Therefore, they play a vital role in motivating nursing staff to develop the required professional competence (Athlin et al., 2014; Vesterinen et al., 2013; Wikstrom & Dellve, 2009). According to the Norwegian Directorate of Health (2017), leaders must be aware of their responsibility to achieve targets, as well as offer support and flexibility needed to take care of this responsibility. The Norwegian government has stated (Meld. St. 13, 2011–2012) that leaders' competence is the totality of knowledge, skills and abilities, which enable the fulfilment of specific functions and tasks in accordance with defined expectations and goals. However, previous research shows that nurse leaders experience challenges in fulfilling their tasks. Athlin et al. (2014) highlighted the lack of congruence between nurse leaders' responsibility and authority, which obstructs achieving high quality of care and working environments. Wikstrom and Dellve (2009) described that, in practice, nurse leaders' focus is on balancing budgets and staff is seen as a cost rather than a resource.

This undermines the focus on developing necessary professional competencies. According to Armstrong et al. (2015), an enabling practice environment with supportive executive management is required to enable nursing managers to promote professional development. Kanerva et al. (2017) suggest that leadership development is a crucial element in advancing patient safety in hospitals. Reviews by Kakemam et al. (2020) and Lunden et al. (2017) emphasized that nurse leaders need evidence-based interventions to support shared learning and create infrastructure that facilitates competence development.

In Norway, unlike many other countries, healthcare services are public (Mossialos et al., 2016). In 2002, the New Public Management reform was implemented in Norwegian public hospitals, incorporating private sector models. Four regional health enterprises were established as independent entities with their own boards and managing directors (Meld. St. 7, 2019–2020). Unified management was introduced, which led to an amendment to the Act §3–9 (Ministry of Health and Care Services, 1999). Each organizational unit was given overall responsibility for its activities, both administrative and professional, with managers at all levels; and nurses and physicians could apply for the same management positions. The goal was to establish lines of responsibility so that hospital employees knew their immediate managers. However, the Norwegian Nurses' Association believed that unified management could lead to medical domain thinking and specialization, and cause a split in the nursing service, hampering professional development and research. Studies of Norwegian hospitals have found tensions between top management levels and lower implementation levels. The current studies describe nurse leaders' experiences with various administrative tasks in general wards, but little is known about nurse leaders' experiences with their professional responsibility to facilitate competence development of the nursing staff. The aim of this study was to explore such experiences. The research question was: What were nurse leaders' experiences of their professional responsibility in terms of facilitating nursing staff competence in general wards?

2 | METHODS

2.1 | Settings, sample and data collection

This study was conducted in three city hospitals in Norway, with approximately 300 beds in the surgical and medical wards. The participants were registered nurses who worked as formal nurse leaders (leaders employed by the hospital to manage a general ward). The nurse leaders were chosen by a purposive sampling procedure. They were recruited from each hospital upon invitations from the hospital management after they had received written and oral information about the study from the researchers. In total, 12 of the 13 female nurse leaders working in surgical and general medical wards joined the study voluntarily.

The participants were between 35 and 65 years of age and had between 1 and more than 30 years of experience. Of the 12 participants, 10 had a degree in management or were concurrently enrolled in management education courses.

We selected a qualitative exploratory design using individual interviews Polit and Beck (2014) to capture participants' challenges regarding professional responsibilities. We developed a semi-structured interview guide with open-ended questions to identify nurse leaders' experiences of their professional responsibility and to facilitate competence development among the nursing staff in general wards. We asked questions such as 'Please tell me about your professional responsibilities as a nurse leader in the general ward', 'How do you conduct competence development among your nursing staff?', 'How do you think the professional development of the nurse's competence in the general ward meets the current and future patient picture?' and 'How do you collaborate with the hospital management to develop strategies to promote competence development among nursing staff in general ward?' More details were elicited by asking,

'Can you provide an example?' The interviews involved listening to the nurse leaders' experiences, soliciting more detailed descriptions and asking additional open-ended questions when expected material was omitted.

The interviews conducted from February to April 2019, lasted for about 1 h, were audio-recorded with consent and were subsequently transcribed (the average length of transcription was 15 pages). The authors conducted interviews in the meeting rooms of the participants' workplaces.

2.2 | Data analysis

We analysed the transcribed interviews based on qualitative content analysis, inspired by Graneheim and Lundman (2004), in five steps (Table 1). First, each interview was read several times to gain a sense of the whole narrative and identify preliminary themes. Second, the text was divided into meaning units, and content from direct quotes was extracted and condensed using participants' own language. Third, the condensed meaning units were labelled with codes to organize data. Fourth, the codes were compared, similarities and differences were identified, and a structure of categories and sub-categories was created. Finally, we summarized our comprehensive findings in an overarching category. After the analysis was conducted, the researchers agreed that the data were diverse and of quality to answer the aim of the study.

2.3 | Ethical considerations

This study was approved by the Norwegian Social Science Data Services (NSD) 59402 and conducted according to the current ethical guidelines of the World Medical Association (2000). All data were handled confidentially by storing audio material and transcriptions on an external hard drive in a locked cabinet Polit and Beck (2014) and deleting data in accordance with NSD guidelines. The research board of the regional health authorities approved this project. The participants received written and oral information about their participation and were assured of anonymity, confidentiality, voluntary participation and freedom to withdraw. All participants provided written informed consent.

3 | RESULTS

3.1 | Struggle to achieve nursing staff competence

Several participants reported the need for a higher level of competence to deal with increasingly complex patient cases and to improve the quality of service. They found the division of the general ward into different patient groups challenging and expressed that employees needed to be competent enough to manage the full spectrum of patient diagnoses. A participant stated: 'Management is confusing and demanding to achieve competence since we have five different patient groups, such as vascular surgery, gynecology, urology, ear-nose-throat, and eye-care' (1). Some also reported that they felt that nurses did not consider professional development, which was frustrating because they struggled to improve competence in the ward. One participant said, 'The most important and difficult thing is to develop the capacity for change. We need to prepare for the future, so we need to start this process now' (10). Another said, 'We encourage nurses to take higher clinical education, but then they move on to special units' (2). Several participants found it unsuitable to employ nurses based on a specialization, as comprehensive education is essential in the general ward. Hence, even though participants had enough employees, they needed to hire extra nurses to cover different professional fields.

3.2 | Focus on operational and budgetary requirements rather than professional development

Participants reported a lack of management guidelines and clarity on how to take responsibility for professional duties. They also faced ambiguous demands for ensuring the quality of their nurses' competency, for which they felt greatly responsible. One participant said, 'There are barely any clear requirements for eligible competence, so I feel that I am solely responsible for determining the same'. Another stated that, 'The requirements for me as a leader are not clear, but I feel responsible for ensuring that those who work with me possess the required skills' (9).

Even though the management did not provide support regarding employees' capacity assessment, they did pressurize participants to oversee daily operations and comply with financial limits. For instance, one participant said, 'The main work here is operations management, calling to cover round-the-clock shifts, etc. These duties have nothing to do with professional development. There are no formal policies from employers about professional development, and when we ask about the same, all we hear is that it is the budget that matters' (6).

3.3 | Demands to maintain competence during sick leaves and holiday periods

Employee management issues, such as covering sick leaves and vacations, and subsequent understaffing, were common challenges faced by the participants, which they described as being demanding. Participants spent a lot of time covering shifts while ensuring that employees represented a variety of professional skills, without succeeding. One participant said, 'I use 30-40% of my working time to cover day and night shifts, but due to sick leaves and other reasons, these plans do not work' (11). Similarly, another stated, 'I sit down to call for substitutes and I go home with a guilty conscience, because I doubt if they have the required competence' (9). Likewise, a participant claimed, 'It is a challenge when half the nurses go on vacation, as

TABLE 1 Example of the analysis process

Meaning units	Condensed meaning unit	Coding	Sub-category	Category
It is a confusing and demanding section to achieve competence that consists of five different patient groups: vascular surgery, gynaecology, urology, ear-nose-throat and eye-care (Participant 1)	It is confusing and demanding to achieve competence since we have many different patient groups	Dividing into different patient groups makes it challenging to have an overview of necessary professional knowledge	Demanding and challenging to cover enough competence due many different patient groups	Struggle to achieve nursing staff competence
You feel that the main work here is operations management, calling to cover round-the-clock shifts, etc. so I say these duties have nothing to do with professional development. There are no formal policies from employers about professional development, and when we ask about the same, all we hear is that it is the budget that matters, You save nothing by going understaffed… on the contrary (Participant 6)	The main work is operations management to cover the shift; these duties have nothing to do with professional development; there are no formal policies from employers, all that matters is the budget	No formal policies about professional development Focus on shift and budget	Main responsibility is to cover shift and manage the budget	Focus on operational and budgetary requirements rather than professional development
I use 30%–40% of my working time as a nurse leader to actually cover day and night shifts, but due to sick leaves and other reasons, these plans do not work (Participant 11)	Using 30%–40% of my working time to cover day and night shifts, but due to sick leaves and other reasons, these plans do not work	Spending lot of time covering shifts when understaffed	Do not succeed to acquire required competence	Demands to maintain competence during sick leaves and holiday periods
It is difficult to have enough time … if we had a professional nurse hired for competence development. A lot could have been improved, for example, they could have performed patient safety programmes (Participant 10)	A professional nurse hired for competence development, a lot could have been improved. For example, they could have performed patient safety programmes	To collaborate with a hired professional nurse could improve competence	Lack of opportunities to improve professional competence	Challenges in facilitating professional development

it is very difficult to replace them' (3), whereas another said, 'If nurses with lower competence are hired, working becomes harder for the remaining employees' (10). Further, a participant said, 'We are generally able to obtain enough resources as there are many students who want a job. However, nursing coverage drops drastically during summer vacations' (7).

3.4 | Challenges in facilitating professional development

Several participants mentioned that facilitating nurses' professional development was an important responsibility, and some had even integrated permanent professional development days for this purpose. They reported that it was important to motivate nurses to consider competence development, as one participant said, 'If you do not get professional input, you may lose motivation' (3). Participants described a desire to meet nurses' expressed needs for professional development and even offered to schedule an hour of professional meetings with them each week. Although these offers were met positively, most participants stated that they had stopped offering them because nurses did not prioritize attending them. One participant disclosed, 'Those who work afternoon shifts forget the meetings, and it has become impossible to host them' (11).

To support new hires, participants offered them 3 days of training and requested experienced nurses to provide additional guidance. However, participants found it challenging to organize internal or external courses for hires, as they had to prioritize daily activities. One participant said, 'I would like to have a greater budget to send nurses to courses, but I must also ensure that there are enough competent nurses available on rotation. This is prioritized over professional development' (9). Almost all participants wanted the management to hire professional nurses responsible for competence development. However, only a few had been granted such nurses, but not in sufficient numbers. A participant said, 'If we had a professional nurse hired for competence development, a lot could have been improved. For example, they could have performed patient safety programs' (1).

Some participants stated that it was a challenge to motivate experienced nurses to take over new tasks that required developing professional skills. As one said, 'Many nurses with long careers work the same routines, making it difficult for them to understand the value of continuous professional development. What I have learned is that we all see this issue differently and do not have the same commitment toward change. So, when you must push people in the direction you want them to go, you eventually give up' (11).

However, participants also reported that a few professional development days were used to teach mandatory exercises using online portals. These included infection control, cardiopulmonary resuscitation and fire protection.

Participants revealed that mandatory online courses with national evidence-based clinical procedures provided guidelines for performing specific nursing responsibilities. Further, almost all participant leaders described online courses as tools for acquiring professional knowledge and opportunities for professional advancement. Several participants mentioned that these courses reassured them that their employees had undergone necessary trainings. Others declared that they viewed these courses as mandatory management tools rather than professional development opportunities. As a participant said, 'It does not contribute to professional development, but to the fact that you must stay updated on current procedures' (5).

4 | DISCUSSION

The aim of this study was to explore nurse leaders' experiences of their professional responsibility to facilitate nursing staff competence in general wards. Our results indicate that the nurse leaders meet several barriers when facilitating professional competence development in general wards.

4.1 | Ensuring competence development in general wards

Participants' descriptions of their responsibility in competence development provided an overview of the need for developing nursing competence in general wards regarding increasing complicated patient cases. They felt obligated to provide both generalist and specialist competencies. One finding was that participants had to hire extra nurses to bridge competence gaps according to patients' illnesses and needs. This finding is similar to that of Sibbald and Kothari (2015), that is, nurse leaders attempted to anticipate and promote competence, but competence development often was focused on daily management of knowledge and 'putting out fires'. According to Lunden et al. (2019), knowledge development will occur on an ad hoc basis unless it is supported by clear structure and sufficient managerial support. They concluded that knowledge management in nursing is a complex task that requires a command of different kinds of management of related leadership styles and competence. This aligns with a finding from the present study, which discovered that in some cases, nurse leaders struggle with the requirements of professional competencies, because it was impossible to be skilled in all fields and they did not know how to solve these challenges in the long term. Another finding from our study indicated that nurses disappeared from the general ward when they completed the specialist education. This may be attributed to better job prospects. According to Moland and Bråthen (2021), nursing leaders must think innovatively to maintain competence in the general ward, such as offering specialist nurses to work in combined positions in outpatient clinics and general wards with the same field area so that competence can be maintained. The benefit is that patients meet the same nurses at admission and at outpatient visits, and the competence is strengthened on weekends. These combined positions can provide good synergies professionally and provide good coherence in the patient process. The use of combined positions can contribute to less vulnerable operations in the general ward because there are more employees available with equal competence. Combined positions will enable the solution of structural challenges by offering challenging tasks and retaining employees in the general

ward and outpatient clinic. To succeed with combined positions, employees in the workplace must know tasks, routines and colleagues and, thus, do a good job and gain mastery (Moland & Bråthen, 2021).

4.2 | Facilitating nurses' all-round competence development

Our findings revealed that new employees receive 3 days of training and regular mentoring from nurses, but not as formal requirements, and the only criterion for mentoring was having nursing experience. According to a study by (Wei et al., 2019), one-to-one mentoring is an important factor in supporting the personal and professional development of new graduate nurses. Our participants had great faith in mentor training and saw it as quality assurance, claiming that support from experienced nurses is perceived positively, prevents stress and improves working environments (Chen et al., 2011). However, Chen et al. (2011) also found that providing mentoring can be laborious and burned-out mentors can negatively impact newly hired nurses. Identifying, addressing and monitoring clinical burnout in nurses are important duties of nursing leadership (Kelly et al., 2019). In our study, nurse leaders reported struggling with nurses who were unwilling to take up new tasks or develop new skills. They also became frustrated when nurses undertook further education and left for better prospects.

Based on these findings, our impression is that nurse leaders have few opportunities and insufficient investment to provide professional development, which is not prioritized by the management. Nurse leaders only had 4 days a year to offer professional training, which often included repetitions of procedural aspects; there were few opportunities for offering other courses; and weekly development meetings were often cancelled. Even though nurse leaders desired to facilitate competence development, only a few of them had employed professional nurses to collaborate on such projects. According to Chen et al. (2011), competence development is important to job retention, especially among nurses. Lunden et al. (2017) emphasized that supported and collaborative learning and information sharing are required to develop competence.

4.3 | Conflict between responsibility of professional development and budgetary constraints

Overall, participants reported experiencing pressure to perform their financial, professional, operational and human resource responsibilities. Particularly, their biggest challenge was that sick leaves and vacations often led to understaffing of competent staff and hiring of inadequate personnel which led to guilty consciences. This finding is supported by Armstrong et al. (2015) who highlighted that lacking healthcare employees and suboptimal performances disrupted nurse leaders' responsibilities and hindered other management tasks. This finding also aligns with other studies (Orvik et al., 2015; Orvik & Axelsson, 2012), who found that nurse leaders were conflicted between demands for both quality and efficiency.

Haahr et al. (2020) found that nurses have a holistic approach to their work. This can be linked to the ICN Code of Ethics for Nurses, which provides guidelines for accountability to society, patients, other staff and themselves. Our findings indicate that systemic requirements for cost-effectiveness do not increase efficiency, and negatively impact professional development, hindering patient safety. Hence, nurse leaders are conflicted between the desire to improve professional competence and quality while being cost efficient.

According to López-Medina et al. (2022), it is important to provide task-oriented information such as role and goal clarity. Managers have the power to either support or hinder employees' professional competence and are hence linked to organizational performance. The most important obstacle to professional development in this study was the aforementioned conflict between budgetary requirements and competence development. This has been found in other international studies (Athlin et al., 2014; Orvik & Axelsson, 2012).

Another important finding was that time constraints negatively impacted leaders' contribution to competence development. Administrative routines, in particular, became obstacles towards fostering professional skills. Wikstrom and Dellve (2009) also found that administrative tasks are perceived as time consuming and stressful. After unified management was introduced in public hospitals in Norway, the Norwegian Nurses' Association (2018) claimed that nursing services did not have clear management lines, increasing administrative tasks. Further, the enterprise model fragmented nursing services and restrained professional development and collaboration, threatening patient safety (Norwegian Nurses' Association, 2018).

Norwegian hospitals are still under ministerial control. Although they are organized as state enterprises, physicians are tasked with gatekeeping services, and challenging this power is difficult (Berg & Byrkjeflot, 2014). This may be one of the reasons why nurse leaders do not have the authority to prioritize important areas of professional development. This explanation has been proposed by Vasset et al. (2021), on finding that nurses in Norway have less formal leadership power after structural changes in organizations. However, because healthcare professionals' moral duties require them to be critical of their employers' directives if they are harmful, nurse leaders' inputs toward improving patient care quality and safety in general ward management must be considered even against hierarchical authorities (Stenehjem, 2016). According to Walsh et al. (2019), leaders play a key role in the success of any organization, and there is value in understanding the competencies that affect leadership effectiveness. Although most nurse leaders in our study had received higher management education, they could not come up with innovative solutions to reduce turnover and maintain competence in general wards. Hafsteinsdóttir et al. (2019) argued that nurse leaders should be more proactive and ensure involvement and interprofessional collaboration. Strategies to reduce turnover and increase professional development may be improved by shared governance programmes with physicians that give nurses an empowered voice in scheduling, workflows and hospital policies. Nursing leaders should also establish relationships across general wards and hospitals within their respective regional health authorities in order to work towards a targeted solution to

improve professional development. According to West et al. (2014), organizations cannot work in isolation to achieve the best possible care; their cultures need to be conducive to interdependent working within and across the system. Our findings suggest that nurse leaders have few opportunities in the organizational structure to increase and maintain their nursing staff's competence to promote patient safety in general wards. The hospital's management should accept responsibility for being efficient with the nurse leaders' competence and skills, as well as making the necessary changes to combat health system challenges.

4.4 | Strengths and limitations

The trustworthiness of our findings is strengthened by our consistent adherence with the guidelines of qualitative analysis, as well as its corroboration with other research findings. However, because our data were collected from only 12 participants from regional hospitals, our findings cannot be generalized across regions and organizations.

5 | CONCLUSIONS

Nurse leaders perceived their responsibilities as overwhelming and challenging. Initiatives from the hospital management regarding appropriate competence development guidelines would be essential in facilitating nurse leaders' capacity beyond monitoring budgets and staff. Nursing leaders must stay informed about innovations that may have an impact on the organization's goal of reducing turnovers and improving workflow in institutionalized nursing care. This study identified critical issues that should be addressed in future research.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Hospitals should formulate clear work guidelines to strengthen nurse leaders' abilities to assess and maintain nurses' professional competence in general wards. Nurse leaders should be allocated more resources to conduct their duties, such as nurses to manage professional development and assistants to perform administrative tasks such as managing shifts, sick leaves and holidays.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

ETHICS STATEMENT

This study was approved by the Norwegian Social Science Data Services (NSD) (number 59402) and conducted according to the current ethical guidelines of the World Medical Association (2000). All data were handled confidentially by storing audio material and transcriptions on an external hard drive in a locked cabinet Polit and Beck (2014) and deleting data in accordance with NSD guidelines. The research board of the regional health authorities approved this project. The participants received written and oral information about their participation and were assured of anonymity, confidentiality, voluntary participation and freedom to withdraw. All participants provided written informed consent.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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ORIGINAL ARTICLE

WILEY

Primary care nurses' perception of leadership and the influence of individual and work setting characteristics: A descriptive study

Sarah L. Brzozowski PhD, MBA, RN, Director Magnet and Nursing Excellence[1,2] | Hyeonmi Cho RN, PhD, Post-doctoral researcher[3] | Clayton J. Shuman PhD, MSN, RN, Assistant Professor[4] | Linda D. Scott PhD, RN, NEA-BC, Dean[1] | Marlon P. Mundt PhD, Associate Professor[5] | Linsey M. Steege PhD, Professor[1]

[1]School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin, USA

[2]UW Health, Madison, Wisconsin, USA

[3]College of Nursing, Chung-Ang University, Seoul, South Korea

[4]Department of Systems, Populations, and Leadership, School of Nursing, University of Michigan, Ann Arbor, Michigan, USA

[5]Departments of Family Medicine and Community Health and Population Health Sciences, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, Wisconsin, USA

Correspondence
Sarah Brzozowski, School of Nursing, University of Wisconsin, 701 Highland Avenue, Madison, Wisconsin 53705 USA.
Email: slciganek@wisc.edu

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Abstract

Aims: The aim of this study is to describe primary care nurses' perceptions of their formal leaders' leadership behaviours and outcomes and explore differences based upon nurses' individual and work setting characteristics.

Background: Formal nursing leadership is positively associated with patient, nurse workforce and organizational outcomes, yet no studies have examined primary care nurses' perception of formal leadership behaviours and outcomes in the United States.

Methods: Cross-sectional survey data from 335 primary care nurses were analysed to assess perceived leadership behaviours associated with transformational, transactional and passive-avoidant leadership styles, perceived leadership outcomes and individual and work setting characteristics.

Results: Positive leadership behaviours (transformational) were lower than those reported for other settings. There were significant differences in nurses' perceptions of their leaders' leadership behaviours and outcomes based upon individual and work setting characteristics.

Conclusion: This study confirmed differences in perception of leadership and that individual and work setting characteristics influence nurses' perception of their leaders in primary care.

Implications for Nursing Management: Leaders must be versatile and consider the unique needs of each staff member and the influence of clinic characteristics.

KEYWORDS
leadership, nurse individuality, nurses, organizations, primary health care

1 | BACKGROUND

Globally, primary care is a growing health care sector due to longer life expectancies and increasing attention on addressing social, economic and environmental determinants of health (World Health Organization and the United Nations Children's Fund, 2018). Given this growth, the function and responsibilities of primary care registered nurses (PCRNs) are receiving added attention. In Spain, over a third of the nation's health care indicators in primary care settings are deemed nurse sensitive (Planas-Campmany et al., 2016), highlighting the impact registered nurses (RNs) have in primary care. Excellence and the importance of nursing practice in nonhospital settings are recognized with inclusion of ambulatory nurse-sensitive standards in the Magnet® Recognition Program (The American Nurses Credentialing Center, 2017) and, in the United States, efforts to identify and refine ambulatory nurse-sensitive indicators (Start et al., 2018).

The National Academies of Sciences, Engineering and Medicine's report on The Future of Nursing 2020–2030 (2021) stresses the importance of nursing leadership in advancing health equity and quality patient outcomes while also creating and maintaining healthy work environments. Formal nursing leadership includes individuals who, based on their position, formally or operationally oversee and influence nurses to achieve a common goal (e.g., nurse managers) (Cummings et al., 2010). Internationally, it is associated with patient (e.g., decreased adverse events), nurse (e.g., increased satisfaction, retention) and organizational outcomes (e.g., decreased cost) (Alilyyani et al., 2018; Boamah et al., 2018). Formal nursing leadership directly affects practice behaviours of followers including clinical decision-making and self-empowerment (García-Sierra & Fernández-Castro, 2018; Samuel et al., 2018).

Leadership outcomes can be described as the effects of leader behaviours on nurses' actions or perceptions and include, for example, willingness to exert extra effort, satisfaction with the leader and value alignment between the nurse and the leader. There are multiple prerequisites to achieving positive leader outcomes including a leader's ability to adjust their leadership attitudes and behaviours to adapt to staff characteristics and the work environment (Oc, 2018). Leadership behaviours are actions that influence the individuals a leader leads and are often defined and associated with transformational, transactional and passive-avoidant leadership styles (Avolio & Bass, 2004). Although studies have investigated leadership and associated outcomes in nursing around the world, research on formal nursing leadership in the United States predominately looks at hospital-based work environments with few studies conducted in primary care settings.

Formal leadership is often conceptualized as a group-level construct (Northouse, 2010); however, US primary care settings frequently have few nurses reporting to one formal leader. Further, leaders may oversee multiple clinics that are geographically dispersed. Thus, it is important to understand perceptions of leadership at the individual level. Some individual nurse and work setting characteristics (e.g., education and work environment) have been associated with perceptions of leadership in a small number of hospital-based studies (Khan et al., 2018; Olu-Abiodun & Abiodun, 2017). Exploring how certain subgroups of PCRNs, with similar individual or work setting characteristics, perceive their leader's behaviours and outcomes may provide a foundation for the development of new leadership models and effective interventions or strategies to support PCRNs.

Although leadership is associated with outcomes in nursing, no comprehensive studies evaluated the association between individual nurse and work setting characteristics and how nurses perceive their formal leaders' behaviours and outcomes in primary care in the United States. Therefore, this study sought to address these gaps. Specifically, this study aimed to (1) describe PCRNs' perceptions of their formal leaders' leadership behaviours and outcomes and (2) explore differences in PCRNs' perceptions of their formal leaders' leadership behaviours and outcomes based upon nurses' individual and work setting characteristics.

1.1 | Theoretical framework

This study was guided by the Full Range Leadership Model (FRLM), an established leadership model depicting a range of leadership styles with each style shaped by leadership behaviours (Figure 1) (Avolio & Bass, 2004). Though this model has been widely used, it has not been well tested with PCRNs in the United States. The *transformational leadership* style is visionary, leading followers to do more than they thought they could do and includes five behaviours. The *transactional leadership* style sets standards, approaches relationships as transactions and focuses on corrective action and includes two behaviours. The *passive-avoidant leadership* style is passive and reacts after problems are serious or refrains from actions at all and includes two behaviours.

The FRLM also includes three leadership outcomes. *Extra effort* describes a leader's ability to drive followers to do more or work harder; *effectiveness* indicates a leader's ability to lead a group and meet goals; and *satisfaction with leadership* indicates the follower's satisfaction with their leader. Given what is known about leadership in nursing and the implications on professional nursing practice, it is important to consider nursing-specific outcomes such as the alignment of professional values with their leader (Dunning et al., 2021). Therefore, two additional outcomes—nurse manager ability, leadership and support of nurses and value alignment—were added to an adapted FRLM for the purposes of this study.

2 | METHODS

2.1 | Design and setting

This cross-sectional study was conducted in August–December 2020 using a web-based survey distributed to PCRNs across the US. Eligible RNs practiced in a US primary care setting and spent at

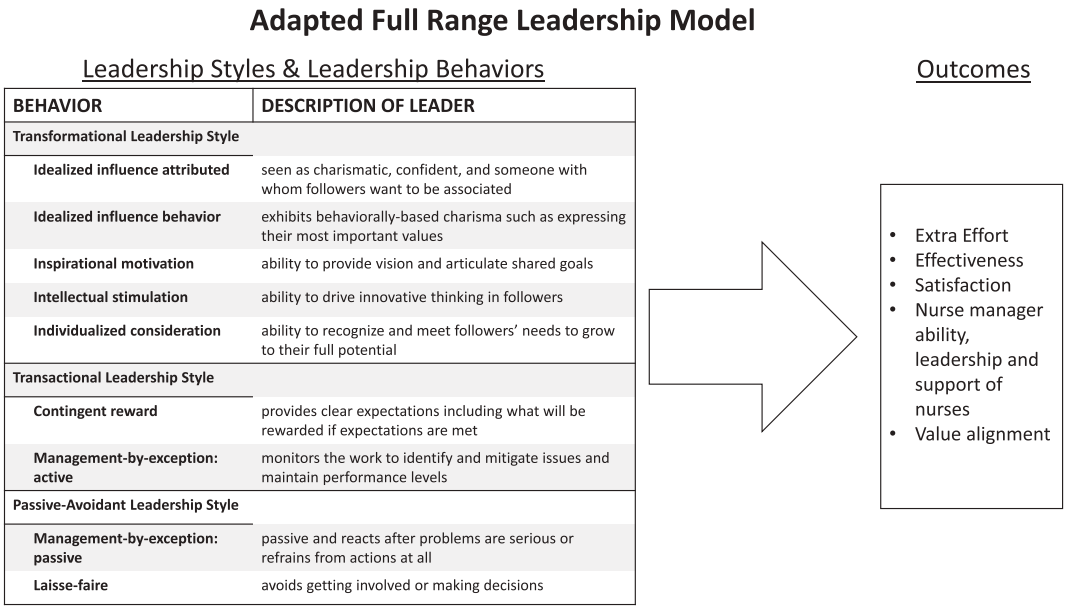

FIGURE 1 Full range leadership model as adapted for this study. *Note*. Behaviour descriptions are adapted from Avolio and Bass (2004).

least 50% of their work time providing patient care (i.e., in-person, telephone or virtual visits). PCRNs who served in a formal leadership role or advanced practice role as a part of their position were excluded. Participants were recruited using convenience techniques including social media posts (e.g., LinkedIn, Twitter and Facebook), emails and postings through professional organizations and in health care organizations and emails sent to the study team's personal networks. Additionally, snowball sampling was encouraged by recommending that individuals share the survey link with others. Because we advertised the study in various ways and also employed snowball sampling, the number of PRCNs who saw the advertisement was unknown. Therefore, we could not calculate a true overall response rate. However, using G*Power 3.1 software for calculating the minimum required sample size for ANOVA, with an effect size of 0.25, power of 0.95 and an alpha level of 0.05 with four groups, the study required at least 280 nurses (Faul et al., 2007). Therefore, the sample size of this study was sufficient.

2.2 | Ethical considerations

Approval to conduct the study was obtained from the University of Wisconsin-Madison's Institutional Review Board (No: 2020–0135).

2.3 | Measures

2.3.1 | Leadership behaviours

The Multifactor Leadership Questionnaire 5X Short Form (MLQ-5x) Rater Version is a 45-item instrument that measures leadership behaviours (Avolio & Bass, 2004). Item responses are from 0 (not at all) to 4 (frequently, if not always). Four items are averaged to determine the score for each of nine factors (Idealized Influence [Attributes]; Idealized Influence [Behaviours]; Inspirational Motivation; Intellectual Stimulation; Individual Consideration; Contingent Reward; Management-by-Exception: Active; Management-by-Exception: Passive; Laissez-Faire). Higher scores indicate greater perception that the leader demonstrates that behaviour. The factors are grouped into three leadership styles (*Transformational*, *Transactional* and *Passive-avoidant*). The MLQ-5x has been shown to be valid and reliable (Antonakis et al., 2003; Avolio & Bass, 2004) and is used extensively in nursing research (Boamah et al., 2018; Specchia et al., 2021). The measures showed acceptable to excellent internal consistency ($\alpha = 0.68–0.93$) in our sample.

2.3.2 | Leadership outcomes

The MLQ-5x also measures leadership outcomes (Avolio & Bass, 2004). Three, four and two items are averaged to determine the score of the *Extra Effort*, *Effectiveness* and *Satisfaction* subscales, respectively. Higher scores indicate greater perception that the leader demonstrates that outcome.

The five-item subscale of the Practice Environment Scale of Nursing Workforce Index (PES-NWI), *Nurse Manager Ability*, *Leadership and Support of Nurses*, was used (Lake, 2002). Items responses are from 1 (strongly disagree) to 4 (strongly agree) and averaged. Higher scores indicate a more positive perception of the manager's ability, leadership, and support. The PES-NWI is reliable with robust construct validity (Lake, 2002) and is used internationally in nursing research in acute care (Smith et al., 2018; Xiuwen et al., 2022) and ambulatory

TABLE 1 Demographic characteristics

Individual characteristics ($n = 335$)	n (%)
Gender ($n = 303$)	
Female	276 (91.1)
Male	23 (7.6)
Other	1 (0.3)
Prefer not to answer	3 (1.0)
Ethnicity ($n = 301$)	
Hispanic, Latino/a, Spanish origin	23 (7.6)
Not of Hispanic, Latino/a, Spanish origin	269 (89.4)
Prefer not to answer	9 (3.0)
Race ($n = 300$)	
White	261 (87)
Black or African American	8 (2.7)
American Indian or Alaska native	6 (2.0)
Asian	6 (2.0)
Prefer not to answer	10 (3.3)
Other	4 (1.3)
Select more than 1	5 (1.7)
Age in years ($n = 275$)	
Millennial 20–39	126 (45.8)
Generation X 40–55	89 (32.4)
Baby boomer 56–75	60 (21.8)
Highest nursing degree ($n = 303$)	
Diploma	3 (1.0)
Associate	81 (26.7)
Bachelor's	185 (61.1)
Master's	32 (10.6)
Doctorate (DNP)	2 (0.7)
Nursing certification ($n = 303$)	
Yes	99 (32.7)
No	204 (67.3)
Years of experience as a registered nurse ($n = 276$)	
Less than 2	10 (3.6)
2 to 5	61 (22.1)
6 to 10	61 (22.1)
11 to 15	42 (15.2)
16 to 20	24 (8.7)
>20	78 (28.3)
Years of experience in primary care ($n = 290$)	
Less than 2	28 (9.7)
2 to 5	124 (42.8)
6 to 10	59 (20.3)
11 to 15	31 (10.7)
16 to 20	19 (6.6)
>20	29 (10.0)
Years of experience in current role ($n = 296$)	
Less than 2	59 (19.9)
2 to 5	157 (53.0)
6 to 10	46 (15.5)
11 to 15	16 (5.4)
16 to 20	9 (3.0)
>20	9 (3.0)
Years of experience with current supervisor ($n = 299$)	
Less than 2	117 (39.1)
2 to 5	151 (50.5)
6 to 10	21 (7.0)
11 to 15	6 (2.0)
16 to 20	2 (0.7)
>20	2 (0.7)
Number of clinics covering ($n = 303$)	
Single clinic	239 (78.9)
Multiple clinics	35 (11.6)
Float	16 (5.3)
Other	13 (4.3)
Work hours per week ($n = 282$)	
Less than 40	143 (50.7)
40	118 (41.8)
More than 40	21 (7.5)

Note: Missing data for each variable are reported in the supporting information Table S1.

(Friese et al., 2016; Gea-Caballero et al., 2021) settings. Slight adjustments were made to two of the items to remove the reference to a 'nurse' manager recognizing not all primary care clinics have nurse managers. The Cronbach's α for five items was 0.90 in our sample, indicating good internal consistency.

To measure value congruence, we used one of the 10 items from the Mini Z RN survey ('My professional values are well aligned with those of nursing leadership') (Shimotsu et al., 2015). The single item has been used in research with physicians that identified significant relationships between value alignment and job satisfaction, job stress, and burnout (Privitera et al., 2018). Item responses are from 1 (strongly agree) to 5 (strongly disagree). The variable was dichotomized into agree (strongly agree and agree) or not agree (neither agree nor disagree, disagree, strongly disagree).

2.3.3 | Individual and work setting characteristics

Based on previous studies of nursing leadership, items assessing multiple individual and work setting characteristics were included

(Cummings et al., 2020). Individual characteristics included demographics, education status, tenure and employment. Work setting characteristics included clinic type, Magnet® and Pathway to Excellence® status, geographic location of clinic, training of supervisor, number of RNs in the clinic and percentage of time per week the supervisor is physically in the clinic.

2.4 | Data analysis

There were 448 eligible participants. Individuals who exited the survey prior to completing measures and individuals who were deemed not eligible due to responses in demographic questions were removed. Little's missing completely at random (MCAR) test was used to examine missing data (Little, 1988). Results indicated that data were MCAR ($p = .931$); therefore, pairwise deletion was used. The normal distribution of continuous variables was evaluated with skewness and kurtosis and found to be within acceptable ranges of ±2 (Garson, 2012).

Data were analysed using SPSS 26.0 (IBM Corp.). Categories of certain items assessing individual and work setting characteristics were collapsed for theoretical reasons (i.e., ages grouped into generational cohorts) and to ensure sufficient sample size in comparison groups. Descriptive statistics including mean, standard deviation (SD), frequency and percentage were calculated for study variables. Analyses of variance and independent *t*-tests were conducted to evaluate differences in the relationships between independent variables (individual and work setting characteristics) and dependent variables from the MLQ-5x and PES-NWI. Chi-square tests were conducted to assess the association between individual and work setting characteristics and the single item value alignment measure from the Mini Z RN. *P*-values for each family of variables (e.g., *p*-values for all behaviours by age) were corrected using the False Discovery Rate correction for multiple testing (Benjamini & Hochberg, 1995) in SAS 9.4 (SAS Institute Inc). Given the exploratory nature of Aims 2 and 3, the level of statistical significance used was an adjusted *p*-value less than 0.10.

TABLE 2 Work setting characteristics

Work setting characteristics ($n = 335$)	*n* (%)
Clinic type ($n = 301$)	
Internal medicine	65 (21.6)
Family practice	139 (46.2)
Paediatrics	26 (8.6)
Other	71 (23.6)
Magnet ($n = 292$)	
Yes	70 (24.0)
No	126 (43.2)
I do not know	96 (39.2)
Pathway to excellence ($n = 292$)	
Yes	34 (11.6)
No	82 (28.1)
I do not know	176 (60.3)
Location of clinic ($n = 293$)	
Rural	88 (30.0)
Suburban	94 (32.1)
Urban	111 (37.9)
Training of supervisor ($n = 292$)	
RN	207 (70.9)
Clinical non-RN	29 (9.9)
Nonclinical	52 (17.8)
Unknown or other	4 (1.4)
Number of registered nurses in clinic ($n = 290$)	
1	34 (11.7)
2–5	137 (47.2)
6+	119 (41.0)
Supervisor physically in clinic ($n = 302$)	
0%–19%	80 (26.5)
20%–39%	26 (8.6)
40%–59%	25 (8.3)
60%–79%	36 (11.9)
80%–100%	135 (44.7)

Note: Missing data for each variable are reported in the supporting information Table S1.

3 | RESULTS

After pairwise deletion, 335 participants were included the final sample, including nurses working in 35 states across the United States. Most participants were female (91.1%), and the mean age was 43 years (SD = 12.5; Table 1). Participants indicated working in a variety of clinic types and locations of clinics (Table 2).

3.1 | Perception of leadership behaviours and outcomes

Overall, mean scores were highest for behaviours associated with transformational leaders including Idealized Influence (Attributes), Idealized Influence (Behaviours) and Inspirational Motivation (Table 3). Lowest mean scores were observed for passive-avoidant leadership style behaviours. Almost two thirds (64.5%) of nurses agreed or strongly agreed with the statement *My professional values are well aligned with those of nursing leadership*.

3.2 | Differences in leadership behaviours and outcomes based upon individual characteristics

Significant differences were observed for leadership behaviours based upon gender, years of primary care experience and weekly

TABLE 3 Descriptive statistics of leadership behaviours and outcomes

	n	Mean	SD
Leadership behaviours by leadership style			
MLQ-5x			
Transformational leadership style			
Idealized influence (attributes)	335	2.33	1.19
Idealized influence (behaviours)	335	2.23	1.08
Inspirational motivation	335	2.44	1.15
Intellectual stimulation	335	2.04	1.14
Individual consideration	335	2.02	1.20
Transactional leadership style			
Contingent reward	335	2.18	1.15
Management-by-exception: Active	335	1.79	0.88
Passive-avoidant leadership style			
Management-by-exception: Passive	335	1.51	1.10
Laissez-Faire	335	1.34	1.15
Leadership outcomes			
MLQ-5x			
Extra effort	334	2.05	1.30
Effectiveness	335	2.31	1.23
Satisfaction with leadership	335	2.30	1.35
PES-NWI: Nurse manager ability, leadership and support of nurses	315	2.67	0.78
Mini Z: My professional values are well aligned with those of nursing leadership (score 1–5)	315	2.28	1.15

Note: A full range of values were observed for each measure.
Abbreviations: Max, maximum score from participants; Min, minimum score from participant; Mini Z score range is 1 to 5, lower is better; MLQ-5x, Multifactor Leadership Questionnaire 5X Short Form (MLQ-5X) Rater Version, score range is 0 to 4, higher is better; *n*, number of participants; PES-NWI, Practice Environment Scale of Nursing Workforce, score range is 1 to 4, higher is better; SD, standard deviation.

work hours (Table 4). There was a significant difference in the transformational leadership behaviour Intellectual Stimulation, and transactional leadership behaviours Individual Consideration, and Management-by-Exception: Active based on gender, with males rating their leaders higher than females. Regarding primary care experience, participants in categories with ≤5 years in primary care rated their leader higher for all transformational behaviours and the transactional leadership behaviour Contingent Reward and lowest for the passive-avoidant leadership behaviour Laissez-Faire than participants with ≥6 years in primary care. Regarding weekly work hours, participants who worked 40 h per week scored their leader highest for all transformational behaviours and the transactional leadership behaviour Contingent Reward and lowest for passive-avoidant behaviours. Participants who work more than 40 h scored their leader lowest for transformational behaviours and highest for passive-avoidant behaviours.

For leadership outcomes, significant differences were observed for primary care experience and weekly work hours (Table 5). Regarding primary care experience, participants with ≤5 years of experience rated their leader higher for Extra Effort, Effectiveness, Satisfaction with Leader and Nurse Manager Ability and Leadership and Support of Nurses than participants with ≥6 years in primary care. A significantly higher proportion of participants with ≤5 years of primary care experience agreed or strongly agreed that their values align with their leaders' values (71% and 72%, respectfully) than individuals with ≥6 years in primary care (54% and 61%, respectfully).

Participants who worked 40 h per week scored their leader highest and participants who work more than 40 h scored their leader lowest for Extra Effort, Effectiveness, Satisfaction with Leader and Nurse Manager Ability and Leadership and Support of Nurses. Participants who worked 40 h or less per week agreed or strongly agreed more with the statement that their values align with their leaders' values (62%–74%) than individuals who worked more than 40 h per week (42%).

3.3 | Differences in leadership behaviours and outcomes based upon work setting characteristics

There were significant differences in leadership behaviours based upon clinic type, training of supervisor and number of RNs in the clinic (Table 3). Participants in family practice and paediatric clinics

TABLE 4 Leadership behaviours with significant differences by individual and work setting characteristics

		MLQ-5X								
		Transformational leadership					Transactional leadership		Passive-avoidant leadership	
		Idealized influence (attributes)	Idealized influence (behaviours)	Inspirational motivation (IM)	Intellectual stimulation (IS)	Individual consideration (IC)	Contingent reward (CR)	Management-by-exception: Active (MBEA)	Management-by-exception: Passive (MBEP)	Laissez-Faire (LF)
	n	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Individual characteristics										
Gender										
Male	23	2.58 (1.30)	2.58 (1.08)	2.65 (1.24)	2.59 (1.13)	2.59 (1.20)	2.49 (1.35)	2.27 (0.68)	1.34 (0.89)	1.04 (0.98)
Female	276	2.35 (1.16)	2.25 (1.06)	2.47 (1.12)	2.04 (1.11)	2.01 (1.17)	2.20 (1.11)	1.74 (0.86)	1.50 (1.10)	1.32 (1.14)
Adj *p*-value		.485	.347	.497	.072*	.072*	.381	.045*	.497	.381
Experience in primary care (years)										
Less than 2	28	2.65 (1.19)	2.58 (1.07)	2.78 (1.06)	2.44 (1.14)	2.30 (1.16)	2.43 (1.08)	1.96 (0.64)	1.29 (1.08)	0.95 (1.00)
2–5	124	2.52 (1.10)	2.41 (0.95)	2.67 (1.03)	2.26 (1.09)	2.32 (1.10)	2.35 (1.06)	1.76 (0.81)	1.37 (1.01)	1.19 (0.98)
6–10	59	2.12 (1.18)	2.08 (1.16)	2.24 (1.10)	1.80 (1.14)	1.75 (1.24)	1.89 (1.22)	1.73 (0.82)	1.67 (1.08)	1.61 (1.16)
11+	79	2.20 (1.21)	2.05 (1.07)	2.25 (1.22)	1.86 (1.08)	1.74 (1.18)	2.11 (1.18)	1.79 (1.00)	1.55 (1.17)	1.44 (1.28)
Adj *p*-value		.060*	.040*	.027*	.023*	.009*	.060*	.695	.262	.040*
Work hours per week										
Less than 40	143	2.37 (1.08)	2.29 (1.05)	2.47 (1.04)	2.03 (1.08)	2.02 (1.14)	2.15 (1.09)	1.71 (0.84)	1.53 (0.99)	1.37 (1.03)
40	118	2.55 (1.15)	2.39 (1.02)	2.64 (1.13)	2.29 (1.10)	2.23 (1.20)	2.44 (1.10)	1.82 (0.86)	1.33 (1.13)	1.12 (1.16)
More than 40	21	1.51 (1.31)	1.37 (1.07)	1.63 (1.28)	1.36 (1.29)	1.42 (1.18)	1.21 (1.13)	1.83 (0.68)	2.25 (1.19)	1.86 (1.33)
Adj *p*-value		.002*	<.001*	.002*	.002*	.014*	<.001*	.541	.002*	.014*
Work setting characteristics										
Clinic type										
Internal medicine	65	2.15 (1.24)	2.03 (1.09)	2.28 (1.22)	1.83 (1.26)	1.73 (1.19)	2.03 (1.20)	1.79 (0.85)	1.70 (1.15)	1.48 (1.23)
Family practice	139	2.61 (1.02)	2.45 (0.99)	2.67 (1.04)	2.29 (1.09)	2.31 (1.15)	2.38 (1.08)	1.80 (0.82)	1.36 (1.02)	1.13 (1.02)
Paediatrics	26	2.48 (1.07)	2.55 (0.94)	2.63 (0.88)	2.32 (1.03)	2.21 (1.07)	2.45 (0.99)	1.69 (0.81)	1.23 (0.96)	1.18 (1.00)
Other	71	2.10 (1.31)	2.07 (1.14)	2.29 (1.19)	1.85 (1.05)	1.83 (1.21)	2.00 (1.18)	1.72 (0.99)	1.61 (1.16)	1.46 (1.22)
Adj *p*-value		.020*	.020*	.057*	.020*	.020*	.057*	.882	.093*	.098*
Training of supervisor										
RN (including APRN)	207	2.28 (1.15)	2.19 (1.08)	2.38 (1.10)	2.01 (1.11)	1.99 (1.17)	2.14 (1.13)	1.79 (0.86)	1.50 (1.06)	1.33 (1.10)
Clinical non-RN	29	2.86 (1.00)	2.83 (0.85)	3.07 (0.94)	2.61 (0.99)	2.55 (1.15)	2.64 (1.12)	1.88 (0.84)	0.94 (0.94)	0.81 (0.79)
Nonclinical	52	2.50 (1.21)	2.36 (1.02)	2.58 (1.17)	2.16 (1.18)	2.12 (1.21)	2.29 (1.15)	1.67 (0.88)	1.69 (1.14)	1.37 (1.23)
Adj *p*-value		.054*	.027*	.027*	.054*	.064*	.084*	.560	.027*	.064*

(Continues)

TABLE 4 (Continued)

		MLQ-5X								
		Transformational leadership					Transactional leadership		Passive-avoidant leadership	
		Idealized influence (attributes)	Idealized influence (behaviours)	Inspirational motivation (IM)	Intellectual stimulation (IS)	Individual consideration (IC)	Contingent reward (CR)	Management-by-exception: Active (MBEA)	Management-by-exception: Passive (MBEP)	Laissez-Faire (LF)
	n	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Number of RNs in clinic										
1	34	2.65 (1.21)	2.48 (1.13)	2.79 (1.19)	2.36 (1.25)	2.32 (1.26)	2.37 (1.23)	1.95 (0.71)	1.28 (1.01)	1.02 (1.06)
2–5	137	2.54 (1.07)	2.42 (1.03)	2.61 (1.04)	2.25 (1.08)	2.22 (1.13)	2.39 (1.04)	1.77 (0.88)	1.44 (1.06)	1.26 (1.10)
6+	119	2.15 (1.20)	2.09 (1.05)	2.29 (1.18)	1.85 (1.10)	1.84 (1.18)	2.02 (1.19)	1.73 (0.88)	1.57 (1.13)	1.38 (1.15)
Adj *p*-value		.038*	.038*	.038*	.038*	.038*	.038*	.429	.380	.330

Note: All results are presented in the supporting information Table S2.
Abbreviations: adj, adjusted *p*-value; APRN, advanced practice registered nurse; M, Mean; *n*, number of participants; RN, registered nurse; SD, standard deviation.
*$p < 0.1$.

scored their leader higher for all transformational behaviours and the transactional behaviour Contingent Reward and lower for passive-avoidant behaviours than participants who worked in internal medicine clinics or 'other' types of primary care clinics. Regarding training of supervisor, leaders who were nonnurse clinicians scored highest for transformational behaviours and the transactional behaviour Contingent Reward, while nurse leaders scored the lowest. Additionally, leaders who were nonnurse clinicians scored the lowest for passive-avoidant behaviours, while nonclinical leaders scored highest. Regarding the number of RNs in the clinic, clinics with one RN scored their leader highest followed by clinics with two to five RNs and clinics with more than six RNs scoring their leader lowest for transformational leadership behaviours. Clinics with one RN and two to five RNs scored their leader highest and clinics with more than six RNs scoring their leader lowest for the transactional behaviour Contingent Reward.

Leadership outcomes differed significantly based upon clinic type, Magnet® designation, clinic location and the number of RNs in the clinic (Table 4). There were significant differences with Extra Effort and Satisfaction with Leader based upon clinic type, with family practice and paediatric clinics rating their leader higher than internal medicine or 'other' types of clinics. There also were significant differences with Extra Effort and 'My professional values are well aligned with those of nursing leadership' based upon Magnet® designation. Participants who did not know if their organization was Magnet® and those who worked in a Magnet® organization rated their leader highest and agreed or strongly agreed more with the statement that their values align with their leaders' values (78% and 61%, respectfully) than individuals who worked in non-Magnet® organizations (59%). Regarding clinic location, nurses in suburban areas rated their leader higher for all three leader outcomes than nurses in rural or urban clinics. For number of RNs in the clinic, participants in clinics with one RN or two to five RNs rated their leader higher for Extra Effort and agreed or strongly agreed with the statement that their values align with their leaders' values (70% and 72%, respectfully) more than individuals who worked in clinics with more than six nurses (57%).

4 | DISCUSSION

Nurse leaders are critical to improving patient, nurse and organizational outcomes; yet very little research on formal nursing leadership has been conducted in US primary care settings. To our knowledge, this was the first nation-wide study to explore these concepts and test a model and measures commonly used within nursing with PCRNs. Results demonstrate similarities and differences in perceptions of leadership compared with other practice settings. Further, findings identified differences in PCRN perceptions of formal leadership behaviours based on their individual and clinic characteristics. Results may provide insight into future research and the development of new leadership models and associated interventions or strategies to support PCRNs.

TABLE 5 Leadership outcomes with significant differences by individual and work setting characteristics

		MLQ-5x			PES-NWI	Mini-Z	
						My professional values are well aligned with those of nursing leadership	
		Extra effort	Effectiveness	Satisfaction with leadership	Nurse manager ability, leadership and support of nurses	Agree and strongly agree	Do not agree
	n	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*n (%)*	*n (%)*
Individual characteristics							
Experience in primary care (years)							
Less than 2	28	2.40 (1.27)	2.55 (1.33)	2.71 (1.34)	2.84 (0.74)	20 (10.6)	8 (7.9)
2–5	124	2.23 (1.25)	2.52 (1.13)	2.54 (1.26)	2.78 (0.72)	89 (47.1)	35 (34.7)
6–10	59	1.83 (1.26)	2.09 (1.24)	2.10 (1.36)	2.47 (0.81)	32 (16.9)	27 (26.7)
11+	79	1.88 (1.37)	2.21 (1.21)	2.11 (1.36)	2.56 (0.81)	48 (25.4)	31 (30.7)
Adj *p*-value		.084*	.084*	.060*	.060*	.084*	
Work hours per week							
Less than 40	143	2.03 (1.25)	2.29 (1.18)	2.28 (1.31)	2.64 (0.73)	89 (48.4)	54 (55.1)
40	118	2.29 (1.26)	2.62 (1.15)	2.60 (1.29)	2.80 (0.77)	86 (46.7)	32 (32.7)
More than 40	21	1.29 (1.31)	1.54 (1.26)	1.52 (1.37)	2.19 (0.94)	9 (4.9)	12 (12.2)
Adj p-value		.004*	<.001*	.004*	.004*	.016*	
Work setting characteristics							
Clinic type							
Internal medicine	65	1.87 (1.44)	2.11 (1.32)	2.08 (1.42)	2.58 (0.79)	38 (19.2)	27 (26.2)
Family practice	139	2.30 (1.20)	2.54 (1.15)	2.58 (1.24)	2.76 (0.75)	98 (49.5)	41 (39.8)
Paediatrics	26	2.29 (1.12)	2.40 (1.14)	2.63 (1.25)	2.71 (0.71)	19 (9.6)	7 (6.8)
Other	71	1.77 (1.31)	2.24 (1.20)	2.08 (1.39)	2.59 (0.83)	43 (21.7)	28 (27.2)
Adj *p*-value		.035*	.138	.035*	.290	.278	
Magnet							
Yes	70	2.09 (1.32)	2.35 (1.23)	2.38 (1.33)	2.69 (0.75)	43 (22.4)	27 (27)
No	126	1.89 (1.32)	2.23 (1.22)	2.23 (1.39)	2.60 (0.79)	74 (38.5)	52 (52)
I do not know	96	2.34 (1.19)	2.57 (1.15)	2.54 (1.25)	2.77 (0.78)	75 (39.1)	21 (21)
Adj *p*-value		.095*	.192	.269	.269	.035*	
Location of clinic							
Rural	88	2.11 (1.27)	2.28 (1.17)	2.30 (1.31)	2.58 (0.75)	56 (29.2)	32 (31.7)
Suburban	94	2.33 (1.18)	2.63 (1.14)	2.60 (1.31)	2.86 (0.76)	67 (34.9)	27 (26.7)
Urban	111	1.84 (1.36)	2.21 (1.26)	2.20 (1.36)	2.60 (0.79)	69 (35.9)	42 (41.6)
Adj *p*-value		.048*	.048*	.114	.048*	.355	
Number of RNs in clinic							
1	34	2.41 (1.38)	2.62 (1.37)	2.60 (1.46)	2.79 (0.87)	24 (12.5)	10 (10.2)
2–5	137	2.22 (1.23)	2.45 (1.18)	2.50 (1.29)	2.74 (0.74)	100 (52.1)	37 (37.8)
6+	119	1.85 (1.28)	2.23 (1.17)	2.16 (1.32)	2.59 (0.79)	68 (35.4)	51 (52)
Adj *p*-value		.060*	.186	.123	.232	.060*	

Note: All results are presented in the supporting information Table S3.

Abbreviations: adj, adjusted *p*-value; APRN, Advanced Practice Registered Nurse; M, Mean; *n*, number of participants; RN, registered nurse; SD, standard deviation.

*$p < 0.1$.

A leader is bound by the environmental context in which they work, requiring them to adjust behaviours and actions accordingly to each practice site (Cummings et al., 2020; Oc, 2018). Overall, PCRNs perceived their leaders to practice transformational leadership behaviours more than transactional and passive-avoidant behaviours. This aligns with previous research with US hospital nurses (Farag et al., 2009). However, when comparing PCRNs to hospital nurses, PCRNs scored their leaders lower for transformational and transactional behaviours and higher for passive-avoidant behaviours (Farag et al., 2009). Similarly, Nurse Manager Ability, Leadership and Support of Nurses was lower for PCRNs compared with a large nation-wide study of hospital nurses (Nelson-Brantley et al., 2018). These results highlight that although the relative perceptions of different leadership behaviours and outcomes are comparable between primary care and hospital settings, the actual perceived values may differ. It is important to recognize that there may be contextual influences (i.e., leader's presence on site; number of nurses in the clinic) on nurses' perceptions of leadership. Future studies should evaluate why these differences exist to better understand the unique needs of nurses and role of leadership primary care.

When looking at the influence of various individual and work characteristics, what has been identified to influence nurses' perceptions of leadership in other settings did not consistently hold to be true in primary care. Formal education of a nurse impacts knowledge, skills and competencies and has been shown to influence perception of a leader's transformational leadership behaviours in hospital nurses (Olu-Abiodun & Abiodun, 2017); yet, formal education was not significant in this study. However, nurses' primary care experience was significantly associated with perceptions of leadership behaviours and outcomes in this study. These differences may be attributed to the structure of nursing education and exposure to clinical settings as a nursing student. Nurses often graduate from nursing school with limited exposure to ambulatory settings. Consequently, learning to practice in primary care occurs through on-the-job training and experience as opposed to formal education (Watkins & Neubrander, 2020). Regardless of practice setting, through formal education or on-the-job training and experience, it seems that as a nurse's knowledge and skills in a particular practice area increase, their expectations for effective leadership behaviours shift. Further exploration of these findings is needed to better understand what about a nurse's exposure to clinical practice in a setting influences their perception of leadership. Nurse leaders in all settings need to consider and tailor their leadership behaviours to nurses' level of education, experience and competency (American Association of Colleges of Nursing, 2019).

There were significant differences between clinic types, locations and size for nurses' perception of leadership behaviours and outcomes. These clinic characteristics are not easily shifted by an organization. Rural settings in the United States are known to experience challenges with nursing workforce and resources (Smith et al., 2019). Additionally, clinic characteristics such as the proportion of provider full-time equivalent can have a significant influence on staff outcomes (Bruhl et al., 2020). Nevertheless, clinic attributes and their impact on leadership behaviours and outcomes are not well understood. Future work on formal leadership should recognize the potential influence of clinic characteristics identified in this study and explore the relationship of other clinic variables (i.e., providers and panel sizes). These findings would provide a deeper understanding of leader 'best practices' and adaptation of leadership behaviours needed based upon clinic characteristics.

Leaders who were nonnurse clinicians were perceived to exhibit more transformational leadership behaviours than RN leaders. Nurses are often promoted for the great work they are currently doing, not necessarily because they are the right person for the next level job (Morse & Warshawsky, 2021). This may provide some explanation for the less favourable perceptions of RN leader behaviours as nurse leaders are often promoted without leadership competencies. Strategies such as improved leadership training in nursing school curriculum, ongoing leadership development opportunities provided within health care organizations and succession planning are essential in nursing to build the skills of future RN leaders. Furthermore, given the diversity of backgrounds of leaders in primary care, exploration is needed to determine what specific characteristics and competencies primary care leaders need to best support their nurses.

5 | LIMITATIONS

Using convenience and snowball sampling methods may have resulted in coverage error. Although multiple approaches for recruitment were used to reach diverse members of the population, a large proportion of participants were from midwestern and western parts of the United States with relatively few nurse participants from the southern and northeastern parts of the country. There are no published demographics on PCRNs in the United States preventing descriptive comparison of the composition of our sample to national data. However, this is the largest cross-sectional study of PCRNs we have seen. Additionally, although data collection was postponed until the initial surge of Coronavirus disease (COVID-19) in the United States began to recede, implications of the pandemic's influence on nurses and leaders, including historical effects from the initial surge, changes in working conditions, patient care shifting to telehealth and new safety precautions, may have impacted leaders' behaviours as well as nurses' responses and perceptions of leadership. However, changes in health care resulting from COVID-19 persist and are becoming the new 'normal' with ongoing surges and cases.

6 | CONCLUSION

This study directly addresses an important and understudied area in nursing leadership research and contributed new knowledge of nursing leadership with the exploration of PCRNs' perception of leadership behaviours and outcomes and the influence of individual and work setting characteristics on those perceptions. Our findings identified that, overall, PCRNs' perceptions of leadership behaviours are favourable with transformational leadership behaviours being most

predominant. However, positive leadership behaviours identified in this study are notably lower than previous reports of hospital nurses warranting more attention on leadership in primary care settings. This study highlighted that there is not a one-size-fits-all when it comes to leadership behaviours and outcomes. Individual nurse characteristics, and more-so, work setting characteristics, influence a PCRNs' perception of their leader. Leadership effectiveness is dependent upon situational influences, and this study is the first to call attention to the unique staff and work setting characteristics in and among primary care settings in the United States.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Staff and clinic characteristics may influence perception of leadership behaviours and outcomes including staff willingness to do more and the leader's ability to guide the group toward goal obtainment. Nursing leaders should recognize that leadership behaviours are not necessarily transferable from one setting to the next or from one clinic to the next. Leaders must be versatile and consider the unique needs of each staff member and the influence of work setting characteristics as they draw upon multiple leadership styles and deploy various behaviours and actions. Additionally, education of leaders should include strategies to support leaders in adapting to the unique needs of nurses and settings. As health care delivery in the US shifts to clinic settings, nursing leaders must be active participants in their own leadership development and training on leadership behaviours to align their actions with the needs of their team.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

ETHICS STATEMENT

Approval to conduct the study was obtained from the University of Wisconsin – Madison's Institutional Review Board (No: 2020–0135).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Sarah L. Brzozowski https://orcid.org/0000-0002-8148-9666
Hyeonmi Cho https://orcid.org/0000-0001-7296-2581
Clayton J. Shuman https://orcid.org/0000-0002-6072-9739
Linda D. Scott https://orcid.org/0000-0001-6785-2249
Linsey M. Steege https://orcid.org/0000-0002-8508-7787

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

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Leadership in the context of digital health services: A concept analysis

Elina Laukka MSc, RN, Doctoral Researcher[1] | **Tarja Pölkki PhD, RN**[1,2] | **Outi Kanste PhD, RN**[1,2]

[1]Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland

[2]Medical Research Center Oulu, University Hospital and University of Oulu, Oulu, Finland

Correspondence
Elina Laukka, Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland.
Email: elina.laukka@oulu.fi

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Abstract

Aim: To define and clarify the concept of leadership in the context of digital health services using Walker's and Avant's concept analysis model.

Background: Conceptualizing leadership in the context of digital health services is needed to deliver higher quality services and advance research.

Method: Searches were conducted of MEDLINE (Ovid), Scopus, CINAHL (EBSCO) and ProQuest (ABI/INFORM). Empirical articles were included if they reported *attributes*, *antecedents* or *consequences* of leadership in the study context. A total of 4037 references were identified; 23 were included.

Results: Leadership attributes concerned leaders' behaviour, roles and qualities. Antecedents concerned informatics skills and competence, information and tools, understanding care systems and their complexity and education. Consequences related to organization, professionals and patient and care.

Conclusion: Based on our results, the term 'e-leadership' should be more widely utilized in nursing practice and research.

Implications for nursing management: Nurse leaders need to be strong leaders; they need to be visionary and use strategic thinking to develop existing and new digital solutions. By becoming e-leaders, nurse leaders may increase the successful development and implementation of eHealth and benefit clinicians and patients.

KEYWORDS
concept analysis, digital, health care, leadership, telemedicine

1 | INTRODUCTION

Digital health care is important because its meaningfulness has often been emphasized due to problems in modern health care, such as increasing costs (De La Torre-Diéz et al., 2015) and COVID-19 (Wind et al., 2020). For example, hospitals with electronic health records (EHRs) with basic capabilities (EHRs) have a 12% lower average cost than those hospitals that do not have EHR (Highfill, 2019). However, despite their potential and heavy investment, implementation of digital health services often fails (Herrmann et al., 2018; Öberg et al., 2018), with poor leadership cited as one reason (Abbott et al., 2014; Mair et al., 2012); leaders often seem ill-prepared to handle future challenges (Day, 2000), and it may be that leaders are not conscious of what leadership actually is in the context of digital health services.

Although health care leaders traditionally lead clinical health services (Sood et al., 2017), leadership develops over time and in

different contexts (Day, 2000). Recently, health care leadership has been transformed by digital services; nurse leaders' responsibilities have expanded into digitalizing health care (Cowan, 2014; Sandström et al., 2011) and even artificial intelligence (Chen & Decary, 2020). As Cowan (2014) noted, nurse leaders have more commonly been tasked with coordinating digital health care, and their role seems to be more emphasized in leading digital health services than physician leaders (Keijser et al., 2016). According to Strudwick, Nagle, Morgan, et al. (2019), leaders were likely unaware of the gaps they have in their informatics knowledge and skills. In addition, the literature provides little clarity as to what leadership in the context of digital health services entails (Lulu, 2019; Tremblay, 2017), and it has been suggested that research should focus on continuously transforming leadership (Dickson, 2009). Because of the lack of clarity about leadership in digital health services, Walker and Avant's (2019) method of concept analysis was used to identify the attributes, antecedents, consequences and empirical referents of this concept. Understanding the concept of leadership in the context of digital health services would be important, since it may ease leaders to obtain required competencies and behaviours related to information and communication technology (ICT) acquisition and use (Strudwick, Nagle, Morgan, et al., 2019).

2 | BACKGROUND

Health care organizations have been recognized as complex (Begun & Thygeson, 2015): they have been scrutinized as complex adaptive systems (CASs) that can self-organize, adapt and learn (Paina & Peters, 2012). Digitalization transforms the context in which leaders operate (Hernez-Broome & Hughes, 2004). High levels of digitalization tend to make health care organizations even more challenging to lead: every new digital service requires decision-making, implementation, assessment and secure usage among end-users. Avolio et al. (2014) have suggested that organizational structures, including leadership, may transform due to the implementation of Advanced Information Technology (AIT). Thus, every digital health solution may be understood as a complex innovation, which according to Chuang et al. (2012) means that *the implementation process requires systematic organizational changes in structure, staffing, workflows, and/or policies, as well as coordinated innovation use by multiple organizational members*—all of which concern leaders. Digital innovations then again may transform the work of professionals and enable virtual or geographically dispersed units and teams (Hernez-Broome & Hughes, 2004). The interdisciplinary literature shows that leadership in digital environment requires different kinds of leadership behaviours such as transformational behaviour, strategic-oriented behaviour and servant leadership (Avolio et al., 2014; Larjovuori et al., 2016).

Successful implementation of digital services would be important since their costs are extremely high. For example, in the United Kingdom EHR implementation costs £200 million (EUR 275 million, USD 293 million), and in Denmark DKK 2.8 billion (EUR 375 million, USD 400 million). The implementation of the new EHR has not been trouble-free in the United Kingdom or Denmark, and in Norway, managers have been recognized to play an important part in the implementation process (Hertzum & Ellingsen, 2019). According to a scoping review by Laukka et al. (2020), health care leaders need to adopt certain behaviours to support the implementation of health information technology; leaders need to act as supporters, change managers, advocates, project managers, decision-makers, facilitators and champions. Another review shows that leaders also need several informatics competencies such as informatics knowledge, informatics skills and computer skills (Strudwick, Nagle, Kassam, et al., 2019).

However, leaders cannot fully act in expected roles since their understanding of digitalization and its implementation may not be any better than their subordinates' understanding of it (Laukka et al., 2020). This may be because there is a lack of understanding about leadership in the context of digital health services, and thus, health care leaders may be ill-prepared to lead in a transformed digital environment. As it appears, prior reviews synthesized leadership roles and competencies but making the most of HIT requires proper health care leadership in other processes as well (Simpson, 2004). For a health care leader managing technology is an issue about the three 'Ps': People, processes and (computer) programmes (Simpson, 2004).

Previous concept analyses have scrutinized health care leadership, for example, in terms of implementation leadership (Castiglione, 2020), transformational leadership (Fischer, 2016) and succession planning (Titzer & Shirey, 2013). Since research on leadership in this context is limited and developing transforming leadership is currently challenged by rapid digital innovation (Dickson, 2009), conceptualizing leadership may provide guidance for service development and future research. The conceptualization of leadership in the context of digital health services provides a better understanding of today's health care leadership and how it supports digitalization and improves implementation. In addition, conceptualization may facilitate further research and thus help reshape existing and emerging leadership models. Precise conceptualization of leadership in the context of digital health services is therefore needed to support leaders working on the frontline and at middle and senior management levels, to improve digital health services, facilitate evolving leadership and advance research. Thus, the aim of this paper was to define and clarify the concept of leadership in the context of digital health services using Walker's and Avant's concept analysis model.

3 | METHODS

The detailed protocol for this concept analysis has been published (Laukka et al., 2021). We used the concept analysis model by Walker and Avant (2019), a frequently used tool in health care settings (Nuopponen, 2010). To identify all relevant literature about leadership in the context of digital health services, a literature review was conducted in accordance with the Joanna Briggs Institute's (JBI) search protocol for scoping reviews (Peters, Godfrey, et al., 2020).

3.1 | Eligibility criteria

A participants, concept and context (PCC) framework was applied when defining eligibility criteria (Table 1).

Peer-reviewed empirical studies were considered. The study participants comprised all positional health care leaders; we included nursing and physician leaders, since one may safely generalize about leadership in the context of digital health services (Keijser et al., 2016). Publications eligible for inclusion must either define or clarify the concept of leadership in the relevant context.

3.2 | Search strategy

A three-step search strategy was used to retrieve both published and unpublished studies. An information specialist helped develop the initial and final search strategies. An initial limited search of MEDLINE (Ovid) was undertaken on 19 October 2020 as part of a concept analysis protocol (Laukka et al., 2021). On 31 November 2020, four databases (MEDLINE (Ovid), Scopus, CINAHL (EBSCO) and ProQuest (ABI/INFORM)) were searched using indexing and keywords with a limit of 10 years (Appendix S1). Keywords were truncated where appropriate.

3.3 | Screening and synthesis

The Covidence systematic review software package (v2422) was used for screening purposes and removing duplicates. Two team members (EL & OK) screened the articles independently following the eligibility criteria. After title and abstract screening, potentially relevant studies were retrieved in full. Disagreements were resolved through

TABLE 1 Eligibility criteria

Eligibility	Participants	Concept	Context	Language	Article type
Inclusion	Studies on health care line managers regardless of their position or health care field	Health care/service leadership	Digital health services	English, Finnish, Swedish	Empirical studies
Exclusion	Studies on leaders working solely with IT management	Not related to health care/service leadership	Health services with no digitalization of any kind pharmacy radiology		Reviews, anecdotal papers without references

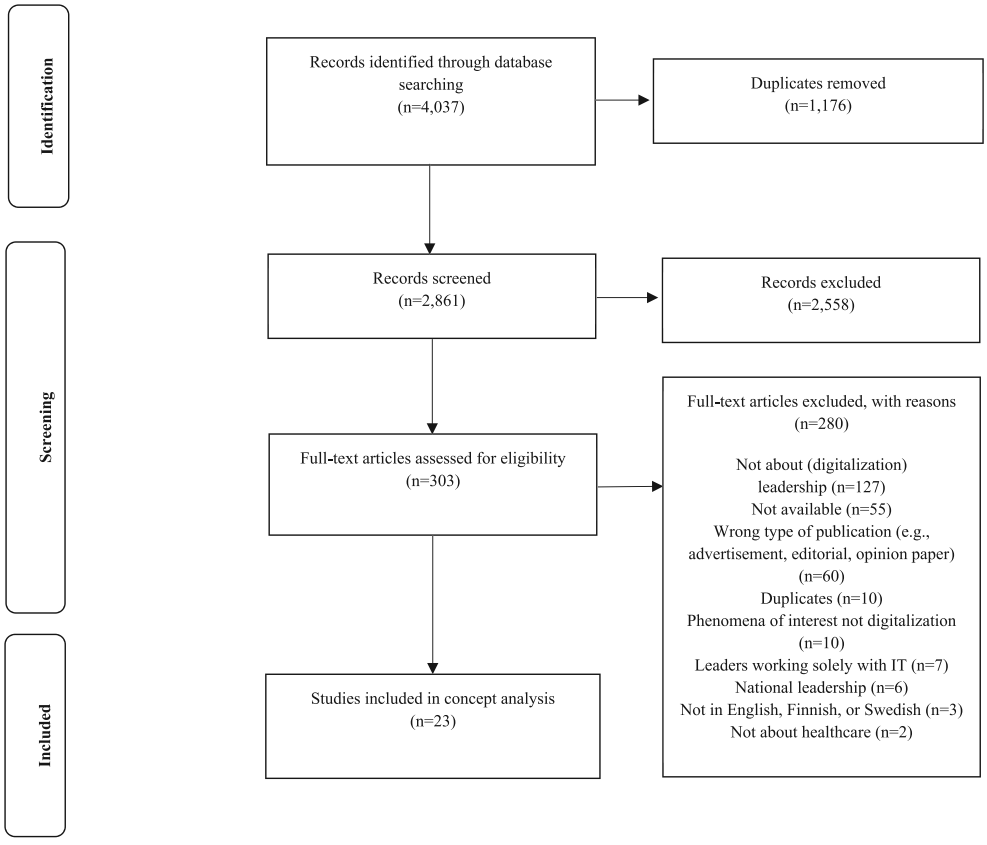

FIGURE 1 PRISMA flow diagram adapted for scoping review

consensus. Search and screening results are presented in a PRISMA flow diagram (Figure 1) (Peters, Marnie, et al., 2020).

Searching returned 4037 possible records. After removing 1176 duplicates, 2861 records underwent title and abstract screening, which included 2558 papers that did not meet the inclusion criteria. Full-text assessment for eligibility was performed on 303 papers, of which 23 met the inclusion criteria (Figure 1).

Extraction was undertaken by one researcher (EL) and confirmed by another (OK). Data included publishing information, design, purpose, sample and instrument (if mentioned). Extraction also included main findings and stated definitions of leadership in the context of digital health services, attributes, antecedents and consequences (Walker & Avant, 2019) (Table 2 and Appendix S2). Similar themes and trends were discovered and grouped iteratively by the end of data collection (Appendix S2).

4 | RESULTS

4.1 | Uses of the concept of leadership in the context of digital health services

According to Cambridge Dictionary (n.d., May 23), digitalization is defined as 'to change something such as a document to a digital form (= a form that can be stored and read by computers)'. Leadership then again is defined as 'the set of characteristics that make a good leader', 'the position or fact of being the leader' and 'the person or people in charge of an organization'. Closely related or surrogate terms for leadership were also used. Few authors provide an official definition for leadership, or its closely related terms, in the context of digital health services (Table 3).

4.2 | Attributes, antecedents, consequences and empirical referents

According to Walker and Avant (2019), the defining attributes of a concept are the heart of a concept analysis. We defined the key attributes of leadership in the study context and generated them as clusters. We also identified antecedents and consequences—events that occur before or because of leadership in the context of digital health services (Figure 2).

4.2.1 | Attributes

The defining attributes associated with leadership in the study context were identified and categorized as behaviours, roles and qualities (Figure 3).

Leadership as a set of behaviours

The following nine attributes concerned leadership behaviour: acting as a strong and effective leader; visionary and innovative behaviour; supportive behaviour; strategic-oriented behaviour; IT-oriented behaviour; transformational and change-oriented behaviour; knowledge-oriented behaviour; responsible behaviour; and competence-orientated behaviour.

According to earlier studies (Ahonen et al., 2016; Avdagovska et al., 2020; Gjellebæk et al., 2020; Kahn et al., 2019; Kujala, Heponiemi, & Hilama, 2019; Simon et al., 2013), leaders in the study context had to act as strong, effective leaders, meaning, for example, that they had to stand behind the implementation of digital health services. Visionary and innovative behaviour (Avdagovska et al., 2020; Chen, 2018; Ennis-Cole et al., 2018; Kujala, Heponiemi, & Hilama, 2019; Kujala, Hörhammer, et al., 2019; Simon et al., 2013) was also seen as relevant in the implementation and development of digital health services among earlier studies. According to Kujala, Heponiemi, and Hilama (2019) and Ahonen et al. (2016), leader's clear vision associated with support for digital health services and was also seen as relevant when developing client-centred eHealth. Several papers also highlighted the importance of supportive behaviour (Amlung et al., 2020; Avdagovska et al., 2020; Chen, 2018; Collins et al., 2017; Kahn et al., 2019; Kolltveit et al., 2017; Kujala, Hörhammer, et al., 2019; Simon et al., 2013; Strudwick, Nagle, Morgan, et al., 2019), meaning that leaders had to either provide support or create a supportive culture when professionals utilized digital services (Kujala, Hörhammer, et al., 2019). Leaders' transformational and change-oriented behaviour broadened their leadership practices (Ali et al., 2017; Avdagovska et al., 2020; Gjellebæk et al., 2020; Hansen & Nørup, 2017; Liebe et al., 2016). Based on an included study knowledge-oriented behaviour enabled effective interpretation of data held by organizations (Ahonen et al., 2016; Ali et al., 2017). By strategic-orientated behaviour the included papers suggested that nurse leaders contribute to their organizations' strategic development and ensure that eHealth policies are followed (Andreassen et al., 2015; Avdagovska et al., 2020; Chen, 2018; Collins et al., 2017; Kahn et al., 2019; Kolltveit et al., 2017; Kujala, Hörhammer, et al., 2019; Simon et al., 2013; Strudwick, Nagle, Morgan, et al., 2019). Leaders' IT-oriented behaviour included e-leadership (Ennis-Cole et al., 2018) and remote leadership practices (Sharpp et al., 2019). According to the included studies, competence-orientated leaders for example recognized those who needed more education concerning eHealth (Ahonen et al., 2016; Collins et al., 2017; Sharpp et al., 2019; Simon et al., 2013; Strudwick, Nagle, Morgan, et al., 2019). Finally, leaders had to adopt responsible behaviour styles (Kolltveit et al., 2017).

Leadership as a set of roles

Seven attributes encapsulated leadership roles: resource allocator; decision-maker; developer; informer; advocate; collaborator; and facilitator. Ahonen et al. (2016) suggested that leaders are responsible for allocating resources when implementing and using digital services. According to Strudwick, Booth, Bjarnadottir, et al. (2019) leaders also act as decision-makers and select technologies to be implemented. The included paper also suggested that as informers and communicators, leaders share information in an organization (Kujala, Heponiemi, & Hilama, 2019) and also act as advocates for personnel, patients and

TABLE 2 Summary of the research studies

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Ahonen et al. (2016) (Finland)	Mixed method	To describe nurses' contribution to the national strategy concerning eHealth development and implementation in health and social care.	10 experts representing eHealth and health informatics	Expert group questionnaire	Knowledge-based management and active utilization of data warehouses are needed to ensure quality and safe care	Nursing leaders	eHealth services	N/A
Ali et al. (2017) (Malaysia/New Zealand)	Quantitative study	To develop a knowledge management systems success model for health care organizations.	263 doctors	Cross-sectional survey	Leadership is a key element in promoting the success of knowledge management	Leadership	Information technology	N/A
Amlung et al. (2020) (USA)	Qualitative study	To identify recurrent themes, insights and process recommendations from stakeholders in US organizations during the health information technology (HIT) modernization of an existing electronic health record (EHR) to a commercial-off-the-shelf product in both resource-plentiful settings and in a resource-constrained environment, the US Indian Health Service.	13 leaders	Semi-structured interviews	Clinical and leadership involvement are important in HIT implementation	Leadership	Health information technology	N/A

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Andreassen et al. (2015) (Norway)	Case study	To investigate whether there are benefits of ICT innovation seen from a managerial point of view, and, if so, whether these can explain the persistence of ICT innovation projects in the sector.	21 participants of TDW project	Interviews	Management tasks were delegated to the ICT project, which thus contributed to four processes of organizational control: Allocating resources, generating and managing enthusiasm, system correction and aligning local practice and national policies	Health care management	ICT innovation	N/A
Avdagovska et al. (2020) (Canada)	Historical study	To examine the institutional decision-making processes that shaped the development and implementation of MyChart.	423 primary and secondary sources 10 key decision makers	Interviews	Supportive leadership, project management, focused scope, appropriate technology and vendor selection and quick decision making	Leaders	Patient portal	N/A
Chen (2018) (Taiwan)	Qualitative study	To investigate how and why electronic health (eHealth) has been applied in Taiwan and to suggest implications that may inspire other countries facing similar challenges.	38 stakeholders in health care ecosystem	In depth and focus group interviews	Leader's vision, authority and management skills might influence success in health care innovation	Leader	eHealth	N/A

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Collins et al. (2017) (USA)	Delphi study	To identify nursing informatics competencies perceived as relevant and requires by nurse leaders.	34 nurse leaders in round 1, 25 nurse leaders in round 2 and 41 nurse leaders in round 3	Three-round survey	Most nurse leaders acquired HIT knowledge through on-the-job training	Nurse leader	Informatics competency	N/A
Collins et al. (2015) (USA)	Cross-sectional study	To understand existing CI governance structured and provide a model with recommended roles, partnerships and councils based on perspective of nursing informatics leaders.	12 nursing informatics leaders	Interviews	Leaders were valuing, investing in and supporting interprofessional informatics	Nursing informatics leader	Clinical informatics governance	N/A
Ennis-Cole et al. (2018) (USA)	Qualitative case study	To explore the experiences of ten physicians following a 6-month in-house leadership development programme.	10 physician leaders	Interviews	Physician leadership programmes distribute knowledge and create opportunities to incorporate technology	Physician leaders	IT competency	N/A
Gjellebæk et al. (2020) (Norway and Sweden)	Qualitative study	To explore middle managers' strategies that can facilitate workplace learning when introducing eHealth and new ways of providing health care services in line with the strategies of the organization.	31 participants (middle managers, employees and persons from small business)	Three focus groups with 4-month interval	A necessity for a shift towards learning-oriented leadership and adaptive management that emphasizes employee involvement and opportunities for learning	Middle managers	Digitalization of health care services	N/A

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Hansen and Nørup (2017) (Denmark)	Quantitative study	To analyse the associations between leadership, the implementation of information and communication technology (ICT) innovations and performance. To test the extent to which general theories of leadership style and strategy hold in the context of implementing ICT innovations.	Nearly 4000 employees and local managers	Survey	Differences in leadership during the ICT implementation process have an important impact on performance after the implementation	Leadership	Electronic patient record implementation	N/A
Kairy et al. (2014) (Canada)	In-depth case study	To examine how telerehabilitation becomes part of existing and new clinical routines and identifies factors that enable or constrain its routine use.	92 health professional, 9 managers, 22 patients and 12 family members	Focus groups and phone interviews	Managers were one of the actors either facilitating or preventing the integration of telerehabilitation in routine practices	Leadership	Telemedicine in rehabilitation	N/A
Kahn et al. (2019) (USA)	Ethnographic study	To identify the organizational factors associated with ICU telemedicine effectiveness.	ICU nurses, nurse practitioners, physicians, telemedicine facility managers and directors	Direct observation of clinical care Semi-structured interviews ($n = 222$) Focus groups ($n = 18$) Collection of artefacts	Three domains influence ICU telemedicine effectiveness, and one is leadership (i.e., the decisions related the role of telemedicine, conflict resolution and relationship building)	Leadership	Telemedicine in ICU	The ways in which the leadership team of the telemedicine facility, ICU, and hospital system set programme goals and impact the development and implementation goals, particularly around policies, protocols, budget and conflict management.

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Kolltveit et al. (2017) (Norway)	Qualitative study	To identify perceptions of health care professionals in different working settings with respect to facilitators to engagement and participation in the application of telemedicine.	24 registered nurse and 5 clinical leaders	Focus group interviews	One of the identified conditions for success in using telemedicine was committed and responsible leadership	Leader	Telemedicine in diabetes foot care	N/A
Kujala, Heponiemi, and Hilama, (2019) (Finland)	Quantitative study	To evaluate clinical leaders' eHealth competencies and training needs in two public health care organizations in Finland.	98 clinical leaders	Survey	Managing change and planning implementation are challenging to clinical leaders	Clinical leaders	eHealth competencies	N/A
Kujala, Hörhammer, et al. (2019) (Finland)	Quantitative study	To examine whether frontline leaders' positive expectations of a patient portal and perceptions of its implementation were associated with their support for the portal.	2067 health professionals and 401 frontline leaders	Online survey	The frontline leaders' perception of vision clarity had the strongest association with their own support for the portal ($\beta = .40$, $P < .001$). There is also an association between leaders' view of organizational readiness and their support ($\beta = .15$, $P = .04$)	Frontline leaders	Patient portal	N/A
Liebe et al. (2016) (Germany)	Quantitative study	To examine the extent to which joint intrapreneurship of clinical leaders and IT leaders as well as	168 clinical leaders and IT leaders	Survey	The chief information officers reported a higher implementation status than the	Clinical leaders	IT innovations	N/A

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
		a distinct innovation culture mediate the effect of user participation on hospitals' IT innovativeness.			directors of nursing, which pointed to a trend for a unidirectional gradient			
Mills et al. (2010) (USA)	Qualitative study	To examine EMR purchases in the rural landscape by examining CAHs in Iowa that are early adopters of EMRs.	15 critical access hospital leaders	Interviews	Critical access hospital leaders also viewed EMR implementation as a necessary business strategy to remain viable and improve financial performance	Leaders	Electronic medical records	N/A
Sharpp et al. (2019) (USA)	Qualitative study	To sought nurse managers' perspectives on challenges and opportunities with technology and how it may influence communication and leadership.	16 nurse managers	Interviews	Four themes emerged regarding the nurse managers' perspectives of e-leadership and their use of information and communication technologies: (a) cannot live without it, (b) too much, too many, (c) poor onboarding education and (d) difficulty maintaining virtual relationships	e-leadership	Information communication technology	'e-Leadership is a technological paradigm derived from servant leadership and trans-formational leadership (Arnold & Sangrá, 2018; Northouse, 2010)'.
Simon et al. (2013) (USA)	Qualitative study	To characterize the experiences of hospitals that have successfully implemented CPOE.	24 participants (physicians, nurses and pharmacists)	Interviews	Successful implementation hinged on the ability of clinical leaders to address and manage perceptions and the fear of change			

(Continues)

TABLE 2 (Continued)

Reference (country of origin for scientific studies and case studies)	Design	Purpose	Sample	Instrument	Findings	Term used	Context	Selected definitions
Simpson (2013) (USA)	Qualitative study	To identify and validate the gaps existing between selected CNEs' self-ascribed lived experience information technology competencies and those laid out by AONE	Seven chief nursing officers	Ethnographic interviews	Chief nursing executives found themselves limited in their ability to advocate effectively for technology needed to support nursing practice during the evaluation and selection of clinical information systems	Chief nurse executive	Informatics competencies	N/A
Strudwick, Nagle, Kassam, et al. (2019) (Canada)	Qualitative study	To investigate the role of nurse managers in supporting point-of-care nurses' health information technology (IT) use and identify strategies employed by nurse managers to improve adoption, while also gathering point-of-care nurses' perceptions of these strategies.	10 nurse managers and 12 point-of-care nurses	Interviews	Nurse managers adopt the role of advocate, educator and connector, using the following strategies: Communicating system updates, demonstrating use of health IT, linking staff to resources, facilitating education and providing IT oversight	Nurse managers	Adoption of health information technology	N/A
Strudwick, Booth, Bjarnadottir, et al. (2019) (Canada)	Delphi study	To obtain consensus on the informatics competencies of priority to senior Canadian nurse leaders.	53 nurse leaders	A total of 25, 24 and 23 participants completed the survey in rounds 1, 2 and 3, respectively	A core set of informatics competencies were identified	Nurse leaders	Informatics competency	N/A

digital health (Strudwick, Nagle, Morgan, et al., 2019). For example, leaders must stand behind the implemented digital health system, but they also need to advocate for personnel and patients when implementing or developing digital health solutions (Strudwick, Booth, Bjarnadottir, et al., 2019).

Leadership as a set of qualities

Three particular leadership qualities were emphasized in earlier studies: commitment and engagement (Ahonen et al., 2016; Amlung et al., 2020; Andreassen et al., 2015; Mills et al., 2010; Simpson, 2013); being active (Kolltveit et al., 2017) and authoritativeness (Chen, 2018). According to Kolltveit et al. (2017) leaders' commitment and engagement seem to be especially important: for example, there seems to be a definite need for a leader to support unequivocally the conditions that support digitalization. Among other things, leader's authoritativeness is relevant to a eHealth project's success (Chen, 2018).

TABLE 3 Closely related terms and their definitions

Closely related term	The used definition
e-leadership	*'E-leadership is defined as a social influence process mediated by AIT to produce a change in attitudes, feelings, thinking, behavior, and/or performance with individuals, groups, and/or organizations'*. (Avolio et al., 2000, p 617).
Virtual leadership	*'When an individual manages a group they do not see in person, lead a team that is dispersed geographically, or work within a team that is partially remote, they are part of the virtual workplace'*. (Dinnocenzo, 2006, p. 14)

4.2.2 | Antecedents

Four antecedents must exist before leadership in digital services can occur (Figure 2): digital health services must already exist or be on the point of introduction if leaders are to lead in this respect. According to the included studies, when leaders make decisions concerning digital health services, they need informatics skills and competence, which may for example through education (Chen, 2018; Ennis-Cole et al., 2018; Gjellebæk et al., 2020; Kujala, Hörhammer, et al., 2019; Sharpp et al., 2019; Simpson, 2013; Strudwick, Nagle, Morgan, et al., 2019). Prior to leading digital health services, have sufficient information and tools (Kujala, Hörhammer, et al., 2019) and understand complex health care systems (Sharpp et al., 2019). Finally, according to Gjellebæk et al. (2020) and Sharpp et al. (2019) leaders need to have sufficient education to lead digital health services.

4.2.3 | Consequences

Leadership in the context of digital health services exhibited characteristics desirable for health care organizations, professionals and patients and their care (Figure 2). Earlier studies show that from an

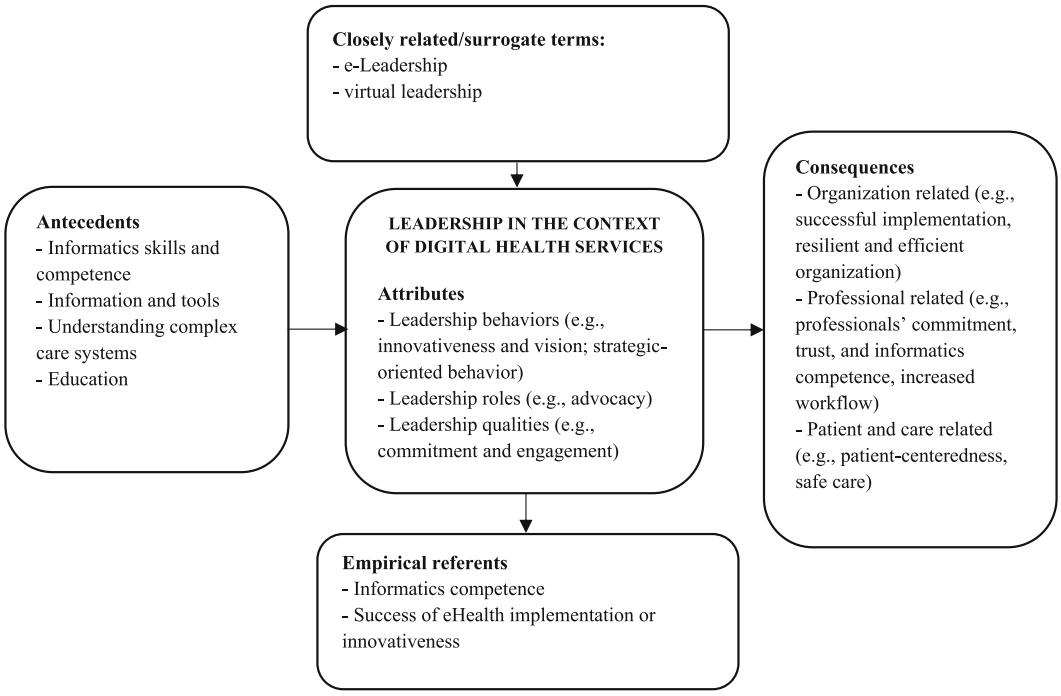

FIGURE 2 Framework of leadership in the context of digital health services

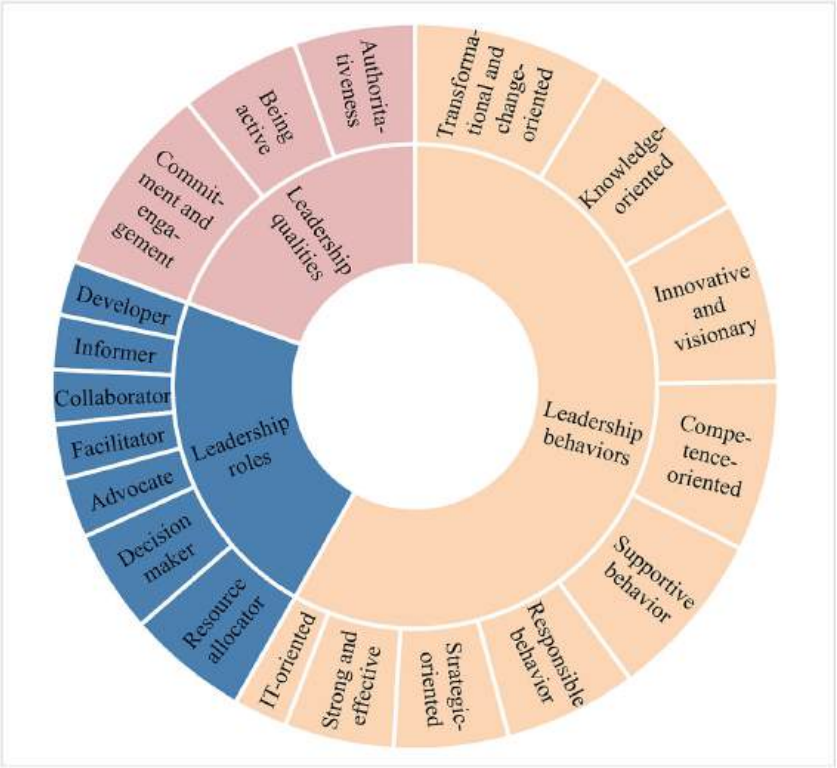

FIGURE 3 Attributes of leadership in the context of digital health services

organizational perspective, good leadership seemed to increase the successful implementation and innovativeness of digital solutions (Ennis-Cole et al., 2018; Gjellebæk et al., 2020; Kairy et al., 2014; Kolltveit et al., 2017; Sharpp et al., 2019), improve efficiency (Kahn et al., 2019; Mills et al., 2010) and enhance innovativeness (Chen, 2018; Liebe et al., 2016; Mills et al., 2010). When leadership in the context of digital health services is successful, it also makes organizations more resilient, allowing them to achieve goals and gain the full benefits of technology (Kujala, Hörhammer, et al., 2019; Mills et al., 2010). Due to the leadership in our context, organizations may also achieve better financial performance (Mills et al., 2010) and greater level of sustainability (Strudwick, Booth, Bjarnadottir, et al., 2019).

According to earlier studies, the outcomes for professionals related to flexible working (Ahonen et al., 2016), improved workflows (Collins et al., 2015; Simpson, 2013; Strudwick, Nagle, Kassam, et al., 2019) and higher levels of commitment and satisfaction with digital services (Ahonen et al., 2016; Collins et al., 2017; Gjellebæk et al., 2020; Kujala, Hörhammer, et al., 2019; Liebe et al., 2016; Mills et al., 2010). According to included studies, leadership in this context also increased professionals' informatics competency (Strudwick, Nagle, Morgan, et al., 2019) and development (Ennis-Cole et al., 2018). Earlier studies showed that several different consequences related to patients; leadership seemed to advance patient-centredness (Ahonen et al., 2016; Collins et al., 2015), improve the quality (Ahonen et al., 2016; Collins et al., 2015; Mills et al., 2010; Simon et al., 2013; Strudwick, Nagle, Morgan, et al., 2019), safety (Ahonen et al., 2016; Simon et al., 2013) and efficiency of care (Ennis-Cole et al., 2018).

4.2.4 | Model case, borderline and contrary cases

We developed one model case to represent a real-life example of leadership using the defining attributes discussed earlier. We also represented borderline and contrary cases (Table 4).

4.2.5 | Empirical referents

Empirical referents are measurable ways to demonstrate the occurrence of leadership in the study context. However, there exists no validated metrics to measure this complex phenomenon; instead, there is a metric that measures parts of it, namely, Nursing Informatics Competency Assessment for Nurse Leaders (Collins et al., 2017).

5 | LIMITATIONS

This concept analysis has several limitations. Data extraction was completed by one researcher (although it was discussed in the research group). Few papers provided an implicit definition for leadership in the context of digital health services, and these definitions were context-specific. The papers were conducted in affluent countries with high levels of digitalization; thus, the results might not be transferable to lower income countries. In addition, the database searchers had a limit of 10 years, which might have excluded some potential articles.

TABLE 4 Model, borderline and contrary cases of leadership in the context of digital health services

Model case	Borderline case *(closely resembles the model case but may lack at least some of the defining attributes)*	Contrary case *(clearly not an instance of leadership in the context of digital health services)*
Health care organization A has defined eHealth as its strategy and has thus implemented several different digital health services, such as EHRs, patient portals and online communication platforms. These services have been successfully designed and implemented in a workgroup that consisted of several different stakeholders, including top, clinical and IT management, staff, vendors and patients. One of the key persons in the implementation and development group is the chief nurse executive, with 25 years of experience, who is known for being *innovative and visionary* when it comes to digital health services. She/he is a *strong and effective leader* who has strategic eye *(strategic-oriented)* what it comes to digital health services. Her/his *authoritativeness* is relevant to eHealth project's success. When implementing new digital health services, organization A has provided IT and software training for health care leaders in all leadership positions from top managers to frontline leaders, and nurse executive A has been attending to those (*competence oriented*). Due to the training, she/he has become skilled with informatics, and her/his skills are regularly evaluated by organization and herself/himself. She/he is familiar with fundamentals or IT, and she/he takes care that also other leaders at all levels are familiar with the fundamentals of IT, can analyse big data and use it for strategic decision-making in an ethical way *(IT-oriented)*. Leaders are trained to be critical towards the data that they receive from the decision-support tools— – they evaluate the data *(knowledge-oriented)*. Nurse executive A together with top managers has agreed that having informatics-savvy staff is one strategic goal of organization A. Nurse executive A has encouraged and supported frontline leaders have arrange IT training for staff and regularly evaluate their IT skills *(supportive behaviour)*. She/he has also instructed frontline leaders to identify those professionals who either struggle with IT or are enthusiastic about it. For the first group they offer more support and training, while the professionals belonging to the latter group are identified as 'champions'. Nurse executive A has adopted *transformational and change-oriented behaviour*; she/he understands that implementation and usage of digital health services requires resources; enough resources are thus provided for IT projects *(resource*	Health care organization B has lately defined eHealth in its strategy and implemented some digital health services. The decision about digital health services is solely made by IT management and vendors, with just ratification from top managers. The organization has no chief medical or nursing informatics officers. Nurse executive B has attended to some education/training concerning digital health services, but rather concentrated on leading traditional clinical services than digital services. However, IT training has not been provided, for example, to educate staff to use new digital health services.	Organization C has not defined any strategy regarding eHealth, although it is aware that it has been part of the national programme for several years. However, they some must-have IT solutions, such as EHRs, have been implemented, but the nurse executive C among other leaders acquiesced in the decision-making with others. IT management selected the EHR to be implemented, which was ratified by top management. No employees or frontline leaders participated in EHR selection. Nurse executive C who was responsible for the implementation, did not take any training concerning the implementing solution. Implementation has been made rapidly and with insufficient resources. Training of the employees has happened at work. Nurse executive C is not very familiar with IT, politics related to it, or any risks that may be associated with it. She/he simply prefers to use e-mail and leave everything else regarding technology to the IT department. IT decisions tend to fail to meet clinical practice needs. Nurse executive C has not discarded traditional models of bureaucratic leadership.

(Continues)

TABLE 4 (Continued)

Model case	Borderline case *(closely resembles the model case but may lack at least some of the defining attributes)*	Contrary case *(clearly not an instance of leadership in the context of digital health services)*
allocator). Nurse executive A act as an example to her/his staff and remains visible, vocal; they are perceived as available to assist subordinates with IT when needed. In organization A, top managers are responsible for *decision-making* concerning eHealth solutions and their implementation, whereas leaders on the frontline recruit clinical champions to advance the implementation of eHealth solutions. Nurse executive A understands that she/he needs to support all employees through frequent IT changes. She/he should recognize that her/his role as supporter is important when the organization is about to adopt or implement new digital solutions. She/he recognizes herself/himself as important information source *(informer)* and provides honest information concerning up-coming digital services; aims to prevent negative rumours, instead justifying the benefits of digital health services from the perspective of the organization's strategy, and benefits for professionals and patients *(advocate)*. Nurse executive A asks frontline leaders observe how the digital service impacts on health care professionals' workflow and provide this information for middle and top managers. The digital services are developed so that they support professionals' workflow as well as possible and provide benefits for patients. Nurse executive A and other leaders engage staff and patients with the implementation and development process, and they work as *facilitators and collaborators* between different stakeholders. Nurse executive A utilizes social media for leadership and development purposes. When using social media, leaders are not bound to geographic locations or time zones, and they may even collaborate internationally *(being active)*.		

6 | CONCLUSIONS

Our concept analysis creates a foundation for further research with its robust definition for leadership in digital health services. We encourage redefining and developing the term *e-leadership* within the field. The constantly shifting context will doubtless influence leadership and leaders' behaviour. The increasing role of artificial intelligence may alter leadership in health care in the coming years—indeed, understanding leadership in the era of AI is surely a subject ripe for future study. To conclude, we urge use of the term e-leadership in nursing research and in practice.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

The literature lacks a comprehensive understanding of leadership in the context of digital health services. Based on the results of our analysis, we created an initial framework of leadership, which may also be utilized when studying nursing leadership. As leadership, also nursing leadership develops over time and in different contexts. During the past decade, the rapid digitalization of health care has transformed nursing leadership.

Based on the results, there exist several different concepts through which leadership in our context may be defined. One of the most promising of these is the e-leadership presented by Avolio et al. (2000); according to them, e-leadership has been described as a socially influential process mediated by advanced IT to produce a change in individual/group/organizational thinking, feelings and performance. This definition fits with the attributes, antecedents and consequences represented in our concept analysis: for example, both our concept analysis and Avolio et al. (2014) definition include similar leadership behaviours; more specifically, we both highlight the importance of transformational leadership and effective e-leaders. They also stated that effective e-leaders understand the expectations of followers and communicate a clear vision, which was also seen as relevant within literature concerning health care leaders in the context of digital health services.

Second, the analysis reveals that leaders who are fully engaged in the context of digital health services seem to improve the implementation of those services; they release potential benefits or consequences to an organization. As stated earlier, digital health services implementation often fails (Herrmann et al., 2018; Öberg et al., 2018), and poor leadership might be one reason for that (Abbott et al., 2014; Mair et al., 2012). It might be that health care leaders, including nursing leaders, are ill-prepared to handle digitalization; however, if they are fully engaged it seems—based on this work—that they might be more successful. This responsibility seems to fall especially on nurse leaders (Cowan, 2014), who based on our results work in an important role in a workgroup consisting of several different stakeholders (e.g., IT management, staff, IT vendors and patients).

Strudwick, Nagle, Kassam, et al. (2019) noted that leaders have to be more savvy with regard to IT. We recommend educating nurse leaders to become e-leaders who adopt the necessary behaviours and roles and emphasize certain qualities when leading digital health services. Nurse leaders need to be visionary and use strategic thinking to develop existing and new digital solutions. Nurse leaders also need to listen to clinicians, evaluate their digital competence and provide support for frequent IT-related changes. Nurse leaders need to advocate for clinicians and patients when developing digital health solutions. By becoming such e-leaders, nurse leaders may increase the successful development and implementation of eHealth and benefit clinicians and patients.

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CONFLICT OF INTEREST

None.

ETHICS STATEMENT

No ethical approval needed (no research with humans).

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

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Nurse leaders' work-related well-being—Relationships to a superior's transformational leadership style and structural empowerment

Milja Niinihuhta PhD candidate[1] | Anja Terkamo-Moisio PhD, University lecturer[1] | Tarja Kvist, Professor[1] | Arja Häggman-Laitila, Professor, Director of Nursing[1,2]

[1]Department of Nursing Science, University of Eastern Finland, Kuopio, Finland

[2]City of Helsinki, Social and Health Care, Helsinki, Finland

Correspondence
Niinihuhta Milja, PhD candidate, Department of Nursing Science, University of Eastern Finland, Joensuu, Finland.
Email: niinihuh@uef.fi

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Abstract

Aims: To describe how nurse leaders' work-related well-being is related to a superior's transformational leadership style and structural empowerment.

Background: The demanding role of nurse leader means that these professionals experience emotional exhaustion and challenges with work–life balance. They can also be influenced by the leadership style of their own superiors.

Methods: A cross-sectional questionnaire using two internationally validated scales, namely, the Transformational Leadership Scale and Conditions For Work Effectiveness Questionnaire-II, was used. Statistical methods were applied during data analysis.

Results: A total of 155 nurse leaders participated completed the questionnaire. The participants' work-related well-being scores ranged from 8 to 10. The participants felt that their superiors employ transformational leadership. The dimension of feedback and rewards received the lowest scores, whereas the nurse leaders reported moderate overall empowerment levels. A nurse leader's work-related well-being was positively correlated with structural empowerment and their superior's leadership style.

Conclusions: Despite the fact that nurse leaders reported relatively high levels of work-related well-being, more attention should be paid on the feedback and rewards and on the support of superiors as they positively influence the work-related well-being.

Implications for Nursing Management: Transformational leadership should be supported in organisations and through education as it strengthens work-related well-being and structural empowerment of nurse leaders.

KEYWORDS
empowerment, nurse leader, nurse manager, transformational leadership style, work-related well-being

1 | BACKROUND

Work-related well-being can be conceptualised in numerous ways in the context of a workplace depending on discipline, organisation and country, among others. Furthermore, this type of well-being is a highly complex concept that includes social, physical, psychological and emotional factors that can exist both inside and outside of the workplace. As an example, assessments of workplace well-being solely focus on mental health aspects, whereas other measures incorporate work-specific and personal characteristics (Buffet et al., 2013; Herttuala et al., 2020). In this study, work-related well-being is considered a subjective, comprehensive experience of one's physical, psychological, social and emotional state.

In a recent meta-analysis, Membrive-Jimenez et al. (2020) stated that the prevalence of emotional exhaustion—which negatively influences work-related well-being—can reach 29% among nurse leaders. This is unsurprising, as the demanding role of nurse leader can lead to stress and burnout, a risk which is exacerbated by unclear expectations of the leadership role (Coogan & Hampton, 2020) and challenges arising from staff shortages (Joslin & Joslin, 2021). Nurse leaders face a highly demanding task, as they are expected to look after the well-being of their staff, provide direction for ward- and organisational-level actions, be present, and behave as role models (Coogan & Hampton, 2020; Keisu et al., 2018; Udod et al., 2021). Moreover, a nurse leader's performance can significantly influence patient outcomes and employees' work-related well-being (Adriaenssens et al., 2017; Membrive-Jimenez et al., 2020). Furthermore, nurse leaders across all organisational levels face challenges with work–life balance (Kelly et al., 2019). They are exposed to stressful situations on a daily basis, which requires high levels of tolerance and resilience (Hampton & Rayens, 2019). This stress can—understandably—affect a leader's individual work-related well-being. For this reason, nurse leaders need support from their organisation and superiors, which is recognised as a factor that enhances nurse leaders' work-related well-being (Coogan & Hampton, 2020; Herttuala et al., 2020; Trinchero et al., 2014). In this current study, the nurse leaders' levels and roles are differentiated so that leaders are considered persons who take the first-line responsibility of the conduction of the nursing at the wards and superiors who are the principal chiefs of the leaders are working at the middle and upper level of the organisations taking responsibility of strategic planning of nursing.

It has been suggested that a nurse leader's control over their work and decision authority are factors that decrease the development of burnout and nurse leaders' turnover intentions. In contrast, poor leadership and a lack of autonomy may contribute to nurse leaders' burnout, whereas recognition, rewards and acknowledgement have been found to enhance work-related well-being (Kelly et al., 2019). In their study, Adriaenssens et al. (2017) found that nurse leaders who did not receive adequate support from their superiors showed significantly higher intention to leave than other participants. Labrague (2020) in turn found that the intentions to leave can be reversed especially by transformational leadership, positive organisational culture and trust in nurse directors. From these perspectives, the leadership style of nurse leaders' superiors is crucial to the working atmosphere of nurse leaders.

In particular, the transformational leadership style has been found to positively influence nurses' work-related well-being (Cummings et al., 2018; Kaffashpoor & Sadeghian, 2020). Nurse leaders' leadership styles, along with the effect on work-related well-being among nurses, have been extensively studied, with most research focussing on the transformational, ethical, transactional and laissez-faire leadership styles (Niinihuhta & Häggman-Laitila, 2022). However, there is limited evidence of how nurse leaders' superiors' leadership styles and nurse leaders' work-related well-being are related. Transformational leadership is a relationally focussed leadership style that can be characterised by the way a nurse leader supports the growth of employees and coaches them to achieve their goals. Transformational leaders exercise value-driven, visionary and intellectually stimulating behaviours to establish an equal relationship with employees. As such, transformational nurse leaders challenge employees to participate in decision-making and problem solving. (Ebrahimzade et al., 2015; Munir et al., 2012; Pishgooie et al., 2018; Sabbah et al., 2020).

Nurse leaders' empowerment has been identified as a further predictor of their job strain and turnover intentions (Wing et al., 2015). Empowerment, much like work-related well-being, is a multidimensional concept with various definitions (Abel & Hand, 2018). In the context of health care, empowerment has been described as the process of identifying and removing disempowering factors to improve nurse leaders' self-efficacy (Fragkos et al., 2020). Empowerment can also be seen as the potential for gaining power or promoting nurse leaders' skills to advance positive changes in the work environment (Moura et al., 2020). Leadership has been shown to play an important role in the creation of empowering conditions at an organisation; thus, nurse leaders need to feel empowered to succeed in their demanding work (Trus et al., 2017).

One way to address empowerment is structural empowerment, that includes access to opportunity, information, support and resources in the workplace (Fragkos et al., 2020; Garcia-Sierra & Fernandez-Castro, 2018; Zhang et al., 2018). Access to opportunity describes the availability of options for professional development and enhancing one's expertise, whereas access to information involves both formal and informal knowledge and is crucial for improving effectiveness at work. Feedback, advice and guidance from supervisors and other colleagues fall under access to support, whereas access to resources includes the materials, time and means needed to perform work tasks (Garcia-Sierra & Fernandez-Castro, 2018; Orgambidez & Almeida, 2019). Structural empowerment also includes formal and informal power. The former involves rewards for innovation, visibility and flexibility, whereas the latter comprises collaboration with other professionals and seeking advice from peers (Laschinger et al., 2001). Structural empowerment has previously been associated with positive outcomes among nurses, for example, low burnout levels along with increased motivation, intention to stay and organisational commitment (Fragkos et al., 2020; Khan et al., 2018; Yürümezoğlu & Kocaman, 2019). In addition, Laschinger et al. (2012) associated senior nurse leaders' transformational leadership with the structural empowerment of both middle and first-line nurse leaders.

There is extensive knowledge about how nurses' work-related well-being is associated with structural empowerment and their leader's leadership style. For example, it is well known that nurses who work in an environment with strong structural empowerment and relational leadership styles show high levels of work-related well-being (Cummings et al., 2018; Laschinger et al., 2013; Niinihuhta & Häggman-Laitila, 2022) By contrast, the associations between nurse leaders' work-related well-being and perceived structural empowerment and their superiors' leadership style have not studied, to the best of our knowledge, in the recent decade. Only one article (Laschinger et al., 2012) adopted the nurse leader's perspective when reporting the associations between transformational leadership and structural empowerment, and this was published 10 years ago. A systematic review that included nine studies that solely focussed on nurse leaders' work-related empowerment was published in the same year; the review reported a negative correlation between empowerment and emotional exhaustion and perceived health (Trus et al., 2012), and both factors that are associated with work-related well-being. The presented research focusses on the research gaps identified above of the relations concerning nurse leaders' work-related well-being, their experiences of structural empowerment and their superiors' leadership styles.

2 | METHODS

2.1 | Aim

The aim of the study was to describe how nurse leaders' work-related well-being is related to their superior's transformational leadership style and their experiences of structural empowerment.

The research questions were as follows:

1. How are nurse leaders assessing their overall work-related well-being?
2. Do nurse leaders feel that their superiors exercise transformational leadership?
3. To what extent do nurse leaders experience structural empowerment at their work?
4. How are a superior's transformational leadership style and structural empowerment related to nurse leaders' work-related well-being?

2.2 | Study design

This research employed a cross-sectional design.

2.3 | Participants and recruitment

The participants of the study were nurse leaders working in one large organisation in Finland. The organisation provides outpatient and inpatient social and health care services to over 600,000 inhabitants and has over 15,000 employees. As such, it can be stated that the participants are working in a challenging environment. At the time of the research, the organisation was in the middle of a large renovation which aimed to integrate the social and health services (e.g. Tynkkynen et al., 2016), as well as challenged by a growing shortage of nurses.

The inclusion criteria were that the participant was a nurse leader and working in a unit providing 24-hour care. Nurse leaders ($N = 350$) from acute care facilities, home hospital units, inpatient wards, mental health and substance abuse facilities, elderly services units, emergency departments and rehabilitation were invited to participate in the study. Prior to data collection, a power analysis was conducted using RAO software (McDonald, 2014). Based on the calculation, a sample size of 153 from a population size of 350 was needed to ensure a 5% margin of error and 90% confidence level. An information letter with a link to the electronic questionnaire was first sent to a contact person at the health care organisation, who then sent it via email to all of the nurse leaders who met the inclusion criteria.

2.4 | Data collection and instruments

The data were collected anonymously from December 2015 to May 2016 using an electronic questionnaire that included demographic questions and two international instruments, namely, the Transformational Leadership Scale (TLS) and the Conditions For Work Effectiveness Questionnaire II (CWEQ-II). Prior to data collection, a pilot study was conducted among 14 Finnish nurse leaders; the results of the pilot study did not indicate that any changes to the questionnaire were warranted. The demographic questions concerned the participant's age, gender, current title, current division and workplace. Furthermore, the participants were asked about their education, employment relationship and number of subordinates. The participants also assessed their well-being at work using a scale that ranged from 4 (weakest) to 10 (strongest).

The TLS was designed to measure nurses' perceptions of nurse leader practices (Eneh et al., 2012; Kvist et al., 2019, 2013; Stevanin et al., 2020). The TLS includes a total of 49 questions across five different subscales: leadership ethics (14 questions); managing nursing process (16 questions); feedback and rewards (6 questions); professional development (7 questions); and characteristics of superiors (6 questions out of 11 questions from the original instrument). Respondents score each item using a 5-point Likert scale. Previous studies have reported Cronbach's alpha values ranging from .88 to .97 for the scale (Eneh et al., 2012; Kvist et al., 2013).

The CWEQ-II is based on Kanter's theory of structural empowerment (1977), which considers workplace structures that support employees to succeed as empowering. The CWEQ-II operationalises the six sub-concepts of Kanter's theory (Opportunity, Information, Support, Resources, Job Activities Scale [JAS] and Organisational Relationships Scale [ORS]), as well as includes two questions about global empowerment, which serve as a validation index (Laschinger, 2012). The questionnaire includes 21 items that are scored on a 5-point Likert

scale. Previous studies have reported Cronbach's alpha values ranging from .78 to .94 for the scale (Taan et al., 2020; Trus et al., 2017).

During data collection, we also gathered work-related well-being data from the target group using four internationally validated scales that focussed on work engagement, working conditions, sense of coherence and burnout. These results have been reported in Niinihuhta et al. (2022). When responding to these scales, the nurse leaders assessed their working conditions along with the associations between work, health and productivity, leadership skills, mastery of work and role expectations, ability and capability to face problems, and stressors.

2.5 | Data analysis

The data were analysed using SPSS 27 (IBM Corporation, Armonk, NY) for Windows. Descriptive statistics were employed to present the participants' demographics. In further analyses, the participant age was recoded into four groups of approximately the same size (30–46, 47–51, 52–56, and 57–66 years). In addition, the number of employees a participant had was recoded into three groups (>20, 20–39, and 40–99), whereas leadership level was recoded into two groups (manager and director levels). Lastly, work experience in health care was recoded into five groups (5–19, 20–24, 25–29, 30–35, and 36–42 years), whereas experience in leadership was recoded into four groups (0–5, 6–10, 11–15, and 16–30 years).

Sum variables were calculated based on previously published descriptions of the instrument structures (Eneh et al., 2012; Laschinger, 2012). Relationships between variables were examined with Spearman's correlations, with r values ≥ .3 indicating intermediate correlation and r values between .31 and .5 indicating strong correlation (Field, 2013). The non-normality of the data was confirmed with the Kolmogorov–Smirnov test (Field, 2013). The threshold for statistical significance was set as $p < .05$. The internal consistency of the calculated sum variables was examined by calculating Cronbach's alpha values, with values >.7 regarded as good, whereas values between .6– and .7 were regarded as acceptable (Field, 2013).

2.6 | Ethical considerations

Based on Finnish legislation, this study—which followed the ethical guidelines for research—did not require ethical approval. However, research approval was obtained from the studied organisation because of their requirements. The participants were informed about the study in written form and were also given the possibility to ask additional questions from the researcher prior to confirming their voluntary participation (The World Medical Association, 2018). All of the data were collected anonymously and stored in a secure file that was only accessible to members of the research group (Nordic Nurses Federation, 2003). Permission to use both scales was asked for and received.

3 | RESULTS

3.1 | Participants

A total of 155 nurse leaders participated in this study (Table 1), which reflects a response rate of 44%. Most of the participants were female (97%), and the mean age was 51 years (range 32–66 years). Most of the participants (39%) had a degree from a university of applied sciences, followed by college (33%) and university degrees (28%). The participants had, on average, 24 years (range 5–41 years) of

TABLE 1 Participants demographics ($n = 155$)

	f	%
Gender ($n = 152$)		
Male	4	2.6
Female	148	97.4
Age in years ($n = 151$)		
30–46	36	23.8
47–51	47	31.1
52–56	32	21.2
57–66	36	23.8
Level of education ($n = 154$)		
College	51	33.1
University of applied sciences	60	39.0
University degree	43	27.9
Managerial level ($n = 153$)		
Manager	136	88.9
Director	17	11.1
Workplace ($n = 155$)		
Acute care, rehabilitation, or elderly services units	136	87.7
Mental health and substance abuse facilities	14	9.0
Family and social services facilities	4	2.6
Number of subordinates ($n = 137$)		
> 20	45	32.8
20–39	79	57.7
40–99	13	9.5
Experience in healthcare in years ($n = 151$)		
5–19	33	21.9
20–24	36	23.8
25–29	32	21.2
30–35	34	22.5
36–41	16	10.6
Managerial experience in years ($n = 145$)		
0–5	40	27.6
6–10	61	42.1
11–15	18	12.4
16–30	26	17.9

experience in nursing, and 10 years (range 1–30 years) of experience in nursing leadership. Most of the participants worked as nurse managers (89%), with almost all having a permanent contract (94%). Over half of the participants (58%) were in charge of 20–39 subordinates. Most of the participants worked in acute care, rehabilitation or elderly services units (88%), followed by mental health and substance abuse facilities (9%) and family and social services facilities (3%).

3.2 | Nurse leaders' work-related well-being

The participants reported work-related well-being scores between 8 and 10 (mean 8.12, SD 1.1). A minority (15.8%) of the nurse leaders rated their work-related well-being at the highest possible level (a score of 10), with most of the participants (43.9%) reporting a score of 8 for work-related well-being.

3.3 | Transformational leadership among nurse leaders' superiors

When asked about their superior's transformational leadership style, the participants reported scores between 1.1 and 5.0 (mean 4.0, SD 0.84). The dimension of TLS which received the highest mean score (4.11, SD 0.80; Table 2) was professional development, followed by leadership ethics (mean 4.07, SD 0.90), managing nursing process (mean 4.00, SD 0.86) and superiors (mean 3.96, SD 0.97). The participants rated feedback and rewards (mean 3.64, SD 1.00) as the weakest dimension of TLS.

3.4 | Nurse leaders' structural empowerment

The participating nurse leaders reported a moderate level (mean 21.5, SD 3.05) of overall empowerment. The strongest individual dimension of structural empowerment (Table 3) was opportunity (mean 4.20, SD 0.69), followed by information (mean 4.05, SD 0.71) and ORS (mean 3.74, SD 0.63). The three weakest dimensions of this scale were resources (mean 3.33, SD 0.82), JAS (mean 3.18, SD 0.77), and support (mean 3.05, SD0.98).

3.5 | Relationships between nurse leaders' work-related well-being and other factors

Nurse leaders' work-related well-being was found to be positively correlated with the extent to which their superiors employ transformational leadership (Table 4). This indicates that the stronger the transformational leadership style the own superior has, the stronger is the work-related well-being of the nurse leader. Further positive correlations were found between a nurse leader's work-related well-being and perceived structural empowerment (Table 4); in other words, nurse leaders who experience sufficient levels of structural empowerment will experience high work-related well-being.

A closer examination of the relationship between structural empowerment and TLS revealed strong statistically significant correlations (Table 5). The access to support correlated most strongly with the dimension of TLS. Although the informal power showed the weakest correlations.

TABLE 2 Transformational leadership scale results ($n = 155$)

Dimension	No. of items	*n*	Min	Max	Mean	SD	α
Leadership ethics	14	146	1.00	5.00	4.07	0.90	.96
Managing nursing process	16	137	1.06	5.00	4.00	0.86	.97
Feedback and rewards	6	144	1.17	5.00	3.64	1.00	.92
Professional development	7	141	1.14	5.00	4.11	0.82	.90
Top manager	6	147	1.00	5.00	3.96	0.97	.93

α = Cronbach's alpha.

TABLE 3 Participants structural empowerment ($n = 155$)

Dimension	No. of items	*n*	Min	Max	Mean	SD	α
Opportunity	3	148	2.33	5.00	4.20	0.69	.84
Information	3	145	2.00	5.00	4.05	0.71	.78
Support	3	145	1.00	5.00	3.05	0.98	.87
Resources	3	147	1.00	5.00	3.33	0.82	.78
JAS	3	147	1.00	5.00	3.18	0.77	.73
ORS	4	145	1.25	5.00	3.74	0.63	.68

α = Cronbach's alpha.

4 | DISCUSSION

The participants in this study assessed their work-related well-being to be at a relatively high level. This is a positive finding, especially because stress and burnout among nurse leaders has been acknowledged as a growing problem (Djukic et al., 2017; Remegio et al., 2021; Saifman & Sherman, 2019). Work-related well-being can be considered as a result of several organisational and individual factors (Buffet et al., 2013); therefore, it should be assessed on a multifactorial level by including aspects such as structural empowerment and leadership styles (Niinihuhta & Häggman-Laitila, 2022). In addition, previous studies have revealed that work-related well-being is associated with stress (Liu et al., 2019; Niinihuhta et al., 2022), working conditions, experienced status of health, sense of coherence (Niinihuhta et al., (2022) and leadership skills (Niinihuhta & Häggman-Laitila, 2022) underlining the need to take also these into the account in the future studies.

TABLE 4 Correlations between work-related well-being and associated factors

	Work-related well-being	
	r	*p*
Transformational leadership style	**.319**	**<.001**
Leadership ethics	.403	<.001
Managing nursing process	.319	<.001
Feedback and rewards	.319	<.001
Professional development	.312	<.001
Top manager	.289	<.001
Structural empowerment	**.391**	**<.001**
Information	.248	.003
Support	.295	<.001
Resources	.342	<.001
JAS	.222	.007
ORS	.237	.004

Notes: JAS, job activities scale; ORS, organisational relationships scale.

Most of the participants felt that their superiors employed a transformational leadership style. In a prior study, Kvist et al. (2013) found nursing leadership in Finnish hospitals to be administrative rather than transformational; this led the researchers to conclude that there is a need for further efforts to achieve transformational leadership across all organisational levels. Compared our results with the Kvist et al. (2013), the nurse leaders seem more likely to assess their superiors' leadership style as transformational than nurses. One example to explain this could be nurse leaders' deeper understanding on their superiors' job descriptions than nurses have of their leaders. Another possibility could be that there is more interaction between nurse leaders and their superiors than between nurses and their leaders. Also, the higher level of education among nurse leaders compared to nurses may partly explain the difference; however, this should be studied further.

In the current study, the dimension of feedback and rewards was the weakest component of a superior's leaderships style; this result agreed with what was reported by Kvist et al. (2013). Seitovirta et al. (2018) also found in their study focussing on rewarding that nurses have been generally unsatisfied with it. Although generational differences in nurses' satisfaction with feedback and rewards have been noted, this aspect of leadership exerts a positive influence on work-related well-being among all nurses through outcomes, stability and performance (Seitovirta et al., 2018; Stevanin et al., 2020). In addition, support, rewards and acknowledgement enhance nurse leaders' work-related well-being and reduce their turnover intentions (Kelly et al., 2019; Miller, 2020). Thus, this aspect of leadership warrants future attention, for example, in leadership education.

Health care organizations should consider interventions that would develop superiors' leadership styles, because these have a clear connection on nurses' and nurse leaders' work-related well-being. More specifically, research could provide insight into how leadership style affects the whole team and the workplace culture, rather than just individual relationships between nurses, nurse leaders and their superiors (e.g. Cummings et al., 2018).

The participants' experiences of moderate levels of structural empowerment are in line with the findings of previous research (Connolly et al., 2018; Moura et al., 2020; Trus et al., 2018, 2017).

TABLE 5 Correlations between structural empowerment and transformational leadership style

	TLS leadership ethics	TLS managing nursing process	TLS feedback and rewards	TLS professional development	TLS nursing director
SE opportunity	$r = .228$ $p < .001$	$r = .349$ $p < .001$	$r = .382$ $p < .001$	$r = .309$ $p < .001$	$r = .261$ $p < .001$
SE information	$r = .353$ $p < .001$	$r = .363$ $p < .001$	$r = .440$ $p < .001$	$r = .431$ $p < .001$	$r = .279$ $p < .001$
SE support	$r = .560$ $p < .001$	$r = .613$ $p < .001$	$r = .695$ $p < .001$	$r = .594$ $p < .001$	$r = .447$ $p < .001$
SE resources	$r = .472$ $p < .001$	$r = .419$ $p < .001$	$r = .340$ $p < .001$	$r = .454$ $p < .001$	$r = .381$ $p < .001$
SE JAS	$r = .409$ $p < .001$	$r = .449$ $p < .001$	$r = .485$ $p < .001$	$r = .438$ $p < .001$	$r = .385$ $p < .001$
SE ORS	$r = .221$ $p < .001$	$r = .227$ $p < .001$	$r = .255$ $p < .001$	$r = .263$ $p < .001$	$r = .135$ $p = .109$
SE GE	$r = .546$ $p < .001$	$r = .506$ $p < .001$	$r = .574$ $p < .001$	$r = .506$ $p < .001$	$r = .409$ $p < .001$
SE total	$r = .581$ $p < .001$	$r = .643$ $p < .001$	$r = .726$ $p < .001$	$r = .665$ $p < .001$	$r = .478$ $p < .001$

Notes: SE, Structural empowerment; TLS, transformational leadership style; JAS, job activities scale; ORS, organisational relationships scale.

Researchers have also previously acknowledged relationships between structural empowerment and factors associated with work-related well-being, for example, lower work stress, emotional burnout and organisational commitment (Fragkos et al., 2020; Jafari et al., 2021; Zhang et al., 2018). In a recent meta-analysis Zhang et al. (2018), stated that nurses' structural empowerment is negatively correlated with emotional exhaustion, and that this challenge can be alleviated by enhanced structural empowerment. Structural empowerment has also been linked to organisation's success (e.g. de Almeida et al., 2017; Goedhart et al., 2017) and positive organisational consequences such as adaptive resilience, work engagement and retention (Abel & Hand, 2018), and thus, future research should focus on how each dimension of structural empowerment can be further enhanced.

MacPhee et al. (2012) stated that nurse leaders who use structural empowerment strategies create a high-quality, safe work environments that empower other employees. Leadership training could offer the means for strengthening structural empowerment at a health care organisation (MacPhee et al., 2012), and research into these types of interventions is relevant because structural empowerment is closely connected to work performance and decreased turnover of employees (Fragkos et al., 2020). Despite extensive research on structural empowerment, Häggman-Laitila and Romppanen (2018) did not find any interventions related to work-related well-being that were based on structural empowerment. Therefore, this topic requires additional research.

Our results revealed that access to support was the weakest dimension of structural empowerment. It is difficult to compare this result with previous reports, because only a limited number of studies have investigated nurse leaders' structural empowerment. However, previous studies with a focus on nurses have revealed low levels of access to support (Connolly et al., 2018; Moura et al., 2020). Support can be received from one's superior, and also from peers and subordinates. The support nurse leaders receive from their organisation and superiors has been recognised to enhance nurse leaders' work-related well-being (Coogan & Hampton, 2020; Herttuala et al., 2020; Trinchero et al., 2014), whereas access to support can enable autonomous decision-making (Moura et al., 2020). Future research should identify the type of support that nurse leaders find supportive. This evidence could help clarify the approaches through which organisations can enhance nurse leaders' autonomy, involvement, activity and trust. Deeper knowledge about the development of support processes in organisations is also needed. For example, Penconek et al. (2021) suggested that evaluating the work loads of nurse leaders, offering clinical and administrative support, and developing co-managing and transformational leadership could all lead to higher job satisfaction.

4.1 | Strengths and limitations

All of the participants were from the same region of Finland, which may be considered a limitation. Furthermore, only a minority of the participants were nurse leaders working at upper leadership level in the organisation; thus, little can be stated about the work-related well-being of them. This indicates that there is a need for future research on this topic. A strength of the research was that the study was conducted in a large organisation that included various working environments. Moreover, the response rate in this study was high (44%), which strengthens the validity of the results. The choice to apply internationally validated instruments strengthens the trustworthiness of the research. In addition, the Cronbach's alpha values calculated in this study varied from .68 to .97, which demonstrates acceptable internal consistency. The associations between work-related well-being and structural empowerment were based on nurse leaders' self-assessments, which reduces the validity of the study. However, the findings about how transformational leadership is linked to work-related well-being were based on nurse leaders' ratings of their superiors' leadership styles, which enhances the validity of the study.

5 | CONCLUSIONS

This study focussed on the research gap concerning how perceived structural empowerment and a superior's transformational leadership style affect nurse leaders' work-related well-being. The current study had three main findings. First, the participating nurse leaders had relatively high work-related well-being. This shows that they were provided adequate resources despite working in challenging and stressful environment. Second, the participants felt that their superiors exercised transformational leadership. The weakest dimension of this leadership style was feedback and rewards, and organisations should specifically focus on this dimension when developing transformational leadership among leaders. Third, there was a discrepancy between work-related well-being and structural empowerment, with the nurse leaders perceiving moderate levels of the latter. It is crucial for organisations to develop all dimensions of structural empowerment, with the dimension of support particularly important.

Health care organisations should pay more attention to support, feedback and rewards across all organisational levels if they aspire to improve work-related well-being, which is critical for tackling staff shortages and retention of nurse leaders. Organisations should also promote and increase the use of transformational leadership to strengthen nurse leaders' structural empowerment, and thus, work-related well-being.

5.1 | Implications for nursing management

The work of a nurse leader can be extremely challenging and demanding, potentially causing significant stress among those with limited experience in leadership. This will naturally have an effect on their work-related well-being. Organisations can tackle this, for example, by providing flexible working hours and by helping nurse leaders maintain a healthy work–life balance. Continuous leadership training ensures that the challenges which nurse leaders experience are in line

with their competences, that is, providing constructive feedback. Organizations should ensure that leaders in every organizational level employ transformational leadership, as well as enhance structural empowerment among nurse leaders, in a bid to strengthen leaders' and nurses' work-related well-being (Hampton & Rayens, 2019).

The existing literature demonstrates that nurses and nurse leaders only perceive moderate levels of structural empowerment (e.g. Eskandari et al., 2017; Jafari et al., 2021; Regan et al., 2016; Trus et al., 2018) Hence, organizations should continue to strive towards improved structural empowerment, which can reduce costs and improve the quality of services (Jafari et al., 2021). Moreover, the strong correlation between structural empowerment and work-related well-being shown in this study indicates a strong need for policies and structures that enhance nurses' and nurse leaders' structural empowerment in health care organizations.

Organizations can use the results of presented research to focus the assessment and development of the weaker areas of the leadership, for example feedback and support, to enhance their nurse leaders' work-related well-being. Organisations should invest in nurse leaders who can create empowering environments from the bottom to the top of the organisation (Hampton & Rayens, 2019; Laschinger et al., 2012). The organisational culture and practices should be supportive of both transformational and empowering leadership (Khan et al., 2018). Nurse leaders who are supported and empowered by their superiors will, in turn, direct the same support and empowerment to their staff nurses (Laschinger et al., 2012). Health care organisations can positively affect nurse leaders' retention, turnover intentions, empowerment and work-related well-being by offering mentoring, coaching and leadership training (Labrague, 2020; Laschinger et al., 2012).

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

ETHICAL APPROVAL STATEMENT

Based on the Finnish legislation, this study—which followed the ethical guidelines for research—did not require ethical approval.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Tarja Kvist https://orcid.org/0000-0001-5974-8732

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REVIEW ARTICLE

WILEY

Financial competencies as investigated in the nursing field: Findings of a scoping review

Aysun Bayram, PhD candidate[1,2] | Andrea Pokorná PhD, Full Professor in Nursing[3] | Sabina Ličen PhD, Associate Professor in Nursing[4] | Natália Beharková PhD, Assistant Professor in Nursing[3] | Simona Saibertová PhD, Assistant Professor in Nursing[3] | Radka Wilhelmová PhD, Assistant Professor in Nursing[3] | Mirko Prosen PhD, Associate Professor in Nursing[4] | Igor Karnjus PhD, Associate Professor in Nursing[4] | Barbora Buchtová PhD, Assistant Professor in Finance[3,5] | Alvisa Palese PhD, Full Professor in Nursing[1]

[1]Department of Medical Sciences, University of Udine, Udine, Italy

[2]Department of Health Sciences, Karadeniz Technical University, Trabzon, Turkey

[3]Department of Health Sciences, Faculty of Medicine, Masaryk University, Brno, Czech Republic

[4]Department of Nursing, Faculty of Health Sciences, University of Primorska, Koper, Slovenia

[5]Department of Finance, Faculty of Economics and Administration, Masaryk University, Brno, Czech Republic

Correspondence
Alvisa Palese, University of Udine, Udine, Italy.
Email: alvisa.palese@uniud.it

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Abstract

Aim(s): This study aims to map the extent of the research activity in the field of financial competencies and nursing and identify main patterns, advances, gaps, and evidence produced to date.

Background: Financial competencies are important indicators of professionalism and may influence the quality of care in nursing; moreover, these competencies are the basis of health care sustainability. Despite their relevance, studies available on financial competencies in the nursing field have not been mapped to date.

Evaluation: A scoping review was guided according to (a) the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review and (b) the Patterns, Advances, Gaps and Evidence for practice and Research recommendations framework.

Key issue(s): A total of 21 studies were included. Main research patterns have been developing/evaluating the effectiveness of education programmes and investigating the nurse's role in the context of financial management, challenges and needs perceived by them, and tool validation to assess these competencies. The most frequently used concept across studies was 'financial management competencies' ($n = 19$).

Conclusion(s): The sparse production of studies across countries suggests that there is a need to invest in this research field.

[Correction added on 8 June 2022, after first online publication: The job titles for authors Natália Beharková, Simona Saibertová, Radka Wilhelmová, and Barbora Buchtová has been corrected from Full/Associate Professor to Assistant Professor.]

Implications for nursing management: Nurses with managerial roles should invest in their financial competencies by requiring formal training both at the academic and at the continuing education levels. They should also promote educational initiatives for clinical nurses, to increase their capacity to contribute, understand, and manage the emerging financial issues.

KEYWORDS
financial behaviours, financial knowledge, financial liability, financial literacy, financial management, nursing

1 | INTRODUCTION

The increased sustainability concerns, productivity expectations and economic pressure applied to the entire health care sector regardless of whether based on tax, social insurance or market (Erjavec & Starc, 2017) and consequently, on the whole nursing system, have been underlined as being at the merit of specific actions by 2020 (Scoble & Russell, 2003). From their side, clinical nurses undertake several decisions daily, and these may have different cost-effective impact. Moreover, they are immersed in a clinical environment that may value or not the financial implications of each activity, such as supporting nurses in time management and prioritization, in promoting the quality of care to prevent negative outcomes (e.g., increased length of stay) and in coaching how to decide between interventions (e.g., surfaces preventing pressure sores) implying different costs. Moreover, the budget pressure applied by local, regional and national rules may shape the nurse's behaviour and the entire work environment: Examples of how this pressure may exasperate the nursing care at the bedside have been summarized in several documents reporting the detrimental effects of workforce cuts (Alameddine et al., 2012) and that of work environments dominated by the so called command-and-control behaviours (Lynas, 2015).

In this scenario, nurse managers have been recognized as playing an important role and are in need of enlarging their responsibilities from those regarding the care quality and staffing to those associated also with financial competencies (Courtney et al., 2002). Nursing care has been reported as consuming approximately one third of the hospital budget (Bai et al., 2017), and head nurses in charge of the units are expected to control labour costs, to contribute to cost saving and ultimately, to the financial stability of the system (Manss, 1993). Given that nurse managers may function as a role model, shaping staff attitudes and behaviours and, ultimately, the care environment, they have been called to be prepared on financial competencies (Hadji, 2015; McFarlan, 2015).

At the beginning of the 90s, Chase (1994) developed the Nurse Manager Competencies Model including financial management skills. In this context, financial management competencies were defined as those regarding the implementation of financial control systems, the collection of financial data, the analysis of financial reports and the following financial decision-making based on the analyses conducted (Chase, 1994). More recently, Pihlainen et al. (2016) have identified three main competencies of nurse managers, namely, context-related, operational and general including also financial competencies. The debate regarding the core competencies of nurse managers has continued recently (e.g., Gunawan & Aungsuroch, 2017; Ma et al., 2020) up to the most recent scoping review, where González-García et al. (2021) have identified 22 competencies as being the most documented in the literature, including financing. However, despite financial competencies having been discussed as relevant more than 100 years ago (*The Hospital*, 1920), achieving full recognition as a core competence among nurse managers (González-García et al., 2021) and an educational content to introduce in undergraduate programmes (Lim & Noh, 2015), studies available have never been mapped to date. Mapping the extent of the research on financial competencies in the nursing field, identifying the main patterns, the advances achieved and the gaps still present, may inform future policy, managerial, educational and research directions. Therefore, the intent of this study was to contribute to advance the knowledge available by mapping studies regarding financial competencies published to date in the nursing field.

2 | METHODS

2.1 | Aim

The specific aim of the study was to summarize (1) the main characteristics of studies on financial competencies published in the nursing field to date, (2) the main issues investigated, (3) the advances produced in terms of knowledge and (4) the gaps still present in this research field.

2.2 | Design

A scoping review was performed following two guidelines, namely

(1) the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review (PRISMA-ScR) guidance (Tricco et al., 2018, Table S1), and

(2) the (a) Patterns, (b) Advances, (c) Gaps and (d) Evidence for practice and research recommendations framework (PAGER guidance, Bradbury-Jones et al., 2021).

2.3 | Search methods

The electronic databases, including MEDLINE (PubMed), Cumulative Index to Nursing and Allied Health Literature (CINAHL-EBSCO), SCOPUS and ProQuest (Health and Medical Complete) were approached in October 2021 and then refreshed on the 6th and 7th January 2022. In the initial approach of the database, the Medical Subject Headings (MeSH) terms were searched (e.g., financial management), and additional terms emerged as more common in the nursing field (e.g., 'financial competence'; González-García et al., 2021). Therefore, all MeSH/key words close to that of financial competencies were used in order to broaden the search. Specifically, the following terms 'financial literacy', 'financial management', 'financial liability', 'financial knowledge', 'financial capability', 'financial behaviour', 'financial education', 'financial competency', 'nurs*', 'nurse', 'nursing student', 'nurse educator', 'nurse teacher', 'nurse manager', 'nurse leader', 'nurse researcher' were used by two researchers (AB and AP) (Tables S2 and S3).

According to the population, concept and context (PCC) framework (Peters et al., 2020), there were eligible studies concerning:

(1) the nursing system (e.g., nurses, nursing student and nurse manager/leaders) (Population),
(2) the financial competencies topic or related terms (e.g., literacy/knowledge) as investigated with primary and secondary studies (Blaney & Hobson, 1988) (Concept),
(3) all settings (e.g., hospitals and universities) (Context), and written in English, Italian, Slovenian and Czech according to the languages of the research team.

Then, the reference lists of included studies were screened to increase the inclusiveness of the search, and those eligible were included (e.g., Sharma et al., 2021).

2.4 | Study selection process

All studies searched were transferred to a reference manager (Mendeley). The duplicated studies were removed by the reference manager programme and visual inspection. After removing the duplicates, the study selection process consisted of two stages. In the first step, two reviewers (AB and AP) screened independently titles, abstracts and keywords of the eligible studies against the inclusion criteria. In the second step, the full text of the studies chosen in the first stage was screened by two reviewers (AB and AP) to extract data. In addition, the reference lists of the included studies were manually searched. In case of disagreement at each stage, a researcher was involved for further discussion until consensus was reached (AnP and BB). Taking into consideration the international panel of researchers, online meetings were conducted to discuss the scoping review protocol and the study selection process.

2.5 | Data extraction

Data extraction of the eligible studies was performed independently by two reviewers (AB and AP). The data extraction grid was piloted in one study, and the final version was approved by the entire research team as composed by the following elements: (a) author(s), year, country of origin and field of authors (e.g., economics, nursing); (b) study aim(s), design, setting(s) and year of data collection; (c) sampling method and participants' main characteristics; (d) data collection process and tools; (e) concepts/terminologies used in the study (e.g., financial competence, literacy); (f) interventions applied, if applicable (e.g., education); and (g) main findings related to the research question(s). Data extraction was performed by researchers (AB and AP), and other researchers (AnP and BB) were consulted in case of disagreements.

2.6 | Data synthesis

First, the included studies have been summarized in their main features. Then, according to the Patterns, Advances, Gaps and Evidence (PAGER) framework (Bradbury-Jones et al., 2021), the patterns of this current body of literature have been described regarding (a) studies characteristic, (b) the main areas investigated, (c) the profiles of participants involved and (d) the underlying financial concepts used by authors to also detect in this case, the main patterns. Thus, according to the PAGER framework (Bradbury-Jones et al., 2021), the main advances in the evidence were identified by summarizing the findings produced in this research field over the years. Then, gaps in the research were identified, and implications for nurse managers of the evidence emerged were summarized.

3 | RESULTS

3.1 | Study characteristics

As reported in Figure 1, a total of 21 studies were included. These were published between 1987 (Johnson, 1987) and 2021 (Paarima et al., 2021; Sharma et al., 2021), mostly in the United States ($n = 13$) and the remainder in different continents (Africa, Naranjee et al., 2019; Asia, Bai et al., 2017; Australia, Courtney et al., 2002; and Europe, e.g., Slovenia & Ghana; Paarima et al., 2021). In the majority ($n = 14$), the first author was appointed at university level (e.g., Scalzi & Wilson, 1991), whereas the remaining were in health care facilities (e.g., Johnson, 1987) (Table S4).

Six studies were cross-sectional or descriptive (e.g., Carruth et al., 2000), four mixed both qualitative and quantitative approaches (e.g., Ruland & Ravn, 2003), three were pre/post or

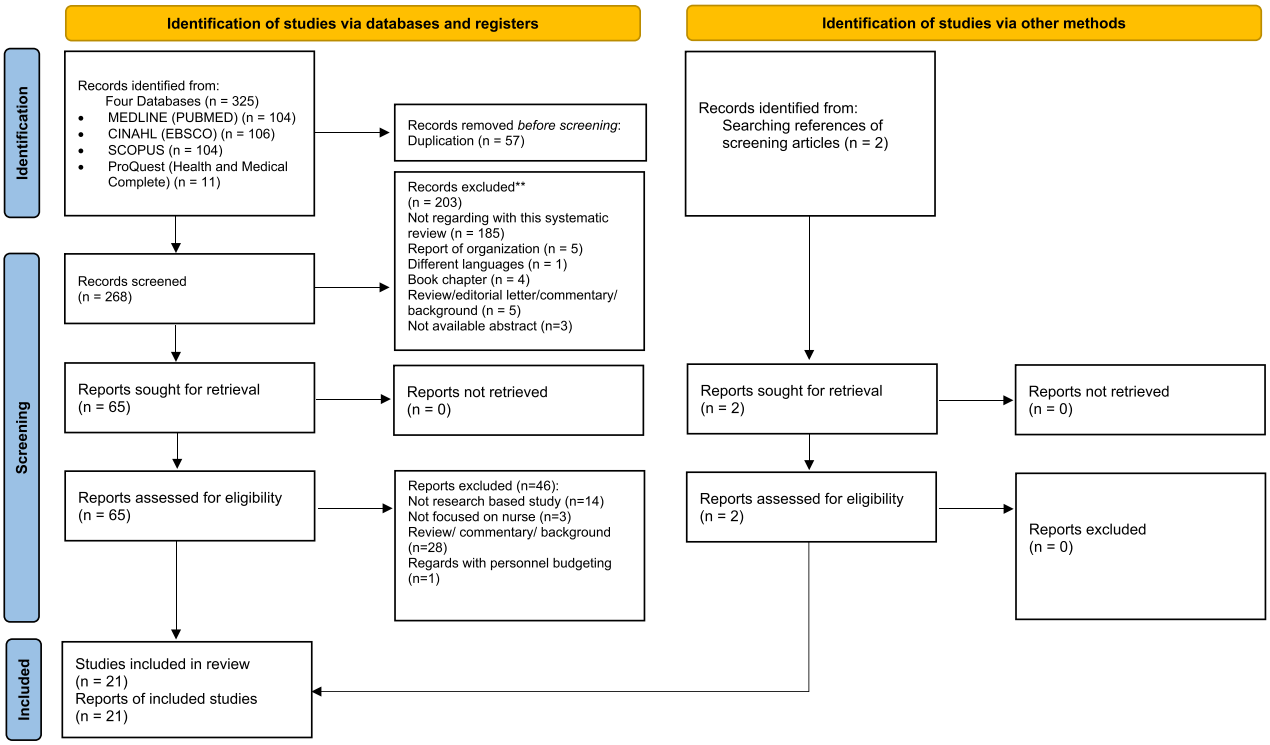

FIGURE 1 PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources. *Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers). **If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools. *Source*: Page et al. (2021) [Color figure can be viewed at wileyonlinelibrary.com]

quasi-experimental study designs (e.g., Krugman et al., 2002), whereas two were qualitative (e.g., Naranjee et al., 2019). The remaining six did not specify the design (e.g., Davis, 2005). Multiple research phases were performed by three studies involving different participants, such as that conducted by Erjavec and Starc (2017) (first phase 297 nurse managers and second phase 12), by Lim and Noh (2015) (11 nurses and 12 experts) and by Brydges et al. (2019) (178 and 10 nurse executive leaders).

Studies were mainly multicentre in nature ($n = 12$, e.g., Bai et al., 2017), and only a few have involved community hospitals (McFarlan, 2020; Paarima et al., 2021), nursing homes (Johnson, 1987), districts (Sharma et al., 2021) and public health care services (Courtney et al., 2002).

A convenience ($n = 6$, e.g., Blaney & Hobson, 1988) followed by a random ($n = 5$, e.g., Poteet et al., 1991), a purposeful ($n = 3$, Bai et al., 2017; Erjavec & Starc, 2017; Naranjee et al., 2019) and a mixed-sampling method ($n = 3$, e.g., convenience and purposeful; Brydges et al., 2019) were used, whereas one reached all the target population (Paarima et al., 2021). However, some studies did not report the sampling used ($n = 3$, e.g., Scalzi & Wilson, 1991). At the overall level, 7 (Ruland & Ravn, 2003) to 370 participants (LaFevers et al., 2015) were involved, and 10 studies out of 21 involved less than 55 participants.

When reported, participants were all (Blaney & Hobson, 1988; McFarlan, 2020; Scalzi & Wilson, 1991) or the majority female (Carruth et al., 2000; Erjavec & Starc, 2017; Paarima et al., 2021); their average age was from 38.4 (Blaney & Hobson, 1988) to 49 years (Poteet et al., 1991; Scalzi & Wilson, 1991), and the average experiences in management ranged from >2 or 3 (Erjavec & Starc, 2017; Lim & Noh, 2015) to 10 years (Scalzi & Wilson, 1991) up to 30 (Erjavec & Starc, 2017). In a few studies, the educational background of participants was described, ranging from diploma (51.9%, Scalzi & Wilson, 1991), to bachelor and masters (Erjavec & Starc, 2017; Paarima et al., 2021) and first-degree holders (47.9%, Paarima et al., 2021); in only one study, some participants were reported to be educated at the doctorate level (e.g., 4 out of 226; McFarlan, 2020).

Outcomes have been assessed in seven studies with validated tools, namely, (a) the Financial Management Competency Self-Assessment (FMCA) and the Financial Knowledge Assessment (FKA) on the financial literacy of nurse leaders (Brydges et al., 2019); (b) the Budget-related Behaviour scale on budget preparation, planning and control (Carruth et al., 2000); (c) the Health Service Managers Role and Careers (Courtney et al., 2002); (d) the Quality Review Checklist on students' opinions about technical and instructional quality of the modules (Edwardson & Pejsa, 1993); (e) the Chase's Nurse Manager Competency Instrument (Erjavec & Starc, 2017); (f) the Nurse Manager Skills Inventory Tool (McFarlan, 2020); and (g) the Nurse Managers Competencies Instrument (NMCI) (Paarima et al., 2021). However, ad hoc questionnaires ($n = 4$, e.g., Johnson, 1987) and surveys ($n = 5$, e.g., LaFevers et al., 2015) were also used.

In qualitative studies, data were collected with in-depth semi-structured individual interviews (*n* = 4, e.g., Bai et al., 2017) and focus groups (Lim & Noh, 2015; Ruland & Ravn, 2003). Two studies did not report data collection tools clearly (Consolvo & Peters, 1991; Davis, 2005), and only one has collected data from staffing and financial statistics to assess improvements in the balance stability (Ruland & Ravn, 2003).

In addition, in a few studies, the time when the data collection was performed has been reported (*n* = 6, e.g., Sharma et al., 2021; Paarima et al., 2021).

3.2 | Patterns

As reported in Table 1, developing educational programmes or evaluating their effectiveness by also including technologies (*n* = 10, e.g., Sharma et al., 2021) was the most frequent aim of the studies retrieved; to a lesser extent, the role as enacted by nurses in the context of financial management (*n* = 6, e.g., Carruth et al., 2000), the financial competencies/knowledge possessed (*n* = 5, e.g., Paarima et al., 2021), the challenges/needs perceived regarding the financial issues (*n* = 4, e.g., Bai et al., 2017) and the tool validation to assess such competencies was investigated (*n* = 1, Brydges et al., 2019).

Studies involved different participants, from nurse executives (*n* = 7 e.g., Scalzi & Wilson, 1991) to nurse managers (*n* = 9, e.g., Carruth et al., 2000; Paarima et al., 2021), and registered nurses (*n* = 4, e.g., Davis, 2005). Moreover, studies involved homogeneous profiles (*n* = 10, Blaney & Hobson, 1988) such as nurse managers/leaders (e.g., Erjavec & Starc, 2017; Paarima et al., 2021), executives (Brydges et al., 2019), graduate students (Edwardson & Pejsa, 1993) or nurse practitioners (LaFevers et al., 2015). The remaining 11 studies involved from two (e.g., Blaney & Hobson, 1988) to six different professional roles (e.g., Carruth et al., 2000).

'Financial management competencies' was the most often used concept by researchers (=19 studies) with the exception of two (Carruth et al., 2000; Sharma et al., 2021) followed by that of 'financial knowledge/principles' (*n* = 7, e.g., McFarlan, 2020) and 'financial/finance education' (*n* = 5, e.g., Poteet et al., 1991). Less used were the 'financial literacy' (*n* = 2, Brydges et al., 2019; Sharma et al., 2021) and 'financial experience' (Davis, 2005) concepts.

3.3 | Advances in the evidence

The financial role has been investigated in the studies in their main features and across the managerial profiles occupied. Carruth et al. (2000) reported that nurse managers were used to plan, investigate budget variances, prepare future budgets and suggest budget changes activities. Moreover, in their study, less than 25% of nurse managers controlled the budget as compared with less than 18% unit-based coordinators, supervisors and assistants (Carruth et al., 2000). The financial role has also been documented by Naranjee et al. (2019) (nurse managers = planning; monitoring; decision-making; controlling), Poteet et al. (1991) (nurse executives = preparing budget; allocating the budget), Courtney et al. (2002) (nurse executives = financial management) and by Lemire (2000) where budget preparation and productivity were both recognized as important and profit analysis rated at higher importance among chief executive officers than nurse administrators.

TABLE 1 Studies patterns: Main aims, participants profiles and financial dimensions considered in studies (=21)

	Main aims					Profile of participants															Financial dimensions considered																	
Author(s)	Educational programs (+ Technology support)	Role enacted/involvement in financial management	Financial competences required/ possessed	Financial competence challenges/needs	Measuring financial competences: Tool validation	Nurse Executives	Directors of Nursing	Vice President of patient care	Nurse Administrators	Department Directors	Nurse Managers	Head Nurse	Unit-based Managers	Nursing Supervisors	Assistants of Nurse Directors/Nurse Managers	Nurse coordinators	Nurse Practitioners	Registered Nurses	Graduates nursing in administration courses	Other	Financial management competencies	Financial competency	Financial experience	Financial performance	Financial literacy	Financial knowledge/principles	Financial skills	Financial education	Financial responsibilities	Financial matters/issues	Financial outcomes	Fiscal management	Financial dimensions	Budget planning/management	Cost-effective manner/Cost effectiveness	Financial Resource Procurement and Monitoring	Cost Containment and Cost Avoidance Practice	Other: Hospitals economics/distribution Budget of hospitals/financial stability
Bai et al., 2017				•		•		•				•				•					•	•		•				•										•
Blaney & Hobson, 1988	•								•			•									•														•			
Brydges et al., 2019					•	•															•				•	•	•		•		•							•
Carruth et al., 2000		•					•			•	•		•	•	•															•								•
Consolvo & Peters, 1991	•	•									•							•			•														•			
Courtney et al., 2002		•		•			•								•					•	•											•		•	•			•
Davis, 2005	•										•							•			•		•			•												
Edwardson & Pejsa, 1993	•																		•		•													•				
Erjavec & Starc, 2017			•								•										•	•											•			•	•	•
Johnson, 1987			•			•															•											•		•				•
Krugman et al., 2002	•																	•		•	•					•		•		•			•					
LaFevers et al., 2014			•														•				•					•												
Lemire, 2000		•				•			•												•					•	•											
Lim & Noh, 2015	•					•					•							•		•	•							•										•
McFarlan, 2020	•										•										•					•	•	•		•	•							
Naranjee et al., 2019		•		•		•					•		•		•					•	•					•	•											•
Poteet et al., 1991		•	•				•	•				•		•						•	•	•						•	•									•
Paarima et al., 2021			•								•										•						•			•								
Ruland & Ravn, 2003	•										•										•																•	
Scalzi & Wilson, 1991	•			•		•															•			•														
Sharma et al., 2021	•																			•					•													•

Legend = • indicates that the study has investigated the specific aspect

Despite their recognized role, nurses have been documented to perceive moderate competencies (Paarima et al., 2021) or to be unready to manage the budget (LaFevers et al., 2015) due to the lack of formal education, whereas the competencies are developed mainly on the job and with self-study. Therefore, financial competencies should be included in the nursing administration curriculum at the masters/doctoral levels and at the bachelor/diploma levels (Johnson, 1987). However, the role occupied, and the working places are both important in influencing the competencies perceived: In Erjavec and Starc (2017), the nurse managers working in private sectors reported significantly higher financial management competencies compared with those working in the public sector. In contrast, nurse managers in high positions reported significantly higher levels of financial management competencies than those in lower positions.

The financial management role occupied has been considered as the basis for the development of a financial competency framework (Naranjee et al., 2019) and specific educational programmes (Scalzi & Wilson, 1991) to support leaders in overcoming the challenges lived in financial and budget management. Specifically, financial and budget management have been perceived as the most difficult tasks due to budget constraints, financial inequities and the increased demands on resources (Courtney et al., 2002). Additional challenges have been documented in the lack of intrinsic motivation and education on financial issues, in the poor cooperation and communication across units and in the insufficient reference managerial tools (Bai et al., 2017).

All studies that have evaluated the effectiveness of education programmes reported their positive effects on motivation and self-perceived skills to work in a cost-effective manner (Blaney & Hobson, 1988; Ruland & Ravn, 2003) on financial management knowledge (Davis, 2005; Krugman et al., 2002; McFarlan, 2020), on literacy (Sharma et al., 2021), on roles (McFarlan, 2020) and on nurse manager perceptions (Consolvo & Peters, 1991). Moreover, educational programmes including computer-aided instruction have been appreciated in addressing financial management issues (Edwardson & Pejsa, 1993) and in reducing expenditures for overtime and extra hours meeting the budget balance in a year (Ruland & Ravn, 2003). Educational programmes may be generated according to the role occupied in a bottom-up approach (Scalzi & Wilson, 1991) or by mixing the bottom-up and the top-down approach (Lim & Noh, 2015). However, only Brydges et al. (2019) validated a tool measuring the financial management competencies among nurse executives, capable also of discerning the level of such competencies across novices, competent and expert executives.

4 | DISCUSSION

4.1 | Study characteristics and gaps

To the best of our knowledge, this is the first scoping review on financial competencies in the nursing field. With the growing attention on health care costs, sustainability, productivity, performance and, in some countries, on competitiveness (Hampton, 2017; Talley et al., 2013), mapping the research's state might support the identification and the address of gaps in study methodologies and in investigated areas.

Despite the recognized relevance of the financial issues in the health care (Erjavec & Starc, 2017; Scoble & Russell, 2003) and also in the nursing sector (Bai et al., 2017; Cook et al., 2017), only a few studies have been published to date in this field, less than one per year in the last 25 years. The limited power given to nurses (McMillan & Perron, 2020) and the influence of some stereotypes regarding their higher interpersonal skills when compared with doctors, who are perceived as having high power and being strong leaders (Braithwaite et al., 2016), might have left this area of investigation out of the nursing discipline.

Most of the studies have been conducted in the United States, and the diverse nature of the roles played by nurses, as well as the financial features of the health care systems where they are immersed (Waxman & Massarweh, 2018), suggest that evidence produced in this field should be considered generalizable with caution given that it is context-related. In this regard, more attention should be given in future studies to describing context-specific issues (Luz et al., 2018) that may affect the interpretation and the generalization of the findings. Describing the health care financial and reimbursement systems, the private or public mission, the role enacted by nurses and their responsibilities are only some examples of contextual data that should be reported in future studies.

From the methodological point of view, studies have been conducted by researchers appointed at the academic and at the health care facility levels, suggesting a mix of interests in this research area, from both professional/managerial and academic perspectives, and a potential source of academia/service partnership also including non-nursing disciplines.

Emerged studies have been mainly multicentric in nature, more often involving hospitals, suggesting the need to also involve community/home, intermediate and residential settings in line with the progressive decentralization of care according to its cost-effectiveness (Blackburn et al., 2016). Although a wide variety of study designs have been performed to date, some of them have not been fully specified in their methods, confirming the need to increase the methodological accuracy of this research field. Furthermore, studies have included a limited number of participants, with some gender (=all female) and age (mature professionals) biases that should be addressed in the future by also ensuring greater attention is paid to describing participants' characteristics, given that missing data may threaten the external validity of the findings. For example, describing the educational prerequisites possessed (e.g., bachelor/master), as well as how the financial responsibilities are given, through a progressive career promotion in the field or after being trained and assessed in these competencies, might help in the interpretation of the findings.

Studies have mainly investigated the perceptions of nurses as rated with self-administrated questionnaires or through individual/in group interviews. Only one study has used objective data (e.g., performance data, Ruland & Ravn, 2003). This research field is encouraged to use more objective measures in the future—close to

the definition of the financial discipline itself, which is aimed at measuring behaviour and consequences with objective data (OECD, 2013, p. 80). Moreover, while measuring the perceptions, more homogeneity in the metrics and tools used to detect outcomes is encouraged to increase the likelihood of comparing the findings and to accumulate the evidence.

4.2 | Patterns and gaps

First, patterns that emerged are all around financial competencies from those required or needed to those perceived as important or challenging and from those possessed or acquired with tailored educational programmes to tools capable of measuring such competencies. Therefore, financial competencies as perceived by nurses are central in this research field: In other words, the focus is given to the nurses' professional development, by identifying the theory and the practice gap, the competencies expected and the associated learning needs (Tashiro et al., 2013), mainly as an internal examination exercise. Moving this research line forward by embracing other disciplines and perspectives is strongly suggested to communicate outside of the nursing field the financial competency achievements that might increase the nurse's power and overcome any stigma (Braithwaite et al., 2016).

Second, regarding the profiles involved, these competencies have been investigated mainly among nurses with managerial roles, and only to a limited extent among clinical nurses (e.g., Davis, 2005). Clinical nurses are important partners in cost-related initiatives and excluding them might marginalize the entire profession from an issue that is central for the quality of care. Moreover, increasing the gap between the nurse managers in their different roles—by equipping them with appropriate education—and the clinical nurses may also trigger conflicts and professional distance between those who are in charge of the operational decisions regarding the nursing care and those responsible for delivering the care (LaFevers et al., 2015). Furthermore, the low financial competencies of clinical nurses may prevent their full independence in making decisions. One possible reason is that the clinical nurse is not considered as a carrier measurable in the performance, given that it is not reimbursed in terms of specific interventions, but rather as a complex of lump-sum activities. Moreover, it may also be possible that a prejudice is still present regarding the current reimbursement for care being focused on saving money in terms of direct costs but does not account for indirect costs (e.g., in the care of patients with non-healing wounds, falls). The education process is also a significant factor: Current nurse educators may lack in financial competencies, and this may prevent the knowledge transfer and promotion to students. Therefore, considering the financial competencies as a continuum, from undergraduate to postgraduate education, embracing all nurses' roles, may increase the mutual understanding and the power of the nursing profession (Di Giulio et al., 2020).

Third, although the concept of 'financial management competencies' seems to be considered central in this kind of research, all studies also used other subconcepts (e.g., financial literacy and financial skills): however, more conceptual clarity is required to expand the theoretical foundation of this field of research, a gap that should be urgently addressed.

4.3 | Advances in evidence and gaps

Different financial competencies and financial competence frameworks have been identified to date (e.g., Naranjee et al., 2019) mainly involving nurses. Establishing the set of competencies required is crucial to develop educational programmes; however, there is a need to develop a comprehensive framework of such competencies, from clinical to managerial roles, by also involving non-nurse stakeholders as for example those occupying executive financial roles to deepen their expectations, making visible the continuum of the expected competencies and designing effective undergraduate, postgraduate and continuing education strategies. Moreover, a stratification of financial competencies has been identified across novices, experts and competent levels in the same role (Brydges et al., 2019) and across roles (Erjavec & Starc, 2017). This suggests that it is not only the education provided that might modulate the financial competencies but also other factors (e.g., the communication with the financial managers of the hospitals). Therefore, investigating the role of some intrinsic (e.g., motivation towards financial competencies; Bai et al., 2017) and extrinsic factors (e.g., associated with the context, its mission) in building such competencies is recommended.

Financial competencies are acquired mainly by on-the-job study and self-study (LaFevers et al., 2015): The examples of programmes scrutinized for their effectiveness published to date (e.g., McFarlan, 2020) might be used to design further educational interventions in their methods, duration and main contents. However, given that today the outcomes of these educational interventions have been investigated from the perceptions of the nurses involved, there is a need to also investigate some actual outcomes (e.g., financial behaviour and decisions) by establishing valid indicators. Examples of policies in this field (e.g., Ruatti et al., 2021) as those designed by the American Organization of Nurse Leadership and the Healthcare Financial Management Association (e.g., AONL, 2022) may be useful in designing educational programmes as well as in underlying the relevance of financial theme as a key factor in the health care sustainability. Above all, nurses at different levels might contribute tremendously to the implementation of the value-based health care that has been defined as the most important current transformation: In this context, care delivery systems must be value for patients where value is the outcome(s) expected for patients and the costs to achieve these outcomes (Porter & Teisberg, 2006). The Future of Nursing Report 2020–2030 has been recommended to use performance-based payment criteria for the care and interventions performed by nurses within the scope of the value-based payment system. In this context, nurses can document the necessary financial behaviours and decisions in a concrete way by recording all kinds of initiatives and care indicators they apply. This provides an opportunity to see the

financial behaviours of nurses in a concrete way within the framework of the value-based health care (National Academies of Sciences, Engineering, and Medicine, 2021).

4.4 | Limitations

This scoping review has several limitations. First, although the search of studies has been designed and conducted with care, some studies may have been missed. Moreover, no grey literature has been investigated, such as professional, regulatory or health care reports/policy documents according to the purpose to map the state of the research. In this intent, all studies were considered eligible without imposing any limitation in the time: As a result, the studies included have been published from 1987 to 2021, and the interpretations of their findings should be prudent given that the financial relevance in the health care sector may differ over time.

In accordance with the method described by Arksey and O'Malley (2005), the quality appraisal of included studies was not performed. In addition, we have used the PAGER framework (Bradbury-Jones et al., 2021) to organize the findings and the discussion to focus the attention on gaps—as this is the main intent of scoping reviews. However, this should be considered in its limitation, given the recent establishment of the PAGE framework and limited examples available. Furthermore, the research team identified the main research patterns and gaps: Their background may have influenced the process of study interpretation and patterns/gaps identification.

5 | CONCLUSIONS

Research into financial competencies in the nursing profession is in its infancy. The sparse production of studies across countries suggests that there is a need to invest in this research field. From a mainly internal, professional development-oriented approach, this research field should be integrated into the broader approach by also involving other disciplines. In addition, more methodologically sound studies are required, transitioning from the definition of competencies required to (a) how to effectively develop them and (b) how these competencies can make a difference in financial decisions and outcomes on a daily basis. Moreover, this research field should change its perspective from being mainly reactive to the increased needs and challenges in the health care sector regarding financial issues and sustainability to being more proactive according to the gaps identified.

From the nursing point of view, financial competencies may help the profession to flourish by increasing its chances to participate and implement decisions safeguarding the quality of care effectively. On the other hand, increased financial competencies may reduce the marginalization of nurses and progressively prevent the subordination of their care to the decisions of others. Consequently, from the health care sector point of view, where the financial issues are increasing their pressures, all nurses can contribute proactively, from those who play a clinical role to those with executive roles.

Nursing in the 21st century needs a change in the mindset of nurses, and therefore, financial literacy must be a part of their professional skills. As part of education, a nurse equipped with financial competencies can effectively share information with the patients, which can ultimately help them in decision-making. For undergraduate students, financial literacy will help in their personal lives (e.g., personal budget management, economic and financial balance of their future life, poverty prevention and debt traps). Financial literacy will also affect nurses' professional lives, as they better understand the functioning of health care institutions in their country. Based on finance competencies, they could participate in improving the quality of care provided, in applying evidence-based approaches and in establishing effective indicators of quality of nursing care provided.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurses with managerial roles should invest in their financial competencies by requiring formal training both at the academic and at the continuing education level. Besides, they need to explore the impact of this investment on their individual financial capabilities and consider the financial goals of the health care institutions they are in. In designing the educational opportunities for clinical nurses to promote their continuing professional development, they should also consider financial alphabetization, to increase their capacity to contribute, understand and manage the emerging financial issues. It is also recommended that these financial competencies be debated in terms of advantage for all managerial roles occupied by nurses, and inside of them, across junior to senior positions.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

ETHICAL STATEMENT

According to the nature of the study, no ethical approval was required.

AUTHORS' CONTRIBUTIONS

AB, AP, AnP and BB made substantial contributions to conception and design, or acquisition of data. AB, AP and AnP made substantial contributions to analysis and interpretation of data. AB, AP, AnP and

BB (drafting) and SL, NB, SS, RW, MP and IK (revising) involved in drafting the manuscript or revising it critically for important intellectual content. All authors had given the final approval of the version to be published. Each author have participated sufficiently in the work to take public responsibility for appropriate portions of the content. All authors agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analysed in this study.

ORCID

Aysun Bayram https://orcid.org/0000-0003-2038-6265
Sabina Ličen https://orcid.org/0000-0002-8795-7985
Mirko Prosen https://orcid.org/0000-0001-9943-9037
Alvisa Palese https://orcid.org/0000-0002-3508-844X

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ORIGINAL ARTICLE

WILEY

Social support and job satisfaction in nursing staff: Understanding the link through role ambiguity

Alejandro Orgambídez PhD[1] | Helena Almeida PhD[2] | Yolanda Borrego PhD[3]

[1]Department of Social Psychology, University of Málaga, Málaga

[2]Faculty of Economics, University of Algarve, Faro, Portugal

[3]Department of Social and Educational Psychology, University of Huelva, Huelva, Spain

Correspondence
Alejandro Orgambídez, PhD, Departament of Social Psychology, Faculty of Psychology, University of Málaga, Campus de Teatinos s/n, Málaga, 29071, Málaga, Spain.
Email: aorgambidez@uma.es

Funding information
Universidad de Málaga / CBUA

Abstract

Aim: This study aimed to analyse the mediator effect of role ambiguity between social support from supervisor and colleagues and job satisfaction in Portuguese nursing staff.

Background: Few studies have analysed the processes through which social support increases job satisfaction in the nursing context.

Design: A cross-sectional design using questionnaires.

Method: A total of 124 registered nurses and 130 certified nursing assistants participated in the study. Mediation analysis was performed by calculating percentile confidence intervals (10,000 resamples).

Results: Mediation analysis revealed a partial mediation between social support and job satisfaction through role ambiguity. The direct effect was greater in the case of supervisor support.

Conclusions: Social support is a crucial resource in the nursing work context with a beneficial effect on well-being (e.g. reducing role stress) and job satisfaction.

Implications for Nursing Management: Managers of hospitals and health units can establish the organizational bases to facilitate this process, considering the importance of the role of the supervisors and colleagues in the provision of high levels of instrumental and socio-emotional support.

KEYWORDS
job satisfaction, nursing staff, occupational stress, role, social support

1 | BACKGROUND

Job satisfaction is one of the main concerns of administrators and researchers in the nursing context, given its beneficial effects both on the quality of work life and on the quality of services and care of health organizations (Lu et al., 2019). One of the main determining factors of job satisfaction in the nursing context is social support (Bagheri Hossein Abadi et al., 2021; Blanco-Donoso et al., 2019; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020). However, few studies have analysed the processes through which social support increases satisfaction levels in a nursing context. Our study suggests that the relationship between social support provided by supervisors and colleagues may be mediated by role ambiguity (Blanco-Donoso et al., 2019; Ghanayem et al., 2020). Role ambiguity is an important psychosocial stressor at work and is defined

[Correction added on 20 July 2022, after first online publication: 'Cenzig et al.' has been corrected to 'Cengiz et al.' throughout the article text and in the reference list in this version.]

as the lack of clarity and information about the functions, responsibilities, and tasks related to the position (Cengiz et al., 2021). Several studies have identified that role ambiguity has a negative effect on job satisfaction: higher levels of role uncertainty have been associated with higher job dissatisfaction (Cengiz et al., 2021; Giles et al., 2017; Kadir et al., 2017).

In this sense, and taking the Job Demands Resources model (JD-R model) (Bakker & Demerouti, 2017) as a reference, we propose that social support reduces the levels of uncertainty and, as a result, improves the levels of job satisfaction in nursing staff. Consequently, this study aimed to verify the mediating effect of role ambiguity between social support (supervisor and colleagues) and job satisfaction in a sample of Portuguese nursing staff.

1.1 | Social support and job satisfaction in nursing staff

The concept and definition of social support are complex, resulting in numerous proposed definitions of this construct. Social support can be defined as the assistance and protection given by others (Velando-Soriano et al., 2020). This support can come from both informal sources (e.g. family and friends) and formal sources (e.g. supervisors). According to Shirey (2004), four characteristics or types of support can be identified: (a) instrumental support associated with the provision of goods, resources or services; (b) emotional support related to the provision of affect, empathy, trust or care; (c) informational support related to information provided both to solve a problem and to mitigate stress; and (d) appraisal support associated with self-evaluation and affirmational support made by another.

Within the work context, Karasek and Theorell's proposal is one of the most widely accepted. These authors define social support as helpful social interaction resulting from interpersonal relationships with colleagues and with the supervisor in the workplace (Luchman & González-Morales, 2013). Karasek and Theorell (1990) establish two types of support at work: socio-emotional and instrumental. Socio-emotional support refers to the degree of social and emotional integration of the nursing staff with their group, that is, with their colleagues and supervisor. Empathy, trust and encouragement would be examples of socio-emotional support. Instrumental support refers to collaborative relationships and assists in job tasks with colleagues and supervisors. Practical advice, guidance and feedback would be examples of instrumental support. Both colleagues and supervisors can be considered to be support sources beneficial to the conduct of work and personal functioning of nursing staff (Luchman & González-Morales, 2013).

Numerous studies have observed a positive relationship between the social support perceived by nursing staff and the quality of services and care in health organizations, intention to stay in the organization, organizational commitment and job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020). Regarding job satisfaction, high levels of social support foster (1) the exchange of advice, feedback and guidance to perform clinical tasks and (2) the development of a strong affective climate of empathy, trust and mutual reinforcement. As a consequence of this helpful social interaction, nursing professionals show improved job performance which is reflected in a positive job evaluation, manifested in the form of high job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020). In this sense, the following hypotheses are proposed:

H1a. Higher levels of supervisor social support are related to higher levels of job satisfaction.

H1b. Higher levels of colleagues' social support are related to higher levels of job satisfaction.

1.2 | Role ambiguity and job satisfaction in nursing staff

Current health care challenges have changed the way nursing roles are performed, making them more complex and dynamic in some cases (e.g. COVID). These changes have resulted in nursing professionals finding themselves in situations of uncertainty or lack of knowledge of tasks and functions arising more frequently (e.g. COVID treatment guidelines), as well as conflicts and overlaps of responsibilities between different roles (e.g. responsibilities and tasks in multidisciplinary in-hospital teams) (Lankshear et al., 2016; Manzano García & Ayala Calvo, 2021; Martin & Weeres, 2016). As a consequence, nursing staff has become more vulnerable to psychological risk situations at work, especially to role stressors (Blanco-Donoso et al., 2019; Frögéli et al., 2019; Manzano García & Ayala Calvo, 2021; Wells, 2021). Within role stressors, role ambiguity should be highlighted for its negative consequences on the well-being, health and performance of nursing staff (Blanco-Donoso et al., 2019; Cengiz et al., 2021; Schmidt et al., 2014).

Role ambiguity or uncertainty refers to the lack of information and/or confusion about the functions, tasks and responsibilities associated with a position (Cengiz et al., 2021; Schmidt et al., 2014). The lack of clarity may be due to several reasons (Cengiz et al., 2021): (a) an inaccurate job description, (b) an absence of clear information about functions and tasks and (c) inadequate communication of the functions and responsibilities to be performed. Cengiz et al. (2021) and Schmidt et al. (2014) declare that unclear requests and expectations by supervisors and co-workers are also considered sources of uncertainty at work.

Various studies have observed a negative link between role ambiguity and work attitudes such as job satisfaction, organizational commitment or intention to stay (Cengiz et al., 2021; Déry et al., 2018; Kadir et al., 2017; Schmidt et al., 2014; Sureda et al., 2018). With regard to job satisfaction, high role ambiguity, reflected by the absence of information and/or instructions about the job (e.g. what, how, when and with whom to work), makes it difficult to perform clinical tasks, negatively affecting performance and generating perceptions of incompetence and frustrations (Cengiz et al., 2021; Giles

et al., 2017; Kadir et al., 2017). These perceptions, in turn, lead to negative emotions and feelings which manifest themselves in the workplace in the form of low levels of job satisfaction. Bearing the above in mind, the following hypothesis is proposed:

H2. Higher levels of role ambiguity are related to lower levels of job satisfaction.

1.3 | The mediating effect of role ambiguity between social support and job satisfaction

Numerous studies have shown that higher levels of social support, both from supervisor and colleagues, are related to higher perceptions of job satisfaction in the nursing context (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020). However, studies on the mechanism through which social support has a positive effect on job satisfaction are still lacking. Taking as a reference the JD-R model (Bakker & Demerouti, 2017), we propose that social support reduces the perception of uncertainty and, as a result, it rises the job satisfaction perceptions in nursing staff.

The J-DR model assumes the existence of job demands and resources in any position (Bakker & Demerouti, 2017). On the one hand, job demands are aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs. In this sense, role ambiguity can be considered a job demand. Lack of information about the functions of the professional role causes physical fatigue and psychological discomfort, which prevents the successful completion of clinical tasks (Blanco-Donoso et al., 2019; Cengiz et al., 2021). A high number of job demands is associated with high levels of dissatisfaction, stress, and burnout (Bakker & Demerouti, 2017).

On the other hand, job resources are those elements of the job which allow the nursing staff to carry out their tasks effectively and facilitate their personal and professional development. Social support can be considered a job resource since the support of the supervisor and colleagues (e.g. useful advice, trust, and empathy) makes it easier for nursing professionals to carry out their tasks successfully (Bagheri Hossein Abadi et al., 2021; Blanco-Donoso et al., 2019; Ghanayem et al., 2020). The presence of high job resources is related to psychological well-being and job satisfaction (Bakker & Demerouti, 2017).

The JD-R model shows the existence of relationships between job resources and demands, but it does not specify the sign of the relationships. Bakker and Demerouti (2017) indicate the importance of analysing the relationships between job resources and demands in different occupational sectors (e.g. the nursing context). In this sense, we propose that social support (job resource) reduces the negative effect of role ambiguity (job demand) on job satisfaction. The instrumental and socio-emotional support given by colleagues and supervisors helps to clarify the work role (e.g. tasks and responsibilities), reducing uncertainty at work and increasing work motivation (Blanco-Donoso et al., 2019; Frögéli et al., 2019). Therefore, nursing staff feels more positive emotions and feelings in their positions associated with better job performance, experiencing higher levels of job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020). Considering the above, we propose the following hypotheses (Figure 1):

H3a. Role ambiguity fully mediates the relationship between supervisor social support and job satisfaction.

H3b. Role ambiguity fully mediates the relationship between colleagues' social support and job satisfaction.

2 | METHODS

2.1 | Design and sampling

A cross-sectional study was carried out with a convenience sample of registered nurses (RNs) and certified nursing assistants (CNAs) from a private hospital in Portugal. RNs have a 4-year university education with different subsequent specializations, while CNAs have a 3-year nonuniversity education. Both are considered nursing professionals by the Portuguese national health system. The criteria for selecting the participants were the following: (a) working as a RN or a CNA and (b) have been working in the same unit/section (wards and outpatient units) of the hospital for more than 12 months. Those professionals who were occupying a supervisory and/or management position at the time of the study were excluded.

A power analysis was performed to determine the minimum sample size for testing the study hypotheses, using the programme mc_power_med (Schoemann et al., 2017). For the calculation, the following parameters were established: power level of .80, 2000 Montecarlo draws per replication and 5000 replications. The simulations showed that 108 participants are necessary to obtain a standard power level (.80) to detect the direct and indirect effects raised in the study hypotheses.

2.2 | Instruments

To measure social support, the scale of social support of the supervisor (four items, e.g., 'My supervisor supports my job') and of the colleagues (four items, e.g., 'My colleagues treat me with respect') of the

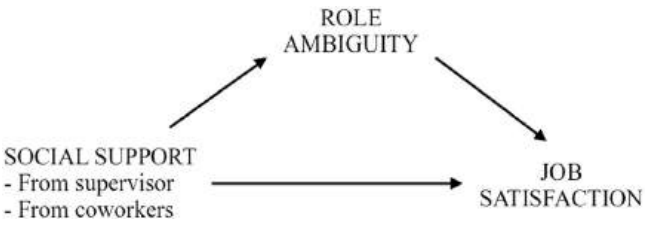

FIGURE 1 Relationships between social support, role ambiguity and job satisfaction

Portuguese version of the Job Content Questionnaire (Karasek & Theorell, 1990) was used. Participants responded to each item using a four-point scale, from 1 (totally disagree) to 4 (totally agree). Omega reliability coefficients (Dunn et al., 2014) were .93 (*boot se* = .008) for supervisor and .87 (*boot se* = .014) for colleagues' support.

To measure role ambiguity, the four items (e.g. 'I know exactly what is expected of me' [inverted]') of the Portuguese version of the role stress scale of Rizzo et al. (1970) were used. The participants expressed their degree of agreement with each item through a seven-point response scale from 1 (strongly agree) to 7 (strongly agree). The omega reliability coefficient obtained in this study was .91 (*boot se* = .012).

The job satisfaction scale of Lima et al. (1994) was used to measure job satisfaction. This scale is composed of three items (e.g. 'Regarding the work you do in your unit, you feel…'). Participants expressed their satisfaction with each statement using a seven-point scale response, from 1 (totally unsatisfied) to 7 (totally satisfied). The omega reliability coefficient was .89 (*boot se* = .011). Finally, the questionnaire included questions about the following socio-demographic and labour variables: age, gender, professional category, ward or outpatient unit, years working in the ward/unit and working shifts.

To determine the validity of the scales, two measurement models were compared concerning the construct validity of the scales: M1 and M2. The M1 model proposes the existence of a single factor in which all the items of the scales used in the study saturate. The M2 model assumes the existence of four factors (supervisor social support, colleagues' social support, role ambiguity and job satisfaction) in which their respective items saturate. The four-factor model (M2) showed a better fit to the data: $X^2(98) = 281.122$, $p < .01$, Comparative Fit Index (CFI) = .94, TuckerLewis Index (TLI) = .93, Standardized Root Mean Square Residual (SRMR) = .05 and Akaike Information Criterion (AIC) = 7770.99 than the one-factor model (M1): $X^2(104) = 1285.46$, $p < .01$, CFI = .61, TLI = .54, SRMR = .14 and AIC = 8763.20, considering the criteria established by Kline (2016): CFI and TLI above .90, SRMR below .08 and the lowest value in AIC. Consequently, the validity of the scales is appropriate and the variables measured in this study can be considered independent psychological constructs.

2.3 | Procedure

To carry out the study, the researchers had a first meeting with the board of the hospital, in which the objectives and the research questionnaire were presented, and participation in it was requested. After receiving the approval of the ethics committee and subsequent authorization from the managers of the institution, the researchers attended the daily clinical meetings of the different units of the hospital (wards/outpatient units), to present the study and request the collaboration of those professionals who complied with the selection criteria requirements. Each participant was given an envelope without identification and an anonymous questionnaire with instructions for its completion. The questionnaires were placed in the envelopes and returned to the researchers. Data collection took place between February and April 2018. Of the potential 415 participants, a final sample of 254 professionals, 124 RNs and 130 CNAs was obtained (61.20%).

2.4 | Data analysis

Data analysis was performed using the R statistical programme (R Core Team, 2021) and the lavaan and MBESS packages. The following descriptive statistics were calculated as follows: mean, standard deviation, skewness and kurtosis and the correlations between the variables using Pearson's correlation coefficient (*r*). The omega coefficient (Dunn et al., 2014) was used to verify the reliability of the scales.

Following the recommendations of Hayes (2013), the analysis of the direct and indirect effects was carried out by estimating percentile confidence intervals (95% PC-CI), based on 10,000 resamples. If the confidence interval does not include zero (0), the effect can be considered as significant ($p < .05$).

2.5 | Ethical considerations

The ethics committee of the hospital approved this study (ref: HPA-FR-2018-103). Anonymity and the use of all data for exclusively scientific purposes were guaranteed. All participants were informed of the objective of the research and gave their written consent to participate.

3 | RESULTS

3.1 | Sample characteristics

The sample consisted of 254 professionals from a private hospital complex, 124 RNs (48.81%) and 130 CNAs (51.19%). The mean age of the sample was 32.51 years (*SD* = 8.46) with an age range between

TABLE 1 Descriptive statistics and correlations of the study variables (*N* = 254)

	1	2	3	4
1. Supervisor social support	1.00			
2. Colleagues' social support	.35	1.00		
3. Role ambiguity	−.47	−.41	1.00	
4. Job satisfaction	.66	.45	−.66	1.00
Mean	3.33	3.42	3.16	4.48
Standard deviation	0.68	0.53	1.12	1.05
Skewness	−0.83	−0.50	0.59	−0.22
Kurtosis	0.10	−0.75	0.36	−0.41

Note: All coefficients are significant ($p < .01$).

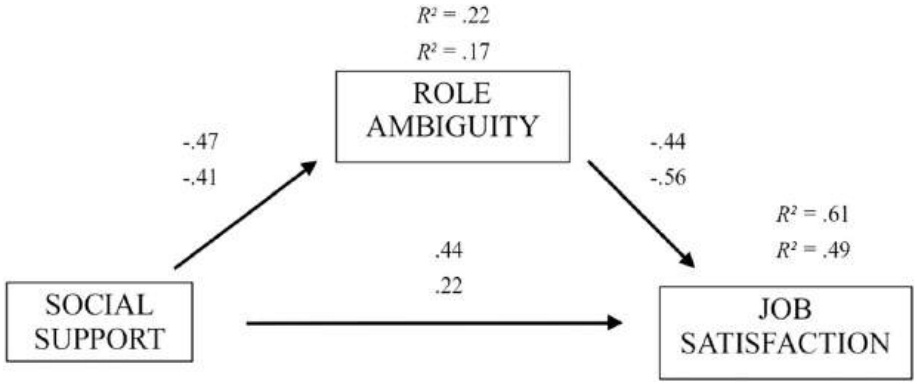

FIGURE 2 Mediation analysis ($N = 254$). *Note*: Standardized coefficients. All coefficients are significant ($p < .01$). Social support from supervisor: coefficients on the top. Social support from co-workers: coefficients on the bottom. Professional category was covaried but not presented in the final model for simplicity

TABLE 2 Direct and indirect effects of social support on job satisfaction ($N = 254$)

Predictor (X)	Mediator (M)	Outcome (Y)	X → M	M/ covariate → Y	Direct effect	Indirect effect	95% PC-CI	Total effect
Supervisor social support	Role ambiguity	Job satisfaction	−0.77	−0.41	0.68	0.32	0.22, 0.42	1.00
Covariate	Prof. category			−0.30				
Colleagues' social support	Role ambiguity	Job satisfaction	−0.88	−0.52	0.43	0.45	0.30, 0.62	0.89
Covariate	Prof. category			−0.36				

Note: Nonstandardized coefficients. All coefficients are significant ($p < .01$). 95% PC-CI: percentile confidence intervals (95%) based on 10,000 samples.
Abbreviation: PC-CI, percentile confidence intervals.

21 and 58 years. The sample was composed mainly of women ($n = 174$). No statistically significant differences were observed between men and women depending on the professional category (RNs versus CNAs): $X^2(1) = 0.63$, $p = .43$. The mean years of professional experience was 7.63 years ($SD = 4.31$), and most of the participants (87.3%) reported working 12-h shifts.

3.2 | Descriptive statistics and correlations

The results, as seen in Table 1, indicate that the study participants showed high levels of social support ($M = 3.33$ and $M = 3.42$ for supervisor and colleagues' social support, respectively), a low level of role ambiguity ($M = 3.16$) and a medium level of job satisfaction ($M = 4.48$). No statistically significant differences were observed in supervisor social support, colleagues' social support and role ambiguity depending on the professional category, but there were differences in job satisfaction: $M_{rn} = 4.72$ and $M_{cna} = 4.24$, $t(243.28) = 3.78$, $p < .01$. As expected, social support from supervisor and colleagues was positively and significantly ($p < .01$) related to job satisfaction ($r = .66$ and $r = .45$, respectively). A negative correlation was found between role ambiguity and job satisfaction ($r = -.60$, $p < .01$).

3.3 | Mediation analysis

Figure 2 shows the mediation models for social support from supervisor and colleagues. The direct, indirect and total effects of both models can be consulted in Table 2.

It is apparent from Table 2 that supervisor support was shown to be a significant predictor ($B = 0.68$, 95% PC-CI: 0.54, 0.83) of the job satisfaction variable, confirming hypothesis H1a. Role ambiguity also had a direct effect ($B = -0.41$, 95% PC-CI: −0.49, −0.32) on job satisfaction, confirming Hypothesis H2. Social support from supervisor and role ambiguity explained 61% of the variance of the result variable, together with the covariate ($B = -0.30$, 95% PC-CI: −0.48, −0.14). Regarding the mediating effect of role ambiguity, this variable partially mediated the relationship between supervisor social support and job satisfaction, showing an indirect effect of $B = 0.31$ (95% PC-CI: 0.22, 0.42). Social support from supervisor had an indirect effect, reducing the levels of uncertainty at work, and also a direct effect on job satisfaction. Of the total effect (100%), 68% (0.68/1.00) was direct and 32% (0.32/1.00) was indirect. Consequently, Hypothesis H3a could only be partially confirmed.

As shown in Table 2, colleagues' social support was a significant predictor ($B = 0.43$, 95% PC-CI: 0.21, 0.66) of job satisfaction, as was

role ambiguity ($B = -0.52$, 95% PC-CI: −0.61, −0.42), supporting Hypotheses H1b and H2. These two variables explained 49.3% of the variance of job satisfaction, together with the covariate ($B = -0.36$, 95% PC-CI: −0.57, −0.16). Role ambiguity partially mediated the relationship between colleagues' social support and job satisfaction, showing an indirect effect of $B = 0.45$ (95% PC-CI: 0.30, 0.62). Colleagues' social support showed an indirect effect, reducing the perception of role ambiguity, and a direct effect on job satisfaction. On the total effect (100%), the direct effect was 48.86% (0.43/0.89) and the indirect effect was 51.14% (0.45/0.89). Therefore, Hypothesis H3b could only be partially confirmed.

4 | DISCUSSION

Despite the large number of studies on social support and job satisfaction in the nursing context (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020), the mechanisms through which supervisors and colleagues' support increases job satisfaction levels have not yet fully explored. Accordingly, this study aimed to analyse the effect of role ambiguity as a mediating variable: Social support reduces the levels of uncertainty at work and, as a result, increases the levels of job satisfaction. It has been found that supervisor and colleagues' social support had both direct and indirect effects, through role ambiguity, on participants' job satisfaction. However, in the case of supervisor support, the main effect was direct, while in the case of colleagues support, the direct and indirect effects were more balanced.

Regarding the relationship between social support and job satisfaction, it has been observed that high levels of support from supervisor and colleagues were associated with higher levels of job satisfaction, confirming Hypotheses H1a and H1b. Through helpful social interactions, the exchange of information and advice about the role (e.g. functions and responsibilities), together with a climate characterized by good interpersonal relationships (e.g. trust and empathy) improves the nursing staff's performance, which translates into positive emotions and evaluations of the job. As a consequence, nursing staff experience high perceptions of job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020).

Concerning Hypothesis H2, the results corroborated the negative relationship between role ambiguity and job satisfaction: Higher scores in job uncertainty were associated with lower scores in satisfaction in the workplace. The findings in the present study are consistent with the results of Cengiz et al. (2021), Giles et al. (2017), Déry et al. (2018) and Kadir et al. (2017). Role ambiguity is a significant stressor with negative effects on job satisfaction. A lack of information, together with unclear instructions and protocols, makes it difficult to correctly perform clinical tasks, generating situations of stress and frustration. These experiences lead, in turn, to negative job evaluations, increasing the levels of job dissatisfaction in the nursing staff (Cengiz et al., 2021; Déry et al., 2018; Giles et al., 2017; Kadir et al., 2017).

Regarding the mediation models, the results partially confirmed Hypotheses H3a and H3b. Both supervisor and colleagues' social support had a direct effect and an indirect effect, reducing role ambiguity, on job satisfaction. These effects can be discussed according to the JD-R model (Bakker & Demerouti, 2017). Concerning the direct effect, social support is a job resource that allows the achievement of tasks and goals at work. Receiving support, both instrumental and socio-emotional, generates perceptions of control over tasks and effectiveness at work, strongly related to high levels of job satisfaction (Bagheri Hossein Abadi et al., 2021; Blanco-Donoso et al., 2019; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020).

The indirect effect of social support on job satisfaction would occur through role ambiguity, according to the relationships between job resources and demands addressed in the J-DR model (Bakker & Demerouti, 2017). The perception of instrumental and socio-emotional support given by supervisors and colleagues (e.g. feedback and encouragement) increases role clarity at work. Thus, nursing personnel with low role ambiguity know the what, how, when, where and with whom of the tasks, functions and responsibilities of their positions, allowing them to face job demands with greater confidence. As a consequence, professionals feel more motivated, are more likely to offer a better quality of care and services and experience greater job satisfaction (Cengiz et al., 2021; Déry et al., 2018; Giles et al., 2017; Kadir et al., 2017).

Differences were observed in the direct and indirect effects of supervisor and colleagues' social support. The direct effect was greater than the indirect effect in the case of supervisor support, while the direct and indirect effects were similar in the case of colleagues' support. This difference may be due to the availability of supervisor and colleagues to be consulted and asked about daily aspects of the work. Coworkers can be perceived as more accessible and closer when it comes to resolving any query or work-related issue, thus reducing uncertainty about responsibilities and tasks more inmediately and constinously. On the contrary, supervisors would be seen as less accessible and their support would be given at more specific moments compared with colleagues' support (Kim et al., 2017; Luchman & González-Morales, 2013). Thus, the indirect effect, through the reduction of ambiguity, would be greater in the social support from colleagues.

4.1 | Limitations and future research

These findings must be interpreted with caution considering the following. First, the cross-sectional design makes it impossible to determine causeeffect relationships between variables. Second, the study sample does not allow the results to be generalized to the population which is being studied. Third, the use of self-measures leads to the possible existence of biases in the participants' responses, such as social desirability bias. Finally, third variables (e.g. resilience and job performance) not measured in the research could mediate the relationship between social support, role ambiguity and job satisfaction.

In this sense, another element not considered is the possible interaction between NRs and CNAs. There could be instrumental social support from the NRs to the CNAs, with the NRs being responsible for supervising the work of the CNAs.

Some of the limitations can be remedied in future research. The findings of this study can be replicated with representative samples of different nursing professionals and by comparing public and private health care organizations. Diary studies would help to understand the dynamics of the relationships between social support, role ambiguity and job satisfaction, allowing the identification of support patterns and profiles over time. Finally, new studies and research should include specific measures of the type of social support (e.g. instrumental and socio-emotional) and consider the role of individual, group and organizational variables in the provision of support at work. Likewise, it would be necessary to explore the support relationships between different professionals. In this regard, less qualified staff (e.g. CNAs) could benefit from more instrumental support due to the guidance provided by other nursing professionals (e.g. RNs).

5 | CONCLUSIONS

This study provides empirical evidence on the processes involved (e.g. reduction of uncertainty) between social support and job satisfaction in nursing staff: a direct effect through helpful social interactions (instrumental and socio-emotional support) and an indirect effect reducing the perception of uncertainty at work. These processes are present in both supervisor and colleagues' social support. Regarding theoretical implications, we have provided further evidence about the direct links between job demands and resources in the JD-R model (Bakker & Demerouti, 2017). Our findings have highlighted the negative relationship between job resources (e.g. social support) and demands (e.g. role ambiguity) in the nursing context. Certain resources (e.g. social support) have the capacity to reduce the negative effects of job demands on important attitudes such as job satisfaction. To sum up, social support is a crucial resource in the nursing work context with beneficial effects on well-being (e.g. reducing role stress) and job satisfaction.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Given that social support has beneficial consequences for individuals and organizations, interventions directed at three levels can be carried out (EU-OSHA., 2014): (a) workers, (b) supervisors and (c) organizations. On an individual level, a key element would be the development of strong interpersonal relationships between colleagues, either strengthening existing ones (e.g. gratitude for the help and reciprocity) or establishing new ones (e.g. mutual appreciation and absence of animosity). Supervisors play a central role in support processes in the workplace, so their training is essential in this regard, for example, distinguishing when it is necessary to offer instrumental or socio-emotional support. Finally, on an organizational level, social support can be fostered through the development of cultures and work environments where cooperation between groups, units and departments is enhanced and rewarded (e.g. culture of mutual appreciation). To sum up, managers of hospitals and health units can establish the organizational bases to facilitate this process, considering the importance of the role of the supervisors and colleagues in the provision of high levels of instrumental and socio-emotional support.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

Conceptualization, A.O. and Y.B; methodology and data analysis, A.O. and H.A.; data analysis replication, Y.B.; writing-original draft preparation, A.O. and Y.B.; writing-review and editing, A.O. and H.A. All authors have read and agreed to the present version of the manuscript.

DATA AVAILABILITY STATEMENT

The authors do not wish to share the data.

ETHICS STATEMENT

Ethical approval for this study was obtained from the Hospital Ethics Committee of the HPA Hospital Particular do Algarve (approval number: 2017/2882).

ORCID

Alejandro Orgambídez https://orcid.org/0000-0003-3785-4336
Helena Almeida https://orcid.org/0000-0002-8186-3507

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ORIGINAL ARTICLE

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Disciplinary processes for nurses, from organizational supervision to outcomes: A document analysis of a regulatory authority's decisions

Oili Papinaho PhD candidate in Nursing Science, RN, MSc, Training Coordinator[1,2] | **Arja Häggman-Laitila PhD, Professor**[3,4] | **Miko Pasanen MSc, Statistician**[1] | **Mari Kangasniemi RN, PhD, Professor**[1,5]

[1]Department of Nursing Science, University of Turku, Turku

[2]Oulu University Hospital, Oulu

[3]Department of Nursing Science, University of Eastern Finland, Kuopio, Finland

[4]Department of Social Services and Health Care, Helsinki, Finland

[5]Satakunta Hospital District, Pori, Finland

Correspondence
Oili Papinaho, PhD candidate in Nursing Science, RN, MSc, Training Coordinator, Department of Nursing Science, University of Turku, Joukahaisenkatu 3-5, 20520 Turku, Finland.
Email: oili.a.papinaho@utu.fi

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Finnish Association for Nurses

Abstract

Aim: This study aims to explore the disciplinary processes for nurses, from organizational supervision to final decisions by the Finnish regulatory authority.

Background: Regulatory authorities are responsible for protecting the public, by ensuring that they receive safe, competent and ethical nursing care, but little is known about the disciplinary processes for nurses.

Methods: This is a retrospective document analysis of 296 disciplinary decisions by the Finnish regulatory authority from 2007 to 2016. The data were analysed using a quantitative design with descriptive statistics.

Results: We studied 204 disciplined nurses (81.4% female) with a mean age of 43.5 years. The disciplinary process comprised organizational supervision, complaints, investigations and decisions. Nurses with substance abuse issues were more likely to face criminal investigations and receive temporary decisions. The process lasted from under 1 month to years and could have profound effects on nurses, colleagues and nurse managers and compromise patient safety.

Conclusion: This study identified key factors that could inform the disciplinary processes for nurses. More knowledge is needed about how organisations ensure patient safety when unprofessional conduct is suspected.

Implications for Nursing Management: Retaining nursing professionals is vital due to global shortages, and more attention should be paid to organizational supervision and support for nurses during disciplinary processes.

KEYWORDS
complaints, disciplinary action, nursing management, professional regulations, registered nurses

1 | BACKGROUND

Nurse managers must intervene if nurses' lack the expected professional competencies, do not comply with standards or laws, betray trust (Kunyk et al., 2016) or risk the public safety of patients (Brous, 2012). Nurse managers can alert the authorities to any circumstance that may endanger patient safety (Finnish Ministry of Justice, 2008). Most professional standard violations are handled by nurses' employers if there is clear, convincing evidence that they do not pose a serious life or death risk (Hudspeth, 2009). Health care organisations protect patient safety by providing models to supervise professional competence and standards of practice (Cronquist, 2013; Eisenmann, 2020; Hudspeth, 2009).

Regulatory authorities have a statutory responsibility to protect the public by ensuring that nurses offer safe care and have professional and ethical competencies (Brous, 2012; Kunyk & Deschenes, 2019). The disciplinary process begins with complaints about serious patient safety risks. Authorities consider each complaint in detail (Beardwood & Kainer, 2015; Cronquist, 2013; Raper & Hudspeth, 2008) and decide whether a nurse is competent, ethical and provides safe care (Johnstone, 2019; Koskenvuori et al., 2019; Poikkeus et al., 2014). They must investigate complaints that allege violations of professional legislation (Beardwood & Kainer, 2015; Raper & Hudspeth, 2008). Investigators have the right and duty to collect details of allegations against nurses, so that nursing boards can consider the evidence and make decisions. In Finland, the National Supervisory Authority for Welfare and Health is responsible for handling complaints about the treatment of patients who are severely and permanently injured or die after a suspected medical error or malpractice (Finnish Ministry of Justice, 2008). Its Board can sanction nursing professionals if they violate professional legislation. These can include temporary, permanent or indefinite decisions that restrict, suspend or remove the nurse's rights to practice or a written warning (Finnish Ministry of Justice, 1994; Finnish Ministry of Justice, 2008). If a nurse does not agree to their professional capacity and health being investigated, the Board may prohibit them from practising or using their professional title (National Supervisory Authority for Welfare and Health in Finland, 2019).

Earlier studies have described disciplinary procedures in the nursing profession from the point of view of authorities (Balestra, 2012; Eisenmann, 2020; Kim et al., 2014), nursing management (Ritter et al., 2018; Traynor et al., 2014) and nurses (Kunyk & Deschenes, 2019; Maurits et al., 2016; Smalls, 2014). Studies have concluded that nurse managers use different problem-solving methods on daily basis and that these are predominantly discussions that define, manage and resolve situations with employees. (Aitamaa et al., 2019; Laukkanen et al., 2016). There has been a lack of research on how organisations intervene with regard to nurses' professional conduct before disciplinary processes begin. This is important, especially for nurse managers, so that they can ensure that patients and nurses benefit from safe environments and structures.

Authority level regulation is based on national legislation (Brous, 2012; Cronquist, 2013; Kunyk & Deschenes, 2019; Smalls, 2014), and disciplinary actions are based on statutory violations and have consequences for a nurse's professional career (Kunyk, 2015; Livingston et al., 2012). Although disciplined nurses represent a small percentage of the nursing population, previous studies have reported patient integrity violations (Azuri et al., 2014; da Silva et al., 2016), mistakes in nursing practice (Azuri et al., 2014; Benton et al., 2013; Hester et al., 2011), risky behaviour (Azuri et al., 2014; Hudson & Droppers, 2011; Zhong et al., 2009) and other professional incompetence (Benton et al., 2013; da Silva et al., 2016; Zhong et al., 2009). Nurses have been subject to disciplinary actions, such as reprimands, limitations, probations, suspensions, licence revocations and being removed from nursing registers (Azuri et al., 2014; Benton et al., 2015; Chiarella & Adrian, 2014; Eisenmann, 2020; Millbank, 2020). Health care professionals, nurse managers and patients have a poor understanding of how complaints about unprofessional conduct by nurses are investigated and resolved by authorities (Papinaho et al., 2021). In addition, little is known about what effect the length of the disciplinary process has on nurses who continues to work under temporary disciplinary decisions.

The aim of this study was to explore the disciplinary processes for nurses, from organizational supervision to final decisions by the Finnish regulatory authority. We did this by analysing anonymized decision documents on disciplinary procedures.

Our research questions were:

- What organizational supervision procedures were put in place before nurses were reported to the regulatory authority?
- How did the disciplinary process proceed once a format complaint had been received by the authority?
- What investigations did the authority carry out concerning the nurses' professional competence?
- What disciplinary decisions were made?
- How were the nature of the complaints and the nurses' background factors associated with the disciplinary decisions?

2 | METHOD

2.1 | Study design

This study used systematic, retrospective document analysis (Bowen, 2009; Kaae & Traulsen, 2015; Rasmussen et al., 2012). The research data comprised disciplinary decisions issued by the Finnish Board of National Supervisory Authority for Welfare and Health between January 2007 and December 2016 against registered nurses (RNs) with educational level degrees and those with professional titles such as public health nurses, midwives and paramedics.

2.2 | Research environment

The Finnish board issues approximately 200 decisions a year against health care professionals for serious threats to patient safety. About

20% of the decisions relate to RNs which equates to 0.3% of the registered population. The Board investigates whether the complaints can be substantiated (Finnish Ministry of Justice, 1994) and a quarter of the investigations result in sanctions. Remarks and written warnings received by health care professionals have been recorded in the Central Register of Healthcare Professionals for 10 years. The Register also states whether their right to practice has been restricted or removed or they have been suspended from using their professional title (National Supervisory Authority for Welfare and Health in Finland, 2019).

2.3 | Data collection

The National Supervisory Authority for Welfare and Health selected 325 decisions against nurses from 2007 to 2016. We examined 324 decisions relating to 204 RNs in this study, and 28 were coded as one decision as they had the same outcomes. This meant that the final data comprised 296 decisions: 288 final decisions and 8 open cases with just initial decisions. One nurse could receive several decisions relating to the same complaint. The disciplinary decisions comprised documents that ranged from tens to hundreds of pages and included the finding of investigations and the nurses' own reports and explanations. The data were transferred to an electronic observation matrix.

2.4 | Data analysis

We analysed 18 of the 34 fields in the observation matrix, and the information was converted into numerical variables. These covered demographics, when and why the complaint was made, the type of complaint, the complainant and any organizational supervision procedures put in place before the complaint was made. They also detailed any investigations, when the first and the last available decisions were made and the type and permanence of the decisions. We used SPSS Statistics® version 25.0 (IBM Corp, New York, USA) to produce descriptive statistics. Fisher's exact test was used to explore categorical variables, and frequencies and percentages were used to demonstrate statistically significant associations between the reasons for the complaints, the nurses' background factors and disciplinary decisions. Significance was set at $p < .05$.

2.5 | Ethical considerations

The study was approved by the Finnish National Supervisory Authority for Welfare and Health in October 2017, subject to a written agreement on the security and confidentiality of the data. The principles of good scientific practice were followed and respected during the data collection and when reporting the results.

3 | RESULTS

3.1 | Organizational supervision before the complaint

Most (81.4%) of the 204 disciplined nurses were female, with a mean age of 43.5 (range 25–61) years. The majority (82.4%) had been subject to supervision by their nursing directors, head nurses, nurse managers or staff nurses. About two thirds (67.6%) of the nurses had their contracts terminated. Other methods of organizational supervision included administrative conversations (55.9%) and investigating a nurse's ability to work (33.8%), written warnings (17.6%) and restrictions on the nursing tasks they could perform (11.8%). Most of the nurses (82.4%) needed social and health care services, such as substance abuse support services (54.4%). Half of them received support from occupational health care services (50.0%) and only a few an occupational safety service (2.9%) (Table 1).

3.2 | Disciplinary process from the complaint to the decision

3.2.1 | Complaints

The complaints that the authority received (Figure 1) were written (50.2%), oral (38.9%) or instigated by the authority (1.5%). The majority (95.1%) comprised one complaint and the rest (4.9%) comprised two or more complaints about the same case. Most (52.5%) came from an organizational administrator, nurse manager (17.2%) or police official or the judiciary (13.2%). Other complainants (16.2%) were the health care professional or organisation responsible for the nurse, such as a physician, a pharmacy, a social insurance institution or the nurse themselves. The complaints included issues such as substance use disorders or working under the influence (43.1%), stealing medicine (32.4%) and a reduced ability to work (14.2%). Other reasons (10.3%) included falsifying documents, being suspected of a crime, neglecting prior regulatory agreements and stealing patients' money (Table 1).

3.2.2 | Investigations

The authority requested an average of 15 investigations per case (range 1–73) about the nurse's professional competence, including reports from officials, physicians or other responsible health care professionals, employers, the social insurance institution, the police, a court or nurses themselves. Documents about the nurses' health, including their medical records, were also requested. In 45.6% of cases, the authority asked the nurse to undergo a health assessment. Just under half (48.0%) were the subject of a criminal investigation. Some nurses (12.3%) had been subject to previous disciplinary action, including requirements to inform the regulators where they were current working, paying attention or notices, restrictions or written warnings. (Table 2).

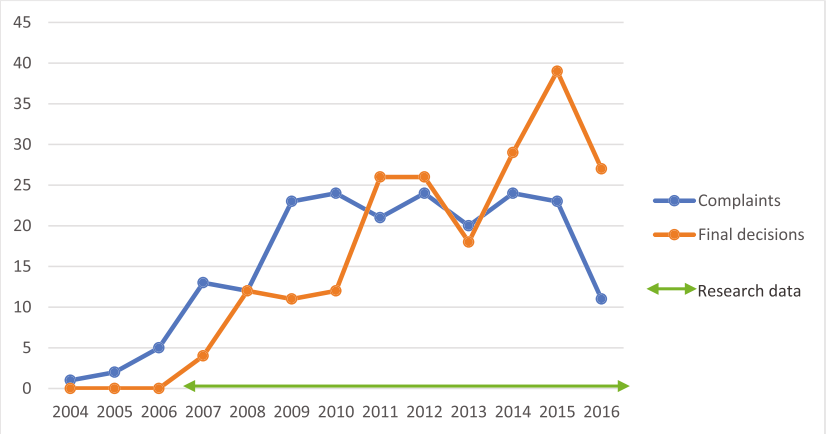
TABLE 1 Information about the complaints

	n	%	Mean	Range
Nurses age	204	100	43.5	25–61
25–34	39	19		
35–44	64	31		
45–54	75	37		
55–61	24	12		
Missing data	2	1		
Gender	204	100		
Female	166	81.4		
Male	38	18.6		
Type of the complaint	204	100		
Written	102	50.2		
Oral	79	38.9		
Other	4	1.5		
Missing information	19	9.3		
Organizational supervisory procedures based on the documents	168	82.4		
Terminate a working contract	138	67.6		
Administrative conversation	114	55.9		
Investigate nurses ability to work	69	33.8		
Written warning	36	17.6		
Restrict nursing tasks	24	11.8		
Notice	6	2.9		
Reported social and health care services	168	82.4	2.05	1–5
Substance abuse service	111	54.4		
Occupational health service	102	50.0		
Psychiatric service	77	37.7		
Social work service	14	6.9		
Occupational safety service	6	2.9		
Complainant	202	99		
Organizational administrator	107	52.5		
Nurse manager	35	17.2		
Policy or judiciary	27	13.2		
Other	33	16.2		
Missing	2	1.0		
Reason for the complaint	204	100		
Substance abuse	88	43.1		
Stealing medicine	66	32.4		
Reduced ability to work	29	14.2		
Other reason	21	10.3		

3.2.3 | Decisions

A total of 296 disciplinary decisions were issued for 204 RNs, and they had one to three decisions each. The 257 decisions were permanent (76.0%), temporary (49.5%) or indefinite (0.5%). One third (35.3%) had both a temporary and a permanent decision. Written warnings were issued in 63 (30.9%) cases: 39 were issued on their own, and they did not state whether they were temporary or permanent, and 24 were issued with other decisions. Nurse with just temporary decisions were younger than those with just permanent decision (39 vs. 45.3 years). Most received specified restrictions (41.7%) or were suspended from practising (40.7%), and almost one third (31.9%)

FIGURE 1 Frequency of the complaints and final decisions per each year ($n = 204$)



had their licences to practice revoked. In addition, the authority required for a nurse to report their current working place to them in 16.2% of the cases (Table 2).

The time it took to reach a final decision ranged from less than 1 to 64 months, and the mean time ranged from 3 to 21 months, depending on the type of decision. Suspensions took the longest time (Figure 2). We found that 33.3% of the initial decisions took less than a month from the complaint and 54.4% took less than 6 months. A quarter (24.5%) of the final decisions were delivered in under 6 months.

3.3 | Associations between the complaints and nurses' background factors and disciplinary decisions

We found that 10.3% of the 204 nurses who were accused of substance abuse and 27.5% of those who were accused of stealing medicines, faced a criminal investigation ($p < .001$). Just under fifth (17.2%) of the 204 nurses received a temporary decision ($p = .017$) because substance use was involved and 24.5% received a written warning ($p < .001$). When it came to terminating nurses' working contracts, there were no statistical differences between reasons for the complaints even though substance abuse was the most common issue (Table 2). Nurses who were suspended were more likely to be facing a criminal investigation (25.0%) ($p < .002$), had been working less than a year (19.6%) ($p < .002$) and had two or more employers (24.5%) ($p < .014$). We also found statistical significance between the 11.3% of the nurses whose licences were revoked and a criminal investigation ($p = .016$) and using social and health care services, such as substance abuse support (29.4%) ($p = .010$). Most of the licence revocations were permanent (31.9%) ($p < .001$), and temporary decisions were more likely to be suspensions (33.8%) ($p < .001$) (Table 3).

4 | DISCUSSION

This study produced new knowledge by exploring how a Finnish regulatory authority disciplined nurses, from the organizational supervision before the complaint, to the complaint to the authority, and its investigations and decisions. The organisations' roles and procedures were poorly identified in the decision documents and the disciplinary process was hard and lengthy, with far-reaching consequences for nurses. According to disciplinary decisions, a third of the nurses had been supervised by their organizations before the complaint was made. In addition, our results noted that some nurses had previous disciplinary procedures. The current cases covered their private and working lives, and some were also undergoing criminal investigations. Some nurses received temporary restrictions during the investigation and were able to continue working.

4.1 | Systematic structures for organizational supervision

The disciplinary decisions showed that organizational supervision varied, nurse managers has a central role in the process but very little detail was documented. In line with earlier studies, nurse managers had used a number of methods to tackle work-related problems (Aitamaa et al., 2019; Laukkanen et al., 2016). Our findings showed that the majority of these supervision procedures involved terminating the nurse's working contract. Nurse managers were guided by protocols that stated that they should terminate contracts when they were faced with serious issues, such as working under the influence or stealing medicine. However, they may not have had enough knowledge, experience, alternatives or systematic structures to handle these situations in other ways (Aitamaa et al., 2021; Kuntatyönantaja [Municipal Employer], 2021). This meant that nurses could still work elsewhere or faced unemployment with limited access to support services. Health care organisations should have systematic procedures in place and encourage nurse managers to observe problems (Cooper et al., 2014), report issues and help nurses to receive support (Green, 2019). We also need to determine whether existing protocols are adequate and widely disseminated and what support nurse managers need to deal with potential unprofessional conduct.

TABLE 2 Associations between disciplinary process-related factors and the reasons for the complaints

	Reasons for complaints								
	Substance abuse			Stealing medicines		Decreased ability to work		Other reasons	
	n (%)	88 (43.1)		66 (32.4)		29 (14.2)		21 (10.3)	
	204 (100)	*n* (%)	*p* value	*n* (%)	*p* value	*n* (%)	*p* value	*n* (%)	*p* value
Previous disciplinary actions	25 (12.3)	12 (5.9)	.669	7 (3.4)	.820	2 (1.0)	.541	4 (2.0)	.300
Social and health care services	168 (82.4)	75 (36.8)	.459	53 (26.0)	.695	25 (12.3)	.793	15 (7.4)	.221
Criminal investigation	98 (48.0)	21 (10.3)	<.001**	56 (27.5)	<.001**	7 (3.4)	.008**	14 (6.9)	.105
Authority's request for a health assessment	93 (45.6)	41 (20.1)	.887	32 (15.7)	.653	12 (5.9)	.839	8 (3.9)	.496
Termination of a working contract	138 (67.6)	66 (47.8)	.069	50 (36.2)	.110	9 (6.5)	<.001	13 (9.4)	.624
Type of decision	296								
Restriction	85 (41.7)	34 (16.7)	.567	31 (15.2)	.288	11 (5.4)	.839	8 (3.9)	.819
Suspension	83 (40.7)	29 (14.2)	.061	30 (14.7)	.363	13 (6.4)	.685	11 (5.4)	.348
Revocation	65 (31.9)	30 (14.7)	.649	16 (7.8)	.112	13 (6.4)	.132	6 (2.9)	.810
Written warning	63 (30.9)	50 (24.5)	<.001**	11 (5.4)	.002**	0 (0)	-	2 (1.0)	.025
Authority's requirement to report a working place	33 (16.2)	15 (7.4)	.848	12 (5.9)	.685	2 (1.0)	.180	4 (2.0)	.754
Permanence of decision	257								
Temporary	101 (49.5)	35 (17.2)	.017**	37 (18.1)	.232	16 (7.8)	.552	13 (6.4)	.257
Permanent (incl. indefinite)	156 (76.5)	66 (32.4)	.740	50 (24.5)	0.862	25 (12.3)	.240	15 (7.4)	.590

**Statistical significance, $p < .05$.

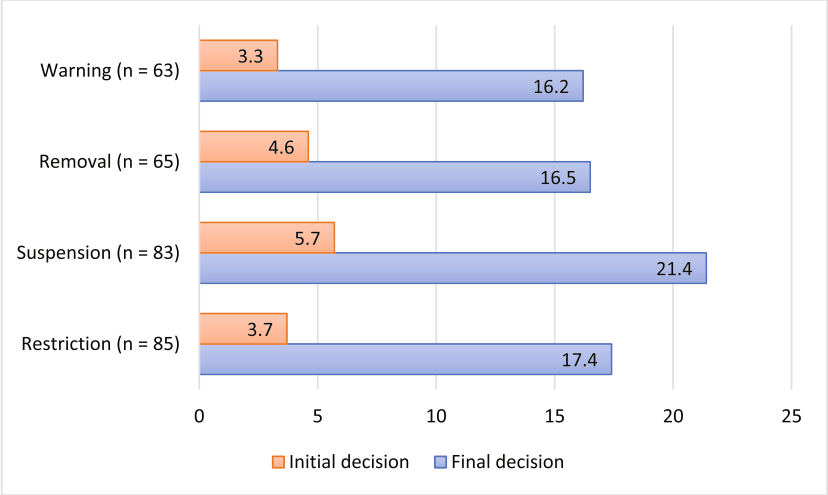


FIGURE 2 The mean time of the process according to initial and final decisions (months)

4.2 | Protecting patient safety

The regulatory authority received written and oral complaints when there were concerns about high risks to patient safety. The notifications were usually made by organizational administrators or nurse managers. Nurse managers could contact the authority about how to handle a situation or if they needed to know how the complaints procedure worked (Supervisory Authority for Welfare and Health, 2017). Numerous officials could raise concerns about public safety, as the complaints procedure could also be triggered by a police, judiciary or pharmacy representative. Different channels for making complaints are needed, but we also need to know more about nurse managers' perceptions of, and competencies for, notification and supervising.

Complaints were frequently about substance abuse or stealing medicine (Papinaho et al., 2021), in line with a previous study (Papinaho et al., 2019). Substance abuse problems have been common factors in disciplinary procedures as they pose a serious risk to patient safety (Azuri et al., 2014; Kunyk, 2015; Kunyk et al., 2016; National Council of State Boards of Nursing [NCSBN], 2011). Nurses with substance abuse or other work-related problems may need considerable support and ongoing care (Eisenmann, 2020; Kunyk & Deschenes, 2019; Tanga, 2011). As our results demonstrated, most of the disciplined nurses used social and health care services (82.4%) and half of them used substance abuse support services. We found that only half of the nurses received support from occupational health services, even though employers are responsible providing these (Ministry of Social Affairs and Health, 2001). Only a few nurses had mentioned to have an occupational safety service during the process. That meant that disciplined nurses who were undergoing disciplinary investigations may not have received enough support services and systematic models are needed to tackle this issue. In addition, it is important to address the roles that occupational health and safety services play in disciplinary process at an organizational level.

4.3 | How the investigation aimed to produce an overview of a nurse's life

The disciplinary decisions showed that the authority evaluated the nurse's professional competence and any safety risks they posed during the investigation phase. The results showed no systematic structure for what kind of information was collected, but investigations were legally required to establish the underlying facts (Finnish Ministry of Justice, 1994; Finnish Ministry of Justice, 2008). These could include obtaining wide-ranging, multiple reports about the patient care provided by the nurse and their ability to work (Finnish Ministry of Justice, 2008). This could be quite stressful for the nurse when their career and private life were both under scrutiny.

Disciplinary procedures have been shown to compromise a nurse's privacy (Cady, 2009), and the authority stated that almost half of the nurses had to undergo a health assessment. Sometimes, the first time that nurse managers became aware of an investigation was when the authority requested details of a nurse's professional competence. In addition, nearly half of the disciplined nurses faced a criminal investigation during their disciplinary case, mostly due to allegations of stealing or driving a car under the influence of alcohol or drugs.

4.4 | The final decision and the consequences

Our results confirmed earlier studies on the types of decisions (Azuri et al., 2014; Benton et al., 2015; Chiarella & Adrian, 2014; Eisenmann, 2020; Millbank, 2020). Half of the disciplined nurses received temporary initial decisions, and this was most likely to be a suspension. A previous study found that this tended to be due to serious infractions of professional conduct (Cady, 2009). We found that permanent licence revocations were most common in substance abuse cases, in line with an earlier study (Millbank, 2020). Most substance abuse, such as working or coming to work under the influence

TABLE 3 Associations between the disciplinary process factors and disciplinary decisions

	Types of decisions											
	n (%)	Restriction		Suspension		Revocation		Written warning		Requirement to report a working place	
	204 (100)	85 (41.7)	*p* value	83 (40.7)	*p* value	65 (31.9)	*p* value	63 (30.9)	*p* value	33 (16.2)	*p* value
Temporary	101 (49.5)	50 (24.5)	.033	69 (33.8)	<.001**	31 (15.2)	.765	17 (8.3)	<.001**	11 (5.4)	.057
Permanent (incl. indefinite)	156 (76.5)	70 (34.3)	.131	68 (33.3)	.135	65 (31.9)	<.001**	40 (19.6)	.007**	17 (8.3)	.001**
Social and health care services	168 (82.4)	72 (35.3)	.353	65 (31.9)	.262	60 (29.4)	.010**	55 (30.0)	.240	26 (12.7)	.618
Criminal investigation	98 (48.0)	46 (22.5)	.119	51 (25.0)	.002**	23 (11.3)	.016**	16 (7.8)	<.001**	17 (8.3)	.706
Earlier criminal history	37 (18.1)	13 (6.4)	.464	20 (9.8)	.095	14 (6.9)	.437	11 (5.4)	1.000	4 (2.0)	.460
Previous disciplinary actions	25 (12.3)	11 (5.4)	.829	6 (2.9)	.084	8 (3.9)	1.000	7 (3.4)	.821	4 (2.0)	1.000
Nurse's working career											
<1 year	74 (36.3)	30 (14.7)	.765	40 (19.6)	.002**	27 (13.2)	.196	18 (8.8)	.109	8 (3.9)	.123
≥1 year	116 (56.9)	80 (39.2)		36 (17.6)		31 (15.2)		60 (29.4)		21 (10.3)	
Employer											
1	57 (27.9)	30 (14.7)	.098	17 (8.3)	.014**	14 (6.9)	.161	20 (9.8)	.141	14 (6.9)	.021**
≥2	108 (52.9)	41 (20.1)		50 (24.5)		39 (19.1)		25 (12.3)		11 (5.4)	

**Statistical significance, $p < .05$.

of substances, resulted in a written warning, in common with an earlier study (Hudson & Droppers, 2011). The authority could also monitor and control where a nurse was working while a disciplinary issue was being investigated, by making it a requirement for them to notify the authority of their current employer.

Disciplinary actions could also restrict nurses by requiring them to be supervised by a colleague and control the medication they could administer or the nursing tasks they could perform (Finnish Ministry of Justice, 1994; Hudson & Droppers, 2011). Nurse managers and colleagues should be made aware of the authority's restrictions, but this can be difficult, due to privacy policies. Restrictions relating to administrating medication can be effective but can also be visible and attract criticism of the restricted nurse (Hanson & Haddad, 2021; Martyn et al., 2019).

4.5 | Disciplinary processes and their far-reaching effects

Previous studies have provided little information about how long disciplinary processes lasted, and our finding suggested they could take years. Initial decisions were taken quite quickly if there was a serious risk to patient safety and then the authority carried out more detailed investigations into the nurse's professional competence and the actual risk to patient safety (Finnish Ministry of Justice, 1994; National Supervisory Authority for Welfare and Health in Finland, 2019). Nurses may try to avoid detection, because they feared disciplinary action, and this allowed possible dangerous practices to continue (Monroe & Kenaga, 2011). Disciplinary action may be intended to protect the public, but nurses struggle with the stigma of being blamed (Kunyk, 2015; Livingston et al., 2012). Studies have identified that censure can be a barrier to a nurse's recovery and some can be reluctant to disclose a problem as they are worried about the possible consequences (Eisenmann, 2020). These can include losing their licence to practice, their professional identity and their ability to earn a living (Johnstone & Kanitsaki, 2005). The disciplinary process also poses possible dangers for patients if nurses work for long periods of time while being monitored by the authority and their professional conduct declines (NCSBN, 2011). Our results showed that when nurses finally received sanctions, after being under investigation for months or years, this could affect their ability to work and have permanent consequences for their nursing career.

Disciplinary processes affect all those involved, including the nurse managers who supervise nurses and their colleagues. We also wonder how many unprofessional conduct cases go undetected. Colleagues play an important role in reporting risky behaviour (Pohjanoksa et al., 2019) or supporting colleagues, but it is normally organizational administrators who complain to the authorities. In addition, nurse managers cannot know every employee in their unit well. That is why more specific knowledge is needed about organizational supervision, self-regulation and how to intervene.

4.6 | Limitations

The study limitations relate to the document analysis research method. Nurses could have undergone several separate disciplinary processes over the 10-year study period, which may have led to data bias, including demographic variables (Rasmussen et al., 2012). Also, the documents were not designed for research use and may not have included full or accurate information. For example, only one third of the nurses were reported to have had some earlier organizational supervision, even though the real frequency was clearly higher, and details of support services were not systematically collected and reported in the decision documents.

5 | CONCLUSION

This study confirmed earlier studies on the types of disciplinary actions at the national regulatory authority's level and compared with previous studies demonstrated a disciplinary process as a whole. The role of the nursing management, and the procedures that were implemented when Finnish nurses were suspected of unprofessional conduct, varied during the disciplinary process, according to the authority's decision documents. That is why further empirical research is needed. A structured model for reporting and registering organizational supervision would support nurse managers to handle practice-related problems better. It was clear from our study that some working contracts were guided to be terminated without consideration for other options. However, it was unclear how common organizational supervision was, when it was used or whether nurse managers had enough knowledge to make a notification and intervene and supervise when nurses were suspected of unprofessional conduct.

In addition, there needs to be more systematic communication between the regulatory authority and employers, including a structured model for sharing information. Our study raised issues about the need for effective and organized support for disciplined nurses. Receiving sanctions after being under investigation for a long period of time can harm a nurse's ability to work and permanently affect their career. It is also unclear how patient safety is affected while cases are being investigated.

5.1 | Implications for nursing management

Disciplinary processes affect nurses' careers and lives, and they should be humanely treated and receive support from their colleagues and nurse managers at this difficult time. It is important that nurses, and their colleagues and nurse managers, are more aware of disciplinary processes and that everything is done to retain nurses, due to the serious global shortage of nursing professionals. More attention needs to be paid to effective organizational supervision and support for nurses who are undergoing disciplinary procedures.

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CONFLICT OF INTEREST

The authors have no conflicts of interest declare.

ETHICS STATEMENT

The study was approved by the Finnish National Supervisory Authority for Welfare and Health in October 2017, subject to a written agreement on the security and confidentiality of the data.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Oili Papinaho https://orcid.org/0000-0002-5133-2801
Arja Häggman-Laitila https://orcid.org/0000-0003-2013-173X
Miko Pasanen https://orcid.org/0000-0002-1637-5064
Mari Kangasniemi https://orcid.org/0000-0003-0690-1865

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ORIGINAL ARTICLE

WILEY

Factors contributing to burnout among nurses at a district hospital in Namibia: A qualitative perspective of nurses

Daniel Opotamutale Ashipala RN, BNSc, MNSc, Senior Lecturer | **Tuyenikelao Muudikange Nghole RN, Chief Health Programme Administrator**

Department of General Nursing Science, School of Nursing and Public Health, Faculty of Health Sciences and Veterinary Medicine, University of Namibia (UNAM), Rundu, Namibia

Correspondence
Daniel Opotamutale Ashipala, Department of General Nursing Science, School of Nursing and Public Health, Faculty of Health Sciences and Veterinary Medicine, University of Namibia (UNAM), PO Box 88, Kaisosi Road, Rundu, Namibia.
Email: dashipala@unam.na

Abstract

Aim: The aim of this study was to explore and describe the factors that contribute to burnout among nurses.

Background: Burnout remains one of the major occupational health problems, posing risks to human health globally. In Namibia, there has been growing public criticism of nurses, stating that they are rude or act in a manner that does not show professionalism towards their clients. Reasons for such unprofessional behaviour could be linked to negative attitudes on the part of nurses towards their clients, resulting from burnout syndrome.

Method: A qualitative, exploratory, descriptive and contextual research design was followed as the basis for conducting the study. Using a purposive sampling technique, a sample of 20 nurses was selected from a population of 69 nurses employed in this setting. This sample size was determined by the saturation of data as reflected in repeating themes. Data were collected using individual semi-structured interviews and were analysed using qualitative thematic analysis.

Results: The following three themes emerged: understanding the concept of burnout, factors leading to burnout and creating a conducive environment as a corrective measure to address burnout and to advance nurses.

Conclusions: Burnout is indeed real and affects nurses' performance negatively. Burnout has a negative impact on the well-being of nurses both physically and emotionally, which has the potential to compromise staff performance, productivity and the quality of patient care. Burnout among nurses is linked to many stressors such as poor staff management, inadequate resources, lack of support and lack of wellness programmes in the workplace.

Implications for Nursing Management: Strengthening communication between frontline health workers and management by engaging and involving them more in decision making in matters that concern them is anticipated to address poor staff management, enhance staff performance and improve the quality of patient care.

[Correction added on 13 June 2022, after first online publication: the ORCID IDs of authors Daniel Opotamutale Ashipala and Tuyenikelao Muudikange Nghole have been added to this version.]

Staff wellness programmes in the workplace are believed to be a good coping mechanism to address work-related pressure and tensions, and they are believed to resolve some work-related stress that may result in increased staff productivity.

KEYWORDS
burnout, contributing factors, management, nurses, staff productivity, thematic analysis

1 | BACKGROUND

Burnout remains a major occupational health problem, posing risks to human health globally. Nursing is a stressful profession that deals with human aspects of health and illness and can ultimately lead to job dissatisfaction and burnout. The profession is not only physically demanding as it deals with human health and functions but also necessitates the use of mental energy and leads to mental exhaustion when one is continuously exposed to stressful events and situations. This mental exhaustion is what partly defines burnout (Lambert et al., 2018; Moukarzel et al., 2019). Burnout is a condition of emotional exhaustion, depersonalization and low personal accomplishment that can occur among individuals who work with people in some capacity (Zhang, 2018). The emotional exhaustion component is characterized by loss of emotional resources and energy, lack of enthusiasm, frustration, tension and fatigue. The depersonalization component represents the interpersonal relationships that lead to a negative interaction, and the sense of low personal accomplishment refers to feelings of incompetence (Karthik et al., 2019). Generally speaking, burnout can occur as a result of the presence of job demands like work overload, prolonged working hours, nurse–patient ratio imbalance, role conflict, lack of fairness, conflict in values and job resources such as a lack of social support from colleagues or management, lack of feedback, and poor participation in decision making (Ren et al., 2020). Burnout represents a high cost to workers and their institutions and appears to be more common in developing than in developed countries (Shanafelt et al., 2020). The World Health Organization (WHO) recently declared burnout as an "occupational phenomenon" in the International Classification of Disease 11th revision (ICD-11), recognizing burnout as a serious health issue worldwide (Woo et al., 2020). Other evidence also suggests that burnout in nurses is high across specialties and countries (Ling, 2019). Globally, the overall prevalence of burnout among nurses is 11.23%, but significant differences have been noted between geographical regions and specialties. The sub-Saharan African region had the highest burnout symptom prevalence rate, whereas Europe and Central Asia region had the lowest (Woo et al., 2020). A systematic review conducted in sub-Saharan Africa showed that the prevalence of burnout among nurses was 33% (Owuor et al., 2020). Some of the consequences of job burnout are absenteeism, low morale or personal deterioration, stress, anxiety, psychosomatic complaints, sleep disturbances and poor organizational commitment (Torun & Cavusoglu, 2018). Burnout not only affects physical and mental abilities but also affects the individual's health (Fradelos et al., 2019). Therefore, the identification and prevention of burnout play an important role in improving the quality of services provided (Bakker & Costa, 2021).

Nurses experience high levels of burnout because of a high workload, and because nurses are always in contact with sick patients, they are easily exposed, infection that can cause work-related health problems (Gil-Monte et al., 2020). Burnout levels range between 10% and 70% among nurses, and burnout has become a common issue among health care workers, which can affect the quality of care provided to patients (Lyndon, 2018). Some of the factors that lead to burnout in the nursing profession include work-related stress that is caused by high job demands, overtime work, shortage of staff and lack of resources (Khamisa et al., 2019).

2 | THE AIM OF THE STUDY

The aim of the study was to explore and describe factors that contribute to burnout among nurses.

3 | METHODS

3.1 | Research design

A qualitative, exploratory, descriptive and contextual research design was followed asthe basis for conducting the study. The ultimate point of departure for researchers to use qualitative study for this research was because it allowed descriptions and provided an in-depth understanding of human experiences from the stance of research participants (Brink et al., 2018). The descriptive design was appropriate because it allowed researchers to describe the phenomenon (Polit & Beck, 2017), which was the factors contribution to burnout among nurses at the selected district hospital. The use of an explorative design was aimed at exploring key issues to gain greater insight into the factor's contribution to burnout among nurses, therefore building a new understanding (Maree, 2018). One of the features of qualitative research is that it is naturalistic and context based, so it is centred around natural settings where interactions occur (Maree, 2018). This is because a phenomenon experienced in the research population is unique to their context, and therefore, the factors contribution to burnout among nurses was understood from the context of burnout among nurses at a specific district hospital, which makes this research a contextual design.

3.2 | Population, sample and setting

Population in this study composed of nurses working at Gobabis District Hospital in Omaheke region. According to the records of Gobabis Hospital staff compliment of 2020, there were 69 nurses (both enrolled and registered nurses) in Gobabis Hospital. In this study, purposive sampling technique was used to select participants in this study. Purposive sampling allows the researcher to select participants who possess certain traits or qualities (Polit & Beck, 2017). The inclusion criteria in this study were as follows: (1) a registered or enrolled nurse working at Gobabis hospital for at least more than 1 year, (2) willing to participate by signing an informed consent and (3) available at the time of data collection. The study was conducted at Gobabis Hospital, which is situated in the town of Gobabis in the Omaheke region. Gobabis lies about 200 km west of Windhoek, and the hospital has a 172-bed capacity and 69 nurses serving a population 86,709, which translates to a nurse–patient ratio of 1:1,257. During the day shift, two to three nurses work one shift on average, while during the night shift, only one enrolled nurse is on duty per shift in each department except for the maternity ward where three nurses (two enrolled and one registered nurse) work on each shift. If a nurse fails to turn up for any reason, the next available nurse will be called for overtime, or the one on duty will extend their shift for at least 6 h or more. This extreme heavy workload has the potential to cause unproductivity and burnout on the part of nurses. Additionally, the efficiency and effectiveness in the implementation of activities are likely to be poor, and quality of service delivery is compromised. The Namibian health care sector includes specialized medical care, primary health care and the private sector (Ministry of Health and Social Services, 2020).

3.3 | Data collection

In this study, the data were collected by the researcher using semi-structured individual interviews with all categories of nurses who met the study criteria ($N = 20$). Data were collected in November 2020 at Gobabis District Hospital across different departments, namely, outpatients/casualty, paediatric and maternity, as well as the male and female wards and high care. After initial contact with the nurses selected according to the sampling criteria for this research, informed consent was obtained to tape record the interviews. The date, time and place of the interview were duly confirmed. Interviews were conducted by the researcher in a quiet place, and the participants were made comfortable. The interview session lasted for approximately 40–45 min, making use of an interview guide. During the interview, the researcher took fields notes and used follow-up questions to probe for a more detailed exploration. Interviews were conducted until data saturation was reached. In this study, data saturation was reached at the 20th participant. These immediate impressions provided valuable context for data analysis. Prior to data analysis, the field notes were combined with the transcribed interviews to give insight into the situation during the interview. Additionally, individual interviews were tape recorded with the permission of the participants. The main question posed during the interviews included the following:

- What are the factors contributing to burnout among nurses at Gobabis District State Hospital in Namibia?
- What recommendations can be made to the district hospital management team to address burnout among nurses at Gobabis Hospital?

3.4 | Data analysis

In the study, the researcher listened to the audio recordings of all the interviews several times before transferring the audio file to text. The content analysis has been used to analyse the narrative data and, according to Daniel (2018), started with coding, a process that involves reading the data, breaking them down into subparts, and giving labels to that part of the text. Text labelling served as a path for the researcher to identify common data similarities and differences in text format. Where similarities existed, they were grouped and coded as the same theme, from a broader too narrower perspective, before drawing conclusions.

3.5 | Rigour

The trustworthiness of the entire study was assessed using the criteria proposed by Lincoln and Guba (1985), namely, criteria relating to the credibility, transferability, dependability and confirmability of the study.

Credibility was achieved through prolonged engagement, with the researcher spending a month in the clinical setting in which the research was conducted. Both individual interviews and field notes were used as methods of data collection. In addition, member checking was done with the researchers constantly checking their findings with the participants and comparing them with the literature control. Transferability was achieved through dense description that included a comprehensive description of the methods, including illustrative direct quotes of participants. Dependability was achieved in this study as an audit trail was kept and is available on enquiry. The transferability of this study was achieved by means of a confirmability audit done by an independent expert researcher.

3.6 | Ethical considerations

The Committee of Research Ethics of the School of Nursing approved this study prior to data collection. The ethical clearance reference number is SoNREC No 87/202 (Decision Date: 17.12.2020, Reference No: 87/2020) and Ministry of Health and Social Services institutional and review board (Decision Date: 22.01.2021, Reference No 17/3/3TMN). Throughout the study, the

researchers' conduct was guided by the following ethical principles: beneficence, non-malfeasance, confidentiality, privacy, anonymity, justice, informed consent and autonomy. The participants signed to indicate informed consent prior to data collection, and data were accessible only to the two researchers involved in the study. The participants were assured of privacy, anonymity and confidentiality, as well as their right to terminate their participation in the study at any point without having to explain themselves or receiving penalties for doing so.

4 | RESULTS

4.1 | Demographics of the nurses

Participants in this study included 20 nurses in total from Gobabis Hospital, of which 10 were registered nurses and 10 were enrolled nurses. The pilot study included two participants from Epako Clinic of which one is a nurse manager. Participants' ages ranged between 25 and 56 years. Their years of work experience ranged from 1 year and 6 months to 29 years. The were 15 females and five males. Table 1 summarizes the demographic data of the participants.

4.2 | Presentation of findings

The three themes that emanated from the data (as indicated in Table 2) are as follows: understanding the concept of burnout; factors leading to burnout; and creating a conducive environment as a corrective measure to address burnout. Table 2 summarizes the study results that are presented in the form of themes, subthemes, codes and participants' comments.

TABLE 1 Characteristics of the participants

Characteristic		Total
Age	18–28 years	7
	29–39 years	3
	40–50 years	8
	Above the age of 50	2
Gender	Male	5
	Female	15
Marital status	Single	14
	Married	6
Working experience	1–10 years	5
	10–20 years	12
	20–30 years	3
Rank	Nurse managers	6
	Registered nurses	9
	Enrolled nurses	5

TABLE 2 Summary of findings

Themes	Subthemes
Understanding the concept of burnout	Staff under pressure
	Equipment insufficient
	Influx of patients
	Self-identity undermined
Factors leading to burnout	Overwhelming number of patients
	Placement of patients
	Lack of necessities aggravating
	Poor management and communication
	Training unstandardised
	Budgeting controlled on national level
	Shifting responsibilities
	Domestic circumstances
Creating a conducive environment as a corrective measure to address burnout	Employment of more staff
	Improving management
	Much-needed increase in funding.
	Procurement of items beforehand
	Saving lives

4.3 | Theme 1: Understanding the concept of burnout

This theme is a description of the way the participants understood the concept of burnout based on their working experience. All participants seemed to have a basic understanding of the concept and how it is linked to their work environment. The descriptions given are based both on personal experience and participants' understanding of the concept of burnout in general.

4.3.1 | Staff under pressure

Participants described burnout as working under pressure in a high workload environment on a daily basis. Participants stated that they work under pressure in district hospitals because of the high nurse–patient ratio, resulting in high patient load.

> Most nurses have high workload as they work alone in their wards due to staff shortage. (P1, 25 years, male)

> Patient–nurse ratio, in Gobabis, or Omaheke is unequal. A patient and staff ratio, one staff is catering

for 30–40 patients per day at casualty. (P3, 45 years, female)

4.3.2 | Equipment insufficient

During the interview, one participant ascribed burnout to insufficient equipment in the hospital setup, adding that the lack of equipment put pressure on nurses, driving them to stress and burnout.

> Equipment for nurses to do their work is not enough and it is shared at least between four wards like paediatrics, male, female and high care. (P5, 26 years, male)

4.3.3 | Influx of patients

The study results show that patients who receive services at Gobabis Hospital exceed the expected number on a daily basis. The participants believed that the high influx of patients in the hospital leads to overcrowding, causing emotional exhaustion for nurses because they must deal with a large number of patients when they are few on duty.

> Burnout could be that fact that nurse is overworked or overloaded that they end up working out of their scope of practice. (P2, 30 years, female)

4.3.4 | Self-identity undermined

Participants understood how their minds and bodies function. They can identify when their bodies and minds are exhausted. They feel that sometimes supervisors do not take the time to listen to them when they report to them and when they are exhausted, overloaded and stressed out. In addition, nurses are not always involved in decisions that concern their working arrangements.

> I understand burnout as physical and emotional exhaustion that involves sense of loss of accomplishment and identity. (P4, 34 years, female)

> When someone is emotionally, physically or mentally tired. Contributes to a prolonged state of stress. (P8, 50 years, female)

4.4 | Theme 2: Factors leading to burnout

This theme describes how participants understood the factors leading to burnout. The subthemes that emerged from the discussions with participants include the overwhelming number of patients, the placement of patients and the lack of equipment.

4.4.1 | Overwhelming number of patients

In this study, participants revealed that the Omaheke staff establishment (including that of Gobabis Hospital) has not been revised or reviewed since 2003. Although the Omaheke regional population has increased annually, participants said that the number of nurses remained the same. In this context, participants stated the following:

> Other region was given additional staff after 2003 but Omaheke was excluded, that was around 2009. It is always being disadvantaged because it has one district and one region. (P4, 34 years, female)

> Maybe they only look at the population and not at activities nurses are doing. (P6, 32 years, female)

> While you balance your ward, all of a sudden you hear one of your staff is booked off. While you are maybe supposed to be five on duty, you will find that you are only two. In addition, workload becomes more for two people that are at work. (P9, 56 years, male)

4.4.2 | Placement of patients

Participants in this study indicated that the inpatient admissions are beyond the hospital capacity. In relation to their experiences, they narrated how patients are admitted to wards where all the beds are already occupied, which they say results in patients sleeping on mattresses. One of the participants remarked as follows in this regard:

> Some patients require special care but due to lack of admission beds they end up being nursed from different departments. (P4, 34 years, female)

4.4.3 | Lack of necessities (equipment, stationery and supplies)

The study revealed that a shortage of materials and equipment is one of the major forces driving nurses in Gobabis Hospital to burnout. Participants identified a lack of equipment and supplies such as beds, linen, oxygen face masks, thermometers and blood pressure machines, among others, as a factor contributing to burnout among nurses. This is evident from one of the participants who narrated the following:

> Nurses buy equipment such as blood pressure machines, thermometers, batteries, light bulbs and take work equipment for servicing using their own money. (P9, 56 years, male)

4.4.4 | Poor management and communication

The study found that there is poor communication between the nurses and hospital management, which contributes to stress and burnout. Participants stated that hospital management lacks an open-door policy that would allow for consultation and staff involvement in decision making. Study participants shared their experience of not being involved in decision making on critical issues that directly concern them. One participant had the following to say in this regard:

> The management is not good, and the matron is not attending to the staff problems or if he/she cannot really understand what nurses are going through at ward level can be painful to the staff members. The management may not have that good experience of how to run the things. (P7, 38 years, male)

4.4.5 | Training unstandardized

Participants acknowledged the need for continuous professional development for every nursing professional. The interviews revealed that nurses in Gobabis Hospital are not equally exposed to training opportunities despite working with the same programmes. Participants believed that nurses should be given equal chances to attend training. Participants mentioned that only some individuals are nominated for training while others must learn in the process of doing. In addition, those who received formal training do not give feedback to others.

> Lack of in-service training, e.g., Ministry programmes to be done by some individuals that are taken to run the programmes and those people when they are conducting workshops and in-service training, they do not come and train others. One person cannot run the programme alone. He should train one or two people to help reduce the workload on you. (P11, 40 years, female)

4.4.6 | Budgeting controlled at national level

The study results show that although the Omaheke region budgets for its needs, including those of the hospital, participants felt that management has little influence in controlling spending. They say the budget is controlled from national level with the region being allocated portions of money to spend on different votes on a monthly basis, but the monthly allocation is not done in consultation with the region. Accordingly, although the region may have planned to spend money on a certain activity, the amount allocated for that month may not be sufficient.

> The budgeting is done but the budget is controlled from national level because they are the one putting money on regional votes on monthly bases and the money, they release monthly is not enough for what is supposed to be paid. (P14, 44 years, female)

> When you order from the district to the region you will be told there are no funds to procure the needed equipment and it is really frustrating, staff are forced to buy equipment. (P10, 29 years, male)

4.4.7 | Shifting responsibilities

Participants stated during the interviews that registered nurses are forced to supervise others and oversee their respective departments simply because there are no senior nurse positions within the hospital structure. There is only one senior registered (nurse manager) who oversees the entire hospital, something that participants feel forces the hospital to delegate registered nurses to take up administrative and supervisory duties, even supervising those of the same rank, besides their primary duties of patient care.

> There are no vacancies for senior positions in staff establishment at ward level. It is difficult to decide that this one should be the supervisor to others while they are both grade 8. (P13, 27 years, female)

> There are no department managers. You are put to work your normal hours which is 8–5, 7–7, AM or PM. And at time you are off during the week and when you come back you find things not done, drugs are not recorded but if there is a unit manager, that person actually from Monday to Friday can do supervision and staff management to improve staff adherence to work and services provision. (P16, 51 years, female)

4.4.8 | Domestic circumstances

During the interviews for this study, the participants admitted exposure to social stresses relating to relationships, family relations and alcohol and drug abuse. Such exposure affects nurses negatively and also has an effect on the colleagues they work with. Accordingly, social factors affect the performance of the individual nurses. Participants believed that at times nursing supervisors were not doing enough to find out what nurses are going through outside the workplace.

> Social issues whereby their social interaction outside work setting, which the management may not know what the person is going through being at home or at

areas they associate, and they may come with stress to work. This creates stress for the next person that they are working together with and duplicate the work burden. (P12, 41 years, female)

Lack of leisure time such as sport clubs where nurses can share their challenges and relax their minds. Lack of praising of departments. (P15, 52 years, female)

4.5 | Theme 3: Creating a conducive environment as a corrective measure to address burnout

This theme investigated the recommendations participants would like to make to Gobabis Hospital, the Ministry of Health and individual staff members to reduce burnout among Gobabis Hospital nursing staff and help individuals experiencing burnout to respond better. Participants had an opportunity to give their recommendations and propose strategies to address and reduce burnout in their workplace.

4.5.1 | Employment of more staff

Study participants recommended the recruitment of more staff at both operational and supervisory level to reduce workloads by increasing manpower in the system. Furthermore, they urged the management to revise the current regional staff establishment, thus creating new nurse positions at the departmental and supervisory levels.

The hospital management especially the matron to increase staff capacity at ward level to relieve the burden. (P18, 31 years, female)

Employment of more staff to reduce staff patient ratio from 30 to 15, which a nurse can see productively per day. (P20, 55 years, female)

4.5.2 | Improving management

The study participants recommended that nurse managers should be more flexible, sensitive and understanding with their subordinates when they open up to them for support. Participants further recommended that management open their doors to staff members and engage them more in discussions to hear their opinions and involve them in decision making.

Yeah, one of the things I would like to add is the engagement between management and the nurses. Because if our management engage our nurses and try to find out how comfortable they are in the setting where they are. (P19, 38 years, female)

4.5.3 | Much-needed increase in funding

The study participants recommended that additional funding be provided for the training of staff to increase capacity building and improve standard practices across departments. An increase in budget is recommended for buying equipment and stationery and increasing staff recruitment.

Increasing the number of nurses and training. (P17, 40 years, female)

Avail more funds for in-services training for nurses. (P3, 28 years, male)

4.5.4 | Procurement of items beforehand

The study participants recommended that funding be increased to enable the directorate to purchase much-needed equipment, stationery and supplies. They further recommended that equipment be procured in advance and enough stock kept on hand, and not to start the procurement process the day nurses place their orders with the storeroom and items are not in stock.

Procure more items beforehand not to wait until you are left with one item or only order when there is a complaint. (P7, 52 years, female)

Admin should ensure that needed equipment should be made available. (P1, 37 years, male)

Discuss equipment shortage with other managers in the meeting. (P10, 53 years, male)

4.5.5 | Saving lives

Among other things, participants recommended that all nurses be given an equal opportunity to attend and receive training in different programmes within the health system. Participants further advocated for the availability of basic lifesaving medication in the hospital, ambulances to transport emergencies from one point of care to another, lifesaving equipment and skilful human personnel.

Ensure the availability of all medications and equipment for staff to easily carry out their activities. (P5, 39 years, female)

Sometimes you do not know how to treat your client to save their live, Avail a doctor and ambulance at the clinic. (P16, 47 years, male)

5 | DISCUSSION

The study described the way the participants understood the concept of burnout based on their working experience. The study has shown the participants' understanding of burnout as being in line with that of Pieters and Matheus (2020), who in their definition explain that burnout is a result of being exposed to unpleasant stressful work environments for a long period of time. Similarly, WHO (2019) further define burnout syndrome as occurring as a result of chronic stress at work and is characterized by emotional exhaustion, depersonalization and low professional accomplishment. This agrees with the findings of this study in which participants highlighted that burnout can occur when nurses work outside their scope of practice, which according to participants leads to physical tiredness, prolonged stress, poor concentration and poor productivity (Pieters & Matheus, 2020).

Importantly, high workload, high patient inflow, limited resources and staff absenteeism formed part of the concept of burnout in this study. Self-confidence is an important component that every nurse logically should have in dealing with incivility from supervisors and it is also important for building and maintaining teamwork to deliver effective and quality patient care. If management does not acknowledge the concerns of frontline workers, patient care may be compromised (Denning et al., 2021).

During the interviews, various factors that lead to burnout among nurses were identified based on the participants' experiences. The study found that an unconducive environment, a high workload (high patient–nurse ratio) and the lack of needed equipment are among the factors contributing to burnout in nurses at Gobabis Hospital. These results are similar to those of a study conducted by Holdren et al. (2018), which showed that poor working environments and an increased nurse–patient ratio have contributed significantly to burnout syndrome in hospital nurses. Similarly, a study done in South Africa by Roomaney et al. (2018), among a nursing population, concluded that burnout was associated with high workload and lack of support. This is further supported by a Namibian study done by Pieters and Matheus (2020), who found anxiety, insomnia, workload and social dysfunction to be predictors of emotional exhaustion.

Participants narrated how frustrating it is for them to work without the necessary resources to meet their expectations. Medical equipment is very important in diagnosis and progress monitoring and some is used for patient treatment. Therefore, the absence of needed equipment leads to poor patient care, hampering service delivery and in turn frustrating health care workers. This is supported by Thakur (2020), who, in his study, found that medical supply shortages were significantly associated with emotional exhaustion and depersonalization.

Lack of communication may result in the poor coordination of services within a health system O'Daniel and Rosenstein (2008). Poor communication between frontline nurses and management is found to be one of the factors contributing to burnout. In addition, poor staff engagement is another identified factor alongside task shifting without capability assessment and proper training to ensure skills development (WHO, 2019). A study done on paediatric nurses has shown that a lack of real meaningful guidance regarding work-related activities can lead to frustration and ultimately burnout (Bilal & Ahmed, 2018). Study participants also indicated that nurses are rotated between different departments on a monthly basis without the supervisor doing one-on-one assessments to find out how confident they are to work in their new environment. This causes stress as some nurses' lack skills in certain areas, such as rendering emergency care to a patient in casualty. Staff members feel left out and not part of the system when they are not consulted on the decisions that concern their work, resulting in them losing interest and contributing to unnecessary absenteeism. However, this was disputed in a study conducted by Meinia (2021), which found that job rotation inspires nurses to achieve higher performance, allowing continuous growth at work, extended knowledge and skill, and increasing clinic patient caretaking quality (Meinia, 2021).

In their study, Kowalczuk et al. (2020) mentioned that the absence of nurses for health reasons results in an additional workload for their colleagues remaining in the workplace, adding that staff shortages mean that nurses replace absent workers, resulting in excessive workloads or additional on-call time. Kowalczuk et al. (2020) further state that sometimes they (the colleagues remaining in the workplace) stay in the hospital and fill the shortage of staff on the next shift immediately after working one duty shift. They do this either out of an inner sense of responsibility that does not allow them to leave patients unattended, or they use it as an opportunity to gain extra remuneration. Additional duties naturally contribute to an increase in the workload, which, in turn, has an effect on burnout and thus creates a cyclical self-perpetuating mechanism.

6 | LIMITATIONS

This study only explored the experiences of Gobabis Hospital nurses of burnout syndrome based on their real-life experiences while working at Gobabis Hospital. This means that the findings cannot be generalized to other hospitals within Namibia and globally. Furthermore, the geographical location of the research site may pose different challenges that are unique to the region.

7 | CONCLUSION

In conclusion, excess workload results in stress that leads to burnout among nurses. Burnout among nurses is linked to many stressors such as poor staff management, inadequate resources, lack of support and lack of recreational facilities. Burnout has a negative impact on nurses' well-being, both physically and emotionally, which is likely to compromise performance, productivity and the quality of patient care. Additional duties naturally contribute to an increase in the workload, which in turn has an effect on burnout and thus creates a cyclical self-perpetuating mechanism. Further research exploring specific strategies for managing stress and improving job satisfaction may reduce

the impact of burnout on the general health of nurses, while also minimizing absenteeism and turnover. This could be achieved through evidence-based policies aimed at creating better work environments, in which nurses feel more secure and have adequate resources to successfully perform their jobs, hence improving their health outcomes as well as those of their patients.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

Strengthening communication between frontline health workers and management by engaging and involving them more in decision making in matters that concern them is anticipated to address poor staff management, enhance staff performance and improve the quality of patient care. Staff wellness programmes in the workplace are believed to be a good coping mechanism for work-related pressure and tensions, resolving some work-related stress and, thus, resulting in increased staff productivity.

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CONFLICT OF INTEREST

None.

ETHICS STATEMENT

The Committee of Research Ethics of University of Namibia ethical clearance reference No SoNREC No 87/202 (Decision Date: 17.12.2020, Reference No: 87/2020) and Ministry of Health and Social Services (Decision Date: 22.01.2021, Reference No 17/3/3TMN). Throughout the study, the researchers' conduct was guided by the following ethical principles: beneficence, non-malfeasance, confidentiality, privacy, anonymity, justice, informed consent and autonomy. The participants signed to indicate informed consent prior to data collection and data were accessible only to the two researchers involved in the study. The participants were assured of privacy, anonymity and confidentiality, as well as their right to terminate their participation in the study at any point without having to explain themselves or receiving penalties for doing so.

AUTHORS CONTRIBUTIONS

Study conception and design: Daniel Opotamutale Ashipala and Tuyenikelao Muudikange Nghole. *Data collection*: Tuyenikelao Muudikange Nghole. *Data analysis and interpretation*: Tuyenikelao Muudikange Nghole and Daniel Opotamutale Ashipala. *Drafting of the article*: Daniel Opotamutale Ashipala. *Supervision*: Daniel Opotamutale Ashipala. *Validation*: Daniel Opotamutale Ashipala. *Writing – review & editing*: Daniel Opotamutale Ashipala. All authors have read and approved the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, DOA, upon reasonable request.

ORCID

Daniel Opotamutale Ashipala https://orcid.org/0000-0002-8913-056X

Tuyenikelao Muudikange Nghole https://orcid.org/0000-0003-2257-4462

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ORIGINAL ARTICLE

WILEY

Factors influencing newly graduated registered nurses' voice behaviour: An interview study

Karin Kee MSc, PhD candidate | **Demi de Jong MSc, Junior researcher**

Department of Organization Sciences, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

Correspondence
Karin Kee, Department of Organization Sciences, Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands.
Email: k.kee@vu.nl

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Abstract

Aim: To gain insight into the factors that affect newly graduated registered nurses' voice behaviour.

Background: Employees with little work experience may experience difficulties with speaking up. Given that a lack of voice can negatively affect the delivery of safe client care and lower nurses' job satisfaction, it is important to understand which factors facilitate and hinder newly graduated nurses' voice behaviour.

Methods: A qualitative descriptive study was conducted using semi-structured interviews with 17 newly graduated registered nurses working in inpatient hospital settings.

Results: In total, seven factors emerged from our data, which were grouped in four overarching themes. Whether newly graduated nurses speak up depends on (1) their levels of self-confidence, (2) whether they feel encouraged and welcome to speak up, (3) their relationship with the voice target and (4) the content of their voice message.

Conclusion: Factors that affect newly graduated nurses' voice behaviour are multifaceted, but mostly centre around time spent in and relationships at the workplace.

Implications for Nursing Management: Nurse managers and colleagues can build an environment that fosters newly graduated nurses' voice behaviour. Specifically, induction programmes, assigning mentors and offering additional training can support newly graduated nurses in developing voice behaviour.

KEYWORDS
communication, new graduate nurses, nursing, registered nurses, speaking up, voice behaviour

1 | INTRODUCTION

Nurses are central to the working of care organizations (Garon, 2012). Not only do nurses possess unique information about patients' health conditions; they often also have ideas for how their work unit may operate more efficiently (Kee et al., 2021). For this to be effective, it is essential that nurses engage in 'voice behaviour' (Alingh et al., 2019)—defined as the different ways and means through which employees speak up, attempt to have a say in and potentially influence matters that affect their work or lives (Morrison, 2014). By speaking up, nurses can ensure the delivery of safe and high-quality care (Levine et al., 2020) and can exert influence regarding work matters (Kee et al., 2021). This, in turn, may result in feelings of empowerment and being in control (Both-Nwabuwe, 2020).

Yet, nurses are often hesitant to engage in voice behaviour (Hanson et al., 2020). Three reasons have been named for this

(Okuyama et al., 2014). First, nurses may perceive voice behaviour as 'risky' (Morrow et al., 2016). As voice inherently tries to change the status quo, it may not always be responded to positively by managers and colleagues. As a result, nurses may face—and fear—negative consequences, such as being disrespected and ignored. Second, nurses may experience a sense of powerlessness, and perceive their voice is not being listened to, nor acted upon (Garon, 2012; Todorova et al., 2014). Finally, nurses may have learned that voice is not a type of behaviour that is expected of them (Morrow et al., 2016). Consequently, nurses may be more inclined to remain silent than to speak up (Garon, 2012).

Scholars have also studied factors that facilitate or hinder nurses' voice behaviour (Okuyama et al., 2014). On the individual level, research has shown that nurses who experience high levels of job satisfaction and identification with their job and team feel a need to contribute. They may do so by sharing their ideas and perspectives (Morrison, 2014). At the team and organizational level, the behaviour demonstrated by employees higher in status, such as managers and physicians, affect nurses' voice behaviour (Alingh et al., 2019; Weiss et al., 2018). Research has shown that nurses become hesitant to speak up, when they perceive or have experienced that authority holders act dismissive or aggressive towards them (Todorova et al., 2014). In contrast, voice is enhanced when nurses are invited and encouraged to speak up (Weiss et al., 2018).

What characterizes existing studies on nurses' voice behaviour is that they mainly focus on nurses with several years of work experience (e.g. Alingh et al., 2019; Garon, 2012). Yet, especially employees with little work experience may be hesitant to speak up (Morrison, 2014), such as newly graduated registered nurses (NGRNs). NGRNs are oftentimes not fully familiar with their team and organization and are still gaining knowledge and practice experience (Lyman et al., 2020). Consequently, NGRNs may feel overwhelmed. Moreover, the well-entrenched hierarchy most hospitals tend to be characterized by, may result in feelings of inferiority among NGRNs (Rush et al., 2019). These factors may hinder NGRNs' voice behaviour. This is of particular concern in light of the global nursing shortage, as communication issues, such as a lack of voice behaviour, have been shown to negatively affect nurses' job satisfaction and retention (Both-Nwabuwe, 2020).

Although the importance of NGRNs' voice behaviour is clear, factors that affect NGRNs' voice behaviour are not well documented. The purpose of this study was therefore to fill this gap. The study's findings can help NGRNs better prepare for nursing practice and can serve as a reference for nurse managers to initiate interventions aimed at creating a voice-enhancing work environment for NGRNs.

2 | METHODOLOGY

2.1 | Design

A qualitative descriptive study was conducted using semi-structured interviews. The use of such a design is deemed appropriate when the study aims to develop a better understanding of a phenomenon, based on perspectives from those who have experienced it (Doyle et al., 2020). Given that the factors that affect NGRNs' voice behaviour are not well understood in the literature, a qualitative descriptive design was selected. Ethical approval was granted by the authors' University Ethics Review Committee.

2.2 | Respondents

Respondents were considered to be eligible for this study if they worked (1) as a registered nurse, (2) in an inpatient hospital setting and (3) if they had graduated from a university of applied sciences within the 2 years prior to this study. Initial selection of participants was performed by convenience and snowball sampling (Bryman, 2012). The authors first approached three existing professional connections. During a phone call, one of the researchers explained the purpose and design of the study and invited the NGRN for an interview. Voluntary participation and confidentiality and anonymity were ensured. NGRNs were then asked if they were willing to participate and if they had any questions. After obtaining their approval, an interview appointment was scheduled. All respondents received an informed consent form by mail, which they were asked to read and sign. At the end of the interview, respondents were asked if they knew other NGRNs, and, if so, were asked if they could ask the latter if they would be willing to participate in this study. Upon agreement, contact details were shared with the researchers, who then approached the potential respondents in the same way as described above.

2.3 | Data collection

Data were collected through semi-structured interviews with NGRNs. The use of semi-structured interviews allowed for a systematic exploration of respondents' views and experiences, as well as space for the researchers for follow-up queries and for the respondents to highlight other relevant topics (Bryman, 2012). The topic list that guided the interviews was aimed to acquire information about NGRNs' experiences with exhibiting voice behaviour. We drew upon interview guides developed by Garon (2012) and Schwappach and Gehring (2014), who have studied facilitating and hindering conditions to registered nurses' voice behaviour. We made slight changes to the questions, so as to ensure that they fit our research context and population. Specifically, we asked respondents about prior experiences with speaking up and what they considered to be facilitating and inhibiting conditions to their voice behaviour. We asked open-ended questions, so as to grasp respondents' lived experiences and opinions (Bryman, 2012).

In total, 15 interviews were conducted with 17 respondents. Participant characteristics can be found in Table 1. Thirteen interviews were conducted by the second author in February 2021. During two interviews, two NGRNS were interviewed at the same time. Data

TABLE 1 Overview of participant characteristics

Respondent number	Gender	Age range	Team size	Type of hospital	Clinical unit	Interview conducted by telephone or video platform
1	Female	25–30	70	Academic hospital	Emergency department	Zoom
2	Female	18–24	60	Academic hospital	Pulmonary medicine	Zoom
3	Female	18–24	50	Regional hospital	Oncology (internal medicine)	Zoom
4	Female	25–30	35	Regional hospital	Emergency department	Telephone
5	Female	18–24	N/A	Academic hospital	Flex (at time of study: internal medicine and pulmonary medicine)	Zoom
6	Female	18–24	20	Regional hospital	Orthopaedics	Zoom
7	Female	18–24	100	Academic hospital	Obstetrics and gynaecology	Zoom
8	Female	18–24	100	Regional hospital	Surgery	Zoom
9	Female	18–24	15	Academic hospital	Transplantation and intestinal surgery	Zoom
10	Female	18–24	40	Regional hospital	Children's ward	Zoom
11	Female	18–24	40	Regional hospital	Children's ward	Zoom
12	Female	25–30	50	Academic hospital	Haematology	Zoom
13	Male	25–30	75	Academic hospital	Anaesthesiology	Zoom
14	Female	18–24	50	Academic hospital	Pulmonary medicine	Zoom
15	Female	18–24	30	Regional hospital	Pulmonary medicine	Zoom
16	Female	25–30	50	Regional hospital	Emergency department	Zoom
17	Female	25–30	30	Academic hospital	Pulmonary medicine	Zoom

saturation was reached after 13 interviews, as no new themes emerged. The first author then conducted two additional interviews in June 2021 to rule out the possibility of new information coming to light (Bryman, 2012). This was not the case, after which the researchers decided to finish data collection. The interviews were conducted in Dutch by telephone or via a video chatting platform. The length of the interviews varied from 40 to 70 min. All interviews were recorded and transcribed verbatim. Confidentiality was preserved by removing identifying details.

2.4 | Data analysis

Data analysis was conducted by using the constant comparative method (Bryman, 2012) and took place in three phases. First, both researchers read the transcripts several times in order to become familiar with the data. In the second phase, both researchers independently coded a selection of three interviews line-by-line. Coding was done using Atlas.ti (Atlas.ti GmbH, Berlin, Germany, Version 8.1). Exemplary codes were 'Perceived lack of knowledge', 'Reflection sessions with co-workers', 'Receiving help from a mentor' and 'Difficult relationship with physicians'. The researchers met and discussed the emerging findings and their initial codes with each other. This resulted in an initial coding scheme, which was then applied to subsequent transcripts and was further refined as new codes emerged. In doing so, we became aware that how NGRNs experienced their work and their relationships at work affected their voice behaviour. The third and final stage involved a further analysis of the coded dataset, oriented specifically towards the factors respondents perceived to be affecting their voice behaviour. Specifically, we organized the codes into descriptively labelled themes (e.g. 'Being encouraged to speak up' and 'Prior voice experiences'). We discovered that seven factors affected NGRNs' voice behaviour, which we then grouped in four overarching themes.

2.5 | Qualitative rigour

We used a variety of strategies to enhance qualitative rigor (Bryman, 2012). To establish credibility, both researchers analysed the data. Moreover, we used member-checking: The emergent findings and interpretations were shared with two respondents to check for accuracy and resonance with their experiences. To establish dependability, we provide detailed descriptions of the data collection and analysis and offer quotes, which allows readers to verify our interpretations. Finally, to establish trustworthiness, we worked with reflexive journals and had regular meetings to discuss the (emergent) findings.

In preparing this manuscript, the Consolidated Criteria for Reporting Qualitative Studies guidelines (COREQ) were followed (Tong et al., 2007) (see Appendix A).

3 | RESULTS

Our analysis of the data showed that whether NGRNs spoke up depended on (1) their levels of self-confidence, (2) whether they felt

TABLE 2 Exemplar quotes

Factors influencing newly graduated registered nurses' voice behaviour		
NGRNs' levels of self-confidence	Overcoming insecurities	'I did not really know what I could expect. Everything was so new, so you do not speak up that fast' (Respondent 2) 'You have to process so much new info, have to perform different types of tasks. It was really a lot in the beginning and it has made me quite insecure. Instead of getting involved in discussions right away, I prefer to wait. I need to feel a bit more at ease and secure before I come more vocal' (Respondent 6) 'What frightened me a bit was that from one day to the next I was graduated and on my own. I was responsible for my patients. That was actually quite scary' (Respondent 8)
	Support from a mentor	'There needs to be a good induction programme, so you get to know your colleagues and the department. And you need to be paired with someone that you can discuss your issues with and who can help you in case you are struggling with something. Like a mentor' (Respondent 14) 'My mentor is really there for me. I have the feeling that I can discuss everything with her' (Respondent 15)
	Gaining knowledge and experience	'You go to school for four years and complete some internships, but your practical experience is basically zero. If you are a fulltime student, you just lack the skills. Yes, you have some knowledge, but it is just not enough to act as a fully qualified professional' (Respondent 1) 'You notice that once you gain knowledge and practical experience, you also become more daring to speak up' (Respondent 11) I have learned a lot during my internships. And because of that, I feel equipped to think along. For instance, you learn to recognize certain disease states more quickly. So, you can think along, like: 'Hey, maybe this patient has this disease, so we can give him this medication?' (Respondent 13)
Feeling encouraged and welcome to speak up	Being stimulated to speak up	'Colleagues also encourage me to speak up. They keep telling me: "We are the ones who actually interact with our patients, we know what is going on. Doctors need our input, so speak up!"' (Respondent 7) 'I was literally drilled to speak up, in the sense that my supervisors just kept encouraging me to speak up: "Does a doctor not disinfect his hands? Speak up about this! Speak up if you see something and do not be afraid to do so"' (Respondent 12)
	Prior voice experiences	'Last year, a lot of children were infected with the RS-virus. During that time, I once experienced an acute situation. One of the children was not breathing, and because I was relatively new, I did not know how the equipment worked, so I could not help my colleagues. Afterwards, I sent an email to my supervisor and asked her for more training. She immediately undertook action and one week later the training took place (…) I had the feeling that my concerns were actually heard and that I was actually taken seriously, which has made me more vocal' (Respondent 10) 'If you mention something to the physician and you get a positive response, that gives you some satisfaction. Otherwise, you have the feeling you are not taken seriously, and that lowers your willingness to speak up' (Respondent 14) 'I notice that I enter into discussions more quickly. When I just came here, I was quite hesitant to do so, but I have spoken up a couple of times now. People actually listened to what I had to say and responded very positively, so now I am more daring to speak up' (Respondent 17) 'I once reported an incident to the head nurse, and then this particular colleague that was involved in this incident came to me, very angry, like: "Who do you think you are for reporting this?!" That really deterred me. I now think twice before speaking up and sharing my concerns' (Respondent 2) Respondent: 'When I worked in the cardiology department, one of the nurses made nasty comments. (…) The whole time, she was like: "This is wrong, and that is not okay."' Interviewer: 'How did it make you feel?' Respondent: 'Well, you just become afraid to speak up' (Respondent 11)

(Continues)

TABLE 2 (Continued)

Factors influencing newly graduated registered nurses' voice behaviour	
Relationship with the voice target	'My team consists of a lot of novice registered nurses, who are all new to this department and hospital. We all need to learn, which creates mutual understanding. I feel really at ease in my interaction with them' (Respondent 3) Despite me being here only for a short amount of time, I feel more and more at ease in my interaction with colleagues, because they behave respectfully and are friendly. Because of that, I dare to speak up (Respondent 12) 'I worked at the surgery department and I actually felt like a slave. I just had to do what the doctor told me and often, they did not even know my name. It is so much different here. They even ask me like: "Hey, how was your holiday?" It is much more personal and that makes it a lot easier to speak up to physicians' (Respondent 10) 'In the hospital where I used to work, there existed a large hierarchy. I did not dare to speak up to the cardiologists. Here, in this hospital, the cardiologists are really friendly and approachable, they actually ask me how my weekend was. I now experience a lower threshold to make myself heard' (Respondent 16)
Content of the voice message	'Well, when you think someone performed a care task in the "wrong way", it is quite easy to speak up about that, because you can just refer to the protocol and can explain why you think it should be done differently. But sometimes you see things happening and you think: this is not okay. But then it is more personal, my own opinion. And then I have a hard time speaking up, because this other person may think it is a personal attack' (Respondent 1) 'When you have something that can back up your claim, it is easier to speak up. For instance, we work with a scoring system. When someone has a high heart rate or a low blood pressure, a patient gets a certain number of points. Once that patient reaches a certain score, you call the physician' (Respondent 7) 'Speaking up about things that a colleague did wrong, is super difficult—especially when it concerns the interaction with a patient' (Respondent 9)

encouraged and welcome to speak up, (3) their relationship with the voice target and (4) the content of their voice message. We will discuss this in more detail below. Quotes that illustrate our findings can be found in Table 2.

3.1 | NGRNs' levels of self-confidence

3.1.1 | Overcoming insecurities

Most NGRNs experienced feelings of insecurity at the start of their contracts that refrained them from speaking up. Whereas during their internships they could rely on their supervisors, NGRNs now had final responsibility for one or more patients, which they found difficult. Moreover, as respondents started working at departments that were different from the ones in which they had completed their internships, they had to familiarize themselves with new patient populations, disease states and policies and protocols. For eight respondents, the hospital was even a new work environment, as they had completed their internships in nursing homes. These respondents shared that they had experienced a 'transition shock' ever since transitioning to the hospital, because of the more complex diseases they came across, the additional responsibilities that were part of their role and the different procedures and policies they had to work with. Respondents described that they had experienced this transition as tough and that they felt overwhelmed. This, in turn, had made them insecure. As such, rather than speaking up right away, respondents shared that they first had to adapt to their new work environment and become more confident before speaking up.

3.1.2 | Support from a mentor

Several respondents had been assigned a mentor, who acted as a point of reference and who provided the NGRNs with information and guidance during the first 3–5 months of their employment. The mentor was a more experienced colleague (>5 years of work experience) who knew the department well. Several respondents described their mentor as someone they could fall back on in case they were insecure or had questions. Consequently, NGRNs started to feel more confident in performing their jobs, as they could call their mentor in times of stress or uncertainty. As such, mentors helped the NGRNs overcome some of the initial insecurities they experienced, which helped NGRNs feel more at ease.

Moreover, although NGRNs initially were a bit hesitant to speak up, the good relationships most NGRNs had developed with their mentors ensured that they had a point of contact who they felt at ease to share their suggestions, recommendations and concerns with. One of the NGRNs, for instance, mentioned that during one of her first shifts, she had discovered that one of her patients had been given the wrong type of medication the night before. As she did not know the other colleagues in the department well enough, she decided to approach her mentor first and share this observation with her. The mentor then checked whether this patient had indeed been given the wrong type of medication, and, after realizing this was the case, the NGRN and her mentor together reported this incident. The respondent shared that this positive experience had made her more confident. As is discussed in more detail below, positive prior experiences with speaking up are an important facilitator of NGRNs' voice behaviour.

Moreover, mentors often acted as 'linking persons' between the NGRNs and other colleagues. That is, mentors introduced the NGRNs to other colleagues in the department, and, in doing so, facilitated communication. As is discussed further below, the development of relationships with colleagues also facilitated NGRNs' voice behaviour.

3.1.3 | Gaining knowledge and experience

NGRNs' knowledge base moreover affected their opportunities to speak up. Most respondents perceived that their training had provided them with basic nursing knowledge, but that deepening of this knowledge was needed in order to act as an autonomous professional. Because NGRNs did not possess all necessary knowledge right away, they indicated that they were not always able to identify problems, engage in discussions with other care personnel and come up with recommendations, for instance, regarding alternative treatment options. As such, NGRNs perceived that a lack of knowledge hindered their opportunities to engage in voice behaviour. Yet, as NGRNs gained knowledge and work experience, they noticed that they became more self-confident, and, as a result, they felt more equipped to think along.

3.2 | Feeling encouraged and welcome to speak up

3.2.1 | Being stimulated to speak up

NGRNs shared that receiving explicit invitations to speak up also enhanced their voice behaviour, as they felt encouraged and welcome to speak up. In several departments, initiatives, such as 'reflection sessions' and 'care evaluation sessions' were organized in which all personnel, including NGRNs, were explicitly invited to share their experiences, opinions, recommendations and concerns. In addition to these more formal initiatives, several respondents shared that also on the work floor itself, especially in the departments where acute care is being delivered, the importance of voice behaviour was emphasized on a day-to-day basis by colleagues and supervisors. Consequently, the respondents shared that they were oftentimes literally encouraged to speak up—also towards staff in higher hierarchical positions, which enhanced their voice behaviour.

3.2.2 | Prior voice experiences

Positive prior experiences with speaking up, that is, instances in which NGRNs had experienced that they were being listened to and that their voice was acted upon, also facilitated NGRN's voice behaviour. One NGRN, for instance, shared that during one of her shifts, a patient had received too much antibiotics. After signalling this to the head nurse, action was undertaken, and this particular NGRN received compliments from both colleagues and physicians. NGRNs derived satisfaction from these moments, perceived that their input actually mattered and felt that they were taken seriously. This, in turn, stimulated them to speak up more often.

Yet, other NGRNs shared more negative experiences. Respondents, for instance, had encountered that physicians were unwilling to listen to them because of their limited experience or 'simply because they were "only" an NGRN' (Respondent 8). Instances like these made respondents wonder whether they could actually make a difference by speaking up, which made them hesitant to do so.

3.3 | Relationship with voice target

Whether NGRNs spoke up also depended on the relationship they had with the target of their voice message. One NGRN shared in this regard: 'Whether I actually speak up, depends on who I have to speak up towards' (Respondent 6). Most NGRNs shared that they had built relationships with other novice registered nurses in their teams that were characterized by mutual understanding and respect. Consequently, NGRNs often felt safe and at ease in their interaction with these nurses, which positively affected their voice behaviour.

Eight respondents shared that they were hesitant to speak up to older, more experienced nurses, as they perceived that the latter often acted pedantic and bossy towards the NGRNs. This became particularly apparent at moments when NGRNs proposed new ideas or offered suggestions for change. Six NGRNs had experienced that despite their good intentions, their input was met by deaf ears or was responded to defensively. While proposing a new, more efficient lifting technique to help patients out of bed, one of the NGRNs for example heard one of her more experienced co-workers say: 'Do not get involved in things that are none of your business' (Respondent 17). Responses like these made NGRNs believe that speaking up to experienced nurses would not make a difference, which made them hesitant to do so.

Respondents also differed in the extent to which they were willing to speak up to physicians. Half of the respondents perceived the physicians in their departments to be friendly and approachable. What these respondents particularly liked was that physicians showed interest and asked how NGRNs were doing. Because of these friendly interactions, respondents felt at ease speaking up. However, not all respondents had such positive experiences. One nurse, for instance, shared how a physician snapped at her, whereas another respondent mentioned how she was ignored by physicians. This negatively affected their voice behaviour: 'At one point, I experienced such a large hierarchy in my relationship with the cardiologists, that I did not even dare to call them anymore' (Respondent 3).

3.4 | Voice content

Finally, the content of the voice message affected NGRNs' voice behaviour. Specifically, respondents shared that they found it relatively easy to speak up to colleagues who did not adhere to safety

protocols and regulations. Guidelines and protocols specified how optimal and safe care had to be delivered and how certain tasks had to be performed. NGRNs referred to these guidelines and protocols in order to back up their claims. One NGRN, for instance, had discovered that one of her colleagues had changed a catheter in a rather old-fashioned way and not in accordance with current guidelines. The NGRN spoke up about this, and, in doing so, referred to the updated guidelines, to illustrate her point.

However, NGRNs were hesitant to speak up about matters for which no clear guidelines and regulations existed and which contained a value judgement. For instance, several NGRNs perceived that colleagues sometimes interacted with patients in an unpleasant manner. However, NGRNs believed this to be a personal matter, as nurses all had developed their own ways of interacting with patients. Consequently, most NGRNs were hesitant to speak up about matters like these, especially towards colleagues higher in status and hierarchy, as the latter could interpret this voice behaviour as a 'personal attack' or 'negative feedback'.

4 | DISCUSSION

Nowadays, the importance of nurses' voice behaviour is widely recognized (Levine et al., 2020; Morrow et al., 2016). However, the factors that influence NGRNs' voice behaviour remain largely unexplored. The present study aimed to fill this gap. In total, seven factors emerged from our data, which were grouped in four overarching themes. These are illustrated in Figure 1. Whether NGRNs speak up depends on (1) their levels of self-confidence, (2) whether they feel encouraged and welcome to speak up, (3) their relationship with the voice target and (4) the content of their voice message. In what follows, we discuss our main findings in light of the existing literature.

A first insight that emerges from our research is the importance of time. That is, immediately after graduating, NGRNs may not feel at ease with speaking up, nor may be able to do so in the first place. In line with existing research, our study shows that NGRNs may face significant challenges as they transition to professional nursing practice (Lyman et al., 2020; Rush et al., 2019). The uncertainties that come with this transition make NGRNs insecure, which, in turn, and as we have shown, may prevent them from speaking up. In addition, NGRNs may not always be able to speak up due to a (perceived) lack of knowledge. In particular, a lack of practice experience and more specialized types of knowledge prevents NGRNs from engaging in discussions. As NGRNs grow into their roles, such hindrances can be overcome, and, over time, they may become more vocal.

Second, our research adds further credence to the relational nature of nurses' voice behaviour (Kee et al., 2021; Weiss et al., 2018). Our study is in line with existing scholarly work that has demonstrated that organizational hierarchies and status differences between members of different occupational groups are one of the main barriers to nurses' voice behaviour (Hanson et al., 2020; Morrow et al., 2016). However, in contrast to most previous studies, a few NGRNs also reported that their voice behaviour was hindered because of the behaviour executed by members of their own profession. Johnstone and Kanitsaki (2008) already pointed out that staff attitudes may pose a significant barrier to graduate nurse integration into hospital organizational and system processes. We add to this that such dynamics among occupational members may also affect voice behaviour.

Finally, our study adds to a growing understanding of how the content of nurses' voice messages may affect their willingness to speak up (Martinez et al., 2015). Existing research has shown that speaking up about patient safety concerns is becoming more normalized, as this has been incorporated into safety curricula, whereas speaking up about unprofessional behaviour and organizational misconduct is still difficult for nurses, as this remains largely untaught (Clancy & Tornberg, 2007). The latter is largely in line with our findings. However, whereas existing research shows that nurses refrain from speaking up about unprofessional behaviour and related topics that contain a value judgement as they believe this to be more confrontational and less acceptable (Martinez et al., 2015), we show that nurses—in particular NGRNs—are hesitant to do so, as speaking up about these matters may be interpreted as a personal attack or negative feedback, which may jeopardize existing professional relationships.

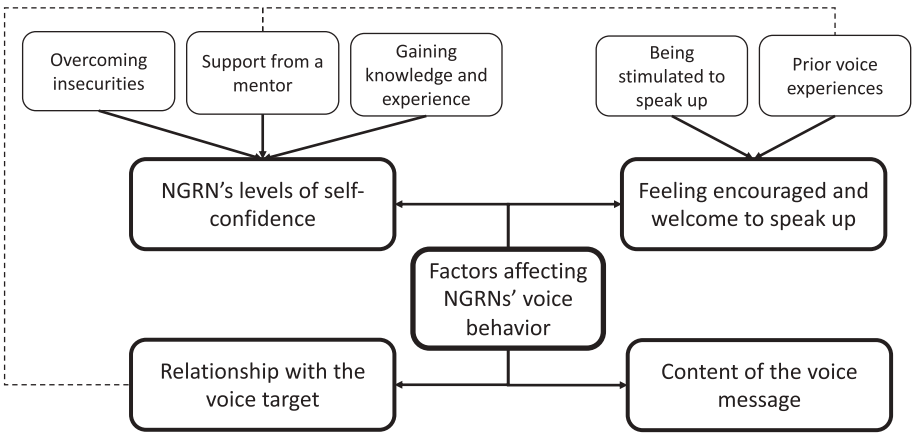

FIGURE 1 Overview of factors affecting newly graduated registered nurses' voice behaviour

4.1 | Study limitations

An important limitation of this study is the number of NGRNs interviewed. In total, 17 NGRNs were interviewed for the current study. Even though data saturation was reached, there is still a possibility that other factors affect NGRNs' voice behaviour as well. Moreover, as convenience and snowball sampling methods were used, representativeness of the sample is not guaranteed (Bryman, 2012). To overcome these shortcomings, survey research could be conducted, in which a larger, representative sample of NGRNs are asked about their experiences with speaking up. In doing so, also investigator bias can be overcome, as all participants are provided with a standardized questionnaire (Bryman, 2012).

Moreover, the current research focused on NGRNs who worked in hospital settings. NGRNs who work in care homes or who provide care in the community may have different experiences with speaking up. Repeating the current investigation and including NGRNs with different backgrounds could further increase our understanding of factors that affect NGRNs' voice behaviour.

4.2 | Implications

Voice behaviour in the workplace is crucial for patients, care organizations and nurses themselves. Our research poses several directions nurse managers can take to support NGRNs' voice behaviour. Our findings demonstrate that NGRNs become more willing to speak up once they build self-confidence. An induction programme provides an opportunity to welcome NGRNs to their team and to clarify the requirements, duties and responsibilities of their role. This, in turn, can help NGRNs in overcoming the initial insecurities they experience at the start of their employment. Similarly, gaining knowledge also made NGRNs more self-confident, which enhanced their voice behaviour. Nurse managers could therefore organize additional training sessions for NGRNs.

Developing a mentoring programme may be helpful as well. As already pointed out by Gan (2021), such mentorship ideally starts when nurses are still in nursing schools, as more experienced nurses can support nursing students, and, eventually NGRNs, as they transition into their new roles. Regardless the moment a mentor becomes involved, mentors can act as informal points of reference and can provide information and guidance. This, in turn, will make feel NGRNs more at ease at work, which increases the chances of them speaking up.

Moreover, as our study has shown, mentors are often the first persons NGRNs speak up towards. It is therefore important for mentors to react to NGRNs' voice behaviour in a positive, constructive way and, as such, to ensure that NGRNs have positive, initial voice experiences. After all, our study has shown that once NGRNs believe their voices are being heard and acted upon, their willingness to speak up increases. Nurse managers may therefore offer additional training to mentors, in which mentors are learned about the importance of positive responses to NGRNs' voice.

Yet, not everything is within the control of nurse managers in a specific unit. Specifically, our study has demonstrated that colleagues play a vital role as well. Colleagues could enhance NGRNs' voice behaviour by explicitly inviting NGRNs to speak up and by explaining the importance of voice behaviour for the delivery of high-quality and safe patient care. Moreover, in this study, NGRNs were more willing to speak up when they had high-quality relationships with their colleagues. As such, colleagues can spend time to get to know NGRNs, be supportive of NGRNs and can act respectfully towards them. Although great efforts are needed to implement these changes, the rewards are worth it: more satisfied staff, better functioning care organizations and better and safer patient care.

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The authors would like to thank the 17 participating newly graduated registered nurses for sharing their experiences.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ETHICAL APPROVAL

Ethical approval was obtained from the Ethics Review Committee of the Faculty of Social Sciences, Vrije Universiteit Amsterdam. The authors completed an ethics self-check. As the research complied with the ethical guidelines of the university, no further ethics review was deemed necessary.

DATA AVAILABILITY STATEMENT

Data are available upon reasonable request.

ORCID

Karin Kee https://orcid.org/0000-0003-4897-2346

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APPENDIX A: COREQ 32-ITEM CHECKLIST

No.	Item	Question	Answer
Domain 1: Research team and reflexivity			
Personal characteristics			
1	Interviewer/facilitator	Which author/s conducted the interview or focus group?	Both researchers conducted the interviews
2	Credentials	What were the researcher's credentials?	KK: MSc; DJ: MSc
3	Occupation	What was their occupation at the time of the study?	KK: PhD candidate; DJ: Junior researcher
4	Gender	Was the researcher male or female?	Both researchers are female
5	Experience and training	What experience or training did the researchers have?	Both researchers received training in qualitative research methodology and had experience with conducting interviews
	Relationship with participants		
6	Relationship established	Was a relationship established prior to study commencement?	Each interview started with an 'introduction phase', in which both researcher and respondent introduced themselves and respondents were asked about their (work) day and how they were doing
7	Participant knowledge of the interviewer	What did the participants know about the researchers?	All participants were informed of the reasons for doing the study and goals of the study. Moreover, both researchers explained who they were
8	Interviewer characteristics	What characteristics were reported about the interviewer?	At the start of each interview, the researcher briefly explained her background and interest in the research topic
Domain 2: Study design			
Theoretical framework			
9	Methodological orientation and theory	What methodological orientation was stated to underpin the study?	Qualitative descriptive design
10	Sampling	How were participants selected?	Convenience and snowball sampling
11	Method of approach	How were participants approached?	Telephone and email
12	Sample size	How many participants were in the study?	17
13	Non-participation	How many people refused to participate or dropped out?	0
Setting			
14	Setting of the data collection	Where was the data collected?	One interview by telephone, 14 interviews via Zoom (during two interviews, two respondents were interviewed)—all respondents were at home at the time the interview was conducted
15	Presence of non-participants	Was anyone else present besides the participants and researchers?	No
16	Description of sample	Description of sample	All respondents were newly graduated registered nurses with less than 2 years of work experience
Data collection			
17	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	The researchers together developed an interview guide that was based on prior interview guides developed by Garon (2012) and Schwappach and Gehring (2014). The authors asked open-ended questions and encouraged the respondents to provide examples

(Continues)

No.	Item	Question	Answer
18	Repeat interviews	Were repeat interviews carried out	No repeat interviews were carried out
19	Audio/visual recording	Did the researcher use audio or visual recording to collect the data?	All interviews were audio recorded
20	Field notes	Were field notes made during and/or after the interview?	Both researchers made field notes of the behaviours observed during the interviews and wrote down personal reflections after the interview had ended
21	Duration	What was the duration of the interviews?	40–70 min
22	Data saturation	Was data saturation discussed?	After 13 interviews, no new themes and dimensions emerged. By means of a member-check, KK conducted two extra interviews, which again did not result in additional themes or dimensions
23	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	The transcripts were not returned
Domain 3: Analysis and findings			
Data analysis			
24	Number of data coders	How many data coders coded the data?	Both researchers coded the data
25	Description of the coding tree	Did authors provide a description of the coding tree?	A description of the coding tree can be found in Section 2.4
26	Derivation of themes	Were themes identified in advance or derived from the data?	Themes were derived from the data
27	Software	What software; if applicable, was used to manage the data?	Atlas.ti
28	Participant checking	Did participants provide feedback on the findings?	Two participants received a draft version of the results, which they commented on
Reporting			
29	Quotations presented	Were participants' quotations presented to illustrate the themes/findings? Was each quotation identified?	Quotations to illustrate *all themes* have been provided, as well as the corresponding respondent numbers (Table 2)
30	Data and findings consistent	Was there consistency between the data presented and the findings?	There is consistency between the data presented and the findings
31	Clarity of major themes	Were major themes clearly presented in the findings?	Major themes are presented in Section 3 and presented in Table 2
32	Clarity of minor themes?	Is there a description of diverse cases or discussion of minor themes?	Diverse cases and minor themes are discussed in Section 3

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Newly graduated nurses' experiences of the intervention graduate guidance nurses: A qualitative interview study

Anna-Karin Rose RN, MSc, Head of education and training[1] | **Ann-Christine Andersson RN, CPN, PhD, Associate Professor**[2]

[1]Region Skåne Hospital Northeast, and Department of Care Science, Faculty of Health and Society, Malmö University, Malmö, Sweden

[2]The Jönköping Academy for Improvements of Health and Welfare, School of Health and Welfare, Jönköping University, and Department of Care Science, Faculty of Health and Society, Malmö University, Malmö, Sweden

Correspondence
Ann-Christine Andersson, The Jönköping Academy for Improvements of Health and Welfare, School of Health and Welfare, Jönköping University, and Department of Care Science, Faculty of Health and Society, Malmö University, Malmö, Sweden.
Email: ann-christine.andersson@ju.se

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Abstract

Aims: This study is describing newly graduated nurses' experiences of the intervention graduate guidance nurses.

Background: Newly graduated nurses need support to become established in the profession. The intervention was initiated to empower and support in the professional role.

Methods: A qualitative case study was conducted with semi-structured interviews, using a thematic content analysis.

Results: One overarching theme 'Organizational prerequisites', consisting of three themes, occurred: 'Activator' involved that the graduate guidance nurse was the activator creating a clear structure, and the wards became more attractive workplaces. 'Supportive nursing' meant that the graduate guidance nurse constituted an important support function which ensured patient safety. 'Professional development' created the opportunity for professional growth.

Conclusion: Newly graduated nurses' experiences show that the creation of an organisational structure enabled the graduate guidance nurses to be an important support and contributed to professional development.

Implications for nursing management: In health care organisations, strategic decisions, management support and clear goals are important to create the organisational conditions to improve safer care. Support from experienced nurses is a large enabler in supporting newly graduated nurses developing in their profession. The results of the current study can be transferred to other similar health care organisations and can be supporting managers who plan to initiate support to newly graduated nurses.

KEYWORDS
acute health care, clinical supervision, experienced nurses, newly graduated nurses

1 | BACKGROUND

In the increasing complexity of acute health care settings where more patients with comorbidities require much care, newly graduated nurses (NGNs) need higher levels of support (Hussein et al., 2017). Experienced nurses' support and supervision of NGNs is described as one of the most crucial elements for learning and professional development (Bakon et al., 2018; Kyndt et al., 2016; Pennbrant et al., 2013). Willman et al. (2020) show that NGNs need experienced nurses who are available for questions and support in their daily work.

The establishment of NGNs in the profession has been examined in many studies. According to Mellor and Greenhill (2014), the opportunity to orient themselves in the profession with supervision and access to structured introduction has a major impact on how NGNs perceive the start of their professional life. Several studies have shown that the first period of time in the profession, up to 1 year after graduation, is the most challenging (Lindfors et al., 2018; Rudman & Gustavsson, 2012; Sterner et al., 2017; Wong et al., 2018). However, studies show that when NGNs are in the orientation period, they are most vulnerable and need the most support and guidance (Cao et al., 2021; Lee & De Gagne, 2022).

The concept of 'expert nurses' originates from Benner's (1982) nursing theory of knowledge development, where nurses are in five different stages from *novice to expert*. In these stages, the nurse develops the professional role through knowledge and practical experience (Benner, 1982). Nurses in the *skilled and expert* stages are able to anticipate events and can apply preventive measures. They have special skills and can perceive situations as a whole and focus quickly on the most important aspects of a nursing situation (Benner, 2001). According to Lindfors et al. (2018), the initial supervision during the introduction of NGNs is a key factor in how the transition between nursing education and professional life will develop.

Supervision in this context is an educational relationship between the NGN and one or more experienced nurses (Lindfors et al., 2018). Furthermore, supervision aims to provide support and enable the NGN to move through the transition in order to become confident in their professional role and increase their own competence (Tracey & McGowan, 2015). NGNs value supervisors with the ability to create a safe environment in which they can develop their skills without being questioned (Hunsberger et al., 2013; Pennbrant et al., 2013). Similarly, a safe environment is fostered when NGNs are given the opportunity to practise various practical elements and link these to theoretical knowledge. This develops their nursing skills (Pennbrant et al., 2013). Sterner et al. (2017) found that training in emergency situations was particularly valuable for nurses who had less than 1 year of professional experience. Those nurses found emergency situations requiring quick decisions to be particularly difficult, while factors such as good interpersonal relationships and organisational structures could support a well-functioning team (Sterner et al., 2017).

Studies by Chachula et al. (2015) and Kyndt et al. (2016) showed that NGNs need to be respected, have access to educational role models, be part of a collaborative department and receive constructive feedback and support from their colleagues in order to develop competencies and experience job satisfaction (Chachula et al., 2015; Kyndt et al., 2016). Dyess and Sherman (2009) found that for NGNs to feel confident, it was important that they received confirmation that they were performing tasks correctly. The NGN also saw great value in discussing and reflecting on nursing situations with experienced nurses (Dyess & Sherman, 2009). It is important for experienced nurses to work to develop trust and caring relationships with NGNs. By establishing supportive relationships for NGNs, learning can become less stressful (Brunelli et al., 2022).

Globally, there is a shortage of almost six million nurses (World Health Organization [WHO], 2020). Nurses are important to ensuring quality of care and patient safety. The widespread shortage of nurses poses a significant challenge to the health sector nationally and internationally. The professional competence of nurses is essential to ensure that high-quality nursing care is provided and that patient safety levels are maximized (ICN, 2019). Experienced nurses are a prerequisite for ensuring patient safety; likewise they are a prerequisite for providing NGN support in the professional role (Willman et al., 2020).

NGNs continue to enter a work environment characterized by nursing staff shortages, increasing patient acuity and at times limited access to clinical support (Hussein et al., 2017). Support to NGNs can contribute to retention with the profession and thereby improve care and patient safety (Cao et al., 2021; Willman et al., 2020). In the autumn of 2019, Region Skåne's administration Skåne Hospital Northeast in southern Sweden decided to start an intervention at two hospitals, with the aim of strengthening and supporting NGNs and retaining NGNs in the profession. Similar efforts have been made elsewhere (Hussein et al., 2017; Wiersma et al., 2020), but this was a novel approach in the Region. The goal of the intervention was to ensure competence development and empower NGNs to provide care taking patient safety into account based on their experience and competence. The aim of this study was to explore NGNs' experiences of the intervention graduate guidance nurse (GGN).

2 | METHOD

A qualitative inductive case study with semi-structured interviews was analysed by a thematic content analysis. This study was reported according to the Consolidated Criteria for Qualitative Studies (COREQ) checklist (Tong et al., 2007).

2.1 | Intervention

The intervention GGN involved employing five experienced nurses to strengthen and support the NGNs. In this context, the experienced nurses had worked in the profession as nurses for between 10 and 28 years. Three of them were also specialist nurses with at least 8-year experience in specialist nursing. These experienced nurses, called GGNs, would be responsible for ensuring that the skills and competencies of the NGNs were developed and for helping to create a

conducive learning environment. GGNs had three main areas of responsibility:

- To be available on the ward to provide clinical support, for example, to provide clinical supervision and to support the NGNs in their nursing work.
- Facilitate and ensure educational activities such as lectures, workshops, clinical skills training and simulations.
- Provide opportunities for structured reflection.

Initially, all NGNs were given a questionnaire to fill out. This was done to identify the needs of NGNs in the areas of education, clinical supervision and reflection. Based on the needs identified, action plans were created for which the GGN was responsible. The GGN was also tasked with identifying where exactly the NGNs needed support within their day-to-day work as nurses. This was done by the GGN recording the situations in which the NGN asked for help and how long each supervision took. Based on this information, targeted interventions such as workshops or simulations were created. The GGNs were free to develop the support together with the NGNs they supported. Therefore, the number and content of workshop training sessions and simulations variated, both during times and on the different wards.

The intervention was carried out in project form for one year, from 1 April 2020, to 31 March 2021. A project plan was developed, and the intervention took place in one emergency department and four wards at two hospitals in the southern Region in Sweden. For the intervention to be successful, the hospital management decided that the GGN would not be part of the regular ward staff.

2.2 | Participants

The overall inclusion criterion was NGN who had been employed in one of the departments where the GGN intervention took place for at least 5 months. The NGNs in this study were required to have worked as nurses for a maximum of 3 years. This was based on their proximity to undergraduate education while working as nurses in a nursing unit (Veerapen & Purkis, 2014). The managers of the departments where the GGNs were employed were contacted and verbally informed about the study, after which written consent was given. Recruitment for the study was carried out with the help of the heads of the wards concerned.

When the NGNs were asked to participate, an information letter about the study was provided. The information letter stated that the NGNs who chose to be included in the study were guaranteed confidentiality. Those who wished to participate in the interview were asked to register by email to the first author. However, all interested participants chose to register via the GGN instead. The time and place for the interviews were chosen by the participants.

At the fist ward, there was a total of 25 NGNs possible to recruit for the study. Two of these NGNs were on parental leave and were therefore not asked to participate. A total of 11 NGNs signed up to participate in the study, but due to external circumstances, only four were able to participate.

In order to achieve data saturation, an additional ward was included. That ward met the inclusion criterion of having GGN intervention for 5 months during the data collection period, which made it possible to include them. There were 18 NGNs in that ward who met the inclusion criteria. Six of these signed up to participate in the study. A total of 10 NGNs participated in the study, three men and seven women. They had worked as nurses between 6 months and 2 years and 7 months.

2.3 | Data collection

Data collection took place between November 2020 and February 2021. The data were collected by the first author through interviews using a semi-structured interview guide. This approach allowed the participant to freely describe their experiences. A pilot interview was conducted to test whether the questions in the interview guide met the study's purpose, which they did, and no changes were made. Ten interviews were conducted, including the pilot interview. When no new information emerged and participants' descriptions of experiences tended to be repeated at the ninth interview, the author chose to terminate the interviews after the tenth interview. Data saturation had then been achieved.

All interviews started with the opening question 'What are your experiences with GGN?' and were followed by the following questions (Table 1). The interviews were conducted in locations chosen by the participants. The sites chosen were the participants' workplace and the author's workplace. The interviews lasted between 12 and 74 min and were recorded and transcribed verbatim. The transcription of the interviews was done subsequently by the first author.

2.4 | Data analysis

Data analysis was conducted using a six-step qualitative content analysis inspired by Graneheim and Lundman (2008). *Transcription*: The interviews were transcribed, and the text material was read through repeatedly to get a complete picture. *Meaning units*: Systematic review of the textual material to identify meaning units that responded to the purpose. *Condensation*: The meaning-bearing units

TABLE 1 Semi-structured interview guide

Semi-structured questions
1. What are your experiences with GGN?
2. What are your experiences with lectures, workshops, CASE, clinical skills training and simulations for which GGN is responsible?
3. What are your experiences with the clinical supervision provided by the GGN?
4. What experiences do you have with the structured reflection that the GGN is responsible for?

were shortened and became descriptions at an abstract level. *Coding*: Generation of codes from the condensed sentences. *Categories*: The manifest content of the codes created categories and subcategories. Finally, an *overarching theme* emerged from the latent content of the text (Graneheim & Lundman, 2004). To achieve high reliability, parts of the analysis process were conducted by both authors. One of the interviews was coded and categorized independently, resulting in high congruence. In the step of developing codes and categories, these were discussed until consensus was reached. Subsequently, labels for subcategories and the overall theme were also discussed.

3 | RESULTS

One overarching theme, 'Organizational prerequisites', emerged. The theme consisted of three categories and eight sub-categories (Table 2). The overarching theme comprised the whole result. All categories and sub-categories address the importance of involving the organisation at all levels. To establish the intervention in the management was crucial to realize the intervention and obtain positive results.

3.1 | Activator

The category Activator is created of the subcategories *facilitating structure* and *attractive workplace*. The participants described that there was a clarity and structure when the GGN is not part of the line organisation of the wards. That gave the GGN time and space to be present and available to them.

3.1.1 | Facilitating structure

The participants described that the GGN was the activator creating a clear structure. They considered that this was made possible when it was decided that the GGN would not be included in the regular staff (the line organisation). The participants felt that this decision provided the conditions for the GGN to be available and present. The participants also considered that this decision gave the GGN time and opportunity to strengthen and support them. Participants felt that it was important for the GGN to be clinically on the ward.

> I also think it's clearer because she's out of business and just there for us (P7).

> Everyone needs this person you can ask. A person who works both clinically but also administratively to refine routines and details (P9).

3.1.2 | Attractive workplace

The participants felt that wards with GGNs became more attractive workplaces, and NGNs chose to work there. They also described that the GGN made it possible for them to learn and that they developed, which motivated them to stay in the workplace.

> Saw it as a great asset and that it would facilitate my work (P5).

> Feels motivated to stay (P2).

3.2 | Supportive nursing

Supportive nursing is created by the subcategories *present assistance*, *emotional support* and *patient safety*. The participants described that the GGN constituted an important support function, was emotionally supportive in difficult situations and helped to ensure patient safety. The physical presence of the GGN made the participants feel calm and secure, which, in turn, contributed to feelings that they could perform their work more safely.

3.2.1 | Present assistance

The participants felt that the GGN was a huge asset as they could be physically present and tangibly supportive in new situations and that they could ask for help and that the GGN had time to help a little extra. The participants described that they could consult the GGN in the clinical nursing. They felt that they could ask the GGN for advice when they got into situations where they did not know how to proceed. The participants described that when the GGN was present on the ward, they were able to discuss, brainstorm ideas and develop their thoughts with the GGN.

> I think it is a good arrangement that they are not working clinically. That they are there to support and guide (P3).

> She could always answer questions … she was always close at hand to ask so … she took that time, and it was allowed to take a little longer and no stress at all and very educational (P4).

TABLE 2 Theme, categories and subcategories emerged from the qualitative analysis

Theme	Category	Subcategory
Organisational prerequisites	Activator	Facilitating structure
		Attractive workplace
	Supportive nursing	Present assistance
		Emotional support
		Patient safety
	Professional development	Nursing competence
		Feeling of security
		Learning

The NGN felt that the GGNs were available for support in the emergency situations. Here, they described that they received support by having the GGN physically present. They could get immediate confirmation that they acted adequately in an emergency situation. They were supported through clinical guidance.

> Especially when you end up in these critical situations, it really feels good. That's when it feels like. God, how nice that they were here. I do not know if I would have managed otherwise. I don't know what I would have done (P2).

3.2.2 | Emotional support

The NGNs felt that the GGNs provided support in more than practical tasks. They provided emotional support and ensured that they felt safe and well-functioning. They also felt that the GGNs understood their work situation and that they were helping if the NGN felt stressed. Participants described the presence and care of GGNs as helping to prevent burnout.

> She makes sure that you feel safe and well-functioning. (P1) Someone who stops the machinery. It does not work if you don´t take 10 minutes here now. You may need it. If you do not tell someone, you will get burned out (P2).

3.2.3 | Patient safety

The participants felt that if their nursing skills were not enough, the GGNs could cover these knowledge gaps. They also described that they turned to the GGN when there was something they did not know about. Here, they experienced that the GGN's knowledge contributed to improve patient safety. The participants felt that the opportunities for reflection contributed to growth in their role as nurses and becoming better at ensuring patient safety in their functions.

> Fabulous to have someone to go to when I feel that my skills do not cover all challenges and she can help cover up the small shortcomings (P1).

> She can show me what I do not know and make it safer for patients (P10).

3.3 | Professional development

Professional development is created by the three subcategories: *the nurse's professional role*, *feeling of security*, in the sense of perform tasks correctly, and *learning*. The participants described that they felt secure and were strengthened in their professional role by the presence of the GGN, which enabled professional development. The participants considered that the GGN contributed to their competence development by supervising various forms of learning. They found it valuable that the GGN provided them with opportunities to refine procedures and details through trainings. The GGN supported the NGN's progress in the development of the NGN's nursing skills and improved their security by strengthening them in their professional role and being a knowledge support.

3.3.1 | Nursing competence

The participants felt that the GGN made it possible for them to be new in their professional role. They described how the GGN taught them to set up strategies for how their work as nurses would be easier and how they would learn to prioritize. They also experienced that the reflection opportunities initiated by the GGN contributed to becoming more grounded in their nursing profession. One of the participants considered that the GGN was like a bridge into working life.

> Being able to be new in your profession and not knowing, because you are far from knowing everything, and then have someone who has long experience, to whom you can go and brainstorm ideas. So only positive thoughts (P8).

> Feel that you are growing as a nurse in that role, and that you actually become safer, purely patient safety-oriented (P2).

3.3.2 | Feeling of security

The participants described that the GGNs made them feel safe. They described that the GGN could strengthen the confidence that they performed their tasks correctly. If they felt insecure, they knew where to get support, and it was a form of security to know that the GGN was there for them. The participants also felt that they were strengthened and calmed down simply by knowing where they could turn for help.

> Yes, this is exactly what you need help with, you get help with, it is not set in stone. I can get help with what I need. So above all it is an extra security (P1).

> To be strengthened in the security that I am doing the right thing and you do not think about that much when it comes to routines … you can come to thoughts that you might be able to improve this. - What are we really doing here? (P7).

3.3.3 | Learning

The participants described that the GGN made learning possible, both through mediated and their own learning. The NGNs experienced that they learned through the trainings, workshops and CASE sessions that the GGN arranged and that this improved their competence. They often received both advice and tips, which they felt developed their skills. The participants felt that they could build up their own experience through the experience of the GGN and described that GGNs were like banks of knowledge and experience. The GGN was perceived as a good supervisor and at teaching how to supervise others. They described that the GGNs were pedagogical and that they did not take over the work but explained and showed how to do it. The participants also experienced that the GGN created a favorable learning environment, and in that environment, learning moments were offered.

> It is good to have a little workshop if there are several people and discuss. Because I think if there are several people who talk and create a discussion … then my experience is that you learn more if there are more people who discuss and work together and get to try things out a little … (P3).

> The GGN has probably created a favorable learning environment … it gives the opportunity to have a favorable learning environment, I think above all. Before, it was difficult to get learning elements, but now you can get it when the need arises (P1).

The participants described that the GGN started up reflection sessions in the wards. All participants described that reflection was important for developmental purposes and that the reflections could lead to long discussions. The participants described the importance of being able to reflect on situations, especially acute situations, which led to professional development.

> Reflection is important because otherwise you learn nothing … You cannot just go on working; you have to think; what did we do well, what did we do badly. If you do not reflect, there will be a lot of trouble in the department. You also want to avoid that (P6).

4 | DISCUSSION

The results of this study show that the way in which the GGN intervention was organised created favorable conditions. The decision by the hospital management that GGN would not be part of the regular ward staff proved to be successful. The participating NGNs considered this to be crucial in creating a structure that enabled GGNs to be available in the wards, which was made possible because of the GGN not taking part in the regular ward staff.

The GGNs, who are experienced nurses, provided an important support function for the NGNs that participated in the current study. The GGNs had the time to be physically present and were able to support the NGNs both practically and emotionally, which made them feel secure. This is in line with the findings of Willman et al. (2020). Showing that experienced nurses are important in providing support to NGNs during their first time in the profession.

In the process of professional development, NGNs felt that the GGN was important to the NGNs professional development and helped them to evolve on the road from novice to expert (Benner, 2001). Dyess and Sherman (2009) found that NGNs felt more confident in their professional role when they received confirmation that they had performed their tasks correctly. Furthermore, the nurse develops in the professional role through knowledge and practical experience (Benner, 1982). NGNs in this study consulted GGNs in clinical nursing tasks, which developed NGNs' skills. NGNs were able to improve and perform their work because GGNs contributed their knowledge and experience. Aiken et al. (2014) found that nurses' level of education and workload are directly related to serious patient risks. Learning can be less stressful when experienced nurses develop trust and caring relationships with NGNs (Brunelli et al., 2022). The lectures, trainings, workshops, and CASEs organised by the GGN in conducive learning environments also strengthened the NGNs' competences. This reinforces the importance of the role of GGN in the development of the NGNs' competences and their ability to perform work in a manner conducive to patient safety.

The supervision carried out by the GGN was described by the NGNs as educational and instructive supervision situations. Tracey and McGowan (2015) found that supervision was a way to provide support and enable the NGNs to move through the transition to become confident in their professional role and increase their own competence (Lee & de Gagne, 2022; Tracey & McGowan, 2015). Experienced nurses' support and mentoring of new nurses is one of the most central factors for learning (Bakon et al., 2018; Kyndt et al., 2016; Pennbrant et al., 2013). To our knowledge, this kind of intervention is not common in Swedish health care. In her thesis, Willman, (2020) explored NGNs self-assessed clinical competence and professional development, concluding that support increase both quality of care and patient safety, which our participants also stated. In a study from the United States, Wiersma et al. (2020) identify some key issues to be aware of in the transition from newly graduate to experienced nurse, and facilitation is found to be essential. Therefore, we argue that this kind of intervention is useful both for the NGNs and the health care organisations but not least for the patients, increasing care quality and safety.

The participants in the present study highlighted the importance of reflection and that it was supported by GGNs. The reflections were important for developmental purposes and provided the NGNs with the skills to perform nursing care that reflected patient safety while NGNs became more grounded and confident in their professional role. NGNs saw the importance of reflecting on situations and especially those acute situations that they felt led to professional development. Sterner et al. (2019) found that reflection can influence the ability to

provide care in acute situations. In the current study, NGNs reported that reflection also led to improved communication and a better work environment (Sterner et al., 2019).

Both organisational and individual factors impact a nurse's intention to stay or leave their job (Cao et al., 2021). Individual factors include changes in personal or family life or health, educational goals, work stress, job dissatisfaction or, conversely, a sense of empowerment in decision-making. Organisational factors that affect retention include work environment, working relationships, working conditions, salary, managerial style and effective supervision (WHO, 2020). NGNs who participated in this study highlighted that the reason they stayed was that professional development was enabled, and this development was achieved through the GGNs. The NGNs also thought that having GGNs at hand could prevent burn-out. The success factors for this intervention are interpreted to be the structure created by the organisational decision and the clarity of the role and the tasks of the GGN.

The first author was the initiator of the intervention and project manager during the project. This may have influenced the analysis due to preunderstanding and required outcomes. Therefore, both authors were involved throughout the analysis process. To strengthen the trustworthiness (Lincoln & Guba, 1986), the analysis was discussed by both authors several times until consensus was obtained (Graneheim & Lundman, 2004). The interviews were conducted by the same person over a period of a few months, which decreased the risk for inconsistency. An open approach with a semi-structured interview guide increases the pre-conditions for credibility. Transferability is always difficult due to contextual factors, but the findings in this study could facilitate other organisations (Graneheim & Lundman, 2004; Lincoln & Guba, 1986), and the result is also supported by other studies (e.g., Bakon et al., 2018; Kyndt et al., 2016; Pennbrant et al., 2013; Tracey & McGowan, 2015).

5 | CONCLUSIONS

The results of the current study show that the first years in the profession are challenging for NGNs and that the GGNs provided an important support function and contributed to the professional development of the NGNs. The NGNs experienced that their professional role developed and that the support from GGNs improved patient safety. This was made possible by the structure created when the GGN was not part of the regular ward staff. This was a strategic decision taken by the hospital management. This decision was a success factor in achieving the positive outcome of the intervention.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

In health care organisations, strategic decisions, management support and clear goals are important to create the organisational conditions to improve safer care. Support from experienced nurses is an enabler in supporting NGNs developing in their profession. Establishing specific positions for experienced nurses could improve ways to achieve support. The hospital management's decision, except the GGNs as part of the regular ward staff, was successful. The findings of this study could support managers and management, both locally, nationally and internationally. Establish ways to increase and maintain the nursing staff is essential, and this study show that support to NGNs can pay off in a longer run.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest. They also declare that they agree with the content of this manuscript.

ETHICAL CONSIDERATIONS

As the study neither concerns the conditions of the Swedish Act on Ethical Review of Research Involving Humans (2003:460) nor has sensitive content, there is no requirement for an application for ethical review according to Swedish law. The ethical guidelines of the Declaration of Helsinki (World Medical Association, 2013) are the basis for ensuring an ethical approach to studies and were applied in this study. The participants received both oral and written information about the aim of the study. They were also informed that participation was voluntary and that they could end their participation without any explanation. Written informed consent was obtained from each participant prior to the interview.

DATA AVAILABILITY STATEMENT

This study was performed in Swedish, so prints of interviews and analysed material are therefore only available in Swedish. Due to confidentiality, the interviews will not be exposed, but examples of the analysis can be translated and shown upon request.

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ORIGINAL ARTICLE

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Chinese nurses' perceptions on toxic leadership behaviours of nurse managers: A qualitative study

Xueqin Guo RN, MSc[1,2] | Lijuan Xiong RN, Deputy Director of Nursing Department[1] | Yumei Wang RN, MS[1] | Xin Li RN, MS[1] | Yuhan Wang RN, MSc[1,2] | Fang Xiao RN, MS[1] | Jia He RN, MS, Head Nurse[1] | Yuting Xiang RN, MS[1] | Chenzi Xu RN, MS[1]

[1]Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China

[2]School of Nursing, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China

Correspondence
Lijuan Xiong, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China.
Email: xhxlj@hust.edu.cn

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Abstract

Aim: The aim of this study is to explore the perceptions of Chinese registered nurses on toxic leadership behaviours of nurse managers and to determine its type, cause and response measures.

Background: The nurse manager is the front-line leader of the nurses who provide services directly to patients. Previous evidence suggests that toxic leadership behaviours of nurse managers do exist and it is necessary to understand the specifics of it.

Methods: We used phenomenological research methods to conduct semi-structured in-depth interviews among 12 nurses at a tertiary hospital in Wuhan over the period from January to March 2022. And the data were analysed using Colaizzi seven-step analysis method.

Results: Four themes were discovered: (a) nurses' perceptions of toxic leadership behaviours; (b) toxic leadership behaviours of nurse managers; (c) reasons for toxic leadership behaviours of nurse managers and (d) measures for toxic leadership behaviours of nurse managers.

Conclusion: Chinese nurses are exposed to the toxic leadership of nurse managers for multiple reasons and respond differently.

Implications for Nursing Management: This study helps nursing managers identify which behaviours are harmful to the nurse that require special attention in developing strategies to buffer against nurse managers' toxic leadership.

KEYWORDS
abusive supervision, interview, nurse manager, qualitative, toxic leadership

1 | INTRODUCTION

Leadership behaviour has always been the focus of management research. Most of the past investigations have focused on positive leadership behaviours such as transformational leadership and sincere leadership but paid less attention to negative leadership behaviours. Toxic leadership behaviour, as a negative and ineffective leadership behaviour, does exist in nursing and is becoming more common

(Labrague, 2021). In the workplace, the leadership of the nurse managers has an impact on nurses, patients and organizations. Research repeatedly reports the consequences of toxic behaviours in terms of poor psychological health (Zhang et al., 2021), low job satisfaction, low quality of nursing care (Sharif et al., 2021), counterproductive work behaviours (Low et al., 2021) and higher turnover intention (Lyu et al., 2019). As to patients, the incidence of nurse-reported adverse events increased, such as medical errors (Lyu et al., 2019) and the decline in care quality (Labrague, 2021). To the organization, the reduced organizational performance and the emergence of toxic followers can lead to the breeding of negative organizational culture (Thomas et al., 2016). The existence of the toxic leadership behaviours of nurse managers is widely concerned.

Prior studies, mainly in western countries, have identified its definition, prevalence, classification, causes and effects in different cultural backgrounds. However, there is little known about the toxic leadership behaviours of nurse managers in Chinese hospitals. Chinese hospitals mainly advocate positive leadership behaviour such as transformational leadership styles but pay less attention to negative leadership behaviour. Therefore, this qualitative research explores Chinese nurses' perceptions of toxic leadership behaviours of nurse managers and identify the type, cause and response measures.

2 | BACKGROUND

Past research has attempted to identify nonviolent harmful behaviours among health care leaders. Concepts involving such behaviours include abusive management, petty tyranny, workplace bullying and toxic leadership (Guo et al., 2021). There is theoretical and empirical overlap between these concepts. Toxic leadership refers to the use of organized, systematic and persistent destructive behaviours by leaders that may cause psychological harm to their followers and harm to the organization, emphasizing undesirable outcomes (Webster et al., 2016). Unlike workplace bullying (Tuna & Kahraman, 2019), which is repeated hostile behaviour of one person or group towards another, toxic leadership behaviour specifically refers to behaviour from managers to subordinates and does not include bullying from colleagues.

In recent years, many studies have pointed to the presence of toxic leadership, which has become prevalent in nursing and other health care professions (Labrague, Nwafor, & Tsaras, 2020; Zhang et al., 2021). Filipino nurses rated their nurse managers' toxic leadership behaviours to a lesser extent, suggesting that Filipino nurse managers have a lower tendency to exhibit toxic leadership behaviours (Labrague et al., 2021). A survey of 224 nurses in Turkey showed that nurses were exposed to a moderate number of toxic leaders. The overall mean score of the Toxic Leadership Scale was 78.64 ± 29.24 with a total score between 30 and 150 (Ozkan et al., 2022). These studies indicate that nurse leaders may exhibit toxic behaviours in the treatment of subordinates in the nursing field.

Toxic leadership is characterized by chronic abuse of subordinates, including public ridicule, threats, deliberate withholding of needed information and silent treatment (Peltokorpi & Ramaswami, 2021). They always find ways to crush and reduce the confidence and interest of subordinates (Singh et al., 2018). They are destructive, abusive and ineffective, interfering with the ability of others to do their jobs. They are concerned with status and power, thus increasing the toxicity of the environment (Milosevic et al., 2020).

Toxic leadership can manifest in different ways in another context and therefore can lead to different outcomes (Milosevic et al., 2020). The Chinese work culture emphasizes harmony in collective relationships on the one hand. Managers need to be fair and selfless and care for subordinates. On the other hand, it requires managers to be strict in rewards and punishments and goal oriented. There is a large power distance and a clear organizational hierarchy in Chinese work (Sun et al., 2020; Yin et al., 2021). Chinese managers' leadership behaviours are strongly influenced by traditional Chinese culture (Barney & Zhang, 2009; Ma & Tsui, 2015). Therefore, toxic leadership in the Chinese cultural context may have different characteristics from other countries.

In China, nursing staff is roughly divided into three categories. The first is registered nurses who provide direct services to patients within the unit. The second is nurse managers, who directly supervise and direct the clinical work of registered nurses. The third is nursing department managers, who manage the nurse managers throughout the hospital. As a significant component of nursing management in hospitals in China, do toxic leadership behaviours occur in the management process of nurse managers? What are the specific types of toxic leadership behaviours perceived by nurses? Why does toxic leadership occur in the nursing workplace? How do nurses deal with these toxic leadership behaviours? The identification of these elements is critical to the healthy development of nursing management.

There is no theoretical framework to explain the manifestation of toxic leadership behaviour; the Toxic Triangle model (Padilla et al., 2007) can help to understand the development of it. In China, researchers used a case interview method, combined with literature analysis and rooting theory, to construct a 'new' toxic triangle model based on the toxic triangle model (Chen & Sun, 2021). It consists of three elements: supervisory traits, subordination factors and organizational context. Supervisor traits include narcissistic tendencies, power consciousness, outcome orientation, stereotypes and biases. Subordinate factors include self-perception, behavioural style, job performance and political skills. Organizational contextual factors include power distance, Chaxu Climate, promotion channels and grievance mechanisms. Among them, the Chaxu climate emphasizes interpersonal relationships. 'Cha' represents the inequitable distribution of resources in the organization. 'Xu' represents the status gap between superiors and subordinates, emphasizing the order of respect and inferiority in the organization (Ma & Su, 2020). Supervisors will use the intimacy of interpersonal relationships as the main reference standard in resource allocation and job evaluation, losing quantitative fairness. This can result in affiliates and cliques in the organization. The combination of these three elements will promote toxic leadership.

3 | METHODS

3.1 | Design

We applied a descriptive, qualitative study using individual telephone semi-structured interviews. The aim is to understand the toxic leadership behaviours of nurse managers perceived by nurses by revealing the reality and experience of repeated hostile behaviours at work. Find out its type, cause and response measures through further analysis.

3.2 | Participants

Purposeful sampling was used to recruit nurses in a tertiary hospital in Wuhan, which has a total of 3,733 nurses on staff and 197 nurse managers. Inclusion criteria for interviewees possess a nurse's practice qualification, informed consent and voluntary participation. Exclusion criteria: nurses who experienced a bad psychological impact event (e.g. divorce, death of an influential relative or sick leave) within three months, and nurses in internship. The rationale for including the target population for this survey was that these nurses were managed by nursing managers and provided direct patient care. Nurses with their psychological distress were excluded to minimize the influence of other factors. The demographic profile of participants is shown in Table 1.

TABLE 1 Demographics of nurse participants ($N = 12$)

Characteristics	*n*	%
Education		
Bachelor's degree	8	66.7%
Master's degree	4	33.3%
Marital status		
Married	5	41.7%
Single	7	58.3%
Age, mean = 32.01, SD = 6.50		
20–30	6	50.0%
31–40	4	33.3%
41–50	2	16.7%
Years as nurse, mean = 9.92, SD = 8.30		
0–10	7	58.3%
11–20	3	25.0%
21–30	2	16.7%
Nurse career title level		
Junior nurse	2	16.7%
Junior nurse practitioner	4	33.3%
Supervising nurse practitioner	5	41.7%
Associate chief nurse practitioner	1	8.3%

Note: *n* = number of nurses.

3.3 | Data collection

This study was conducted from January to March 2022 using semi-structured, in-depth, open-ended and recorded interviews. To create a relaxed atmosphere, it began with light topics such as personal information and expectations for ideal leaders. Before the formal interview, respondents were asked to recall specific instances of toxic leadership behaviours of nurse managers that they or their colleagues had experienced. The researcher asked appropriate follow-up questions, listened carefully and took notes. The detailed interview outline is shown in Table 2.

Due to the sensitivity of the subordinate relationship between nurses and nurse managers, respondents may not be able to express their true thoughts fully during face-to-face conversations. Consequently, the interviews were conducted by telephone. The anonymity of telephone contact enables respondents to be more proactive in answering questions without feeling constrained (Musselwhite et al., 2007) so that it can be considered an appropriate method of data collection (Ward et al., 2015). Data collection ended when the conceptual information achieved saturation and no new data emerged (Saunders et al., 2018).

3.4 | Data analysis

The mean duration of interviews was 38 min, ranging from 28 to 59 min, and each was transcribed within 24 h of the interview. We used NVIVO11.0 computer software to facilitate the analysis of interview transcripts. The data were analysed by Colaizzi's (1978, p. 48–71) seven-step method. First, two authors reviewed transcribed interviews several times and had a general understanding of the whole content. Second, they analysed the data word by word to identify and extract significant statements related. In the third step, they determined and formulated meanings from substantial statements. Then,

TABLE 2 Interview questions

- Please briefly introduce yourself (age, marital status, time spent independently in nursing, nursing title)
- What is the personality and work style of the head nurse on your unit? How do you feel this work style has contributed to your professional performance?
- Have you heard of toxic leadership behaviours of nurse leaders? What behaviours do you think are toxic for nurse leaders?
- Have you yourself or a colleague ever suffered from toxic nurse leader behaviour? What was the situation at the time?
- Why do you think nurse leaders exhibit this toxic behaviour?
- What are the effects of this nurse leader toxic behaviour?
- What would you do if your nurse leader exhibited toxic behaviour?
- Do you know of any countermeasures or ways to respond to or address negative leadership behaviours of nurse leaders in your hospital?

Source: Primary author.

they look for common concepts and organize formulated meanings into categories and clusters of themes. In the fifth step, they exhaustively describe the investigated phenomenon by adding typical original statements from participants. Next, they put similar themes and their descriptions together for repeated comparisons to draw similar views and construct themes. Finally, returning the resulting subject structure to the participants to check, if there is a bias, the researcher must step back to the analysis from the first step.

3.5 | Rigour

The following measures have been taken to ensure the consistency and validity of the study. The researchers have clinical experience that can easily communicate with the nurses and build trust. The researchers ensured that the interviewees correctly understood toxic leadership behaviours before the interview. The nominal themes and subthemes identified by the two researchers were discussed and agreed. All respondents were invited to confirm the distilled results, and they agreed with the findings.

3.6 | Ethical considerations

This study protocol was approved by the Ethical Committee of Tongji Medical College, Huazhong University of Science and Technology (No. S044), and followed the ethical principles of the Declaration of Helsinki. Before the beginning of each interview, participants were informed verbally, and in writing about basic information including the purpose, significance, the principles such as voluntary participation, confidentiality and anonymity, the need for audio recording and the experience of recalling might be psychologically uncomfortable. They could terminate and discontinue at any time in the study.

4 | RESULTS

We derived 4 main categories and 15 sub-categories from the data. They are described in Table 3. The following interpretations and direct quotations (translated from Chinese) describe the meaning of each theme in order to be representative of the nurses' views.

4.1 | Theme 1: Nurses' perceptions of toxic leadership behaviours

4.1.1 | Hard to avoid

Most respondents consider that toxic leadership is inevitable in the workplace. A nurse said: 'I know toxic behavior is bad, but the workplace will have it, wherever you go' (N4). Another nurse said: 'This thing is very common, no matter what the manager does, there will be people who are not satisfied' (N6).

TABLE 3 Main categories and subcategories of the study

Main categories	Sub-categories
Nurses' perceptions of toxic leadership behaviours	Hard to avoid
	Desire for attention
Toxic leadership behaviours of nurse managers	Negative feedback
	Ignoring
	Unfair treatment
	Self-centeredness
	Excessive pressure
	Work inaction
Reasons for toxic leadership behaviours of nurse managers	Workload
	Personality
	Job performance
Measures for toxic leadership behaviours of nurse managers	Confusion and silence
	Department or industry change
	Reflection and communication
	Flatter and ingratiation

4.1.2 | Desire for attention

Respondents said that in the face of toxic leadership behaviour, everyone will selectively see only the positive side. They hope to get enough attention for the negative side. A nurse said: '…people will not bring out the toxic leaders to discuss a specific solution' (N3). Another nurse said: 'The hospital asks nurses to evaluate the nurse manager, every time this happens, we will give a good score, even if it is hypocritical' (N7). A nurse explained: 'The nurse manager has some toxic leadership behaviors, but she must have a positive side, otherwise how could she be elected as a manager? Everyone tends to say good things about managers' (N11).

4.2 | Theme 2: Toxic leadership behaviours of nurse managers

4.2.1 | Negative feedback

All respondents desired care and understanding at work, as well as verbal evaluations and constructive feedback from their nurse managers. They claimed that certain nurse managers frequently utilized negative feedback to illustrate that the nurses' performance was inadequate or inappropriate and to dismiss and criticize the nurses' personal and professional accomplishments. A nurse recalled, 'Once I carefully provided an infusion, the nurse manager told me I was wrong in front of the family members of patients and reprimanded me harshly. After that, she kept telling me what I had done wrong' (N2). Furthermore, 'Our supervisor does not point out your mistakes in your presence, but she blames you in front of other nurses or doctors in the department' (N5). Another nurse talked about the interaction

with her head nurse at work, 'She would make some bad facial expressions to you, like rolling her eyes or glaring at you' (N7).

4.2.2 | Ignoring

Half of the nurses had been neglected by their leaders. They described toxic leadership practices as nurse leaders' scorn and indifference to nurses in the unit. Some nurses went into detail about situations. 'When I have a conflict with a patient, the nurse manager does not listen to my explanation and just makes me apologize to the patient' (N1). One nurse explained, 'Our chief nurse rarely appreciates us and continually stresses that if you are not content, you may quit. More people can replace you no matter how good you are' (N3).

4.2.3 | Unfairness

Some interviewees claimed that even though they worked in the same department, the administrator treated them unfairly for various reasons. N4 expressed this unfair treatment: 'You can be blamed and deducted for the same mistake while others get nothing'. Another nurse said, 'Accountability team assignments are unfair. You always have the most work to complete, and your two days off on the night shift are sometimes purposely separated' (N10).

4.2.4 | Self-centeredness

According to several respondents, nurse leaders can demonstrate self-centred traits such as narcissism and selfishness. 'The head nurse will actively highlight her leadership position in front of the nurses, exhibit a sense of superiority and give us a strong sense of remoteness', one nurse stated (N6). 'You have to consult the chief nurse to make any decision in the department. Moreover, do not argue with her. Otherwise, you will be required to self-examine', one nurse explained (N9). One nurse mentioned, 'The chief nurse admires to be complemented by the nurses. She thinks that everyone in the unit is around her for cajoling her and making her available' (N11). In addition, one nurse shared, 'Our head nurse often asked us to do things but would announce to the public that she did these things herself …' (N13).

4.2.5 | Excessive pressure

Respondents noted that nurse managers frequently assign many non-repetitive tasks at work and add exert pressure. One nurse exclaimed, 'The nurse manager is part of the unit and requires nurses to do research and publish articles, but we do not have the foundation or resources to learn …' (N3). One nurse said she faced a similar dilemma: 'Nurses are asked to clean up every day, and we do not know if we are cleaners or what' (N6). Another nurse expressed her experience in the following words: 'Departmental training, exams, and inspections are widespread, and even all exam papers are also required to be memorized or else you will have your salary deducted' (N7).

4.2.6 | Work inaction

We also received information from the interviewees that the head nurse was inactive in her work. For example, 'The head nurse ignores conflicts between nurses when they arise' (N8). One nurse explained her situation in these words: 'Once the unit was very busy and needed to be coordinated, so I reported it to the head nurse. But the head nurse told me to find my way and asked me to find my colleagues to work overtime' (N11).

4.3 | Theme 3: Reasons for exposure to toxic leadership behaviours of nurse managers

4.3.1 | Workload

The vast majority of interviewees described the reason for the toxic leadership behaviours of a nurse manager as a lack of labour that included not only nurses but also the nurse managers. One interviewee revealed that 'patients and nurses are both under the charge of the nurse manager; although she does not have to care for patients, she has to do research, publish articles, go to meetings, etc' (N2). Another nurse pointed out that 'the department is understaffed, and there are only a few nurses working and even fewer on the night shift' (N5).

4.3.2 | Personality

Personality was identified as a cause. The personality of the head nurse is described as '… low emotional intelligence, tending to reopen old scores … narrow-minded, and not wanting subordinates to develop better' (N1). '… competitive and doing everything to the best to emphasize her ability' (N11). A few nurses mentioned that nurses' personality also affects whether they would be exposed to toxic leadership. 'Nice guys finish last, and nurses with weak personalities will be bullied by their leaders' (N7), and 'Some nurses are too opinionated to obey the arrangement of their leaders' (N3).

4.3.3 | Job performance

Some respondents believed that nurses' performance leads to toxic leadership, and the respondents shared their story that 'if you are negligent and make mistakes frequently, of course, you will always be supervised' (N6). Respondents reported their experience that 'they do not do their daily nursing work well enough to meet the leader's demands' (N4).

4.4 | Theme 4: Measures for toxic leadership behaviours of nurse managers

4.4.1 | Confusion and silence

When asked about responding to the toxic leadership behaviours, the majority of nurses said they were overwhelmed with silence and would not respond. A nurse uttered, 'I have no idea what to do … Even if you report it, it will not change anything, and it will just make the leader dislike you more' (N1). Another nurse mentioned that 'when encountering such an incident, our department would rather work on the night shift than the day shift in order to work without the head nurse. I will do my best to forget the bad experience and avoid interacting with the chief nurse in the workplace' (N5).

4.4.2 | Department or industry change

Most of the nurses pointed out that they can choose to resign or work in different departments in the same hospital to escape from their current environment. For example, one nurse stated, 'Do not do nursing without a strong heart and an iron body, or you will think about resigning every day. Moreover, many people in our department were resigned because the head nurse' (N2). Another nurse answered, 'I can change my department and living environment' (N8).

4.4.3 | Reflection and communication

Some nurses reported that they would self-reflect after receiving toxic leadership from the nurse manager, try to communicate with the nurse manager and then make changes from themselves. 'First of all, I would reflect on myself and think why it was me. If I made a mistake, I would correct it next time' (N7). Another nurse responded, 'If you have a problem with the head nurse, you should communicate with her/him directly instead of hiding it in your heart, which will only increase your psychological burden' (N11).

4.4.4 | Flatter and ingratiation

A few nurses mentioned that after receiving toxic leadership from the nurse manager, you just need to do 'little things' to change your situation, such as 'saying what the head nurse likes to hear, learning to read people's minds, and kissing ass' (N12) as well as 'doing as she pleases' (N4).

5 | DISCUSSION

This article analysed nurses' perceptions of toxic leadership behaviours among nurse managers, and these open-ended responses replenish the missing piece of the quantitative problem. We know that toxic leadership does exist in the workplace of Chinese nurses, and nurses want to draw attention. Toxic leadership is not limited to one country. It is a global problem.

Previous studies have shown that nurse leaders' toxic behaviours are multifaceted. Labrague, Lorica et al. (2020) categorized the toxic leadership behaviours of nurse leaders into four types of behaviours: intemperateness, narcissism, self-promotion and humiliation. In addition to these apparent behaviours, toxic behaviours of leaders sometimes involve covert and passive behaviours, such as the failure to support staff and the constant use of insulting and offensive nonverbal gestures (Milosevic et al., 2020). The specific manifestations of toxic behaviours of Chinese nurse leaders in this study included excessive negative feedback, neglect, differential treatment, pressure on subordinates, self-centeredness and inaction at work. In contrast to foreign countries, supervisors rarely displayed pronounced superficial 'hostility' when they disliked or blamed an employee, such as physical aggression or uncontrolled behaviour. Due to the high context of Chinese culture (Ding et al., 2016), leaders use covert and disguised ways to express such thoughts and feelings implicitly.

The new 'toxic triangle' framework (Chen & Sun, 2021) suggests that toxic leadership causes include supervisory traits, subordination factors and organizational context. Leadership behaviour is a leader–member exchange interaction, and the personal characteristics of both leaders and subordinates influence toxic leadership. Among supervisor traits and subordinate factors, except those mentioned in the toxic triangle, previous research has shown that leaders who are poorly managed (Gunawan et al., 2018), chronically psychologically depressed (Tepper et al., 2006) and sleep deprived (Barnes et al., 2014) are more likely to practice toxic leadership. Employees who dare to overcome their fears and adhere to their values and principles are less likely to be affected by toxic leadership behaviours (Afsar et al., 2019). This study concluded that the personalities of nurses and nurse managers may contribute to toxic leadership. Factors such as low emotional intelligence, narrow-mindedness, goal-orientedness of nurse managers, cowardice and stubbornness of nurses may also contribute to toxic leadership behaviours. Among the organizational context factors, since the power and authority of the nurse manager are not absolute or highly concentrated (Martinko et al., 2013), organizational factors mentioned in the 'toxic triangle' framework, such as power distance, Chaxu Climate, promotion channels and grievance mechanisms, as pointed out in other studies such as opaque promotion channels, which require a leader's recommendation to be promoted, are not evident in this study. In addition, workload factors are a major cause, the shortage of nurses leads to excessive work imposed by leaders on their subordinates and leaders produce toxic leadership to achieve desired goals, which is consistent with Labrague et al.'s study (2021).

Respondents indicated that the vast majority are in a state of helplessness after encountering toxic leadership. Some nurses choose to resign or change departments; in China, a survey of 28,910 nurses showed that 22.02% of nurses often have the idea of changing jobs recently. In the coming year, 70.80% choose to leave their dissatisfaction with their current jobs, and 76.53% choose not to continue their current careers after leaving (Wu et al., 2022). Some nurses who are

reluctant to leave may become advocates to maintain and promote the rationalization of toxic organizational leadership (She, 2020). Organizations do not provide avenues for grievances and do not have good responses to toxic nurse leaders. Despite of extensive research and implementation of various organizational development and human resource interventions, it is unrealistic to expect leaders to change suddenly. Most importantly, leaders can be made aware of the harmful nature of the behaviour, and organizations can establish more systematic intervention and feedback systems.

6 | LIMITATIONS

This study is based on nurses' perceptions of toxic leadership behaviours. Thus, the real frequency of toxic leadership behaviours of nurse managers at this workplace could not be determined. In China, nurses from different levels of hospitals are exposed to the toxic leadership behaviours of nurse managers. This study only recruited nurses working in tertiary hospitals. The scope of further study should be conducted to expand the sample's representativeness.

7 | CONCLUSIONS

This study is an exploration of toxic leadership behaviours of nurse managers from the Chinese nurses' perspective. First, compared with other countries, the severity of toxic leadership behaviours of nurse managers among Chinese nurses was not reflected in the apparent hostile act with an uncompromising attitude but in some unfriendly, concealed and disguised behaviours. The causes are complex and deserve to be explore in-depth. Finally, we found that nurses have different ways of responding, some of which can affect nursing care. The findings can help nurse managers determine which behaviours are harmful to nurses and respond at the source. The importance of oversight by more senior managers in the organization is emphasized to promote a positive work environment for nurses. We can no longer pretend that nothing is happening; we need to work to address this issue and protect the work environment for nurses.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse managers need to follow the principle of being strict with themselves and lenient with others and take the initiative to prevent the emergence of toxic leadership behaviours. Nurses urgently need to improve their ability to identify and respond to negative leadership behaviours, regulate their emotions and work with colleagues to create a harmonious departmental atmosphere. The organization should strengthen its care for nurse leaders, pay attention to and promptly discover negative leadership behaviours of nurse leaders, open up channels, clarify attitudes, find out the facts and deal with them seriously.

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CONFLICT OF INTEREST

All authors declare no conflict of interest.

ETHICS STATEMENT

The study was approved by the Ethics Committee of Tongji Medical College, Huazhong University of Science and Technology (No. S044).

AUTHOR CONTRIBUTIONS

The authors conceptualized and designed the study, conducted data collection and analysis and drafted and wrote the paper.

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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ORIGINAL ARTICLE

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Chinese nurses' perceptions on toxic leadership behaviours of nurse managers: A qualitative study

Xueqin Guo RN, MSc[1,2] | Lijuan Xiong RN, Deputy Director of Nursing Department[1] | Yumei Wang RN, MS[1] | Xin Li RN, MS[1] | Yuhan Wang RN, MSc[1,2] | Fang Xiao RN, MS[1] | Jia He RN, MS, Head Nurse[1] | Yuting Xiang RN, MS[1] | Chenzi Xu RN, MS[1]

[1]Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China

[2]School of Nursing, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China

Correspondence
Lijuan Xiong, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, China.
Email: xhxlj@hust.edu.cn

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Abstract

Aim: The aim of this study is to explore the perceptions of Chinese registered nurses on toxic leadership behaviours of nurse managers and to determine its type, cause and response measures.

Background: The nurse manager is the front-line leader of the nurses who provide services directly to patients. Previous evidence suggests that toxic leadership behaviours of nurse managers do exist and it is necessary to understand the specifics of it.

Methods: We used phenomenological research methods to conduct semi-structured in-depth interviews among 12 nurses at a tertiary hospital in Wuhan over the period from January to March 2022. And the data were analysed using Colaizzi seven-step analysis method.

Results: Four themes were discovered: (a) nurses' perceptions of toxic leadership behaviours; (b) toxic leadership behaviours of nurse managers; (c) reasons for toxic leadership behaviours of nurse managers and (d) measures for toxic leadership behaviours of nurse managers.

Conclusion: Chinese nurses are exposed to the toxic leadership of nurse managers for multiple reasons and respond differently.

Implications for Nursing Management: This study helps nursing managers identify which behaviours are harmful to the nurse that require special attention in developing strategies to buffer against nurse managers' toxic leadership.

KEYWORDS
abusive supervision, interview, nurse manager, qualitative, toxic leadership

1 | INTRODUCTION

Leadership behaviour has always been the focus of management research. Most of the past investigations have focused on positive leadership behaviours such as transformational leadership and sincere leadership but paid less attention to negative leadership behaviours. Toxic leadership behaviour, as a negative and ineffective leadership behaviour, does exist in nursing and is becoming more common

(Labrague, 2021). In the workplace, the leadership of the nurse managers has an impact on nurses, patients and organizations. Research repeatedly reports the consequences of toxic behaviours in terms of poor psychological health (Zhang et al., 2021), low job satisfaction, low quality of nursing care (Sharif et al., 2021), counterproductive work behaviours (Low et al., 2021) and higher turnover intention (Lyu et al., 2019). As to patients, the incidence of nurse-reported adverse events increased, such as medical errors (Lyu et al., 2019) and the decline in care quality (Labrague, 2021). To the organization, the reduced organizational performance and the emergence of toxic followers can lead to the breeding of negative organizational culture (Thomas et al., 2016). The existence of the toxic leadership behaviours of nurse managers is widely concerned.

Prior studies, mainly in western countries, have identified its definition, prevalence, classification, causes and effects in different cultural backgrounds. However, there is little known about the toxic leadership behaviours of nurse managers in Chinese hospitals. Chinese hospitals mainly advocate positive leadership behaviour such as transformational leadership styles but pay less attention to negative leadership behaviour. Therefore, this qualitative research explores Chinese nurses' perceptions of toxic leadership behaviours of nurse managers and identify the type, cause and response measures.

2 | BACKGROUND

Past research has attempted to identify nonviolent harmful behaviours among health care leaders. Concepts involving such behaviours include abusive management, petty tyranny, workplace bullying and toxic leadership (Guo et al., 2021). There is theoretical and empirical overlap between these concepts. Toxic leadership refers to the use of organized, systematic and persistent destructive behaviours by leaders that may cause psychological harm to their followers and harm to the organization, emphasizing undesirable outcomes (Webster et al., 2016). Unlike workplace bullying (Tuna & Kahraman, 2019), which is repeated hostile behaviour of one person or group towards another, toxic leadership behaviour specifically refers to behaviour from managers to subordinates and does not include bullying from colleagues.

In recent years, many studies have pointed to the presence of toxic leadership, which has become prevalent in nursing and other health care professions (Labrague, Nwafor, & Tsaras, 2020; Zhang et al., 2021). Filipino nurses rated their nurse managers' toxic leadership behaviours to a lesser extent, suggesting that Filipino nurse managers have a lower tendency to exhibit toxic leadership behaviours (Labrague et al., 2021). A survey of 224 nurses in Turkey showed that nurses were exposed to a moderate number of toxic leaders. The overall mean score of the Toxic Leadership Scale was 78.64 ± 29.24 with a total score between 30 and 150 (Ozkan et al., 2022). These studies indicate that nurse leaders may exhibit toxic behaviours in the treatment of subordinates in the nursing field.

Toxic leadership is characterized by chronic abuse of subordinates, including public ridicule, threats, deliberate withholding of needed information and silent treatment (Peltokorpi & Ramaswami, 2021). They always find ways to crush and reduce the confidence and interest of subordinates (Singh et al., 2018). They are destructive, abusive and ineffective, interfering with the ability of others to do their jobs. They are concerned with status and power, thus increasing the toxicity of the environment (Milosevic et al., 2020).

Toxic leadership can manifest in different ways in another context and therefore can lead to different outcomes (Milosevic et al., 2020). The Chinese work culture emphasizes harmony in collective relationships on the one hand. Managers need to be fair and selfless and care for subordinates. On the other hand, it requires managers to be strict in rewards and punishments and goal oriented. There is a large power distance and a clear organizational hierarchy in Chinese work (Sun et al., 2020; Yin et al., 2021). Chinese managers' leadership behaviours are strongly influenced by traditional Chinese culture (Barney & Zhang, 2009; Ma & Tsui, 2015). Therefore, toxic leadership in the Chinese cultural context may have different characteristics from other countries.

In China, nursing staff is roughly divided into three categories. The first is registered nurses who provide direct services to patients within the unit. The second is nurse managers, who directly supervise and direct the clinical work of registered nurses. The third is nursing department managers, who manage the nurse managers throughout the hospital. As a significant component of nursing management in hospitals in China, do toxic leadership behaviours occur in the management process of nurse managers? What are the specific types of toxic leadership behaviours perceived by nurses? Why does toxic leadership occur in the nursing workplace? How do nurses deal with these toxic leadership behaviours? The identification of these elements is critical to the healthy development of nursing management.

There is no theoretical framework to explain the manifestation of toxic leadership behaviour; the Toxic Triangle model (Padilla et al., 2007) can help to understand the development of it. In China, researchers used a case interview method, combined with literature analysis and rooting theory, to construct a 'new' toxic triangle model based on the toxic triangle model (Chen & Sun, 2021). It consists of three elements: supervisory traits, subordination factors and organizational context. Supervisor traits include narcissistic tendencies, power consciousness, outcome orientation, stereotypes and biases. Subordinate factors include self-perception, behavioural style, job performance and political skills. Organizational contextual factors include power distance, Chaxu Climate, promotion channels and grievance mechanisms. Among them, the Chaxu climate emphasizes interpersonal relationships. 'Cha' represents the inequitable distribution of resources in the organization. 'Xu' represents the status gap between superiors and subordinates, emphasizing the order of respect and inferiority in the organization (Ma & Su, 2020). Supervisors will use the intimacy of interpersonal relationships as the main reference standard in resource allocation and job evaluation, losing quantitative fairness. This can result in affiliates and cliques in the organization. The combination of these three elements will promote toxic leadership.

3 | METHODS

3.1 | Design

We applied a descriptive, qualitative study using individual telephone semi-structured interviews. The aim is to understand the toxic leadership behaviours of nurse managers perceived by nurses by revealing the reality and experience of repeated hostile behaviours at work. Find out its type, cause and response measures through further analysis.

3.2 | Participants

Purposeful sampling was used to recruit nurses in a tertiary hospital in Wuhan, which has a total of 3,733 nurses on staff and 197 nurse managers. Inclusion criteria for interviewees possess a nurse's practice qualification, informed consent and voluntary participation. Exclusion criteria: nurses who experienced a bad psychological impact event (e.g. divorce, death of an influential relative or sick leave) within three months, and nurses in internship. The rationale for including the target population for this survey was that these nurses were managed by nursing managers and provided direct patient care. Nurses with their psychological distress were excluded to minimize the influence of other factors. The demographic profile of participants is shown in Table 1.

TABLE 1 Demographics of nurse participants ($N = 12$)

Characteristics	*n*	%
Education		
Bachelor's degree	8	66.7%
Master's degree	4	33.3%
Marital status		
Married	5	41.7%
Single	7	58.3%
Age, mean = 32.01, SD = 6.50		
20–30	6	50.0%
31–40	4	33.3%
41–50	2	16.7%
Years as nurse, mean = 9.92, SD = 8.30		
0–10	7	58.3%
11–20	3	25.0%
21–30	2	16.7%
Nurse career title level		
Junior nurse	2	16.7%
Junior nurse practitioner	4	33.3%
Supervising nurse practitioner	5	41.7%
Associate chief nurse practitioner	1	8.3%

Note: *n* = number of nurses.

3.3 | Data collection

This study was conducted from January to March 2022 using semi-structured, in-depth, open-ended and recorded interviews. To create a relaxed atmosphere, it began with light topics such as personal information and expectations for ideal leaders. Before the formal interview, respondents were asked to recall specific instances of toxic leadership behaviours of nurse managers that they or their colleagues had experienced. The researcher asked appropriate follow-up questions, listened carefully and took notes. The detailed interview outline is shown in Table 2.

Due to the sensitivity of the subordinate relationship between nurses and nurse managers, respondents may not be able to express their true thoughts fully during face-to-face conversations. Consequently, the interviews were conducted by telephone. The anonymity of telephone contact enables respondents to be more proactive in answering questions without feeling constrained (Musselwhite et al., 2007) so that it can be considered an appropriate method of data collection (Ward et al., 2015). Data collection ended when the conceptual information achieved saturation and no new data emerged (Saunders et al., 2018).

3.4 | Data analysis

The mean duration of interviews was 38 min, ranging from 28 to 59 min, and each was transcribed within 24 h of the interview. We used NVIVO11.0 computer software to facilitate the analysis of interview transcripts. The data were analysed by Colaizzi's (1978, p. 48–71) seven-step method. First, two authors reviewed transcribed interviews several times and had a general understanding of the whole content. Second, they analysed the data word by word to identify and extract significant statements related. In the third step, they determined and formulated meanings from substantial statements. Then,

TABLE 2 Interview questions

- Please briefly introduce yourself (age, marital status, time spent independently in nursing, nursing title)
- What is the personality and work style of the head nurse on your unit? How do you feel this work style has contributed to your professional performance?
- Have you heard of toxic leadership behaviours of nurse leaders? What behaviours do you think are toxic for nurse leaders?
- Have you yourself or a colleague ever suffered from toxic nurse leader behaviour? What was the situation at the time?
- Why do you think nurse leaders exhibit this toxic behaviour?
- What are the effects of this nurse leader toxic behaviour?
- What would you do if your nurse leader exhibited toxic behaviour?
- Do you know of any countermeasures or ways to respond to or address negative leadership behaviours of nurse leaders in your hospital?

Source: Primary author.

they look for common concepts and organize formulated meanings into categories and clusters of themes. In the fifth step, they exhaustively describe the investigated phenomenon by adding typical original statements from participants. Next, they put similar themes and their descriptions together for repeated comparisons to draw similar views and construct themes. Finally, returning the resulting subject structure to the participants to check, if there is a bias, the researcher must step back to the analysis from the first step.

3.5 | Rigour

The following measures have been taken to ensure the consistency and validity of the study. The researchers have clinical experience that can easily communicate with the nurses and build trust. The researchers ensured that the interviewees correctly understood toxic leadership behaviours before the interview. The nominal themes and subthemes identified by the two researchers were discussed and agreed. All respondents were invited to confirm the distilled results, and they agreed with the findings.

3.6 | Ethical considerations

This study protocol was approved by the Ethical Committee of Tongji Medical College, Huazhong University of Science and Technology (No. S044), and followed the ethical principles of the Declaration of Helsinki. Before the beginning of each interview, participants were informed verbally, and in writing about basic information including the purpose, significance, the principles such as voluntary participation, confidentiality and anonymity, the need for audio recording and the experience of recalling might be psychologically uncomfortable. They could terminate and discontinue at any time in the study.

4 | RESULTS

We derived 4 main categories and 15 sub-categories from the data. They are described in Table 3. The following interpretations and direct quotations (translated from Chinese) describe the meaning of each theme in order to be representative of the nurses' views.

4.1 | Theme 1: Nurses' perceptions of toxic leadership behaviours

4.1.1 | Hard to avoid

Most respondents consider that toxic leadership is inevitable in the workplace. A nurse said: 'I know toxic behavior is bad, but the workplace will have it, wherever you go' (N4). Another nurse said: 'This thing is very common, no matter what the manager does, there will be people who are not satisfied' (N6).

TABLE 3 Main categories and subcategories of the study

Main categories	Sub-categories
Nurses' perceptions of toxic leadership behaviours	Hard to avoid
	Desire for attention
Toxic leadership behaviours of nurse managers	Negative feedback
	Ignoring
	Unfair treatment
	Self-centeredness
	Excessive pressure
	Work inaction
Reasons for toxic leadership behaviours of nurse managers	Workload
	Personality
	Job performance
Measures for toxic leadership behaviours of nurse managers	Confusion and silence
	Department or industry change
	Reflection and communication
	Flatter and ingratiation

4.1.2 | Desire for attention

Respondents said that in the face of toxic leadership behaviour, everyone will selectively see only the positive side. They hope to get enough attention for the negative side. A nurse said: '…people will not bring out the toxic leaders to discuss a specific solution' (N3). Another nurse said: 'The hospital asks nurses to evaluate the nurse manager, every time this happens, we will give a good score, even if it is hypocritical' (N7). A nurse explained: 'The nurse manager has some toxic leadership behaviors, but she must have a positive side, otherwise how could she be elected as a manager? Everyone tends to say good things about managers' (N11).

4.2 | Theme 2: Toxic leadership behaviours of nurse managers

4.2.1 | Negative feedback

All respondents desired care and understanding at work, as well as verbal evaluations and constructive feedback from their nurse managers. They claimed that certain nurse managers frequently utilized negative feedback to illustrate that the nurses' performance was inadequate or inappropriate and to dismiss and criticize the nurses' personal and professional accomplishments. A nurse recalled, 'Once I carefully provided an infusion, the nurse manager told me I was wrong in front of the family members of patients and reprimanded me harshly. After that, she kept telling me what I had done wrong' (N2). Furthermore, 'Our supervisor does not point out your mistakes in your presence, but she blames you in front of other nurses or doctors in the department' (N5). Another nurse talked about the interaction

with her head nurse at work, 'She would make some bad facial expressions to you, like rolling her eyes or glaring at you' (N7).

4.2.2 | Ignoring

Half of the nurses had been neglected by their leaders. They described toxic leadership practices as nurse leaders' scorn and indifference to nurses in the unit. Some nurses went into detail about situations. 'When I have a conflict with a patient, the nurse manager does not listen to my explanation and just makes me apologize to the patient' (N1). One nurse explained, 'Our chief nurse rarely appreciates us and continually stresses that if you are not content, you may quit. More people can replace you no matter how good you are' (N3).

4.2.3 | Unfairness

Some interviewees claimed that even though they worked in the same department, the administrator treated them unfairly for various reasons. N4 expressed this unfair treatment: 'You can be blamed and deducted for the same mistake while others get nothing'. Another nurse said, 'Accountability team assignments are unfair. You always have the most work to complete, and your two days off on the night shift are sometimes purposely separated' (N10).

4.2.4 | Self-centeredness

According to several respondents, nurse leaders can demonstrate self-centred traits such as narcissism and selfishness. 'The head nurse will actively highlight her leadership position in front of the nurses, exhibit a sense of superiority and give us a strong sense of remoteness', one nurse stated (N6). 'You have to consult the chief nurse to make any decision in the department. Moreover, do not argue with her. Otherwise, you will be required to self-examine', one nurse explained (N9). One nurse mentioned, 'The chief nurse admires to be complemented by the nurses. She thinks that everyone in the unit is around her for cajoling her and making her available' (N11). In addition, one nurse shared, 'Our head nurse often asked us to do things but would announce to the public that she did these things herself …' (N13).

4.2.5 | Excessive pressure

Respondents noted that nurse managers frequently assign many non-repetitive tasks at work and add exert pressure. One nurse exclaimed, 'The nurse manager is part of the unit and requires nurses to do research and publish articles, but we do not have the foundation or resources to learn …' (N3). One nurse said she faced a similar dilemma: 'Nurses are asked to clean up every day, and we do not know if we are cleaners or what' (N6). Another nurse expressed her experience in the following words: 'Departmental training, exams, and inspections are widespread, and even all exam papers are also required to be memorized or else you will have your salary deducted' (N7).

4.2.6 | Work inaction

We also received information from the interviewees that the head nurse was inactive in her work. For example, 'The head nurse ignores conflicts between nurses when they arise' (N8). One nurse explained her situation in these words: 'Once the unit was very busy and needed to be coordinated, so I reported it to the head nurse. But the head nurse told me to find my way and asked me to find my colleagues to work overtime' (N11).

4.3 | Theme 3: Reasons for exposure to toxic leadership behaviours of nurse managers

4.3.1 | Workload

The vast majority of interviewees described the reason for the toxic leadership behaviours of a nurse manager as a lack of labour that included not only nurses but also the nurse managers. One interviewee revealed that 'patients and nurses are both under the charge of the nurse manager; although she does not have to care for patients, she has to do research, publish articles, go to meetings, etc' (N2). Another nurse pointed out that 'the department is understaffed, and there are only a few nurses working and even fewer on the night shift' (N5).

4.3.2 | Personality

Personality was identified as a cause. The personality of the head nurse is described as '… low emotional intelligence, tending to reopen old scores … narrow-minded, and not wanting subordinates to develop better' (N1). '… competitive and doing everything to the best to emphasize her ability' (N11). A few nurses mentioned that nurses' personality also affects whether they would be exposed to toxic leadership. 'Nice guys finish last, and nurses with weak personalities will be bullied by their leaders' (N7), and 'Some nurses are too opinionated to obey the arrangement of their leaders' (N3).

4.3.3 | Job performance

Some respondents believed that nurses' performance leads to toxic leadership, and the respondents shared their story that 'if you are negligent and make mistakes frequently, of course, you will always be supervised' (N6). Respondents reported their experience that 'they do not do their daily nursing work well enough to meet the leader's demands' (N4).

4.4 | Theme 4: Measures for toxic leadership behaviours of nurse managers

4.4.1 | Confusion and silence

When asked about responding to the toxic leadership behaviours, the majority of nurses said they were overwhelmed with silence and would not respond. A nurse uttered, 'I have no idea what to do … Even if you report it, it will not change anything, and it will just make the leader dislike you more' (N1). Another nurse mentioned that 'when encountering such an incident, our department would rather work on the night shift than the day shift in order to work without the head nurse. I will do my best to forget the bad experience and avoid interacting with the chief nurse in the workplace' (N5).

4.4.2 | Department or industry change

Most of the nurses pointed out that they can choose to resign or work in different departments in the same hospital to escape from their current environment. For example, one nurse stated, 'Do not do nursing without a strong heart and an iron body, or you will think about resigning every day. Moreover, many people in our department were resigned because the head nurse' (N2). Another nurse answered, 'I can change my department and living environment' (N8).

4.4.3 | Reflection and communication

Some nurses reported that they would self-reflect after receiving toxic leadership from the nurse manager, try to communicate with the nurse manager and then make changes from themselves. 'First of all, I would reflect on myself and think why it was me. If I made a mistake, I would correct it next time' (N7). Another nurse responded, 'If you have a problem with the head nurse, you should communicate with her/him directly instead of hiding it in your heart, which will only increase your psychological burden' (N11).

4.4.4 | Flatter and ingratiation

A few nurses mentioned that after receiving toxic leadership from the nurse manager, you just need to do 'little things' to change your situation, such as 'saying what the head nurse likes to hear, learning to read people's minds, and kissing ass' (N12) as well as 'doing as she pleases' (N4).

5 | DISCUSSION

This article analysed nurses' perceptions of toxic leadership behaviours among nurse managers, and these open-ended responses replenish the missing piece of the quantitative problem. We know that toxic leadership does exist in the workplace of Chinese nurses, and nurses want to draw attention. Toxic leadership is not limited to one country. It is a global problem.

Previous studies have shown that nurse leaders' toxic behaviours are multifaceted. Labrague, Lorica et al. (2020) categorized the toxic leadership behaviours of nurse leaders into four types of behaviours: intemperateness, narcissism, self-promotion and humiliation. In addition to these apparent behaviours, toxic behaviours of leaders sometimes involve covert and passive behaviours, such as the failure to support staff and the constant use of insulting and offensive nonverbal gestures (Milosevic et al., 2020). The specific manifestations of toxic behaviours of Chinese nurse leaders in this study included excessive negative feedback, neglect, differential treatment, pressure on subordinates, self-centeredness and inaction at work. In contrast to foreign countries, supervisors rarely displayed pronounced superficial 'hostility' when they disliked or blamed an employee, such as physical aggression or uncontrolled behaviour. Due to the high context of Chinese culture (Ding et al., 2016), leaders use covert and disguised ways to express such thoughts and feelings implicitly.

The new 'toxic triangle' framework (Chen & Sun, 2021) suggests that toxic leadership causes include supervisory traits, subordination factors and organizational context. Leadership behaviour is a leader–member exchange interaction, and the personal characteristics of both leaders and subordinates influence toxic leadership. Among supervisor traits and subordinate factors, except those mentioned in the toxic triangle, previous research has shown that leaders who are poorly managed (Gunawan et al., 2018), chronically psychologically depressed (Tepper et al., 2006) and sleep deprived (Barnes et al., 2014) are more likely to practice toxic leadership. Employees who dare to overcome their fears and adhere to their values and principles are less likely to be affected by toxic leadership behaviours (Afsar et al., 2019). This study concluded that the personalities of nurses and nurse managers may contribute to toxic leadership. Factors such as low emotional intelligence, narrow-mindedness, goal-orientedness of nurse managers, cowardice and stubbornness of nurses may also contribute to toxic leadership behaviours. Among the organizational context factors, since the power and authority of the nurse manager are not absolute or highly concentrated (Martinko et al., 2013), organizational factors mentioned in the 'toxic triangle' framework, such as power distance, Chaxu Climate, promotion channels and grievance mechanisms, as pointed out in other studies such as opaque promotion channels, which require a leader's recommendation to be promoted, are not evident in this study. In addition, workload factors are a major cause, the shortage of nurses leads to excessive work imposed by leaders on their subordinates and leaders produce toxic leadership to achieve desired goals, which is consistent with Labrague et al.'s study (2021).

Respondents indicated that the vast majority are in a state of helplessness after encountering toxic leadership. Some nurses choose to resign or change departments; in China, a survey of 28,910 nurses showed that 22.02% of nurses often have the idea of changing jobs recently. In the coming year, 70.80% choose to leave their dissatisfaction with their current jobs, and 76.53% choose not to continue their current careers after leaving (Wu et al., 2022). Some nurses who are

reluctant to leave may become advocates to maintain and promote the rationalization of toxic organizational leadership (She, 2020). Organizations do not provide avenues for grievances and do not have good responses to toxic nurse leaders. Despite of extensive research and implementation of various organizational development and human resource interventions, it is unrealistic to expect leaders to change suddenly. Most importantly, leaders can be made aware of the harmful nature of the behaviour, and organizations can establish more systematic intervention and feedback systems.

6 | LIMITATIONS

This study is based on nurses' perceptions of toxic leadership behaviours. Thus, the real frequency of toxic leadership behaviours of nurse managers at this workplace could not be determined. In China, nurses from different levels of hospitals are exposed to the toxic leadership behaviours of nurse managers. This study only recruited nurses working in tertiary hospitals. The scope of further study should be conducted to expand the sample's representativeness.

7 | CONCLUSIONS

This study is an exploration of toxic leadership behaviours of nurse managers from the Chinese nurses' perspective. First, compared with other countries, the severity of toxic leadership behaviours of nurse managers among Chinese nurses was not reflected in the apparent hostile act with an uncompromising attitude but in some unfriendly, concealed and disguised behaviours. The causes are complex and deserve to be explore in-depth. Finally, we found that nurses have different ways of responding, some of which can affect nursing care. The findings can help nurse managers determine which behaviours are harmful to nurses and respond at the source. The importance of oversight by more senior managers in the organization is emphasized to promote a positive work environment for nurses. We can no longer pretend that nothing is happening; we need to work to address this issue and protect the work environment for nurses.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse managers need to follow the principle of being strict with themselves and lenient with others and take the initiative to prevent the emergence of toxic leadership behaviours. Nurses urgently need to improve their ability to identify and respond to negative leadership behaviours, regulate their emotions and work with colleagues to create a harmonious departmental atmosphere. The organization should strengthen its care for nurse leaders, pay attention to and promptly discover negative leadership behaviours of nurse leaders, open up channels, clarify attitudes, find out the facts and deal with them seriously.

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CONFLICT OF INTEREST

All authors declare no conflict of interest.

ETHICS STATEMENT

The study was approved by the Ethics Committee of Tongji Medical College, Huazhong University of Science and Technology (No. S044).

AUTHOR CONTRIBUTIONS

The authors conceptualized and designed the study, conducted data collection and analysis and drafted and wrote the paper.

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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ORIGINAL ARTICLE

WILEY

Professional development among newly graduated registered nurses working in acute care hospital settings: A qualitative explorative study

Anna Willman PhD, Senior lectures[1] | **Jan Nilsson PhD, Professor**[1,2] | **Kaisa Bjuresäter PhD, Senior lectures**[1]

[1]Department of Health Sciences, Faculty of Health, Science, and Technology, Karlstad University, Karlstad, Sweden

[2]Department of Health and Social Sciences, University of Innlandet, Elverum, Norway

Correspondence
Anna Willman, Department of Health Sciences, Faculty of Health, Science, and Technology, Karlstad University, SE-651 88 Karlstad, Sweden.
Email: anna.willman@kau.se

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Abstract

Aim: To explore newly graduated registered nurses' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of work experience.

Background: Newly graduated registered nurses working in acute care hospital settings play a critical role in providing safe nursing care.

Methods: An explorative qualitative design, with four focus group interviews with 14 newly graduated registered nurses working in acute care hospital settings.

Results: One theme emerged: 'Clarity and security in one's own nursing role despite facing challenges that hinder professional development' and three categories: 'Independency due to one's own efforts and experience', 'Well-functioning teamwork' and 'Challenges in the work situation'.

Conclusion: After 18 months in the profession, the nurses were considered to be advanced beginners; at the same time, the most experienced nurses on their respective wards. They found it challenging and need to further develop competences concerning managing and organizing the nursing care of several complex patient situations or new patient groups, as well as supervising novice registered nurses and nursing students.

Implication for Nursing Management: Powerful and urgent action is needed to be taken by national healthcare policymakers as well a hospital and nurse managers to develop long-term strategies to improve working conditions for newly registered graduated nurses.

KEYWORDS
acute care hospital, leading nursing care, newly graduated registered nurses, qualitative design

1 | INTRODUCTION

Today's newly graduated registered nurses (NGRNs) who commence work in acute care hospital settings will face fast-changing healthcare systems that are characterized by an increasing number of patients with acute, chronic and complex co-morbidities (Hussein et al., 2017), shorter hospital lengths of stay (Buchan et al., 2013) and a shortage of registered nurses (RNs) (WHO, 2020c). This can lead to higher demands being placed on NGRNs who are expected to provide comprehensive nursing care that meets patients' complex and diverse needs in acute care hospital settings (Bandini et al., 2018).

2 | BACKGROUND

RNs' competence is developed by gaining experience over time in conjunction with gaining theoretical knowledge and the ability to be reflective. RNs describe themselves being motivated to pursue professional development as it is a way to increase competence, comply with requirements, deepen knowledge and increase career possibilities (Falk & Lindström, 2022; Pool et al., 2016). For further professional development, teamwork (Eddy et al., 2016; Serafin et al., 2022) and leadership that supports teamwork and facilitates professional development are of importance (Page et al., 2020). WHO (2020a; 2020b) is also arguing for the importance of RNs' competence concerning leadership, which must be highlighted at all levels in healthcare organizations.

In recent years, acute care hospital settings have become increasingly specialized and complex (Disch et al., 2016), primarily due to the increasing number of patients who are in need of more demanding and complex nursing care in acute care hospitals (Carnesten et al., 2022; Dharmaraijan et al., 2016). Along with the heightened complexity of patient cases admitted to hospitals, there has also been a constant shortage of RNs (ICN, 2019), in particular of experienced RNs (National Board of Health and Welfare, 2018). Organizing healthcare without a sufficient number of RNs may lead to a decline in patient safety (Aiken et al., 2017; Driscoll et al., 2018), and patients in complex situations have been found to have a higher risk of mortality and lower probability of home discharge (Bandini et al., 2018).

Nursing care in complex patient situations are dynamic interactions related to instability, variability and uncertainty from the perspective of the patient and the RNs with processes such as personal, communication and cognitive, psychosocial and ethical aspects interacting with each other causing uncertainty and unpredictability in a situation (Huber et al., 2020; Kannampallil et al., 2011). In order to handle nursing care in complex patient situations successfully, RNs need professional experience, expertise and clinical reasoning skills, as well as contextual prerequisites such as time resources and support through teamwork (Kentischer et al., 2018). Previous studies on NGRNs have focused on their transition from education into professional life and describe them facing new demands and challenges in complex patient situations (Arrowsmith et al., 2016; Cheng et al., 2021; Walton et al., 2018) and that both organizational and personal factors influence their professional development (Charette et al., 2019). However, there is limited knowledge regarding NGRNs' perceptions of their working situation, how they manage nursing care in complex patient situations in demanding and complex acute care hospital settings after their first one and a half year in the profession. What is the understanding of NGRNs about their work situation in nursing care in an acute care hospital? How does the careful management of inpatient nursing care for these patients occur? Therefore, the aim of the study was to explore NGRNs' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of work experience.

3 | METHODS

An explorative qualitative design was used to gain a deeper understanding of a predetermined subject (Polit & Beck, 2021), and an inductive manifest and latent content analysis was performed as described by Krippendorff (2018). Data were collected through focus group interviews (FGIs) (Morgan, 1997). FGIs aim to access a deeper understanding of a predetermined subject as they allow participants to interact with each other and explore their perceptions, views and opinions using their one's own words (Morgan, 1997). In accordance to EQUATOR Network, the COREQ criteria for reporting was used (Data S1) (Tong et al., 2007).

3.1 | Context

Study participants consisted of NGRNs who were employed by a county council in central Sweden. The NGRNs worked in direct patient care in a central regional acute care hospital on a variety of wards including medical, surgical, emergency, gynaecological, psychiatric and oncological wards. In this study, the NGRNs are considered to be advanced beginners, due to RNs considering themselves to be novices or advanced beginners for their first 2 years of professional life (Benner, 2001).

3.2 | Sample and recruitment

The NGRNs who participated in this study were recruited using convenience sampling (Polit & Beck, 2021). They received oral and written information about the study at the beginning of their clinical development programme. The first author was assisted by a ward head nurse to gain access to eligible NGRNs who had 18 months of clinical experience. The first author contacted the participating NGRNs using telephone text messages to arrange the time and place for the FGIs. Prior to the FGIs, interested NGRNs received an information letter and provided written informed consent. In total, 14 NGRNs agreed to participate in the study. Their ages ranged between 24 and 30 (mean age 26.8 years), and 12 participants were women and two were men.

TABLE 1 Interview guide for the semi-structured focus group interviews

Opening question	Can you please tell us how you perceive your work situation?
Transition question	Can you describe a patient situation that you perceived as complex?
Key questions	Can you describe how you perceive and manage nursing care in complex patient situations?
	Can you describe a work situation in a complex patient situation that worked well?
	Can you describe a work situation in a complex patient situation that did not work well?
Closing question	Is there anything else you would like to add?

3.3 | Ethical considerations

Ethical considerations were made in accordance to the Helsinki Declaration (2013). Before each interview, informed consent was collected. They were also informed that participation was voluntary and that they were free to end their participation at any time without giving an explanation. The study was given ethical approval by the National Ethical Review Board.

3.4 | Data collection

As a point of departure, each FGI started off with a question asking participants to describe their understanding of complex patient situations related to instability, variability and uncertainty. The FGIs were conducted as semi-structured discussions and were based on a semi-structured interview guide (Table 1). In addition to the semi-structured interview guide, follow-up questions were asked. They lasted between 43 and 62 min (mean 56 min) and were recorded and transcribed verbatim.

3.5 | Data analysis

The transcribed data were analysed using a text-driven, interpretive qualitative manifest and latent content analysis that included several steps (Krippendorff, 2018). The interviews were firstly read several times to get an overall understanding of the data. Thereafter, they were read thoroughly to identify manifest meaning units, which were used to formulate codes. At this stage of the analysis, data are based on manifest content that clearly emerge from the transcribed text. The codes were then grouped into subcategories based on similarities and differences. The contents in the subcategories were interpreted and sorted into latent categories. As the subcategories were built on manifest data, then more complex analyses and interpretations were made following the methodological process of going back and forth in the text to find different levels of abstraction to increase the ability to see context and patterns (Krippendorff, 2018). The authors then agreed on eight subcategories that the three categories are based upon, which then emerge in one overarching theme (Table 2). The last step of the process was to confirm the relevance of the results by verifying the correlation with the aim and the categories and the overarching theme (Krippendorff, 2018).

4 | RESULTS

One overarching theme 'Clarity and security in one's own nursing role despite facing challenges that hinder professional development' and three categories emerged: 'Independency due to one's own efforts and experience', 'Well-functioning teamwork' and 'Challenges in the work situation' (Table 3). The NGRNs perceived that they gained competence, independency and confidence in the nursing care of complex patient situations they had experience of, resulting in clarity and security in their role as an NGRN. They managed complex patient situations thought leading and collaborating with colleagues and patients. They found that facing challenges in the work situation reduced their ability to manage the nursing care of several complex patient situations simultaneously or complex patient situations they are not familiar with, such as patients who usually stay on other wards. These challenges were also perceived to be a hinder in their professional development.

4.1 | Independency due to one's own efforts and experience

After being in the profession for 18 months, the NGRN had gained experience of nursing in complex patient situations. Due to *competence gained through experience and their one's own efforts* along with struggles, they perceived that their professional competence had increased and that they had gained *confidence and independency in the role as an RN*. A common opinion was that experience gained through working as an RN along with a gained confidence and positive attitude had contributed to this and developed the ability to provide optimal nursing care in complex patient situations. They had also learnt how to prioritize different tasks and develop routines for tasks that they carried out repeatedly, and they had gained experience through handling several different complex patient situations in the acute care hospital settings they worked in.

> … there was a patient who had a troublesome venous port and he did not want me to use it because it has bothered him so much, I said we should try … I think he felt I knew what I was doing and then it wasn't a problem, it probably has a lot to do with the attitude you put across …. I also feel that if you have better self-confidence, then things will work out well …. (FGI 1, P 2, P 4)

TABLE 2 Examples of the analysis process

Meaning units	Codes	Categories	Overachieving theme
This unforeseen situation happens quite often … you never know what will happen, various complications and consequences arise that you should try to deal with … it is not as stressful as before, you are calmer and more confident (FGI 2)	Calmer and more confident in unforeseen situations	Independency due to one's own efforts and experience	Clarity and security in one's own nursing role despite facing challenges that hinder professional development
The team that joins in and solves difficult patient situations together … afterwards you need to help out because you have lots of patients who have not received care and it is their turn (FGI 3)	Teamwork solving difficult situations and helping each other	Well-functioning teamwork	
It's going ok but when you have lots of really sick patients and you have to help the newer nurses it is hard to have time to do everything you have to do and then you feel like a failure (FGI 1)	Hard to have time to help novice nurses when there are lots of really sick patients	Challenges in the work situation	

TABLE 3 Subcategories, categories and the overarching theme

Subcategories	Categories	Overarching theme
Competence gained through experience and their one's own efforts	Independency due to one's own efforts and experience	Clarity and security in one's own nursing role despite facing challenges that hinder professional development
Confidence and independency in the role		
Teamwork	Well-functioning teamwork	
Leading and delegating care		
Advocates for patients' needs		
Involving patients in their one's own care		
Given the responsibilities of an experienced RN	Challenges in the work situation	
Supervising novice RNs and nursing students		

The NGRNs had gained a sense a confidence in their role as an RN and regarded nursing in complex patient situations. This also led to feeling safe and competent when administrating medication in complex patient situations.

> … the days go by easier and you have more time to check medication that you do not know about and the margins are better for doing a better job … (mmm yes I agree). … now you can see what needs to be done straight away and what can wait. (FGI 4, P 2, P3)

Experience in being able to identify a patient's deteriorating condition came from taking the approach of remaining calm when assessing situations as critical. Being confident and secure in their profession meant that they knew how they would act and react and that they had the skills required to manage complex patient situations. This has been done due to experience and one's own struggles meaning despite the fact that they were previously afraid, they have continued to expose themselves to new situations.

> … I feel that I am not as afraid of new situations anymore—I have a better basic knowledge and I can judge if a situation is critical and I know what is critical and what is not. (FGI 1, P 1)

4.2 | Well-functioning teamwork

Regarding nursing care in complex patient situations, the participating NGRNs described effective collaboration between nurses, assistant

nurses and doctors as being of importance. When the NGRNs experienced a feeling of *teamwork* that worked well with assistant nurses and doctors, and to manage complex patient situations more effectively, they were then able to complement each other by sharing their different experiences and knowledge. The NGRNs also described that having a team that worked well together was more important than having an experienced RN available as a mentor. The members of the team complimented each other with their different experiences and together there was a feeling of 'we'.

> When we are all working together, we can help each other if needed and share each other's experiences and knowledge. (FGI 3, P 2)

NGRNs described how they managed complex patient situations by *leading and delegating care* in these situations. They expressed that they had grown into the leadership role and felt more secure by gaining an overall understanding of how nursing work is to be performed. They also described how they could be determined and driven when working alongside colleagues and follow up and monitor how assistant nurses performed their work. Various stages in the nursing process in complex nursing situations could be delegated to colleagues to relieve their one's own workloads. However, despite the NGRNs saying they were comfortable in their leadership roles, they felt that further development was necessary in this area.

> After the rounds I have to priorities and make decisions … you have to remember that you have assistant nurses … you need to take on the leadership role and say that I need to do this and you need to do that, etc … you have to make a plan and delegate … the assistant nurses want us to take the role of the leader. (FGI 2, P 4)

In communication with colleagues, the NGRNs *advocate for patients' needs*. Communication between colleagues was described as important in order to manage and give patients the correct nursing care in complex patient situations. The NGRNs expressed that they could participate in these conversations on equal terms with the doctors and other colleagues and that they showed courage and responsibility in these conversations by questioning or expressing their views to meet patients' needs on how nursing care should be performed. They described the importance of all team members having updated information about patients, and they strived to share information with each other even though it was stressful.

> … I can be decisive in my role as a nurse and I can say that I have a plan for this patient … I can watch out for the patient … I'm tougher now …. (FGI 1, P 3)

Participating NGRNs managed nursing care by *involving patients in their one's own care*; this was perceived as vital to include in conversations, tasks and the exchange of information with the patient. Providing patients with more information gave them the opportunity to participate in their one's own care, which was considered important because this group of patients was often seriously ill.

> If patients are informed and we know what they want and what they are striving for … they become more motivated … it's good that they are aware … so they get the best care. (FGI 4, P 1)

Communication also included relatives who, with information and knowledge about care plans, became more familiar with the patient's care and felt involved and calm. Having experience and knowledge of communicating with both the patient and their relatives was thought to result in a relaxed relationship between the NGRNs, the patient and their relatives, where trust in the nurse was shown.

4.3 | Challenges in the work situation

Participating NGRNs perceived that their work situations were sometimes challenging as they perceived that they were *given the responsibilities as an experienced RN* and asked to *supervise novice RNs and nursing students*. These work situations and their conditions made managing nursing care in complex patient situations more difficult. It emerged that the NGRNs, despite only having 18 months of work experience, were now among the RNs who had the most experience on their wards, which also meant that they were expected to work extra shifts due to experienced RNs being required. The lack of experienced RNs resulted in them being afraid of becoming overworked and burnt out. The high nurse turnover led to experienced RNs who quit being replaced by novice RNs and also led to experience and knowledge disappearing from the ward, making the NGRNs work situations more difficult.

> We have had a lot of novice nurses … there have been nine new ones … it was a real transition to get experienced … (another nurse continues) It takes almost a year to do it … there are not many experienced ones anymore … there are 11 nurses who have worked 18 months or less … a lot of knowledge is disappearing. (FGI 3, P 1,P 3)

Responsibility for providing nursing care in several complex patient situations simultaneously or the responsibility for providing nursing care to patients from other wards was perceived as demanding. Managing the nursing care of several complex patient situations involved assessing which patients had the greatest needs. When participating NGRNs cared for patients from other departments and patient groups that do not normally come to their ward, they found that their competence was challenged. In these situations, they did not feel they had the competence to prioritize and delegate work to assistant nurses due to being responsible for providing nursing care to several complex patient situations simultaneously. Thus, these

patients' needs are unfamiliar to the NGRNs, which leads to both themselves and the patients feeling insecure.

> The patients become unsure … we are unsure about what we are doing … then they get worried … and we might do the wrong thing if we aren't so experienced in, for example, head injuries … (you have more of this, addressing another NGRN) … things can go wrong where these patients are concerned …. (FGI 1, P 3)

Challenges of a pedagogical nature, such as supervising novice RNs and nursing students, made them feel insufficient when nursing in complex patient situations. Supervising novice RNs in complex patient situations when they themselves needed support from an experienced RN was described as challenging. They found it difficult to coordinate nursing in complex patient situations when there were a large number of novice RNs and newly graduated doctors. It appeared that even newly graduated doctors would turn to the NGRNs with 18 months of experience for help regarding routines and expect them to make decisions regarding care in complex patient situations. The NGRNs expressed having insufficient competence to be responsible for patients in complex situations as well as recently graduated doctors and novice RNs—the pressure of these situations led to an increase in stress levels and perceived pressure.

> … when you have lots of really sick patients and you have to help colleagues who are less experienced, … you feel like there is not enough of you to go round … now you have to make judgments yourself, if there were more experienced nurses you would have asked … now you have to make the decision yourself. (FGI 2, P3)

5 | DISCUSSION

The aim of this study was to explore NGRNs' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of clinical experience. Through experience gained from nursing care in complex patient situations on the wards, the NGRNs who participated in this study have achieved clarity, autonomy and have gained confidence in their role as RNs. They manage nursing care in complex patient situations by leading, delegating and collaborating with the team. However, in this study, the NGRNs were the most experienced RNs after just 18 months of clinical experience. Further, they were expected to be responsible of the nursing care of several complex patient situations or new patient groups and supervising novice RNs and student nurses. This findings has not been shown elsewhere to our knowledge, and for the NGRNs, this working situation is very worrying and utterly remarkable. In contrast, Benner (2001) is referring to RNs with 18 months in the profession as advanced beginners. As a consequence identified in the present study is that where there is high staff turnover of RNs, knowledge disappears from the wards and this is a threat to RNs' professional development. Earlier research has shown that a lack of peer support is a barrier to professional development (Page et al., 2020). Organizational support and strong nursing leaders play a vital role in RNs' professional development, for example, by moving away from traditional hierarchies and identifying individual RNs' clinical competence and need for further training (King et al., 2021). However, this presupposes that the manager has genuine knowledge in evidence base nursing care with the adequate level of education in order to be able to make right assessments and support each individual NGRN after 18 months within the profession.

These results reflect the consequences of the global nursing shortage (Buchan et al., 2013), which is estimated to increase in the coming years, both in Sweden (National Board of Health and Welfare, 2018) and other countries (ICN, 2019). The nursing shortage is a threat to sustainable health systems, which in turn will have an impact on reaching the goal of health for all by 2030 (WHO, 2018). As a response to the global nursing shortage, WHO (2020c) advocates for a massive acceleration in the education of new RNs to bridge the gap of six million nurses and midwives. It is therefore of importance to focus on RNs' working conditions and keeping them in the profession as this shortage may not be able to be solved merely by educating more RNs as recommended by (WHO, 2020c).

The results of the present study show that one obstacle in achieving professional development among NGRNs was the uncertainty associated with supervising NGRNs with less experience in complex patient situations. Other studies have reported that novice RNs report low levels of competence in supervising students and staff (Gardulf et al., 2019; Nilsson et al., 2019) and in the organization of nursing care (Halabi et al., 2020). One possible way to support the transition and professional development in working in the context of acute care hospital settings among NGRNs has been shown to be peer learning (Pålsson et al., 2018). It is therefore of importance for ward managers to utilize research evidence when organizing teams in terms of RNs with different experience levels of overall competence in the health care team as recommended by the National Board of Health and Welfare (2015). Well-composed teams could increase RNs' job satisfaction and thus increase the chances of retention. It is the employer's responsibility to provide RNs with the conditions required to be able to carry out nursing care with high patient safety and good quality, as these are important predictors for wanting to remain in the profession.

Previous research shows that even RNs with approximately 5 years of experience find nursing in complex situations challenging or overwhelming (Kentischer et al., 2018). The participating NGRNs in the present study had the ability to manage the nursing care of single complex patient situations, but when presented with several cases simultaneously or complex patient situations they not were familiar with, they found it more difficult. The difficulties were related to managing the making of assessments and prioritizing and organizing care, and the NGRNs felt that they took a step back in their professional development as a consequence of these difficulties. It has been found that nursing in complex patient situations can lead to incomplete care

or the avoidance of providing care, which can be a threat to patient safety, especially when under time pressure (Vinckx et al., 2018). To accomplish an effective nursing process in complex patient situations and the best outcome for the patient, the level of the RN's attention, knowledge and experience is crucial (Huber et al., 2020) as shown in this study among NGRNs' nursing care in single complex patient situations. Another strong incitement for NGRNs not being given sole responsibility for several complex patient situations simultaneously is that an association between the complexity of nursing care and turnover among NGRNs has been found (Ten Hoeve et al., 2020). Hence, it is not appropriate to make NGRNs responsible for leading a team, assessing, prioritizing and organizing care for several patients in complex situations or unfamiliar cases usually treated on other wards when they have only been in the profession for 18 months, due to the risk of increased turnover and reduced patient safety.

5.1 | Limitations

As suggested by Morgan (1997), a goal was to include FGIs with four to six participants; thus, this was not possible to organize. Despite there only were three participants in one FGI, they interacted well with each other and generated in richness of information as they shared their views, thoughts and opinions. FGIs aim to capture the interaction in the group to explore and discuss between the participants. The number of participants may also be seen as a limitation; however, saturation was discussed during the analysis process, and saturation was assessed to be reached after analysis of the fourth FGI. Using FGI was also a way to capture new knowledge. The head of the ward nurse recruited the participants; this could serve as a limitation as they might have asked the most positive NGRNs.

6 | CONCLUSION

NGRNs with 18 months of professional experience are considered to be advanced beginners; however, due to high turnover in the profession, they are among the most experienced RNs on their respective wards. Despite having developed independency and clarity in their nursing role as well as leadership skills, they were facing challenges that made their work situation difficult. This was due to managing and organizing the nursing care of several complex patient situations or new patient groups, and supervising novice RNs and student nurses is challenging, and they need further support to develop competencies in these areas.

7 | IMPLICATION FOR NURSING MANAGEMENT

Powerful and urgent action is needed at a national level by healthcare policymakers to develop long-term strategies to improve NGRN's working conditions. Further, it is the responsibility of the healthcare leaders and management to improving work conditions and professional growth among all RNs to ensure that staffing is adequate, with a mix of different experiences and competences. Retaining the more experienced RNs within patient-centred work the NGRNs would also benefit a security and role models. However, this presupposes that the manager has genuine knowledge in evidence base nursing care with the adequate level of education in order to be able to make right assessments and support each individual NGRN after 18 months with in the profession by developing long-term strategies for improving their work condition and by establishing adequate staffing combinations by considering RNs' different experience levels that will contribute to the total competence within the team. Further, RNs need to be given a position in the healthcare systems, so they can have an impact of RNs work situation and facilitate a sustainable working life.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests or conflict.

ETHICS STATEMENT

The study followed the ethical principles in accordance with the Declaration of Helsinki (Helsinki Declaration, 2013) and was given ethical approval by the Ethical Review Board (reg. no. 2015/071 and 2015/071/2). Written informed consent was obtained from each participant in connection with the clinical development programme. Study participants received both oral and written information about the aim of the study, that their participation was voluntary and that they could end their participation at any time without explanation.

DATA AVAILABILITY STATEMENT

Data are available, but not for public due to ethics.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Professional development among newly graduated registered nurses working in acute care hospital settings: A qualitative explorative study

Anna Willman PhD, Senior lectures[1] | **Jan Nilsson PhD, Professor**[1,2] | **Kaisa Bjuresäter PhD, Senior lectures**[1]

[1]Department of Health Sciences, Faculty of Health, Science, and Technology, Karlstad University, Karlstad, Sweden

[2]Department of Health and Social Sciences, University of Innlandet, Elverum, Norway

Correspondence
Anna Willman, Department of Health Sciences, Faculty of Health, Science, and Technology, Karlstad University, SE-651 88 Karlstad, Sweden.
Email: anna.willman@kau.se

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Abstract

Aim: To explore newly graduated registered nurses' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of work experience.

Background: Newly graduated registered nurses working in acute care hospital settings play a critical role in providing safe nursing care.

Methods: An explorative qualitative design, with four focus group interviews with 14 newly graduated registered nurses working in acute care hospital settings.

Results: One theme emerged: 'Clarity and security in one's own nursing role despite facing challenges that hinder professional development' and three categories: 'Independency due to one's own efforts and experience', 'Well-functioning teamwork' and 'Challenges in the work situation'.

Conclusion: After 18 months in the profession, the nurses were considered to be advanced beginners; at the same time, the most experienced nurses on their respective wards. They found it challenging and need to further develop competences concerning managing and organizing the nursing care of several complex patient situations or new patient groups, as well as supervising novice registered nurses and nursing students.

Implication for Nursing Management: Powerful and urgent action is needed to be taken by national healthcare policymakers as well a hospital and nurse managers to develop long-term strategies to improve working conditions for newly registered graduated nurses.

KEYWORDS
acute care hospital, leading nursing care, newly graduated registered nurses, qualitative design

1 | INTRODUCTION

Today's newly graduated registered nurses (NGRNs) who commence work in acute care hospital settings will face fast-changing healthcare systems that are characterized by an increasing number of patients with acute, chronic and complex co-morbidities (Hussein et al., 2017), shorter hospital lengths of stay (Buchan et al., 2013) and a shortage of registered nurses (RNs) (WHO, 2020c). This can lead to higher demands being placed on NGRNs who are expected to provide comprehensive nursing care that meets patients' complex and diverse needs in acute care hospital settings (Bandini et al., 2018).

2 | BACKGROUND

RNs' competence is developed by gaining experience over time in conjunction with gaining theoretical knowledge and the ability to be reflective. RNs describe themselves being motivated to pursue professional development as it is a way to increase competence, comply with requirements, deepen knowledge and increase career possibilities (Falk & Lindström, 2022; Pool et al., 2016). For further professional development, teamwork (Eddy et al., 2016; Serafin et al., 2022) and leadership that supports teamwork and facilitates professional development are of importance (Page et al., 2020). WHO (2020a; 2020b) is also arguing for the importance of RNs' competence concerning leadership, which must be highlighted at all levels in healthcare organizations.

In recent years, acute care hospital settings have become increasingly specialized and complex (Disch et al., 2016), primarily due to the increasing number of patients who are in need of more demanding and complex nursing care in acute care hospitals (Carnesten et al., 2022; Dharmaraijan et al., 2016). Along with the heightened complexity of patient cases admitted to hospitals, there has also been a constant shortage of RNs (ICN, 2019), in particular of experienced RNs (National Board of Health and Welfare, 2018). Organizing healthcare without a sufficient number of RNs may lead to a decline in patient safety (Aiken et al., 2017; Driscoll et al., 2018), and patients in complex situations have been found to have a higher risk of mortality and lower probability of home discharge (Bandini et al., 2018).

Nursing care in complex patient situations are dynamic interactions related to instability, variability and uncertainty from the perspective of the patient and the RNs with processes such as personal, communication and cognitive, psychosocial and ethical aspects interacting with each other causing uncertainty and unpredictability in a situation (Huber et al., 2020; Kannampallil et al., 2011). In order to handle nursing care in complex patient situations successfully, RNs need professional experience, expertise and clinical reasoning skills, as well as contextual prerequisites such as time resources and support through teamwork (Kentischer et al., 2018). Previous studies on NGRNs have focused on their transition from education into professional life and describe them facing new demands and challenges in complex patient situations (Arrowsmith et al., 2016; Cheng et al., 2021; Walton et al., 2018) and that both organizational and personal factors influence their professional development (Charette et al., 2019). However, there is limited knowledge regarding NGRNs' perceptions of their working situation, how they manage nursing care in complex patient situations in demanding and complex acute care hospital settings after their first one and a half year in the profession. What is the understanding of NGRNs about their work situation in nursing care in an acute care hospital? How does the careful management of inpatient nursing care for these patients occur? Therefore, the aim of the study was to explore NGRNs' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of work experience.

3 | METHODS

An explorative qualitative design was used to gain a deeper understanding of a predetermined subject (Polit & Beck, 2021), and an inductive manifest and latent content analysis was performed as described by Krippendorff (2018). Data were collected through focus group interviews (FGIs) (Morgan, 1997). FGIs aim to access a deeper understanding of a predetermined subject as they allow participants to interact with each other and explore their perceptions, views and opinions using their one's own words (Morgan, 1997). In accordance to EQUATOR Network, the COREQ criteria for reporting was used (Data S1) (Tong et al., 2007).

3.1 | Context

Study participants consisted of NGRNs who were employed by a county council in central Sweden. The NGRNs worked in direct patient care in a central regional acute care hospital on a variety of wards including medical, surgical, emergency, gynaecological, psychiatric and oncological wards. In this study, the NGRNs are considered to be advanced beginners, due to RNs considering themselves to be novices or advanced beginners for their first 2 years of professional life (Benner, 2001).

3.2 | Sample and recruitment

The NGRNs who participated in this study were recruited using convenience sampling (Polit & Beck, 2021). They received oral and written information about the study at the beginning of their clinical development programme. The first author was assisted by a ward head nurse to gain access to eligible NGRNs who had 18 months of clinical experience. The first author contacted the participating NGRNs using telephone text messages to arrange the time and place for the FGIs. Prior to the FGIs, interested NGRNs received an information letter and provided written informed consent. In total, 14 NGRNs agreed to participate in the study. Their ages ranged between 24 and 30 (mean age 26.8 years), and 12 participants were women and two were men.

TABLE 1 Interview guide for the semi-structured focus group interviews

Opening question	Can you please tell us how you perceive your work situation?
Transition question	Can you describe a patient situation that you perceived as complex?
Key questions	Can you describe how you perceive and manage nursing care in complex patient situations?
	Can you describe a work situation in a complex patient situation that worked well?
	Can you describe a work situation in a complex patient situation that did not work well?
Closing question	Is there anything else you would like to add?

3.3 | Ethical considerations

Ethical considerations were made in accordance to the Helsinki Declaration (2013). Before each interview, informed consent was collected. They were also informed that participation was voluntary and that they were free to end their participation at any time without giving an explanation. The study was given ethical approval by the National Ethical Review Board.

3.4 | Data collection

As a point of departure, each FGI started off with a question asking participants to describe their understanding of complex patient situations related to instability, variability and uncertainty. The FGIs were conducted as semi-structured discussions and were based on a semi-structured interview guide (Table 1). In addition to the semi-structured interview guide, follow-up questions were asked. They lasted between 43 and 62 min (mean 56 min) and were recorded and transcribed verbatim.

3.5 | Data analysis

The transcribed data were analysed using a text-driven, interpretive qualitative manifest and latent content analysis that included several steps (Krippendorff, 2018). The interviews were firstly read several times to get an overall understanding of the data. Thereafter, they were read thoroughly to identify manifest meaning units, which were used to formulate codes. At this stage of the analysis, data are based on manifest content that clearly emerge from the transcribed text. The codes were then grouped into subcategories based on similarities and differences. The contents in the subcategories were interpreted and sorted into latent categories. As the subcategories were built on manifest data, then more complex analyses and interpretations were made following the methodological process of going back and forth in the text to find different levels of abstraction to increase the ability to see context and patterns (Krippendorff, 2018). The authors then agreed on eight subcategories that the three categories are based upon, which then emerge in one overarching theme (Table 2). The last step of the process was to confirm the relevance of the results by verifying the correlation with the aim and the categories and the overarching theme (Krippendorff, 2018).

4 | RESULTS

One overarching theme 'Clarity and security in one's own nursing role despite facing challenges that hinder professional development' and three categories emerged: 'Independency due to one's own efforts and experience', 'Well-functioning teamwork' and 'Challenges in the work situation' (Table 3). The NGRNs perceived that they gained competence, independency and confidence in the nursing care of complex patient situations they had experience of, resulting in clarity and security in their role as an NGRN. They managed complex patient situations thought leading and collaborating with colleagues and patients. They found that facing challenges in the work situation reduced their ability to manage the nursing care of several complex patient situations simultaneously or complex patient situations they are not familiar with, such as patients who usually stay on other wards. These challenges were also perceived to be a hinder in their professional development.

4.1 | Independency due to one's own efforts and experience

After being in the profession for 18 months, the NGRN had gained experience of nursing in complex patient situations. Due to *competence gained through experience and their one's own efforts* along with struggles, they perceived that their professional competence had increased and that they had gained *confidence and independency in the role as an RN*. A common opinion was that experience gained through working as an RN along with a gained confidence and positive attitude had contributed to this and developed the ability to provide optimal nursing care in complex patient situations. They had also learnt how to prioritize different tasks and develop routines for tasks that they carried out repeatedly, and they had gained experience through handling several different complex patient situations in the acute care hospital settings they worked in.

> … there was a patient who had a troublesome venous port and he did not want me to use it because it has bothered him so much, I said we should try … I think he felt I knew what I was doing and then it wasn't a problem, it probably has a lot to do with the attitude you put across …. I also feel that if you have better self-confidence, then things will work out well …. (FGI 1, P 2, P 4)

TABLE 2 Examples of the analysis process

Meaning units	Codes	Categories	Overachieving theme
This unforeseen situation happens quite often … you never know what will happen, various complications and consequences arise that you should try to deal with … it is not as stressful as before, you are calmer and more confident (FGI 2)	Calmer and more confident in unforeseen situations	Independency due to one's own efforts and experience	Clarity and security in one's own nursing role despite facing challenges that hinder professional development
The team that joins in and solves difficult patient situations together … afterwards you need to help out because you have lots of patients who have not received care and it is their turn (FGI 3)	Teamwork solving difficult situations and helping each other	Well-functioning teamwork	
It's going ok but when you have lots of really sick patients and you have to help the newer nurses it is hard to have time to do everything you have to do and then you feel like a failure (FGI 1)	Hard to have time to help novice nurses when there are lots of really sick patients	Challenges in the work situation	

TABLE 3 Subcategories, categories and the overarching theme

Subcategories	Categories	Overarching theme
Competence gained through experience and their one's own efforts	Independency due to one's own efforts and experience	Clarity and security in one's own nursing role despite facing challenges that hinder professional development
Confidence and independency in the role		
Teamwork	Well-functioning teamwork	
Leading and delegating care		
Advocates for patients' needs		
Involving patients in their one's own care		
Given the responsibilities of an experienced RN	Challenges in the work situation	
Supervising novice RNs and nursing students		

The NGRNs had gained a sense a confidence in their role as an RN and regarded nursing in complex patient situations. This also led to feeling safe and competent when administrating medication in complex patient situations.

> … the days go by easier and you have more time to check medication that you do not know about and the margins are better for doing a better job … (mmm yes I agree). … now you can see what needs to be done straight away and what can wait. (FGI 4, P 2, P3)

Experience in being able to identify a patient's deteriorating condition came from taking the approach of remaining calm when assessing situations as critical. Being confident and secure in their profession meant that they knew how they would act and react and that they had the skills required to manage complex patient situations. This has been done due to experience and one's own struggles meaning despite the fact that they were previously afraid, they have continued to expose themselves to new situations.

> … I feel that I am not as afraid of new situations anymore—I have a better basic knowledge and I can judge if a situation is critical and I know what is critical and what is not. (FGI 1, P 1)

4.2 | Well-functioning teamwork

Regarding nursing care in complex patient situations, the participating NGRNs described effective collaboration between nurses, assistant

nurses and doctors as being of importance. When the NGRNs experienced a feeling of *teamwork* that worked well with assistant nurses and doctors, and to manage complex patient situations more effectively, they were then able to complement each other by sharing their different experiences and knowledge. The NGRNs also described that having a team that worked well together was more important than having an experienced RN available as a mentor. The members of the team complimented each other with their different experiences and together there was a feeling of 'we'.

> When we are all working together, we can help each other if needed and share each other's experiences and knowledge. (FGI 3, P 2)

NGRNs described how they managed complex patient situations by *leading and delegating care* in these situations. They expressed that they had grown into the leadership role and felt more secure by gaining an overall understanding of how nursing work is to be performed. They also described how they could be determined and driven when working alongside colleagues and follow up and monitor how assistant nurses performed their work. Various stages in the nursing process in complex nursing situations could be delegated to colleagues to relieve their one's own workloads. However, despite the NGRNs saying they were comfortable in their leadership roles, they felt that further development was necessary in this area.

> After the rounds I have to priorities and make decisions … you have to remember that you have assistant nurses … you need to take on the leadership role and say that I need to do this and you need to do that, etc … you have to make a plan and delegate … the assistant nurses want us to take the role of the leader. (FGI 2, P 4)

In communication with colleagues, the NGRNs *advocate for patients' needs*. Communication between colleagues was described as important in order to manage and give patients the correct nursing care in complex patient situations. The NGRNs expressed that they could participate in these conversations on equal terms with the doctors and other colleagues and that they showed courage and responsibility in these conversations by questioning or expressing their views to meet patients' needs on how nursing care should be performed. They described the importance of all team members having updated information about patients, and they strived to share information with each other even though it was stressful.

> … I can be decisive in my role as a nurse and I can say that I have a plan for this patient … I can watch out for the patient … I'm tougher now …. (FGI 1, P 3)

Participating NGRNs managed nursing care by *involving patients in their one's own care*; this was perceived as vital to include in conversations, tasks and the exchange of information with the patient. Providing patients with more information gave them the opportunity to participate in their one's own care, which was considered important because this group of patients was often seriously ill.

> If patients are informed and we know what they want and what they are striving for … they become more motivated … it's good that they are aware … so they get the best care. (FGI 4, P 1)

Communication also included relatives who, with information and knowledge about care plans, became more familiar with the patient's care and felt involved and calm. Having experience and knowledge of communicating with both the patient and their relatives was thought to result in a relaxed relationship between the NGRNs, the patient and their relatives, where trust in the nurse was shown.

4.3 | Challenges in the work situation

Participating NGRNs perceived that their work situations were sometimes challenging as they perceived that they were *given the responsibilities as an experienced RN* and asked to *supervise novice RNs and nursing students*. These work situations and their conditions made managing nursing care in complex patient situations more difficult. It emerged that the NGRNs, despite only having 18 months of work experience, were now among the RNs who had the most experience on their wards, which also meant that they were expected to work extra shifts due to experienced RNs being required. The lack of experienced RNs resulted in them being afraid of becoming overworked and burnt out. The high nurse turnover led to experienced RNs who quit being replaced by novice RNs and also led to experience and knowledge disappearing from the ward, making the NGRNs work situations more difficult.

> We have had a lot of novice nurses … there have been nine new ones … it was a real transition to get experienced … (another nurse continues) It takes almost a year to do it … there are not many experienced ones anymore … there are 11 nurses who have worked 18 months or less … a lot of knowledge is disappearing. (FGI 3, P 1,P 3)

Responsibility for providing nursing care in several complex patient situations simultaneously or the responsibility for providing nursing care to patients from other wards was perceived as demanding. Managing the nursing care of several complex patient situations involved assessing which patients had the greatest needs. When participating NGRNs cared for patients from other departments and patient groups that do not normally come to their ward, they found that their competence was challenged. In these situations, they did not feel they had the competence to prioritize and delegate work to assistant nurses due to being responsible for providing nursing care to several complex patient situations simultaneously. Thus, these

patients' needs are unfamiliar to the NGRNs, which leads to both themselves and the patients feeling insecure.

> The patients become unsure … we are unsure about what we are doing … then they get worried … and we might do the wrong thing if we aren't so experienced in, for example, head injuries … (you have more of this, addressing another NGRN) … things can go wrong where these patients are concerned …. (FGI 1, P 3)

Challenges of a pedagogical nature, such as supervising novice RNs and nursing students, made them feel insufficient when nursing in complex patient situations. Supervising novice RNs in complex patient situations when they themselves needed support from an experienced RN was described as challenging. They found it difficult to coordinate nursing in complex patient situations when there were a large number of novice RNs and newly graduated doctors. It appeared that even newly graduated doctors would turn to the NGRNs with 18 months of experience for help regarding routines and expect them to make decisions regarding care in complex patient situations. The NGRNs expressed having insufficient competence to be responsible for patients in complex situations as well as recently graduated doctors and novice RNs—the pressure of these situations led to an increase in stress levels and perceived pressure.

> … when you have lots of really sick patients and you have to help colleagues who are less experienced, … you feel like there is not enough of you to go round … now you have to make judgments yourself, if there were more experienced nurses you would have asked … now you have to make the decision yourself. (FGI 2, P3)

5 | DISCUSSION

The aim of this study was to explore NGRNs' perceptions of their work situation and management of nursing care in complex patient situations after 18 months of clinical experience. Through experience gained from nursing care in complex patient situations on the wards, the NGRNs who participated in this study have achieved clarity, autonomy and have gained confidence in their role as RNs. They manage nursing care in complex patient situations by leading, delegating and collaborating with the team. However, in this study, the NGRNs were the most experienced RNs after just 18 months of clinical experience. Further, they were expected to be responsible of the nursing care of several complex patient situations or new patient groups and supervising novice RNs and student nurses. This findings has not been shown elsewhere to our knowledge, and for the NGRNs, this working situation is very worrying and utterly remarkable. In contrast, Benner (2001) is referring to RNs with 18 months in the profession as advanced beginners. As a consequence identified in the present study is that where there is high staff turnover of RNs, knowledge disappears from the wards and this is a threat to RNs' professional development. Earlier research has shown that a lack of peer support is a barrier to professional development (Page et al., 2020). Organizational support and strong nursing leaders play a vital role in RNs' professional development, for example, by moving away from traditional hierarchies and identifying individual RNs' clinical competence and need for further training (King et al., 2021). However, this presupposes that the manager has genuine knowledge in evidence base nursing care with the adequate level of education in order to be able to make right assessments and support each individual NGRN after 18 months within the profession.

These results reflect the consequences of the global nursing shortage (Buchan et al., 2013), which is estimated to increase in the coming years, both in Sweden (National Board of Health and Welfare, 2018) and other countries (ICN, 2019). The nursing shortage is a threat to sustainable health systems, which in turn will have an impact on reaching the goal of health for all by 2030 (WHO, 2018). As a response to the global nursing shortage, WHO (2020c) advocates for a massive acceleration in the education of new RNs to bridge the gap of six million nurses and midwives. It is therefore of importance to focus on RNs' working conditions and keeping them in the profession as this shortage may not be able to be solved merely by educating more RNs as recommended by (WHO, 2020c).

The results of the present study show that one obstacle in achieving professional development among NGRNs was the uncertainty associated with supervising NGRNs with less experience in complex patient situations. Other studies have reported that novice RNs report low levels of competence in supervising students and staff (Gardulf et al., 2019; Nilsson et al., 2019) and in the organization of nursing care (Halabi et al., 2020). One possible way to support the transition and professional development in working in the context of acute care hospital settings among NGRNs has been shown to be peer learning (Pålsson et al., 2018). It is therefore of importance for ward managers to utilize research evidence when organizing teams in terms of RNs with different experience levels of overall competence in the health care team as recommended by the National Board of Health and Welfare (2015). Well-composed teams could increase RNs' job satisfaction and thus increase the chances of retention. It is the employer's responsibility to provide RNs with the conditions required to be able to carry out nursing care with high patient safety and good quality, as these are important predictors for wanting to remain in the profession.

Previous research shows that even RNs with approximately 5 years of experience find nursing in complex situations challenging or overwhelming (Kentischer et al., 2018). The participating NGRNs in the present study had the ability to manage the nursing care of single complex patient situations, but when presented with several cases simultaneously or complex patient situations they not were familiar with, they found it more difficult. The difficulties were related to managing the making of assessments and prioritizing and organizing care, and the NGRNs felt that they took a step back in their professional development as a consequence of these difficulties. It has been found that nursing in complex patient situations can lead to incomplete care

or the avoidance of providing care, which can be a threat to patient safety, especially when under time pressure (Vinckx et al., 2018). To accomplish an effective nursing process in complex patient situations and the best outcome for the patient, the level of the RN's attention, knowledge and experience is crucial (Huber et al., 2020) as shown in this study among NGRNs' nursing care in single complex patient situations. Another strong incitement for NGRNs not being given sole responsibility for several complex patient situations simultaneously is that an association between the complexity of nursing care and turnover among NGRNs has been found (Ten Hoeve et al., 2020). Hence, it is not appropriate to make NGRNs responsible for leading a team, assessing, prioritizing and organizing care for several patients in complex situations or unfamiliar cases usually treated on other wards when they have only been in the profession for 18 months, due to the risk of increased turnover and reduced patient safety.

5.1 | Limitations

As suggested by Morgan (1997), a goal was to include FGIs with four to six participants; thus, this was not possible to organize. Despite there only were three participants in one FGI, they interacted well with each other and generated in richness of information as they shared their views, thoughts and opinions. FGIs aim to capture the interaction in the group to explore and discuss between the participants. The number of participants may also be seen as a limitation; however, saturation was discussed during the analysis process, and saturation was assessed to be reached after analysis of the fourth FGI. Using FGI was also a way to capture new knowledge. The head of the ward nurse recruited the participants; this could serve as a limitation as they might have asked the most positive NGRNs.

6 | CONCLUSION

NGRNs with 18 months of professional experience are considered to be advanced beginners; however, due to high turnover in the profession, they are among the most experienced RNs on their respective wards. Despite having developed independency and clarity in their nursing role as well as leadership skills, they were facing challenges that made their work situation difficult. This was due to managing and organizing the nursing care of several complex patient situations or new patient groups, and supervising novice RNs and student nurses is challenging, and they need further support to develop competencies in these areas.

7 | IMPLICATION FOR NURSING MANAGEMENT

Powerful and urgent action is needed at a national level by healthcare policymakers to develop long-term strategies to improve NGRN's working conditions. Further, it is the responsibility of the healthcare leaders and management to improving work conditions and professional growth among all RNs to ensure that staffing is adequate, with a mix of different experiences and competences. Retaining the more experienced RNs within patient-centred work the NGRNs would also benefit a security and role models. However, this presupposes that the manager has genuine knowledge in evidence base nursing care with the adequate level of education in order to be able to make right assessments and support each individual NGRN after 18 months with in the profession by developing long-term strategies for improving their work condition and by establishing adequate staffing combinations by considering RNs' different experience levels that will contribute to the total competence within the team. Further, RNs need to be given a position in the healthcare systems, so they can have an impact of RNs work situation and facilitate a sustainable working life.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests or conflict.

ETHICS STATEMENT

The study followed the ethical principles in accordance with the Declaration of Helsinki (Helsinki Declaration, 2013) and was given ethical approval by the Ethical Review Board (reg. no. 2015/071 and 2015/071/2). Written informed consent was obtained from each participant in connection with the clinical development programme. Study participants received both oral and written information about the aim of the study, that their participation was voluntary and that they could end their participation at any time without explanation.

DATA AVAILABILITY STATEMENT

Data are available, but not for public due to ethics.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

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Career identity and career success among Chinese male nurses: The mediating role of work engagement

Chao Wu MM, PhD Student[1] | Mi-mi Fu MB, Junior Pharmacist[2] | Si-zhe Cheng MM, PhD Student[3] | Ya-wei Lin MB, Graduate Student[1] | Jia-ran Yan MB, Graduate Student[1] | Jing Wu MB, Graduate Student[1] | Xin-yan Zhang MB, Assistant Engineer[4] | Bao-hua Cao PhD, Assistant Professor[1] | Juan Du MM, Teaching Assistant[1] | Hong-juan Lang MM, Professor[1]

[1]Department of Nursing, Fourth Military Medical University, Xi'an, China

[2]Department of Pharmacy, Sanya Rehabilitation Center, Sanya, China

[3]Department of Military Medical Psychology, Fourth Military Medical University, Xi'an, China

[4]Department of Engineering, Army 75 Group Military Hospital, Kunming, China

Correspondence
Bao-hua Cao, Juan Du and Hong-juan Lang, Department of Nursing, Fourth Military Medical University, No. 169 Changle West Road, Xi'an, Shaanxi 710032, China.
Email: cbh528@fmmu.edu.cn; juandu999@126.com and langhj@fmmu.edu.cn

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Abstract

Aim: This study aimed to investigate the effect of career identity on career success among Chinese male nurses and to examine the mediating role of work engagement in this relationship.

Background: Recently, with the development of the nursing career, male nurses take up a higher share and play a more important role in the nursing team. With its own particularity and advantages, this group's stability closely relates to the future of the nursing team. Therefore, promoting the career success of the male nurses is essential to the nursing team development.

Methods: The data were collected in China. A sample of 557 male nurses completed measures of career identity, work engagement and career success scale. Structural equation model was adopted to verify the research hypotheses.

Results: Career identity was significantly and positively related to male nurses' work engagement and career success ($p < .01$). And work engagement partially mediated the association between career identity and career success.

Conclusion: Career identity is critical to predicting and enhancing male nurses' career success. Work engagement plays an intervening mechanism explaining how career identity promotes career success among male nurses.

Implications for Nursing Management: Nursing management should minimize the impact of the traditional concept, implement the gender equality and provide moderate care for male nurses to facilitate balanced development of gender by upgrading the management system. The administrators should carry out skill training based on male nurses' features and the need of the department. Given full play to their respective advantages, male nurses will make great progress in professional development and achieve greater career identity and work engagement. Meanwhile,

Chao Wu, Mi-mi Fu and Si-zhe Cheng contributed equally to this work.

the further exploration of better incentive mechanism also makes sense in improving career identity and work engagement by the reform of performance appraisal mechanism and salary adjustment according to their ability.

KEYWORDS
career identity, career success, male nurses, work engagement

1 | INTRODUCTION

With the development of the medical and health services, the nursing career has made great progress in the development of quantity and quality (Lu et al., 2018) and with the development of society and nursing specialty, more and more male nurses take this position gradually. However, nurse shortage is still a big problem being experienced around the world (Beitz, 2019). Male nurses, compared with female nurses, enjoy some gender advantages with better performance in physiology and psychology (Mao et al., 2021). In recent decades, male nurses have been an irreplaceable part of the nursing team, and to some extent, their appearance alleviated the shortage of nurses (Stanley et al., 2016). According to the survey, the rate of male nurses in western countries is between 10% and 30% (Younas & Sundus, 2018). Male nurses in China, whose development is relatively late but quick, are still not in line with those in western countries in proportion with only about 5% (Stanley et al., 2016). Despite the surging demand from the society, male nurses still share the problem of low career identification, higher mental stress and lack of job planning due to the impact of traditional concept, improper self-awareness and low income (Liu et al., 2018). The group of male nurses is not stable and has a high turnover rate, which affects the quality and safety of patient care and becomes a stumbling block to the development of nursing career (Sasa, 2019; H. Zhang & Tu, 2020).

Career success refers to the positive psychological reception accumulated in one's own career development and the relative achievements (Brownrout et al., 2021; H. Zhang & Tu, 2020). It is an important indicator evaluating individual development of professional career (Tu & Okazaki, 2021). When it turns to nurses, it refers to positive psychological experience accumulated in nursing and sense of accomplishment related to hands-on experience (Dan et al., 2018; Sönmez et al., 2021). A survey suggests that career success of nurses plays an important role in decreasing the turnover rate and improving quality of nursing service (Wu et al., 2020; Xu et al., 2021). Current research thus has a growing interest in exploring factors affecting male nurses' career development. Researches show that emotional labour and professional empowerment are the influencing factors of male nurses' career success (Lou et al., 2010; H. Zhang & Tu, 2020). Smith et al. (2021) found that gender stereotyping, prejudice and discrimination reduced career success for male nurses. Further research found that in the student stage, male nursing students' career choice confidence is significantly lower than that of female nursing students, which leads to their low sense of career success in the future (Twidwell et al., 2022).

Career identity refers to recognition and acceptation of professional roles given by the society. It also refers to positive response to the aim of one's career, social value and the other factors (Cruess et al., 2019; Fitzgerald, 2020). However, studies on the career identity of male nurses in China are far from enough. Existing studies imply that male nurses have lower career identity affected by traditional concept, especially the junior male nurses with less than 3 years of working experience who are reported having the lowest professional identity (Y. Chen et al., 2020). Career identity plays a key role in improving work enthusiasm and efficiency (L. Cheng, 2021). However, it is less clear whether career identity could promote career success among male nurses. So the first aim of this study was to examine whether career identity could promote career success among male nurses.

In addition, we attempted to explore the mechanisms through which career identity enhances male nurses' career success. Past studies have found that career identity is positively related to work engagement (Hirschi, 2012; Sun et al., 2022) and work engagement is positively related career success (Q. Chen et al., 2021). Accordingly, we believe that career identity, work engagement and career success are related, and work engagement may serve as an intervening mechanism between career identity and career success. Hence, the present study investigated the effect of career identity on male nurses' career success and explored the mediating role of work engagement among Chinese male nurses. As such, we attempted to shed light on the antecedents of male nurses' career success from the perspective of male nurses' career identity and explore under what mechanisms could this influence process happened. Therefore, carrying out career related research on male nurses is of great significance for stabilizing the nursing team and promoting the development of nursing in China.

2 | LITERATURE REVIEW AND HYPOTHESES

2.1 | Career identity and career success

Nursing career identity refers to the nursing practitioner's positive view and feeling to their career and the psychological condition determining one's positive occupational behaviour tendency (Foster, 2021; Landis et al., 2020). Nursing career identity mainly includes five core dimensions: (a) career awareness and evaluation, which is how nurses treat and cognize their career; (b) career social support, which they can perceive from the outside world to their career; (c) career social skills, which includes adjustment ability and interpersonal skills; (d) career

frustration reaction, which means how they handle the difficulties; and (e) career self-reflection, which indicates consistent in-depth thought and summary of lessons and experience (Qi et al., 2021).

Studies reveals that good career identity can increase job satisfaction and decrease the job burnout and turnover rate (Mainous et al., 2018; T. Zhang et al., 2021). Here, we argue that career identity could promote career success among male nurses. First, good career identity is beneficial to their passion to career and work satisfaction (Kunhunny & Salmon, 2017). Second, work satisfaction and acknowledgement can mobilize the enthusiasm and efficiency in work. Finally, improved satisfaction, enthusiasm and efficiency can help them materialize their career value. Therefore, based on these arguments, our first hypothesis is:

Hypothesis 1. Career identity is positively and directly related to male nurses' career success.

2.2 | Work engagement as a mediator

Work engagement is a positive, relatively stable and lasting emotional and cognitive state (Giménez-Espert et al., 2020). Several studies have also documented that engaged nurses tend to have more passion, higher work quality and efficiency (Lourenção, 2018; Xiong et al., 2019; Ziapour & Kianipour, 2015). Nurses with good work engagement usually have better career satisfaction and lower work stress (Acea-López et al., 2021; Labrague et al., 2020). Research among haemodialysis nurses shows that male nurses' work engagement score is higher than that of female nurses, because male nurses have better physical strength and work concentration than female nurses (Cao & Chen, 2019). However, existing studies lack enough investigation and further study in male nurses' work engagement. Male nurses have a low sense of identity and professional success, which may limit their further work engagement and the further development of gender advantages. Thus, it is of great importance to investigate the predictors and consequences of male nurses' work engagement.

Recently, nursing administrators and researchers have carried out the multi-angle survey on nurses' work engagement. It shows that one's work engagement significantly correlates with career identity (Huang et al., 2019). Career identity is an intrinsic motivation factor of one's career development and a positive response to his career. Good career identity can strengthen nurses' sense of career benefit and result in more passion and commitment in the work (Sun et al., 2022).

In addition, active work engagement is conducive to obtain positive feedback at work and improve the level of work performance, so as to obtain a good sense of career success experience, that is, it helps to promote individual career success (Q. Chen et al., 2021; Hoşgör et al., 2021). At present, the survey investigating the male nurse's career success is limited. Research shows nurses' turnover rates ranged from 4.5% to 30.7% with an average of 18.2% (Wei et al., 2019). Due to the influence of Chinese traditional culture and low social acceptance and prejudice of male nurses, the turnover rate of Chinese male nurses was above 83.3%, which was much higher than that of Chinese female nurses' intention of 47.3% (Xian et al., 2020). The high turnover rate among male nurses is contributing to the job dissatisfaction, intention to leave and the shortage of nursing staff with high physical requirements, such as heavy work, which is more suitable for male nurses (Nantsupawat et al., 2017). Male nurses lack recognition, understanding and respect from patients, family members and friends. They always feel very confused about the future career development prospects, lacking a sense of belonging and security which is not conducive to their long-term career development and career stability. Therefore, exploring the influencing factors of their career success is of great significance to stabilize and develop male nurses' team and facilitate the development of nursing career.

We thus expect that work engagement would play a mediating role in the association between career identity and male nurses' career success. Good work engagement is beneficial to their work satisfaction and enthusiasm. With better performance in work, they will get positive feedback and accomplishment to promote career success. Taken together, we propose that:

Hypothesis 2. Work engagement mediates the relationship between career identity and male nurses' career success.

3 | METHODS

3.1 | Participants and data collection

Participants were male nurses from 12 hospitals in Shaanxi, Shanxi, Yunnan and Hainan province of China. With the help of the hospital managers, surveys were sent to 582 male nurses from August to November 2021 using a convenient sampling method. The inclusion criteria were the male nurses who have obtained the professional qualification certificate of nurses of the People's Republic of China and officially worked in the hospital. The exclusion criteria were those who were not willing to participate or were absent during the survey. Prior to conducting the study, written and informed consent were obtained from the participants. The time of filling in the questionnaire which was sent by e-mail was controlled within about 30 min. The aim and significance of this research was reiterated on the cover page. They were informed that they could withdraw from the study at any time for any reason. After the male nurses completed the self-fulfilled questionnaire, the researchers immediately collected it from the network backstage. In the process of filling in the questionnaire, six nurses quit the survey and 19 questionnaires were found to be incomplete. After collecting the questionnaires, 557 questionnaires (95.70%) were determined to be valid.

3.2 | Measures

3.2.1 | Career identity

Career identity was measured using the Nursing Career Identity Scale (NCIS) which was developed by scholars. The scale contains 30 items

from five dimensions, including the career awareness and evaluation (nine items), career social support (six items), career social skills (six items), career frustration reaction (six items) and career self-reflection (three items). Example item is 'I believe those who devote themselves to their career will get rich rewards in the career'. A 5-point Likert-type scale was adopted, with a full score of 150. Higher scores indicated higher career identity. A score between 30 and 60 is generally considered to be a low level of career identity. The score between 61 and 90 is a relatively low level. Medium level is those who score between 91 and 120. The high level is between 121 and 150. The Cronbach's α was .97 and ranged between .73 and .92 for the five dimensions.

3.2.2 | Work engagement

Work engagement was measured using the Utrecht Work Engagement Scale (UWES) (Kulikowski, 2017). The scale contains nine items. Example items are 'I totally immersed in my work' and 'I want to work when I get up every morning'. A 7-point Likert-type scale was adopted. Each item is scored from '1' to '7' from *none* to *everyday*. With the full score of 63, higher scores imply more commitment. The Cronbach's α coefficient of the scale was .93.

3.2.3 | Career success

Career success was measured using the career success scale (CSS) translated by Li et al., (2014) with good reliability and validity. The scale contains 11 items from two dimensions, including the career satisfaction (five items) and career competitiveness (six items). Example items are 'I am satisfied with the progress I have made towards my promotion goals' and 'My unit believes I can create value for the organization because of my skill and experience'. A 5-point Likert-type scale was adopted. Each item is scored from '1' to '5' from *totally disagree* to *totally agree*. With the full score of 55, higher scores indicate higher career success. The Cronbach's α was .93 and ranged between .89 and .94 for the two dimensions.

3.3 | Statistical analysis

First, we used the exploratory factor analysis to test the possible common method bias (Blackburn et al., 2005). We sorted out each item of the questionnaire and used SPSS 26.0 for exploratory factor analysis. In this study, we found that the first common factor interpretation rate was 31.46%, which was less than the critical standard of 40%. Then, we analysed descriptive statistics and internal consistency of each variable. Then we used the Pearson correlation coefficient to analyse the correlations among career identity, work engagement and career success. Finally, a two-step procedure of structural equation modelling was adopted to analyse the mediating effects of work engagement between career identity and career success. Specifically, the measurement model and structural model were performed using Mplus 8.0 in two sequencing steps to examine our hypotheses. Then, we ran 2000 bootstrapping resamples to examine the mediator effect. The confidence interval is 95% confidence interval and does not contain 0, which signifies statistical significance (Motl & McAuley, 2009).

3.4 | Ethical approval

This study was conducted under ethical guidelines described in the Helsinki Declaration ("Issue Information-Declaration of Helsinki," 2019). The ethics approval was not required because there was no unethical behaviour existed in the study and our study did not involve human clinical trials or animal experiments. Before the investigation, we explained the purpose to the participants, asked for their verbal consent before conducting the survey and signed the informed consent form with them. During the investigation, participants could terminate and withdraw from the investigation at any time and the questionnaire was completed anonymously.

4 | RESULTS

4.1 | Descriptive statistics and internal consistency of the measurement scales

With the assistance of the hospital administrators, 557 out of 582 participants completed the survey for a response rate of 95.70%. All the participants are male nurses. They had an average age of 31.06 years ($SD = 5.23$) and an average working year of 7.98 years ($SD = 5.17$).

Table 1 shows the descriptive statistics and internal consistency of the measurement scales. Male nurses' work engagement score was (48.50 ± 13.33), career identity score was (108.48 ± 21.05) and career success score was (22.34 ± 4.26) which indicate that Chinese male nurses have a high level of work engagement, a medium level of career identity (the score between 91 and 120 is a medium level) and a low level of career success. Their career success scores are the lowest, which will be the most important point we need to pay attention to in the following research. Our study will help Chinese male nurses achieve career success by finding out the influencing factors and action paths of their career success.

4.2 | Correlational analysis of variables

Table 2 shows the Pearson correlation coefficients among male nurses' work engagement, career identity and career success in the survey. The results showed that career identity and its 5 dimensions have significantly positive correlations with career success ($r = .83$, $p < .01$; $r = .80$, $p < .01$; $r = .82$, $p < .01$; $r = .78$, $p < .01$; $r = .76$, $p < .01$; $r = .72$, $p < .01$) and work engagement ($r = .70$, $p < .01$; $r = .68$, $p < .01$; $r = .67$, $p < .01$; $r = .68$, $p < .01$; $r = .62$, $p < .01$; $r = .61$, $p < .01$). In addition, work engagement was positively

TABLE 1 Descriptive statistics and internal consistency of all measures used in the current study

		Mean	*SD*	Min.	Max.	Cronbach's α	Items
1	Work engagement	48.50	13.33	10	63	.93	9
2	Career awareness and evaluation	18.15	4.99	5	25	.92	9
3	Career social support	19.40	5.38	6	30	.87	6
4	Career social skills	37.55	9.64	11	55	.91	6
5	Career frustration reaction	32.58	6.86	10	45	.88	6
6	Career self-reflection	21.27	4.60	7	30	.73	3
7	Career identity	22.34	4.26	6	30	.97	30
8	Career satisfaction	21.79	4.28	6	30	.94	5
9	Career competence	10.51	2.39	3	15	.89	6
10	Career success	108.48	21.05	35	150	.93	11

TABLE 2 Correlations among study variables

		1	2	3	4	5	6	7	8	9
1	Work engagement									
2	Career awareness and evaluation	.68**								
3	Career social support	.67**	.88**							
4	Career social skills	.68**	.86**	.87**						
5	Career frustration reaction	.62**	.84**	.85**	.90**					
6	Career self-reflection	.61**	.79**	.81**	.80**	.82**				
7	Career identity	.70**	.95**	.95**	.95**	.94**	.88**			
8	Career satisfaction	.74**	.77**	.79**	.74**	.71**	.68**	.80**		
9	Career competence	.61**	.72**	.74**	.71**	.70**	.65**	.75**	.72**	
10	Career success	.72**	.80**	.82**	.78**	.76**	.72**	.83**	.92**	.93**

**p < .01.

correlated with career success ($r = .72$, $p < .01$). This shows that in order to improve the career success of male nurses, it is necessary to promote their career identity and strengthen their work engagement, because these variables are closely and positively related.

4.3 | Verification of research hypotheses

First, we assessed the measurement model which includes three latent constructs (career identity, work engagement and career success). Confirmatory factor analysis revealed that the three-factor model fit the data well: $\chi^2 = 256.99$, $df = 97$, $\chi^2/df = 2.65$, CFI = 0.98, TLI = 0.97, RMSEA = 0.05, 90% CI: 0.04–0.06, SRMR = 0.03 ($p < .01$), and all indicators were significantly loaded on the corresponding constructs.

Second, we tested a direct effect model to verify whether career identity positively affects career success (Hypothesis 1). The results showed that the direct effect model exhibited a good fit to the data: $\chi^2 = 32.62$, $df = 10$, $\chi^2/df = 3.26$, CFI = 0.99, TLI = 0.98, RMSEA = 0.06, 90% CI: 0.04–0.08, SRMR = 0.01 ($p < .01$). Figure 1 depicts the direct model. Career identity was found to be positively associated with career success ($\beta = .92$, $p < .01$). And we performed 2000 bootstrapping resamples to justify the 95% CI of the total direct effect of career identity on career success. The results of bootstrapping showed that the 95% CI for the total direct effect was (0.89, 0.95). Career identity explained 92% of the variance of career success.

Finally, we tested a mediating effect model to verify whether work engagement mediates the relationship between career identity and career success (Hypothesis 2). We repeated this process 2000 times to arrive at an empirical approximation of the sampling distribution and obtained the estimate and confidence interval for this indirect effect. According to the confirmatory factor analysis, the three-factor model had an adequate fit to the data with $\chi^2 = 256.99$, $df = 97$, $\chi^2/df = 2.65$, CFI = 0.98, TLI = 0.97, RMSEA = 0.05, 90% CI: 0.04–0.06, SRMR = 0.03 ($p < .01$), and all indicators were significantly loaded on the corresponding constructs. Figure 2 depicts the mediating effect model. Career identity was positively related to work engagement ($\beta = .74$, $p < .01$), which in turn had a positive effect on career success ($\beta = .33$, $p < .01$). Moreover, even after incorporating work engagement, career identity remained significantly related to career success ($\beta = .68$, $p < .01$), indicating that work engagement played a partial mediating role. We performed 2000 bootstrapping resamples to justify the 95% CI of the indirect effect of career identity

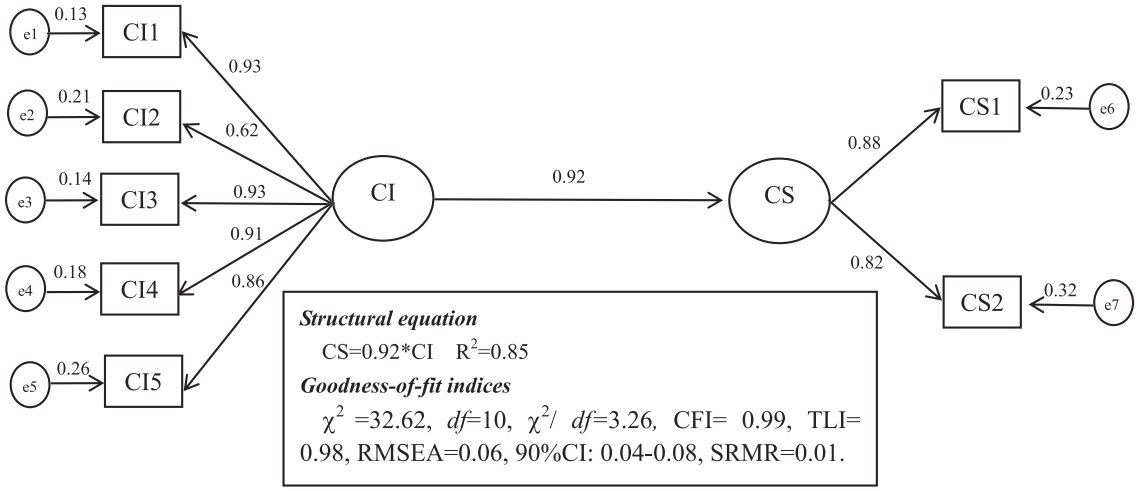

FIGURE 1 Direct effect model. CI, career identity; e1–e5, manifest variables of the five dimensions of career identity; CS, career success; e6–e7, manifest variables of the five dimensions of career success

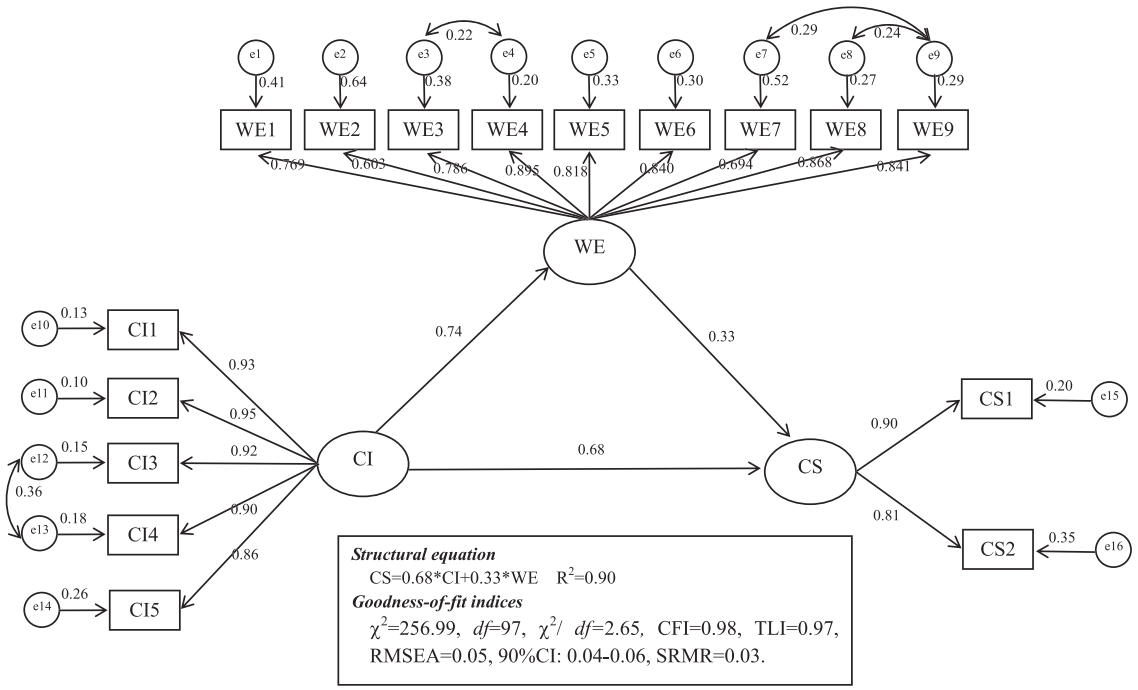

FIGURE 2 Mediation model. WE, work engagement; CI, career identity; CS, career success

on career success via work engagement. The results of bootstrapping showed that the 95% CI of the mediating effect was (0.18, 0.31). Career identity and work engagement together explained 90% of the variance of career success. The indirect effect accounted for 27% of the total effect of career identity on career success (total effect = 0.92, indirect effect = 0.24) (Table 3).

It indicates that male nurses' career identity can well predict their career success. At the same time, a better career identity can promote their career success by increasing work engagement. Job engagement plays a good intermediary role between male nurses' career identity and career success. Therefore, nursing managers should not only pay attention to male nurses' career identity but also pay attention to their engagement in the clinical nursing work.

TABLE 3 Confidence interval of mediating effect value in chain mediated model (2000 bootstrap samples)

Model path	Estimate	95% CI	
		LLCI	ULCI
CI → CS	0.92	0.89	0.95
CI → WE → CS	0.24	0.18	0.31

5 | DISCUSSION

The Chinese male nurses' career success in our study is similar to previous studies which found the level of career success of nurses is low (Dan et al., 2018; Wu et al., 2020; L. G. Zhang & Jin, 2018), and among the male nurses' career success, the score of the career competence dimension is the lowest. The reasons may be that hospital managers do not pay enough attention to the vocational education of male nurses, so male nurses are not clear about their career development planning and direction, and lack awareness and motivation to improve their career competence (Ma et al., 2020; Mao et al., 2020). At the same time, influenced by Chinese social concepts, nurses' social status is low, especially male nurses, which greatly affects their enthusiasm for nursing work and is not conducive to achieving career success (Feng et al., 2017). Although the society emphasizes gender equality, the traditional Chinese concept believes that nursing work is usually undertaken by women. Moreover, in China, the social status and income of nurses are not high, and men often assume the pillar role. If they engage in nursing work, this is contrary to this role. In addition, the male nurse is a minority of the nurse population in the world especially in China, which implies negative influences on their nursing identity and career success because the number of male nurses is small. Because of not given enough attention, they are in the danger of occupational marginalization. This will further exacerbate their low career identity and resignation, forming a vicious circle (Sedgwick & Kellett, 2015).

As the analysis of data in this survey shows, male nurses' career identity can predict their career success very well. To a certain degree, we can conclude that male nurses with good career identity can usually achieve career success. That is because improved career identity can benefit the enthusiasm in nursing work. They will commit themselves to the nursing career more proactively and deliver better service to the patients (Lin et al., 2021; Min et al., 2021). On the other hand, the positive feedback from patients can enhance nurses' sense of responsibility and accomplishment and foster a new career identity (Byram et al., 2021). It forms a virtuous circle. So improving their career identity makes great sense in promoting career success. However, due to the impact of the social concept that the nursing industry is often engaged by women, management of male nurses in hospital is not often underlined (Feng et al., 2019; Zhou et al., 2021). This will affect male nurses' career attitude badly. So managers should assist male nurses to carry out career development planning and life planning education. First, they should be guided to understand themselves and career correctly, enhance career identity and integrate self-development and nursing career development. It is beneficial to investigating the ideological trend while male nursing students choose this major and taking measures to stabilize their ideology during higher vocational nursing education so as to obtain jobs smoothly (Powers et al., 2018). Meanwhile, the managers can provide some targeted training to male nurses to improve career identity (Arif & Khokhar, 2017).

In this survey, we also find that work engagement mediates the relationship between career identity and male nurses' career success. With a good career identity, the individual is more willing to put time and energy into work and easier to get positive feedback from work and a sense of career success. Sun et al. (2022) found that in clinical nursing work, nurses with high career identity for nursing have high work enthusiasm and engagement. This is consistent with the results of Hirschi's research (Hirschi, 2012). When individuals invest more in their work, they will find a sense of existence and achievement, and that will help to achieve career success (Q. Chen et al., 2021). Therefore, work engagement plays a good intermediary role between male nurses' career identity and career success. So we should not only pay attention to their career identity but also focus on their work engagement level. The nursing manager should minimize the impact of traditional concept, implement the gender equality and improve the compensation and welfare distribution mechanism to let male nurses get well-matched pay for their work. Managers should also provide enough room for promotion and development to make them truly feel the glory and value of nursing career (Alvares et al., 2020). Meanwhile, work commitment and enthusiasm of male nurses should be sparked by further development of incentive mechanism. Based on their own features and need of department, skill and research training also make sense to improve their nursing competence, personalize and diversify their development. Given full play to their advantages, the male nurses will get higher sense of professional achievements and perform better in their work (M. L. Cheng et al., 2018).

Male nurses can play a better complementary role in the nursing team with female as the main body. They are not only the leading role in emergency room, ICU and so on but also the backbone player in the relief efforts of earthquake, snow disaster and infectious disease (Appiah et al., 2021; Banakhar et al., 2021). Their career identity and work engagement are critical to the quality of health care services. Today, our nursing team is still short of hands (Papantoniou, 2021). Policymakers and managers need to think about how to attract and retain male nurses, provide personalized career path for them and promote their career success. As a result, it is necessary to understand the career identity and work engagement of male nurses to provide inspiration and reference for managers to reduce the loss of male nurses and promote the nursing team development.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Our research provides relevant implications for nursing management. After studying the career success of male nurses, which is a special group, we find out that their career identity is positively correlative to career success. Meanwhile, the work engagement plays a mediating role between them. It suggests that nursing managers should pay attention to not only their career identity but also their work engagement. Nursing managers should minimize the impact of traditional concept, implement the gender equality and give moderate care for them. The managers should also improve the management system of male nurses and enhance their work identity to realize the establishment of more professional nursing team of male nurses, gender

balance and professional development of nursing. Based on their own features and need of department, skill and research training are beneficial to improving their nursing competence, personalizing and diversifying their development. Given full play to their advantages, the male nurses will perform better in their work. Last but not least, the further exploration of better incentive mechanism also makes sense in promoting male nurses' career identity, work engagement and career success by the reform of performance appraisal mechanism and salary adjustment according to their ability.

7 | LIMITATION

There are some limitations in our study which need to be improved through follow-up research. First, our study is conducted in the form of self-report questionnaire, and the results are relatively subjective. Second, our research is only carried out in part of provinces in China. Therefore, the sample has certain limitations. In the next research, we will further expand the sample size and involved regions, so as to make the sample more representative.

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CONFLICT OF INTEREST

None.

ETHICAL APPROVAL

This study was conducted under ethical guidelines described in the Helsinki Declaration. The ethics approval was not required because there was no unethical behaviour existed in the study and our study did not involve human clinical trials or animal experiments. Before the investigation, we explained the purpose to the participants, asked for their verbal consent before conducting the survey and signed the informed consent form with them. During the investigation, participants could terminate and withdraw from the investigation at any time and the questionnaire was completed anonymously.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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ORIGINAL ARTICLE

WILEY

Registered nurses' perceptions of their career—An interview study

Hanna Kallio PhD, RN, Project Researcher[1] | Mari Kangasniemi PhD, Professor[1] | Marja Hult PhD, University Researcher[2]

[1]Department of Nursing Science, University of Turku, Turku, Finland

[2]Department of Nursing Science, University of Eastern Finland, Kuopio, Finland

Correspondence
Marja Hult, Department of Nursing Science, University of Eastern Finland, Kuopio, Finland.
Email: marja.hult@uef.fi

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Abstract

Aim: We aim to explore registered nurses' perceptions of their career.

Background: Career development options have been found to increase attraction to nursing and support nurses' engagement with their organization and profession.

Methods: We collected qualitative individual interviews with 23 registered nurses; data were analysed with thematic analysis and reported according to the consolidated criteria for reporting qualitative research (COREQ) criteria.

Results: Three themes emerged: career choices, career engagement and career development. Participants had chosen a nursing career because they perceived it as humane, people oriented, meaningful, diverse and secure work. Participants' engagement in their career was connected to the content of the work, in which direct patient care was central. Nurses connected career development with high competency, independence, influence and meaningful working life experience. However, they perceived career development opportunities as minute within direct patient care.

Conclusions: Career development opportunities for nurses in direct patient care are needed to foster their career engagement and the attractiveness of the nursing profession. Further research is needed on the career planning and development of nurses working in patient care.

Implications for Nursing Management: Nurse managers must play a central role in engaging nurses in their careers and promoting their competency and career planning and development in organizations.

KEYWORDS
career, qualitative research, registered nurses, working life

1 | BACKGROUND

The escalating worldwide nursing shortage (International Council of Nurses, 2021) is the major challenge for nurse leaders and managers. There is an urgent need to develop both nurses' working life and the public image of nursing as a career, as it reflects on its attractiveness (Glerean et al., 2017) and hence influences the availability of labour (Bayliss-Pratt et al., 2020). Societal trends, such as population ageing and climate change, increase noncommunicable diseases and therefore the need for care and a nursing workforce

to provide such care. However, several deficiencies have been recognized that hinder nurses' motivation to engage in their career: excessive workload (Kox et al., 2020) and underpay (Bayliss-Pratt et al., 2020) in particular.

Nursing has been a traditional 'calling profession', often referred to altruistic and sacrificing image of a nurse as an unambitious subordinate, thus conflicting with career pursuits (Meleis, 1997). However, previous research has shown that high competency and training opportunities are important for nurses' experience of meaningful careers and ability to provide high-quality care (Hariyati et al., 2017) in a burdensome, constantly changing health care environment (Price & Reichert, 2017). Research has also addressed the fact that nurses value autonomy in their work (Rakhab et al., 2021) and that, as they work closely with patients, they play a vital role in developing care practices (Kallio et al., 2018). Furthermore, it is notable that younger generations have been shown more likely to base their career choices on financial comfort rather than living a calling with poor pay (Carter, 2014).

Opportunities for career development have been recognized to resonate with nurses' experience of a meaningful working life (Moore et al., 2019) and to be one of the key factors in workforce retention (Brook et al., 2019; Marufu et al., 2021; Yarbrough et al., 2017). However, factors supporting career development (Eley et al., 2012; Marufu et al., 2021), such as clear progression routes (Rakhab et al., 2021) and advocacy by leadership (Price & Reichert, 2017), have often been found lacking. Research describing registered nurses' perceptions of their careers is scarce. We aimed to provide such knowledge. This knowledge will be beneficial for nurse managers to support nurses in their career planning and is needed from the perspective of competence management and future competence needs.

2 | METHODS

2.1 | Study design, participants and recruitment

This was a descriptive qualitative study with individual semi-structured interviews for Finnish registered nurses conducted in March 2021. Participants were recruited from care workers' trade unions within a research project with a survey in which respondents ($n = 7925$) were informed about an opportunity to enrol in interviews. Altogether, 403 care workers volunteered, and of those, 64 were registered nurses. To form a reasonable but sufficient group of participants to answer the research question (Polit & Beck, 2010), we decided to invite all the nurses who were members of one nurses' union ($n = 34$). Finally, 23 nurses (Table 1) were interviewed, including the three pilot test interviews. The amount of participants was assessed to be purposeful due to the saturation, which emerged as an accumulation of participants' repeated parallel perceptions regarding the interview guide themes (Polit & Beck, 2010). We have followed the consolidated criteria for reporting qualitative research (COREQ) checklist (Tong et al., 2007; Table S1) for reporting.

TABLE 1 Participants' background information

Age	$n = 23$
29–30	1
31–40 ($n = 2$)[a]	5
41–50 ($n = 1$)[a]	8
51–60	8
60+	1
Work experience in years	$n = 23$
1–10	9
11–20 ($n = 3$)[a]	6
21–30	4
31–40	2
41+	2
Current workplace	$n = 23$
Hospital ($n = 2$)[a]	9
Health centre, home care ($n = 1$)[a]	7
Nursing home	3
Foundation	2
Other than health sector	2
Other profession in health field	$n = 13$
Primary nurse	9
Public health nurse	2
Housekeeper	2

[a]Included pilot test participants ($N = 3$).

2.2 | Data collection

We collected data with semi-structured individual interviews to allow participants broadly describe their perceptions within the topic of nurses' career and calling. We developed the interview guide to provide a uniform skeleton for the interviews (Kallio et al., 2016). Based on previous research (e.g. Carter, 2014), we formulated three main themes with follow-up questions that focused on nurses' career and calling. We pilot tested the guide with three randomly selected registered nurses. Based on the pilot test, we revised expressions to make the questions more practical and understandable (Table S2). We included pilot interviews in the data due to their valuable contents. Individual pilot and research interviews were conducted by one researcher (M. H. or H. K.) using Zoom videoconferencing software in March 2021. Interviews lasted from 30 to 80 min (52 min on average). The total length of the recordings was 19 h and 50 min. This study reports the career results. Findings focused on calling have been presented by Kallio et al. (2022).

2.3 | Analysis

The analysis method was data-driven thematic analysis to provide a rich and diverse description of the data (Braun &

Clarke, 2006). Recordings were transcribed, producing 309 pages of text (Calibri 12, single-spaced). After becoming familiar with the transcripts, the researcher (H. K.) coded and collated the data to sub and main themes using NVivo 12 software (Braun & Clarke, 2006). The initial analysis was discussed, refined and finalized by the research team.

2.4 | Ethics

Ethical principles were followed throughout the research process (ALLEA, 2017). In Finland, ethics committee approval is not required when adult participants are voluntary and competent (Ministry of Social Affairs and Health, 1999). Permissions for data collection were obtained from the research councils of each trade union and workforce leasing company. We obtained informed consents from the participants, electronically and verbally, and provided them research information, including voluntariness and the right to withdraw (Finnish Advisory Board on Research Integrity, 2012).

3 | RESULTS

The results reflect nurses' perceptions of their reasons for choosing nursing as a career and issues having an effect on their career engagement. Results also show what nurses viewed career development to be like and what kind of support was needed for it (Figure 1).

3.1 | Career choice

3.1.1 | Humane, people oriented and meaningful work

Participants had chosen a nursing career, which they considered to be humane and meaningful work. This meant that working with people, helping them and being of benefit to others were elements of work that had been important to them. Participants had also been interested in biology, health, and the hospital world and had felt respect towards the nursing profession and admiration towards its distinctive symbols, such as work clothing. Before deciding on their nursing careers, other pathways emphasized among the participants were related to medicine, pedagogy, theology and languages.

> I do not have to think about whether I'm doing meaningful work, because I know I am. (N12)

3.1.2 | Diverse and secure work

Diversity and security of work options contributed to nurses' career choice. Participants saw that as nurses they had good opportunities to choose from different workplaces and that nurses' work description is more varied than that of many other professions. They said that nurses are always needed and therefore income is regular.

> In nursing, there are a lot of opportunities, so many different specialities that you can apply for, day jobs, shift work, double shift work, entrepreneurship, et cetera. (N22)

> If you want to ensure yourself a job that never ends, then this is the right field. (N14)

3.1.3 | Personal life experiences

Participants' personal experiences contributed to why they chose nursing careers. They said that some of their loved ones had acted as nurse role models or encouraged them to select nursing. One reason for choosing a nursing career was a crisis, often a serious disease, in their own or a loved one's life. Work as nurses enabled the participants to realize their need to help others or to treat themselves.

> I think that it [choosing a nursing profession] was also influenced by things like that one of my grandparents died around that time and another got cancer. (N21)

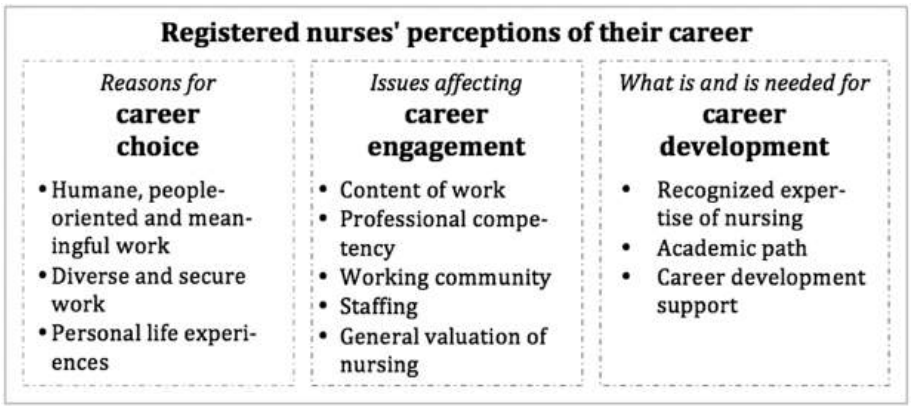

FIGURE 1 Nurses' perceptions of their career

3.2 | Career engagement

3.2.1 | Content of work

The content of the work had a central influence on nurses' career engagement. Direct patient care was important; nurses found it rewarding to be able to help patients, see them recover and receive positive feedback from them. Nurses also emphasized the importance of abundantly challenging and versatile work, meaning that narrow and repetitive work tasks were insufficient. They also brought up that it is important to work in a field and work environment suitable to one's personal interests. One issue that participants considered to be motivating was development possibilities as part of their work so that the problems they encountered were solved and they could be part of this process.

> The maternity ward is such a wonderful ward for me, no matter how busy it is … the same kind of rush, for example, in an internal medicine ward do distresses me. (N22)

3.2.2 | Professional competency

Nurses found high professional competency to be important for their career engagement. Experience of managing their own work was important, and being able to handle the wide field of nursing was described as enjoyable. In-service training was desired, and learning new things was not only needed to answer work demands but also contributed to a meaningful working life experience. In training, one could also find new areas of nursing that would actually interest them. Nurses wanted to apply their professional competency to what it was meant for, and it was crucial that their work tasks corresponded to their training. However, nurses reported that often they are expected to execute non-nursing tasks suited rather to cleaners, physicians or secretaries.

> [In my current work] I have a perfect sense of work management all the time … It's the first time when I really have awakened to think that this is what working as a nurse should be like! (N4)

3.2.3 | Working community

Our analysis showed the working community to be central in relation to nurses' experience of a meaningful career. Functional multiprofessional collaboration and networking without hierarchies were important, referring to relationships between nurses and other professional groups and relationships between permanent and temporary employers, as well as collegiality among nurses. Where strong we-feeling and positive feedback among nurses had empowered them in working life, colleagues' unprofessional attitudes and behaviour had an opposite impact.

> This is not a sport of individual performance but team play. It is really important and affects coping at work. (H4)

3.2.4 | Leadership

Organizational and managerial work impacted how nurses engaged in their careers. Motivating administrative leadership included respect towards staff, open multilevel dialogue and staff involvement in decision-making, but nurses also described situations of unfair treatment and exclusion in their organizations. Nurse managers also played a role in nurses' motivation. Participants considered managers' supportive, advocating and inspiring ways of practicing as well as understanding towards their work to motivate them. But they reiterated that also nurse managers need administrative support in their work. Furthermore, employment contract-related issues were connected to career engagement. In addition to salary, the possibility to choose permanent employment, ergonomic working time planning and opportunities for remote work were such issues.

> I have such a good foreman. … It is the managerial work that has made me stay in this [nursing] position. (N22)

3.2.5 | Staffing

One crucial factor that affected nurses' career engagement was staffing. Participants said that in general, staffing had been insufficient considering their workload, the number of patients, increased work demands and constant changes, such as digitalization in the health care sector. COVID-19 had further increased nurses' burden. The need for haste forced nurses to lower the care quality, placing them in ethical conflicts. However, one nurse also mentioned that sometimes her colleagues complain about haste but use their time poorly.

> The lack of resources affects daily routine so much that a career doesn't seem meaningful. (N22)

3.2.6 | General valuation of nursing

Nurses described the general valuation of nursing and people's understanding of nurses' work to be low, leading them to consider leaving their nursing career. They reported that nurses' low pay was a concrete indication of discrimination against their profession and that people's negative comments in social media about nurses reflect their incomprehension of nursing work. According to their experiences, people expect nurses to have a humble character, be content with their working conditions and never express criticism. On the other hand, participants said that nurses often lack the courage to defend

themselves. Nurses considered trade unions' advocacy activities vital for working life improvements.

> Those who are supposed to appreciate nurses, employers and governments, don't value a bit … That eats nurses' motivation to do this work. (N19)

3.3 | Career development

3.3.1 | Career development as recognized expertise of nursing

Participants saw career development in nursing as guiding their career to refine their area of expertise and increase their competency. Expertise could be focusing on a certain narrow area of nursing, such as stoma care or resuscitation, or a wider specialty, such as cardiac or palliative care. In this kind of role, a nurse who works with patients could delve into the area of the professional competency, perform special tasks and share knowledge in the working community. Nurses also connected increased expertise with opportunities to work independently and have greater influence on their work and organizational issues. According to them, career development needed to be recognized and correlate with wages because of the expansion of competency and responsibilities.

> You kind of rise from a regular nurse to a development task or something like that. (N17)

> Perhaps, it [career development] is deepening of professionalism. (N12)

3.3.2 | Career development as academic path

When discussing nurses' options for career development, participants brought up the possibility of proceeding into an academic nursing position, which required acquiring a new degree. A degree from a university of applied sciences was required for clinical specialist's work, although team leaders or responsible nurses in the patient care units often had this training as well. Nurses said that proceeding on leadership stairs is a 'traditional' image of nursing career development. The leadership path, as well as working as a nursing teacher or researcher, required university training. However, participants underlined that these roles were outside of the nurse title and did not consider them as actual development in the nursing career itself. Regarding the career development options, project, association and workplace steward roles were also brought up, but these kinds of tasks were temporary and rare.

> There is an opportunity to study further from a nurse, to be assistant head nurse or nurse manager, but basically there is no way to progress anywhere within this [nurse] role. (N5)

3.3.3 | Career development support

Participants brought up different support mechanisms that nurses need to be able to develop their career in patient care. Participants perceived employers' supportive attitude and actions to be vital: employers positively relating on career development, making development options visible in the organization and enabling nurses' studies during working time and at the employer's expense. Support could also manifest as encouraging nurses to apply to new positions, empowering them in their new roles and advocating their rewarding in organizations. Colleagues' attitudes were also connected to career development. Participants called for working communities in which nurses respected each other's competence and development. However, individual career pursuits also required a combination of personal will, courage and motivation for a change in working life, as well as a suitable life situation for studying.

> In my opinion, nurse's career development is dependent on employer's investments in these issues. (N18)

> My supervisor said she would request a higher personal bonus for me because I have taken on this new area of responsibility. (N14)

4 | DISCUSSION

Based on this study, a nursing career with direct patient care was desirable. Nurses had chosen their career because of the people oriented and humane nature of nursing, the element that appears to be persistent over time (Carter, 2014; Eley et al., 2012). Throughout their working lives, patient care and practice tended to remain crucial for nurses' experience of a meaningful career. However, nurses perceived career opportunities, models and support within direct patient care to be lacking. Instead, they connected career development in nursing to moving away from patients. In addition, they experienced a lack of societal support for and valuation of a nursing career.

Based on our results, work structure and environment-related issues also had an impact on nurses' careers. Structures were particularly emphasized regarding insufficient staffing resources (e.g. Marufu et al., 2021). Nurses missed permanent colleagues and contracts. Permanence not only increased one's security in a career and thus in life but also impacted on colleagues' work because the use of substitute workers increases permanent ones' responsibilities. Regarding their work environment, constant reformations burdened nurses and hindered their experience of a meaningful career. One factor was technology, as constant learning of new programmes burdened nurses, taking energy and time from other learning and development work.

It is worth noticing that it may be beneficial in the longer term to also encourage those nurses who are uninterested in career development because they want to stay in their current role. Research has shown that in the longer term, extending the boundaries of practice may lead to increased autonomy and responsibilities and promote

confidence and empowerment (Rasmussen et al., 2018) as well as engagement (Arrowsmith et al., 2016). Overall, professional advancement activities have been proven to promote retention of nursing staff and reduce turnover (Brook et al., 2019); however, activities are not widely used for these purposes, as our results showed.

Nurses in this study considered nursing as a career to be somewhat dull. Nurses expressed their interest towards career development and connected it to meaningful work but saw their opportunities for it as scarce, even non-existent. If a nurse were to proceed in a career, it meant abandoning direct patient care, the element that made them to choose the career and gave its meaning (Karlsson et al., 2019). Weak career development possibilities may lead to decreased job satisfaction and leaving the profession (Zhu et al., 2021). Therefore, health care organizations should develop career paths that allow patient care practice throughout the career to that could prevent nurses from being frustrated and leaving the profession and instead foster professional identity (Rasmussen et al., 2018).

Another challenge in career advancement in nursing is that employers had supported nurses' career development very little (also Price & Reichert, 2017). Our study showed that nurses had trouble, describing what career development in nursing could be and that they recognized only minor opportunities for it. In line with previous research, our results thus emphasize the need for nurses' career mentoring (Tucker & Gallagher-Ford, 2019) and nurse managers' role in strengthening nurses' career planning and introducing them possible career goals already at the beginning of their careers (Yan et al., 2021). Some leadership styles have been shown to be beneficial to nurses' careers and are therefore worth taking into account in nurse managers' degree programmes and continuing education. For example, an authentic leadership style has been shown to increase nurses' career satisfaction, decrease career turnover intentions (Alilyyani et al., 2018) and servant leadership professional development (James et al., 2021).

Nurse managers, but also nurses themselves from the very beginning of their nursing career, should be aware of career development opportunities and possibilities, because a successful career needs planning and networking (Carter, 2014). Thus, scrutinizing nurses' career development thoughts, wishes and ideas and opportunities to answer them is an important part of development discussions and regular updates between an employee and a supervisor and degree education in nursing. The nurse managers' role is also central in making the organization's career path models familiar to nurses (Moore et al., 2019).

Lack of career development programmes also seems to be problematic, considering the quality of patient care. Previous studies have brought up that, as career development is connected to professional competency improvement, it is likely to extend professional values, such as promoting care quality and patient safety (Haines et al., 2021; Yarbrough et al., 2017). In this study, an even salary for all the nurses regardless of their work performance was brought up. Those who aimed for high quality in their work were not rewarded. This is prone to causing resentment but also to hinder motivation to perform the best.

Poorly conceived career development options might be one of the reasons why nursing mainly remains an undervalued women's profession with low pay and poor working conditions (Bayliss-Pratt et al., 2020). These adverse working conditions, along with underdeveloped career advancement options, lack of in-service training (Simpson & Simpson, 2019) and also nursing's inherent challenges (Kox et al., 2020) may change nursing into a job without security (Bodin et al., 2020). Precarious working conditions, unfortunately, already hamper the quality of working life in nursing, manifested, in addition to the above-mentioned issues, as low autonomy, poor control over working times, overwork and high demands (Bayliss-Pratt et al., 2020; Hult et al., 2022). Like the participants in this study, many nurses currently intend to leave nursing, though the lack of career development options is only one reason among others.

4.1 | Limitations

We interviewed nurses during the COVID-19 pandemic. Considering motivational and career development issues in this kind of burdensome situation may be secondary for them and thus produce biased findings compared with a more conventional situation. Also, the COVID-19 pandemic has been shown to increase nurses' dissatisfaction with work and intentions to leave (Lavoie-Tremblay et al., 2022). On the other hand, data collection with remote access in the time of the pandemic enabled nurses to participate at times convenient for them. We did not carry out repeat interviews or return transcripts and request feedback.

5 | CONCLUSIONS

Traditional perceptions of caring professions still seem to attract people to nursing careers and engage them. Reasonable challenges and development contribute to a meaningful working life, and career development opportunities could increase the attractiveness and general valuation of nursing. Based on our study, a level of nursing that combines patient care, continuous competence and practice development with a clear reward system is desired among nurses. As the greatest part of nursing professionals works in direct patient care, career development within that sector is a central question for ensuring the nursing workforce of the future. Pay and organizational involvement are also critical in increasing nurses' motivation to stay, and they need to be further developed. In the future, nurses' career development models should be studied in relation to the content and diversity of their work.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse leaders have a significant role in supporting nurses' motivation and engagement in their careers. This study showed that nurses value

increased competency and development possibilities, which lead them to wish for reasonably challenging work tasks. Nurse managers' support and encouragement and, concretely, allocation of working time for training are some of the factors that may increase the meaningfulness and motivation for nurses to engage in their career. Nurses need clear, equal and motivating career paths and models; however, nurses who want to do a very basic job should also be supported. This study showed that career advancement should also be reflected in pay. Nevertheless, the study found that advocacy and involvement in decision-making are as important as pay. Nurse managers and leaders should foster involvement and interest in career development by applying a respectful and inspiring leadership style.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

ETHICS STATEMENT

Ethical principles were followed throughout the research process (ALLEA, 2017). In Finland, ethics committee approval is not required for this type of study, which interviews adults who volunteer and are competent (Ministry of Social Affairs and Health, 1999). However, permissions for data collection were obtained from the research councils of each trade union and workforce leasing company before the data collection phase. We obtained informed consents from the participants, electronically and verbally, and provided them research information, including voluntariness and the right to withdraw (Finnish Advisory Board on Research Integrity, 2012).

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Hanna Kallio https://orcid.org/0000-0002-3817-9646
Marja Hult https://orcid.org/0000-0002-2020-5914

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Unfinished nursing care reasons as perceived by nurses at different levels of nursing services: Findings of a qualitative study

Stefania Chiappinotto Research Fellow, PhD Student[1] | **Alvisa Palese PhD, Full Professor in Nursing**[2]

[1]University of Tor Vergata, Rome, Italy

[2]Department of Medicine, University of Udine, Udine, Italy

Correspondence
Alvisa Palese, Department of Medicine, University of Udine, 33100 Udine, Italy.
Email: alvisa.palese@uniud.it

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Abstract

Aim: This study aimed to investigate reasons for unfinished nursing care across the whole levels of the nursing service as perceived by clinical nurses, ward managers and executive nurses.

Background: Even though unfinished nursing care has been considered an issue affected by the system, no studies to date have attempted to investigate reasons across the whole levels of the nursing service by involving clinical nurses, ward managers and executive nurses.

Method: A descriptive qualitative approach was performed in 2021 according to the COnsolidated criteria for REporting Qualitative research guidelines. A large public health care trust was approached, and a purposeful sample of clinical nurses, ward managers and executive nurses was invited to attend face-to-face or online interviews. Twenty-nine interviews were performed (19 clinical nurses, 7 ward managers and 3 executive nurses) and transcribed verbatim. Then, a content analysis was conducted by considering all narratives together followed by an analytic process to identify themes and subthemes at the clinical, ward manager and executive levels.

Results: Reasons for unfinished nursing care have emerged at five levels: system (e.g., poor support towards nursing care), unit (e.g., ineffective models of nursing care delivery), nurse managers (e.g., inadequate nurse manager leadership), nurses (e.g., weaknesses in education) and patients (e.g., increased demand for patients' care).

Conclusion: The evidence available should be expanded to include also unfinished nursing care reasons identified at the system and at the ward manager levels, that both can complete the perceptions of the clinical nurses.

Implications for Nursing Management: The actors composing the nursing service perceive different reasons and therefore should be involved in detecting and contrasting the unfinished nursing care. The reasons applied or established at the upper level influence the bedside levels: Therefore, strategies to prevent or minimize the

unfinished nursing care should be designed at multi-levels in a system-inclusive approach.

KEYWORDS
antecedents, nursing service, qualitative study, reasons, unfinished nursing care

1 | BACKGROUND

The concept of unfinished nursing care, also known as task undone, missed nursing care or implicit rationing of nursing care, was developed in the early 2000s, documenting that omissions or delays in nursing care are possible (Jones et al., 2020). Since its establishment, researchers have attempted to merge the underlying unfinished nursing care anteceded by conceptually describing the reasons for and providing evidence of them with empirical studies.

At the conceptual level, task undone was the first approach developed by Sochalski (2004) and Lucero et al. (2009) as 'necessary things left undone by nurses' (Lucero et al., 2009, p. 3). In their conceptual framework, lack of time was the principal reason for task undone: However, the analysis of the causes was less important than measuring the occurrence of the phenomenon (Lucero et al., 2009; Sochalski, 2004). Later, Al-Kandari and Thomas (2009) began to reflect on factors leading to task undone, emphasizing the role of the number of patients in the unit, the nurse–patient loads, the number of unstable patients assigned to each nurse, the nursing and non-nursing tasks performed and the total workloads assigned in each shift. Around the same time, Kalisch (2006) established the missed nursing care framework, and reasons were identified as the lack of staff, the time required for each nursing intervention, the poor skills on delegation and the 'It's not my job' syndrome as the expression of certain habits. In the MISSCARE Survey, reasons were established as being labour, material resources and communication issues (Kalisch et al., 2009).

A further conceptual approach was developed by Schubert et al. (2005), with the implicit rationing of nursing care framework, where reasons were identified in the lack of resources; additionally, five influencing factors were identified as the (a) hospital-level organization, (b) nurse work environments, (c) philosophy of care, (d) nurses' characteristics and (e) patients' characteristics. More recently, the unfinished nursing care framework (Jones et al., 2019) has recognized that the phenomenon is linked to the efficient allocation of resources in a context of resource scarcity, where other elements, such as political, cultural and ideological factors, may modulate the occurrence of unfinished nursing care.

Considering empirical evidence, several studies have attempted to document factors leading to unfinished nursing care. Quantitative studies have been recently summarized in a systematic review by Chiappinotto et al. (2022), where reasons have been set at (a) the organizational levels, such as staffing and resource adequacy, poor patient-to-nurse ratio and hour per patient day, workload intensity, high non-nursing tasks, overtime and the poor quality of work environment; (b) the nurses' levels, such as the degree of absenteeism, satisfaction or personal accountability; and (c) the patients' levels, such as clinical instability that requires more care, thus leading to unfinished nursing care. Differently, qualitative studies have never been summarized to date, despite qualitative approaches have been used from the start to merge the reasons for missed nursing care (Kalisch, 2006) with focus groups. The perspectives of clinical nurses were also investigated by Harvey et al. (2018) regarding the process of care rationalization and by Rezaei-Shahsavarloo et al. (2021) merging the unfinished nursing care reasons among hospitalized frail patients. However, to the best of our knowledge, only Dehghan-Nayeri et al. (2018) as also underlined by Caldwell-Wright (2019) and Mantovan et al. (2020) involved nurse managers, working in oncology and acute care settings, respectively. Therefore, even though unfinished nursing care has been considered an issue affected by the system (Jones et al., 2019), no studies to date have attempted to investigate the reasons across the whole level of the nursing service (International Council of Nurses [ICN], 2022). Expanding the knowledge on the underlying reasons for unfinished nursing care by involving nurses appointed at different levels of the nursing service, namely, at the clinical, middle-management and executive levels, will allow a broader understanding of the phenomenon and the reasons for it, as experienced by the whole nursing system. Contributing to this expansion of knowledge was the main intent of this study.

2 | METHODS

2.1 | Study design

A descriptive qualitative approach (Sandelowski, 2010) was performed in 2021 and reported according to the COnsolidated criteria for REporting Qualitative research guidelines (Tong et al., 2007) (Table S1).

2.2 | Setting and participants

A large public health care trust of the National Health Service, located in the north-east of Italy, providing care to around 888,309 citizens (on an annual basis) with 9332 health care workers, 3868 of whom were nurses, and organized in six hospitals for a total of 2390 beds (Regione del Veneto, 2021), was approached. According to the Italian laws, three levels of nurses are appointed in the nursing service: (a) clinical nurses, educated at the university level with 3 years in

length bachelor, to ensure care responsibilities; (b) the ward managers educated at the university level with 1-year course (60 credits) as mandatory to be appointed in managerial roles and responsibilities; and (c) the executive nurses, educated at the advanced university level (Master of Science, 120 credits), with managerial responsibilities at the hospital levels.

A purposeful sample (Patton, 2015) was chosen to include nurses at different levels of the nursing service, sensitive to the phenomenon under consideration. Those eligible were (a) clinical nurses involved in the care of medical patients, as full- or part-time nurses, after at least 6 months of experience in the context, and willing to participate in the study; (b) ward managers, with at least one year of experience and willing to participate; and (c) executive nurses, with at least 1 year of experience and willing to participate. Therefore, those nurses who were only recently hired, without care or managerial responsibilities and not willing to participate were excluded.

Clinical nurses were identified by researchers and the ward managers; ward managers were identified by executive nurses, whereas the latter were identified by the hospital nurse director. They were invited to participate in the study via an email, which provided a full explanation of the aims of the study and its procedures. The recruitment ended when saturation was achieved (Morse, 1995), that is, when data have been considered completed, dominant themes were recurrent and no other themes emerged as judged independently by two researchers (S. C. and A. P.). A total of 19 clinical nurses, 7 ward managers and 3 executive nurses were involved. Nine clinical and two ward manager nurses did not reply to the email requesting participation; therefore, they were considered as refusals.

2.3 | Data collection process

An interview guide composed of open-ended questions was designed by two researchers, following the questions used by Kalisch (2006) in her focus groups, first identifying the underlying reasons for missed nursing care. Then, additional literature was consulted to refine the questions (Chiappinotto et al., 2022; Dehghan-Nayeri et al., 2018). The questions were piloted with five nurses to assess their understandability and feasibility, and the final interview guide included: (a) demographic/professional data; (b) a recall of a particular unfinished nursing care episode; and (c) which its regards, the perceived antecedents of unfinished nursing care (Table 1).

After having obtained the consent to participate in the study, the interviews were scheduled between May and August 2021, according to the day/time proposed by each participant and also taking into consideration the modality preferred: face to face ($n = 3$) or online ($n = 26$).

TABLE 1 Interview guide for clinical nurses, ward manager and executive nurses

Interview guide
• Presentation • Aim of the study and data collection process • Consent for interview and audio-recording
First section
• Age • Nursing education • Working profile • Experience as a nurse, in the current role and in the current setting (years)
Second section
• Recall of a particular episode of unfinished nursing care • Narration of the perceived reasons triggering the episode narrated • Other reasons of unfinished nursing care according to the personal experience • Other issues that the participant desired to be shared in the field of unfinished nursing care

2.4 | Data analysis

The demographic profile of participants has been summarized in frequencies, percentages, averages and standard deviation. Then, a content analysis framework (Elo & Kyngäs, 2008) was used, a systematic approach allowing a detailed description of the phenomenon to be obtained and based upon three phases: preparation, organization and reporting. In the 'preparation phase', the researcher (S. C.), who performed the interviews, transcribed the interviews verbatim. Subsequently, two researchers (S. C. and A. P.) read the text individually to gain a general understanding of the data; then, each researcher separately underlined the units of analysis as sentences or words with meaning. The 'organization phase' involved an inductive approach by performing an open coding, where labels were identified by encoding the data obtained. Then labels were grouped and assigned to a single category, according to their similarity and differences. The categories were then abstracted into subthemes and themes by formulating a general description of their contents and by providing one or more quotes for each. According to the aims of the study, the data analysis was performed across the whole level by considering all interviews; then, an analytic process was conducted by identifying the specific themes and subthemes for each level involved—clinical, ward manager and executive. An example of the coding tree is reported in Table S2.

The 'reporting phase' involved the writing of the search results according to the COnsolidated criteria for REporting Qualitative research guidelines (Table S1). Strategies used to ensure trustworthiness (Lincoln & Guba, 1985) have been summarized in Table S3.

2.5 | Ethical issues

The study was approved by the Health Care Trust Board (Azienda AULSS 2 Marca Trevigiana on March 26th, 2021). All participants freely participated, and no rewards were offered. To ensure privacy and confidentiality, interviews and quotations were anonymized by attributing a progressive number. Study findings have been provided at all levels of the nursing service involved where implications have been also discussed.

3 | RESULTS

3.1 | Participants

As reported in Table 2, participants were mainly female (27/29), with Bachelor of Nursing Science (22/29) and working full time in their position (25/29); clinical nurses were, on average, younger (35.6 years; standard deviation 9.2) compared to the ward managers (48.1; standard deviation 5.7) and executive nurses (50; standard deviation 3), with the current role of 11.2 years (standard deviation 8.5), 4.3 years (standard deviation 3.4) and 7.7 years (standard deviation 7.2), respectively.

3.2 | Reasons for unfinished nursing care

Unfinished nursing care reasons have emerged at the five levels, namely, at the system, unit, nurse managers', clinical nurses' and

TABLE 2 Demographic characteristics of nurses

ID	Gender	Age (range)[a]	Nursing education	Working profile	Experience as a nurse (years)	Experience as ward manager nurse/executive nurse (years)	Experience in current area (years)
Clinical nurses							
1	F	40–45	Nursing diploma	Full-time	19	—	3
2	F	26–30	BNS	Full-time	3	—	1.5
3	F	56–60	Nursing diploma	Full-time	33	—	2
4	M	26–30	BNS	Full-time	5	—	1.5
5	F	26–30	BNS	Full-time	5	—	1.5
6	F	30–35	BNS	Full-time	5	—	0.5
7	F	40–45	BNS	Part-time	16	—	11
8	F	26–30	BNS	Full-time	3	—	1
9	F	20–25	BNS	Full-time	3	—	1
10	F	30–35	BNS	Full-time	9	—	3
11	F	30–35	Nursing diploma	Part-time	12	—	11
12	F	30–35	BNS	Full-time	9	—	2
13	F	50–55	BNS	Full-time	10	—	4
14	F	40–45	BNS	Part-time	18	—	18
15	F	36–40	BNS	Part-time	14	—	9
16	F	46–50	Nursing diploma	Full-time	27	—	22
17	F	20–25	BNS	Full-time	3.5	—	3
18	F	30–35	BNS	Full-time	4	—	1
19	F	36–40	BNS	Full-time	15	—	14
Ward manager nurses							
1	F	46–50	BNS+[b]	Full-time	27	9	9
2	F	50–55	BNS+[b]	Full-time	34	22	2
3	F	40–45	BNS+[b]	Full-time	13	3	3
4	F	40–45	BNS+[b]	Full-time	14	3	3
5	F	40–45	BNS+[b]	Full-time	27	9.5	9.5
6	F	56–60	BNS+[b]	Full-time	40	31	2
7	F	46–50	BNS+[b]	Full-time	26	8	2
Executive nurses							
1	F	50–55	MNS	Full-time	33	15	3
2	M	46–50	MNS	Full-time	25	16	16
3	F	50–55	MNS	Full-time	31	18	4

Note: Full-time: 36 h/week; part-time: <36 h/week.
Abbreviations: BNS, Bachelor of Nursing Science; F, female; M, male; MNS, Master of Nursing Science.
[a]To ensure confidentiality.
[b]All have attended and additional university advanced course, 1 year in duration, focussed on unit coordination and management (60 credits, 1800 h).

TABLE 3 Level, themes, subthemes and levels of the nursing service

Level	Themes	Subthemes	Clinical nurses	Ward manager nurses	Executive nurses	Quotations
System level	Poor support towards nursing care	Lack of nurses and nursing care value	*			Certainly, these are settings that not provide for the centrality of the nurse and that not ensure that he/she is the fulcrum of the care project, of caring for the patient. (CN 17)
		System insensitive to the unfinished nursing care			*	One is certainly an organization that did not respond to the needs of the nurses to be supported in delivering the care required on time. (EN 1)
		Higher bureaucratization of the system	*	*	*	I mean, nurses still do a lot of administrative work. (EN 3)
		Lack of investments in electronic records	*	*	*	[…] the lack of electronic health records that can facilitate the work of nurses. (EN 1)
Unit level	Inappropriate care environment	Layout of the environment	*			That is a further waste of time, that the ward is very large, very dispersive and you have no idea where the people you need are …. (CN 5)
		High number of patients in each room	*			There were three-person rooms, therefore the rooms were even more messy. (CN 5)
		Chaotic environment	*			Medical wards are very chaotic, at least in the experience that I have. (CN 12)
	Insufficient material resources	Material resources unavailable or limited	*	*	*	Not having materials to wound care or of very simple things. (CN 17)
	Insufficient human resources	Higher nurse–patient ratio	*			But sometimes it's impossible with the time we have and the number of patients we have. In other words, there are two nurses at night for 60 patients and it's not easy. (CN 11)
		Nurses' shortages	*	*	*	Well, trivially, I am reminded of the insufficiency of nursing staff compared to what the (patients') needs are. (EN 2)
		Nursing aides' shortages	*	*	*	In acute care wards, less importance is rightly given to the provision of support staff. However, the management of mobilization, rather than the surveillance, […] I need the nursing assistants. (WMN 6)
		Physician unavailable (e.g., off the unit)	*			There are times when I may not have any medication prescribed for pain. […] So, I need to call the physician. And maybe he/she is busy with something else … because he/she obviously has other patients. (CN 9)
	Ineffective inter- and intra-professional cooperation	Poor teamwork (lack of collaboration and communication/lack of in-group reflection on action)	*	*		There is not a team, there is not a group. Also, it depends on the people, like everywhere. But there is no group, we do not feel like a group, or like a team. (CN 3)

(Continues)

TABLE 3 (Continued)

Level	Themes	Subthemes	Clinical nurses	Ward manager nurses	Executive nurses	Quotations
		Tension or communication breakdowns between • nurses and medical staff, • nurses and nursing aides, • nurses and ward managers, and • nurses and patients	*	*	*	There is no collaboration. Both between physician and nurses, and between nurses and nursing assistants. (CN 5) […] or, sincerely speaking, when you take care of a patient, as I said before, who is grumpy, you do not want to stay with him and 'waste time' with him. I mean, we are humans. (CN 11)
	Ineffective work processes	Unpredictability of the work process	*	*		Emergency-type events, a new hospitalization, rather than an urgency of a particular patient, which of course, hi/she 'steal' the nursing time, reducing the time available to do something else. (WMN 5)
		Overlapping activities	*	*		[…] that more patients call me, but I cannot divide myself. (CN 9)
		Large number of discharges and admissions	*	*		[…] even the overlapping of hospitalizations rather than discharges. (WMN 7)
		Ineffective routine	*	*		I mean things that maybe we do automatically, which take away our care time to do other things. (WMN 5)
		Lack of shared procedures	*			There are no common lines that could give us a benefit. Nurses who have been working for a long time, know well the organization and the procedures as routines. Those newly hired no. (CN 16)
		Higher frequency of interruptions	*			The phone, the phone cuts off a lot of interventions that are postpone or missed. (CN 2)
	Ineffective shift design	Weekend	*			Also, the fact that, having happened at a weekend, there was no continuous coverage from his physician, which maybe could have speeded things up a bit. (CN 1)
		Night shift	*			Then at night everything becomes a bit exacerbated, accentuated. (CN 1)
	Ineffective models of nursing care delivery	Models of care delivery: functional nursing	*		*	Even the functional nursing plays a role. It is obvious that you do not have a total view, you do not see the patient in its entirety, you do the intervention and then you move on to the next patient. (CN 10)
		Incomplete or ineffective handovers	*	*		Such as a wound care. It is obvious that if I treat the wound today, you treat it tomorrow, another colleague treats it on the third day, without an effective handover … you are unable to assess whether the wound is improving or worsening, that's it. (CN 10)

(Continues)

TABLE 3 (Continued)

Level	Themes	Subthemes	Clinical nurses	Ward manager nurses	Executive nurses	Quotations
Nurse manager level	Inadequate nurse manager's leadership		*			Even the ward manager nurses are not always adequate, maybe they are forced to be inadequate by the priorities imposed by the system. (CN 6)
Nurse level	Ineffective nurses' performances	Increased age	*	*		That our population, not of patients, but of the nurses, is aging. We are getting old again. If you have nurses starting to approach their 50s and beyond, you cannot think of them as the 20–30-year-old ones that you can ask to run to get everything done. You can ask for what is right and proper, what is necessary. (WMN 6)
		Lack of work experience, knowledge and competence	*	*		I can have more or less expert nurses in my context, so they can do a sort of analysis when a patient's needs arise and they can identify the priority. But if I have a group of new nurses, not very experienced, the fact of having so many requests could make it difficult to define priorities. (WMN 7)
		Lack of responsibility	*	*		I would not like to say indifference, because that word is bad, but not feeling the responsibilities … yes. This allows the nurse to say 'Oh well, I do not do that', which is not nice. (CN 19)
		Low motivation	*	*	*	So there is always some motivation behind it in my opinion. The low interest in the job, the low responsibility as I said before, are factors that lead to not reach the expected goals. (CN 7)
		Higher stress	*			Maybe work stress in general. The feeling of stress in general in our work. (CN 14)
		Fatigue	*			Like the tiredness of some of my colleagues. Who are tired of work and therefore maybe limit themselves. (CN 8)
		Poor time management skills	*	*		Sometimes even bad organization. Because we lost time in one intervention and then we realize that we could have given priority to something else. (CN 15)
		Ineffective delegation skills			*	Of a bad attribution of the activities to be done, because it could be given to nurse assistants who are not able, and therefore have little understanding of what the situation is. (EN 1)
	Weaknesses in education	Incomplete training or mentoring (in the transition as a newly qualified graduate)	*	*	*	[…] a lack of training, even with respect to specific nursing skills. (EN 1)

(Continues)

TABLE 3 (Continued)

Level	Themes	Subthemes	Clinical nurses	Ward manager nurses	Executive nurses	Quotations
		Inadequate orientation of new staff	*			Perhaps there is also a lack of adequate orientation of the new staff. (CN 16)
		High nursing turnover	*	*		Maybe one thing was staff turnover. We did not have the time to coach a new colleague, […] that immediately he/she went away. (CN 9)
	Poor humanistic view of patient care	Nursing care not patient-centred	*			A hospital dynamic that is less centered on the patient and more on activities, more on organizational needs than on patient's needs. (EN 2)
		Disruption of the continuity of care	*			I realize that … especially working part time, I often change sector and actually see the patient for the first day so at risk to miss important interventions. (CN 11)
	Ineffective priority-setting skills	Time required for a nursing intervention	*	*		There are many who would like to talk and you do not have the time. You also try to stay there, but they perceive your hurry, they perceive the fact that we are perpetually running. They say: 'Look, I'm not talking because I do not want to disturb you'. (CN 5)
		Higher propensity to prevent legal/medicolegal issues	*			[…] … there is often fear of legal implications, so we spend a lot of time in filling in the documentation. (CN 17)
		Wrong nursing care planning	*			Wrong decisions and priorities in the care plans mean an increased risk of missed care. (CN 2)
Patient level	Increased demand of patients' care	Patient instability	*	*		Because of the clinical instable patients, you neglect the other, more stable, already hospitalized for a couple of days. (CN 1)
		Patient complexity	*	*		Their complexity is also higher, with several interrelated issues, problems, and risks. (CN 11)
		Patients' needs	*	*		Basic needs are also increasing. (WMN 1)
		Patients' cognitive impairments	*	*		[…] patient's cognitive decline means that you can achieve less because their lack of cooperation. (CN 1)
		Patient loneliness	*	*		Patients are elderly … several have no family members with whom to relate or who acted as an intermediary. (CN 3)
	Lack of carers' support	Carer absent (e.g., off unit)	*			The fact that they (patients) do not have visits now, that they do not see their relatives, makes it worse. It gets worse. It gets much worse because they are much more demanding, because psychologically being in the hospital, being sick and never having anyone around, worsens any symptoms. (CN 15)

Abbreviations: CN, clinical nurse; EN, executive nurse; WNM, ward nurse manager.

patients' levels. In Table 3, findings have been summarized, and the quotes extracted from interviews are also reported.

3.2.1 | System level

At system level, as the highest organizational level establishing and influencing the culture, the values and the strategic plans of the entire health care trust, poor support for nurses and nursing care were identified as the reason for unfinished nursing care. A lack of nurses and nursing care value has been underlined as leading to poor support and to a low interest in nursing-related issues, such as unfinished nursing care. Consequently, a sort of system insensitivity about unfinished nursing care has been reported, with managers more concentrated on addressing economic, organizational and reporting outcomes, failing to detect unfinished nursing care issues and to support nurses in designing and implementing preventive strategies.

Furthermore, nurses reported being oppressed by the high bureaucratization of the system, spending a lot of time on administrative work, which forces them to postpone relevant nursing care activities. On the other hand, the lack of investments in electronic records and on health care digitalization has also been reported to increase the unfinished nursing care due to the lack of data available across settings and professionals.

3.2.2 | Unit level

At the unit level, inappropriate care environments were reported as causing the unfinished nursing care. In particular, the layout of the environment was described as influencing this phenomenon, especially when there is a long distance between patient rooms and the nurse station and nurses are forced to spend a lot of time walking through the ward. Moreover, the high number of patients in each room, with all their belongings, and the chaotic environment, due to the presence of equipment in the middle of the corridors, have been reported making nursing care difficult, wasting nurses' time and leading to unfinished nursing care.

The lack of material resources has also been underlined as contributing to unfinished nursing care: Materials are often unavailable or limited, triggering the need to search for resources, asking nurse managers or other wards, thus substantially postponing the care required, making nurses' provision of care less timely. Lack of nursing care in terms of high nurse-to-patient ratio and nurse shortages have also been reported. When there is a low number of nurses available, they are expected to focus their attention on a limited set of activities, judged as high priority, leaving others missed. Moreover, a shortage of nursing aides pushes nurses to spend time on non-nursing tasks that may result in unfinished nursing care. Participants have also underlined the unavailability of physicians as a reason for unfinished nursing care, mainly during night shifts or weekends, when they spend an increased time trying to reach them in case of necessity and to obtain, for example, a medication prescription.

Ineffective inter- and intra-professional cooperation was reported as another reason. Participants have highlighted poor teamwork, describing the difficulty in feeling as a group, communicating, cooperating and having common strategies. Tensions and/or communication breakdowns with medical staff, nursing aides, ward managers and patients have been reported as reducing the coordination of work processes, increasing the risk of unfinished nursing care. Moreover, the unpredictability of work processes, requiring the continual re-prioritizing of the provision of nursing care, has also been experienced as leading to unfinished nursing care: Overlapping activities and uncoordinated decisions (e.g., large number of discharges and admissions) force nurses to miss or postpone some activities. On the other hand, the constraints determined by strong, well-established routines were also considered important in leading nurses to work 'in a given manner', without reconsidering priorities and changes required by work process unpredictability. The lack of shared procedures inside of the nursing team also contribute to unfinished nursing care as well as the high frequency of interruptions (e.g., telephone and colleagues) forcing nurses to continually stop and abandon their activities to take care of something else.

Among reasons at the unit level, participants have also reported the ineffective shift design: Weekends and night shift are still designed with low numbers of nursing staff due to the old conception that during night and weekends, the care required is limited. Finally, ineffective models of nursing care delivery have been highlighted, given the prevailing diffusion of the functional model instead of the patient-centred care model due to the lack of resources. In this context, unfinished nursing care is also increased by the poor quality of the handovers, which threatens the continuity of care.

3.2.3 | Nurse managers' level

Participant clinical nurses have reported the role of the inadequate leadership as a reason for unfinished nursing care, lacking in clear and shared goals and interest in the nurse's professional growth. Specifically, ward managers have been reported to negatively affect the expectations of clinical nurses, asking them to work in a standardized/routine way, thus increasing unfinished nursing care.

3.2.4 | Clinical nurses' level

At the clinical nurses' level, ineffective nurses' performances were reported as a reason for unfinished nursing care: Increased age of nurses has been recognized as diminishing the nurse's capacity, whereas the lack of work experience, knowledge and competence may threaten an effective prioritization. The lack of professional responsibility and motivation at the individual level of nurses both have been reported as limiting the degree of engagement required to prevent unfinished nursing care. Added to this have been highlighted in the staff stress and fatigue due to the high workloads: Nurses working under pressure are at higher risk of underperforming; moreover, the lack of effective delegation to nursing aides, aimed at protecting

time for nursing interventions, increased the risk of unfinished nursing care.

Furthermore, weaknesses in education were also experienced: Specifically, the lack of transition programmes for newly qualified graduates as well as the lack of orientation programmes for the new staff entering the unit, especially during the pandemic, have increased the risk of unfinished nursing care. In addition, the high turnover, implying the need for supporting new colleagues on the one hand, and a frailty in the competences available in the staff where few experts remain in the unit, on the other, have been documented as increasing unfinished nursing care.

Among nurses, their poor humanistic view of patient care was also reported: The nursing care delivered has been reported to be more centred on activities rather than being focused on patients, overshadowing the patient, neglecting his/her priorities. Moreover, the disruption of the continuity of care due to rapid nurses' rotations across units and the fragmentation of care between part-time and full-time nurses, all threatening the in-depth knowledge of patients' needs, have been reported as affecting the quality of care. The last reasons are based on the nurses' level ineffective priority-setting skills. Some interventions (e.g., rehabilitation) require an unpredictable amount of time; thus, nurses focus their attention on more urgent and controllable interventions in terms of duration. Priorities are also identified on preventing legal/medicolegal issues—for example, filling in clinical documentation accurately to prevent errors. Erroneous nursing care planning has also been highlighted as leading to unfinished nursing care when unnecessary care interventions are programmed leaving others overlooked.

3.2.5 | Patients' level

Nurses have reported an increased demand of patient care caused by the patient's instability (e.g., at the hospital admission) and complexity due to high age, comorbidity and dependence on daily living activities. The increased needs of some patients have been reported to absorb more nursing care, thus reducing the care for those more clinically stable who are often neglected in some requests. Patients' cognitive impairments have been suggested as also negatively affecting unfinished nursing care, due to their lower cooperation and inability to express their needs, rendering their assessment more complex and time-consuming. Moreover, participants have also reported the relevance of patient loneliness, requiring additional interventions based on communication and emotional support. This is also linked to the lack of caregivers' support, determined by restrictions imposed by the pandemic, expanding dramatically the needs of patients (e.g., help in eating) previously addressed by family carers or volunteers (Bicego et al., 2021).

4 | DISCUSSION

We performed a qualitative study involving all levels of the nursing service, appointed in different units/hospitals and with different professional and educational backgrounds. Previous qualitative studies involved only clinical nurses or nurse managers (Harvey et al., 2018; Kalisch, 2006; Mantovan et al., 2020; Rezaei-Shahsavarloo et al., 2021), leaving a gap in the knowledge on reasons for unfinished nursing care as experienced by the whole nursing service.

The reasons that emerged for unfinished nursing care can be discussed in the context of (a) the conceptual frameworks available, (b) the empirical evidence summarized to date and (c) the different perceptions of nurses' roles across the whole nursing service.

To date, the reasons for unfinished nursing care have been identified in the conceptual models available (task undone, missed nursing care and implicit rationing of nursing care) mainly at the unit or nurses' levels, thus suggesting that factors are mainly embodied in the context where the nursing care is delivered. The five different levels of reasons for unfinished nursing care that emerged in our study, namely, from that at the bedside to those at the higher system levels, suggest that some factors already recognized in the conceptual models available should be expanded by including other factors at the macro-level, as proposed by Jones et al. (2019). Moreover, the different levels that emerged seem to have reciprocal influences and close connection to each other: As patients' needs shape the nursing care required, the system level might affect the nursing care and the patient expectations.

By considering the reasons documented by the empirical evidence summarized to date (Chiappinotto et al., 2022) and also in this study, the three already known levels (organizational, nurses and patients) should be expanded by including the system and the ward manager levels, both of which can influence the occurrence of unfinished nursing care. The health care system poorly supporting the nursing service, not valuing the care delivered, not demonstrating sensitivity regarding unfinished nursing care and not investing in strategies capable of easing the work of clinical nurses (e.g., electronic records; Longhini et al., 2020) substantially apply a negative pressure that leads to unfinished nursing care. Moreover, at the nurse manager level, leadership inadequacy was also reported as leading to unfinished nursing care: The importance of the leadership has already been documented (Scott et al., 2019) along with its ethical implications (Arslan et al., 2022), which may be associated with the unfinished nursing care. Different factors may affect the poor leadership of the ward managers, from the scarce training received to the consequences of high stress lived daily (e.g., Martella, 2021) resulting in burnout (Kelly & Hearld, 2020). However, also in previous studies, the inadequate leadership has been documented (e.g., Rezaei-Shahsavarloo et al., 2021) as aggravating the unfinished nursing care: for example, by further not supporting the nurses or not moderating the negative pressure applied by the system on clinical nurses.

In the remaining levels, namely, at the unit, nurses' and patients' levels, the findings confirm some factors already recognized as leading to unfinished nursing care (Chiappinotto et al., 2022; Verrall et al., 2015), whereas others are new and thus increase the evidence available. At the unit level, several reasons that emerged in our study have already been recognized as relevant (environment, material

resources, human resources, inter- and intra-professional cooperation, work process, shift design and models of nursing care delivery; Chiappinotto et al., 2022): Therefore, the evidence seems to be accumulated in a consistent direction. However, two main new reasons have emerged: (a) the lack of nursing aides in their capacity to support nurses in concentrating their efforts on nursing care and (b) the quality of handovers in keeping priorities across shifts and teams. Also, at the nurses' level, some reasons have already been documented (increased age, education, experience and competencies, responsibility and motivation, stress and fatigue, time management skill, delegation skills, turnover, part time, time required for a nursing intervention and propensity to prevent legal/medicolegal issues; Arslan et al., 2022; Chiappinotto et al., 2022; Rezaei-Shahsavarloo et al., 2021). However, three elements seem to be new in this context: (a) the poor performance of clinical nurses due to the high work pressures applied over a long time; (b) the continuity of care often threatened by the required rotations across units (due, for example, to the unpredictable understaffing), with a lack of programmed transitions (for newly qualified graduates or new staff), rendering superficial the knowledge of the patients' needs, especially those cognitively impaired; and (c) the poor humanistic vision of nursing care that also affects the quality of care plans.

The progressive increase in the complexity and instability of patients, also due to their cognitive impairments (Rezaei-Shahsavarloo et al., 2021), triggers an additional demand for care: therefore, while on the one hand data should be continuously updated in the attempt to discover whether with the increased care demand the occurrence of unfinished nursing care will increase, and on the other more awareness should be devoted towards unfinished care, especially in the case of frail patients, in accordance with their increased risk of negative outcomes. Moreover, family restrictions due to the pandemic have further increased the incidence of unfinished care, and the role of nurses to compensate for them might be insufficient given the importance of family visits for the patients, the nurses and the entire care delivery system (Hugelius et al., 2021). On the other hand, although several studies have investigated the consequences of the family restrictions also for nurses, the units without relatives might shape new attitudes among health care professionals, thus creating barriers to their further involvement.

The reasons for unfinished nursing care emerged differently across the actors composing the nursing service. Although a large number of reasons have been reported by clinical nurses, suggesting that they can identify reasons at all levels of the health system complexity, on their side, ward managers have reported some of the same reasons, but no new other factors, suggesting that they are close to clinical nurses, and perceive similar reasons, from a sort of internal (to the unit) perspective. On the other hand, executive nurses identified some additional reasons, not mentioned by clinical and ward manager nurses (e.g., a system insensitive to unfinished nursing care and ineffective delegation skills), underlining the value of the external perception of the phenomenon at the overall level. Interestingly, these two visions (internal and external to the units) are complementary and ensure a global vision of all the factors involved in unfinished care. Therefore, this suggests that both in investigating and in implementing interventions to prevent the phenomenon, all actors and levels should be included by adopting a complex approach that includes interventions at multiple levels in a comprehensive strategy (Craig et al., 2013).

4.1 | Limitations

This study has several limitations. Only one large health care trust based on multiple hospitals was approached, thus suggesting that more investigations are required to understand the reasons for unfinished nursing care across multicentre settings, also including the community levels. Moreover, more variation in participants' profiles is suggested by involving nursing services at the academic levels and/or located in different contexts (urban and rural) and countries. Furthermore, the study was conducted during the pandemic, and this might have affected the findings. In addition, we have involved nurses inside of a nursing service; upper levels (regional and national) could also be involved in future studies to merge all the perspectives regarding reasons for unfinished care; moreover, along the same lines, also involving other health care professionals (e.g., physicians) and patients may contribute to a deeper understanding of the unfinished nursing care phenomenon. Future research should also continue to develop knowledge to which profile/profiles the different reasons of unfinished care emerged are attributable and the weight of each reason as perceived by different profiles to increase the understanding of the phenomenon at the nursing service and at the entire health care system.

5 | CONCLUSIONS

To the best of our knowledge, this is the first qualitative study attempting to detect the antecedents of unfinished nursing care at the nursing service level. The map of the reasons that emerged, at their different levels, suggests three main conclusions:

- Reasons for unfinished nursing care lie at different levels, from at the system upper levels to at the bedside, involving all actors as responsibilities of nursing care.
- The detailed reasons that emerged are similar to those already established in the conceptual and empirical evidence, whereas others are new: In the first case, the accumulation of evidence in the same direction, despite its production at different times and under different circumstances/approaches (National Health Service features, countries and research methodologies), creates the basis for the design of interventions aimed at preventing the phenomenon; on the other, the new reasons that emerged may suggest future direction of the intervention studies to prevent/minimize the unfinished care.
- Clinical nurses perceived the reasons for unfinished nursing care in several different elements and similarly to the perception of ward managers, whereas executive nurses have a different perspective

of the reasons: However, their complementary views are crucial to understanding the phenomenon and to design interventions that effectively target the different reasons in a comprehensive strategy.

In particular, the changes in the patients' needs, mainly expressing a trend of increased demand for care, seem to foresee dramatic future conditions in the context of unfinished care if nursing services are not provided with increased resources and identified as a fulcrum of a system strategy aimed at preventing the occurrence of the phenomenon.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

The actors composing the nursing service perceive different reasons and therefore should be involved in detecting and contrasting the unfinished nursing care. The influences applied or established at the upper level affect the bedside levels: Therefore, strategies to prevent or minimize unfinished nursing care should consider different levels and a system-inclusive approach should be designed. Although the reasons already documented in previous studies, and confirmed in our study, should be considered as a basis on which to design interventions mainly under the complex interventions' framework aimed at preventing the occurrence of unfinished nursing care, the new reasons suggest some additional implications. The role of ward manager leadership should be further investigated in its contribution to unfinished nursing care as aggravating or moderating the factors applied by the system level. Their leadership should be promoted; however, they should also be supported when they act as a protective barrier towards nurses when the system applies a negative pressure on the entire nursing service. In addition, their poor leadership may also be considered as a sign of fatigue and burnout: Nurse leaders are instrumental in building a resilient nursing workforce, but their energy should be nurtured (Wei et al., 2019). Moreover, findings suggest that handovers should be better designed, and the number of nursing aides should be increased in order to support the continuity of care and the nursing care delivered. Managerial strategies are strongly recommended to offer nurses some respite when poor performance appears due to high pressures; moreover, the continuity of care should be encouraged by avoiding unnecessary rotations across units, by implementing strategies to ensure that the same staff are assigned to the same patients so as to have a deeper understanding of their needs and by promoting accelerated transition programmes when newly qualified graduates or new staff are experiencing difficult times. Renewed attention towards the humanistic vision of nursing care is required: This could be promoted by nursing education, by nurse leaders and by the entire system primarily considering that nurses are valuable human resources.

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CONFLICTS OF INTEREST

No conflict of interest has been declared by the authors.

ETHICS STATEMENT

According to the nature of the study, no ethical approval was required. The study was approved by the Health Care Trust Board (Azienda AULSS 2 Marca Trevigiana on March 26th, 2022).

AUTHOR CONTRIBUTIONS

All authors made substantial contributions to conception and design or acquisition of data and analysis and interpretation of data, are involved in drafting the manuscript or revising it critically for important intellectual content, have given the final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Stefania Chiappinotto https://orcid.org/0000-0003-4829-1831
Alvisa Palese https://orcid.org/0000-0002-3508-844X

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Factors that impact Australian early career nurses' intentions to remain in their position and the profession: A prospective cohort study

Amanda Cottle-Quinn BN, MHPE, PhD, Lecturer[1] | **Marion Tower RN, PhD, Associate Professor**[2] | **Rob Eley PhD, CSci, FRSB, Academic Research Manager**[3,4]

[1]School of Nursing, Midwifery and Social Work, The University of Queensland, Brisbane, QLD, Australia

[2]Griffith University, Brisbane, QLD, Australia

[3]The University of Queensland, Brisbane, QLD, Australia

[4]Princess Alexandra Hospital, Brisbane, QLD, Australia

Correspondence
Dr. Amanda Cottle-Quinn, School of Nursing, Midwifery and Social Work, The University of Queensland, Brisbane, QLD 4072, Australia.
Email: a.cottle@uq.edu.au

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Abstract

Aim: The aim of this work is to identify factors that impact on early career nurses' intentions to remain in their current position and compare with what impacts on intention to remain in the profession.

Background: Early exits of nurses from a position and the profession are a result of evolving factors. A lack of longitudinal follow-up impedes knowledge about these factors or what proportion of temporary exits become permanent.

Method: The study used prospective cohort survey design. The sample was obtained from non-probability convenience sampling of graduating nursing students from two universities. Data was collected across three time points over 12 months, commencing in November 2016.

Results: The professional turnover rate was 6.7% in total. Higher Work Environment, Support and Encouragement scores and Stress in personal life were the only predictors of intending to remain in the profession. Statistical modelling could not predict intention to remain in current position.

Conclusion: There were differences identified when comparing intention to remain in a position and the profession. Nurses are satisfied with their career choice and intend to remain in the profession, although many are intending to move positions.

Implications for Nursing Management: To effectively retain the nursing workforce, stakeholders must focus on the work environment, appropriate support and remuneration, and facilitate career progression.

KEYWORDS
education, employment, health workforce, nursing, nursing graduate, work engagement

1 | BACKGROUND

Graduates in all professions have higher rates of job mobility when compared with those who have spent longer in the workforce (Kidd et al., 2014). This remains true for nursing (Frijters et al., 2007; North et al., 2014), influencing health workforce supply. In Australia, this trend continues (Health Workforce Australia, 2014). This turnover is financially expensive for the industry (Henderson et al., 2015; McCalla-Graham & De Gagne, 2015). It can also lead to a decrease in the quality of treatment through lack of continuity of care (Eley et al., 2007; Huntington et al., 2012).

Intent to leave a position is thought to be related to discouraging and exhausting work experiences (Henderson et al., 2015; McCalla-Graham & De Gagne, 2015), and low job satisfaction (Bontrager et al., 2016; Kenny et al., 2016). For early career nurses, being married or working in small nonmetropolitan hospital (Cho et al., 2014), or being older or working in a nonpreferred ward (Beecroft et al., 2008), may also increase intention to leave a current position.

Intent to leave the profession may be due to a lack of understanding regarding graduate employment intentions and a reduction of expenditure on health services, including supported graduate nurse employment (Gilmour et al., 2016; Henderson et al., 2015). However, job satisfaction (Gurkova et al., 2013; Walker & Campbell, 2013), and negative perceptions of the work environment (Dechawatanapaisal, 2018; Guerrero et al., 2017) can also play a role. Being younger (Camerino et al., 2008; Hasselhorn et al., 2005), being more highly qualified, and being male (Hasselhorn et al., 2005) are also predictors of intent to leave the profession.

It can be argued that job mobility in nursing simply reflects the female domination of the profession as younger nurses take on parenting or home duties (Health Workforce Australia, 2014). However, in Australia (Wilkins & Inga, 2018) and internationally (Tourangeau et al., 2017), job mobility because of increased education, career changes, upskilling and moving location are common. Indeed, turnover from one job to another within nursing has been reported to achieve career advancement, better working conditions, develop new skills and meet professional goals, often resulting in superior financial earnings for the individual (Camerino et al., 2008; Cho et al., 2014; Eley et al., 2007; Kidd et al., 2014).

Therefore, the early exits of early career nurses from a position and the profession may be a result of evolving factors. Currently a lack of longitudinal follow-up means it is not known what proportion of the exits from a position are also from the profession, nor whether they were for career or academic progression, or due to dissatisfaction. Intra-individual changes are a methodological approach to data collection that is currently missing from the limited knowledge on graduate nurse employment outcomes in Australia. There are clearly differences between what causes early career nurses to want to leave a position, compared with the profession. An increased understanding of the causal influences on early career nurses' intent to remain both in the position and the profession should lead to evidence-based strategies that may result in higher retention rates.

The current paper, reporting on the doctoral work of the first author (Cottle, 2019), addresses the gaps in the literature by identifying the factors that impact on retention in a position, and the profession, using a longitudinal design to track intraindividual changes over time with a focus on intent to remain as opposed to intent to leave.

2 | METHODS

This paper reports on one research question from a larger study (Cottle, 2019). The other two research questions related to initial employment outcomes and employment settings and the findings have been published previously (Cottle-Quinn et al., 2021). This study asked: "Which factors do early career nurses attribute their intent to remain in the profession and their current positions?" It was guided by two theoretical frameworks, Stages of Transition Theory (Duchscher, 2008) and Transition Shock (Duchscher, 2009).

2.1 | Participants

The target population was final-year nursing students enrolled in undergraduate nursing programmes in Australia. A convenience sample of 583 graduating nursing students was recruited from two universities (A and B). Participants were recruited using three main activities with repetition. First, information about the study was made available on the learning platforms. Second, face-to-face presentations were provided by the researcher during teaching time, and finally information was distributed through university-related social media sites such as Facebook.

2.2 | Sample size

Sample size in surveys is reliant on level of significance (measured at .05), and power (measured at 80%). In this study, logistic regression analysis of up to 10 factors was proposed. With a required minimum of 10 cases per variable for binary logistic regression, an expected response rate of 50% and a further 25% lost to follow up, the initial response rate of the convenience sample exceeded that required for this analysis.

2.3 | Research instrument

The study employed an online survey titled *Early Career Nurse Employment Experience Survey*, which included adaptations of the *Casey-Fink Readiness for Practice Survey*© (Casey et al., 2011) and *Casey-Fink Nurse Retention Survey*© (revised, 2009) (Buffington et al., 2012). The surveys were adapted for appropriateness to the Australian context and included the following sections:

1. Work environment: measured using an adaptation of the Work Environment, Support and Encouragement scale from the Casey-Fink Nurse Retention Survey © (revised, 2009).
2. Job satisfaction: measured using the original Casey-Fink Nurse Retention Survey © (revised, 2009) (Buffington et al., 2012) scale. In the original analysis, each of the 13 items on the scale (rated using Likert scale [1 = *very dissatisfied*, 2 = *moderately dissatisfied*, 3 = *neither satisfied nor dissatisfied*, 4 = *moderately satisfied*, 5 = *very satisfied*]) was reported individually; however, as an exploratory factor and for the purpose of modelling, in this research, all 13 items were taken as a scale, allowing for a continuous variable to be created.
3. Stress: The original Casey-Fink Nurse Retention Survey © (revised, 2009) one statement was, "I am experiencing stress in my personal life", asking for self-report of the level of agreement using a Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*). Given the context of this study and its focus on employment, this item was extended, and a follow-up question added. Participants were asked to respond to the statement, "I am experiencing stress in my personal life that affects my work." Participants who scored 3 = *agree* or 4 = *strongly agree* were then asked to identify what was causing their stress and to answer whether this stress had a positive or negative effect on their ability to work using a self-report Likert scale (1 = *extremely negative*, 2 = *somewhat negative*, 3 = *neither positive nor negative*, 4 = *somewhat positive*, 5 = *extremely positive*).
4. Support: Researcher-designed questions identifying what employers do to support graduates and what graduates desired to facilitate their transition were asked, including whether participants identified as taking part in a formal structured support programme, its name and length.
5. Intent to remain: Researcher designed questions including "What do you think could be done to improve Registered Nurse retention in the Australian workforce?" In Phases Two and Three, one item that formed part of the Readiness for Practice scale pertained to intention to remain and three items from the Work Environment, Support and Encouragement scale. In Phases Two and Three, employed early career nurses were also asked how many more whole years they intended to remain in the nursing workforce in Australia, and in the final survey only, how many more whole years they intended to remain in their current registered nurse position. Researcher-designed open-ended questions, "What keeps you working in your current position?" and "What might cause you to leave your current position?" expanded the quantitative results.

Following face and content validity by an expert panel ($n = 8$) minor language and formatting changes were made.

The *Early Career Nurse Employment Experience Survey* was distributed via Qualtrics (Qualtrics, 2017). Recruitment and Phase One was in October 2016 as participants were completing their degrees; Phase Two approximately 6 months later April/May 2017, with Phase Three occurring in November/December 2017.

2.4 | Ethical considerations

Ethical clearance was obtained from the UQ Behavioural & Social Sciences Ethical Review Committee (BSSERC), clearance number: NMSW 2016/02.

2.5 | Data analysis

IBM SPSS Statistics version 24 was used to analyse the data using Cronbach's alpha coefficient, binary logistic and multiple regression, and the Pearson product–moment correlation coefficient. To review data across commonly accepted categories, some continuous variables were collapsed into categorical variables. Specifically related to this paper.

- Intent to remain in position: Collapsed to binary >7.5 years and ≤7.5 years as the average job tenure is 7.5 years for full-time Australian workers (Wilkins & Inga, 2018)
- Intent to remain in profession: Collapsed to binary >10 years and ≤10 years as the average career tenure is 10 years in Australia (Fell, 2018).

The results are described using the format described by Pallant (2010). The final sample retained in Phase Three ($n = 194$) was used for analysis as this provided a complete set of data for each of the participants. Missing values were treated as suggested by Pallant (2010) with cases excluded analysis by analysis. Responses to open ended questions were coded, classified into categories, and counted, with a higher number suggesting a more prominent category.

3 | RESULTS

3.1 | Description of sample

Response rate in Phase One was 50.3% ($n = 293$). The final sample retained from Phase Three was 194 with overall loss to follow-up of 33.8% ($n = 99$). The study sample was predominately female (89.2%), average age 26, with 63% under 25 (for full demographics table, see Cottle-Quinn et al., 2021).

3.2 | Employment outcomes

Thirty-three respondents (17%) were not working as registered nurses at Phase Two (Figure 1), which decreased to 13 (6.7%) by Phase Three (Figure 2). After 12 months, the turnover rate from a nursing position was 8.2% ($n = 16$). The most common reason for changing jobs was for a better nursing position. The turnover rate from the profession was 6.7% ($n = 13$), consisting of 3.1% ($n = 6$) leaving a registered nurse job and not taking another, plus 3.6% ($n = 7$) never beginning a registered nurse job post-graduation.

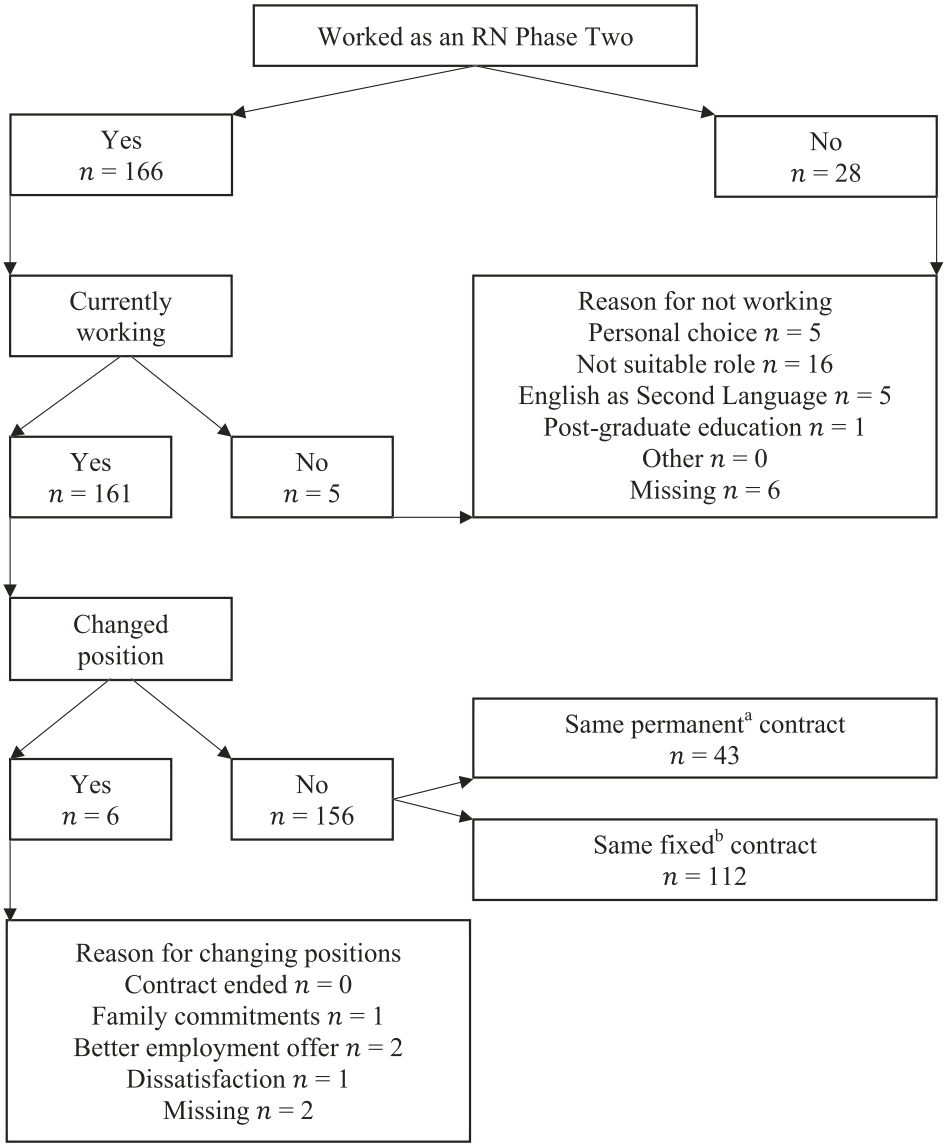

FIGURE 1 Flow of participants' employment outcomes at Phase Two. *Note*: [a]An employee employed on a permanent contract is employed on an on-going basis and is entitled to paid leave including annual leave and sick and carer's leave, and is usually entitled to written notice when their employment ends, or payment instead of notice (Australian Government, 2022). [b]Fixed term contract employees are also entitled to paid leave including annual leave and sick and carer's leave but are employed for a specific period of time or task (Australian Government, 2022).

3.3 | Work environment

The Work Environment, Support and Encouragement scale has very good internal consistency (previous Cronbach's alpha coefficient reported .92; Buffington et al., 2012; current study .86). Total scores range from 30 to 120, with higher scores suggesting stronger work environments with better support and encouragement. The overall average scores (Phase Two = 90.98, Phase Three = 90.21) suggest that most respondents agreed that their work environment was providing encouragement and support.

3.4 | Support

Most respondents identified as taking part in a formal structured support programme (79.9%). Many of these programmes lasted 12 months (74.2%). Participants were asked whether common support items were provided to them by employers and whether they identified the same support items as desirable in assisting their transition. Results are shown in Figure 3 as frequencies. Supernumerary time, study days, and orientation to both the organisation and ward were common support strategies implemented by employers, whereas altered responsibilities, mentors, and social activities were commonly requested by respondents. As time went on, there was an increase in all support items that respondents identified as desirable, with the biggest increase seen in wanting altered responsibilities. However, except for ward rotations and social activities, most support items given by employers remained relatively stable or decreased.

3.5 | Stress

Most respondents (Phase Two $n = 121$; Phase Three $n = 115$) did not report stress from their personal lives that impacted on their work.

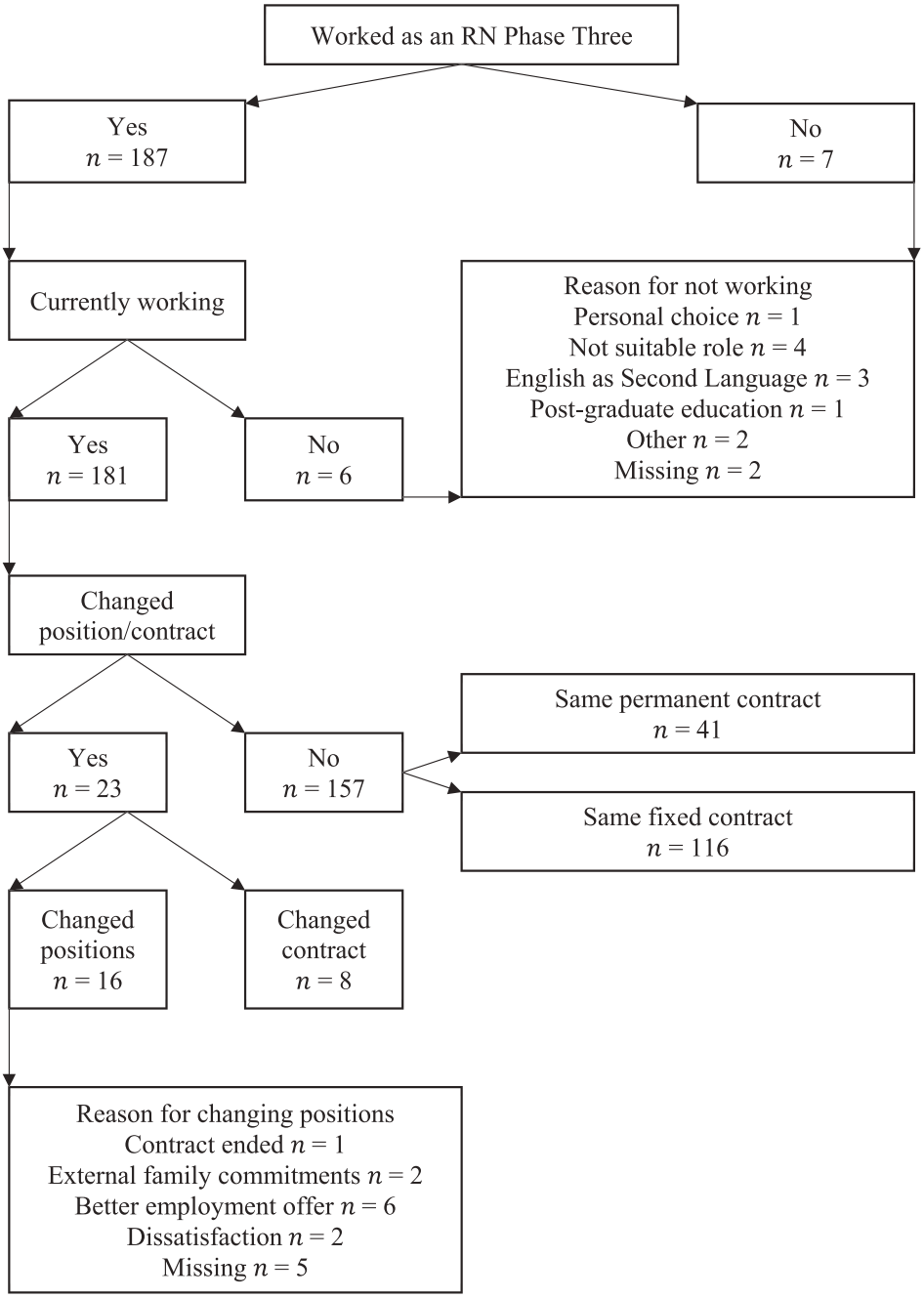

FIGURE 2 Flow of participants' employment outcomes at Phase Three

However, for those that did, the majority noted that it had a negative impact on their work. The most common causes of this stress were personal relationships and finances.

3.6 | Job satisfaction

Participants were asked the open-ended question "What keeps you working in your current job?" Analysis found three themes: Supportive team (Phase One $n = 63$, Phase Two $n = 72$), job satisfaction (Phase One $n = 69$, Phase Two $n = 70$) and completing a formal structured support programme (Phase One $n = 49$, Phase Two $n = 52$). The most common response was the importance of having a supportive team. Participant 140 wrote, "what keeps me going is the support I'm getting from other nurses on the ward, they have been so lovely and great to me as a grad and has definitely been the biggest factor is making the transition from student to nurse easy."

Job Satisfaction scale showed good internal consistency (Cronbach's alpha coefficient .85). Higher total scores (range 13–65) indicating higher job satisfaction. The average score for Phase Two was 49.04, and 46.23 for Phase Three indicating that most respondents were between "neither satisfied or dissatisfied" and "moderately satisfied" with their jobs on the 5-point Likert scale.

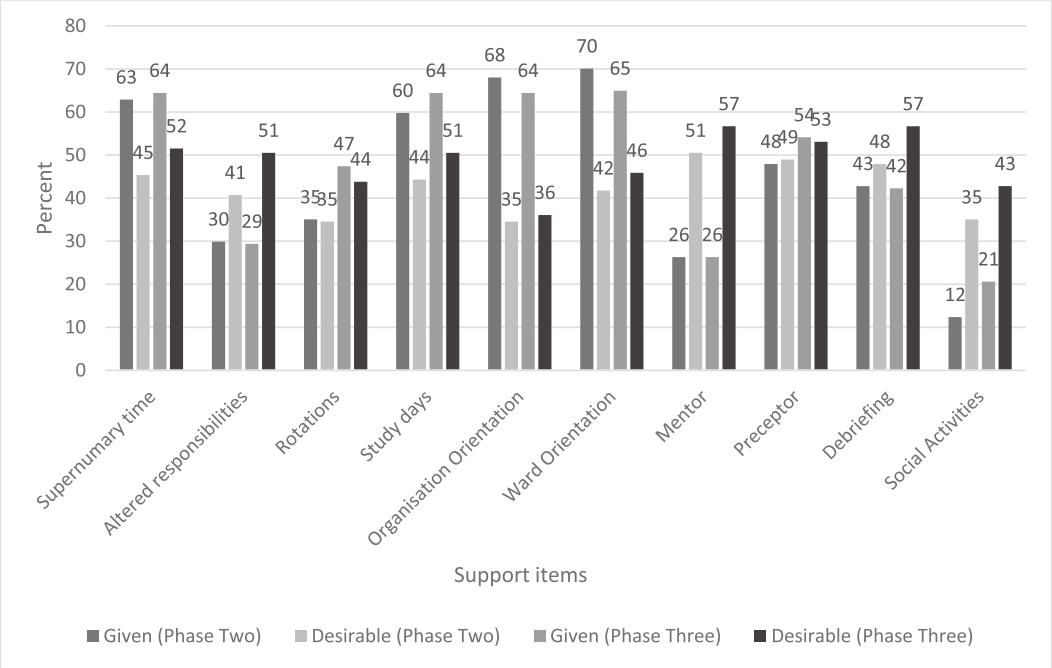

FIGURE 3 Support items provided and desired as percentage of the total sample

TABLE 1 Intention to remain in employment descriptive statistics

					Kolmogorov–Smirnov[a]		
	n	Range	Mean	*SD*	Statistic	*df*	Sig.
Phase two							
Workforce	155	0–65	26.82	16.81	0.95	155	<.001
Phase three							
Workforce	173	0–65	23.22	16.80	0.92	173	<.001
Current position	173	0–65	7.88	13.31	0.57	173	<.001

Note: df = degrees of freedom; SD = standard deviation.
[a]Lilliefors significance correction.

3.7 | Intention to remain

In Phases Two and Three, those who were working were asked how many more years they intended to remain in the nursing workforce in Australia, and in Phase Three only, how long they planned to remain in their current registered nurse position. As seen in Table 1, there was a drop in average years intended to remain in the workforce of 3.6 years, and a large difference between intention to remain in the workforce and intention to remain in a current position of 15.34 years. The Wilcoxon signed rank test revealed a statistically significant reduction in years intended to remain in the registered nurse workforce in Australia, $z = -1.95$, $p = .05$, with a small effect size ($r = .11$). The median score in years intended to remain in the registered nurse workforce in Australia decreased from Phase Two (Md 30) to Phase Three (Md 20).

As shown in Table 2, most respondents in Phase Two (88.7%) and Phase Three (79.4%) were satisfied with nursing as a career. However, by Phase Three, only half of the respondents wanted to remain in their current position for the next 5 years. Similarly, approximately half felt they had been in their position "as long as they wanted to be."

In Phases Two and Three, participants were asked: "What might cause you to leave your current place of employment?" In Phase Two, there were 152 responses, and 169 in Phase Three. In both phases, the same themes were identified, most commonly "dissatisfaction" (Phase Two $n = 56$, Phase Three $n = 61$), and "better opportunities" (Phase Two $n = 59$, Phase Three $n = 73$). Many responses in both phases centred on leaving their current employment for better opportunities. Participant 145 wrote, "Better career advancement offer or like an offer to work in the hospital where I want to be."

In Phases Two and Three, all participants were asked: "What do you think could be done to improve Registered Nurse retention in the Australian workforce?" In Phase Two, there were 160 responses, and 165 in Phase Three. Across the two phases, three themes emerged: Improved working conditions (Phase Two $n = 71$, Phase Three

TABLE 2 Level of agreement with intention to remain items

Item	Strongly disagree/disagree *n* (%)	Agree/strongly agree *n* (%)	Missing *n* (%)
16 P2	15 (7.7)	172 (88.7)	7 (3.6)
16 P3	21 (10.8)	154 (79.4)	19 (9.8)
32 P2	116 (59.8)	69 (35.6)	9 (4.6)
32 P3	108 (55.7)	68 (35.1)	18 (9.3)
33 P2	150 (77.3)	36 (18.5)	8 (4.1)
33 P3	141 (72.7)	36 (18.5)	17 (8.8)
46 P2	66 (34.0)	121 (62.4)	7 (3.6)
46 P3	84 (43.3)	92 (47.4)	18 (9.3)

Note: 16 = I am satisfied with choosing nursing as a career; P2 = Phase Two; P3 = Phase Three; 32 = I have been in my position about as long as I want to be; 33 = If the economy was better I would think about finding another job; 46 = I would like to be working here in 5 years' time.

TABLE 3 Binary logistic regression modelling to predict intention to remain in the profession

Variable	*B*	*SE*	*OR*	95.0% CI	Wald	*p*
Phase two						
Grade point average	−0.98	0.54	0.38	[0.13–1.08]	3.28	.070
Undergraduate employment	0.51	0.63	1.66	[0.49–5.66]	0.66	.416
Health care experience	−0.34	0.47	0.71	[0.28–1.80]	0.52	.473
Stress P2	−0.24	0.49	0.78	[0.30–2.61]	0.24	.621
Job satisfaction P2	−0.04	0.04	0.96	[0.89–1.04]	1.13	.287
Work environment, support and encouragement S P2	0.06	0.03	1.07	[1.01–1.12]	5.65	.017
Phase three						
Age	0.41	0.48	1.51	[0.59–3.84]	0.74	.239
English as a second language	0.98	0.54	2.66	[0.93–7.66]	3.29	.070
Health care experience	−0.55	0.44	0.58	[0.25–1.35]	1.62	.203
Stress P3	1.08	0.49	2.95	[1.14–7.63]	4.95	.026
Job satisfaction P3	−0.02	0.05	0.99	[0.92–1.05]	0.20	.653
Readiness for practice scale P1	−0.08	0.05	0.92	[0.84–1.02]	1.64	.104
Readiness for practice scale P2	0.03	0.06	1.03	[0.91–1.16]	0.19	.659
Readiness for practice scale P3	0.05	0.06	1.05	[0.93–1.18]	0.64	.425
Work environment, support and encouragement P2	0.01	0.02	1.01	[0.97–1.06]	0.17	.676
Work environment, support and encouragement P3	0.05	0.03	1.05	[1.00–1.11]	3.81	.050

Note: CI = confidence interval for odds ratio (OR); P2 = Phase Two; P1 = Phase One; P3 = Phase Three.

$n = 68$), increased support and recognition (Phase Two $n = 68$, Phase Three $n = 57$), and more employment opportunities (Phase Two $n = 27$, Phase Three $n = 24$). The most reported theme was an improvement in working conditions, specifically patient-to-nurse ratios, remuneration, and shift options. Participant 146 wrote, "Better/consistent nursing ratios (often nurses are pressured to accept patient ratios that fail to conform to current Australian standards), increased pay with reference to the increased cost of living, flexible working hours."

Which factors influence early career nurse intention to remain in the profession?

Direct binary logistic regression was performed to identify which factors influenced intention to remain in the profession longer than 10 years (see Table 3). The full model containing six predictors was statistically significant, X^2 (6, $n = 131$) = 14.02, $p = .029$, thus was able to distinguish between respondents who intended to remain in the profession longer than 10 years and those who did not. Work Environment, Support and Encouragement score [Phase Two] was the only significant variable; for every point, early career nurses scored higher on the Work Environment, Support and Encouragement scale; they were 1.07 times more likely to report intending to remain for more than 10 years.

TABLE 4 Binary logistic regression modelling to predict intention to remain in current position

Variable	*B*	*SE*	*OR*	95.0% CI	Wald	*p*
Age	0.65	0.48	1.92	[0.76–4.87]	1.88	.170
Grade point average	−0.02	0.50	0.98	[0.37–2.62]	0.00	.973
English second language	−0.30	0.61	0.74	[0.23–2.43]	0.25	.619
Undergraduate employment	−1.30	0.61	0.27	[0.08–0.90]	4.52	.033
Health care experience	−0.18	0.53	0.83	[0.30–2.34]	0.12	.730
Stress (P3)	0.10	0.51	1.11	[0.41–3.00]	0.4	.840
Job satisfaction (P3)	0.04	0.04	1.04	[0.97–1.12]	1.28	.257
Readiness for practice scale P1	−0.04	0.05	0.96	[0.88–1.06]	0.70	.401
Readiness for practice scale P2	−0.80	0.06	0.92	[0.82–1.04]	1.80	.180
Readiness for practice scale P3	0.02	0.06	1.02	[0.90–1.15]	0.09	.767
Work environment, support and encouragement P2	0.01	0.02	1.01	[0.97–1.06]	0.26	.610
Work environment, support and encouragement P3	0.03	0.3	1.03	[0.98–1.09]	1.28	.258

Note: CI = confidence interval for odds ratio (OR); P2 = Phase Two; P1 = Phase One; P3 = Phase Three.

In the Phase Three, the full model containing 10 predictors was also statistically significant, X^2 (10, $n = 131$) = 21.51, $p = .018$. Higher Work Environment, Support and Encouragement scores remained predictive of wanting to remain in the profession; however, the strongest predictor was having stress. Those with stress were three times more likely to remain in the profession than those without.

Which factors influence early career nurse intention to remain in their current position?

Direct logistic regression was performed to identify the factors that impact on intention to remain in their current position longer than 7.5 years (see Table 4). The full model containing 12 predictors was not statistically significant, X^2 (12, $n = 148$) = 17.15, $p = .114$.

4 | DISCUSSION

A key finding from the current study is that while most respondents were satisfied with nursing as a career and their workplace, half felt they had been in their position as long as they wanted to be, and only half wanted to remain in their current position for the next 5 years. Concurrently, a large difference between intention to remain in the workforce and the intention to remain in a current position was also found. This suggests that the early career nurses were satisfied with their career choice and intend to remain in the profession but also wanted to move positions early in their career, reflecting wider research (Brotherhood of St Laurence, 2017; Kidd et al., 2014; Wilkins & Inga, 2018). This desire for job mobility may reflect the younger demographic. In general, younger workers are more likely to move in and out of education, change careers, up-skill and move location, all which impact on their employment (Fell, 2018). For nurses, it has historically been argued that job mobility is due to the female domination of the workforce, who historically have taken on more parenting and/or home duties (Health Workforce Australia, 2014). However, in wider research, job mobility is seen as a crucial mechanism through which superior employment outcomes, such as work–life balance and remuneration, are realised (Kidd et al., 2014).

In the past, dissatisfaction with the workplace has dominated the discussion on position turnover (Bontrager et al., 2016; Kenny et al., 2016). However, this study showed that most respondents were satisfied with the workplace, but only half wanted to remain in their current position for the next 5 years. The most common reason given for changing or intending to change employers was for a better employment offer. The open-ended responses gave an insight into what this "better" employment may look like. Respondents reported looking for career advancement with opportunities to increase skills and searching for stability through permanent contracts with increased pay and flexible hours. Therefore, it can be suggested that like wider research (Kidd et al., 2014), job mobility in the early career nurse population is also for labour market gains such as work–life balance and remuneration. If an administrator only looks at turnover from a single nursing unit or even facility in isolation, that could be perceived negatively without these other pieces of information, which suggest nurse managers should be supported if they are encouraging career development opportunities. To retain early career nurses in a position in the future, employers may need to invest in initiatives such as increasing opportunities for continuing professional development, facilitating flexible career pathways, including the transfer between departments, organisations, and sectors, and flexible working contracts, to make staying in a position more attractive (House of Commons, 2016).

In this study, higher work environment support and encouragement scores were predictive of intention to remain in the profession. This finding is like that of previous research that showed that positive work environments retain early career nurses (Kramer et al., 2012). Conversely, negative perceptions of the work environment are strong predictors of intent to leave a position (Kramer et al., 2012; Lee et al., 2019) and the profession (Guerrero et al., 2017). Many studies have shown this positive correlation using a variety of tools. What this

study adds is the comparison of intent to leave the profession and a position simultaneously using longitudinal follow-up in a cohort of early career nurses from more than one institution and employed in various settings. Employers should understand that positive work environments increase an early career nurse's intention to remain in the profession, but this will not necessarily result in an increased intention to remain in their current position. Despite this, it is still important for workplaces to invest in creating positive work environments as they improve quality of care (Purdy et al., 2010) and minimise transition shock (Kim & Yeo, 2019), whereas negative perceptions will still encourage early career nurses to leave (Guerrero et al., 2017). However, with the knowledge that job mobility is common for early career nurses, future research should focus on ensuring early career nurse retention in the profession, not a position; therefore, future studies will require multiple sites and longitudinal follow-up.

In this study, having stress in an early career nurse's personal life was predictive of intention to remain in the profession. This is a point of interest as there may be a perception that the reverse would be true. In the current study, those with stress were three times more likely to remain in the profession than those without. This contrasts with stress caused by the workplace, which has been a predictor of intent to leave a position (Wu et al., 2012; Yeh & Yu, 2009). This finding is interesting and may be explained by the identified causes of this stress: Personal relationships and finances. Historically, it was thought that retention of early career nurses could be improved by providing good working conditions such as removing obstacles to caregiving, allowing autonomy, and reducing workloads and other job pressures (Li et al., 2014). But generational changes may augment the focus of stress-related research. Millennials foster strong social connections with friends and family (Lavoie-Tremblay et al., 2008). Recognition of the need for early career nurses to develop work–life balance quickly during their transition to practice, and facilitation of this by employers, may alleviate some causes of stress for early career nurses that impact on their work. Future research needs to compare work-related stress and personal stress to maintain the distinction between work elements that require change and personal circumstances of early career nurses that require support to overcome.

4.1 | Limitations

The question pertaining to intent to remain in position was only included in the final survey thus prohibiting the ability to measure a change in intent to remain in the position over time. The participants were from two metropolitan institutions in two states in Australia and this may limit generalizability of results to the wider graduate populations. Furthermore, although self-report measures are widely used, results may be affected by context, limits in memory, and social desirability bias. This research used a variety of strategies to mitigate these effects, such as assuring participants of their anonymity and their right to refuse to answer questions.

5 | CONCLUSION

There are differences, in length and factors, when comparing early career nurses' intention to remain in their position and the profession. Early career nurses in this study were satisfied with their career choice and intended to remain in the profession but also intended to move positions early in their career. This study suggests turnover from a position may be a consequence of the desire for career progression for early career nurses within the profession.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Previously, the focus of early career nurse turnover has been focussed on dissatisfying work environments. Whilst this study shows positive work environments, combined with appropriate supports and remuneration, remain imperative to retaining early career nurses in the profession, it also highlights that many early career nurses may want to change positions irrespective of satisfaction with current employment. Therefore, nurse managers should be supported to encourage career development and progression opportunities for early career nurses to ensure retention in the profession as opposed to retention in a position.

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CONFLICT OF INTEREST

The authors have no potential sources of conflict of interest to disclose.

ETHICS STATEMENT

Ethical clearance was obtained from the UQ Behavioural & Social Sciences Ethical Review Committee (BSSERC), clearance number: NMSW 2016/02.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Amanda Cottle-Quinn https://orcid.org/0000-0001-5621-2940
Marion Tower https://orcid.org/0000-0002-7962-5294
Rob Eley https://orcid.org/0000-0003-0856-4313

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ORIGINAL ARTICLE

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Impact evaluation of nurse staffing policy reform in Korea: A quasi-experimental study

Jinseon Yi RN, MPH, Lecturer[1] | Jinhyun Kim PhD, Professor[2]

[1]College of Nursing, Seoul National University, Seoul, South Korea

[2]College of Nursing, Research Institute of Nursing Science, Seoul National University, Seoul, South Korea

Correspondence
Jinhyun Kim, College of Nursing, Research Institute of Nursing Science, Seoul National University, 103 Daehak-ro, Jongno-gu, Seoul 03080, South Korea.
Email: jinhyun@snu.ac.kr

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Abstract

Aim: This study aims to evaluate the new nursing policy's effect on improving overall nurse staffing levels in Korean acute care hospitals.

Background: The Korean government introduced the Integrated Nursing and Care Service policy, which adopted advanced staffing standards. Under the new scheme, reimbursement of nursing fees was differentiated by the patient-to-nurse ratios, and financial incentives were provided to policy participating hospitals to promote additional employment in overall hospitals.

Methods: We analysed 1362 acute care hospitals. The probability and degree of improving nurse staffing levels for each hospital were examined using a two-part model. Whether policy participation had affected to improve nurse staffing levels was evaluated by the difference-in-difference approach.

Results: Policy participating hospitals were 3.89 times more likely to enhance nurse staffing levels compared to non-participating hospitals. The policy participation effect was found to improve average nurse staffing levels by 1.12 grades.

Conclusion: Korean nurse staffing policy reform was successful to encourage hospitals to improve their overall nurse staffing levels.

Implication for Nursing Management: Nursing leaders and policymakers should understand that providing incentives could affect hospitals' employment behaviour change under the market-oriented healthcare system. For developing future nursing policies, these strategies should be considered appropriately.

KEYWORDS
evaluation, healthcare reform, health policy, nurse staffing, staffing level

1 | BACKGROUND

Adequate nurse staffing is essential to provide safe and qualified nursing care. Numerous studies supported the positive relationship between nurse staffing levels in acute care hospitals and patient outcomes (Kane et al., 2007), but fewer studies were concerned with how to elevate the hospitals' nurse staffing levels. Characteristics of hospitals, such as the magnitude (e.g. number of beds, medical equipment, physicians and nurses), ownership (public), location (metropolitan area) and bed occupancy rate, showed association with high staffing levels in hospitals (Cho et al., 2008; Choi et al., 2015; Hong & Cho, 2017). However, the magnitude of the hospital is not directly an associated factor, but the case mix of patients and nursing care needs tends to be high for bigger

hospitals, resulting in the difference in nurse staffing levels (Mark et al., 2000).

From a macro perspective, the market structure of the healthcare system where hospitals belong should be considered (Kim et al., 2007; Robinson, 1988). In the market-oriented healthcare system, hospitals highly tend to reduce the labour costs for nurses, which account for the majority of hospital expenditure (Kim & Kim, 2012). Accordingly, there is no choice but to take care of the maximum number of patients with the minimum number of nurses. Such a poor working environment not only adversely affects the care quality but also affects nurses to increase job dissatisfaction, exhaustion and intention to leave (Nantsupawat et al., 2017). To break the vicious cycle, regulations and public interventions that encourage hospitals to recruit and retain more nurses are needed.

Policies to secure a sufficient number of nurses in hospital have been a challenge in many countries. In 2004, California state in the United States introduced mandated minimum patient-to-nurse ratios in acute care hospitals (e.g. 5:1 for medical/surgical, 4:1 for specialty care and 2:1 for critical care per shift). This strong legal regulation had led California hospitals to elevate nurse staffing levels to meet the legal standard and increased the direct nursing hours of registered nurses (RNs) (Donaldson & Shapiro, 2010). Other than mandating policy, economic incentives that reimburse higher nursing fees to hospitals with higher nurse staffing could be an effective strategy. Japan adopted the inpatient nursing fee schedule, which is differentiated by the nurse staffing standards for each functional category of inpatient wards and the proportion of RNs among nursing staff. The two times revisions of the nurse staffing standard in 2000 and 2006 were successful to increase the overall nurse staffing levels in Japanese hospitals (Noguchi, 2015).

The Korean Medical Service Act clearly stated the minimum number of patients per RN in acute care hospitals (2.5:1 daily patient census per RN). Due to lack of substantial penalties and reimbursing fees to hospitals that could not meet the legal standards, the compliance rate was very low, and only 63% of general hospitals and 19% of hospitals had complied as of 2013 (Cho et al., 2016; Kim et al., 2007; Shin et al., 2020). Therefore, the National Health Insurance Service (NHIS) introduced the nursing fee differentiation policy (hereafter, NFDP) in 1999. Under the NFDP, hospitals get economic rewards according to the nurse staffing grades determined by bed-to-RN ratios (Kim & Kim, 2012). After 10 years of implementing the NFDP, most tertiary hospitals and 45% of general hospitals improved their nursing grades, but only 7% of small/medium-sized hospitals improved (Cho et al., 2008). The effect of the NFDP had fragmented, but it was notable that hospitals started to take measures to secure more nurses responding to the financial incentives.

In 2007, the disincentive system was added to prevent hospitals with low competitiveness from not reporting their nursing grade, rather motivate them to elevate their nurse staffing level. In hospitals with the lowest nursing grade or lower, a 5% reduction in nursing fees were applied in the metropolitan areas and a 2% reduction in other areas except for medically vulnerable areas. For the results, 32% of hospitals improved the overall nurse staffing levels in 2016 compared to 2008, as well as 59% of general hospitals and 70% of tertiary hospitals improved (Hong & Cho, 2017). Moreover, hospitals that have experienced forced cut-offs were more likely to enhance nursing grades than non-reduced hospitals. However, the policy effect was still insignificant in small/medium-sized hospitals (Kim et al., 2010). With these results, it was argued that incentives should be increased to encourage small/medium-sized hospitals to reinvest their surpluses for additional employment. In addition, the need for subdivided classification of nursing grades reflecting the patient's severity and changing the calculation criteria from bed-to-RN ratios to patient-to-RN ratios was suggested (Hong & Cho, 2017; Kim & Kim, 2015).

Reflecting the preceding needs for nurse staffing policy reforms, the NHIS launched a pilot project of integrated nursing and care service (hereafter, INCS) in 2015. The INCS adopted an advanced standard of staffing level than NFDP and reimbursed higher nursing fees including additional incentives. Furthermore, the staffing standards not only for RNs but also for nursing assistants and ward staff were specified. All nursing fees were differentiated according to the hospital type and combination of patient-to-RN ratios and patient-to-NA or ward staff ratios (Kim et al., 2018; NHIS, 2020). Participation in the INCS was optional. Thus, hospitals with sufficient nursing workforce were motivated to transform the general wards into INCS wards to receive higher fees under the new policy. The biggest difference from the existing policies was that hospitals with below minimum staffing level cannot participate in the policy and therefore cannot receive the policy incentives too (Kim et al., 2020; NHIS, 2020).

Before introducing INCS, the Korean nursing system had heavily relied on informal caregivers, such as families, friends and paid caregivers. However, INCS spurred a change towards the full nursing system (Yi & Kim, 2021). Although the policy participation rate has steadily increased since 2015, it was still 20.6% as of 2020 (Kim et al., 2020). To expand the INCS to all hospitals nationwide, nursing workforces in the clinical field should be supplemented. Therefore, it is time to evaluate whether the benefits provided to the INCS policy participating hospitals have been properly allocated into the employment of additional nurses in general wards in Korean hospitals. To evaluate the policy effect, this study compared the changes in the level of nurse staffing in general wards between policy participating and non-participating hospitals during 2017–2019. Furthermore, factors associated with nurse staffing level improvement and the causal effect of policy participation on hospitals' general nurse staffing levels were evaluated.

2 | METHODS

2.1 | Data sources

The NHIS provided acute care hospitals' general characteristics and participation status of the INCS scheme. Each hospital's nursing grade in general wards was obtained with the cooperation of the Health Insurance Review and Assessment (HIRA).

2.2 | Study subject

Every acute care hospital eligible to participate in the INCS policy, according to Article 4-2 of the Korean Medical Service Act, was considered as the study population. Among them, the following hospitals with special purposes were excluded: (a) long-term care hospitals, (b) dental hospitals, (c) oriental medicine hospitals, (d) mental hospitals and (e) military health and medical service institutions. Additionally, hospitals that have less than 30 beds, closed, not reimbursed from the NHIS and in the bond foreclosure states were excluded. After eliminating hospitals without the nursing grade data, 1362 hospitals were finally selected as study subjects.

2.3 | Measurement

2.3.1 | Outcome variable

We used the nurse staffing levels in general wards as an outcome variable to examine whether policy incentives led to overall additional employment of nurses in Korean acute care hospitals. The nurse staffing level in general wards was measured with the scale of adjusted nurse staffing grade (hereafter, nurse staffing grade) borrowing the NFDP standards (Kim & Kim, 2015) (Table 1). In NFDP, the bed-to-RN ratios in general wards (dividing the total number of beds by the total number of full-time equivalent RNs working in hospitals) were categorized into six grades—tertiary hospitals—and seven grades—general hospitals and hospitals. To compensate for the one-grade difference between tertiary hospitals and others, we unified the scale based on the bed-to-RN ratios as follows: Grade 1 (less than 2.0), Grade 2 (2.0 to less than 2.5), Grade 3 (2.5 to less than 3.0), Grade 4 (3.0 to less than 3.5), Grade 5 (3.5 to less than 4.0), Grade 6 (4.0 to less than 4.5), Grade 7 (4.5 to less than 6.0) and Grade 8 (6.0 and more). If the hospital did not report the nurse staffing grade, it is classified as the lowest grade.

TABLE 1 Adjusted nurse staffing grade scale

	Existing nurse staffing grade in NFDP (bed-to-RN ratios)	
Adjusted nurse staffing grade (bed-to-RN ratios)	**Tertiary hospitals**	**General hospitals/ Hospitals**
Grade 1 (<2.0)	Grade 1 (<2.0)	N/A
Grade 2 (<2.5)	Grade 2 (<2.5)	Grade 1 (<2.5)
Grade 3 (<3.0)	Grade 3 (<3.0)	Grade 2 (<3.0)
Grade 4 (<3.5)	Grade 4 (<3.5)	Grade 3 (<3.5)
Grade 5 (<4.0)	Grade 5 (<4.0)	Grade 4 (<4.0)
Grade 6 (<4.5)	Grade 6 (≥4.0)	Grade 5 (<4.5)
Grade 7 (<6.0)	N/A	Grade 6 (<6.0)
Grade 8 (≥6.0)	N/A	Grade 7 (≥6.0)

Abbreviations: NFDP, Nursing Fee Differentiaion Policy; RN, registed nurse.

2.3.2 | Independent variable

The participation status of the INCS policy was dichotomized into participation and non-participation as of 2019.

2.3.3 | Covariates

Hospital type (tertiary hospital/general hospital/hospital), ownership (public/private), number of beds and geographical locations (metropolitan/nonmetropolitan area, urban/rural area) were selected as covariates. Hospitals located in Seoul, Incheon, and Gyeonggi province were classified as metropolitan areas, and rural areas are categorized as the medically vulnerable area designated in Article 12 of the Public Health and Medical Service Act.

2.4 | Statistical analysis

Descriptive statistics were calculated using frequency, percentage, mean and standard deviation to explain the characteristics of the sample hospitals and nurse staffing levels. The chi-square test and *t*-test were conducted to compare the hospital characteristics and nurse staffing grades by policy participation status. The distribution of nurse staffing grades in the fourth quarter of 2017 and 2019 were displayed in histograms with mean and standard deviation.

We used a two-part model (TPM) to identify the factors predicting the improvement of nurse staffing levels. The difference in nurse staffing grades between 2017 and 2019 was used as the dependent variable in the analysis. In the first part, the probability of nurse staffing grade improvement was estimated by logistic regression with a binary outcome of positive-versus-zero (improved vs. sustained/worsen). In the second part, conditional on positive outcomes, an ordinary least square regression analysis was conducted to estimate the factors affecting the degree of improvement (Belotti et al., 2015).

$$\text{Model 1 (1st part)}: \text{Ln}\left(\frac{P}{1-P}\right)i = \beta_1 + \beta_2 P_i + \beta_3 X_i + \varepsilon_i$$

$$\text{Model 2 (2nd part)}: (Y|y>0)i = \beta_1 + \beta_2 P_i + \beta_3 X_i + \varepsilon_i$$

(P : probability of improving the adjusted nurse staffing grade by more than one grade, Y : degree of improvement of adjusted nurse staffing grade, P_i : participation in the INCS policy, X_i : control variables, ε_i : error terms)

To evaluate the causal effect of the INCS policy participation on improving the hospital's nurse staffing levels, the difference-in-difference (DID) approach was applied. Applying the non-equivalent control group study design, 120 hospitals that consistently participated in the INCS policy from 2017 to 2019 were selected as a treatment group from the 427 participating hospitals. Nine hundred thirty-five non-participating hospitals were selected for the control group. The nurse staffing grade in general wards in the fourth quarter of

TABLE 2 Study subject's characteristics and policy participation status

Variable	Total (*N* = 1362)	Participating hospitals (*n* = 427)	Non-participating hospitals (*n* = 935)	X^2/t	*p*
Hospital type				412.4	.000
Tertiary hospital	42 (3.1)	42 (9.8)	0 (0.0)		
General hospital	279 (20.5)	204 (47.8)	75 (8.0)		
Hospital	1041 (76.4)	181 (42.4)	860 (92.0)		
Ownership				129.2	.000
Public	89 (6.5)	76 (17.8)	13 (1.4)		
Private	1273 (93.5)	351 (82.2)	922 (98.6)		
Number of beds				509.0	.000
30–49 beds	265 (19.4)	0 (0.0)	265 (28.3)		
50–99 beds	436 (32.0)	58 (13.6)	378 (40.4)		
100–299 beds	494 (36.3)	215 (50.4)	279 (29.8)		
300–999 beds	151 (11.1)	138 (32.3)	13 (1.4)		
≥1000 beds	16 (1.2)	16 (3.7)	0 (0.0)		
Metropolitan areas				3.9	.050
Non-metropolitan	840 (61.7)	247 (57.8)	593 (63.4)		
Metropolitan	522 (38.3)	180 (42.2)	342 (36.6)		
Medical vulnerability				24.8	.000
Urban area	1205 (88.5)	405 (94.8)	800 (85.6)		
Rural area	157 (11.5)	22 (5.2)	135 (14.4)		
Nurse staffing grade					
4th quarter of 2017	6.6 ± 2.0	5.1 ± 2.2	7.3 ± 1.4	23.2	.000
4th quarter of 2019	5.4 ± 2.6	3.6 ± 1.9	6.3 ± 2.3	20.6	.000

2017 and 2019 was used as the dependent variable in the analysis. Regression analysis with dummy variables was performed (Abadie, 2005).

$$y_{st} = \beta_1 + \beta_2 D_s + \beta_3 D_t + \beta_4 D_s D_t + \epsilon_{st}$$

(y_{st} : adjusted nurse staffing grade, β_2 : selection bias, β_3 : time effect, β_4 : policy effect), ϵ_{st} : *errorterms*

In the above equation, *Ds* is a dummy variable representing the INCS policy participation (1 = participation, 0 = non-participation), *Dt* indicates the pre-and post-policy period (1 = 2019, 0 = 2017), and *DsDt* is the interaction term between the group dummy and the time dummy.

2.5 | Ethical consideration

Hospital identification was provided with meaningless serial numbers to protect sensitive information. Using hospital-unit data and not targeting human beings for study obtained the exemption of the ethical review from the Seoul National University Institutional Review Board (IRB No. E2012/001-008).

3 | RESULTS

Table 2 shows the characteristics of the study subjects. Majority of the hospitals were privately owned (93.5%), had less than 100 beds (51.4%) and were located in the non-metropolitan (61.7%) and urban areas (88.5%). Four hundred twenty-seven out of 1362 hospitals participated in the policy. All tertiary hospitals participated in INCS. The proportion of general hospitals to hospitals was almost the same in participating hospitals (47.8% and 42.4%, respectively), but 92% of hospitals are accounted for non-participating hospitals. Compared to non-participating hospitals, the participating hospitals had higher proportion of public-owned (17.8% vs. 1.4%), with larger scale, and located in the metropolitan (42.2% vs. 36.3%) and urban (94.8 vs. 85.6%) area. The overall nurse staffing level was higher in participating hospitals than in non-participating hospitals. The average nurse staffing grades in participating hospitals were 5.1 in 2017 and 3.6 in 2019, while non-participating hospitals were 7.3 in 2017 and 6.3 in 2019 (Table 2).

Figure 1 presents the distribution of nurse staffing grades for 2017 and 2019 was distinguished by hospital type. Tertiary hospitals had the highest staffing level that densely clustered in high grades of Grade 1 (bed-to-RN ratio = less than 2.0) to Grade 3 (bed-to-RN ratio = 2.5 to less than 3.0). On the other hand, general hospitals and

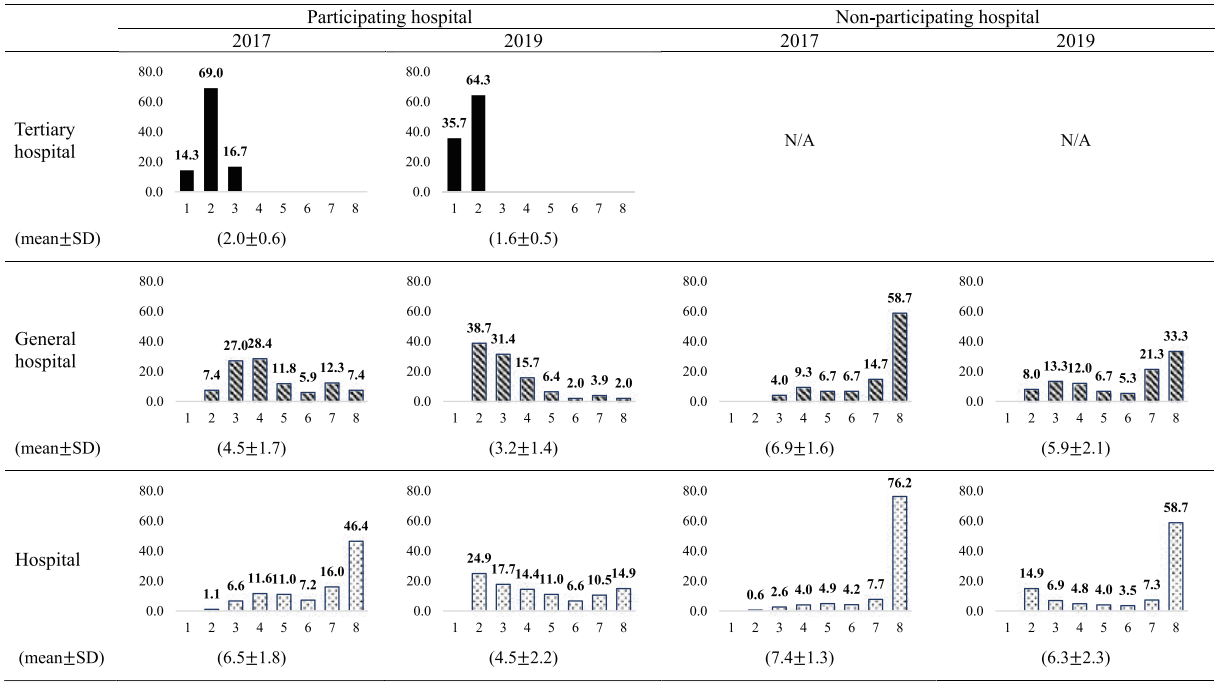

FIGURE 1 Distribution of nurse staffing grades by hospital type and policy participation [Color figure can be viewed at wileyonlinelibrary.com]

hospitals were widely spread from Grade 2 (bed-to-RN ratio = 2.0 to less than 2.5) to Grade 8 (bed-to-RN ratio = more than 6.0). We found the average nurse staffing grade in 2019 was higher than in 2017 in all types of hospitals, regardless of policy participation. Notably, the proportion of the lowest grade (Grade 8; bed-to-RN ratio = more than 6.0) had significantly declined for both participating and non-participating hospitals. But the degree of nurse staffing grade improvement was higher in participating hospitals (Figure 1).

The TPM results exhibited that policy participation increased the odds of improving the nurse staffing grades in hospitals by 3.89 times. Among the medical institutions that improved their nurse staffing levels, the degree of improvement was higher for participating hospitals by 0.28 grades compared to non-participating hospitals; however, it was not statistically significant with a 95% confidence interval ($p = .056$). Besides, hospital type (being a hospital) and regional locations (located in non-metropolitan or urban areas) were strongly related to an increment in nurse staffing levels, even after controlling for policy participation status (Table 3).

The result of the DID analysis proved the causal relationship between the INCS policy participation and the increase in nurse staffing levels in Korean acute care hospitals. After controlling the selection bias and time effect, the net effect of the policy was found to improve the overall nurse staffing levels by 1.12 grades on average (Table 4).

4 | DISCUSSION

This is the first study to explore how the INCS policy affected the overall nurse staffing levels in Korean acute hospitals. The Korean government has implemented various policies for years, such as expanding the quota of nursing schools, increasing re-employment through the education of idle nurses and differentiating the inpatient nursing fees. However, past policies have failed to secure appropriate nursing personnel in the clinical field and only showed partial effects by leaving small medical institutions in remote areas vulnerable (Cho et al., 2008; Hong & Cho, 2017; Kim & Kim, 2015). This study has significance in proving the INCS policies: Adopting a mixture of the financial incentive system and strict regulation for reimbursement had successfully increased the overall nurse staffing levels for policy participating hospitals.

It was estimated that the financial surplus caused by policy incentives was returned to use for employing additional nurses in general wards; in the end, it had elevated overall nurse staffing grades in INCS participating hospitals. The hospitalization fee system for INCS consists of the 'hospitalization fee (53%)' and 'nursing fee (47%)', and policy incentives are added to each fee. In addition, special incentives are provided to hospitals hiring night-shift dedicated nurses (30%) or hospitals located in medically vulnerable areas (8%–8.5%) (NHIS, 2020). The cost preservation rate of the INCS scheme was reported as 129.6%–139.4% for tertiary hospitals, 121.4%–132.0% for general hospitals and 120.4%–132.6% for hospitals (Kim et al., 2020). Therefore, it was expected that the revenue from the INCS scheme sufficiently exceeds the hospitals' expenses including labour costs, material costs and management costs. Besides, this policy incentive was also effective to expand INCS wards in acute care hospitals, which in turn increased the number of RNs and NAs who were directly employed in INCS wards. The total effect of employment-inducing of INCS was found to be 3.1–6.1 times higher than those in similar industries (Kim et al., 2021).

TABLE 3 Associated factors for improving the nurse staffing levels and degree of improvement

	Improvement probability of nurse staffing grade[a] ($n = 1362$)			Degree of improvement[b] ($n = 653$)		
Variables	**OR**	**(95% CI)**	***p***	***β***	**(95% CI)**	***p***
Constant	0.10	(0.03–0.31)	0.000	1.12	(0.60–1.82)	.000
Policy participation (ref. non-participation)						
Participation	3.89	(2.80–5.40)	0.000	0.28	(−0.01–0.56)	.056
Hospital type (ref. Hospital)						
Tertiary hospital	0.47	(0.18–1.23)	0.124	−0.75	(−1.17 to −0.34)	.000
General hospital	2.16	(1.42–3.29)	0.000	−0.36	(−0.68 to −0.03)	.030
Ownership (ref. Public)						
Private	0.73	(0.40–1.33)	0.302	−0.22	(−0.57–0.14)	.239
Number of beds (ref. ≥1000 beds)						
300–999 beds	1.58	(0.46–5.40)	0.465	0.34	(0.03–0.65)	.034
100–299 beds	2.54	(0.67–9.57)	0.168	1.04	(0.62–1.45)	.000
50–99 beds	3.64	(0.93–14.21)	0.063	1.93	(1.39–2.48)	.000
30–49 beds	2.88	(0.73–11.43)	0.132	2.25	(1.64–2.86)	.000
Metropolitan area (ref. Metropolitan)						
Non-metropolitan	1.68	(1.31–2.15)	0.000	0.34	(0.11–0.57)	.004
Medically vulnerable area (ref. Urban)						
Rural area	0.36	(0.24–0.53)	0.000	−0.50	(−0.98 to −0.03)	.037
LR chi-square (p)/F (p)	191.9 (0.000)			16.5 (0.000)		
Adjusted R-square	-			0.192		
Pseudo R-square	0.102			-		
−2 log pseudo likelihood	1693.9			2325.5		

Abbreviations: CI, confidence intervals; OR, odds ratios.
[a]Dependent variable of the first model (improvement of adjusted nurse staffing grade) ranged from 0 to 6. Zero means adjusted nurse staffing grade was not changed or worsened, and positive numbers mean adjusted nurse staffing grade was improved by Grades 1–6. It had a massive point at zero (no changed or worsened) and skewed to the right.
[b]Dependent variable of the second model (degree of improvement of adjusted nurse staffing grade) ranged from 1 to 6; only the positive numbers were selected from the first model's dependent variable.

TABLE 4 The effect of policy participation on nurse staffing levels in hospitals

	β	**Standard errors**	***t***	***p***
Constant	7.34	0.06	116.4	.000
Ds[a] (selection bias)	−1.02	0.19	−5.5	.000
Dt[b] (time effect)	−1.06	0.09	−11.9	.000
DsDt[c] (policy effect)	−1.12	0.26	−4.2	.000
Adjusted R-square	0.146			
F (p)	120.8 (0.000)			

[a]*Ds*: group dummy of policy participation (1 = participation, 0 = non-participation).
[b]*Dt*: time dummy of pre- and post-policy period (1 = 2019, 0 = 2017).
[c]*DsDt*: interaction term between group dummy and time dummy.

Despite the economic benefits of policy participation, hospitals in small, privately owned, non-metropolitan areas and medically vulnerable areas had less participation in the INCS policy. This is consistent with the characteristics of hospitals with insufficient nursing workforces (Choi et al., 2015). The INCS participation rate of hospitals and general hospitals was 11.2% and 5.5% in 2019 (Kim et al., 2020). Most hospitals with sufficient resources including nursing workforces participated (100% of tertiary hospitals), yet small and medium-sized hospitals had undergone difficulties in meeting the high standard of INCS and gave up their policy participation (Kim et al., 2020). The DID results showed that the initial nurse staffing grade of non-participating hospitals was 1.02 grade lower than participating hospitals and support the explanation that hospitals with low resources gave up policy participation.

The lack of nursing workforces in rural areas is a global issue. In Korea, the distribution of RNs is concentrated in tertiary hospitals in metropolitan areas. Nurses do not prefer local hospitals due to low income, poor working conditions and fewer career development opportunities, and this trend was especially evident in newly graduated nurses (Cho et al., 2012; Park & Kim, 2017). Although the impact of remuneration on the nursing labour market is controversial, current study in the United States showed that wage was associated with job dissatisfaction and intent to leave of nurses (McHugh & Ma, 2014). Korea has a distinct wage gap between the capital region and other

regions. Compared to Seoul (USD 3377), the monthly income of nurses in Incheon/Gyeonggi province was 90.1%; Daegu/Gyeongbuk, Gwangju/Jeonnam and Jeju provinces was 80.5%, 77.9% and 78.9%, respectively. In addition, the wage gap according to hospital type is also severe that the average monthly income of general hospitals and hospitals was only 85% and 75% of tertiary hospitals (Kim et al., 2019). Taking the initiatives by the government in determining the remuneration of nurses would be suitable for controlling the monopoly labour market such as for medical professionals (Shin et al., 2020). In this light, policy efforts to coalesce the wage structure of nurses across the nation and to improve working conditions are required.

We also found that the time effect was significant from DID result. As time passed, the average nurse staffing level of hospitals increased by 1.06 grades. This can be interpreted as the impact of NFDP, which had continuously applied to all wards except for the INCS wards. In 2018, the NFDP changed the criteria for calculating the nurse staffing grades from 'bed-to-nurse ratios' to 'patient-to-nurse ratios' in some hospitals to compensate for the low bed occupancy rate and difficulty of hiring nurses in local hospitals. Particularly, the government recommended that the additional revenue generated from changed criteria should be used to increase nurses' remuneration or hire additional personnel (Ministry of Health and Welfare, 2017, 2018). For the result, 56.9% of general hospitals and 40.5% of hospitals improved nurse staffing grades by one to two grades from 2018 to 2019 (Cho et al., 2021). In the initial 10 years of the NFDP, the likelihood of improving nurse staffing grades was higher in hospitals in Seoul (OR 2.66) or metropolitan areas (OR 2.34) with more than 250 beds (OR 3.87 and 12.7 for 250–499 beds, 500+ beds, respectively) (Cho et al., 2008). Even after the introduction of discounted fees in 2007, the likelihood of increasing one grade of nurse staffing level was 80 times higher in tertiary hospitals than hospitals, and 1.07–1.50 times higher in metropolitan hospitals than in other regions (Kim et al., 2010). On the other hand, this study established that the odds of improving the nurse staffing grades were higher in non-metropolitan hospitals and hospitals, confirming that the mixture of various incentive-based nursing policies were effective in small and medium-sized hospitals in non-metropolitan areas. However, securing nursing workforces in hospitals located in medically vulnerable areas is still a policy task to be solved.

The introduction of INCS was an innovative reform of the nursing care system in Korea. The INCS policy includes the advantages of existing policies and compensates for the disadvantages. After implementing the INCS policy, the patients' satisfaction and safety increased, the burden of family care decreased, and the working environment for nurses improved (Kim et al., 2017; Yi & Kim, 2021). Thus, the Korean government expressed a will to expand the INCS scheme nationwide in the near future. Currently, two nursing care systems are used in hospitals. To institutionalize the INCS as a universal nursing care system in Korea, the gradual integration of nurse staffing standards and nursing fee system of NFDP and INCS are essential. Furthermore, to promote recruiting and retaining more nurses in acute care hospitals, monitoring and evaluation system that surveils whether policy incentives were actually used for the direct and indirect labour costs of nurses should be established.

Previous studies that explored the policy effect for improving nurse staffing levels only showed the changes in overall nurse staffing grades with aggregated data. However, this study is significant so that the causal effect of policy could be explored with a quasi-experimental design by constructing panel data for individual hospitals. To obtain an unbiased estimator in DID analysis, the parallel-trend assumption should be satisfied. Due to using data at two time points, the assumption could not be tested and is considered as the limitation of this study. Additionally, the present study used the status of policy participation as an independent variable to evaluate the policy effect. However, it can be considered that the policy effect would rely on the number of participating wards in hospitals because the larger the number of participating wards, the greater incentives were provided. Therefore, a further study exploring whether the policy effect depends on the number of participating wards is necessary.

5 | CONCLUSIONS

A newly introduced nurse staffing policy in Korea was effective to improve the nurse staffing levels in acute care hospitals not only in the ward where the policy was implemented but also in the overall wards in policy participating hospitals. Although the unequal opportunity for policy participation depending on the healthcare resources in hospitals was found, the net effect of policy participation was proved to enhance hospitals' nurse staffing levels over the past 3 years regardless of initial nurse staffing levels. In addition, the overall nurse staffing levels increased over time in both policy participating and non-participating hospitals, which was assumed to be influenced by the NFDP, another nurse staffing policy based on the financial incentives according to nurse staffing levels.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Under the market-oriented healthcare system, the nurse staffing policy combining financial incentives for better staffing and strict restrictions on reimbursement for poor staffing successfully induced hospitals to employ more nursing workforces. Continuous monitoring and evaluation are needed to ensure the financial incentives are directly returned to nurses' additional employment and to improve working environments. It is worth mentioning that an increment in nurse staffing levels may also be affected by the existing nurse staffing grades in hospitals. Therefore, nursing leaders and policymakers should strive to develop more sophisticated nursing policies based on a financial incentive system, with considering the unequal distribution of nursing workforces among hospitals.

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CONFLICT OF INTEREST

None of the authors have any conflicts to report.

ETHICS STATEMENT

This study used the existing collection of data from hospitals and was exempted from ethical review by Seoul National University Institution for Review Board (IRB No. E2012/001-008).

AUTHOR CONTRIBUTIONS

Jinseon designed the study, conducted data analysis and completed the manuscript draft. Jinhyun supervised the whole process of the research and contributed administrative support for data collection, data analysis and interpretation of the study results. All authors have revised and approved the final manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Jinseon Yi https://orcid.org/0000-0002-9533-8295
Jinhyun Kim https://orcid.org/0000-0001-7141-1606

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REVIEW ARTICLE

WILEY

Development, implementation and evaluation of a Professional Practice Model: A scoping review

Gemma Doleman BSc (Hons), PhD, RN, Research Fellow [1,2] | **Di Twigg PhD, RM, RN, Emeritus Professor** [1,2]

[1]School of Nursing and Midwifery, Edith Cowan University, Joondalup, Western Australia, Australia

[2]Centre for Nursing Research, Sir Charles Gairdner Hospital, Nedlands, Western Australia, Australia

Correspondence
Dr. Gemma Doleman, School of Nursing and Midwifery, Edith Cowan University, 270 Joondalup Drive, Joondalup WA 6027 Australia.
Email: g.doleman@ecu.edu.au

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Abstract

Aim: The aim of this study is to synthesize available literature describing the development, implementation and evaluation of a Professional Practice Model.

Background: A Professional Practice Model is an overarching theory-based framework that depicts nursing values and defines the structure and process of nursing care. No research has synthesized available literature on this topic in recent times.

Evaluation: A review of English language papers was published from 2015 to 2022. Fourteen studies met the inclusion criteria.

Key Issues: All studies highlighted the importance of having a Professional Practice Model that reflects nursing care activities and resonates with nurses across an organization. This is achieved through strong leadership and clinical nurse involvement during the development, implementation and evaluation phases. In addition, a model should be adapted to keep up to date with scientific changes relevant to nursing.

Conclusions: This review adds to the body of knowledge on the development, implementation and evaluation of a Professional Practice Model. Future research exploring the benefit of a Professional Practice Model on patient outcomes would be useful.

Implications for nursing management: The key elements of a Professional Practice Model including six components and theoretical foundation have been summarized in this review. Nurse leaders should consider these key elements in the creation of a Professional Practice Model. For successful enculturation, a Professional Practice Model needs to be relevant to all nurses and easy for them to articulate.

KEYWORDS
development, evaluation, implementation, magnet, Professional Practice Model

1 | BACKGROUND

The professional practice environment is important for both patient and nurse outcomes (Maassen et al., 2021). A positive practice environment consists of teamwork, autonomy, support, resource adequacy and nurse participation in hospital affairs (Backhaus et al., 2017; Lake, 2002; Ogata et al., 2017). These elements have shown to improve professionalism, job satisfaction, reduce the rates of stress, burnout and improve nurse retention (O'Hara et al., 2019). In addition, research has shown that positive practice environments

enhance nurses perceived level of patient safety and reporting of adverse patient events (Kirwan et al., 2013). Likewise, Zelenikova and colleagues (2020) identified a statistically significant negative relationship between the professional practice environment and missed nursing care; that is, a healthy practice environment results in lower levels of missed nursing care and an increase in positive patient outcomes.

A Magnet accredited hospital is renowned for providing positive professional practice environments that attract and retain skilled professional nurses (Laschinger et al., 2003; Oshodi et al., 2019). The Magnet hospital was first described in the United States of America following the 1980 nursing shortages. The American Academy of Nursing examined the organizational structures of hospitals, identifying 41 organizations that were known to attract and retain nursing staff. These hospitals became known as Magnet (McClure et al., 1983). From 2000, health care organizations in Australia, Belgium, Jordan, Lebanon, United Kingdom, Canada, Saudi Arabia, Japan and United Arab Emirates became designated as Magnet hospitals (American Nurses Credentialling Centre, 2022). More recently, health care organizations in mainland China have started the application for Magnet recognition (Qu et al., 2019). These hospitals are evaluated based on the distinguishable Magnet characteristics, known as the Forces of Magnetism. The Forces of Magnetism are grouped into five components: transformational leadership, structural empowerment, new knowledge, innovation and development, exemplary professional practice and empirical outcomes (American Nurses Credentialling Centre, 2020). It is through these organizational structures that nurses feel empowered, supported and feel they have control over their practice (Dans & Lundmark, 2019; Kramer & Schmalenberg, 2005).

As part of the Magnet Recognition process, hospitals were encouraged to implement nursing Professional Practice Models (PPMs). A PPM is an overarching theory-based framework that depicts nursing values and defines the structures and process of nursing care (American Nurses Credentialling Centre, 2020), allowing nurses to communicate and articulate their practice (Hoffart & Woods, 1996). In 2019, the Magnet manual requested organizations provide examples of how they improved outcomes with a change brought about by the implementation of a PPM (American Nurses Association, 2019). Research has shown an improvement in nurse and patient outcomes as a result of implementing a PPM, specifically nurses' perceptions of quality of care, nurse interactions, decision making, autonomy, job enjoyment, organizational engagement and patient satisfaction levels that have shown to improve (Stallings-Welden & Shirey, 2015). However, this has not been explored in recent times.

Slatyer et al. (2016) undertook a review of the literature exploring the key elements required for the development, implementation and evaluation of a PPM. The review identified six integral elements, including leadership, nurses' independent and collaborative practice, environment, nurse development and reward, research and innovation and patient outcomes. The results of the literature review highlighted variability in design and use of a PPM depending on the nursing culture within an organization (Slatyer et al., 2016). However, despite this variability, the underlying aim of a PPM is to provide structures and processes that empower nurses to achieve excellent nursing practice and quality outcomes (Slatyer et al., 2016).

While previous research shows improvement in nursing practice and patient outcomes as a result of implementing a PPM, no research has synthesized available literature on this topic since the work of Slatyer et al. (2016). Therefore, the aim of this scoping review is to advance on the work of Slatyer et al. (2016) and explore the development, implementation and evaluation of a PPM.

2 | METHODS

This scoping review was guided by the Joanna Briggs Institute Collaboration (JBIC) for scoping reviews (Peters et al., 2020) and reported using the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist (Tricco et al., 2018).

3 | DATA SOURCES AND SEARCH STRATEGY

A search strategy was created in consultation with a health information librarian. The following electronic databases were searched for relevant studies, Medline (EBSCO), CINAHL (EBSCO), EMBASE and Web of Science. See online resources for keywords used. Forward citation and hand searching of reference lists were also conducted.

Studies were included if they explored the development and/or implementation and/or evaluation of a PPM. All included studies were written in English and published between 2016 and 2022 and conducted in the hospital setting. Studies were excluded from the review if they were conducted in the community or aged care sector and if they were presented as grey literature, editorials, letters or conferences.

4 | SEARCH OUTCOMES

The initial search resulted in 1617 articles. After removing duplicates in EndNote, 1239 tile and abstracts were exported into Rayyan QCRI for screening (Ouzzani et al., 2016). Each title and abstract were independently screened by two reviewers against the inclusion criteria. A total of 1182 articles were excluded as these studies focused on models of nursing care, including patient care processes and program development. The remaining 57 articles underwent full text screening. Any disagreement between the reviewers was resolved by discussion. Fourteen articles met the inclusion criteria for data extraction. See Figure 1 for flow diagram.

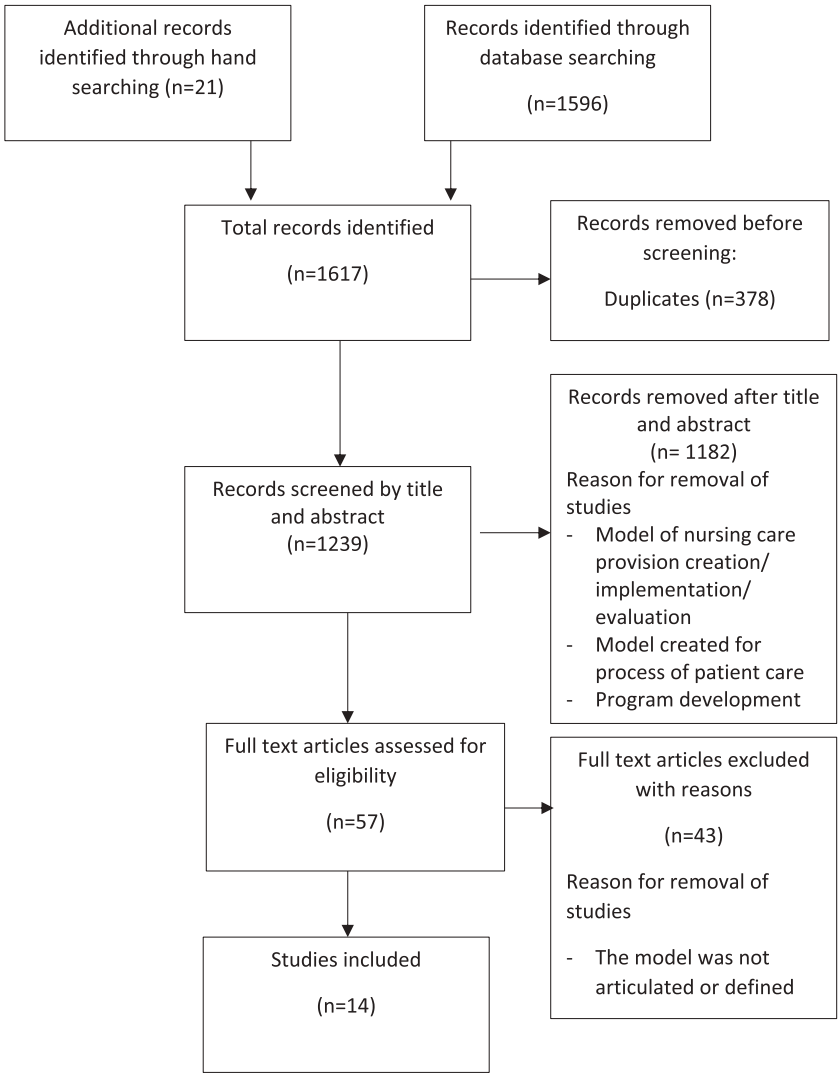

FIGURE 1 Flow diagram for the scoping review process adapted from the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement

5 | DATA EXTRACTION AND SYNTHESIS

The following data were extracted from the eligible studies, country, setting, study population, aim, study design, model development, implementation and evaluation and overall study findings. See Table 1. Due to heterogeneity of the included studies a narrative synthesis is provided.

6 | RESULTS

Fourteen studies measured the development and/or implementation and/or evaluation of a PPM (Arroyo-Marlés et al., 2018; Bloemhof et al., 2021; Burke et al., 2018; Clavelle & Goodwin, 2016; Gentile & Marzinski, 2020; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Murphy et al., 2018; Olender et al., 2020; Oommen et al., 2022; Qu et al., 2019; Robbins, 2019). Eight of the included studies were conducted in the United States of America (Burke et al., 2018; Clavelle & Goodwin, 2016; Gentile & Marzinski, 2020; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Olender et al., 2020), one in Columbia (Arroyo-Marlés et al., 2018), one in Ireland (Murphy et al., 2018), one in China (Qu et al., 2019), one in the Netherlands (Bloemhof et al., 2021), one in the Uinted Arab Emirates (Oommen et al., 2022) and one in Scotland (Robbins, 2019). The characteristics of the included studies are presented in Table 1.

6.1 | Model development

Eight of the studies conducted a literature review prior to development of the model to identify existing PPMs (Arroyo-Marlés et al., 2018; Oommen et al., 2022; Clavelle & Goodwin, 2016; Gentile & Marzinski, 2020; Glassman, 2016; Keleekai-Brapoh & Toresco, 2020; Qu et al., 2019; Robbins, 2019) and four studies used brainstorming workshops (Arroyo-Marlés et al., 2018; Holskey & Rivera, 2020; Olender et al., 2020; Robbins, 2019). A variety of models and frameworks were used to guide the development of a PPM: Roy adaption model (Arroyo-Marlés et al., 2018), clinical

TABLE 1 Characteristics of the included studies

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
Arroyo-Marlés et al. (2018), Columbia	To develop a nursing practice model for the Clinic of the University La Sabana that supports the adaptive process of patients during and after their hospital experience	The model was developed to be compatible with the Roy adaption model and to simplify the practical application and further measurement of caring results obtained within it. Model elements 1) Person 2) Context 3) Health 4) Nursing	Five-stage implementation process was used. (1) Characterization of the context, (2) Identification of the need for a nursing practice model for strengthening care, (3) Literature review, (4) Description of the model, and (5) Validation	Validation of the initial approach of the model with patients, their family caregivers, nursing personnel of the institution and peers from other institutions. The nurses define the communication strategy for the model.	The University of La Sabana nursing practice model is a model focused on the commitment and humane treatment for the adaptation of patients during hospital care. It represents a consensus on the essentials of the nursing practice, which seek to support the adaptive process in order to have more comprehensive welfare and consequent improvement of the patient. Clinical and managerial indicators are required to demonstrate the impact.
Bloemhof et al. (2021) Netherlands	To evaluate the effects of the implementation of a professional practice model based on magnet principles on the nurse work environment in a Dutch teaching hospital.	Model elements 1. Nursing process 2. Professional development 3. Leadership 4. Research and innovation 5. Ownership and focus on results	A steering committee for was established and changes made in keeping with each element of the PPM. 1. Developed a shared governance structure 2. Nursing standard was updated and distributed to all nurses 3. Nursing strategic multiannual plan 4. As job profiles was created including responsibilities 5. Recruitment and branding 6. Participation in nursing leadership courses. 7. Used social media to inform others 8. Assist nurse to develop critical reasoning skills. 9. Educate on nurse sensitive indicators.	The Dutch essentials of magnetism II survey was completed in 2016 prior to implementation of the PPM. The same survey was re-administered in 2019 and results compared.	The implementation of a PPM positively affects the nurse work environment, job satisfaction and quality of care.

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
Burke et al., (2018), United States of America	The aims of this study 1) to describe the division, organizational strengths and improvement opportunities of self-reported behaviours indicative of multidimensional construct of professional practice and 2) to understand demographic characteristics that contributed to these strengths and improvement opportunities	In 2011, clinical practice model framework was adapted for professional practice. Model elements 1) Shared purpose 2) Dialogue and meaningful conversations 3) Partnering relationships 4) Networking councils 5) Scope of practice 6) Individual competence 7) Integrated competence 8) EBP 9) Clinical tools 10) Transformative capacity	At the time of the survey not all elements of the CPM have been implemented.	In 2012–2013, leaders decided to evaluate the current state of staff attitudes toward professional practice to identify strengths and opportunities to continue the integration of the full framework.	Partnering relationships, scope of practice and shared purpose were strengths. Strategies to improve opportunities to direct strategic change were identified, expand orientation and continue to educate, strengthen all staffs understanding, improve EBP skills, transform management and leadership, expand clinical services for continuum of care. These strategies were intended to strengthen the PPM dimensions. A follow-up study is needed.
Clavelle and Goodwin (2016), United States of America	The article describes a health system model implemented into two health care centres over 9 years.	The Centre model serves as a system nursing hub for the creation, execution and evaluation of nursing strategic plan the professional practice model was created by facilitated by the Centre teams in both health care systems. The Johns Hopkins evidence-based practice model was selected to as the problem-solving approach to clinical decision making. Model elements 1) Professional nursing practice 2) Professional nursing education 3) Nursing research and innovation 4) Continual magnet readiness, with system-level directors for each area.	No description provided	Implementation of the model resulted in quantitative and qualitative accomplishments and improvements. Nursing engagement continued to rise for 5 consecutive years, nursing certification tripled, patient experience scores increased steadily over a 5-year period, falls with injury, catheter-associated urinary tract infections, central line- associated bloodstream infections and hospital -acquired pressure ulcers all surpassed the NDNQI magnet national database mean.	The most important factor for successful Centre model is its leadership. The Centre model is an effective organizing framework that provides formal system leadership for nursing practice, nursing research and nursing professional education, while ensuing the infrastructure needed for attaining and maintaining magnet designation. Consolidation opportunities include ladder programs, recognition efforts, educational offerings leadership development and governance meetings.

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
Glassman (2016), United States of America	The purpose of this paper is to describe the development and implementation of a professional practice model in a health care system, which includes three hospitals and over 80 ambulatory practices in New York.	A structural foundation was created by clinical nurses and nurse leaders. Nurses reviewed existing PPM. The concept of caring culture stood out to nurses. They began to define components of the model. Committee members took the draft model to unit colleagues for feedback and there were no requests for significant changes. Model elements 1) Practice 2) collaboration 3) Communication 4) Professional development 5) New knowledge/ evidence-based practice	The model was adopted, and they began the work of enculturation, moving the model into practice. We had an event for each unit to define and identify their own DNA (model design used). Enculturation is important for nurse's engagement. No other details were provided on enculturation.	Magnet requires that the model be evaluated on a regular basis with the use of nursing staff. Eight workgroups were designed to keep the relevance of the model, identify components of practice that were supported by the model and recommend revisions as needed. Eight workgroups were appointed to review the relevance of the current model, identify component of practice that were supported by the model and recommend revisions. (the workgroups included clinical nurses from across the hospital.	There will be ongoing iteration of the model to synthesis the work done by nurses in integrating new technology at the bedside to support practice. The enculturation of the professional Practice model is demonstrated by the pride with which nurses engage in improving care in all aspects of health care delivery.
Gentile and Marzinski (2020) United States of America	To evaluate a multisite nursing professional practice model based on a theory. The study resulted in the development of a new model.	1. A literature review was conducted to review theory driven evaluations. The multi-attribute utility theory was used to drive the evaluation. 2. Patient survey comment data was reviewed. 3. Clinical nurse narratives were reviewed 4. Leadership interviews were undertaken 5. Steak holders were identified, elicit attributes and organized them into hierarchical structure 6. Identify the importance of each attribute Model elements Result was the new model using the attributes-action and outcomes model	Model implementation took 3 years to achieve. No other details were provided on the implementation phase.	The weighting of attributes survey was released post-implementation to further support the attributes and the and extent to which nurses find the attributes professionally desirable.	The attributes-actions-outcomes Model was designed to guide nurses to take actions based on sound clinical reasoning that led to optimal patient outcomes. The dynamic nature of nursing practice requires comparative measures of each model component offered by this theory-driven evaluation to better identify changes in nursing practice over time. The next phase of evaluation must move from Process measures concerning model implementation To the impact the PPM has on patient outcomes.

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
Holskey and Rivera (2020), United States of America	To describe a common descriptive narrative and schematic for nurse leaders and clinical nurses Representing professional nursing at all levels And settings across the organization's 6 campuses toward the goal of defining expectations for excellence In nursing practice.	The nurse leaders pre-planned a series of events as steps on the path to developing the PPM 1) Two kick-off workshops 2) blending session workshop 3) Schematic design contest The leaders chose liberating structures by Lipmanowicz and McCandless as engagement tools to expedite decision making, engage large groups of nurses and ensure inclusion of diverse ideas among the campuses where nurses practiced. Nurses identified the five elements with the most points. Model elements 1) Professionalism/ professional development, 2) Evidence-based practice, 3) Advocacy, 4) Collaboration 5) Autonomy.	Shared the decisions made with clinical nurses through next unit practice council. All clinical peers were invited to participate in an online survey to collect feedback on refinement of the definitions of the 5 essential elements. All nurses were invited to participate in a design contest. Nurses voted on three different model designs. The chosen model now represents the NYP nursing PPM.	Not described.	Leaders designed a systematic guide using liberating structures to empower nurses to develop a professional practice mode. The NYP nurses committed to implement, evaluate and advance the PPM to coincide with organizational changes and the advancement and transformation of professional nursing practice.
Keleekai-Brapoh and Toresco (2020) United States of America	This article describes one organizations experience engaging clinical nurses in developing, implementing and evaluating a new PPM as part of the magnet journey.	Steering committee was established to develop our first PPM, which included clinical nurses, managers, educators and other nurse leaders. 1) Conducted a literature review- Hoffart and woods used as framework 2) Informal dialogues to identify attributes that they felt represented their values and practice through several brainstorming sessions.	1) Introduced through brief education session. 2) Enculturation could not be sustained through a brief education session. – Employed several strategies a) Framed posters b) Brochure linking practice to the elements of the PPM c) Implemented as a new topic during hiring of new staff. d) The logo was added to meeting agendas e) All training programs were linked to the PPM in a slide.	1) Prior to implantation results from 289 respondents demonstrated a strong alignment of the PPM components with nursing practice. These results were shared at management and staff leadership forums to develop action plans to address areas where results were not as strong as desired, such as shared governance Communication.	The PPM is unquestionably the most recognizable symbol of nursing in our organization. Because PPMs reflect nursing practice, they must be dynamic in response to changes in the internal and external environments. Successful development and enculturation was driven by collaboration fostered through shared leadership. Routine evaluation of the PPM ensures that it remains

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
		Model elements Overarching themes 1) Commitment 2) Accountability 3) Recognition 4) Excellence Subelements 1) Professional values 2) Professional relationships 3) Leadership, 4) Professional development 5) Care delivery system	f) Leaders to stat meetings outlining how the meeting objectives linked to the PPM	2) Post-implementation PPM evaluation results from the 261 nurses who responded revealed improved scores in every area, which demonstrated continued alignment. The greatest improvements in scores were in the areas Of professional recognition, research and patient-/family-centred care.	relatable and relevant to current nursing Practice. Through collaboration, creativity and strong nurse leader support, clinical nurses can lead the development and enculturation of a PPM that resonates with nurses across an organization.
Mensik et al. (2017) United States	To describe key steps in the PPM journey	Model elements 1. Contribution to society 2. Contribution to our profession 3. Contribution of our patients Subelements 1. Timely, effective, safe, equitable and efficient 2. Professional practice evaluations, education, quality of practice, ethics, communications, culturally congruent practice, collaboration, EBNP and research, research utilization, leadership, environmental health 3. Evaluation, implementation, Planning, outcome identification, diagnosis, assessment	Leadership at all levels was needed to support a high level of embeddedness of the PPM. The PPM was included into position descriptions, new employee orientation, support for evidence-based practice model, serving as a Foundation for nursing awards and recognition programs, a structure for clinical ladder and leadership models, nursing peer review and ultimately documentation supporting magnet resignation and resignation.	A survey assessment was delivered to all staff to explore the use and understanding.	A PPM is foundational in creating a professional practice environment and should be embedded within the structures and process of the organization. Nursing leadership at all levels and Shared governance council is key to implementation.
Murphy et al. (2018), Ireland	To explore the effectiveness and feasibility of implementing the two clinical dimensions of the careful nursing philosophy and professional practice model in An acute care hospital.	Two dimensions of the careful nursing model was implemented. Model elements 1) Therapeutic milieu 2) Practice competence and excellence	Implementation was limited to one ward because it constitutes a major change to how nurses approached their practice, and such change is best initiated on a small scale. An implementation steering committee guided a detailed project plan	1) Nurse's control over practice measured using the control over nursing practice scale (CONP) to measure hospital-based nurses' freedom to evaluate and modify their practice. The CONP has 16 statements each with a Likert scale which ranges from 1	Nurses' control over practice and adherence to practice documentation standards increased post-implementation of the PPM. Overall, the nurses perceived careful nursing-guided practice positively. Feasibility issues were identified, including staffing

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
			1) Ward preparation 2) Education 3) Ward adoption	(minimal control) to seven (maximum control). 2) A retrospective analysis of charts was conducted to measure nurse's adherence to practice documentation 3) Focus group sessions used to get nurses perceptions of adopting therapeutic milieu concepts. 4) A careful nursing plan questionnaire (five open ended questions) was also constructed to get nurses Perceptions on the benefits and challenges of their adoption of a new care planning system and its documentation.	efficiency and funding and were addressed. Exploratory evidence suggests that careful nursing could influence nurses' practice and overall perception of practice positively; its implementation is feasible
Olender et al. (2020), United States of America	To describe the impact of the implementation of interprofessional shared governance and a caring professional practice model (relationship- based care [RBC]) on the staff's self-report of caring, work engagement and workplace empowerment over a 4-year time frame.	Watson's theory of human caring provides the theoretical framework for this study. The idea to implement shared governance started at a strategic planning retreat. 1) Focus groups 2) Professional practice introductory sessions were offered to inform and engage all staff Model elements 1) Patient centred care 2) Interprofessional teams 3) Evidence-based practice 4) Staff engagement with quality improvement initiatives	Implementation began in increments on wards most receptive. 1) Shared governance council members were elected and unit specific 2) Orientation provided. 3) Status checks were offered and opportunities for unit presentations expected 4) Formal leadership empowerment programs were provided to support the councils.	Pre-implementation and post-implementation measurements of staff's workplace engagement and subsequent annual measures of employee engagement and caring within the annual all-employee survey (AES) were assessed, compared and trended across all units over time. Hierarchal regressions were used to test relationships between demographics and study variables for the purpose of de- scribing a final model to reveal the overall structure of this study.	Only work empowerment scores among staff working within RBC units were sustainable and increased progressively and significantly over time. Work engagement levels initially rose and then stabilized over time. The sustainability of work empowerment is likely related to the periodic provision of education for leaders regarding leading within an empowered work environment. A stronger focus on staff caring, particularly within quality improvement initiatives, with leadership guidance, will be paramount moving forward.

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
Oommen et al. (2022), United Arab Emirates	To describe the development of a nursing professional practice model and 5-year post-implementation survey findings.	The PPM was designed for a 14-hospital health care system. A steering committee was established, and a literature review was conducted. Two nursing theories were used • Virginia Henderson's need theory and Jean Watson's human caring theory • And psychologist Abraham Maslow's hierarchy of needs. Model elements 1. Collaboration 2. Satisfaction and independence over nursing care 3. Patient and family 4. Teamwork 5. Empowerment 6. Leadership 7. Creativity, innovation and improvement 8. National and international standards 9. Professional development 10. Evidence-based practice	Implementation involved frontline nurses and managers. 1. Orientation 2. Displayed in each unit 3. Spoken about in huddles	A nine-item survey was distributed to nurses online.	The overall impact of the PPM resonated in a better understanding of nursing practice, increased ability to talk to other health care providers about nursing practice and served as a credible, respected and reliable source of information on nursing practice. Future activities around the PPM should be include education sessions to keep The PPM alive. Suggested improvements • Immediately offer more time in the general nursing orientation dedicated to PPM. • Offer a minimum of quarterly or even monthly refresher opportunities. • Design a program to create a visual presence of the Nursing model on the nursing units and encourage discussion in morning huddle weekly or at least monthly.
Qu et al. (2019) China	The article described the development and implementation of a PPM in a tertiary hospital in mainland China applying for magnet recognition.	Nursing leadership involved clinical nurses in the development of a PPM using nursing salons, PPM Development team and focus groups. 1) Conducted a literature review 2) The established PPM development guidelines were disseminated to all nurses	The model was introduced to all nurses during international nurses' week. 1) The rationale behind the PPM was explained in written form and video clip. 2) Posters were created depicting the final model 3) The PPM was put onto pens, keychains, mouse pads, tote bags, notebooks and sticky notes and sent to nurses	1) Nurses implemented the PPM and patient outcomes improved. 2) Plans for formal evaluation are being developed	The incorporated model improved patient outcomes, for example catheter-associated urinary tract Infections at the hospital level. The development and the implementation of the PPM required guidance from nursing leadership and the involvement of clinical nurses. A PPM is more meaningful to clinical nurses

(Continues)

TABLE 1 (Continued)

Author, year, country	Aim	Model development	Model implementation	Model evaluation	Findings
		3) Six draft models were selected by the team and sent to all ward nurses Model elements Values 1) Caring and respect 2) Sincerity and integrity 3) Teamwork and collaboration 4) Excellence and innovation 5) Integration and growth Structures 1) Multidisciplinary collaboration 2) Healthy work environments 3) Professional development 4) Shared governance 5) Holistic primary care	3) education courses were provided 4) Nurses were asked to write an essay about how they used the PPM in everyday practice		when they take part in the development process.
Robbins (2019), Scotland	The article discusses the development of a professional practice model at NHS Grampian.	A shared governance approach was used to develop the model. Colleagues in Australia shared details of their PPM development process to support. 1. Staff workshops – Explore shared professional vision and values and core components. 2. Final versions of a PPM were sent to all professional groups. The one with the most votes were implemented. Model elements 1) Leadership 2) Quality and safety 3) Independence and enablement 4) Care and compassion 5) Recognition	A variety of formats have been distributed around the organization 1) Diary 2) Posters on display boars 3) Sticky notes and pens with the logo on 4) Using the ppm in discussion Focused on three issues 1) Empowerment 2) Personalization 3) Promotion	Staff were asked the following question 1. Consider the elements essential to a professional practice model (PPM) identified by Slatyer et al. 2. What other aspects could be used to formulate a PPM? 3. The development process was underpinned by shared governance. Is there another way that such as a large workforce could have been involved in the development of a PPM? 4. How can health boards promote the use of branding and campaigns within nursing, midwifery allied health professionals' practice and strategic direction? Consider how could you use a PPM within your everyday practice?	Upon evaluation the Grampian PPM showed to have limitations in the area of environmental factors. These areas will be strengthened at the implementation stage and considered at the review stage.

practice model framework (Burke et al., 2018), Johns Hopkins evidence-based practice model (Clavelle & Goodwin, 2016), Liberating structures of Lipmanowics and McCandles (Holskey & Rivera, 2020), Hoffart and Woods framework (Keleekai-Brapoh & Toresco, 2020), Multi-attribute Utility theory (Gentile & Marzinski, 2020), Careful nursing model (Murphy et al., 2018), Watsons theory of human caring theoretical framework (Olender et al., 2020) and a Shared governance approach (Robbins, 2019). Oommen et al. (2022) used three theories to support PPM development, Virginia Henderson's Need theory, Jean Watson's theory of Human Caring and Psychologist Abraham Maslow's Hierarchy of Needs.

The models chosen in the studies varied in size: two elements (Murphy et al., 2018), four elements (Arroyo-Marlés et al., 2018; Clavelle & Goodwin, 2016; Keleekai-Brapoh & Toresco, 2020; Olender et al., 2020), three elements (Gentile & Marzinski, 2020; Mensik et al., 2017), five elements (Bloemhof et al., 2021; Glassman, 2016; Holskey & Rivera, 2020; Robbins, 2019) and 10 elements (Burke et al., 2018; Oommen et al., 2022; Qu et al., 2019). Collaboration, research and innovation; development and recognition; independent practice; leadership; and healthy work environments were the most cited elements used in the included studies. See Table 1 for a complete list of all elements.

6.2 | Model implementation

Twelve studies discussed the model implementation method used (Arroyo-Marlés et al., 2018; Bloemhof et al., 2021; Burke et al., 2018; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Murphy et al., 2018; Olender et al., 2020; Oommen et al., 2022; Qu et al., 2019; Robbins, 2019). Implementation of the models was introduced in incremental stages in three studies (Burke et al., 2018; Murphy et al., 2018; Olender et al., 2020). Burke et al. (2018), only implemented some of the 10 model elements across the health care system as their work focused on one hospital division. Similarly, implementation began in increments on wards that were receptive in the study conducted by Olender and colleagues (Olender et al., 2020). Likewise, Murphy et al. (2018) chose to implement the model on one ward through ward preparation, education and ward adoption due to the scale of the change.

Arryo-Marlés and colleagues(2018) created a five-step implementation and development process including characterization of the context, identification of the need for a nursing practice model for strengthening care, literature review, description of the model and validation. Glassman (2016) allowed for each unit to create their own version of the model that was then adopted, and the process of enculturation was undertaken. Another study used brief education sessions and enculturation through framed posters and brochures, which were implemented during staff hiring, all training programs and training, and leaders started meeting outlining how the meeting linked to the PPM (Keleekai-Brapoh & Toresco, 2020). Mensik et al. (2017) used the model to inform all new nursing processes and programs across the system. In a study by Qu et al. (2019), the model was introduced to nurses in a variety of ways; a rational was provided in written form; the model was depicted in video clips and posters; through education courses, marketing items such as pens, keychains, mouse pads, tote bags, notebooks and sticky notes were used; and nurses were asked to write an essay about how they used the PPM in their practice. Similarly, Robbins (2019) used a variety of marketing strategies including the use of diaries, posters, sticky notes and pens and used the PPM in discussions. In another study, the model was implemented at orientations, displayed on each unit and spoken about in ward huddles (Oommen et al., 2022). Bloemhof et al. (2021) established a steering committee and made changes in keeping with each element of the PPM.

6.3 | Model evaluation

Model evaluation was discussed in 13 of the 14 articles (Arroyo-Marlés et al., 2018; Bloemhof et al., 2021; Burke et al., 2018; Clavelle & Goodwin, 2016; Gentile & Marzinski, 2020; Glassman, 2016; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Murphy et al., 2018; Olender et al., 2020; Oommen et al., 2022; Qu et al., 2019; Robbins, 2019). Arroyo-Marlés and colleagues (2018) undertook validation of the initial model with patients, their family care givers, nursing personnel of the institution and other institutions. Burke et al. (2018) similarly undertook evaluation midway through implementation to access the attitudes of nurses toward the practice model and to identify strengths and weakness of the model. Clavelle and Goodwin (2016) identified qualitative and quantitative improvements in the evaluation phase. These improvements included nursing engagement, nursing certification and patient experience scores. Data showed improvement in the mean for falls with an injury, catheter-associated UTI, central line infections and hospital acquired pressure ulcers (Clavelle & Goodwin, 2016). Qu et al. (2019) identified improvements in patient outcomes post-implementation; however, they are working on the formal evaluation process. In another study, the model was reviewed for relevance by appointing eight working groups. These working groups identified the relevance of each item in the model and recommended revisions (Glassman, 2016).

Keleekai-Brapoh and Toresco (2020) undertook a pre-implementation and post-implementation survey. Post-implementation scores revealed improvements in professional recognition, research and patient- and family-centred care. Similarly, Olender and colleges (2020) undertook a pre-implementation and post-implementation survey conducted with staff workplace engagement and caring. Statistically significant correlations were noted between work engagement and empowerment, work engagement and caring, empowerment and caring post-implementation of the model. Bloemhof and colleagues (2021) used the Dutch Essentials of Magnetism II survey pre-implementation and post-implementation of a model to identify changes. Robbins (2019) evaluated their model

against the literature and identified limitations with environmental factors, which was going to be reconsidered in the review stage. Murphy et al.'s (2018) evaluation was undertaken using multiple sources; the nurses' control over practice was assessed using a survey, retrospective analysis of charts was undertaken and focus group sessions to identify nurses' perceptions of the concepts adopted and five open ended questions asking nurses the benefits and challenges of adopting a new model. Mensik et al. (2017) used a survey to assess whether the implementation of the PPM and educational plans had resulted in widespread adoption and understanding of the model. Similarly, Oommen et al. (2022) distributed a nine-item survey to nurses assessing the implementation of the PPM. In another study, the weighting of attributes survey was released post-implementation to identify if nurses found the elements to be professionally desirable (Gentile & Marzinski, 2020).

Seven studies discussed ongoing review of the model to continue to synthesise the work of nurses in providing patient care at the bedside (Arroyo-Marlés et al., 2018; Burke et al., 2018; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Murphy et al., 2018; Qu et al., 2019). The importance of leadership (Arroyo-Marlés et al., 2018; Clavelle & Goodwin, 2016; Gentile & Marzinski 2020; Glassman, 2016; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Olender et al., 2020; Oommen et al., 2022; Qu et al., 2019) and nurse involvement (Arroyo-Marlés et al., 2018; Bloemhof et al., 2021; Gentile & Marzinski 2020; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Oommen et al., 2022; Qu et al., 2019; Robbins, 2019) was discussed in 11 studies. These elements were considered important for model development and enculturation of a PPM that resonates with nurses across an organization.

7 | DISCUSSION

The aim of this scoping review was to explore the development, implementation and evaluation of a PPM. Ten studies met the inclusion criteria. Each of the 10 studies used a different approach, framework and theory for the development, implementation and evaluation of a PPM. The most cited model elements included collaboration, research and innovation, development and recognition, leadership, independent practice and healthy work environments, which is consistent with the work of Slatyer et al. (2016). Overall, the included studies indicated that a PPM should be created with strong leadership and clinical nurse involvement to reflect nursing care activities and professional behaviours that resonate with all nurses across an organization (Bloemhof et al., 2021; Clavelle & Goodwin, 2016; Gentile & Marzinski 2020; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017; Olender et al., 2020; Oommen et al., 2022; Qu et al., 2019; Robbins, 2019).

Through strong leadership, structures, such as shared governance, can be implemented to support clinical nurse autonomy (Bloemhof et al., 2021; Keleekai-Brapoh & Toresco, 2020; Mensik et al., 2017). It is through these structures that nurses have the opportunity to work collaboratively and to raise care delivery concerns (Dans & Lundmark, 2019). Research shows that collaboration for the development of a model promotes nurse engagement (Clavelle & Goodwin, 2016; Keleekai-Brapoh & Toresco, 2020). When nurses perceive they are being heard and are able to contribute to change, then they are more engaged in their roles (Dans & Lundmark, 2019). This engagement improves job satisfaction (Dans & Lundmark, 2019), the experience of connectedness and supportive relationships (Breytenbach, 2016; Cruz et al., 2022), which in turn improves organizational outcomes and nurse turnover intentions (Wan et al., 2018). These positive nurse outcomes are of importance considering the predicted global future shortage of 14 million nurses (International Council of Nurses, 2021) and the stress and burnout caused by the current COVID-19 health pandemic. In this review, one paper discussed the challenges of implementing a PPM into a new facility during the COVID-19 pandemic (Oommen et al., 2022). In this instance, nurses did not receive a traditional orientation program and instead commenced work on the wards immediately. Despite these difficulties, Oommen and colleagues (2022) urged nursing leaders to provide opportunities for professional practice and the identification of ways to improve the confidence and dependence in a PPM to guide nursing practice.

The implementation of a PPM also highlighted improvement in patient outcomes, including patient scores, falls with an injury, infections, hospital acquired pressure ulcers and (Clavelle & Goodwin, 2016) patient- and family-centred care (Keleekai-Brapoh & Toresco, 2020). When patients experience fewer complications, the length of stay and direct costs of patient care decrease (Kanak et al., 2008). These positive patient outcomes are important as health care organizations try to manage greater demand, bed occupancy rates and financial strain (Blay, 2015; Health Workforce Australia, 2012). In addition, there is an intrinsic link between nurses' engagement and patient outcomes (Dempsey & Assi, 2018). In 2016, an analysis of nurse's engagement indicated that 15 out of every 100 nurses were disengaged and lacked commitment, which impacted negatively on patient outcomes. These findings were estimated to cost more than US$22,000 in lost revenue as result of lost productivity (Dempsey & Reilly, 2016). Therefore, engaging nurses in the PPM process is of great importance to patients and the organization.

Of note from this present review is the need to continually develop and adapt a PPM to keep up to date with scientific changes (Arroyo-Marlés et al., 2018; Burke et al., 2018; Gentile & Marzinski 2020; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020; Murphy et al., 2018; Qu et al., 2019). A PPM is considered the most recognizable symbol for nursing in an organization, and therefore, changes to nursing practice, both in the external and internal environments, should be represented within a model (Arroyo-Marlés et al., 2018; Glassman, 2016; Holskey & Rivera, 2020; Keleekai-Brapoh & Toresco, 2020). Maintaining model relevance is important for nurse engagement in all aspects of health care delivery

(Glassman, 2016). Therefore, managers should focus on continually evaluating the PPM for relevance to improve the patient experience and to create and sustain a highly engaged nursing workforce (Dempsey & Assi, 2018).

8 | IMPLICATIONS FOR NURSING MANAGEMENT

The summary of published literature provides an overview for nurse leaders that may assist with the development, implementation and evaluation of a PPM. The review of Slayter and colleagues (2016) identified the key elements of a PPM to include a theoretical foundation and six common components: leadership, nurses' independent and collaborative practice; environment; nurse development and recognition; research and innovation; and patient outcomes. These key elements remain of importance in this current review, with no new additional elements being consistently used in the literature. Nurse leaders should consider these six elements and a theoretical theory that is drawn from nursing or organizational disciplines to assist with the creation of a PPM.

For successful enculturation, a PPM needs to be relevant to all nurses and easy for them to articulate. Nursing leaders need to consider the importance of clinical nurse involvement in the PPM process to promote engagement and enculturation. This includes the identification of model elements or subelements that are relevant to the culture of their organization and model design. Research suggests the use of a steering committee with members of management and direct care nurses to assist with embedding a PPM into all nursing-related activities (Bloemhof et al., 2021; Keleekai-Brapoh & Toresco, 2020; Murphy et al., 2018; Oommen et al., 2022). In addition, quality improvement activities should focus on evaluating the PPM for clinical relevance. This will assist with nurses' engagement and the provision of high-quality patient care.

9 | LIMITATIONS

While a rigorous search of the literature was conducted, it is possible that literature may have been overlooked. Selection bias is always possible as we did not include grey literature or studies conducted in a language other than English. It is also possible that certain keywords or databases may have been overlooked. However, it is felt that the included studies are representative of the available literature.

10 | CONCLUSION

This review adds to the body of knowledge on this topic and summarizes the important elements of a PPM. The available literature highlights the importance of strong leadership, nursing involvement and the use of nursing theories to guide the PPM process. In addition, the content discussed in some of the included papers was of a superficial nature, which prevented in depth discussion and analysis of the improvements of a PPM in practice. Therefore, further research to evaluate the benefit of a PPM would be of benefit, specifically establishing and measuring clear links between the implementation of a PPM and patient outcomes. It is suggested that both quantitative and qualitative measures are used in the future to establish improvements in patient outcomes.

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CONFLICT OF INTEREST

The authors report no conflict of interest for this work.

ETHICS STATEMENT

Ethics approval was not required for this paper.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly Medline (EBSCO), CINAHL (EBSCO), EMBASE and Web of Science.

ORCID

Gemma Doleman https://orcid.org/0000-0001-5566-5681

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ORIGINAL ARTICLE

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Managerial approaches for maintaining low levels of sick leave: A qualitative study

Sara L. Fallman PhD, Senior Lecturer[1,2] | Lotta Dellve PhD, Professor[3] | Agneta Kullén Engström PhD, Senior Lecturer[1]

[1]Faculty of Caring Science, Work Life, and Social Welfare, University of Borås, Borås, Sweden

[2]School of Engineering Sciences in Chemistry, Biotechnology, and Health, KTH Royal Institute of Technology, Stockholm, Sweden

[3]Department of Sociology and Work Science, Gothenburg University, Gothenburg, Sweden

Correspondence
Sara Larsson Fallman, Faculty of Caring Science, Work Life, and Social Welfare, University of Borås, Borås S-501 90, Sweden.
Email: sara.larsson_fallman@hb.se

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Center for Welfare Studies (CVS) at the University of Borås

Abstract

Aim: The aim of this study was to identify first-line managers' approaches for maintaining low levels of sick leave among health care employees.

Introduction: One challenge in health care is the high level of sick leave among employees. High work demands and conflicting pressures characterize the work situation of both employees and first-line managers, with potential negative effects on work-related health.

Method: First-line managers at units with low and/or decreasing sick leave were interviewed. Thematic analysis was used to analyse the data.

Results: The managers took a holistic approach in meeting their employees' broader needs, and they were balancing high organisational demands through insubordination. To keep sick leave rate low, they created possibilities for the employees to influence their own working life through a present, visible and trustful leadership.

Conclusion: Managers responsible for units with low sick leave seemed to utilize a holistic approach with focus on their employees and prioritized needs of their employees before organisational demands from top management.

Implications for nursing management: First-line managers in health care can have impact on sick leave among their employees and create good working conditions, despite pressure from their superiors.

KEYWORDS
employee, first-line manager, flexibility, health care, sick leave

1 | INTRODUCTION

One challenge in health care today is high numbers of sick leave among health care workers. Many studies highlighting this phenomenon focus on conditions associated with high levels of sick leave among employees. Few studies investigating reasons for low sick leave in organisations explicitly focus on the public health care sector. Most research on the topic has been conducted in private companies and the public sector in general (Ljungblad et al., 2014; Stoetzer et al., 2014).

The current study focuses on the approach of first-line managers in health care units with low levels of sick leave. Sick leave and illnesses among employees have increased across Sweden during the last decade, especially among health care employees with a peak in 2016 (Swedish Social Insurance Agency, 2018). Persistent sick leave

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can have negative consequences, both physical and economic, for the employee. It also contributes to large societal costs (Swedish Social Insurance Agency, 2019). In addition to the high rates of sick leave and turnover among health care employees, there is also an upcoming shortage of health care employees. Shortages of employees in health care, especially nurses, are reported from around the world, for instance, the UK (Beech et al., 2019), the US (Bureau of Labor Statistics, 2020) and Canada (CNA, 2020). This situation could have far-reaching consequences and needs to be addressed.

Health care employees today have a workplace environment that is often characterized by high pressure, fast work pace and high demands (Aiken et al., 2013; Duffield, Diers, et al., 2011), which can mean that they do not have the time to perform all their work tasks. This may trigger a chain of negative outcomes, including stress, burnout and, in the long term, extended sick leave. Studies have shown a connection between work overload and sick leave among nurses (Rauhala et al., 2007). In turn, sick leave and a shortage of employees result in a higher workload for the employee at work, which will affect the quality of care (Duclay et al., 2015). In order for employees to achieve a sustainable work–life balance, flexible working conditions have become more common during the last decades. Joyce et al. (2010) showed that flexible working arrangements, such as flexitime, aimed at increasing employees' control had a positive impact on employee health. Other studies have reported that opportunities to influence and adjust their work tasks have been linked to not only a more sustainable return to work after long-term sick leave (Dellve et al., 2016). On the other hand, low opportunity to influence work had a negative impact on sick leave (Hultin et al., 2010). The benefits of flexibility at work, providing autonomy and control to better meet work demands are in line with mechanisms of workplace resources that are explained through the job demand resource model (Bakker & Demerouti, 2007).

The work situation of first-line managers in the health care sector is complex and multifaceted (Pegram et al., 2015) with diverse role responsibilities and competing demands (Baker et al., 2012) from different institutional logics and often without sufficient resources (Udod et al., 2017). Line managers additionally have to interact with many different professional groups as well as patients and their relatives, which increase their work complexity (Wong & Laschinger, 2015). They also play an important role for the quality of care and employee and patient outcomes (Boamah et al., 2018; Cummings et al., 2018; Fuller, 2015). Despite their considerable responsibilities, line managers often have limited decision-making authority because of strict top-down management control. At the same time, they have the overall responsibility for the unit's finances, which has been reported as being associated with reduced health, extensive over time and decreased ability to perform their work for first-line managers in health care (Fallman et al., 2019; Kath et al., 2012).

Studies have shown connections between nurse managers' leadership style and health-related outcomes among their employees, such as work satisfaction, performance, intention to quit (Cummings et al., 2018; Saleh et al., 2018) and levels of sick leave (Schreuder et al., 2011). Other studies have shown positive associations between beneficial working conditions and improved social environment (Strömgren et al., 2017). A trustful leadership with a visible and present manager has been associated to employee satisfaction in previous studies (Duffield, Roche, et al., 2011) and fewer days of sick leave (Dellve & Fallman, 2020).

In sum, although there are many studies about sick leave among health care employees, few investigations have attempted to explain low levels of sick leave in relation to managerial approaches for handling organisational conditions. The focus of this study is, therefore, to identify common patterns in managerial approaches at health care units with low levels of sick leave.

2 | AIM

The aim of this study was to identify first-line managers' approaches for maintaining low levels of sick leave among their health care employees.

3 | METHOD

3.1 | Design

This study has a qualitative design. Interviews were performed with managers of units with low and/or decreasing rates of sick leave according to the hospital employee records. Thematic analysis was used to analyse the managers' approaches that may have had an impact on their health care employees' working conditions.

3.2 | Sample and data collection

Two hospitals in the same region were included due to the existence of ethical approval. The sampling included managers with experience of leading a health care unit with low and/or decreasing levels of sick leave. The register-based data concerning employees' sick leave per unit over a 4-year period (2013–2016) were utilized. The total number of units in the data was 43. Among the units, 14 were categorized as having low (i.e., a mean of <3.8% of staff on sick leave in 2013) or decreasing sick leave among their workers (the mean sick leave being 8.7% in 2013 and 4.9% in 2016). The managers of these units were contacted first by email to inform them about the study and thereafter by phone about participation. Almost all managers (13 out of 14) agreed to participate; two were excluded because of the shorter time (<2 years) they had been a manager of the unit. The final study group consisted of 11 managers, 9 women and 2 men, with 2–20 years' experience as head of the unit in question, and all of them had a degree in a health science or medicine. The number of employees in these 11 units ranged from 8–61 (median being 35).

All interviews were conducted individually, face to face. The interviews were conducted by SLF or AKE and ranged between 50 and 90 min ($M = 70$ min).

3.3 | Analysis

The interview data were analysed using thematic analysis according to the six steps of Braun and Clarke (2006). The interviews were transcribed verbatim, and then, the researchers separately read through the interviews several times. The first step was to read and become familiar with the data, and the researchers made notes in the margin. After a thorough reading of the texts, the second step was to generate the initial coding. The first three interviews were analysed and coded by both researchers together to ensure some inter-rater reliability. The other interviews were coded individually by both researchers. This step also consisted of comparing and reaching consensus between the two authors' codes. The third step was to search for themes by analysing the coding in several steps. In the fourth and fifth steps, themes were reviewed and redefined into new themes. This was done in order to ensure that the themes worked in relation to the data. In the last step, the entire data were read in relation to the whole data set, as recommended by Braun and Clarke (2006). This was done to check if the themes worked in relation to both the codes and the data set. An example of the process is illustrated in Table 1.

4 | RESULTS

This study highlights that managers in today's health care settings are facing demands that could be contradictory. On one hand, they need to meet the demands of the organisation and top management while simultaneously trying to meet the demands from their employees to create sustainable working conditions. The analysis of the data resulted in two themes: (1) a holistic approach to meet the needs of employees and (2) balancing high organisational demands through insubordination. The first theme related to the managers' relationships to the employees. The second theme concerned the managers' strategies in handling the effect of demands to create sustainable working conditions for both themselves and their employees.

An overview of the identified themes and subthemes is presented in Table 2.

4.1 | Holistic approach to meet the needs of employees

The first-line managers seemed to have a genuine interest in other people. A holistic approach for them included considering the whole person and their situation both at and outside work. This requires flexibility regarding the working circumstances as well as supporting the employees and creating trustful relations.

4.1.1 | Flexibility regarding employees' working circumstances

Almost all interviewed managers put significant effort into meeting the employees' needs. They worked hard to approve vacation time or parental leave even at short notice. According to the managers, this was possible because their work schedules did not include full staff planning and scheduling and the employee was flexible and willing to help each other. They also gave the employees the option of working part-time. The managers said that there were benefits to letting employees choose their own working hours. This also gave the managers the flexibility in how they staffed the unit.

> We believe that if we let people choose their working hours, and they work 90% or 95%, maybe they can remain at work, and then we can hire one more employee. (P10)

TABLE 2 Themes and subthemes

Themes	Subthemes
Holistic approach to meet the needs of employees	Flexibility regarding employees' working conditions Flexibility regarding employees' personal situations Being present and visible as a manager Trustful relations
Balancing high organisational demands through insubordination	Exceeding the financial constraints Ignoring high demands for productivity Neglecting administrative demands

TABLE 1 Example of data extraction, codes, subtheme and theme

Data extraction	Codes	Subtheme	Theme
I am expected to report to the administration but have learned to prioritize and only submit some work. It is not only out of dissatisfaction but also to maintain my health.	Prioritize what to report Maintaining health	Neglecting administrative demands	Balancing high organisational demands through insubordination

The managers tried to develop special solutions for employees who wanted to adjust their workload and working hours. This gave the employees more possibilities to recover between shifts, and, thus, the managers felt this would decrease potential sick leave. Implementing this approach required flexibility, creativity and generosity according to the managers.

4.1.2 | Flexibility regarding employees' personal situations

The managers were also flexible regarding the employees' private life. They tried to see the situation as a whole and were aware that if someone had a stressful situation at home, it would reflect on that person's work. The managers pointed out that if they were not flexible and did not care about their employees' personal life, this could ultimately result in sick leave among their staff. Therefore, they offered the employees the possibility to take some leave if needed. The managers felt this strategy was successful in working towards a sustainable, healthy work–life balance.

> Today, I, as a manager, can choose to say that this is your private problem and that I do not care. But it will not help because then I might lose the employee. (P11)

So they offered the employees the possibility to take some leave if needed. This strategy seemed to be successful in working towards a sustainable, healthy work–life situation.

4.1.3 | Being present and visible as a manager

Almost all of the managers described themselves as present and visible. They stated that they tried to be available to the employees and to be a part of the employees' daily work. Some said they made the effort to attend the unit meeting every morning. According to the managers, this presence signaled to the employees that they were accessible.

> I am here early in the morning both to meet the night shift and to attend the morning meeting. I believe this promotes health and team spirit. (P6)

One manager stated she loved the summer because it gave her the opportunity to work bedside. In some units, the managers were physically absent but tried to compensate for geographical distance by being available by phone. The managers highlighted that a leadership style characterized by close interaction between managers and employees could prevent sick leave and facilitate the return to work after sick leave.

4.1.4 | Trustful relations

The managers highlighted the importance of trust and engagement between managers and employees and within the group. They emphasized that it was important to know their employees and were aware of their strengths and weaknesses. This enabled them to balance demands and tailor the tasks to each employee's abilities. They described the employees' generous attitude and acceptance of, and tolerance for, their colleagues' special needs on occasion. They emphasized the importance of paying attention to all employees and making them feel valued both at the workplace and away from it.

> My employees know that I give them time off at short notice but that I also expect them to step up when needed. (P7)

The managers stated they worked continuously to maintain a good psychosocial working environment and applied their skills and effort to create trustful relations. At the same time, they did not emphasize their own leadership position. They were aware that a positive work environment with good staffing levels and a good psychosocial environment was fragile and could easily be broken, for example, due to staff shortages or unreasonable demands for cost savings.

4.2 | Balancing high organisational demands through insubordination

In this second theme, the managers described that they used insubordination when they perceived the organisational demands were too high. They used this technique, such as ignoring requests, to protect both the employees and themselves. According to the managers, even if they used insubordination to maintain a balance at work, they perceived themselves as loyal to the organisation.

4.2.1 | Exceeding the financial constraints

According to the managers, one of the most important considerations in their daily work, set by top management, was finance. From the managers' perspective, they were constantly reminded of that budget controls everything. There were clear demands for a balanced budget, and when this was in jeopardy, the managers were expected to take action. Despite these expectations, the managers sometimes chose to break the rules and exceeded the budget to protect both their employees and themselves.

The managers argued that a factor that contributed to lower sick leave was that they were well staffed, which meant that the employees were not completely overwhelmed after a shift. The interviewed managers pointed out that superior manager sometimes told them that in order to keep balanced budget, they needed to reduce staffing hours. (P4)

I do not care if I overstaff because we have the right level of staff based on our production. The financial issues I have to deal with are on another level.

Although expected by top management, many managers chose not to inform their employees about the financial situation. According to the managers, a focus on finance was burdensome, like a heavy wet blanket, for most employees. The managers pointed out that they avoided discussing financial issues to protect the employees.

4.2.2 | Ignoring high demands for productivity

The first-line managers described top management's high demands for efficiency and increased productivity under tight economic constraints. They described that they were constantly under pressure to increase productivity. At the same time, there were demands to maintain the quality of care: an equation they considered impossible. One strategy for handling this pressure was to ignore the organisational demands.

> I mean it is not possible to twist and turn too much when there are many employees on sick leave. Instead, we cancel patient visits and, of course, that will be noticed in our productivity. (P3)

Another way of ignoring demands for increased productivity was to limit the inflow of patients. Most of the managers used this strategy. This option allowed the employees to perform their work without stress. The managers thought that this strategy would affect the sick leave and in the end increase productivity.

Another strategy the managers used to control employee workload was to refuse employees to take extra shifts in either their own or other units. At the same time, the managers did not hesitate to let employees from other parts of the organisation take an extra shift at their units.

4.2.3 | Neglecting administrative demands

The administrative support services at the hospitals have been centralized and reduced over time, which had adversely affected the amount of support the managers were given. Instead, the managers now were responsible for delivering data to the administrative support services. The managers pointed out that there was not enough time to deliver all the requested information. Their strategy for handling this situation was to either silently disregard follow-up demands or openly refuse to deliver the requested information. They added that, in their opinion, administrative support staff could easily retrieve the data themselves. This was a way for managers to express resistance towards the system.

> I do not report everything that is expected of me, and in the end, no one asks for it. It's a strategy for managing my own health and the work environment. (P2)

The participants criticized the limited support they were getting from the Human Resources (HR) department and said that administrative support had decreased considerably and that tasks that had previously been performed by HR had now been transferred to them as managers.

5 | DISCUSSION

The main findings show that first-line managers who were successful in maintaining low levels of sick leave share some common strategies. These strategies were characterized by a holistic approach to meet the employees' needs while balancing high organisational demands.

Managers in this study put a substantial amount of effort into meeting the needs of the employees to find a good work–life balance for the employee they are managing. This balance was achieved by providing flexibility in work hours, scheduling, vacations and work tasks. Based on the lower levels of taken sick leave in the studied units, these may be effective strategies to lower sick leave. To achieve better health-related outcomes, having this type of balance between work and private life has also been highlighted in previous studies (Belton, 2018; Ejlertsson et al., 2018). The younger generations, who make up an increasingly larger proportion of the work force, prefer more flexible working conditions to a higher degree (Deloitte, 2019). At the same time, how far can a manager stretch to meet the employees' requests of flexibility? Is it acceptable that the organisations' come second?

Another factor that could have affected low sick leave was that the managers were present, visible and accessible to their employees. The managers in this study showed genuine presence, which was more than mere physical presence. A visible and present leader is able to get an understanding of the workload and make an overall evaluation of the situation at work, which is in line with the extant literature (Smith, 2013). Being present and visible gives managers the opportunity to detect early signs of decreased health among their employees (Crumpton, 2010).

In this study, one way of maintaining low levels of sick leave was to circumvent directives placed on them from upper management. This raises the question: Do we want these types of managers in health care, or do we prefer managers who always follow directives from above? Lack of alignment to top management's strategies may have a negative impact on the organisation but positive impact for the employees. Also, the importance of keeping to the budget and delivering all follow-ups as requested can be questioned, and many managers in the study indicated they ignored them at times, giving them a certain amount of flexibility and balance at work. Despite the success of these strategies, managers may be considered disloyal if they do not follow the directives from top management. Furthermore, other

studies have shown that the autonomy of first-line managers has been reduced (Ericsson & Augustinsson, 2015). This lack of autonomy has been shown to be undesirable as top-down management control has a negative effect on managers' self-rated health and can have negative impacts on managers' abilities to perform managerial tasks (Fallman et al., 2019).

The first-line managers' mission is complex. They have responsibility for the employees' health and wellbeing, are expected to keep sick leave low, stay within budget and maintain productivity. This creates competing demands, and managers experience being squeezed between the demands and expectations from top management and employees' needs.

5.1 | Strengths and limitations of the study

One strength of the study is that data on sick leave at a unit level over a 4-year period were used to select the managers for the interviews. Having longitudinal sick leave data over a 4-year period also made it possible to investigate units with lower or decreasing levels of sick leave. This increases the validity of the study compared to a cross-sectional selection. Another strength of the study is that the results are in line with theories of health promotion and organisational management. The inclusion criteria of 2 years in the managerial role was based on the assumption that during that time, the managers had gained enough experience to be able to answer the questions with credibility. A limitation of the present study can be that only two hospitals were included. On the other hand, the units included represented both prehospital, inpatient and outpatient care. The analyse method, thematic analysis, was chosen due to its flexible approach.

6 | CONCLUSIONS

This study highlights some managerial strategies that were used to maintain a lower level of sick leave. In order to keep lower levels of sick leave among employees, the managers seemed to utilize a holistic approach towards their employees, seeing them as a person not only a worker. Furthermore, managers mentioned that prioritizing and creating a flexible work environment and developing trustful relations decreased the need for longer sick leave even if it meant being insubordinate towards organisational demands at times. These aspects need to be further investigated in order to reach a sustainable work life, and the results from this study could be used to trigger new research in the area.

6.1 | Implications for nursing management

This study contributes to the knowledge about first-line health care managerial strategies with the aim to maintain lower sick leave among employees. It shows that the managers were in a position to create good working conditions for their employees despite directions and pressure from top management. It is important to use units with lower sick leave as good examples to learn from them to create healthy and sustainable organisations. Hopefully, this study can inspire nurse managers to learn from units with low sick leave in order to create healthy and sustainable work organisations.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

The study was approved by the Ethics Committee for Gothenburg Region, Sweden (Dnr. 1075-16).

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

ORCID

Sara L. Fallman https://orcid.org/0000-0002-3325-4184
Lotta Dellve https://orcid.org/0000-0003-0480-1895
Agneta Kullén Engström https://orcid.org/0000-0002-0368-3498

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ORIGINAL ARTICLE

WILEY

A qualitative evaluation of the hot debrief/follow-up initiative: Implications of readily identifying positive outcomes in an Australian emergency department

James Page RN, BNurs, Master of Leadership (HlthHumServ), Registered Nurse, Manager | Sue Pearson BA (Hons Psych), PhD, Grad Cert LT Health Professionals, Senior Lecturer, Academic Integrity Advisor | Shantha Raghwan BSc, MBBS, FACEM, Staff Specialist

Faculty of Medicine, University of Tasmania, Hobart, Tasmania, Australia

Correspondence
James Page, Faculty of Medicine, University of Tasmania, Hobart, Tasmania, Australia.
Email: jamesliam.page@gmail.com and jlpage@utas.edu.au

Abstract

Aim: To gain insight into how emergency department nurses and doctors perceive the experience of being offered the opportunity to request a patient follow-up as part of a structured debrief initiative.

Background: An increased prevalence of burnout and compassion fatigue amongst emergency clinicians is being recognized globally. A wellbeing initiative has been implemented within a large public hospital emergency department to combat these phenomena.

Method: A qualitative research approach using semi-structured interviews was carried out to explore the participants' views relating to the debrief/follow-up initiative.

Results: A total of 17 face-to-face semi-structured interviews were conducted. This research highlighted a number of common themes including the participants understanding and perception of the follow up initiative, the barriers and enablers of effective implementation, and the perceived benefits of following up on patient outcomes in the emergency setting. This research identified unanimous support for the initiative. No negative implications relating to the initiative were identified.

Conclusions: This study indicates the positive impacts of employing a deliberate and formalized approach to enabling staff to access follow-up information about the patients for whom they provide life-giving care.

Implications for Nursing Management: Nurse Unit Managers should consider the findings of this research and understand the crucial role that nursing leadership can play in fostering the design and implementation of similar initiatives.

KEYWORDS
debrief, emergency department, nurse manager, positive psychology, wellbeing

1 | BACKGROUND

Within the health care industry, burnout is being increasingly recognized as contributing to less productive workplace culture and negative patient outcomes (Basu et al., 2017). Burnout is a state of physical, mental and emotional exhaustion and disengagement. While burnout is prevalent across all jurisdictions within the health care continuum, it is evident that clinicians who work in critical care environments (such as the ED) are particularly vulnerable (Martins Pereira et al., 2016; Mikkelsen et al., 2019). Often faced with the day-to-day challenge of balancing competing clinical priorities within a setting designed to handle the most critical of health care emergencies, clinicians working within these areas are at high risk for experiencing moral distress and decision fatigue (Rozo et al., 2017; Tawfik et al., 2017).

Health care organizations can be critically impacted by a proclivity of negativity in the workplace. Negativity bias describes a tendency for leaders to bias towards identifying and highlighting negative outcomes (Haizlip et al., 2012), which further contribute towards staff dissatisfaction. While it is accepted that identifying opportunities for improvement is of crucial importance to quality and safety practices in health care, Haizlip et al. (2012) argue that the presence of the negativity bias within some sections of the industry has inadvertently created an unforgiving workplace culture that contributes to high rates of burnout, depression and suicide amongst the workforce. Lee (2021) claims that the negativity bias within the ED can affect professional relationships, can lead to poor workplace culture and can contribute to burnout. Lee (2021) argues that humans are hard-wired to be more influenced by the negative events that take place in day-to-day life and this bias affects how we conduct our practice in the ED domain and can cause us to judge ourselves harshly (Lee, 2021).

Compassion fatigue is also common in the ED setting and more so in younger and less experienced nurses (Kawar et al., 2019; Wei et al., 2017). It describes the physical and emotional exhaustion that can occur from helping others, particularly through traumatic or stressful experiences resulting in an inability to empathize with patients. Components of compassion fatigue include the presence of burnout and secondary traumatic stress. Secondary traumatic stress is specific work-related stress that occurs from secondary exposure to extremely traumatic events. The negative feelings associated with burnout, compassion fatigue and secondary traumatic stress usually have a gradual onset and can stem from the feeling that one's efforts make no difference. They can be associated with a very high workload and/or a non-supportive work environment.

In contrast to compassion fatigue, compassion satisfaction occurs when a caregiver derives satisfaction from their work, encompassing the pleasure of fulfilment and purpose associated with their profession (Kelly & Lefton, 2017). A large body of literature from the area of positive psychology and leadership has demonstrated the benefits of strategies that promote resilience and improve workplace culture. The importance of nursing leadership in supporting such strategies to influence culture at a local level is highlighted (Kawar et al., 2019; Simpson & Knott, 2017). Workplace initiatives that improve professional satisfaction, encourage mindfulness and reward the formulation of an empathetic disposition are found to contribute to the development of cultural resilience and promote compassion satisfaction in these high-pressure environments (Salvarani et al., 2019).

Lewis (2011) argues that where organizations succeed in fostering affirmative bias and encouraging virtuous practices, they are generally more successful in building social capital reserves. Social capital is a term that refers to the quality of relationships and interactions within teams and is said to profoundly impact workforce cohesiveness and capability. The presence of social capital not only helps to produce exceptional performance but also contributes to the development of greater levels of resilience amongst teams. Where teams are supported in building social capital, they are also more likely to bounce back from setbacks (Lewis, 2011).

A structured debrief/follow-up initiative was implemented within a large Hospital ED in Queensland, Australia. A structured debriefing is a facilitated interaction between members of the interdisciplinary team that enables collective reflection after a potentially traumatic clinical event with a focus on improving both system and team performance (Rose & Cheng, 2018). The structured debrief/follow-up tool (Appendix S1) was developed by a small team of ED clinicians with an interest in staff wellbeing and self-care following consultation with neighbouring EDs. A debriefing tool that followed the 'INFO' model (Immediate, Not for personal assessment, Fast/Feedback/Facilitated, Opportunity to ask questions) was adopted (Rose & Cheng, 2018). The debriefing tool was then adapted to meet the specific needs of the department (i.e., indication for a debriefing session was adjusted according to demographic and acuity of common presentations) and to include the opportunity for participants to request follow-up of patient outcomes after they had been transferred out of the department.

Anecdotal evidence suggests that, often, clinicians would be excited to hear about the positive effects of their care; however, it is likely that positive patient outcomes are often under-communicated. The follow-up aspect of the initiative allowed participants of the debriefing to indicate if they would like to receive follow-up information about the longer-term outcome of the patient. A senior staff member would then review these requests, perform a follow-up about the outcome of the patient and relay this information back to the staff who requested it in written format. The addition of the follow-up initiative incorporated positive psychology concepts with an intention to identify positive patient outcomes and communicate these instances back to staff. The structured debrief/follow-up initiative was designed to positively impact on the psychological safety within the department, reduce uncertainty, highlight positive outcomes and provide closure to staff following stressful situations at work.

Prior to the implementation of the structured debrief/follow-up initiative, debriefing and follow-up would happen on an ad-hoc basis and would require individuals to independently identify moments that would benefit from debriefing and/or follow-up, and subsequently take initiative to organize the event/process. With limited structure and no agreed indication criteria, practices surrounding debriefing and follow-up were inconsistent and person dependant. There was no

formal opportunity for staff who were involved in these often-traumatic events, to request a follow-up on the outcomes of patients.

The concept of a structured debriefing session following acute resuscitation events is not novel. The evidence supporting the application of clinical event debriefing is well established; however, the formalized process for allowing clinicians to request a follow-up about the outcomes of the patients for whom they have provided care is less common.

This research was conducted to examine how a workplace initiative that highlights positive patient outcomes to staff working in critical care areas was perceived by ED nurses and doctors. The results will be used to inform ways that nurses in leadership roles can drive wellbeing related quality improvement initiatives while working to uplift cultural resilience and social capital within the workforce.

TABLE 1 An overview of the characteristics of participants recruited to the study

Group 1—Registered nurses (RNs)	• ED registered nurses who are in resus training (NG5) • ED registered nurses who have less than 2 years of resus experience (NG5)
Group 2—Experienced registered nurses and nurse leaders	• ED registered nurses who have over 2 years of resus experience (NG5) • ED clinical nurses (CN) (NG6) • ED clinical nurse consultants (CNC) (NG7)
Group 3—Medical officers	• ED consultants

2 | AIMS

The aim of this research project was to gain insight into how ED nurses and doctors perceive the experience of being offered the opportunity to request a patient follow-up as part of a structured debrief initiative.

3 | METHODS

3.1 | Design

This qualitative research used semi-structured interviews to explore the participants' views on the debrief/follow-up initiative.

3.2 | Setting

The research was conducted at a large public health ED in Queensland, Australia. At the time of the study, the department employed approximately 300 nurses and 120 doctors. The Hospital is the major health centre for one of the fastest-growing regions in the state of Queensland and provides a range of specialty services for children and adults. The ED is one of the busiest in the state and sees more than 88,000 presentations each year.

3.3 | Recruitment and data collection

Participation in the study was voluntary. Staff who held part-time or full-time employment in the target ED who had volunteered to participate in the research and had participated in a debriefing event within the department were eligible to take part. Staff who were employed on casual contracts, agency staff, staff who had not taken part in a debrief procedure and staff who declined to take part were not eligible to participate.

Due to the unpredictable nature of the ED and the challenges associated with shift work, a number of recruitment strategies were used including purposeful and convenience sampling. Understanding the views of both experienced and inexperienced staff was important in addition to representative views from nurses and medical doctors. A minimum of four participants from each clinician group were recruited as per Table 1. A mixture of face-to-face interviews and virtual interviews were conducted.

Advertising material was used to raise awareness about the research project amongst staff within the department. An option was added to existing debrief paper work to give staff the opportunity to indicate their willingness to take part in the research. Appropriate days for conducting interviews were determined in liaison with the Nurse Manager of the ED and the local debrief team CNC. Once interview days were decided, the principal investigator contacted potential participants who had identified their willingness to take part and who were rostered to work in the department on that day. Interviews were conducted during work hours and Interview times were negotiated in liaison with the shift manager and the participant.

The primary investigator, a registered nurse who was involved in the design and implementation of the quality improvement initiative, conducted all interviews. The primary investigator is a certified Mental Health First Aider and has worked as a critical care registered nurse for several years. A semi-structured questionnaire with prompts was developed to ensure that a consistent and focussed approach was taken during interviews (Appendix S2).

3.4 | Data analysis

All audio recordings were transcribed verbatim. Transcripts were analysed according to the six-phase approach described by Braun and Clarke (2006): (a) Familiarizing with the data, (b) Generating initial codes, (c) interrogating for themes, (d) reviewing themes, (e) defining and naming themes and (f) producing the report. Members of the

research team met on multiple occasions and were given access to the transcripts to review. Members then independently identified several emerging themes and subthemes. Findings were discussed and a shared understanding was developed and reviewed.

4 | ETHICAL CONSIDERATIONS

The study was reviewed and approved by the Metro South Health Service District Human Research Ethics Committee (HREC/2020/QMS/65976).

5 | RESULTS

5.1 | Participant demographics

A total of 17 interviews were conducted. Interviews ranged between nine and 24 min in duration. Thirteen registered nurses with various levels of clinical experience and four ED doctors agreed to participate (Table 1). The participants of the study were mostly female. Of the 13 nursing participants, only three were male. However only one of the doctors interviewed was female.

5.2 | Themes

A total of 52 codes were generated during the thematic analysis of the interview transcripts (Figure 1). These codes were then discussed and collated in to 11 subthemes and three overarching themes that highlight the perceptions about the structured debrief/follow-up initiative that emerged during the interviews (Figure 1).

5.2.1 | Theme 1: Understanding and perception of the follow-up initiative

All participants in this study had previously participated in the debriefing procedure. However, the option to request a follow-up is discretionary and it was found that follow-ups are only requested in relatively rare cases. Additionally, having requested a follow-up was not a prerequisite for participating in this study. Three of the nursing staff and none of the doctors who were interviewed had requested and/or received a formalized patient follow-up through the initiative.

As such, all participants were asked questions to gauge their comprehension of the follow-up initiative. Most participants had a sound knowledge of the initiative, with one or two requiring some clarification about the process. Where clarification was required, participants were given a brief overview, which allowed them to consider the hypothetical implications of the initiative.

Formal versus informal follow-ups

One of the sub-themes identified was the comparison between the status quo (informal follow-ups) and the formalized follow-up process. Participants identified a difference between their experience of gaining informal follow-up through word of mouth versus the potential to gain formal follow-up information about the outcomes of their patients. All the doctors who were interviewed agreed that following up on patient outcomes was a pre-existing aspect of their clinical practice. However, many of the nursing staff felt that there were several factors that influenced their ability, or inability to request follow-up information about their patients prior to the formalized follow-up initiative being implemented. *One nurse said '… previous to this being implemented (people) didn't feel empowered to be able to find answers … it was very frustrating that we didn't know what had actually happened to the patient' (G2—CNC1).*

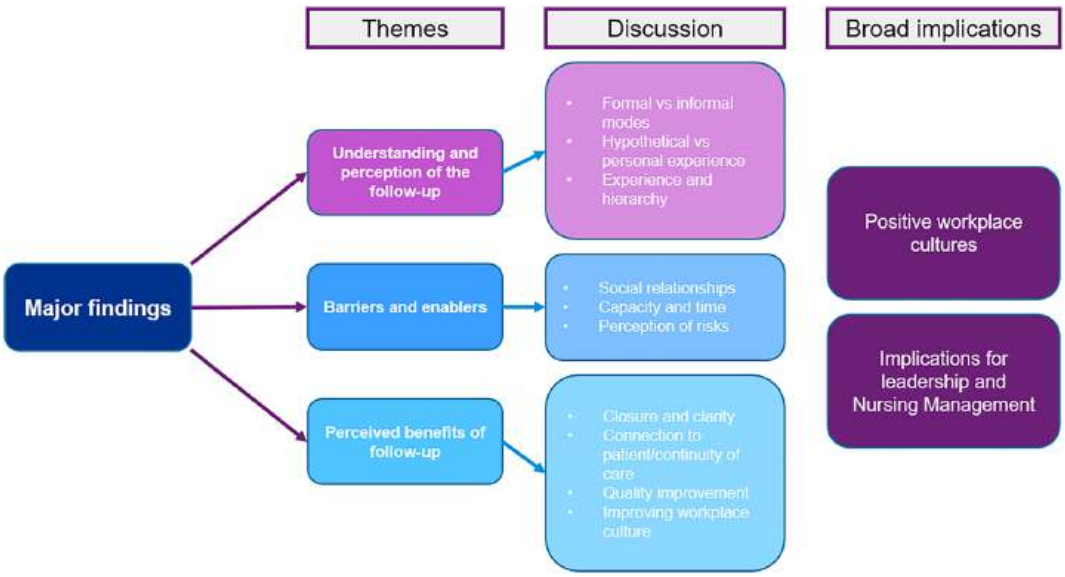

FIGURE 1 A representation of major findings following the thematic analysis process

Many participants in groups one and two referred to occasions when they had received an informal follow-up, usually by means of a brief hallway conversation with a more senior staff member or colleague. Unanimously, the perception was that these encounters did not add any clarity or give any sense of closure. Conversely, all participants who had received formalized follow-up through the debrief/follow-up initiative, believed that the initiative was conducted appropriately and added to their clinical understanding while offering a sense of closure. Many nurses discussed experiences of walking away from a resus situation without knowing what the outcome for the patient was. Many participants identified that this can lead to rumination.

Hypothetical versus personal experience

All participants who had experienced a follow-up first-hand were highly supportive of the initiative.

> … It was really good because in Emergency, people come in with a variety of critical illnesses and a lot going on. In the nursing profession, we're focused on tasks and doing things to stabilise the patient. Often, we don't really get time to understand the full picture … the debrief (and) the follow-up email have been really great for not only looking at the outcome and seeing that they had a positive outcome, but also understanding what was actually going on underneath all of the superficial symptoms. (CNC—1).

All participants in the study stated that they would like to receive follow-up information about the outcomes of patients for whom they have provided care. All participants viewed the potential to request formalized follow-up as a beneficial initiative and all saw the process as an opportunity for education. This was illustrated by a doctor in group three who despite not having received a formal follow-up was able to see the hypothetical benefit.

> … I think this is a great failure of emergency medicine across the board in that we see enormous numbers of patients, we make a lot of decisions, and we never know what happens. With the pressure of the four-hour rule, we make the same decision, we get more confident in the decision we make, and we never actually find out if it was a good decision or not. (G3—DR2)

Experience and hierarchy

It was found that generally, junior nurses were highly supportive of the process because it was perceived as helping deliver a learning experience while increasing psychological safety and providing closure following traumatic experiences. One junior nurse said *'… I noticed how helpful it was … once I'd had the resus experience where we didn't debrief' (G1—RN3)*. The nurse spoke about a missed opportunity to debrief and subsequently a missed opportunity to request follow-up about the patient's outcome following a highly stressful event.

The perspective of the more experienced nursing participants in group two was similar. Many of these participants identified ways that the initiative had impacted on them personally. One senior nurse said that it has afforded her greater job satisfaction and provides closure.

Further to this, participants in group two often spoke about the initiative as a tool that could be used for education and leadership purposes. Many of the senior nursing participants argued that the initiative is more beneficial to junior staff—identifying the added potential to provide education by highlighting patient outcomes and linking it back to clinical practice for staff with limited experience.

Senior nurses also seemed to draw on past experience and reflect on how this initiative may have benefited them as younger ED nurses. This was in slight contrast to many of the younger cohort of nursing participants who were more often considering hypothetical scenarios which may arise in the future. One senior nurse explained that she had developed a resilient and stoic mindset after working in ED for many years. She argued that she does not feel the need to follow up on many of her patients because ultimately the long-term outcome for the patient is unlikely to alter her practice.

However, when asked if she would have appreciated having easier access to follow-up information about her patients as a less experienced nurse she said *'… Yeah, I think I looked for it more then, because I didn't have as many coping mechanisms or resilience or ways to process what I do'. (G2—CN3).*

Many of the senior doctors also shared a similar perspective, often considering the initiative as a leadership tool as opposed to offering a direct benefit to them personally. One of the doctors in group three spoke about the motivation behind the debrief and follow-up initiative.

> I suppose it is for education purposes, but the motivation really is to make sure that people go home without unanswered questions. Because there's nothing worse than going home thinking could we have done this? What if we did that? (G3—DR2).

5.2.2 | Theme 2: Barriers and enablers of effective implementation

Social relationships

It was identified by participants in all interviews that social relationships within the department were a key factor in obtaining informal follow-up about the outcomes of patients prior to the formalized procedure being implemented. Nursing staff who felt that they had strong relationships with senior doctors felt empowered to seek out informal follow-up information, whereas staff who were yet to develop strong social connections with senior clinicians identified more barriers to informal follow-up. It was highlighted that the formalized follow-up process provided more consistency and equity of access to this information.

Capacity and time

A few barriers and risks to formalized follow-up were highlighted. Issues such as available resourcing to carry out the work and timeliness of information transfer were discussed.

The formal follow-up process requires senior staff capacity and time. Finding the workforce capacity to ensure that debriefings and subsequent follow-ups are conducted at an appropriate time and in an appropriate manner is an ongoing challenge for the department. Without a dedicated resource, the process to finalize a follow-up can take several weeks and even months.

Perception of risks

When asked about whether there was any negative potential associated with the initiative, one participant from group two identified the potential for the follow-up to allow traumatic memories to resurface.

> … if they (the person requesting follow-up) had worked through it (psychologically worked through the experience), processed it and then moved on from it, maybe getting the feedback a month or two months down the track might just bring up a bit more … (G2—CN2).

All participants in the study were asked whether they would like to know about the outcomes of their patients regardless of whether the outcome was positive or otherwise. Overwhelmingly, all participants responded that they would like to know about the outcome either way.

> … I personally can't see how having information of a follow up could be viewed as a negative thing. Definitely those that I've spoken to also agree that they like knowing what has happened to the patient. (G2—CNC1).

5.2.3 | Theme 3: Perceived benefits of follow-up of patient outcomes in an emergency setting

A recurring theme throughout the interviews was that staff perceived a variety of benefits relating to the follow-up initiative.

Closure and clarity

Many participants in group one suggested that the initiative provides a sense of closure or resolution.

> *… I absolutely 100 per cent think that the follow-up is really, really beneficial and a really nice closure of whatever the event is that's taken place … I think on a personal note, if you really invest that time in the emotional cause, then that is where so many of us get burnt out and fatigued because we have that emotional burden … we're giving so much of ourselves every day. (G1—RN6).*

Many nursing participants across both groups identified the fact that uncertainty can contribute to emotional fatigue. *One nurse said '… the alternative is you just get left wondering and I wonder if that's why we do get that emotional fatigue because we just have so much "what if" or "what happened?"' (G2—CN2).*

A common perspective amongst the senior doctor's related to their perceptions around personal performance or decision making. It was identified that ambiguity around the outcomes of the patient has the potential to lead to rumination and cogitation. It was suggested that providing closure can help to effectively reduce performance anxiety and increase psychological safety. When asked about whether the follow-up is useful or not, one doctor suggested that the initiative has the potential to improve psychological safety within the workforce.

> … It's invaluable … we like to pretend that medicine is complicated but it's not, it's complex. We bury things in work instructions and flowcharts, but in reality, nothing is black and white. Everything I do is a shade of grey. If I am in a non-psychologically safe situation, and I think this goes for everybody, I defend my practice. (G3—Dr3).

Connection to patient/continuity of care

Considerations about the ED environment and how workflows within the ED can negatively impact one's ability to feel a connection to the patient's journey were raised amongst the less experienced nurses in particular.

> … when you're working in ED, you always look after patients when they're really unwell. But you never know if they've gotten better because they go to the ward or they get transferred somewhere else or they get discharged … You never know if they've fully recovered. So … you've always got that unknown … (G1—RN1).

Quality improvement

Participants with more years of clinical work experience were more likely to highlight the opportunity for quality improvement as a benefit of following up on the outcomes of patients. Encouraging practices of reflection and evaluation were identified as some potential benefits of increasing awareness of patient outcomes.

> It would promote more of a culture of self-reflection and evaluation of practices and planning how we could improve… (G3—DR3).

A nurse in group two highlighted the potential to use the initiative to promote recognition of positive work practices and outcomes. When discussing how the follow-up is communicated to staff, she said *'it's not what we didn't do wrong, it's what we did well and what we could do better so it works great, I think' (G2—CN1).*

Improving workplace culture

Most participants reflected the perception that the debrief/follow-up initiative has made a positive impact on the culture within the wider workplace. Participants in groups one and two shared a perception that the initiative builds cultural resilience and helps to create a psychologically safe environment. *One nurse explained that '… in the past, most of the culture (in the department was that) you either toughen up or you leave' (G1—RN7).*

When discussing how the initiative has had an impact on the culture in the department, one participant said *'It allows you to express those things and actually deal with them and then move on…' (G1—RN7).* This was a similar perspective to a senior nurse who said that she felt that staff are now more culturally empowered to be interested in the outcomes of their patients. *They said '… I think it's had a positive effect because previous to this being implemented, people didn't feel empowered to be able to find answers. I think it creates a more psychologically safe department' (G2—CNC1).*

Another nurse from group two suggested that the initiative has had an impact on staff morale.

> … it definitely improves our staff morale because it's something that everyone talks about and thinks about. People are more self-aware of their own fatigue and burnout and wellbeing and so forth. (G2—CN2).

Participants from group three identified the perception that the initiative was helping to improve multidisciplinary communication practices, especially with regards to strengthening communication channels between senior medical staff and junior nursing staff.

> It strengthens the team building and hopefully encourages more engagement too, particularly between the senior medical officers and the junior nursing staff who don't necessarily interact all that much. (G3—DR1).

6 | DISCUSSION

This research identified unanimous support for the initiative amongst participants and highlighted several positive impacts on workplace culture and staff wellbeing. No negative implications relating to the initiative were identified. The follow-up aspect of the debrief/follow-up initiative was implemented to highlight positive patient outcomes and in turn, potentially impact on levels of staff burnout within a busy ED although this was not measured in the study. The follow-up initiative was developed using principles of positive organizational scholarship and on the back of anecdotal evidence. The implications for the nursing workforce are particularly evident in the findings.

6.1 | The perceptions of participants

The level of experience of participants, along with the hierarchal structure of the workplace was observed to have some bearing over the participants perceptions around the benefits of the initiative. Amongst the less experienced participants, there was a general acknowledgement that work in critical care environments can be highly stressful and traumatic and that this initiative has the potential to protect their own psychological wellbeing in situations that may occur in the future.

While the younger and less experienced cohort of participants perceived the benefits of the initiative at the individual level (i.e., benefits to self), participants with more experience were often more likely to identify how the initiative could benefit others. There were also more stoic attitudes amongst the more experienced participants, with some senior nurses and doctors suggesting that they do not benefit directly from the formal follow-up. However, when asked to consider the benefit for others, all participants could identify the potential benefit for the younger generation of clinicians.

Furthermore, it was observed that staff who were yet to develop strong social connections with senior clinicians identified more potential benefit from the standardization of the follow-up process. The importance of this finding is the perception that the formalized follow-up process allows for more consistency and equity of access to information regarding patient outcomes. It was recognized that the standardized process for offering follow-up, means that all staff are now given an opportunity to request the information and therefore do not need to rely on their relationships with senior staff members to do so. This is particularly important for the younger and less experienced clinicians within the department who have not had the time to develop strong relationships with senor clinicians. With the commonly held perception that this cohort is more likely to receive individual benefit from the initiative, the enabling of more equitable access to follow-up information is a significant finding.

6.2 | Risks

The risks identified by participants were in relation to the potential delay in receiving information as a direct result of limited workforce capacity to conduct the follow-up process. It is an ongoing challenge for leadership within the department to ensure that the follow-up process is conducted in a consistent and timely manner.

This also raises a question as to whether participants would in fact prefer not to know about the outcomes of their patients after they have left their care. However, all participants stated ultimately that they would like to know about the outcomes of their patients, whether positive or otherwise.

6.3 | Positive workplace cultures

There is a great deal of ambiguity and uncertainty regarding the longer-term outcomes of patients in the ED setting. This is

confounded by the role that the ED plays in the triage and stabilization of critically unwell patients. Most commonly, patients who present to the ED in a critical condition are rapidly stabilized and transferred to another area within the hospital or a different hospital facility with more specialized clinical expertise. As a result, ED staff often see the patient when they are in their most critical condition. Once the patient is transferred to another care environment (typically the Intensive Care Unit) a handover of care is conducted, resulting in a transfer of responsibility for the patient's ongoing care. Commonly, this transfer can happen before the patient's condition is fully differentiated.

The degree by which the follow-up initiative has reduced uncertainty experienced by ED clinicians would require further research. However, the reported perception of increased job satisfaction and improved psychological safety is a significant finding. In health care, psychological safety amongst teams can positively impact on team performance. A psychologically safe environment can support patient safety by empowering staff to report issues and more actively engage in quality improvement initiatives (O'Donovan & McAuliffe, 2020). In environments that are considered to be psychologically safe, there is less incidence of burnout and higher levels of staff retention (Vévoda et al., 2016).

Furthermore, the initiative appears to have impacted the levels of social capital amongst the medical and nursing workforce. Direct comments were made by participants about the benefit of improving communication and engagement between members of the multidisciplinary team. With setbacks being plentiful in emergency medicine, the potential to impact levels of social capital in this context should not be overlooked.

Furthermore, the potential implications of the negativity bias in health care should also be considered within the context of the findings of this study. Negative experiences have a greater impact on our behaviour and their effects last longer in our memories (Hambley, 2019). Due to the intense nature of the environment, the negativity bias is a natural occurrence in the ED setting (Lee, 2021). We instinctively bias towards reflecting upon negative experiences to protect us from making the same mistakes twice (Hambley, 2019). It's possible that the follow-up initiative may be helping to shift the focus slightly away from the negative and broadening awareness to include positive outcomes that may have otherwise gone unnoticed. However, more research is needed to evaluate the impact of similar quality improvement initiatives on the prevalence of a negativity bias in the ED.

The findings of this study suggest that the debrief/follow-up process has allowed nursing staff to seek a sense of closure and to gain clarity in situations that are normally rife with uncertainty and to feel safe in doing so. Junior nurses now feel a sense of security going into stressful situations, knowing that the opportunity to request follow-up information about the patient is available. Furthermore, senior clinicians appeared supportive of the utility of the initiative in providing answers in medically complex situations and allowing for better quality improvement practices. Communication links between the multidisciplinary team have reportedly improved which may have resulted in increased social capital within the department. The language used by participants in many of the interviews is indicative of a flourishing organization.

6.4 | Study limitations

The level of work experience within this sample is a limitation. The recruitment of a diversity of senior and junior nurses as well as senior and junior doctors potentially would have enriched the findings. However, due to the unforeseeable impacts of COVID-19 and subsequent difficulties in recruiting participants, the junior doctor cohort was not represented. Further, only four senior doctors were interviewed which resulted in limited diversity of perspectives from the medical cohort.

7 | CONCLUSION

This study indicates the positive impacts of employing a deliberate and formalized approach to enabling staff to access follow-up information about the patients for whom they provide life-giving care in the ED. The follow-up initiative provides a new experience for nursing staff in this setting. Nurses now feel empowered to be curious about the outcomes of their patients. The benefits to the younger and less experienced cohorts within the workforce are particularly evident. Health care organizations should consider trialling similar initiatives that improve connectivity, highlight positive results and offer a sense of closure. Further evaluation on staff satisfaction and organizational culture would be beneficial.

The reported impacts on psychological safety and job satisfaction as a result of this initiative would undoubtedly be having an impact on team dynamics within the department. However, accurately identifying safety and quality improvements would require further evaluation. The findings of this qualitative study highlight opportunities for furthered investment in the development and leadership of social capital building initiatives on a broader scale.

Developing standardized practices to communicate patient outcomes back to clinicians who work in the ED setting following stressful situations at work may be an effective strategy in building cultural resilience, improving quality improvement practices and reducing burnout amongst staff who work in these areas. However, the example considered in this study is one initiative and should not be viewed as a standalone solution. To holistically address burnout amongst ED clinicians, it is recognized that a comprehensive and multifaceted management strategy is required (Wei et al., 2017).

8 | IMPLICATIONS FOR NURSING MANAGEMENT

Leadership from Nurse Unit Managers (NUMs) is a critical factor in enabling a cohesive workplace culture and ensuring the success of quality improvement initiatives in health care (Sfantou et al., 2017).

The implementation of the structured debrief and formalized follow-up initiative was a significant quality improvement undertaking and required considerable buy-in from both medical and nursing leadership within the department. Support from the NUM was particularly important in ensuring the successful implementation of the initiative and helped to create agency amongst staff. Furthermore, the leadership offered by the NUM along with other nursing and medical leaders was crucial in ensuring integration of the practice into the culture of the department and in encouraging rigorous evaluation.

It is of great importance that NUMs create supportive environments for staff to work towards improvements that may impact on the wellbeing of the workforce. It is crucial that leaders in health care organizations encourage an investment in wellness-related quality improvement initiatives (Sfantou et al., 2017). The role of Nursing leaders in positively impacting the well-being of the workforce is crucial (Pappas, 2021). NUMs should consider the findings of this research and understand the crucial role that nursing leadership can play in fostering the design and implementation of similar initiatives.

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CONFLICT OF INTEREST

All authors declare that there are no conflicts of interest with regard to this study.

ETHICAL STATEMENT

The study was reviewed and approved by the Metro South Health Service District Human Research Ethics Committee (HREC/2020/QMS/65976).

AUTHOR CONTRIBUTIONS

JP was responsible for data collection and writing the manuscript. All authors contributed to the thematic analysis of the interview transcripts, provided feedback on the draft manuscripts and approved the final version.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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ORIGINAL ARTICLE

WILEY

Medical staff's sentiments on the establishment of quiet time in the NICU

Shu-wen Zhang MD, Nurse[1] | **Wei Hua Postgraduate Student, Nurse**[1] | **Li-ling Li MD, Head Nurse**[2] | **Yun Cao PhD, Chief Physician**[2] | **Xiao-jing Hu PhD, Deputy Director of Nursing Department**[2]

[1]Fudan University School of Nursing, Shanghai, China

[2]Children's Hospital of Fudan University, Shanghai, China

Correspondence
Xiao-jing Hu, Children's Hospital of Fudan University, Shanghai, China.
Email: humama2015@126.com

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Abstract

Aim: To explore the sentiments of medical staff in setting quiet time in a tertiary neonatal intensive care unit.

Background: Quiet time, which can help create a healing neonatal intensive care unit environment, is increasingly being valued by hospital administrators.

Methods: Semi-structured interviews were used to interview 12 neonatal intensive care unit staff members, with data analysed using the content analysis method.

Results: This study extracted four themes: support, concern, education and teamwork.

Conclusions: If quiet time needs to be set up, implemented and maintained in the neonatal intensive care unit, it is necessary to establish a quiet time culture throughout the whole ward, to carry out detailed management of quiet time and to cooperate and communicate with multidisciplinary departments.

Implications for Nursing Management: To keep the ward quiet and minimize handling during quiet time, it is necessary to take adequate steps from a management level. Targeted staff training and education allow staff to appreciate the necessity and urgency of setting quiet time for themselves and babies. It is also necessary to refine the educational content of noise reduction and minimal handling and provide clear guidance on the best means to carry out clinical work during quiet time. Nursing managers need to establish a monitoring system for NICU noise and manage various noise sources made from equipment and people.

KEYWORDS
medical staff, NICU, quiet time, sentiment

1 | BACKGROUND

The critical neonates are usually admitted in the neonatal intensive care unit (NICU) after birth. NICU is equipped with ventilators, ECG monitors and other equipments around the incubator. For critical neonates, medical interventions such as endotracheal intubation, artery or venous catheter indwelling and resuscitation will be performed beside the bed. The treatment of critically ill newborns usually requires a large number of medical staff, including physicians, primary nurses, breast milk nurses, respiratory therapists, etc. Radiologists and

other professionals are also needed. As a result, the NICU environment is often crowded, noisy and full of sleep interruptions. In China, NICU has long faced the problems of noisy environments and distractions (Zhang et al., 2022). The noisy and chaotic NICU environment not only cause adverse consequences such as unstable vital signs for babies but also cause medical staff in the NICU to be in a state of prolonged stress and tension. This leads to poor health consequences (McCullagh et al., 2022; Rodarte et al., 2019). Florence Nightingale once emphasized that nurses should provide a curative environment for patients (Rana, 2021). In recent years, medical staff have paid increasingly more attention to set quiet time (Zhou et al., 2021). The concept of quiet time is derived from long-term clinical experience and evidence from the literature. Initially, quiet time was proposed to keep the ward as quiet as possible and to provide a quiet environment for both staff and patients (Strauch et al., 1993). With the pursuit of a curative ward environment, the definition of quiet time has gradually expanded. At present, quiet time refers to *reducing the light and sound of the ward within a period of time while minimizing infant* handling (McAndrew et al., 2016). It is a measure worthy of promotion (Cao et al., 2020; Guo, 2015; Slevin et al., 2000). In recent years, the number of infants admitted to NICU in China has increased (Deng et al., 2021), who have a great demand for quiet time in NICU. However, setting quiet time means changing the working environment of the ward, which often requires staff to adjust and adapt their work methods and their own behaviour (Lower et al., 2002). The change could lead to resistance from medical staff to quiet time. The purpose of this study is to conduct interviews with NICU staff members to understand their sentiments on the establishment of quiet time in the NICU and to provide a reference for the clinical development of a more comprehensive quiet time management strategy.

2 | METHODS

This is a qualitative study. In June 2021, this study used phenomenological methods of interviews to explore the experiences of NICU staff in setting quiet time in the NICU, from which themes were extracted.

2.1 | Participants

Purpose sampling method was used to select doctors, nurses and clerks in the NICU as interviewees based on occupation, title and other information. Participants were recruited through snowball sampling. The researchers first invited medical staff to participate in the interview and then asked them to invite other medical staff. The inclusion criteria were commencement of employment in the NICU before December 2020 and voluntarily participating in the study. Those who withdrew from the study were excluded. Interviewees' information was shown in Table 1. A total of 12 NICU medical staff were interviewed, including five doctors denoted as P1–P5, six nurses denoted as P6–P11 and one clerk denoted as P12. The researcher and another nursing specialist completed the extraction of themes.

TABLE 1 Basic information of interviewees

	Gender	Age	Job	Title
P1	Male	47	Doctor	Associate chief doctor
P2	Female	43	Doctor	Attending doctor
P3	Female	37	Doctor	Associate chief doctor
P4	Female	54	Doctor	Chief doctor
P5	Female	45	Doctor	Chief doctor
P6	Female	51	Nurse	Senior nurse
P7	Male	23	Nurse	Nurse
P8	Female	30	Nurse	Senior nurse
P9	Female	38	Nurse	Supervisor nurse
P10	Female	54	Nurse	Senior nurse
P11	Female	25	Nurse	Senior nurse
P12	Female	43	Clerk	/

2.2 | Data collection

The researcher chose a comfortable place as the interview location. The interviewer is a graduate nursing student with a year of NICU work experience and an understanding of the daily work of the NICU. At the time of the interview, there were only one researcher and one interviewee at this location. Before the start of the interview, the researcher informed the interviewee that the entire interview would be recorded and they had the right to withdraw from the study at any time, sought the consent of the interviewee and asked the interviewee to sign an informed consent form. The interview was limited to 10 to 30 min.

2.3 | Interview outline

A semi-structured interview outline was formed based on the discussion of the neonatal intensive care team. The interview outline was: (1) As a staff member of the NICU, what do you think about the setting of quiet time in the NICU? (2) Do you think that setting a quiet time in the NICU will have any positive impact on your daily work? (3) Do you think that setting a quiet time in the NICU will have any negative impact on your daily work? (4) Do you have any suggestions for the specific implementation method of setting a quiet time in the NICU?

2.4 | Data analysis

The researcher initially sorted out the interview notes immediately after the interview, transcribed the recording within 48 h, listened to

the recording repeatedly, read the interview notes and transcribed the transcript. The purpose of this research was to investigate the sentiments of medical staff, so the data were analysed using the content analysis method. The specific methods were as follows: Read the transcript of the interview carefully and repeatedly until I had a sense of the whole. Broke down the data, analysed it line by line, obtained meaningful statements and coded them. Encoded and classified recurring sentences, objects and phenomena to generate themes. Repeated the steps until the theme is saturated. NVivo 11.0 was used for data analysis, extraction and notation of statements with importance. Recurring opinions were assigned a code and classified, with content analysed in a categorized manner.

3 | ETHICAL CONSIDERATIONS

Ethical approval was granted by the Ethics Committees of Children's Hospital of Fudan University (2021-296).

4 | RESULTS

This study extracted four themes: support, concern, education and teamwork.

4.1 | Support

4.1.1 | Acknowledge the positive effects of quiet time on premature infants

Setting quiet time in the NICU can undoubtedly increase the sleep time of premature infants, protect them from the chance of being disturbed by the outside world and benefit their growth and development.

> **Quiet time is definitely good for premature infants**, because combining interventions such as cares, feeds, and invasive procedures will definitely reduce repeated interruptions to them, and you will definitely startle them if you repeatedly interrupt them. With minimal handling, premature infants can be given longer rest. I think that **the more rest time the premature infants have, the better growth and development will be.** (laugh) (P7)

> In fact, I agree with the issue of quiet time, because I have also received a certain degree of NIDCAP training, and I also strongly advocate the ability to focus on handling, because **repeated interruptions to premature babies will have an impact on their brains**. (P2)

> We hope to minimize handling and focus on some cares and interventions, on the one hand, to allow the premature infants to rest; and this can **prevent intracranial hemorrhage in premature infants at an early stage**. If premature infants often have some painful stimuli, it may affect the development of the nervous system. Generally speaking, **the incidence of poor neurological prognosis of premature infants hospitalized in NICU is very high, so setting quiet time is also a protective measure for neurological development**. (P3)

> Those premature babies in the ward also need quiet. **I have children. I know that the premature infants in NICU are very small babies**. They are very fragile, so they need to be handled lightly in all aspects, and the impact on them will be less. Every time, I close the incubator gently and try not to make noise or disturb the babies. Because I think they are already disadvantaged by nature, we should give them more of a chance. (P12)

4.1.2 | Acknowledge the positive effects of quiet time on medical staff

Long-term exposure to the high-load, high-stress and noisy NICU environments can lead to fatigue and sleep disturbances among NICU medical staff (Bresesti et al., 2020). Setting quiet time in the NICU enables medical staff to have a relatively fixed rest time daily.

> Concentrating nursing interventions will keep us busy for a little while, and **in the rest of the time I can observe premature infants and think about how to take care of them.** (P7)

> If everyone tries to lower their voices or other sounds, the environment will be more peaceful. If someone is very noisy, this will also affect other colleagues. Poor rest will lead to a bad mood. I think **mood at work is related to the working environment**. If the working environment is quieter, medical staff mood will be better and they will be more motivated. (P12)

> In fact, **everyone wants to work in a quiet environment**. Sometimes if the environment is too noisy, the medical staff will be irritable. (P9)

> When we are talking, if you speak gently, I will speak gently too. On the other hand, if you speak loudly, I may speak louder than you, in case you can't hear what I'm saying. **It's even more troublesome for everyone to raise their voices together**. (P4)

It is recommended to perform interventions in a clustered manner in the NICU now. **If the interventions are done separately, it will take more time**, especially to put on and take off personal protective equipment. If the interventions are separate, I will need to don and doff PPE more than once and wash my hands many times. I think the ideal state in the NICU is a quiet environment with quiet babies, and the lights are turned off, the door of the ward is also closed, and the medical staff speak quietly. This is the most relaxing and restful environment for me. (P11)

4.2 | Concern

4.2.1 | Setting quiet time may change the pace of clinical work

If quiet time is set in the NICU, medical staff must adapt to an altered work rhythm, and the previously scattered interventions need to be readjusted and carried out together, which may take some time to adapt. Prior to adaptation of quiet time, changes in clinical work rhythms can cause them to worry about whether they can successfully complete daily clinical tasks.

If the number of inpatients is high, it will affect nurses' ability to perform clustered interventions. Once the number of babies in the NICU increases, during medication rounds, intravenous and oral medications may need to administered at the same time, and delay the timely administration of some medications. In other words, this model will result in clusters of high clinical activity with other periods of no activity. **In this case, nurses will feel that the clustered interventions will hamper nursing tasks from being done in a timely manner**. (P6)

In some countries, the care model in NICU is one-to-one or one-to-two. Relatively speaking, minimal handling is more feasible and individualized care can be achieved. **Our care model is relatively streamlined.** At the prescribed times for cares, if the baby is asleep, we will wake them up for the intervention. Because of this, there are less opportunities to personalize intervention times for the babies. (P2)

There are too many people entering and leaving the ward. They're not only nurses, but also doctors and other medical staff. Typically, babies are breastfed at prescribed times. With minimal handling implemented and nurses responsible for feeding babies, changing diapers, and suctioning, this can be an added burden for nurses. In the process of suctioning, if the baby desaturates or becomes otherwise unstable, suctioning needs to be paused until the baby stabilizes. One can imagine how this will add to nursing workloads, especially when the unit is short-staffed. (P8)

Many training doctors rotate through the NICU every six or twelve months. These new training doctors may not be aware of quiet time, and will inevitably affect its implementation. (P9)

4.2.2 | The critical nature of the premature infants' condition may affect the establishment of quiet time

Due to the critical condition of many premature infants in the NICU, the quiet environment of the ward is bound to be broken during resuscitation events. Medical staff generally have concerns about whether it is possible to cluster interventions and reduce noise.

Doctors may not understand: 'Why should I carry out interventions at the same time? If the babies' vital signs fluctuate, how can I simply observe them?' It goes without saying that the condition of NICU patients can change minute to minute. **Most of the time clinical concerns are false alarms or a temporary fluctuation of vital signs, and it is not necessary to act.** In this regard, it is only necessary to ask the doctor for a medical review. (P2)

We often need to perform some unplaned interventions on premature infants. For example, they may suddenly have abdominal bloating or need an enema urgently, or they might self-remove a nasogastric tube. Some interventions can wait, but if there is an actual sudden change in the condition of a premature infant, we must act as soon as possible. (P10)

If the premature infants' condition changes, we may need to make exceptions to the rules around minimal handling. (P5)

4.2.3 | Noise is difficult to monitor

In the NICU, it is difficult to quantify noise and evaluate its effect on the clinical work of medical staff. In the NICU, it is not only medical staff who make noise, but also various instruments and equipment. In addition, premature infants who are older also make noise. It is difficult to accurately measure the noise level emitted by individual medical staff. There will be a large error in the measurement of the noise emitted by each staff member. So it cannot be set as a regulatory indicator for individual medical staff.

I sometimes wonder why the noise in the NICU can't be reduced. There is a lot of noise, and the ward does look messy. Noise supervision is different from hand hygiene supervision. **Problems with noise cannot be solved by supervision or inspection of one or several people**. (P9)

4.3 | Education

Due to the large number of medical staff involved in the NICU, and as most do not understand the importance of quiet time, it is necessary to carry out targeted training and education for all medical staff.

"The NICU is still crowded. There are ventilators which cling to the incubator. When the staff fills the water tank of the incubator with water, they may use a lot of force to open the water tank of the incubator, and then add sterilized water to the container. These will make the incubator shake, causing a relatively loud noise, which will disturb the premature infants. Sometimes staff will communicate loudly in the premature infants' room. They need to pay attention to their voice and speak more gently." (P6).

In my opinion, we still need to raise everyone's awareness. **Not all doctors have the awareness of performing clustered interventions on premature infants and know the importance of protecting their sleep.** Some doctors still think: 'I can perform interventions on premature infants at any time.' It is necessary to change their paradigm and let them realize that clustered interventions are important and as such they should minimize the number of disturbances to the premature infants. I think it can still be instilled continuously from the ward rounds and through education sessions. (P2)

It is very important that everyone should realize the importance of clustering interventions and reducing noise, and to **have a common understanding of quiet time**. We need to create this culture and let more people know what we are doing in the NICU. (P3)

In fact, stepping on lever to open the trash can and touching the incubator actually can make a lot of noise. **We should educate the medical staff on how to reduce the noise we make.** (P11)

4.4 | Teamwork

The premature infants in NICU will be disturbed from their rest by different teams every day, including doctors, nurses, medical imaging specialists, phlebotomists and physiotherapists. These routine interventions often occur multiple times and irregularly, disturbing the sleep of premature infants. Therefore, setting quiet time in the NICU requires the participation of these medical teams together to discuss and adjust the time each team disturbs the premature infants, avoiding the quiet time as much as possible and ensuring that other premature infants will not be disturbed during quiet time.

If **doctors and nurses can understand each other's workflow**, I think the environment of the NICU will be better. The premature infants' outcomes will improve when there is more communication between doctors and nurses. (P7)

The management of premature infants is not a one-point management, but comprehensive. First, I think that doctors and nurses must have a consensus on the understanding of babies. Once there is a consensus, the push for quiet time will be smoother. **During medical rounds and nursing rounds, there can be more integration and communication.** There needs to be a communication between doctors and nurses on the daily arrangements for the babies, so that we can better coordinate these interventions. I think it will be more conducive to the specific implementation of clustered interventions if doctors and nurses communicate with each other every day or every few days. (P1)

Medical staff need to clearly communicate the details of their daily work. For example, when the doctor has just finished a procedure on the premature infant, he/she should communication with the nurse to check if the nurse needs to complete cares, such as changing of a diaper. The nurse can ask the doctor while doing routine nursing: 'Do you want to examine the baby now?' Doctors and nurses can remind each other. (P2)

Nurses have more autonomy in these systems, probably because the nurse-patient ratio is ideal. This isn't saying that the nurses should order the doctors around, because the management of premature infants needs to be done together with the doctors and nurses together as a team. If it is not in the interest of the premature infant to be disturbed, the nurse can suggest that the doctor wait for a while before conducting a physical examination or a procedure on the baby. **When communicating, attention should be paid to how it is done**. It not appropriate to use an imperative tone as it can hinder good communication. (P3)

I think the interventions for premature babies can be clustered. If the medical and nursing interventions are planned ahead of time, the stress of being busy all the

time can be avoided. It may take a little more organization for the nurse to sit down and deal with the paperwork after all the interventions that can be done together have been finished. **This requires guidance from managers.** (P4)

5 | DISCUSSION

The noisy and hazardous environment of the NICU does harm to premature infants (van den Hoogen et al., 2017). First, the sleep of premature infants admitted to NICU is frequently interrupted by noise and medical interventions (Hasanpour et al., 2017). One study monitoring the babies in NICU with video found only half of the babies had enough time to complete a 60-min sleep–wake cycle (Levy et al., 2017). Long-term and repeated interruption during sleep of the premature infant will shorten their rest time and affect their growth and development. In addition, premature infants are at a critical stage of development while in the NICU, during which a noisy environment can have adverse consequences for the premature infants' neurological development (Cheong et al., 2020). It was found that infants' neurons are less resistant to the harmful effects of noise (Musacchia et al., 2018). Stress caused by the noisy environment of the NICU can lead to increased energy expenditure in preterm infants, which negatively affects neurological integration and growth and development (Gomes et al., 2019). At present, the adverse effects of noisy environments on premature infants are often underestimated in the clinical setting, and managers need to be more mindful in creating a healing environment in the NICU (Disher et al., 2017).

The high-intense and noisy working environment of the NICU can also have a negative impact on medical staff (Choiniere, 2010). Medical staff in NICU have to complete many tasks in a short period of time. It results in prolonged periods of intense concentration at work and little time for mental and physical relief (Skorobogatova et al., 2017). In addition, the uncontrollable noise environment of the NICU can exacerbate stress and discomfort of clinical staff (Liu et al., 2020). Studies have found that noise may be a major contributor to an increased baseline heart rate, tachycardia and stress, agitation among clinical staff and increased likelihood of medical errors and lower employee retention (Guo, 2014). Therefore, it is important to assess the negative impact of noise in healthcare environments on clinical staff.

This interview found that NICU clinical staff generally expressed that they found it necessary to set quiet time in the NICU. They believe that the concept of quiet time can reduce the energy consumption of premature infants, protect their neurological development and improve their prognosis. The clinical staff have common sense of care for the special group of high-risk neonates (Fortney et al., 2020). In this interview, we found that medical staff subconsciously want to protect premature infants, do not want them to receive too much stimulation and hope that they can get enough rest and grow up healthily.

Long-term exposure to a noisy environment will make clinical staff feel irritable and fatigued (Kujala & Brattico, 2009; Molina et al., 2016; Zeydabadi et al., 2019). In this interview, clinical staff believed that setting quiet time could relieve the pressure of clinical work to a certain extent and allow them to have a defined time to rest and relax their minds, which is consistent with the results of Riemer's research (Riemer et al., 2015). In this interview, some medical staff thought that in a noisy environment, communication is often more physically intensive. People may need to raise their voices to communicate effectively and to ensure other people can hear them clearly. Reducing the noise of the ward can effectively solve this problem so that clinical staff in the ward can speak in a softer voice, save their physical strength and improve their mood.

While the advantages of quiet time are obvious, it is difficult to implement (Casey et al., 2020). In this interview, many interviewees expressed concerns about the challenges of implementing of quiet time. Firstly, the current NICU nurse–patient ratio is not ideal. In China, one nurse often takes care of three or more infants in NICU. Premature infants need to receive a lot of nursing interventions. These interventions need to be completed at set times. NICU nurses also need to complete paperwork. When the vital signs of babies fluctuate, nurses also need to go to the bedside. If the 'one-to-many' responsibility nursing model is simply adopted, nurses will work continuously and cannot get a rest. Secondly, the current nursing process in the NICU is not conducive to the development of quiet time. Due to the shortage of nursing human resources, most NICUs in China still adopt the process of 'on-time care'. For example, we feed all premature infants and change diapers of all premature infants according to the schedule. If the interventions are clustered, it is difficult to ensure that every baby can receive care in a timely manner. In addition, the NICU often needs the assistance of other departments or auxiliary departments. When the condition of a baby deteriorates, staff from other departments will come to the NICU to perform interventions on the baby. In this case, the interventions are often not clustered, and the quiet environment in the ward is often broken. It is often difficult to communicate with other departments and reach a consensus on maintaining quiet time like with internal NICU clinical staff. The rapid changes in the preterm infant's clinical condition can also pose a challenge. In the NICU, most bedside monitor alarms turn out to be false alarms or a reflection of short-term fluctuations in vital signs, which do not require clinical intervention. However, in situations where the clinical condition of the patient deteriorates, it has the potential to be very dangerous, like apnoea or cardiac arrest. Therefore, some clinical staff believe that if they do not clinically assess the baby upon alarming of the bedside monitor, they may miss acute deterioration.

In this interview, some medical staff thought that the overall reduction of noise in the NICU is a great challenge, and the supervision of noise is one of the challenges in setting the quiet time. The noise in the ward is caused by both equipment and people (Darcy et al., 2008). Due to the large number of equipment and personnel that can emit noise in the ward, it is impossible to attribute emitted noise to individual sources. Although ward noise levels can be

quantified through meters, unless there is a dedicated person to measure and record the noise, it is impossible to determine the source of the noise and take action to rectify the issue. Exploration of other methods of controlling noise in the NICU is required.

It is necessary to carry out relevant training and education for NICU clinical staff before setting quiet time in the NICU and provide the tools for them to recognize the importance and urgency of providing premature infants with a good resting environment (Swathi et al., 2014). The concept of quiet time should be immersed into the collective work culture of the NICU. Specialist or senior doctors and nurses should take the lead in maintaining quiet time. In this interview, some interviewees believed that if they did not pay much attention, routine actions can also cause loud noises. In this research, we found that to avoid these frequently occurring noises, it is necessary to increase awareness on how to reduce noise and maintain the quiet state of the ward. In addition, it is necessary to emphasize the specific harm of noisy environments and frequent interventions to clinical staff in day-to-day clinical work, as well as the specific benefits of setting quiet hours in the NICU for them, increasing the appeal of abiding to set quiet times (Disher et al., 2017).

The collaboration of multidisciplinary medical teams could ensure that various interventions are performed before or after quiet time (Goeren et al., 2018). In this interview, several interviewees mentioned the importance of multidisciplinary teamwork. The first is the cooperation between doctors and nurses in the NICU. At present, when doctors and nurses perform routine interventions, they will try to space a certain period of time from the previous intervention. This practice will cause premature infants to be disturbed many times a day from regular intervals. During interviews for this study, many doctors and nurses expressed their desire to improve the process of carrying out interventions.

Regarding interventions performed by other departments, the person in charge of the NICU can negotiate with other departments and inform them of the importance of setting quiet time for premature infants. After soliciting their cooperation, the multidisciplinary medical team can jointly plan the appropriate time for the premature infants' bedside intervention. When quiet time is implemented in the NICU, it requires the effort of all members to implement change in the complex NICU environment.

6 | LIMITATIONS

This was a qualitative research. Because the resident doctors were busy with their daily work and could not be interviewed, we hope researchers can learn more about doctors' views on setting quiet time in the NICU.

7 | CONCLUSIONS

Quiet time is good for both babies and medical staff, but the lack of nurse manpower, the process of 'on-time care', visits from other departments, the acuteness of the babies' condition and the difficulty of monitoring noise can make quiet time difficult to implement. NICU clinical staff interviewed believed that if quiet time needs to be set up, implemented and maintained in the NICU, it is necessary to establish a quiet time culture in the whole ward, to carry out detailed management of quiet time and to cooperate and communicate with multidisciplinary departments.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

In this study, NICU clinical staff were interviewed about their experiences of setting quiet time in NICU and reflecting on their views of setting quiet time in the NICU. First, clinical staff recognized the positive effect of setting quiet time in the NICU. They believed that the ideal quiet time can protect premature infants while allowing clinical staff to rest and reduce clinical work pressure. However, the current implementation of quiet time in NICU requires improvements in the ratio of NICU staff, medical care processes and coordination with other departments. To keep the ward quiet and minimize handling during quiet time, it is necessary to strengthen the management of clinical work. The training and education could make clinical staff deeply realize the necessity and urgency of setting quiet time for themselves and babies. It is also necessary to refine the educational content of noise reduction and minimal handling and clearly inform clinical staff on how to carry out clinical work during quiet time. In addition, managers need to establish a monitoring system for NICU noise and manage various noise sources (i.e. people and objects). By sharing the experience of a tertiary NICU clinical staff on setting quiet time in the NICU, this study provides information for the managers of other neonatal wards and adult wards to set quiet time, so as to further create a healing ward environment.

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CONFLICT OF INTEREST

All authors disclosed no relevant relationships.

ETHICS STATEMENT

Ethical approval was granted by the Ethics Committees of Children's Hospital of Fudan University (2021-296).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ORIGINAL ARTICLE

WILEY

Success factors when implementing a structured support model for systematic work environment management in operating departments: A case study from Sweden

Erebouni Arakelian MSc, PhD, RN, Associate Professor Nurse Anaesthetist, Intensive Care Nurse[1] | **Fredrik Molin PhD**[2,3] | **Magnus Svartengren MD, PhD, Professor**[3]

[1]Department of Surgical Sciences, Uppsala University, Uppsala, Sweden

[2]IPF, The Institute for Organizational and Leadership Development at Uppsala University, Uppsala, Sweden

[3]Department of Medical Sciences, Occupational and Environmental Medicine, Uppsala University, Uppsala, Sweden

Correspondence
Erebouni Arakelian, MSc, PhD, RN, Associate Professor, Nurse Anaesthetist, Intensive Care Nurse, Department of Surgical Sciences, Uppsala University, Uppsala University Hospital, Entrance 70, 1st Floor, 751 85, SE Uppsala, Sweden.
Email: erebouni.arakelian@surgsci.uu.se

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Abstract

Aim: The study aimed to investigate how departments in a Swedish hospital worked with a structured support model between the sessions and what they identified as success factors.

Background: To improve the work environment in a Swedish hospital, a structured support model for systematic work environment management was implemented in operating departments. The structured work starts with sending a web-based, open-ended, anonymous questionnaire to all employees. In response, employees describe how they perceive their work environment 'right now'. Next, a session is held where employees' viewpoints are discussed, and areas of improvement are agreed upon. Action plans are created between the sessions, and the employees start working with their plans with support from their managers. Implementing new models takes time and requires efforts from employees and managers.

Method: A case study was conducted, including three operating departments within a perioperative organization in a university hospital in Sweden. The participating departments had used the model without interruption during the Covid-19 pandemic 2 years after implementation, and they had created a customized working method. Three first-line managers were interviewed, and 22 action plans, 21 workplace meeting notes and two presentations were analysed using thematic analysis.

Results: The results are sorted under three main thematic headings: Experience of results and benefits, Marketing and cheering on and Making adjustments and making the model one's own. The results from the action plans and workplace meetings indicated that the employees had discussed problems with cooperation, work organization and how to treat each other.

Conclusion: Human factors, such as support, encouragement, seeing the benefits, allowing for time and respecting each other can facilitate and contribute to the implementation and success of a new model.

Implications for Nursing Management: The main finding of the study indicates that with a structured way of working, and with the participation of the employees in the

systematic work environment work, the employees contributed with constructive suggestions for improvement. This, in turn, contributed to reducing the workload for first-line managers. In addition, when working with a structured model, deficiencies in the workplace were identified, which triggered an improvement process in the participating hospital departments.

KEYWORDS
implementation, nurse, perioperative, structured work model, work environment

1 | BACKGROUND

According to Swedish legislation, in workplaces, employees and their managers are obligated to create and maintain a healthy work environment (Swedish Work Environment Authority, 2001, 2015a, 2015b). Despite regulations, there are still organizations in Sweden that do not manage their systematic work environment work properly (Frick, 2014). The demand on health care is high and increasing in the world, especially in Sweden, and it is a challenge to recruit and keep personnel in the healthcare sector. Systematic work environmental management should improve the development and increase the attraction for employees to work and remain within the healthcare sector. A structured way of working with work environment issues should include employees and stimulate them to find constructive solutions to what they identify as environmental challenges. In turn, managers can be relieved from findings all answers.

1.1 | Work environment in a perioperative context

Perioperative context (pre-, before; intra-, during; and postoperative, after surgery) means working in a high-tech work environment, and employees can be affected by poor working conditions and poor work environment (Logde et al., 2018), which, in turn, affects the quality of patient care (Aiken et al., 2012; Woo et al., 2017), and patient safety (Logde et al., 2018). Wålinder et al. (2018) describe that 30% of almost 1000 perioperative employees (including nurse anaesthetists and operating room nurses) had sometimes thought of leaving their position (during at least 1 month in the last year). A shortage of nurses is a general problem (Drennan & Ross, 2019), especially in perioperative contexts where it may lead to surgeries being cancelled. Logde et al. (2018) described that nurse anaesthetists and operating room nurses left their jobs for several reasons: the nurse managers' betrayal and dismissive attitude, inhumane working conditions and colleagues' dismissive behaviour. In contrast, factors that contributed to nurses staying in perioperative contexts were organizational stability with low staff turnover, good spirits between colleagues, to recognize everyone's equal value at the workplace, sustained development in one's own profession and a humane nurse manager who helped employees to develop (Arakelian et al., 2019).

1.2 | Using a structured support model in a perioperative context

A structured support model was described by Svartengren and Hellman (2018) for systematic work environment management. The model is flexible and can be used with a successful outcome, both in municipalities and in a perioperative setting in hospitals with their unique working context. Working with the model, employees and their leaders are engaged in managing their work environment in a structured and systematic manner. There are three to four cycles in the model annually. A cycle starts with sending a web-based, open-ended, anonymous questionnaire to all employees. In response, employees describe how they perceive their work environment 'right now'. Next, a session is held where employees' viewpoints are discussed, and areas of improvement are agreed upon. Action plans are created between the sessions, and the employees start working with their plans with support from their managers. Each cycle is to be repeated three to four times annually. There is a built-in process feedback measurement in the model called Human Resources Index (HRI), which can be measured at any given timepoint as a single measure (see Figure 1). Changes in HRI value can be used to evaluate how the work environment changes over time (Molin et al., 2021). A longitudinal quantitative study by Arakelian et al. (2021) reported a positive trend in HRI, concluding that a structured support model is a helpful tool, and HRI is a simple measure to follow-up on work environment processes.

1.3 | Implementing a new model in new settings and the role of leadership

Hojberg et al. (2018) identified four dimensions for a successful implementation of an intervention: a supportive organizational climate, a workplace with mutual goals for employees, and an 'attractive' intervention, which can be adapted to the workplace. In contrast, Martinsson et al. (2016) indicate that long-term implementation of interventions in organizations tend to fail if they do not produce rapid results. Moreover, finding a suitable intervention for a specific workplace is a challenge that needs to be addressed, as interventions work differently in various contexts (Goodridge et al., 2015; Greenhalgh et al., 2015). It is important to consider that interventions that are found to be effective in research may not be successful in practice

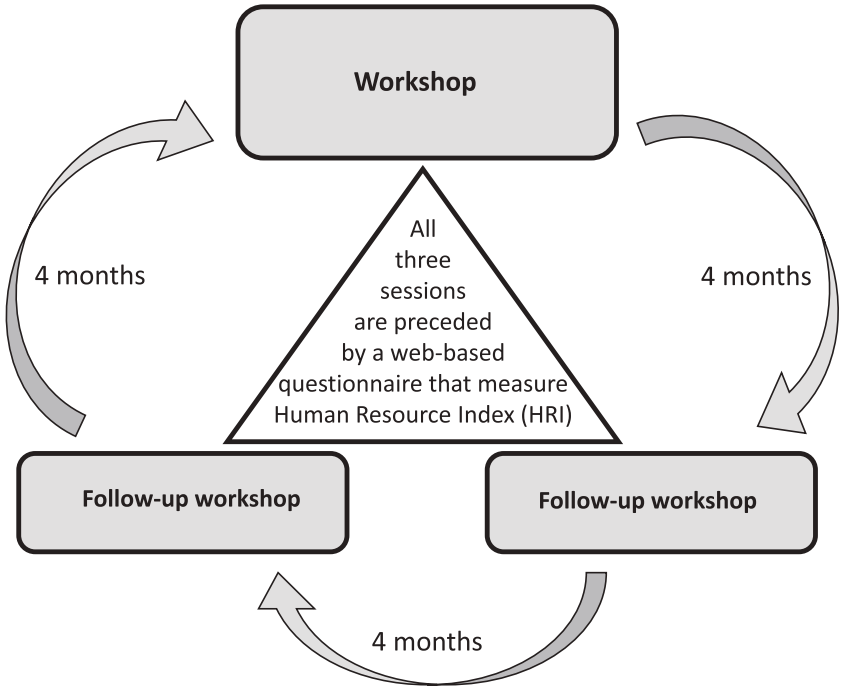

FIGURE 1 The yearly cycle of the Stamina model

(Hojberg et al., 2018). However, there is still a knowledge-gap regarding why an intervention is successfully implemented in several workplaces in an organization but fails to succeed in other workplaces in the same organization.

Leaders have an important role in the implementation process. Mann (2009) argued that 80% of the effort in implementation depends on changing the leaders' mindset, their practices and behaviours, as they set the tone for their employees. Mackenzie and Hall (2014) emphasize the leaders' important role in creating a vision and facilitating the understanding of the benefits of the intervention for the individuals and the organization as a whole. Leaders may have different roles during different phases of implementation. They may support implementation by motivating others, establishing goals and removing barriers. Some leaders work by delegating duties, or by 'modeling the way'. Arakelian et al. (2020) pointed out that the 'culture' of the organization, and the definition of the role for managers and the employees were important when implementing a structured support model in a perioperative setting. The results emphasized that there had to be a 'paradigm shift' in the role of employees, who more likely have a passive role, while managers are the active part in the implementation process. The managers were described as role models, the ones who the employees followed. Also, they needed to take a step back and allow the employees to step forward and take greater responsibility in the implementation process. Role description, goal definition, timely feedback and sticking to one model were defined success factors. Molin et al. (2020) who studied first-line managers' experiences of implementing a structured support model in Swedish municipalities reported similar results. They found that despite managers' experiences of discomfort when giving the responsibility of working with work environmental issues to employees, they were impressed by their employees' success. Managers balanced between being quiescent and, at the same time, actively monitoring progress in the work.

Thus, the work environment in a perioperative setting places specific demands on the employees. The structured support model was implemented in perioperative settings in a university hospital in Sweden as a continuation of a larger project (Svartengren & Hellman, 2018) to support work environment management. This study investigates success factors when implementing and using the model.

2 | AIM

The study aimed to investigate how departments in a Swedish hospital worked with a structured support model between the sessions and what they identified as success factors.

2.1 | Study questions

1. Which problems are identified in the action plans?
2. How do the groups work with their problems between the sessions?
3. What are the success factors in working with the process, according to the first-line managers?

3 | METHODS

This study was performed as a case study (Yin, 2009) with a qualitative and prospective design, as part of a larger research

programme performed in municipalities in Sweden on work environment (Svartengren & Hellman, 2018). It is a continuation of the original protocol in a new context, in a perioperative setting within a hospital.

3.1 | The case

The included hospital was a university hospital in central Sweden, with approximately 8000 employees. The perioperative department consisted of operating departments, an intensive care department, postoperative departments and a sterile processing department and had approximately 900 employees, of which approximately 500 were introduced to the structured support model. The inclusion criteria were departments that continued working with a structured support model through and after the Covid-19 pandemic. Departments that interrupted their work with the model were excluded. The case includes three operating departments within a perioperative organization in a university hospital in Sweden. The common denominator was that 2 years after implementation, all three departments out of nine had used the model without interruption during the Covid-19 pandemic, and that after a successful implementation of the model, they had created a customized working method. The remaining six departments interrupted their work with a structured support model due to the Covid-19 pandemic. Thus, participating departments were sampled using a purposive sampling technique (Giacomini & Cook, 2000). The three departments had also shown a progression in the HRI measures (See Table 1). Table 2 provides information on the participating departments. Department B has different management responsibilities for operation room staff and anaesthesia staff, meaning that operating room staff did not participate in structured support model sessions. In other words, in Department B, only anaesthesia staff completed the sessions/cycles.

TABLE 1 Human Resources Index measure for the participating departments

	t1	t2	t3	t4	t5
Department A	47	58	68	N/A	N/A
Department B[a]	37	60	60	70	N/A
Department C	49	55	63	66	78

Note: t1: baseline measure; t2: approximately 6 months after implementation; t3: approximately 12 months after implementation; t4: approximately 18 months after implementation; and t5: approximately 24 months after implementation.

[a]Change of management between time-point one and time-point two.

3.2 | Data collection and the participants

The departments' first-line managers were invited to participate in the study, and all three accepted. Department B had a change of management between session one and session two (i.e., baseline and 6 months after implementation of the structured support model). The first line manager in Department B who worked with the structured support model after baseline was invited to participate, which she accepted. After obtaining informed consent, an interview was conducted face-to-face with one of the participants and through live video call with two of the first-line managers between October 2021 and January 2022. The interview lasted between 25 and 60 (mean 45) min. All three interviewees were women, between 39 and 52 (mean 46) years of age and had three to 11 (mean 5.8) years of experience as nurse managers. In addition to interviews, 22 action plans (from Departments A and B), 21 workplace meeting notes (from Department C) and two PowerPoint presentations (from Departments A and C) were collected and analysed. Department A was provided with three action plans, one PowerPoint presentation and one interview. From Department B, we had 19 action plans and one interview, and from Department C there were 21 workplace meeting notes, one PowerPoint presentation and one interview.

3.3 | The interview guide

The interview guide for this study included two main areas, that is, the process of implementing the structured support model (working with the action plans between the meetings) and the success factors

TABLE 2 Participating departments in the study

	Department A	Department B[a]	Department C
Number of employees	45	30	Approx. 30
Staff functions	Nurse anaesthetists Operation room nurses Assistant nurses Anaesthesiologists	Nurse anaesthetists Assistant nurses Anaesthesiologists	Nurse anaesthetists Operation room nurses Assistant nurses Anaesthesiologists
Manager experience	11 years	3 years[b]	3½ years

[a]The department has different management responsibilities for operation room staff and anaesthetist staff.

[b]Change of management between session one and session two (i.e., baseline and 6 months after implementation of the structured support model).

for the implementation process, according to the managers (Table 3). Probing questions were used to get in-depth information.

3.4 | Data analysis

Thematic analysis of the interview text was performed in accordance to (Braun & Clarke, 2006) in several steps. The interviews and the text from the action plans were analysed separately. First, the texts were read through to grasp the whole meaning. Second, a first coding was performed separately by authors EA and FM. Subsequently, the two authors discussed the coding. Third, the provisional codes and the text sections that were linked to the codes were reviewed again. The codes were refined based on consistency and agreement between the code and the text sections. Sub-codes that were irrelevant to the aim of this study were removed. Thereafter, themes were created, based on similarities and differences in the codes. Finally, the content in the themes was described, which are presented with quotes. The text from the action plans, workplace meeting notes and presentations, with focus on the manifest content of the text and study question 1, was analysed with content analysis according to Elo and Kyngäs (2008).

To ensure trustworthiness and credibility of the findings, the analysis process went back and forth between coding and the interview transcripts in several steps, as described previously (Nowell et al., 2017; Shenton, 2004). The analysis was discussed within the research group on several occasions. This case study has a limited scope because of its specific context. In our study some parts of the results/themes repeated themselves and some new information was discovered.

3.5 | Ethical considerations

The study followed the Declaration of Helsinki regulations (World Medical Association, 2013) and local ethical guidelines and regulations (Centrum for Research Ethics and Bioethics, 2018). It was approved by the Swedish Ethical Review Authority (Dnr 2019-00948).

4 | RESULTS

4.1 | First-line managers' perspectives on implementing and working with the structured support-model

The results are sorted under three main thematic headings: Experience of results and benefits, Marketing and cheering on and Making adjustments and making the model one's own.

4.1.1 | Experience of results and benefits

The managers appreciated the results from the questionnaire part of the model, which were deemed more useful than traditional employee surveys because they were closer to the daily operations of the department. 'I think it was fun to work with [the model], and it was closer to our reality than an employee survey' (Manager 2).

All three managers stressed the importance of continuity when working with the model and sticking to the suggested way of working to make improvements in the long run. 'The employees feel more involved and come up with suggestions. You work together in the work group, and I think that this is important to make it work in the long run' (Manager 2).

The managers also stressed the importance of the employees seeing the results and benefits of using the model. One manager stated that a result from using the model was the creation of specific occupational groups. This was a concrete development from the discussion initiated by the results from the questionnaire. Having a short time-period between the questionnaire and the processing of the results was also emphasized. Seeing concrete results and improvements from the model was viewed as important in motivating the staff to continue using the model and to avoid a negative climate between different staff functions. One manager made it clear to the staff that those positive outcomes were a result of working with the model: 'When the staff see a concrete change, I always refer to the model' (Manager 1).

TABLE 3 The interview guide

Initial questions	1. How did you start working with Stamina model- at the starting point? 2. What were your thoughts and your employees' thoughts about how to work with the Stamina model and your action plans? 3. Please tell me about your employee group and their reactions about the model.
Main questions	1. When you started to work with the Stamina model, how did you work with your action plans between the meetings? 2. (Knowing the fact that subgroups had started to work actively with action plans) how did you come up with the idea of setting up a subgroup of employees to work with your action plans between the meetings? 3. What would you say were the challenges to work with the action plans between the meetings? 4. How did you work with the action plans between the meetings? 5. How did you influence the model to adapt it to your needs? 6. What was the next step in working with the action plans in your opinion?
Probing question	Please tell me more. Can you give an example? What do you mean?

4.1.2 | Marketing and cheering on

The managers describe the importance of cheering on and encouraging the groups, which were viewed as success factors. They supported the work groups by being available and creating the right conditions for the work groups by making time in the schedule for meetings, which made the employees feel they were recognized and not ignored. 'I was there as a support, and they never felt alone. I was there' (Manager 3).

Another type of support was referred to as lobbying for the model. 'What I did was to market the model as a work tool that was important and helpful and to help my employees to put words to their feelings' (Manager 1). This manager expressed that there was a negative attitude from the staff at the beginning of the process, and therefore he tried to talk positively about the model. 'It was not positive the first time/ … /Then I started to cheer them on during the work in the group' (Manager 1). The manager started to support the group by giving positive comments and encouraging the employees to fill in the web questionnaire to get an even better basis for suggested improvements.

4.1.3 | Making adjustments and making the model one's own

The first-line managers described adjusting the model, making it their own and not following the suggested work process exactly. This was identified as a success factor because it allowed for the groups to work with the model without major disruptions in the department's ordinary work schedule. It also made it easier for the manager to get the groups to accept the model. One manager stated: 'According to the concept, this is something you should work with at every meeting, but I said [to the group] that this is the way *we are* working with the model. We decided to keep it simple' (Manager 3).

Two managers had created separate work groups, with a rotating participation that prepared the results from the web-based questionnaire and presented suggested actions to the group at a later stage. This adjustment allowed the groups to work more efficiently with the model. It seemed that news of this particular adjustment had spread between the departments when the managers of the groups had participated in common manager meetings. The suggested timeframes for the sessions were also adjusted depending on time available at the departments, by all three managers.

4.2 | Action plans and workplace meetings notes and presentations

The results from the action plans and workplace meetings indicated that the employees had discussed problems with cooperation, work organization and how to treat each other.

4.3 | Theme 1: Work organization and prerequisites for performing one's work tasks

4.3.1 | Having time for …

Having time for education or 'to learn new things', time for guidance in work situations, time for proper lunch breaks or not having enough time for lunch or coffee breaks were described in action plans as challenges that the employees wished to improve. Staff members had daily reflections where they asked about how the employees' day had been. This could, for example, be performed in between the patients or at the end of the workday.

> *'We lack time for education and time to learn things (to increase work related competence). Education time needs to be planned into the staffs' work schedule'* (Department A)

4.3.2 | Efficient meetings

Having morning meetings were identified as a source of stress, as the time for preparing for patient care became limited. Hence, employees wanted to have structured and efficient meetings. Structure referred to setting up an agenda prior to the meetings, to have a start and finish time, and to have someone present to lead the meetings. It was also suggested that the patient care should start 30 min after the morning meetings, so that preparation for patient care could be done in a non-stressful manner. It was important that as many as possible, including anaesthesiologists, could attend the meetings, and that roles and work tasks could be discussed and agreed upon. Brief team-meetings in the operating rooms in the morning were identified as important to plan the work, reduce wasted time and streamline the work.

> *'More structured meetings are required on Wednesdays. We need to prepare ourselves before the meetings. It will increase the feeling of participation'* (Department B)

4.3.3 | Planning resources and operating capacity

Need for better planning of resources in the operating department and in the postoperative ward versus operating programme was identified as an area of improvement. 'Heavy programmes' or sudden/late changes to operating programmes had to be reviewed, for example, in weekly plans, especially when staff members became sick or when additional operating rooms were used.

> *'Better planning of resources in the operating programme and in the operating department (resources contra production). Planning of breaks (for the staff) during both in the morning and in the afternoon'* (Department C)

Divergence in desired or 'invented' operating time and the 'real time it takes to operate', including preparation and completion time, had to be looked over. The management was asked to share their thoughts and plans and provide support in structuring the operating programme and operating hours. To review routines and work tasks in the interprofessional teamwork in order to be on the same page needed to be improved.

> *'Heavy programs which need to be reviewed when staff become ill or when staffing is low. Think of each other, ask for and offer help when you can or need it yourself'* (Department B)

4.3.4 | Education

Educating staff members about different operating procedures was another action plan that the staff members desired to work with. Daily educations, mini lectures, review of device usage, presenting the latest research in current and relevant topics were mentioned. Also, it was suggested to have a specific person with a specific responsibility for working with staff education and continued skill development.

> *'Deepen our knowledge, to update ourselves in research articles and new findings, continuous education'* (Department B)

4.3.5 | Engaging in work environment management

Moreover, it was requested that staff members be informed about renovations taking place in the work environment and the need to move from one place to another. The staff member wanted to participate and suggested creating a group of delegates on such occasions and informing colleagues continuously. Input from colleagues in working with work environment management was important. In one department that had built a group with specific responsibility for work environment issues, the group encouraged colleagues to be involved and come up with suggestions for problems.

> *'The vision is that we should think about the work environment every day. Make suggestions to a group (at the workplace) on these topics about how we can work further, come up with suggestions for improvements*, etc. *It is everyone's work environment'* (Department B)

> *'A meeting with anesthesia and the surgery group together should be planned to talk through the common work environment. Calmer work environment is experienced in the department'* (Department B)

4.4 | Theme 2: Respecting each other and using a respectful tone towards each other

'Uncollegiate' manners, 'envy' or being 'grumpy' were identified among colleagues, especially in stressful situations, which the employees wanted to improve. It was suggested that colleagues should treat each other with respect and create a sense of community among each other. Everybody should step in, to counter 'grumpiness' with better communication, remembering that it can be 'one's turn next time'. Treating others as one wants to be treated was encouraged, thus contributing to a good atmosphere. These actions were especially important when work was stressful. Furthermore, it was important to accept and embrace each other's differences, and to talk *to* each other, instead of talking *about* each other. The employees themselves asked whether they were being nice to each other, suggesting they should give each other both positive and negative feedback individually and not in front of the entire group. Stress because of communication problems was presented in some action plans, without further development.

> *'Show each other appreciation. Gratitude can also be shown from above (from the managers to the employees). It is important to take responsibility and show collegiality and to respect each other. Do debrief- and to allow everyone to talk about less pleasant things. Counter whine with better and clear communication'* (Department A)

> *'Are we kind to each other? There still appears that people talk about each other - what is the purpose!?! Raise each other and talk to one another, not about each other'*. (Department B).

5 | DISCUSSION

5.1 | Main findings

The findings show that when working with the structured support model, the staff identified several areas for improvement. An example was the need for effective and structured meetings and the importance of having time for reflection after a workday. Managers stressed the importance of being able to modify the model to suit the needs of their employees and of supporting the employees between workshops.

5.2 | Experience of results and benefits

The managers describe of the importance both for the groups and for the managers to see early benefits from the model. This finding confirms previous literature regarding implementation and change. For instance, Kotter (1995) describes the importance of celebrating early wins and see early concrete results of a change effort.

5.3 | Marketing and cheering on

One success factor when implementing the structured support model, described by the managers, was marketing the model so that the employees would understand how they could benefit from using it. Hojberg et al. (2018) pointed out the impact of making the implementation 'attractive' for those who had to work with it. In this study, the managers tried to show connections between the changes within the operating department and the structured support model and supporting their employees when they needed. Mackenzie and Hall (2014) and Mann (2009) emphasized the role and importance of leaders, to change their employees' mindset and modelling the way.

5.4 | Making adjustments

Furthermore, modifying the model to meet one's own department's needs was important to succeed with the model, according to the first-line managers. Adjustments and the possibility to modify the model are described in the literature as important factors when implementing workplace interventions because models need to be adjusted to different contexts (Greenhalgh et al., 2015). Both Arakelian et al. (2020) and Molin et al. (2020) explained the need to back down as a manager and leave room for employees to take an active role in working with the model. This is confirmed in this study, where independent groups of employees were created in two of the three departments to work actively with the structured support model.

An important finding here was the importance of allowing for time and making room in the organization for the employees to work with their action plans, to keep the model 'alive' and continuing over a longer period (more than 2 years). This was confirmed by the action plans, which describe the implementation's success from the employees' point of view. Also, the managers expressed that they created groups of employees and gave them time to work with their action plans, which is an obvious example of managers and employees working towards the same goal, leading to success.

5.5 | Action plans

The results from the action plans show the broader engagement of the employees in workplace issues, big and small, from opportunities to educate themselves further, organizational balance between resources and tasks, engaging oneself in work environment issues, and respecting each other and everyone's profession. Main findings from the analysis of the action plans were the importance of work organization and stable prerequisites for performing one's task, and the importance of a respectful social climate among the employees. These results would indicate the importance of social climate factors of concern in the investigated departments. Examples of social climate factors in the literature are involvement, co-worker cohesion, supervisor support, autonomy, task orientation, work pressure, clarity, control, innovation and physical comfort (Moos, 1994). Geue (2018) show the positive relationship between social climate and positive practices, which includes respect and treating one another with integrity. Wheelan (2015) highlights the importance of a positive climate among team members and hoe this may influence group development and team performance.

As Arakelian et al. (2020) emphasized, and the managers in this study mentioned, the structured support model was closer to the employee's everyday life compared to other models, engaging them to work with different issues. Even though the managers were sceptical towards the new model in the beginning, they could appreciate and see the benefits after working with it for almost 2 years. The latter was also confirmed by Molin et al. (2020) who showed similar results in Swedish municipalities. Looking at the department's way of working with action plans and their progression in the HRI, one can see a greater positive development in department B, which also stuck to the model to a greater extent (i.e., they stuck to writing action plans, and not workplace meeting notes). However, one should consider the fact that department B changed its first-line manager between timepoint one and two, which can also contribute to the development in HRI.

Martinsson et al. (2016) confirmed that to expect rapid changes from new implementations may not be long lasting. Thus, implementation may take time, as was the case here, and there may be a need for a change in the 'culture' of the organization by a 'paradigm shift', as Arakelian et al. (2020) pointed out. Consequently, both managers and their employees may have to work more intensively with the goal of the implementation and with role descriptions and responsibilities of both managers and their employees, which takes time.

5.6 | Limitations

This study focuses solely on departments that have used the structured support model during a prolonged time. There is thus a potential bias that the studied departments have a positive bias since they have used and adopted the model with good results. This may have influenced the findings in a positive direction.

Another limitation of the study is that it only includes a managerial perspective regarding the issue of how the work groups engaged between the sessions. Getting an employee perspective on this issue would be valuable for further study.

6 | CONCLUSION

Human factors, such as support, encouragement, seeing the benefits, allowing for time and respecting each other, can facilitate and contribute to the implementation and success of a new model. Managerial support and ability to tailor and modify the model to the needs of the organization are also important.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

The take home message of the study is that with a structured way of working, and with the participation of the employees in the systematic work environment work, the employees contributed with constructive suggestions for improvement. This, in turn, contributed to reducing the workload for first-line managers. In addition, when working with a structured model, deficiencies in the workplace were identified, which triggered an improvement process in the participating hospital departments.

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CONFLICT OF INTEREST

Magnus Svartengren (M. S.) has been Chairman of the Board of Directors for the Human Resources Institute AB, the organization that has owned the legal rights to the Human Resources Index measurement tool since 13 November 2020. However, this had no influence on the research design, analysis and results. The funders had no role in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

ETHICS STATEMENT

The study followed the Declaration of Helsinki regulations (World Medical Association, 2013) and local ethical guidelines and regulations (Centrum for Research Ethics and Bioethics, 2018). It was approved by the Swedish Ethical Review Authority (Dnr 2019-00948).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Erebouni Arakelian https://orcid.org/0000-0003-3790-3505

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ORIGINAL ARTICLE

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Improving everyday life of people with dementia living at home: Health care professionals' experiences

Rigmor Einang Alnes RN, MD, PhD, Associate professor[1] | **Wenche Malmedal RN, MD, PhD, Professor**[2] | **Bente Nordtug RN, MD, PhD, Associate professor**[3] | **Gunn Steinsheim RN, MD, PhD candidate**[2] | **Kari Blindheim RN, PHN, MD, Associate professor**[1,4]

[1]Department of Health Sciences, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Ålesund, Norway

[2]Department of Public Health and Nursing, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

[3]Faculty of Health Science, Nord University, Bodø, Norway

[4]Center for Care Research, Nord University, Steinkjer, Norway

Correspondence
Rigmor Einang Alnes, Department of Health Sciences, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Larsgårdsvegen 2, 6009 Ålesund, Norway.
Email: rigmor.e.alnes@ntnu.no

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Abstract

Aim: This study investigates what health care professionals experience is important for improving everyday life of people with dementia living at home.

Background: A prerequisite for living at home is that people with dementia and their relatives can handle everyday life together despite the challenges that dementia poses.

Methods: This qualitative study conducted focus group interviews ($n = 14$), and the data were analysed using qualitative content analysis.

Results: The analysis identified one theme—need for enhanced competence to develop and implement individual plans—and three categories: challenge in identifying cognitive decline; need to timeously facilitate an active and meaningful everyday life; and need for consistency, continuity and coordination in dementia home care.

Conclusion: Increased expertise is needed among health care professionals to contribute to the development and implementation of individual plans in dementia home care. To achieve this, health care professionals' competence and how dementia home care is organized must be seen in conjunction.

Implications for Nursing Management: Routines should be established for identifying cognitive failure early and providing support and guidance at the beginning of the process. There is a need for nurse managers to facilitate increased advanced competence regarding dementia care for a professional home care service and to consider how home services can be organized to ensure continuity and security for people with dementia and their relatives. Creating and implementing an individual plan which can be a starting point for identifying individual needs and wishes and for coordinating an individual user's services.

KEYWORDS
dementia, home care, individual plans, organization, person-centred care

[Correction added on 2 November 2022, after first online publication: The last name of the second author has been corrected in this version.]

1 | INTRODUCTION

Health care professionals, such as nurses, physiotherapists and occupational therapists who work daily with people with early and middle stage dementia living at home, experience how home care services affect patients and their relatives. People with dementia and their relatives, such as spouses, sons and daughters, are often closely connected, and the services provided will influence the whole family. Through the insights of health care professionals working in home care, day-care centres and dementia coordinator teams, this study will call attention to key areas for service improvement.

Dementia is a major health challenge. Over 55 million people were living with dementia worldwide in 2021, and this number is predicted to increase to 78 million by 2030 (Gauthier et al., 2021). Dementia has a huge economic impact. Keeping persons with dementia at home and avoiding unnecessary hospitalizations and early relocation to long-term care facilities have a high priority in the health system. An estimate of the number of people with dementia living at home varies from 50% to 70% in high-income countries to 94% in low- and middle-income countries (Prince et al., 2015). In Norway, two thirds of the 100,000 people with dementia live in their own homes (Gjøra et al., 2021), and in Norway, as in many other countries, there has been an expansion of home care services (World Health Organization, 2020a, 2020b).

The possibility of living at home improves the quality of life of people with dementia (Nikmat et al., 2015; Olsen et al., 2016). However, a systematic review points out that impairments to the activities of daily living and caregiver burden are risk factors for hospitalization (Toot et al., 2017). Other studies suggest that people with dementia experience problems with staying at home due to relationships with caregivers, the need for togetherness, the lack of plans/structures for everyday life and safety challenges, such as falling, starting fires and getting lost (Mazurek et al., 2017; Thoma-Lürken et al., 2018). Additionally, nutritional challenges, satisfying medication requirements and toilet use can cause problems (Abreu et al., 2019; Mole et al., 2018). Moreover, relatives may perceive home care as task oriented and fragmented (Landmark et al., 2013; Nordtug et al., 2021) and undergo limitations regarding individual customization (Tretteteig et al., 2019).

Norwegian government documents and international reports note that the services offered to people with dementia should be more person centred and that relatives are not sufficiently supported. Furthermore, transitions in services often result in a lack of continuity and safety (Alzheimer's Disease International, 2021; Norwegian Ministry of Health and Care Services, 2018, 2020). A review of 23 randomized controlled studies showed that it is paramount to identify the needs of each family to ensure that they receive a personalized plan promptly (Zabalegui et al., 2014). A plan must be based on an individual's interests, wishes and activity habits because people with dementia may utilize their own resources for a long time. Consequently, they may experience security, well-being and mastery (Brooker & Kitwood, 2019; Norwegian Ministry of Health and Care Services, 2015, 2020). A scoping review that aimed to map gaps and priorities in dementia care in Europe found, among other things, that the gaps include fragmented non-person-centred care pathways, limited knowledge and skills and poor communication and information sharing (Martin et al., 2020). Health care professionals are crucial resources who meet people with dementia and their relatives at home and in day-care centres, where they gain insight into the daily lives of those involved, including patients' pleasures and challenges. These experiences enable health care professionals to communicate about appropriate services to ensure quality care and adequately contribute to improving the everyday lives of people with dementia living at home and their relatives. Therefore, it is critical to listen to health care professionals' experiences. To the best of our knowledge, there are few articles regarding home care services for people with dementia from health care professionals' perspectives.

Therefore, the aim of this study is to investigate what health care professionals experience is important for improving everyday life of people with dementia living at home.

2 | METHODS

2.1 | Design

This study has a qualitative design with an explorative and interpretative approach. Focus group interviews were used, as such interviews are considered an effective method for unearthing the spectrum of informants' experiences and feelings. Such interviews elicit further reflections on one's perspectives in the context of other convergent and divergent group views (Krueger & Casey, 2014). Health professionals have certain characteristics in common related to encounters with people with dementia, and experiences could be shared, discussed and enlightened. In focus group interviews, spontaneous interactions and common reflections can enhance new insights into a topic, and the type and range of data can be enriched compared with individual interviews (Gundumogula, 2021).

2.2 | Sample

This study used purposive sampling and is part of a larger study regarding people with dementia living at home (Malmedal et al., 2020; Moe et al., 2021; Nordtug et al., 2021) conducted with the Centre for Care Research in mid-Norway and three municipalities in this region. Stakeholders from one small, one medium-sized and one large urban municipality cooperated with the research group when they were planning and conducting this study. Accordingly, the sample represented a variety of sizes of Norwegian municipalities and health care services related to people with dementia in those municipalities.

Informational letters were sent to the heads of home care services and forwarded to employees (nurse leaders, coordinators for people with dementia, rehabilitation teams and nurses at day centres) in the municipalities. There were 14 health care professionals who accepted the invitation (Table 1 depicts informant details). Overall, the health care professionals had varied experiences in caring for

TABLE 1 Educational background of health care professionals

Informants by education	Focus group 1	Focus group 2	Focus group 3
Registered nurses (4), nursing leaders (2)	2	3	0
Trained nurses (5), occupational therapists (2), physical therapists (1)	2	3	4
Total	4	6	4

TABLE 2 Example of the analysis process

Meaning unit	Code	Subcategory	Category	Theme
M: What plan are they offered in the first phase? When is contact established? I: This is done in very different ways. Sometimes it is when we see relatives become tired. Then, we ask if they want to talk. We have to tread carefully. It is difficult to know how to proceed. I have a contact person in the dementia team with whom I can consult. Otherwise, we do not have much contact. This may be for the first year. Then, there will be contact as the disease develops.	Done in different ways First contact made when relatives become tired. They have to tread carefully. It is difficult for them to know how to proceed.	Different offers in first phase. Health care professional feel uncertain.	The need to timeously facilitate an active and meaningful everyday life	A need for enhanced competence to develop and implement individually plans

people with dementia and cooperating with their relatives in home care, day centres and as members of the municipal dementia team.

2.3 | Data collection

A semi-structured interview guide was used with open-ended questions regarding how health care services can contribute to improving everyday life. It served as a question checklist and ensured that the same questions were asked in all interviews. The questions included: What is important for people with dementia in the early stages of the disease? How can health services contribute to meaningful everyday lives for people with dementia? What are the characteristics of a well-organized service for people with dementia and their relatives? There were rich reflections in the focus group, and the questions allowed the informants to contemplate and talk freely. There were short summaries and follow-up questions during the interviews to ensure that the statements were correctly understood. The interviews were conducted and moderated by the authors, who all had experience leading focus group interviews. Three focus group interviews (45–60 min) took place between May and June 2018 at the university or in a meeting room at the municipal health service.

2.4 | Analysis

The authors audiotaped, transcribed and analysed the interviews using qualitative content analysis, as inspired by Graneheim and Lundman (2004). First, all the authors read the transcripts, discussed the preliminary results, provided interpretation input and helped ensure that the informants' context and data were correct. The first and last authors thoroughly read the transcribed interviews, and the text was divided into condensed meaning units. Each of the authors identified keywords separately to form an overall impression of the interviews and then discussed possible codes and subcategories for each interview. The condensed meaning units were labelled with a code, and NVivo 12 was used as a tool in the coding. The aim of the study guided the authors when codes in all the interviews were compared across data and subcategories were defined.

The first description of the subcategories was discussed with all the authors. Subsequently, the first and last authors reflected on the underlying meanings at an interpretative level and talked about them with all the authors. The authors continuously moved between the whole text and parts of it until there was agreement on the formulation of subcategories–categories and one theme. See Table 2 for an example of the analysis process.

2.5 | Rigour

All authors discussed the analyses and wrote and provided a final reading of the manuscript. The consolidated criteria for reporting qualitative research, the COREQ checklist, were used to ensure that each step in the research process was aligned with the quality requirements (Tong et al., 2007).

2.6 | Ethical considerations

The study was approved by the Norwegian Centre for Research Data (Project Number 58922) and was conducted according to the Helsinki Declaration (World Medical Association, 2018). The informants were provided written and oral information about the study's purpose and informed that their participation was voluntary and that they could withdraw without any consequences. They were informed that audio recordings would be deleted after transcription and all data were anonymized. Thus, citations refer only to the relevant focus group, not to professions or individuals. Informed written consent was obtained from all participants.

TABLE 3 Overview of results

Subcategory	Category	Theme
Some individuals remain undiagnosed for a long time	*Challenge in identifying cognitive decline*	**Need for enhanced competence to develop and implement individual plans**
Collaboration with relatives and general practitioners on a diagnosis		
Follow-up time after diagnosis	*Need to timeously facilitate an active and meaningful everyday life*	
Competence is crucial		
Need for customized and concrete plans		
Significance of day-care centres and collaboration	*Need for consistency, continuity, and coordination in dementia home care*	
Volunteers need training and support		

3 | RESULTS

Through analysis, we identified one main theme: need for enhanced competence to develop and implement individual plans. Three categories were also identified: (1) challenge in identifying cognitive decline, (2) need to timeously facilitate an active and meaningful everyday life and (3) need for consistency, continuity and coordination in dementia home care (Table 3).

3.1 | Need for enhanced competence to develop and implement individual plans

A theme that permeated the health care providers' experiences was the need for increased competence to develop and implement individual plans. Without greater competence concerning the challenges faced by people with dementia and their relatives, the precondition for developing and implementing individual plans was absent. This theme was latent for all categories.

3.2 | Challenges in identifying cognitive decline

3.2.1 | Some individuals remain undiagnosed for a long time

Health care professionals observed that many people with dementia long remained undiagnosed. Sometimes, cognitive failure was discovered only when the spouse became ill and was hospitalized. Health care professionals in day-care centres thought that people with dementia tried to hide their cognitive failures, living with cognitive declines for a long time. They also reported that it is difficult to detect cognitive declines when the provision of home care nursing is spread among many health care professionals. Thus, few professionals could follow up and observe people with dementia handling different daily situations. One informant commented, 'If home care service is used …, there are little "drips of worry," but no one sees the whole situation' (FG3). Furthermore, spouses can hide challenges: 'It is shameful', an informant in the same focus group said. They knew of situations in which individuals had managed to hide their spouses' cognitive challenges from their children for a long time.

3.2.2 | Collaboration with relatives and general practitioners on a diagnosis

Some informants worried that not everyone wanted to be diagnosed; thus, they had to build trust before proposing a medical examination. They were unsure how to collaborate with relatives concerning the diagnosis of possible cognitive failure. One informant said, 'We have to tread carefully. … It is hard to know how to proceed' (FG1). According to informants, there are major distinctions among registered general practitioners (RGPs) regarding how they relate to dementia diagnoses. Some gave medical referrals, provided information about the municipality's offerings to people with dementia and some were elusive and waited too long to diagnose dementia.

3.3 | Need to timeously facilitate an active and meaningful everyday life

3.3.1 | Follow-up time after diagnosis

There were various experiences regarding the timing of follow-ups and facilitation after diagnosis within the three municipalities. One informant said that people with dementia initially receive adequate follow-ups from the specialist health service, but it often takes a long time before they or their relatives contact the health services in the municipalities. Some health care professionals stated that either people with dementia or their relatives must seek help. Additionally, younger individuals often found the information they needed online. Other health care professionals explained the consequences of a lack of early facilitation:

> The husband was diagnosed, and nothing happened. Then, they lived unaware of what the diagnosis truly meant. When there was a crisis in the end and he became almost violent, then there was talk about nursing interventions (FG3).

Some health care professionals felt that a 6-month follow-up meeting after diagnosis (after referral by the Norwegian Directorate of Health, 2019) was too long. They suggested that a home visit should be offered no later than 14 days after diagnosis. One said, 'Six months is a long time when you are sitting there with a diagnosis. What are we doing now?' (FG2). They also stated that people with dementia and their relatives should be aware of the services in their municipality early on: 'They have to get all the information on the table right away to determine what is right for them' (FG2). Furthermore, they expressed that the health service had to act early to gain a health-promoting and preventative effect: 'Otherwise, relatives become exhausted, and the people with dementia are so cognitively impaired that they cannot benefit from health-promoting activities' (FG2). Creating trust early in the illness by assuring the involved individuals that health care professionals 'will go the distance with them' is a crucial contribution to the process, informants reported (FG2).

3.3.2 | Competence is crucial

Several informants noted that it is very important to have expertise in dementia diagnoses and the challenges that people with dementia and their relatives face. In each interview, it emerged that the lack of competence in dementia management among personnel was a challenge. 'The problem is that they don't know anything about dementia' (FG3). One informant believed that home health care professionals did not sufficiently address users' challenges before implementing home care nursing interventions. 'They treat everyone as if they are cognitively healthy, but they are not. The personnel are not updated … before they visit the individuals. … They have no tools, and so it will end in nothing' (FG3). Health care professionals emphasized that competence enhancement also takes place, but simple solutions are often chosen because of time limitations. When people with dementia are not allowed to perform tasks they still can and employees take over, people with dementia become prematurely dependent, health professionals stated.

3.3.3 | Need for customized and concrete plans

For people with dementia to experience safety, participation and improved everyday lives, health care professionals remarked that home health care services must ensure participation and predictability through customized and concrete action care plans. 'We need to write down precise action [care]plans, so we do not have to ask questions' (FG1). One goal was to create security and coherence so people with dementia were in a good mood when health care professionals left. Informants pointed out that many small things make everyday life meaningful.

> We do not have to put dinner on the table, even if they cannot do it themselves. Maybe it is enough that we present the potato, carrot and two fish cakes so that they can see them, and then they can do it themselves. They can use their own resources as long as possible because that is the activity (FG2).

3.4 | Need for consistency, continuity and coordination in dementia home care

Health care professionals pointed out that home health care services should be organized in a certain way so people with dementia have specific carers. One said, 'There are often quite a few workers they have to deal with. It is important to cut down the number of persons they have to deal with' (FG3). The many home health care professionals visiting individuals result in a lack of continuity. 'It is a little scary when once-a-week day-care activities are what maintain continuity in relation to the user' (FG3).

In one focus group, several informants were part of the dementia team in a municipality. They believed they served roles as supervisors for the home care service; one stated, 'But where there are persons who are followed up over a long period, it is mostly the home care service that takes over, and then we are supervisors for the home care service, I think' (FG2). Through collaborations between the dementia team and home care services, customized services are created in which the transferred skills strengthen the home care service.

3.4.1 | Significance of day-care centres and collaboration

Several informants emphasized the importance of day-care centres for people with dementia:

> A lady lay on the couch for several months. She used strong medications that needed to be reduced and started exercising at our day-care centre. She finally jogged up the stairs and became active. She is with us two days a week and jogs around and is fine (FG2).

In day-care centres, people with dementia can go for walks, talk and have a meal together. The staff accumulate knowledge about each individual and what they need, but report that their knowledge is rarely requested for other parts of the service. One informant who worked at a day-care centre said, 'The communication between the day-care centre and the nursing home when they have to move is important, but they do not want to listen to us' (FG3). The informants stated that there should be a routine meeting between the different care levels so each level provides information about the care recipient that is useful to the next level.

3.4.2 | Volunteers need training and support

Volunteers are a notable resource for people with dementia. One informant stated: 'We would not manage (to create an active everyday life) without them' (FG1). However, they noticed that it was a challenge to recruit sufficient volunteers. They were also concerned that not all persons fit together and that work must be done to correctly match the volunteer with the person with dementia. One informant remarked, 'You cannot take just anyone to do whatever' (FG1). Health care professionals were concerned that volunteers needed to be trained and it should be a prerequisite that there are good contact points among volunteers, relatives and health care services.

4 | DISCUSSION

This study investigates what health care professionals experience is important for improving everyday life of people with dementia living at home. The findings showed that obtaining a dementia diagnosis can take time due to challenges related to mapping cognitive failure and uncertainty about when to intervene. To facilitate an active and meaningful everyday life for persons with dementia, heightened expertise among health care professionals is needed, contributing to the development and implementation of individual plans that identify and ensure the use of individuals' resources.

4.1 | Challenges with diagnosis and differences in follow-up

According to the World Health Organization (WHO) Fact Sheet about Dementia 2021, Alzheimer World Report 2021 and the Dementia Plan 2020 and 2025 (Norwegian Ministry of Health and Care Services, 2020), early diagnosis is very important, but in line with our study, remains a challenge. Many people live for a long time with cognitive failure without receiving help. The informants added that it can be difficult to detect cognitive failure due to a lack of continuity in home care services. Furthermore, there is a stigma attached to a dementia diagnosis; therefore, both people with dementia and their relatives often try to conceal it (Larsen et al., 2017). It can also be a challenge for relatives to contact the health care system when people with dementia do not think they need help. To change attitudes about dementia, societal measures are necessary (Lopez et al., 2020). Providing information about dementia to the population and working towards a dementia-friendly society can be a step further to lower the threshold of asking for help.

Our study shows that health care professionals have different opinions about how soon after diagnosis people with dementia and their relatives should receive a follow-up. A survey by the Norwegian Directorate of Health (2018) revealed that 55.3% of all municipalities in Norway have routines for systematic follow-up. Most municipalities' routines consisted of regular visits every 6 months or once a year. It seems that there are large variations among the municipalities represented in this study, and in some municipalities, limited attention may be given to both relatives and people with dementia in the early phase of the disease.

4.2 | Need for an individual plan

The main element of person-centred care is dignity. The person's perspective should be understood, their integrity must be respected and people with dementia should be included in a social environment (Blake et al., 2020; Brooker & Kitwood, 2019). Person-centred care must be visible and genuine for both people with dementia and their relatives when a diagnosis is first provided, in which all resources and help are clear and a concrete care plan is made, as our informants clearly stated. The need for a care pathway with individuals plans is also stated internationally (Martin et al., 2020; WHO, 2017). The plans can be at various levels, for example both a concrete plan for the coming day and the next week and a plan that can gain legitimacy as an individual plan aligned with current national professional guidelines from the Norwegian Directorate of Health (2020). The coordination reform in 2009 clearly stated that the 'Individual Plan will continue to be a key measure to ensure good interaction and co-operation' (Meld. st 47, 2008–2009, p. 48). This plan should be available for those who need long-term care and coordinated services and ensure that all persons receive a comprehensive, coordinated and individually tailored range of services. The Dementia Plan 2025 (Norwegian Ministry of Health and Care Services, 2020) confirms that people with dementia are entitled to individual plans and demonstrates that only 47% of the municipalities in Norway have systems to offer such plans. In our sample, the health care professionals had limited experience with including people with dementia and their relatives in writing individual plans. Another recent study concluded that people with dementia and their relatives are unsure how they can influence care when the care and support they receive are described as mainly predetermined and based on routines (Hoel et al., 2021).

4.3 | Competence and how dementia home care is organized must be seen in conjunction

The World Alzheimer Report 2021 states that increased education about dementia will have a significantly positive impact on the quality of life of people with dementia and their relatives (p. 186). Home care services have many users who are frail and have complex and demanding needs (Morland, 2020), which means that a high level of expertise is required. Giving care to people with dementia is a complex because of the persons' cognitive decline, which can make observations and communication challenging. In our study, it was pointed out that the number of health care professionals who aid people with dementia was large, resulting in limited continuity and expertise. Furthermore, people with dementia have reduced abilities to remember faces (Spoletini et al., 2018), which can make the situation even more difficult. Thus, the number of health care professionals visiting one individual should be limited (Gjevjon et al., 2013).

Service organizations are crucial to developing person-centred care (Brooker & Kitwood, 2019; Brooker & Latham, 2015) and promoting the continuity of dementia home care. To aid people with dementia living at home, the way dementia home care services are organized must change. Not everyone can observe, assess and initiate measures for people with dementia; to do this, one needs specialized competence and knowledge (Polacsek et al., 2020; Sandberg et al., 2021). People with dementia need fewer carers with specific competences which people with dementia and their relatives can learn to trust. Our findings suggest that there is the necessity to look more closely at how services for persons with dementia living at home are organized and coordinated.

Collaboration on an individual plan is a key place to start, both to clarify individual wishes and needs and for health care professionals to gain an overview of various actors' roles in dementia home care. Our results also suggest that day-care centres and volunteers must be integrated into the service to a greater extent to ensure a common understanding of the person's needs in every part of the health care system. This indicates that health professionals' competence and knowledge about the care recipient and how home care is organized for people with dementia must be seen in conjunction.

4.4 | Strengths and limitations

This study sought the views and experiences from participants in one part of Norway. The experiences may vary in other parts of the country or in countries with different health care systems. Although the selection of informants was limited, they covered a large geographic area, had varied competence and experience and represented dementia teams, day-care centres and home care services. Varied experiences in caring for people with dementia increase the opportunity to illuminate the issue from distinct perspectives.

5 | CONCLUSION

To improve the everyday lives of people with dementia and their relatives, health care professionals reported that health services in municipalities need good routines to identify cognitive decline early and should provide support and guidance at the beginning of the dementia process. When people with dementia are diagnosed, they should immediately be offered customized activities and individualized plans to enhance their everyday lives. A prerequisite is staff continuity to ensure that persons with dementia and their relatives can learn to trust a few familiar health care professionals. To achieve this, the organization of dementia home care and enhancement of health care professionals' competence in dementia care must be seen in conjunction.

Further research is needed that focuses on the connection between the organization of dementia home care and the quality of care for people with dementia and their relatives. This could include evaluating measures so new ways of organizing dementia home care can be tested.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Routines should be established for identifying cognitive failure early and providing support and guidance at the beginning of the process. There is a need for nurse managers to facilitate optimal advanced competence regarding dementia care for the professional home care service and to consider how home services can be organized to ensure continuity and security for people with dementia and their relatives. Nurse managers need to be stakeholders for creating and implementing an individual plan which can be a starting point for identifying individual needs and wishes and for coordinating an individual user's services.

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CONFLICT OF INTEREST

The authors report no conflicts of interest in this work.

ETHICS STATEMENT

The study was approved by the Norwegian Centre for Research Data (Project number 58922). The informants were given written and oral information about the study's purpose and informed that their participation was voluntary, and they could withdraw without any consequences. They were informed that audio recordings would be deleted after transcription and all data were anonymized. Thus, citations refer only to the relevant focus group, not to professions or individuals. Informed written consent was obtained from all participants.

DATA AVAILABILITY STATEMENT

The data are not open and available as the study is based on personal experiences from the participants and the participants were not asked about this. They are promised full anonymity and by openness, anonymity can be challenged.

ORCID

Gunn Steinsheim https://orcid.org/0000-0002-4259-9408

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Contents continued from outside back cover

Contents continued overleaf

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