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Aims and scope

The Journal of Nursing Management is an international forum which informs and advances the discipline of nursing management and leadership. The Journal encourages scholarly debate and critical analysis resulting in a rich source of evidence which underpins and illuminates the practice of management, innovation and leadership in nursing and health care. It publishes current issues and developments in practice in the form of research papers, in-depth commentaries and analyses.

The complex and rapidly changing nature of global health care is constantly generating new challenges and questions. The Journal of Nursing Management welcomes papers from researchers, academics, practitioners, managers, and policy makers from a range of countries and backgrounds which examine these issues and contribute to the body of knowledge in international nursing management and leadership worldwide.

The Journal of Nursing Management aims to:

- *Inform practitioners and researchers in nursing management and leadership*
- *Explore and debate current issues in nursing management and leadership*
- *Assess the evidence for current practice*
- *Develop best practice in nursing management and leadership*
- *Examine the impact of policy developments*
- *Address issues in governance*, quality and safety

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- *Evidence-based management and research methods*
- *Continuing professional and practice development*
- *Organisational culture and context in the working environment*
- *Patient empowerment*, participation and safety

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EDITORIAL

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Killing us softly with their wrongs: Nursing academia's 'killer elite' continue unabated

In our combined 90+ years in nursing, we have published over 700 papers. Nothing, however, evoked responses like 'Academic nursing's killer elite'' (Thompson & Darbyshire, 2013). To say that we 'touched a nerve' is an understatement, but we understated the malignant narcissist, corporate psychopath and dimensions of the 'killer elite', and extend that discussion now. We received then and continue to receive, harrowing 'testimonies' (Hartin et al., 2020) from nurses describing, not linguistically sanitized 'incivility', but sustained bullying, gaslighting and corrosive narcissism by some senior academics who made their lives intolerable. The voluminous literature on nurse bullying, revealing only 'the tip of the iceberg' (Hartin et al., 2020, p. 1624), emphasizes this vital concern for service *and* education nurse managers. We ask whether nursing is any closer to addressing this problem today than it was in 2013.

Some who contacted us were junior academics; others were seasoned academics. All expressed frustration and anger that senior members of the world's preeminent 'caring profession' exhibited such malevolence and duplicity, not only with impunity, but often with tacit or expressed organisational support. There seems no typical demographic of the 'killer elite'. Some are high profile, celebrated nurses, while others rose without trace to their senior positions. Previous critics accused us of 'judgmentalism' and of 'finger pointing'. We certainly judge 'killer elite' behaviour as reprehensible and cannot fathom anyone concluding otherwise. We also admit to 'pointing a finger' as this *is* an editorial viewpoint. We are privileged to do this without fearing retribution. Few academics or managers can safely raise these issues in any forum or journal. We cannot solve these problems, but can continue to highlight them.

The danger of revealing identifying details was inherent in including direct examples from our correspondents' conversations and communications, so we created a composite vignette (Spalding & Phillips, 2007), with their expressed permission, highlighting common 'killer elite' behaviours and their effects:

> Thank you for saying what many of us cannot. I joined nursing academia so excited and enthusiastic, thinking this was my dream job. Now, unless I can escape to a non-nursing school I am getting out. I can take no more gaslighting, bullying, marginalisation, dishonesty, favouritism, narcissism, mediocrity and deviousness from my supposed 'leaders'. I thought that being hard-working and collegial, having integrity while valuing and trying to develop scholarship would be enough. I never imagined I needed to join our Head of School's cult and coterie of acolytes where sycophancy and constant adulation are the only 'qualities' valued. As my profile improved, collegiality and support stopped, as I was now viewed as 'competition' and ostracisation began. I was shouted at in research meetings for asking polite questions about one of their student's methods, undermined constantly (even told 'the University has a wonderful mental health support service' I should contact), saw MY PhD research presented at a conference by our Head as theirs and was 'dropped' from grant teams without discussion. I tried 'bridge-building', inviting them as co-author on some of my papers. This magically became all 'their work' and they were now 'the experts', being increasingly feted for their 'transformative, inspirational leadership'. I stopped and they've published nothing since. I transferred my PhD studies to another University and my supervisor has moved also. It is endemic and getting worse. The final straw was our Head and Professor of Nursing asking genuinely, what 'nursing caring' meant.
>
> The toxicity is becoming normalised. Confiding in colleagues, I know I am not alone, but they too stay silent as they know speaking out will mean the end of their jobs, if not careers. Academic nursing's myopic, obsessional, self-absorption, will ensure a one-way trip back to vocational training. 'Nursing Science' is now embarrassing. We research 'mindfulness' and 'wellness' trivia instead of important health issues. My research into [leading cause of death] was deemed 'not nursing research'. The opposition that colleagues and I faced in redesigning a curriculum uncovering nursing's hidden curriculum was immense. It was painful watching it being sabotaged and dismantled.
>
> One 'star' professor's bullying, harassment of young females and questionable research conduct was formally reported, but nothing was done until an investigative journalist became involved. The professor was quietly 'let go' and is now in a plum position elsewhere. The problem is never tackled, just moved

> elsewhere. Yet nursing remains utterly tone-deaf to its behaviour while our notoriety as a toxic profession grows. I cannot happily encourage anyone to join the nursing academy. How can you? I am sick of the same old clinical 'Matron model', but in academia. What makes me angrier, is that I have allowed it to hijack my career, which is all but dead.

Nursing used to 'eat its young' (Darbyshire et al., 2019), but now cares little about the age or experience of those devoured and millennial nurses now view nursing academia more negatively than older nursing faculty (Kemplin et al., 2017). The gaslighting and self-aggrandizing narcissism of one correspondent's head of school finally became intolerable, but worse, the person was told by a university mandarin they 'were not in the mould of the modern nurse'. This clinically experienced, research-active, well-published nurse is in their early 50s. 'How did we get to this point?' is a question many ask, but which nursing seems unable or unwilling to answer. Crucially, this managerial 'killer elite' are *not a majority*, but when research suggests 45% of faculty experience bullying (Wunnenberg, 2020, p. 579), neither are they unicorns. We have highlighted notable exceptions of inspirational, compassionate, collegial *leaders* (Darbyshire & Thompson, 2014), but these beacons are overshadowed by a minority's collective toxicity.

Corporate psychopaths are poisonous to organisations and colleagues. They create workplaces riven by fear, conflict, bullying, unfair workloads, poor job satisfaction, rampant favouritism, toxic communication and decreased retention. Regardless of an impressive CV, a corporate psychopath will cost the organisation far more in financial and reputational costs than was spent attracting them. Research into the 'toxic triangle' (Magwenzi, 2018; Pelletier et al., 2019) has deepened understanding of how the 'killer elite' are enthroned and enabled. The triangle requires destructive leaders, complicit followers and a conducive environment, all readily available in academia and health services. Today's neoliberal university is the perfect petri dish for organisational sociopathy. It welcomed the 'killer elite' when managerial 'head kickers' were needed to impose restructuring, downsizing, casualization or other 'modernising', because corporate psychopaths are 'totally ruthless' and 'without empathy or conscience' (Boddy, 2011, p. 23). What is so difficult for nursing to even contemplate is that such toxicity may not be accidental, but fuelled by 'narcissism, alongside psychopathy and Machiavellianism' (Milosevic et al., 2020, p. 132). Narcissists project a perfect image to the outside world who cannot believe that anything disturbing could underlie such carefully confected 'dynamic nurse leader' personae.

Orwell's Manor Farm needed Squealer and the 9 pack dogs, so the second arm of the toxic triangle is the killer elite's coterie of followers. These 'acolytes' or 'opportunists' (Pelletier et al., 2019, p. 408) are co-opted as deputies to control and manipulate, becoming the killer elite's 'eyes and ears'. They are 'the susceptible circle' of followers who exhibit 'passivity, deference, and obedience, rather than constructive questioning and challenging of leaders in the face of unethical leader behavior' (Thoroughgood et al., 2012, p. 900). This 'toxic triangle' exacerbates the global nursing shortage in academia, yet most workplace psychopaths enjoy uninterrupted career progression. It is a black swan event when a manager's toxic behaviour costs them their job, power, status or registration.

Incoming US President Joe Biden declared at his inauguration that:

> I'm not joking when I say this: If you're ever working with me and I hear you treat another with disrespect, talking down to someone, I will fire you on the spot. On the spot. No ifs, ands, or buts,

Many in higher education and health services heard this and thought, 'if only'. The US president is fortunate that he can hire and fire 'at his pleasure', while most public-sector organisations have copious layers of inaction and ingrained protection for powerful bullies that render such demonstrable decency unimaginable.

We may ask, why do nurses experiencing toxic leadership not speak up? This is akin to asking why women experiencing domestic violence do not 'just leave' their abusers. Faculty do not challenge because they know this will exacerbate their situation for, 'If anyone should dare to challenge [the narcissist's] self-image of perfection, they will be met with viciousness and deceit' (Germain, 2017, p. 82). Malignant narcissists are most dangerous when confronted and their anger will provoke revenge. Collegial difference of opinion is not a challenge to be explored but a threat to be 'crushed with overwhelming force' (Magwenzi, 2018, p. 148). Add to this, the extreme improbability that a university would support a junior academic over their star leader. As one correspondent commented, 'Why not stay and fight? As an academic with no PhD, I felt I had no credibility and no power compared to them'.

It is hard to be optimistic that nursing will stop enabling and tolerating its 'killer elite'. There is little that less powerful colleagues can do and even less that university and service leaders or nursing's representative bodies seem prepared to do. HR responses are doomed to failure as corporate psychopaths do not respond to education, counselling or mediation, having neither the insight nor inclination to change. These measures simply become their 'home ground advantage' where shapeshifter bullies welcome new audiences to manipulate with their charm, intelligence, faux reasonableness and feigned victimhood. Without robust whistle-blower protections and until academic leaders stop hiring them and start to demonstrate that toxic behaviours will result in dismissal, little can change. Fox's admonition cannot be over-emphasized:

> Bullies don't change their spots unless they're faced with loss of prestige, livelihood, or income. Unless managers at the highest levels of the organization commit to putting a halt to bullying, bullies will always have a platform. (Fox, 2013, p. 19–20)

Nurse managers may recognize only some 'killer elite' toxicities in their organisations but every nurse manager will understand the

umbrella scourges of bullying and malevolent politicking and their damaging effects on nursing and services. The forces that drive and sustain the 'killer elite' in education threaten health services just as ominously. Nurse managers can lead by 'Biden example', making it clear that they will challenge and call out 'killer elite' behaviours and bullying machinations wherever and whenever they are encountered. Confident, open managers will also make it clear to staff that they themselves are similarly accountable. In an honest, healthy organisation, nurse managers, like any cabin crew on an aircraft, not only 'allow' but expect *any* member of staff, regardless of role and status to challenge any of their actions, processes and behaviours that do not live up to their and their organisation's values. How long nursing's toxic minority 'killer elite' will enjoy their platform, is a question confronting every nurse leader and every nurse manager can play their part in ending this reign.

CONFLICT OF INTEREST

No author declares any conflict of interest in relation to any aspect of this paper.

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ORIGINAL ARTICLE

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Nursing and midwifery workforce readiness during a global pandemic: A survey of the experience of one hospital group in the Republic of Ireland

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Abstract

Aim: To explore the mobilization of nurses/midwives in a designated hospital group in Ireland during a global pandemic.

Background: The recent global pandemic has resulted in the large-scale worldwide mobilization of registered nurses and midwives working in the acute care sector. There is a dearth of literature reporting the mobilization of this professional workforce.

Method: Mixed-methods design using an electronic survey and facilitated discussion across one Irish hospital group.

Results: Eight of 11 hospitals responded to the survey. There was a 2% vacancy rate prior to the pandemic. Mobilization included reconfiguration of clinical areas and redeployment of 9% of the nursing/midwifery workforce within 2 weeks of the pandemic. A total of 11% ($n = 343$) of nurses/midwives were redeployed in 3 months. Nurses/midwives required re-skilling in infection prevention control, enhancement of critical care skills and documentation.

Conclusions: Three key areas were identified to enable the nursing workforce readiness. These are referred to as the three 'R's': Reconfiguration of specific resources, Redeployment of nurses to dedicated specialist areas and Re-skilling of nurses to safely care for the patients during the pandemic.

Implications for Nursing Management

- A centralized approach to reconfiguration of clinical areas.
- Redeployment is enabled by closing non-essential departments.
- Hands-on re-skilling and reorientating staff are essential.

KEYWORDS
education, leadership, management, mobilization, nursing, survey

Approach: A survey across one Irish hospital group to quantify the mobilization and education requirements of the nursing and midwifery workforce during the first surge of the COVID-19 pandemic.

1 | INTRODUCTION

The coronavirus (COVID-19) global pandemic has resulted in the large-scale worldwide mobilization of Registered Nurses and Midwives working in the acute hospital sector, to meet the urgent needs of patients and families (Jackson et al., 2020). The first phase of the pandemic hit most countries, including Ireland, in Spring 2021. Research to date has examined various countries' response to increasing the health system capacity (Köppen et al., 2021). Health system strategies to expand the health workforce during surges in the pandemic have been compared across countries (Williams et al., 2020). It is widely known that the nursing and midwifery workforce comprises the largest numbers in most health care settings worldwide, the breadth and impact of this action has yet to be established. Adequate workforce or nurse staffing is a match of registered nurse expertise with the needs of the patients being cared for (ANA, 2012). Research studies have outlined an association between higher registered nurse staffing levels in hospitals with better patient outcomes and improved care quality (Griffiths et al., 2016, 2018). However, determining the appropriate nurse staffing requirements has been shown to be weak and major deficits (Griffiths et al., 2018). During Covid 19, nursing management teams were responsible to implement strategies to mobilize the large workforce to meet the unpredictable demands of a pandemic (Wu et al., 2020).

Mobilizing a workforce requires people to take on new roles and be re-deployed to an unfamiliar area of work, in the provision of direct patient care, with unfamiliar symptomatology, including rapid deterioration and high rates of death. Nurses are required to continually maintain their professional registration requirements, within an environment of uncertainty and fear. The degree of uncertainty related to COVID-19 resulted in increased difficulty in planning to meet unknown patient nursing needs (Fan et al., 2021). Anecdotal evidence gleaned from members of the research team who hold appointments in the clinical environment, suggests the process for redeployment is met with resistance, enthusiasm, compassion, commitment, anxiety, and understanding from the entire nursing workforce.

2 | BACKGROUND

Healthcare in the Republic of Ireland is governed by the Department of Health from a policy perspective, operationally the Health Service Executive (HSE), with devolved governance to seven Hospital Groups. One of the seven hospital groups is Ireland East Hospital Group (IEHG). The IEHG, comprises 11 hospitals, with a nursing/midwifery workforce of 4400. The group serves a population of over 1.1 million people. The IEHG acute hospital configuration consists of two model four hospitals, four model three hospitals, two model two hospitals and three specialist hospitals. Table 1 explains the various hospital model configurations (O'Reilly et al., 2015).

TABLE 1 Hospital model configurations

Model	Description
Model 1	Model 1 hospitals are community units with subacute inpatient beds that care for patients with rehabilitation, respite, or palliative care needs.
Model 2	This group includes small hospitals that provide inpatient and outpatient care for low risk, differentiated medical patients or are referred on to associated higher complexity facilities.
Model 3	The majority of hospitals in the country are Model 3 general hospitals, admitting 50% of all medical patients. Model 3 hospitals provide emergency department expertise, acute medical, surgical and critical care.
Model 4	There are eight Model 4 hospitals that function as tertiary referral centres in Ireland. They provide emergency department expertise, acute medical, surgical and critical care plus specialist and supra-regional care. A considerable volume of their patient workload remains inpatient admissions for routine specialist inpatient care.

While there has been plentiful literature related to nursing during the COVID-19 pandemic, there is a dearth of literature reporting nursing management roles to implement the strategy for workforce mobilization. That said, a recent study by Wu et al. (2020), in China, described the nursing management strategy to transform a hospital to a COVID designated site, which included the reconfiguration of clinical areas, creating a supply of nursing staff and preparing training for nurses to meet clinical demands of their roles. What is worth noting is that the limited literature that previously examined the mobilization of healthcare staff during the swine flu (H1N1) influenza crisis (Considine et al., 2011), and the severe acute respiratory syndrome (SARS) crisis (Fitzgerald et al., 2012) confirms that lessons have not been learned and there is an evident lack of research in this area.

A major emergency management plan is an approach used by organisations to ensure appropriate planning, preparedness, capacity, training and coordination are in place to enable it to meet any challenges posed (Health Service Executive, 2020). No current framework exists to support decisions related to the redeployment of staff, particularly for medium to long-term purposes. This is despite nurses and midwives in an organisation having a contractual obligation to accept redeployment in emergency situations. The current practice is for senior nursing and midwifery management to identify staff for redeployment to other areas of the organisation to deliver patient care. It is critical to address the gap in understanding the impact of redeployment on nurses to gain greater knowledge for workforce planning for potential future pandemics.

3 | AIM

The aim of the research was to explore nursing workforce readiness (preparedness) in one hospital group in Ireland during a global pandemic.

The objectives of the study were as follows:

- To quantify staffing and mobilization of nurses/midwives across a large hospital group in the Republic of Ireland during the global pandemic
- To identify the extent of the reconfiguration of services across the hospital group
- To identify education priorities and resources provided for nursing/midwifery staff

4 | METHODS

This study used a mixed methods design. A specifically designed questionnaire was used for this study. Drawing from the literature and professional expertise the 20-item "Nursing Workforce Readiness Survey" was created by the research team, some of whom are senior nurse managers, using Qualtrics® software (Supporting Information S1). The survey was tested for face validity among an additional three Directors of Nursing. Reliability was checked at analysis. A second phase of the study included an additional reflective component, where the results from the questionnaire were presented to the Directors of Nursing (DON) and Midwifery (DOM), whose comments were recorded and included in reporting of the results.

A convenience sample of the DON and DOM in the hospital group was selected. A link to the cloud-based survey was distributed to the 11 Directors of Nursing/Midwifery across the hospital group during September to November 2020. The survey was circulated electronically, with an exhaustive sampling approach adopted and all possible participants in the hospital group invited to take part.

Qualitative data were recorded from participants at a scheduled meeting following a presentation of the survey responses. All eight participants were present.

4.1 | Ethical considerations

A review of a declaration of exemption from full ethical review was accepted by the University Research Ethics Committee, LS-E-20-84-Ryder. Participation information was provided at the beginning of the survey. Participants were informed that completion of the survey implied consent.

An additional declaration of exemption from full ethical review was accepted by the University Research Ethics Committee to collate anonymous feedback from the participants following the presentation of the results. Participants were advised in advance of the feedback presentation that their responses were recorded and were requested to state that they did not wish for their responses to contribute to the research during the discussion.

TABLE 2 Hospital configurations

Hospital model	Frequency
2	1
3	5
4	1
Maternity services	1
Total	8

4.2 | Data analysis

Quantitative data were downloaded from Qualtrics, and analysis was conducted using the software package IBM SPSS®, Statistics Version 24. Data were checked and cleaned for analysis. Four blank survey responses were removed. Descriptive statistics were used to describe, compare and summarize participant responses.

Qualitative data were recorded, transcribed and analysed by two members of the research team. Data were analysed using Braun and Clarke (2006) thematic analysis framework.

5 | RESULTS

Eight of 11 (73%) hospitals responded to the survey (Table 2). The majority ($n = 5$; 63%) of responses were from model three hospitals.

5.1 | Nursing vacancies

In order to understand the context in which the Health Care Group organised and managed its Nursing and Midwifery workforce, the participant hospitals were requested to provide the pre-COVID-19 staffing configuration as identified in Table 3. Participants were also requested to identify pre-COVID nursing vacancies using the same configuration. There were a total of 83 nursing vacancies in participating hospitals prior to COVID-19.

5.2 | Corporate planning

When questioned whether or not their organisation had a documented contingency plan to escalate intensive care units (ICU) in the event of a pandemic half ($n = 4$; 50%) of all the hospitals reported that they had this prior to March 2020. Seventy-five percent ($n = 6$) of organisations reported adopting a collaborative decision-making approach to decide on the reconfiguration of clinical areas (Figure 1). The majority ($n = 6$; 75%) of organisations indicated that both ward design, and clinical skills of the nurses working in the ward areas, informed decisions related to the reconfiguration of clinical areas as opposed to a surge in activity.

TABLE 3 The pre-COVID staffing configuration across hospitals were as follows

Pre-COVID number whole time equivalent (WTE)	Hospital model				
	2 M (n)	3 M (n)	4 M (n)	Maternity services M (n)	Total M (n)
RGN/RM	116 (116)	239 (1196)	625 (625)	251 (251)	273 (2187)
CNM/CMM 1	11 (11)	17 (84)	55 (55)	44 (44)	24 (195)
CNM/CMM 2	15 (15)	29 (145)	82 (82)	62	38 (305)
CNM/CMM 3	0 (0)	5 (24)	8	8	5 (40)
CNS/CMS	7 (7)	13 (66)	63	10	18 (144)
cANP/RANP or cAMP/RAMP	4 (4)	6 (30)	21 (21)	6 (6)	8 (61)
ADON/ADOM	5 (5)	6 (32)	11 (11)	9 (9)	7 (57)
Other	2 (2)	4 (18)	1 (1)	1 (1)	4 (36)
Nurses (all grades) in ICU or equivalent	10 (9)	19 (77)	105 (105)	17 (17)	30 (209)
Nurses (all grades) in ED	14 (14)	28 (140)	90 (90)	17 (17)	33 (260)

Abbreviations: ADON/ADOM, assistant director of nursing/assistant director of midwifery (ADOM); cAMP/RAMP, candidate advanced midwife practitioner/registered advanced midwife practitioner; cANP/RANP, candidate advanced nurse practitioner/registered advanced nurse practitioner; CNM/CMM, clinical nurse manager/clinical midwife manager; CNS/CMS, clinical nurse specialist/clinical midwife specialist; ED, emergency department; ICU, intensive care unit; RGN/RM, registered general nurse/registered midwife.

TABLE 4 Immediate nursing mobilization to target areas from 1 March to 15 March 2020

Immediate staffing redeployment to increase capacity in departments	Hospital model				
	2 M (n)	3 M (n)	4 M (n)	Maternity services M (n)	Total M (n)
Emergency department	0 (0)	2 (10)	30 (30)	0 (0)	6 (40)
ICU/HDU	0 (0)	7 (36)	10 (10)	0 (0)	6 (46)
Other clinical areas	0 (0)	23 (116)	81 (81)	4 (4)	29 (201)

Abbreviations: HDU, high dependency unit; ICU, intensive care unit (ICU).

5.3 | Redeployment/mobilization of nurses

Participants were requested to list the areas where staff were mobilized from. Responses indicated that hospitals mobilized staff from within their own organisation to critical areas including emergency departments, critical care and newly designated COVID-19 areas (Table 4). Responses identified that staff were redeployed from a variety of clinical areas that were closed including outpatient departments, operating theatres, endoscopy services and nurse education and practice development departments. Clinical Nurse Specialists (CNS) were also redeployed from specialist services that were closed for outpatient visits. Two hospitals employed a number of agency nurses to increase the numbers of nurses working in critical areas.

The total number of nurses/midwives working across the eight hospitals in the study was reported as 3019, with 83 vacancies. Within the first 2 weeks of the pandemic, 287 (9%) members of the nursing/midwifery workforce were redeployed to alternative working areas. Overall, 11% ($n = 343$) of the nursing/midwifery workforce were redeployed across the eight hospitals (Table 5).

As part of the survey, the hospitals were asked to identify three education priorities for nursing staff at the onset of the pandemic. The first priority identified by all organisations was related to infection prevention control, including procedures for "don and doff" of personal protective equipment. This second education priority was the provision of instruction to enhance nursing staff in critical care skills including care of the patient receiving invasive and non-invasive ventilation. The third priority was to upskill Registered Nurses who were redeployed from other clinical areas, who were recent appointments to the hospital, many from the non-acute care sector, particularly from nursing homes.

Participants were requested to identify the education resources in place for redeployed staff and explain the mode of delivery of the education available. Responses indicated that the education was provided by Centres for Nurse Education, Nurse Practice Development from both local and regional areas, and higher education institutions. Two hospitals identified the use of online educational resources to support upskilling of staff.

5.4 | Feedback from participants

The results of the survey were presented to the group of participants at a scheduled meeting. There were two key discussion topics raised by the group, namely redeployment and education.

TABLE 5 Total number of nurses mobilized in hospitals between 1 March and 1 June 2020

Total staffing redeployment to increase capacity in departments	Hospital model				
	2 M (n)	3 M (n)	4 M (n)	Maternity services M (n)	Total M (n)
All clinical areas	33 (33)	32 (162)	130 (130)	018 (18)	43 (343)

Note: Total number of staff that were redeployed from 1 March to 1 June 2020.

5.4.1 | Redeployment

The participant group ($n = 8$) expressed surprise at what they referred to as the small percentage of staff redeployed.

> I cannot believe it's only 9–11%, we phoned every available CNS (DOM 3)

They had anticipated that this number would be approximately 25% of staff. The rationale for anticipating a higher percentage was explained by the recollection of identifying and calling every possible CNS, they however noted that this group comprised 5% of all nurses/midwives.

A number of participants ($n = 6$) discussed that perhaps the survey did not capture what was described as "hidden redeployment." This was described as situations where out-patient based nurses/midwives were redeployed to ward areas to enable ward-based nurses to be redeployed to other wards with a higher patient acuity such as non-invasive ventilation. As one participant stated:

> I think it misses the double redeployment element where we put CNS into stable wards to move the ward staff to the more complex wards, there was a hidden element to redeployment if you like. (DON 6)

One participant stated, "it wasn't all about critical care." This comment was met with a lot of agreement. When nurses were moved between wards, this was not identified as redeployment in the survey; however, upon reflection, it was described as "double redeployment."

One participant reflected that there were a number of discussions prior to the pandemic where concerns were raised about critical care staff shortages. The same participant noted that despite the concerns, the group were able to mobilize staff to critical care during a crisis. The group agreed with this commentary.

5.4.2 | Education and training

The need for education resources was highlighted among the group, particularly in clinical educator roles where the availability of expertise to provide hands on skills training was needed. It was discussed that practical "hands-on" focused skills training was the primary requirement across the organisations.

A consensus among the group was related to the importance of the Clinical Facilitator roles and availability. This was particularly expressed amongst DON in model three hospitals as these were the education resources needed locally to prepare staff.

> Not having clinical facilitators was a real problem for us, we struggled to find someone to teach clinical skills (DON 4)

It was agreed that there is a lack of funding for these positions and the group expressed the need for permanent positions to be actioned.

6 | DISCUSSION

This study explored the nurses and midwives experience of mobilization in the first wave (1 March 2020 to 1 August 2020) of a global coronavirus pandemic in a large hospital group in the Republic of Ireland. Three key deliverables were required to occur almost simultaneously to enable mobilization of the nursing and midwifery workforce. They were Reconfiguration, Redeployment and Re-skilling. The clinical areas required reconfiguration from their previous specialist derogation to dedicated COVID-19 suitable clinical environments. Overall, during the COVID-19 pandemic, nurses and midwives' managers reported the urgent need to mobilize staff from other areas within their hospitals to their intensive care departments/units to meet the huge demand for intensive care nursing. In addition, they reported a crucial need to re-skill nurses and midwives in specific infection control skills including donning and doffing of personal protective equipment (PPE), educating and re-skilling nurses/midwives for critical care areas and new documentation.

6.1 | Reconfiguration

This research identified that a collaborative decision-making approach was applied to reconfigure clinical wards to accommodate a predictive surge in critical care and emergency departments as the COVID-19 virus increased in the community. The factors influencing ward reconfiguration was the ward design and the clinical skills of nurses. Hospital resource planning is complex at the best of times, but in the midst of a disaster has the potential to increase the loss of lives due to unavailability of specific resources and or skills (Aghapour et al., 2019). Arabi et al. (2021) argue that the best approach to management of critical care surges is to prevent them by implementing a centralized approach to management of admission to critical care. In

contrast, Hattke and Martin (2020) argue whether a centralized or a decentralized approach is most appropriate is a matter of much debate. It is known that some form of coordination, collaboration or cooperation is necessary during a crisis (Kapucu et al., 2010; Martin et al., 2016) but the degree to which these occurred to bring about collective action within one hospital group is currently unknown. The literature would therefore attest to the centralized collaborative approach applied by the hospitals in the reconfiguration of clinical areas.

The ongoing shortage of nursing and midwives has attracted the attention of the Organisation for Economic Co-operation and Development (OECD), which projects a significant worldwide nursing shortage by 2030, with Ireland, having a projected nurse and midwife shortage of 9.1% (Scheffler & Arnold, 2019). The existing shortage of nurses had already provided a massive strategic risk to the effective functioning of the healthcare system, with many hospitals already facing a staffing crisis, when the COVID-19 pandemic hit (Jilani, 2019). However, the results of this study highlight that within one hospital group prior to COVID-19, there were only 83 (2%) whole time equivalent (WTE) nursing positions vacant prior to the pandemic.

6.2 | Redeployment

This is the first study to quantify the level of mobilization of nurses and midwives during the pandemic. The redeployment of employees was one of the core elements of the response to COVID-19 and reflects the leadership of the nursing executive teams in participating organisations. The findings identified that 9% of the workforce were mobilized within the first 2 weeks. The nursing and midwifery staff were mobilized internally to designated COVID-19 specialist areas. This process resonates with Minissian et al. (2020) whereby redeployment efforts took centre stage for optimizing staffing needs and the surge planning and redeployment efforts led by senior leaders were imperative to ensure crucial staffing needs were achieved.

At a national level, non-essential services (e.g., outpatient clinics and elective surgery) were cancelled or postponed. Arabi et al. (2021) recommend this systematic centralized approach to enable the health system "flex" to accommodate increased demand for hospitalized care. This was reflected in the results of this research where participants indicated that mobilization to COVID-19 designated areas was accommodated through internal redeployment of nurses and midwives whose positions were curtailed or temporarily suspended. The literature has reported consistent findings related to the nursing workforce mobilization. Retzlaff (2020) also noted the need to redeploy perioperative team members to other units and remarked that a common thread at health care facilities across the country was the willingness of staff members to pitch in and do what was necessary to help their communities respond to the COVID-19 pandemic, whether it was temporarily transitioning to a different unit, helping their colleagues with patient positioning, and donning or doffing PPE. To increase the number of nursing staff, nursing interns and retired nurses were used to fill vacancies (Propper et al., 2020). This was not consistent with the experience reported from participants in this research who identified that mobilization was accommodated through internal redeployment.

In the current study, the impact of nurse staffing levels on patient outcomes is unknown in the hospital group, given the scale, speed and age profile most affected during the first wave of the pandemic. Of note, there were 8582 deaths registered in Ireland during this period (Quarter 2, 2020) and of these 1227 deaths were assigned an Underlying Cause of Death (UCOD) of COVID-19, an increase of 14.1% (or 1063 deaths) from Quarter 2 2019 was also reported (Central Statistics Office, 2020).

6.3 | Re-skilling

The need to address related training and education in this study were infection control, intensive care nursing and orientation for nurses redeployed or nurses returning to professional practice relates to the challenges in providing support to reduce the gaps in critical knowledge by Chen et al. (2020). Danielis et al. (2021) described the experience of Italian nurses' redeployment who felt unsupported due to the absence of education and training in skills and documentation required to work in their new clinical area. This research supports the literature identifying that training and up-skilling of nurses was a feature of the measures taken by the profession during the pandemic. This research identified three key skill enhancement areas prioritized, infection and prevention and control, critical care skill enhancement and documentation updates.

The virus, COVID-19, was identified as a highly Infectious disease (WHO, 2020). While most nurses and midwives are familiar with a variety of infectious disease PPE related procedures, COVID-19 was highly contagious, therefore, required focused skills related to donning and doffing full PPE.

This research adds to the existing literature by identifying the specific requirement for "hands-on" skills training in lower acuity organisations. The participating nurse leaders expressed explicitly that skills requirements were not all critical care focused. In contrast, Jackson et al. (2020) identified that it was crucial to have adequate learning resources available to support staff who were redeployed to new areas in particular intensive care. Patient safety no matter what the circumstances are is paramount.

Participants in this study expressed a preference for hands-on skills training to re-skill redeployed staff. Only two organisations availed of the on online education made available. Almomani et al. (2021) reported that the upskilling of non-critical care nurses was conducted using simulation-based education and consisted of completing a mandatory online critical care awareness module. Similarly, Danielis et al. (2021) reported that nurses were required to gain competence individually as the only resource available was distance education. The findings in this research identified that education and skills acquisition was supported by clinical educators and academic partners. Participants highlighted a need for investment in specific clinical teaching roles to enable essential upskilling of staff.

6.4 | Limitations

The findings emerging from this study need to be viewed within the context of its limitations, namely that this study reports on one period of time at the start of the COVID-19 pandemic and during what is now considered the first wave of the pandemic. In Ireland there have been two other substantial waves of COVID-19 which have impacted greatly on the provision of health care within the IEHG. Furthermore, the data presented in the paper represents eight of the 11 hospitals in one group, and the data gathered relating to one of the maternity care services was limited to protect anonymity. Future research will need to consider Nursing and Midwifery services for all Hospital Groups in the Republic of Ireland during the past 12 months and examine the experiences of the Nurses and Midwives who were redeployed during the pandemic to gain a greater understanding for future service development.

7 | CONCLUSIONS

Nurses are the backbone of healthcare delivery and demonstrated willingness and flexibility in adapting to new ways of working during the first wave of COVID-19 pandemic. This study revealed that workforce readiness during the first wave of a global pandemic was influenced by many factors, for example, a documented contingency plan, collaborative decision making, ward design, and the upskilling of nurses' clinical skill set. On reflection many of the Directors of Nursing were surprised at the low number of nurses redeployed to different departments but it was suggested that there may be some hidden redeployment as some nurses adopted different roles within their usual work environments. Educators, more importantly hands-on clinical educators were identified as essential to the successful mobilization of nursing staff across the organisation. Nursing and midwifery staff readiness to cooperate in this crisis is testament to their commitment to assist patients, families and colleagues to respond to COVID-19 tsunami that gripped the nation at the time.

7.1 | Implications for nursing management

This research identified three key factors for consideration by nursing management to mobilize the nursing workforce in response to a pandemic. Reconfiguration of clinical areas to respond to a surge in hospital capacity is a collaborative approach at management level. Closure of non-emergency services in the organisation results in availability of staff for redeployment. Hands-on skills training and refreshment of updated documentation is essential to support staff being redeployed to clinical areas. Organisational measures at macro and micro levels need to be considered if nursing and midwifery are to be adequately prepared for future surges or pandemics.

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CONFLICT OF INTEREST

The authors wish to declare that there are no conflicts of interest.

ETHICAL APPROVAL

A declaration from full ethical review was accepted by the Office of Research Ethics at the Higher Education Institution, reference LS-E-20-84-Ryder.

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

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Experiences of frontline nurse managers during the COVID-19: A qualitative study

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Abstract

Aim: To explore experiences of frontline nurse managers during COVID-19.

Background: The COVID-19 pandemic has complicated care provision and healthcare management around the world. Nurse managers have had to face the challenge of managing a crisis with precarious resources. Little research has been published about the experiences of nurse managers during the COVID-19 pandemic.

Methods: A qualitative descriptive study of 10 frontline nurse managers at a highly specialized university hospital in Spain was carried out. Semi-structured interviews were conducted between June and September 2020. The Consolidated Criteria for Reporting Qualitative Research checklist was used for reporting.

Results: Six themes emerged: constant adaptation to change, participation in decision-making, management of uncertainty, prioritization of the biopsychosocial well-being of the staff, preservation of humanized care and 'one for all'.

Conclusions: This study provides evidence for the experiences of nurse managers during the COVID-19 pandemic. In addition, analysing these experiences has helped identify some of the key competencies that these nurses must have to respond to a crisis and in their dual role as patient and nurse mediators.

Implications for Nursing Management: Knowing about the experiences of frontline nurse managers during the pandemic can facilitate planning and preparing nurse managers for future health disasters, including subsequent waves of COVID-19.

KEYWORDS
COVID-19, experience, nurse manager, nursing, qualitative research

1 | INTRODUCTION

The COVID-19 pandemic has complicated the provision of care and the management of healthcare worldwide (Tort-Nasarre et al., 2021), placing nurses at the forefront of the response to the demands of the crisis (James & Bennett, 2020). Despite this, a lack of available nurses to respond to the urgent need to care for COVID-19 patients and their families has been observed worldwide (Al Thobaity & Alshammari, 2020). Nurse managers have had to face the challenge and threat of managing the crisis with precarious health supplies and resources, a changing workforce and exhausted staff who must cope with fear, uncertainty and the helplessness of not being able to assure humanized care for patients with COVID-19 and their families (Hofmeyer & Taylor, 2021; Xiang et al., 2020). This contributes to the need to design new protocols and continuously reorganize services based on the changing information about SARS-CoV-2, which has led to many frontline nurse managers being overwhelmed (Bookey-Bassett et al., 2020).

Despite the relevant role of nurse managers during the pandemic, little is known about their experiences (White, 2021). This qualitative study contributes to the knowledge on the unique experiences of frontline nurse managers during the pandemic, which can help plan and prepare nurse managers for future health disasters, including subsequent waves of COVID-19.

2 | BACKGROUND

The COVID-19 pandemic has caused a worldwide health and social crisis that has directly impacted the healthcare system (World Health Organization [WHO], 2021). In our country, the first case was confirmed on 31 January 2020. Since then, the virus has spread rapidly, and the country has been severely affected. The government enacted a national lockdown on 14 March 2020, which is gradually becoming the 'new normal' (Ministerio de Sanidad, Gobierno de España, 2021).

During this time, the role of nurse managers facing the pandemic has been briefly discussed in the grey literature. Published editorials have provided recommendations for effective leadership during the pandemic and suggest the requirement for courageous leaders with sound knowledge (Rosser et al., 2020; Shingler-Nace, 2020). Only one study published on nurse managers' experiences during the pandemic with a qualitative approach has been identified to date, although the study did not focus only on frontline nurse managers and was carried out in another context (White, 2021). According to this phenomenological study, the new role of nurse managers during the pandemic focuses on the emotional well-being of their staff and continual communication (White, 2021). However, little research regarding the experiences of nurse managers during the COVID-19 pandemic has been published. Notably, future studies in hospital contexts should be developed (Bookey-Bassett et al., 2020; Lake, 2020; White, 2021). Furthermore, health organizations call for training programmes that prepare nurse managers to respond effectively in such situations (Cariaso-Sugay et al., 2021; Hodge et al., 2017).

Understanding the experiences of frontline nurse managers during the COVID-19 pandemic is key to designing training programmes and organizational strategies that facilitate better management of future situations with similar epidemiological and clinical characteristics (Rosser et al., 2020).

3 | METHODS

3.1 | Aim

The aim of this study was to explore the experiences of frontline nurse managers during the COVID-19 pandemic.

3.2 | Design

A qualitative descriptive study was carried out. This design allows the study of people's experiences around a phenomenon (Polit & Beck, 2017).

3.3 | Participants

Ten nurse managers were selected by purposeful sampling, thus ensuring a notable degree of experience with the investigated phenomenon (Polit & Beck, 2017). The inclusion criteria were front-line nurse managers from different units/services of a highly specialized university hospital in Spain who voluntarily participated and signed the consent form. No exclusion criteria were applied. The sample size was considered sufficient when the addition of new subjects did not reveal novel aspects of the studied phenomenon, and sufficient material was available to offer deep descriptions and interpretations (Polit & Beck, 2017). The characteristics of the sample are presented in Table 1.

3.4 | Data collection

Semi-structured interviews were conducted between June and September 2020. The interviews were audio-recorded for later transcription, and each interview lasted approximately 40 min. The interviews began with an open question and then addressed the areas of

TABLE 1 Sociodemographic data of the participants ($N = 10$)

	Mean ± SD (years)	Range (years)
Age	47.5 ± 7.33	36–57
Professional experience		
As a nurse	25.3 ± 8.3	9–36
As a nurse manager	5.4 ± 4.86	1–14
	n (%)	
Gender		
Female	100%	
Male	0%	
Education level		
Bachelor's degree	20%	
Master's degree	80%	

TABLE 2 Thematic guide

Tell me about your experience as a supervisor during this period.
What have been the main challenges you have faced during the COVID-19 pandemic in your unit/service? Why?
How have you faced these challenges? What has been your role as a supervisor in facing these challenges? What have been your priorities regarding staff? Regarding the team? Regarding patient care?
What barriers have you encountered in responding to the needs of your unit/service during this period? What facilitators have you encountered?
What strategies have you used to manage the crisis with the staff? With the team? With patients?
What has everything you have experienced meant to you? What are the main lessons you have learned during this period?
From your experience in these months, what are the key aspects in the management of a crisis like this one?
Before ending the interview, would you like to tell me anything else that I did not ask you about that is important to you?

interest: change and unit management, influencing factors and suggestions for improvement (Table 2). Aspects that complemented the data obtained through the interview, such as tone of voice, gestures and body posture, were recorded in the field notes to better understand and contextualize the experience of each nurse manager.

3.5 | Data analysis

A systematic analysis of the transcripts was conducted by applying the methods proposed by Burnard (1996). The initial phases of the analysis included comprehensive readings of the data and the development of a system of categories to describe the units of meaning identified in relation to the phenomenon studied. This system of categories was revised and refined based on the identification of common patterns. Accordingly, categories were ordered and regrouped into broader topics to explain the experiences of frontline nurse managers during the COVID-19 pandemic.

TABLE 3 Procedures used to enhance study rigour

Criteria	Procedures
Confirmability Logical and impartial interpretation of data	• Detailed descriptions of the characteristics of the participants and the criteria for the inclusion and selection of participants • Detailed and explicit descriptions of the research methods and procedures
Credibility Veracity of the results	• Use of textual quotes from the transcripts to support the arguments • Searches of the text for textual evidence to support the findings
Transferability Applicability of the results to similar contexts	• Each individual's perceptions are unique; the meanings behind them are common
Trust Stability and consistency of the data	• The interpretative results (narratives) have been confirmed by some of the participants

Source: Riege, 2003, pp. 78–79.

3.6 | Rigour

The procedures used to ensure the rigour of the study were selected based on the criteria proposed by Riege (2003) (see Table 3). In addition, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used for reporting (Tong et al., 2007). The researchers considered their own reflexivity, being aware and reflexively self-critical of how their possible assumptions and biases could influence the process and the results (Riege, 2003). The research team consisted of female nurses in senior positions with PhD (MVC and CO) and master's degree qualifications (the rest), broad and diverse healthcare experience, experience in academia (MVC and CO) and experience with qualitative research methods (MVC, CO and ERM). Specifically, face-to-face interviews were conducted by two of the researchers (CO and ERM) who did not have a direct relationship with the interviewees. MVC, CO and ERM, who had experience in qualitative research, carried out the analysis and interpretation of the data. All research team members were involved in drafting the manuscript and revising it critically for important intellectual content.

3.7 | Ethical consideration

The participants were contacted via electronic mail and received verbal and written information emphasizing their free participation, confidentiality, data anonymity and the use of their data for scientific purposes. The first author encoded the identities of the participants as 'NM', with the number assigned to the interviewed nurse manager, and no other members of the team had access to identifying nurse

TABLE 4 Themes and subthemes extracted from the qualitative data and examples

Themes	Subthemes	Examples of coded phrases
1. Constant adaptation to change	1.1 Urgent and constant reorganization of the service	I have to organize protocols and procedures from one day to the next, even within hours. It was a constant change *We were quickly looking for alternatives to many resources that were not available* *It was very changeable; it changed every day. We even changed the protocol every hour, everything had to be reorganized*
	1.2 Complexity of staff management in a changing situation	The staff changed every so often, so it was difficult to manage them *Another major challenge was managing the ever-changing staff*
	1.3 Communication problems in changing situations	I found changing the way I proceeded every day because there was so much contradictory information *We have sometimes lacked communication in changing circumstances* *Many times, in the most chaotic moments, different information has been received*
2. Participation in decision-making		It has been a time of important and quick decisions without consensus with many people *Some decisions are made without considering the repercussions*
3. Managing uncertainty		Convey calm; like there was calm inside the chaos or uncertainty and fear *We made a great effort to convey peace and tranquillity … in the midst of the uncertainty that existed* *You have to show that you feel secure, even though you have doubts inside you*
4. Prioritization of the biopsychosocial well-being of staff		My priority with the staff was to make sure that they did not lack anything *We have prioritized making staff feel supported and backed up* *To be there, to be present, morning and evening with the staff*
5. Preservation of humanized care		Do not forget about the person, being able to meet all the needs of the patient with care that is a little different from usual *I have been able to accompany people who were dying to their last breath, who were alone, and keeping their families informed*
6. 'One for all'	6.1. Teamwork	These moments have truly united the team. They have worked phenomenally as a team; they have laughed and cried together *As a team, we were going to direct, to organize as one, in sync, together*
	6.2. Collaboration	When you call, the doors open (…) the support is impressive *When I had needs or doubts … I always have a team that answered me at the moment and came and explained things to us*

manager information. Informed consent was collected from those who agreed to participate, and an interview was scheduled. This research was approved by the Research Ethics Committee of the University of Navarre (Code 2020.126) and by the hospital's management team and was performed in accordance with the criteria of the Declaration of Helsinki (World Medical Association, 2013).

4 | RESULTS

Six themes were identified as follows: (1) constant adaptation to change, (2) participation in decision-making, (3) management of uncertainty, (4) prioritization of the biopsychosocial well-being of staff, (5) preservation of humanized care and (6) 'one for all'.

These themes and their respective subthemes from which they evolved appear in Table 4 with examples of supporting verbatim phrases.

4.1 | Constant adaptation to change

4.1.1 | Urgent and constant reorganization of the service

The pandemic situation abruptly brought on by COVID-19 required urgent and constant changes in the organization of services in terms of managing processes and staff, which required diligence and flexibility.

> When you are in the situation, you are so involved (…) in work, in organising (…). They called: 'Hey, you have to organise this', and there you are; it cannot wait for the next day, right? Things changed from one day to the next, even within hours, the protocols changed, and the procedures; so it was, well, a constant, constant, constant change (…). (NM1)

Faced with a new and unknown situation, the nurse managers indicated that they were forced to seek alternatives to the problems that arose and to provide prompt solutions. This proactive search for quick solutions helped them to face and overcome a situation for which they often lacked both organizational and patient care guidelines.

> (…) what were we going to do? If not, we were looking for alternatives to things: well, if there were no such thing … we would look for alternatives to many resources that were not available (…). We had to search for alternatives to the problems that came up and solve them quickly … because, well, you are never prepared; you always have things, you always have resources, alternatives. (NM6)

This proactive attitude of the nurse managers was present even before they had to face the pandemic. As the following quote illustrates, they began to plan and devise solutions for the organization of infrastructure and human and material resources after exploring and analysing situations in other regions.

> Before the worst of the pandemic arrived, we already began to work on things; we tried to organise (…) with all the experience we had of what was happening, of what we were hearing from Madrid (…); we got ahead of many things (…), most importantly, especially staff, patient organisation, organisation of medical teams, equipment, training …. (NM6)

4.1.2 | Complexity of staff management in a changing situation

The complexity of managing staff arose mainly because personnel requirements needed to be changed continuously to adapt to clinical activity and absenteeism due to COVID-19; the response in many cases involved incorporating staff from other services.

> What has happened to us is that the staff changed every so often, between some being infected and then having to replace them and then the number of patients increased, because we had to bring new people, so it was difficult to introduce new people (…). That has added more work, perhaps, for management because you did not have much time to teach a lot to another person …. (NM10)

On the other hand, activities required adjustment to the type of patients who were being treated in the units; therefore, management assumed the training of staff such that in a short time, nurses could learn to attend patients other than those for whom they were qualified to care.

> We were going to have to care for critical patients when the staff here (…) are not used to attending intubated patients; they do not know how to handle them, so they have helped us (…), people from the surgical area who were trained with ventilators (…), but that is an added fear (…) because patient care is the most important thing we have to provide. (NM3)

4.1.3 | Communication problems in changing situations

Nurse managers perceived difficulties with the flow of information that they received regarding the guidelines to be followed during the pandemic crisis, both vertically and horizontally.

At the vertical level, several nurse managers identified communication problems in their stories mainly for two reasons: (1) lack of impartial information at the right time and (2) diverse information that was contradictory or came from different sources. As illustrated in the quote below, both types of internal communication problems led nurse managers to continuously change their practices and to feel uncertainty and insecurity regarding their decisions.

> (…) I found myself changing the way I proceeded every day without knowing very well what I was basing myself on because there was so much contradictory information, and from very good sources in principle (…). It is that uncertainty and insecurity of 'Am I doing it right? Am I not doing it right? Will this be a good decision? Will it not be good…?' (NM7)

On the other hand, regarding communication with their teams, nurse managers reflected on how the changing situation forced them to quickly convey different messages and devise strategies, such as the use of informal channels, to ensure that staff were informed. Nurse managers tried to transmit information that was clear, concise and truthful at all times and to convey it quickly to all staff members.

> Everything changed day by day, so we communicated by WhatsApp, which was the fastest …. People had not even assimilated one thing, when there were changes one after another (…). The information had to be given very concisely, very clearly. (NM6)

4.2 | Participation in decision-making

Decision-making at different levels was another relevant issue during the pandemic that nurse managers emphasized. On the one hand, at the operational level, they were able to participate in the decisions that were made.

> … our contributions have helped them, and they have listened to us (…); if we felt that something was not right, then we would go over it [occupational risks] again with them to change it … they did not make the protocols [for occupational risks] alone; they made them with us…. (NM2)

In this sense, one nurse manager stressed that after reflecting on what they did and how they did it, they were aware of the decisions that they had to make without consensus; due to the importance of these decisions, having a consensus would have been better.

> Now, afterwards, I realise how many things we did in a few days and that we organised without considering anyone's decisions (…). Therefore, you can see that it has been a time of making important and quick decisions without many people agreeing on them (…) and saying, 'My goodness, this is me; here I am deciding this, and I would have liked to have been able to agree with three or four others, right?' (NM1)

On the other hand, some nurse managers perceived not feeling involved in certain decisions that were made at a more strategic level and seemed not entirely correct and could have hindered operational management.

> Some decisions are made without considering …, without thinking about the repercussions they may have. I don't know, it's as if … if everyone can speak, everyone is involved, I think it would be better. (NM5)

This centralized decision-making also hindered operational aspects given the need to make decisions in a changing situation and without prior knowledge on which to base those decisions. Some nurse managers reported not being able to make correct decisions and not having autonomy due to a lack of updated information about which guidelines to follow because they felt that these guidelines were not quite viable in practice.

> You did not know what to rely on to reinforce these regulations. Everything was changing so fast that, in the end, you saw that you were not capable of making a correct decision because you did not really know what the real criterion was for making that decision (…). So, I lacked some autonomy because, in the end, you do many things according to your decision, but you still want to have slightly more general information …. (NM7)

4.3 | Managing uncertainty

The suddenness of COVID-19 generated many fears and considerable uncertainty among nursing professionals. Nurse managers became aware of the need to project a sense of calm, security, confidence and apparent control of the situation. They were aware of the importance of not expressing their doubts and uncertainties in their day-to-day work and not projecting their concerns and fears.

> You have to show you feel secure, even though you have doubts inside you, right? And this is so, but no matter how many times you try not to show your insecurity, in the end, you convey it. (NM9)

> Convey calm; they have been telling me that everyone had the sense of everything being organised, like there was calm inside the chaos or uncertainty and fear. (NM6)

Nurse managers also highlighted how, despite the uncertainty of the situation, the ability to anticipate events played an important role in the management of that uncertainty. The managers tried to look beyond the current problem and anticipate problems that could occur to avoid them or minimize their impact.

> Each day you came to work, it was something different (…). Therefore, for us, the most important thing was to get ahead of events, that is, that they never caught us unaware. (NM4)

4.4 | Prioritization of the biopsychosocial well-being of staff

One of the priorities that the nurse managers repeatedly expressed in the interviews was ensuring the biopsychosocial well-being of the

staff in charge. They realized that their main objective was to ensure that nurses could work in the best possible physical conditions in terms of their rest and protection (material and training) to adequately care for patients with a minimal risk of contagion.

> That the staff were comfortable working within the circumstances in which they lived (…), they had shifts so that they were well-rested when they came to work (…), that they had material, that they did not lack anything. (NM2)

> Another important challenge was organising the groups of professionals. I made two groups in all the units so that they did not mix with each other and so that if there was a concern regarding infection in one, the other stayed, even though we worked with isolation protocols. (NM1)

Nurse managers also described how they formed teams such that they had a friendly work environment in which the professionals felt comfortable. At the same time, they tried to have staff with experience and knowledge to ensure the safety of care and a balance among the professionals themselves.

> When the shift groups were made, groups were not made randomly but with certain characteristics. Those groups were always the same. In addition, it was done with a thought towards like-minded people (…), and I think that was successful …. (NM6)

> Therefore, making those groups and then also bringing in the people who came, if they were an experienced person in X [service], I put them in a group that lacked that (…). That's how we went about figuring out groups. (NM3)

In addition, nurse managers were always receptive to responding to individual needs, sharing experiences and ensuring that the professionals could balance work and family life.

> My priority with the staff was to make sure they didn't lack anything; to listen to them in case someone didn't feel well enough to work; to talk to them to give them more days off if they needed it, or to replace them with other people, so that they would be well, calm, not overwhelmed; (…) we used to get together to share the good things, the bad things, their fears. They were calmer when they talked and said what they thought. (NM2)

> Changing people shifts, extending working hours (…), they said, 'It's that I have my parents, my children, but I work elsewhere'; what do we do? Of course, we are going to help you. We are going to do what we can together; we will arrange shifts. (NM6)

4.5 | Preservation of humanized care

This issue alludes to the double challenge that supervisors faced to ensure the protection of patients/families and professionals without losing sight of the person as the focus of care. This second challenge was difficult due to the impossibility of knowing the patients personally.

> I did not know the patients. I did not recognise their faces. I only knew them by name … Going through the unit and not being able to … and not having their families … that was really hard for me. (NM6)

In this sense, nurse managers highlighted their concern that the priority of nursing work should continue to be holistic care of the patient and to ensure that they could address all of the patient's needs and concerns and provide the support that they needed at all times during their hospitalization.

> Do not forget about the person. It has been very hard, the truth, because we have not been able to care as perhaps we would have liked to care, but that has been the greatest challenge: being able to meet all the needs of the patient with care that is a little different from usual. (NM10)

Similarly, an aspect of care that was highlighted was ensuring that the patient did not feel alone, trying to bring the family as close as possible and reinforcing behaviours that compensated the lack of closeness imposed by protective measures. Such measures included making calls or ensuring that the nurse had a greater presence in complicated situations.

> I have been able to accompany people who were dying to their last breath, who were alone, and I felt good because I was able to do that for them (…). There was also the challenge of keeping their families informed so that they would not be lost, not knowing where the relatives were or how they were admitted. (NM2)

> We asked them if they had been able to speak with their family; we would facilitate a call or make it ourselves and give the patient the phone. (NM10)

4.6 | 'One for all'

The crisis caused by COVID-19 became an opportunity for teamwork and collaboration among all the services that are part of patient care at the hospital.

4.6.1 | Teamwork

Nurse managers reflected in their testimonies how during the first weeks of the health crisis, nursing teams were more united than ever, resulting in teamwork playing an important role not only in ensuring the quality of patient care and preserving the patients' safety but also in providing mutual support among nurses.

> These moments have really united the team. They have worked phenomenally as a team; they have laughed, they cried together …. (NM2)

This team spirit revealed the willingness of nursing professionals to become involved and offer their help with whatever was needed.

> It has been very easy to manage all the changes that have been generated in staff members, shifts, rotations; that is, they have helped a lot; they have made it much easier to be able to make the protocols and change them continuously. (NM10)

Support and unity were reflected not only among the nurses who performed their work at the bedside but also among the first-line nurse manager team.

> The support (…), the team of three was very helpful because you feel supported, the decisions, the consultations … I think it is a priority that as a team, we were going to direct, to organise as one, in synch, together, to get by, because there were many difficult moments. (NM6)

On the other hand, nurse managers reflected on how the relationship with the medical team was based on communication and trust. Meetings were held daily to address each patient condition; aspects of improvement were identified, and action plans were discussed and agreed upon. The crisis allowed the establishment of relationships and practices that were not usually carried out during patient care, which facilitated the provision of care and highlighted the focus on the patient.

> We have worked a lot as a team with the COVID team, which included infectious disease physicians, pneumologists … we met every day and talked patient by patient about how we saw it and how we could improve. (NM2)

4.6.2 | Collaboration

Collaboration among all the teams involved in patient care allowed the nurse managers to feel supported and ensured that decisions were made in a more agile and effective manner.

> We work at an institution where when you call, the doors open (…) but [it] also supports you with accompaniment (…). The support is impressive. (NM9)

> And then, I can tell you that other services have had (…) a very good attitude (…). They have made everything easier. (NM10)

Similarly, nurse managers valued the interdependence among the multiple departments of the hospital. They identified that their collaboration ensured that the needs of different services were covered quickly and diligently in a way that allowed formal channels to be skipped to expedite decision-making.

> When I had needs or doubts … I have always had a team that answered me at the moment and came and explained things to us. (NM2)

> There are many things for which, at certain times, the response is, 'Send me an email; write it down'. Well, no; now it is enough to call to get an answer, which I think has made things easier. In general, we have been open to not requiring written notification of authorisation to do something …. We have also been able to skip the usual regulatory channels to respond. (NM7)

5 | DISCUSSION

This study generated knowledge about nurse managers' experiences in the face of the COVID-19 pandemic in a hospital in Spain. Specifically, the findings provide explanations of these experiences as constant adaptation to change, participation in organizational decision-making at different levels, management of the uncertainty of the situation, prioritization of the biopsychosocial well-being of staff and preservation of humanized care, as well as an opportunity for teamwork and multi- and interprofessional collaboration. Additionally, the analysis of these experiences helped identify some of the competencies that nurse managers consider key from their experience to respond to a crisis, their dual role as patient and nurse mediators and strategies that may be useful in future pandemics.

In this study, adaptation to change was identified as a key experience that allows nurse managers to respond to the pandemic, with the peculiarity that during crises, adaptation must be developed continuously and diligently. Nurse managers identified this experience as a competency that they had to develop 'live' and required knowledge, attitudes and skills in reorganizing the processes and staff of the units, seeking quick solutions, making complex operational decisions and devising communication strategies with the team (e.g. using mobile apps) to obtain and convey new information quickly. These latter skills had previously been identified as essential for improving crisis leadership in the health context (Bookey-Bassett et al., 2020; Deitchman, 2013; Veenema et al., 2017). However, the literature indicates that organizations lack training programmes that prepare nurse managers to respond to a crisis (Baack & Alfred, 2013; Cariaso-Sugay et al., 2021; Hodge et al., 2017). Some of the findings of this study suggest the importance of nurse managers' attitude; specifically, they

suggest that nurse managers must nurture a proactive and visionary attitude that allows them to anticipate events, analyse problems that may arise and think about how to avoid or minimize such problems. In this sense, integrating methodologies such as simulations, role-playing and case studies (Deitchman, 2013) into training may be interesting, which may allow nurse managers to improve their responses to future pandemic outbreaks of the same nature.

Another essential experience they have had to deal with and for which they must be trained in the face of COVID-19 is managing uncertainty. Nurse managers should project a sense of calm, confidence and authority among the staff in charge. These findings are consistent with the principles defined by the American Organization for Nursing Leadership for crisis management by nursing leaders and partially coincide with the results found in recent publications of the same nature (Bookey-Bassett et al., 2020; Shingler-Nace, 2020). The present study highlights the positive impact that leaders have on staff; by example, leaders encourage staff members to remain calm and modulate their attitudes and behaviours. These findings have interesting implications for teaching the management of uncertainty in a crisis situation and support the importance of training in emotional self-management for nurse managers.

In addition, the study allowed an examination of the protective role of nurse managers during the pandemic. Their dual mediating role has been linked to the so-called compassionate leadership in times of crisis, defined as 'the combination of supportive leadership approaches and the four components of compassion: attending, understanding, empathising and helping' (James & Bennett, 2020; Vogel & Flint, 2021). In this study, the characteristics of compassionate leadership have been reflected in the way in which a nurse manager relates to both patients and personnel during a pandemic. On the one hand, nurse managers have been the voice of patients during the crisis, prioritizing their needs at all times (Aquila et al., 2020). Recent studies corroborate this assertion (Bookey-Bassett et al., 2020; Hofmeyer & Taylor, 2021). Patient isolation and the absence of the relatives necessitated the development of strategies, such as telephone communication or a greater nurse presence, to alleviate the patients' loneliness and retain the essence of the patient–nurse relationship.

In line with the findings of other authors (Catania et al., 2020; Cathro & Blackmon, 2021; Hofmeyer & Taylor, 2021; White, 2021), the nurse managers in this study faced the challenge of protecting their staff members at the biopsychosocial level during the pandemic. Specifically, the findings of this study indicate that nurse managers in a crisis should ensure both the physical and mental protection of staff members, such as facilitating an adequate work environment, attending to psychological needs and/or providing emotional support. Among the strategies used to provide such support, being present both physically and emotionally through listening stands out (Bookey-Bassett et al., 2020). To this end, one practice that helps nurse managers to encourage and support their staff is, for instance, to create a space to frequently share fears and good and bad experiences, which results in feeling better and more confidently delivering care to patients. Hofmeyer and Taylor (2021) provide information, practice updates and resources to develop a personalized self-care plan to alleviate anxiety and support renewal and resilience. This strategic action of nurse managers can positively impact nurses' well-being and ability to provide safe and high-quality care for patients with COVID-19 (Hofmeyer & Taylor, 2021). Another interesting strategy used by nurse managers to support their staff, which was not found in the published literature, was the formation of related teams and the management of flexible shifts to ensure work–life balance. Because the balance between the two spheres is one of the priorities that nurses express for their professional development and proper performance under normal conditions (Vázquez-Calatayud et al., 2021), emphasizing this point in a situation as exceptional as a pandemic seems key. Through such actions, nurses will be able to count on the necessary support to maintain their well-being and reduce the possible harm caused by the crisis (Cathro & Blackmon, 2021).

Finally, the positive impact that working during the first wave of the pandemic had on the nurse managers of this study is notable; they felt support from superiors, peers and subordinates who worked 'one for all' in multi- and interprofessional collaboration with the common goal of providing the best patient care possible. This good relationship within and among teams can be attributed to the crucial moment that they experienced given that crises require professionals to assume interprofessional collaboration dynamics that are different from the usual dynamics (Reeves et al., 2010), which is a key element in times of crisis (Rosser et al., 2020).

5.1 | Limitations

As a limitation, this qualitative research gathers the experiences of nurse managers in a specific health context. Therefore, the findings pertain to the context in which the study took place and the perceptions of a limited number of participants. Although the sample can be considered small, it is sufficiently broad for a qualitative study because it ensured saturation of the data and redundancy in nurse managers' contributions. However, this study does not intend to generalize the findings but rather to provide in-depth knowledge about the reality perceived by the nurse managers included in the study. In this sense, developing similar research in other contexts would be desirable to improve the understanding of the phenomenon.

6 | CONCLUSIONS

This study provides evidence on the experiences of nurse managers during the COVID-19 pandemic. This knowledge can inform the design of educational and management strategies aimed at improving the management of the COVID-19 crisis and future pandemic outbreaks of a similar nature. A first step could be the development of training strategies for nurse managers to promote continuous and diligent adaptation to change and to help them manage uncertainty through training in emotional self-management and the promotion of a proactive and visionary attitude. Similarly, the importance of their

dual role as patient–nursing staff mediators should be emphasized to provide an optimal response in a crisis. Lastly, these contributions must be further explored by carrying out new qualitative studies in other contexts.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse managers can use these findings to improve organizational management policies during health catastrophes, including the impending waves of the COVID-19 pandemic, as well as future pandemic outbreaks of a similar nature. Similarly, the findings will serve as a basis for the design of educational strategies aiming to improve the key competencies that a nurse manager must learn to adequately respond to a crisis and ultimately improve the biopsychosocial well-being of staff and patient outcomes.

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CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

ETHICS STATEMENT

This research was approved by the Research Ethics Committee of the Navarre University (Code 2020.126) and by the hospital's management team and was performed in accordance with the criteria of the Declaration of Helsinki (2013).

DATA AVAILABILITY STATEMENT

Research data are not shared.

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REVIEW ARTICLE

WILEY

Exploring clinical leadership in long-term care: An integrative literature review

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Abstract

Aim: The aim of this study is to understand the concept of clinical leadership and clinical leadership development for nurses working with older adults in long-term care health care facilities.

Background: In Canada, clinical care within long-term care is undertaken by registered nurses and licenced practical nurses working with health care aides. Effective clinical leadership is essential for providing quality nursing care.

Evaluation: An integrative literature review using the framework of Whittemore and Knafl (2005). All selected articles were quality appraised using the Critical Appraisal Skills Program and the accuracy, authority, coverage, objectivity, date and significance checklist.

Key Issues: The analysis resulted in four themes: ambiguous definitions, practice-based and value-driven care, the impact of clinical leadership and clinical leadership development for Canadian nurses.

Conclusion: The findings suggest that ambiguity surrounds the concept of clinical leadership, with the term denoting both 'management' as a formal administrative role and 'leadership' in general. More recently, the clinical leadership focus has been on informal leadership by nurses at the bedside, where personal and professional values align with clinical action.

Implications for nursing management: Effective clinical leadership can have a positive impact on quality care and employee job satisfaction.

KEYWORDS
clinical leader, leader, leadership, licenced practical nurse, long-term care, nurse

1 | INTRODUCTION AND BACKGROUND

Canada has an aging population, and for the first time, the percentage of the population age 65 years and over exceeds those aged 15 years and under (Grenier, 2017). For many older adults, increasing age translates into increasing health problems and multiple co-morbidities. This means that, at some point, older adults may require health care in a residential care setting. These older adults' housing placements range from minimal support in independent living communities, which include housing for older adults with no major health issue and assisted living facilities that offer living space for older adults who may need help with their daily living activities, through to extensive

support in residential or long-term care homes where supportive care is provided and memory care communities that are designed to provide care for residents with Alzheimer's disease and other forms of dementia (Kelly-Barton, 2015).

In Alberta, residential or long-term care may be provided in both assisted living and nursing home type settings depending on the amount and type of health care support required. In keeping with international conventions, the term 'long-term care' (LTC) will be used throughout this paper to describe both types of residential care settings. These settings are described as a union of health, personal care, accommodation and hospitality services that accommodate the well-being and independence of older adults who can no longer live independently without support (Alberta Health Services and Benefits, 2019).

In LTC, care is typically delivered by health care aides (HCAs) and licenced practical nurses (LPNs), often with a limited registered nurse (RN) presence. RNs in LTC often function in management roles, with most day-to-day clinical care being directed and provided by LPNs. Providing clinical care to older adults in these settings can be challenging because of a dual focus on quality of care and quality of life, while working within a highly regulated system with a diverse nursing workforce (McGilton et al., 2016). In LTC, care for older adults tends to be labour-intensive and challenging because of the wealth of complex health and social care needs present within a heterogeneous aging population (Faulk et al., 2008).

Currently, all nurses (RNs and LPNs) are expected to be clinical leaders and able to work within interprofessional collaborative teams in various health care settings to improve the health and care of patients (Cook & Leathard, 2004; Pepin et al., 2011). Importantly, clinical leadership is a way to improve quality of care (Stanley, 2006; Stanley et al., 2014). Therefore, effective clinical leadership could offer a solution to many of the challenges encountered with increased practice responsibilities, specifically among nurses working with older adults in long-term care in Canada. Because LPNs are the primary care providers in aged care (Corazzini et al., 2013), and effective CL can improve quality of care for the older-adult population and decrease healthcare costs through lowering staff turnover (Smith & Dabbs, 2007), clinical leadership development is essential for LPNs in LTC.

1.1 | Integrative literature review aim

The aim of this integrative literature review was to synthesize research studies and grey literature on the concept of clinical leadership and explore the relevance of clinical leadership for nurses working in long-term care. The integrative literature review was guided by the question: *How is clinical leadership conceptualized and developed for nurses in long-term care?*

2 | DESIGN

An integrative literature review approach is a systematic procedure for searching the literature and for analysing and synthesizing data to arrive at a comprehensive understanding of the selected topic (Whittemore & Knafl, 2005). An integrative review method allows for the review of findings of both qualitative and quantitative research.

2.1 | Search strategy

A literature search was completed using the following electronic databases: CINAHL plus, EMBASE (OVID), PubMed, Google Scholar and Medline. The key search terms were 'clinical leadership' OR 'nursing leadership' OR 'leadership' OR 'leader'; AND 'registered nurse' OR 'RN' OR 'licensed practical nurse' OR 'LPN' OR 'nurse' OR 'nursing' OR 'LVN'. The search included grey literature and snowballing from related literature.

The search inclusion criteria were peer-reviewed research articles and grey literature using the term 'clinical leadership' or 'leadership within nursing', specific to LPNs and RNs working in long-term care. The exclusion criteria were as follows: proceedings, dissertations or editorial articles; articles that related to acute care or hospital settings and articles not written in English.

The literature search resulted in 278 articles (see Figure 1). Fifteen duplicated articles were eliminated, and the remaining 263 articles were screened by abstract review, leading to 56 exclusions. The remaining 207 articles were assessed for eligibility, resulting in 16 articles that met all the study criteria (Table 1). The 16 selected articles used the term 'clinical leadership' or 'leadership within nursing', with most of the articles focused on nurse managers in a formal management or leadership role. Seven articles were broadly related to the concept of clinical leadership, one article focused on clinical leadership within LTC in Canada and four articles focused on clinical leadership within continuing care/LTC (Table 1).

2.2 | Quality appraisal

We employed three different appraisal tools to evaluate the 16 included articles (see Table 2 for a summary of these assessments). The Mixed Methods Appraisal Tool (MMAT, 2008) was used to assess the qualitative and quantitative research studies, which included five mixed-method studies. The MMAT explores key demensions of quality such as the clarity and appropriateness of the research questions, methodology and data collection, and coherence between the methodology, analysis and interpretation of data. This tool consisted of answering seven 'yes, no, or, can't tell' questions. Eleven articles were appraised as a 'yes' to all questions, whereas five articles received one 'cannot tell' to one of the questions. Overall, the quality of all the articles appraised with MMAT was good.

The Critical Appraisal Skills Program (CASP) was used to assess the quality of the two systematic literature reviews. The CASP evaluates literature review papers for the clarity of research questions, inclusion, relevences, quality of findings, applications, outcomes and

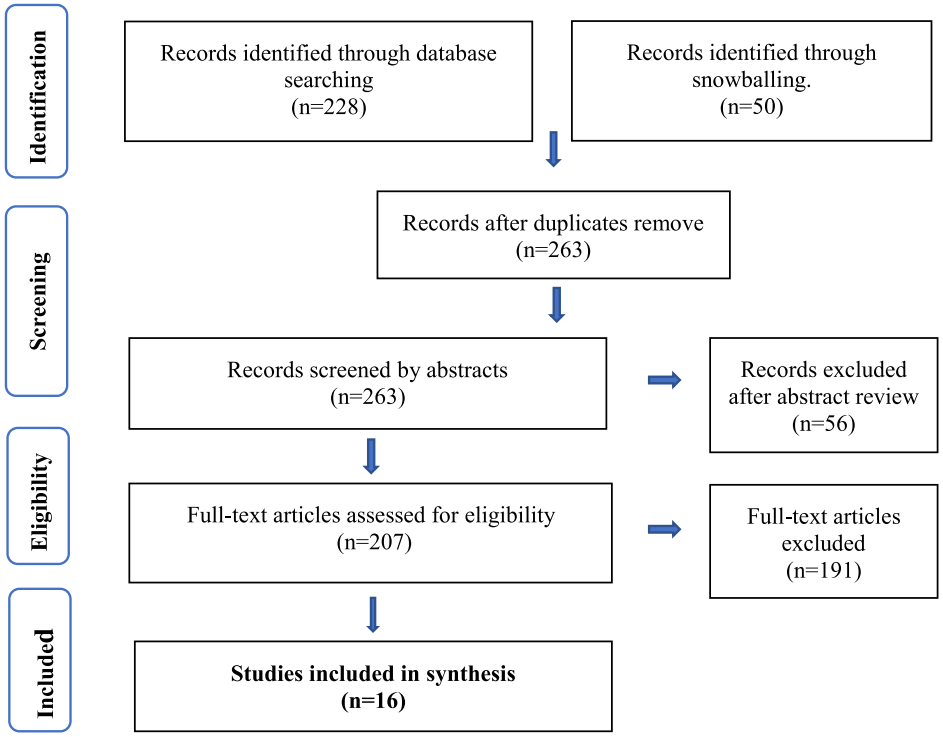

FIGURE 1 Flow diagram of search strategy

benefits with 32 'yes, no, and can't tell' questions. Both systematic reviews were assessed as good quality.

The AACODS (accuracy, authority, coverage, objectivity, date and significance) checklist was used to determine the quality of information in the three grey literature articles included in this review (see Table 2). Two of the included articles received a positive appraisal for all six AACODS categories, whereas one was assessed as unclear in accuracy but clear in all other categories.

3 | RESULTS

Summaries of each of the selected 16 articles, based on careful reading, are in Table 1. Study design or method of the 16 articles breaks down as follows: five mixed-method studies, four quantitative, one qualitative, three systematic literature reviews, one literature synthesis, one leadership development programme with self-assessment survey and one report on leadership education. Three of the studies were conducted in Canada, five in the USA, four in Australia, two in Ireland, one in the Philippines and one in Columbia, and papers were published between 2004 to 2018. The sample size for the four quantitative and six mixed-method studies ranged from 15 to 856, whereas the one qualitative study had 102 participants. Two studies included only LPNs or LPN students, four studies focused on RNs, and the rest focused on other health care workers. Clearly, the selected articles included a variety of methods, were international in scope and had a wide range of sample sizes.

3.1 | Thematic analysis

All articles were analysed thematically using Whittemore and Knafl's (2005) framework. This analysis involves a step-by-step process of noting patterns, and comparing and contrasting similarities and differences across all selected literature. Through this process, we identified four main themes related to the concept of clinical leadership: (1) ambiguous definitions; (2) practice-based, values-driven care; (3) the impact of clinical leadership and (4) clinical leadership development.

3.1.1 | Ambiguous definitions: Delineating clinical leadership, leadership and management

Although the concept of clinical leadership is garnering more attention in the literature (Jeon et al., 2010), a considerable lack of clarity persists. Although nurses and other healthcare professionals are reasonably familiar with the term and idea of 'leadership', *clinical leadership* is often a new term for them (Stanley & Stanley, 2018). Other leadership terms, such as nursing leadership or health care leadership, receive more attention and are more clearly defined in the health care and nursing literature (Stanley & Stanley, 2018), although these terms are often used interchangeably.

Two distinct meanings for the term 'clinical leadership' were found:

TABLE 1 Summary of selected articles (total articles = 16)

	Author(s), year and title	Key findings	Study design or method	Origin	Setting	Participants
1	Curtis et al. (2011) Developing leadership in nursing: The impact of education and training	Leadership is an essential for nursing practice and has a positive impact on clinical outcome and employee satisfaction. Ongoing leadership training is important	Grey literature synthesis	Ireland	Health care	Nurse managers N = not specified
2	Faulk et al. (2008) Broadening the knowledge of the LPN long-term care provider: a pilot study	Gaps in LPN's leadership and management knowledge and skills were noted, and Showed improvent with a leadership education program.	Quantitative study; Pre/post questionnaire	USA	LTC	LPNs $N = 15$
3	Fiset et al. (2017) Clinical nursing leadership education in long-term care: intervention design and evaluation	There are demands for ongoing leadership training in LTC settings.	Mixed method study	Canada (Ontario)	LTC	RNs, registered PN, Nursing administrators $N = 29$
4	Gifford et al. (2013) Developing leadership capacity for guideline use: A pilot cluster randomized control trial	Leadership development requires developing vision, mission, and values. Using leadership guidelines can be useful with more work on tailoring the guidelines to the participants' special needs.	Mixed method study (sequential)	Canada (Ottawa)	Home health care	RN, RPN, Qualitative: $N = 26$ Quantitative chart audit: $N = 54$ (control), $N = 34$ (experimental)
5	Jeon et al. (2010) Policy options to improve leadership of middle managers in the Australian residential aged care setting: a Narrative synthesis	Despite differences, there is some overlapping characteristics between leadership and management elements such as communication, decision-making, integrity, Role modeling, negotiation, and setting standards.	Systematic literature synthesis	Australia	LTC	RN, LPN, nurse aid, director of nurse, advanced practice nurse, personal care assistant, Enrolled nurse, $N = 153$ (articles)
6	Jeon et al. (2015) Cluster randomized controlled trial of an aged care specific leadership and management programme to improve work environment, staff turnover, and care quality	Lack of definition of manager/leader characteristics within aged care.	Quantitative Delphi design study (double-blind, cluster, randomized controlled)	Australia	LTC	Staff, managers $N = 23$

(Continues)

TABLE 1 (Continued)

	Author(s), year and title	Key findings	Study design or method	Origin	Setting	Participants
7	Lekan et al. (2011) Clinical leadership development in accelerated baccalaureate nursing students: An education innovation	Clinical leadership training has a positive impact on clinical care within a multidisciplinary team and a successful learning expeience.	Quantitative/qualitative; pre/post assessment; clinical leadership education	USA	LTC	Nursing students (RNs) $N = 40$ (pre-test); $N = 42$ (post-test)
8	Mbewe and Jones (2015) Does associate degree curricula adequately prepare nurses for leadership roles?	Lack of leadership preparational was identified in nursing curriculum. Leaders indicated lack of comfort in their role.	Mixed method	USA	Unknown (associate degree program)	Nursing students (RN) $N = 50$
9	McNamara et al. (2011) Boundary matters: Clinical leadership and the distinctive disciplinary contribution of nursing to multidisciplinary care	Clinical leadership development for nurses should be led by nurses themselves. Clinical leadership development should be stressed for all nurses as all nurses are clinical leaders	Mixed method	Ireland	National, regional & local tertiary centres.	Midwifes, Staff nurse Managers (RN) Directors $N = 144$
10	Moltio et al. (2015) Self-assessed clinical leadership competency of student nurses	In clinical leadership competency domains, personal qualities received the lowest mark while working with others, managing and improving services, and setting direction received highest marks from nursing participants. Sex was not a factor in establishment of clinical leadership competency.	Quantitative, descriptive study (self-questionnaire)	Philippines	University	Nursing student (bachelorette) $N = 74$
11	O'Rourke et al. (2004) Regional clinical nurse specialists in long-term care: With a focus on clinical, educational, research and leadership areas, clinical nurse specialists prove their worth in enhancing resident care in personal care homes	Developing mission, vision, and values are needed for building clinical teams and this requires both initiative and ongoing support.	Grey literature: Educational support for personal care home (PCH)	Canada (Manitoba)	LTC	All health care team of PCH
12	Scott-Cawiezell et al. (2004) Exploring nursing home staff's	Communication and leadership improvement can help develop a	Qualitative/quantitative; Cross-sectional	USA	LTC	RN, LPN, CNA $N = 856$, communication, $N = 845$, leadership,

(Continues)

TABLE 1 (Continued)

	Author(s), year and title	Key findings	Study design or method	Origin	Setting	Participants
	perceptions of communication and leadership to facilitate quality improvement	quality improvement environment. LPNs reported lack of clarity in their leadership expectations and were the least satisfied group among the participants. LPNs had less openness in communication.				
13	Stanley and Stanley (2018) Clinical leadership and nursing explored: A literature Search	Clinical leadership frameworks and guidelines were required for middle managers in aged care. Literature recognizes clinical leaders values are parallel with their actions.	Systematic literature review (concept analysis)	Australia	All settings	ALL health care staffs (nation-wide literatures) $N = 27$
14	Venturato and Drew (2010) Beyond "doing": Supporting clinical leadership and nursing practice in aged care through innovative models of care	Communication, team work, clinical leadership, and clear articulating and modelling are key to success of health care models.	Qualitative, exploratory	Australia	LTC	RN, PCW, CNA, administration, $N = 19$
15	Vogelsmeier et al. (2010) Evaluation of a leadership development academy for RNs in long-term care	Preparing nurses to be effective leaders required structured leadership programme, consistent application, and reflection on practice.	Grey leadership: Development programme (self-assessment instrument)	Columbia	LTC	RN $N = 56$
16	Wittenberg-Lyles et al. (2013) The practical nurse: A case for COMFORT communication training	There is a lack of communication skills in nursing curriculum.	Pre-test/post-test design study	USA	LTC, home care settings	LPN students $N = 32$

Abbreviations: CAN, Certified Nursing Assistance; PCW, patient care worker; RPN, Registered Practical Nurse.

1. Clinical leadership associated with clinical care—which refers to nurses in a clinical role who demonstrate informal leadership associated with clinical care and clinical management, but without a formal leadership role title (Stanley & Stanley, 2018).
2. Clinical leadership associated with a formal management role—which refers to nurse leaders with a clinical background who carry formal authority, such as an administrative position (Gifford et al., 2013). Studies often refer to nursing leadership without any clear reference to the definition or type of leadership being studied, such as in O'Rourke et al. (2004).

Even pulling forward these two definitions of clinical leadership, developing clinical leadership theory and practice remains challenging, given that the research literature lacks clarity and distinction with respect to which type of leadership is under study. This ambiguity is further complicated by the fact that some behaviors and characteristics are common across all meanings of leadership, management and clinical leadership L. Table 3 summarizes both the distinct and the shared leadership features of management, leadership and clinical leadership that the review reveals. Some studies, such as Stanley and Stanley (2018), Venturato and Drew (2010) and

TABLE 2 Quality appraisal

	Author(s) & year	Article Appraisal
1	Curtis et al. (2011)	***AACODS checklist*** Accuracy Y; Authority Y; Coverage Y; Objectivity Y; Date Y; Significant Y
2	Faulk et al. (2008)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 1.1. Is the qualitative approach appropriate to answer the research question? Y 1.2. Are the qualitative data collection methods adequate to address the research question? Y 1.3. Are the findings adequately derived from the data? Y 1.4. Is the interpretation of results sufficiently substantiated by data? 1.5. Is there coherence between qualitative data sources, collection, analysis, and interpretation? Y
3	Fiset et al. (2017)	***MMAT,*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? CT 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? Y
4	Gifford et al. (2013)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? CT 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? Y
5	Jeon et al. (2010)	***CASP*** 1. Did the review address a clearly focused question? Y 2. Did the authors look for the right type of papers? Y 3. Do you think all the important, relevant studies were included? Y 4. Did the review's authors do enough to assess quality of the included studies? Y 5. If the results of the review have been combined, was it reasonable to do so? Y 6. What are the overall results of the review? **Result very clear** 7. How precise are the results? Very precise 8. Can the results be applied to the local population? Y 9. Were all important outcomes considered? Y 10. Are the benefits worth the harms and costs? No harm
6	Jeon et al. (2015)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 2.1. Is randomization appropriately performed? Y 2.2. Are the groups comparable at baseline? Y

(Continues)

TABLE 2 (Continued)

	Author(s) & year	Article Appraisal
		2.3. Are there complete outcome data? Y 2.4. Are outcome assessors blinded to the intervention provided? Y 2.5 Did the participants adhere to the assigned intervention? Y
7	Lekan et al. (2011)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? Y 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? Y
8	Mbewe and Jones (2015)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? Y 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? CT
9	McNamara et al. (2011)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? Y 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? Y
10	Moltio et al. (2015)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 4.1. Is the sampling strategy relevant to address the research question? Y 4.2. Is the sample representative of the target population? Y 4.3. Are the measurements appropriate? Y 4.4. Is the risk of nonresponse bias low? Y 4.5. Is the statistical analysis appropriate to answer the research question? Y
11	O'Rourke et al. (2004)	***AACODS checklist*** Accuracy Clear aim, CT about method; Authority Y; Coverage Y; Objectivity Y Date Y; Significant Y

(Continues)

TABLE 2 (Continued)

	Author(s) & year	Article Appraisal
12	Scott-Cawiezell et al. (2004)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 5.1. Is there an adequate rationale for using a mixed method design to address the research question? Y 5.2. Are the different components of the study effectively integrated to answer the research question? Y 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? Y 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? Y 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? Y
13	Stanley and Stanley (2018)	***CASP*** 1. Did the review address a clearly focused question? Y 2. Did the authors look for the right type of papers? Y 3. Do you think all the important, relevant studies were included? Y 4. Did the review's authors do enough to assess quality of the included studies? Y 5. If the results of the review have been combined, was it reasonable to do so? Y 6. What are the overall results of the review? Very clear result 7. How precise are the results? Y 8. Can the results be applied to the local population? Y 9. Were all important outcomes considered? Y 10. Are the benefits worth the harms and costs? No harm
14	Vogelsmeier et al. (2010)	***AACODS checklist*** Accuracy Y; Authority Y; Coverage Y; Objectivity Y; Date Y; Significant Y
15	Venturato and Drew (2010)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 1.1. Is the qualitative approach appropriate to answer the research question? Y 1.2. Are the qualitative data collection methods adequate to address the research question? Y 1.3. Are the findings adequately derived from the data? Y 1.4. Is the interpretation of results sufficiently substantiated by data? Y 1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation? Y
16	Wittenberg-Lyles et al. (2013)	***MMAT*** **Phase 1:** S1. Are there clear research questions? Y S2. Do the collected data allow to address the research questions? Y **Phase 2:** 3.1. Are the participants representative of the target population? Y 3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)? Y 3.3. Are there complete outcome data? Y 3.4. Are the confounders accounted for in the design and analysis? CT 3.5. During the study period, is the intervention administered (or exposure occurred) as intended? Y

Abbreviations: CT, cannot tell; Y, yes.

TABLE 3 Distinct and shared leadership features

Management	Leadership	CL	Shared features
• Tied to a formal role & has positional authority • Often features a move away from the bedside, e.g., nurse unit manager • Team-building, inspiring a shared vision • Initiating/driving change • Influencing conflict management • Reinforcing vision • Delegating responsibilities	• May or may not be a formal role, with or without formal authority • May be a clinical lead position e.g., nurse educator or a clinical nurse specialist • Advanced/specialist clinical knowledge	• Clinical role with informal authority • Located at the bedside/in direct patient care. e.g., RN, LPN (clinical) • Teamwork • Clinically competent • Values- and beliefs- focused	• Communication • Decision-making • Empowering others • Role model

Moltio et al. (2015), focused on common, shared features like effective communication, being a decision-maker and empowering others. The overlapping and common characteristics among clinical leadership and leadership (management) (Table 3) also contributes to vague clinical leadership boundaries within the literature. Furthermore, much of the literature is focused on RNs, and the literature on clinical leadership in LTC and long-term care is limited.

Some studies align clinical leadership or leadership within formal managerial roles (Gifford et al., 2013; Jeon et al., 2010, 2015). These studies examined clinical leadership among nurse managers, midwives and directors. Clinical leaders were identified as having several responsibilities: delegation, planning, evaluation and supervision; sharing ambitions and organizational vision and improving relationship and organizational dynamics. Jeon et al. (2015) linked long-term care clinical leaders (in aged care), to 'middle managers' in Australia, whereas Stanley and Stanley (2018) explained that managers tend to be removed from 'the floor' or bedside to deal with staffing and resources issues. This shift then leads to less time and attention to direct client care. As well, Stanley and Stanley distinguish clinical leadership from titled leadership.

Some scholars, like Faulk et al. (2008) and Lekan et al. (2011), used the term clinical leadership in a more general sense. Clinical leaders were defined as having both formal and informal authority, with general leadership characteristics and behaviors, such as influencing others, managing conflicts, reinforcing the vision of the organization, achieving organizational goals and delegating tasks and responsibilities. These studies primarily focused on RNs and noted that leaders may or may not have a managerial or administrative role.

Stanley and Stanley (2018) define clinical leaders as those who are clinically competent, open and approachable and knowledgeable in their area of practice. Clinical leaders tend to have influence rather than authority and are often identified as informal leaders on the floor or at the bedside. They also identify a skill set for clinical leaders, which includes effective communication and decision-making, and having the ability to empower and motivate colleagues in the care team; they are also good role models and are visible in practice. They further identify clinical leaders as nurses who support team members in their clinical scope of practice. Clinical leaders are also embedded in the provision of clinical care and the hands-on, day-to-day clinical work (Jeon et al., 2015).

3.1.2 | Practice-based and values-driven care

Clinical leaders' beliefs and values are their motivations for providing high-quality care to patients and clients (O'Rourke et al., 2004; Stanley & Stanley, 2018; Venturato & Drew, 2010). Clinical leaders stand by their nursing values when a conflict occurs, and when they face critical problems and practice challenges, their values and beliefs align with their actions. As mentioned previously, Stanley and Stanley (2018) found that clinical leaders adhere to the same values in clinical practice that motivated them to pursue nursing in the first place, such as respect for others and concern for the well-being of others. They also emphasize the impact of clinical leaders' individual values such as being caring on their motivation to work (O'Rourke et al., 2004). Clinical leaders get recognized because of their orientation to providing care and their passion for providing high quality of care for their patients/client (Moltio et al., 2015; Stanley & Stanley, 2018). Other team members recognize clinical leaders because their practice is based on, and guided by, the same beliefs and values that the team members uphold. As a result, nurses follow clinical leaders whose values are comparable to their own (Stanley & Stanley, 2018).

3.1.3 | Impact of clinical leadership

The literature has repeatedly reported the impact of nursing leadership on patient outcomes and employee satisfaction (Curtis et al., 2011; Jeon et al., 2010; Vogelsmeier et al., 2010; Venturato & Drew, 2010; McNamara et al., 2011; Wittenberg-Lyles et al., 2013). Clinical leadership was identified as a factor in nurses' job satisfaction and retention. This is important, because job satisfaction improves retention of nurses and can enhance the quality of patient care (Curtis et al., 2011; Faulk et al., 2008; Venturato & Drew, 2010; Wittenberg-Lyles et al., 2013). Further, high nurse turnover can result in poor patient outcomes within LTC settings and can lead to increases in rates of infection, pressure ulcers and behavioural issues (Venturato & Drew, 2010). Researchers have also noted that the presence of skilled clinical leaders ensures patients receive high-quality care (Curtis et al., 2011; Venturato & Drew, 2010; Wittenberg-Lyles et al., 2013).

3.1.4 | Clinical leadership development for Canadian/Alberta nurses

In this literature review, we found a limited number of studies on clinical leadership in Canada, and particularly in relation to long-term care. Among the six studies conducted in Canada, only one study and one article were related to long-term care. The literature review results suggest that very few countries offer a systematic comprehensive clinical leadership development programme (CLDP). The Royal College of Nursing in the UK is one of the programmes that offers a CLDP to improve staff nurses' clinical leadership skills in acute care and community health care settings. An American leadership education programme, learn, empower, achieve, produce (LEAP), is a clinical leadership programme designed specifically for aged-care settings to enable staff empowerment and job satisfaction (Jeon et al., 2010).

The need for clinical leadership training has been highlighted in many studies (Fiset et al., 2017; Gifford et al., 2013), and the literature on clinical leadership development mirrors the approach taken in defining clinical leadership, in that it focuses on behaviours and skills particularly in relation to clinical leadership characteristics, such as communication, teamwork and role-modelling (Table 3). Most of these studies were conducted on undergraduate and graduate RNs in relation to clinical leadership; they reached the same conclusion, which is that leadership training for nurses is a necessity (Mbewe & Jones, 2015; Moltio et al., 2015). Mbewe and Jones (2015) identified that there are existing concerns among new RN graduates about their lack of adequate leadership training. Their concerns were specific to teamwork, collaboration and professional identity. Moltio et al. (2015) highlighted the need for leadership training to be incorporated early in undergraduate RN education. Faulk et al. (2008) explain that some skills, such as quality improvement, delegation, conflict resolution and team-building, are essential for delivering care of a high quality. They also identified the need for further research to develop various characteristics of clinical leadership skills for LPNs in LTC settings.

Some studies noted some limits to LPN leadership education and skills, acknowledging the need for specific leadership and focused clinical leadership training. For instance, Faulk et al. (2008) discussed LPNs' limited exposure to quality improvement, delegation, conflict management and team-building, whereas Scott-Cawiezell et al. (2004) showed that LPNs had less exposure to, or education in, leadership like teambuilding, conflict management, delegation and communication. Fiset et al. (2017) emphasized clinical leadership learning requirements, such as communication and conflict management skills, for LPNs in LTC settings. Similarly, Wittenberg-Lyles et al.'s (2013) study captured the importance of improvement in communication skills. Scott-Cawiezell et al. (2004), Fiset et al. (2017) and Faulk et al. (2008) agreed on the need for further research to address the limited leadership learning resources, along with the need for improvement in clinical leadership skills for those who are working in residential aged-care contexts.

4 | DISCUSSION

Clinical leadership has been defined in various ways in the literature, which has directed researchers down different paths. Even with the ambiguous and varied definitions in the literature (Brown et al., 2016), most scholars define clinical leadership according to a set of desired behaviours or skills. Notably, some of the described characteristics for a clinical leader across these various definitions have been consistent: being an expert and experienced nurse, someone with effective communication skills and being willing to help team members. Harper (1995) and Stanley (2008) identify clinical leaders as nurses who support team members in their clinical scope of practice. The majority of definitions identify clinical leaders as experts and experienced clinical nurses in their specialty (Dierckx de Casterlé et al., 2008; Harper, 1995; McNamara et al., 2011; Stanley et al., 2012).

A few researchers have expressed other characteristics of clinical leaders—nursing values, integrity, trust, autonomy, privacy, humanity, hope, security and personhood—that drive nurses in their practice, shape them (Fagermoen,1997) and motivate them as clinical leaders (Stanley, 2016). Among the various theories of clinical leadership, congruent clinical leadership theory is one that is relevant for nursing. This theory defines clinical leaders as 'valuers'. This theory is well suited to nurses, because their shared values are what bring them to this profession (Stanley, 2016). Moreover, despite other theories that have been *adopted* by nurses, congruent clinical leadership theory was developed based on studies that *focused on* health care professionals, especially nurses. Congruent clinical leadership theory offers nurses a framework to advance their leadership, which is matched with their values, beliefs and actions, can apply to 'anyone' and is not limited to titled older adunurses or managers. Congruent clinical leadership defines clinical leaders as those who are clinically competent, knowledgeable, effective communicators, decision-makers and empowered motivators. They are also open and approachable, role models for others on their team, visible in practice and act on their values. Team members follow a clinical leader who inspires them with their shared values (Stanley, 2016). Therefore, given these compelling reasons, congruent clinical leadership theory is higly relevant for a nurse clinical leader.

Other literature has described the influence of nursing leadership on patient outcomes and employee satisfaction. Pepin et al. (2011) emphasize the importance of clinical leadership as one of the key factors in enhancing the quality and safety of care across acute care settings, whereas McGilton et al. (2016) highlight the influence of nursing leadership on nursing aids' job satisfaction and quality of care for residents in LTC. Clinical leaders' knowledge, skills and experiences empower them daily to make clinical decisions that translate into a higher quality of care for patients (Dierckx de Casterlé et al., 2008). Although the studies show significant benefits of effective CL on older-adult quality of life, job satisfaction and health care cost reduction, limited research exists on clinical leadership training and development (Smith & Dabbs, 2007).

TABLE 4 Example of LPN programmes in Canada

Province	Program	Example training provider	Length
Newfoundland and Labrador	LPN diploma	Centre for Nursing studies	16 months
British Colombia	LPN diploma	Vancouver community College	16 months
Alberta	LPN diploma	Bow Valley College	20 months
Nova Scotia	LPN diploma	Nova Scotia community College	2 years
New Brunswick	LPN diploma	New Brunswick community College	2 years
Manitoba	LPN diploma	Assiniboine community College	2 years
Saskatchewan	LPN diploma	Saskatchewan polytechnic	2 years
Nunavut	LPN diploma	Nunavut Arctic College	2 years
Quebec	Nursing intensive programme diploma	John Abbott College	2 years
Yukon	LPN diploma	Yukon College	2 years
Prince Edward Island	LPN diploma	Holland College	2 years
Ontario	LPN diploma	Georgian College	30 months

This review revealed a focus in the literature on the impact of clinical leadership on the quality of RN practice, but few studies look at clinical leadership development for LPNs. This gap matters because RNs, LPNs, enrolled nurses (ENs) and registered practical nurse (RPN) have distinct education, training and practice experience in clinical judgement, critical thinking and leadership (Unruh, 2003). The length and content of LPN programmes vary in various countries and even among Canadian provinces (Table 4). For instance, whereas Vancouver Community College (2018) in British Columbia has a programme of 16 months, Bow Valley College (2018) in Alberta, Canada, offers a longer 20-month LPN programme, and Georgian College (2018) in Ontario offers a more extended 30 months programme. In the United States, current LPN programmes can be as short as 12 months (Faulk et al., 2008). This variation in programme length is a result of the LPN programmes being modified to serve jurisdictional expectations (Butcher & Mackinnon, 2015).

5 | CONCLUSIONS

Despite these variable training and jurisdictional requirements, LPNs provide more than 70% of aged care across North America (Corazzini et al., 2013). Because LPNs are now responsible for increasingly complex activities, including supervising care aides, building and leading teams, making critical decisions, resolving conflict, dealing with families and collaborating with other healthcare disciplines (Tarnowski et al., 2017), clinical leadership training for nurses, especially LPNs, is crucial.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Despite considerable research on clinical leadership, a lack of clarity in the clinical leadership concept remains. Some studies associated clinical leadership with clinical care, whereas others associated it with a formal management role. Nurse managers would have to clearly communicate how clinical leadership is understood as well as the respective clinical leadership responsibilities. To date, published literature identifies clinical leadership responsibilities as follows: delegation, planning, evaluation and supervision; sharing ambitions and organizational vision and improving relationship and organizational dynamics. More importantly for managers, clinical leaders are valuable in acknowledging and validating those who provide frontline day-to-day clinical work and in exemplifying professional beliefs and values to team members.

The results of this integrative literature review suggest a potential positive impact of clinical leadership training for staff with improved job satisfaction and improved retention of nurses. Although clinical leaders may not formally have a managerial position, clinical leaders motivate their clinical colleagues, are value-driven and have expertise in hands-on clinical work. Nurses with effective clinical leadership skills could work with managers to create a positive work culture and effective, efficient clinical teams. Training in clinical leadership could promote best nursing practice and improve patient and programme quality of care and safety.

Ultimately, literature review supports the need for clinical leadership training for nurses in particular new RN graduates and LPNs. This concern has been more specific to teamwork, collaboration and professional identity.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

Ethical approval was not required for this manuscript because this was an integrative literature review.

DATA AVAILABILITY STATEMENT

The data that support the findings of this integrative literature review are openly available and listed in Table 1 and references.

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ORIGINAL ARTICLE

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Nurses and ward managers' perceptions of leadership in the evidence-based practice: A qualitative study

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Abstract

Aim: To describe nurses and ward managers' experiences with nursing leadership in the implementation of evidence-based practice.

Background: The implementation of evidence-based practice requires to identify the most suitable styles of nursing leadership for the successful application.

Design: A qualitative descriptive study.

Methods: The study was carried out with 57 nurses (clinical nurses and ward managers) in eight focus groups from five public hospitals. Template analysis, using the Promoting Action on Research Implementation in Health Services framework, was used. The Consolidated Criteria for Reporting Qualitative Research guide was followed in planning and reporting this research.

Results: Three types of nursing leadership were identified: traditional leadership, medium leadership and transformational leadership. Traditional leadership was the most frequent, with a predominance of bureaucratic tasks for ward managers, so implementation of evidence-based practice is difficult.

Conclusion: Nurses do not feel empowered and they perceive the changes as an imposition. In the absence of strong leadership for evidence-based practice, a natural leader emerges.

Implications for Nursing Management: Clinical nurses demand more empowerment for decision-making, and ward managers need clarity of roles. To create an environment favourable to evidence-based practice, it is necessary consider the role of the transformational leader.

KEYWORDS
evidence-based practice, nursing, nursing leadership, PARIHS framework, qualitative research

1 | INTRODUCTION

Evidence-based practice (EBP) has remained a challenge for healthcare institutions for decades, with growing concern that common practices do not always reflect what is known as best practice (Seers et al., 2012). Nursing leadership may facilitate the change towards EBP by mentoring policies and helping nurses. Leadership practices that help create a healthy work environment can ultimately improve patient experiences and outcomes (Registered Nurses' Association of Ontario, 2013). From this perspective, it is necessary to gain more insight into the experiences of nurses in nursing leadership practices and how different leadership styles can act as facilitators for the implementation of the EBP.

2 | BACKGROUND

The EBP approach aims to provide the best available nursing care, considering both a nurse's judgement and a patient's preferences. Multiple barriers to EBP implementation have been identified within the strategic dimension (lack of time, leaders have other priorities, lack of resources), cultural dimension (resistance to changing practice, lack of authority for change), technical dimension (poor information systems) and structural dimension (lack of availability of research) (Solomons & Spross, 2011). The implementation of evidence requires changes at the individual, team and organizational levels of health systems. The use of theories, models and frameworks for application science is associated with successful implementation (Nilsen, 2015). There are several frameworks aimed to guide the EBP implementation: the Stetler model, Ottawa Model of Research Use, Promoting Action on Research Implementation in Health Services framework (PARIHS), Iowa model of EBP, Advancing Research and Clinical Practice through Close Collaboration model and the Joanna Briggs Institute models (Rycroft-Malone, 2010).

The PARIHS framework (Kitson et al., 1998, 2008) was generated inductively from health professionals to understand the basis for implementing evidence. This framework helps to make decisions on the steps to be taken based on the analysis of its elements (-Bergström et al., 2020). Considered as determinant framework (Nilsen, 2015), it is a multidimensional framework originally composed of three main elements, namely, evidence, context and facilitation, which are divided into sub-elements (Rycroft-Malone et al., 2002). In the revised version, described as the integrated PARIHS, the core constructs are facilitation, innovation, recipients and context (Harvey & Kitson, 2015). This model helps to predict successful implementation of evidence. It proposes that the strategy to be followed by an organization with a traditional organizational model to achieve EBP must be different from that of an institution with a culture based on continuous learning and innovation throughout its staff.

The implementation of evidence must be assessed in relation to the context in which care is provided: the organization structure, the centralization of decision-making and skills of professionals to manage the change process. It is necessary to identify the formal and informal leaders who support the implementation of evidence (Harvey & Kitson, 2015). In the PARIHS framework, indicators associated with low leadership for EBP are traditional, command and control; autocratic decision-making; lack of clarity of roles; poor organizational structures; didactic approach to learning/teaching/leadership; and lack of teamwork. At the opposite pole, as indicators of high leadership, are transformational leadership; democratic inclusive decision-making; role clarity; effective organizational structures; enabling/empowering approach to learning/teaching/managing; and effective teamwork (McCormack et al., 2002).

The 'transformational leader' is defined as someone who is able to transform organizational cultures to achieve a culture more conducive to integrate evidence into practice (Rycroft-Malone et al., 2002) and the ability to create professionals with a shared vision of future and an attitude towards change that is challenging and stimulating (McCormack et al., 2002). Transformational leadership is characterized by a strong positive correlation with leadership effectiveness; it increases nurse satisfaction and patient outcomes but requires extra effort from ward managers (Casida & Parker, 2011; McGilton et al., 2016). Some clinical outcomes attributable to the clinical nurse leader role are shorter lengths of stay, decreased readmission rates and improved patient outcomes related to nursing care (medication errors, falls, pressure ulcers, hospital-acquired infections) and lower patient mortality (Murray et al., 2018; Wong, 2015).

Leadership, considered as a modifier factor for the success of EBP implementation, needs further theoretical development within the science of implementation (Reichenpfader et al., 2015). According to the PARIHS model, it is important to identify which styles of nursing leadership exist in hospitals and to examine whether they are suitable for the implementation of EBP. The perceptions of nurses and ward managers on leadership in their units could provide a basis for understanding the style of leadership in a hospital and strategies to facilitate the change in clinical practice.

Hutchinson and Jackson (2013) establish the need to study how nursing leadership is perceived by the organizations themselves, how the context influences the leader's behaviour or how leadership is encouraged by those not in appointed leadership positions. More research based on actual descriptions of nurses' work is needed to advance in leadership rhetoric and management practices (Fast & Rankin, 2018; Hewison, 2020).

The aim of the study was to describe nurses and ward managers' experiences with nursing leadership at hospitals in relation to the implementation of EBP.

Insights from this study are expected to extend the evidence base that is necessary to provide effective nursing leadership to facilitate the EBP. Exploring the experiences of hospital care nurses and managers can provide insight into how nurse leadership shapes EBP from elements that hinder and facilitate its implementation.

3 | METHODS

3.1 | Design

This was a qualitative descriptive study using focus groups with drawing on template analysis (Brooks & King, 2012) based on the PARIHS framework.

3.2 | The participants and settings

The study was carried out in five public hospitals in Andalusia (southern Spain) with two different organizational models, three from the Andalusian Health Service with a traditional management structure and two from the 'Alto Guadalquivir' Health Agency organized as a public company to have more autonomy in management. A purposive sampling strategy was used to recruit nurses (registered nurses with 4 years of university education) and ward managers (nurses appointed by the direction of the hospital to manage each ward).

The data were collected by conducting several focus group sessions with nurses and ward managers. The focus group was chosen as a method of data collection because it provides rich descriptions of the attitudes and beliefs underlying the behavior and a context for understanding the experiences of the participants (Carey & Asbury, 2012).

The focus groups (with five to eight participants) were homogeneous in terms of the type of hospital management model (Andalusian Health Service and 'Alto Guadalquivir' Health Agency) and the professional category (clinical nurses and ward managers). In addition, the sampling was guided by maximum heterogeneity in relation to gender, age and work unit to obtain the widest range of perspectives on nursing leadership. The final sample was determined by the principle of information saturation.

3.3 | Data collection

All the focus groups were held in properly equipped meeting rooms at the hospitals, following Carey and Asbury (2012), for their planning and development. Sessions were audio recorded and then transcribed verbatim by the researchers themselves. The sessions lasted between 60 and 100 min. In each focus group, one researcher played a role as an observer, and another as a moderator. No one else was present besides the participants and researchers. The observer took detailed notes on group interaction and non-verbal communication, and the moderator posed the questions and conducted the discussion. It was not necessary to repeat any focus group in more than one session. The open-ended questions used were:

- To what extent are clinical nurses involved in making decisions about the implementation of EBP?
- What strategies should be followed to implement evidence?
- In your opinion, who should lead evidence implementation in nursing?
- How should a nursing leader facilitate evidence implementation by the nurses?
- How do you lead nurses in your hospital ward? (only in ward managers groups)

3.4 | Data analysis

The information collected through the focus groups was analysed using a template analysis method (Brooks & King, 2012; King, 2004), based on the PARIHS framework as a model, selected previously, to illuminate the relevance of the PARIHS constructs in the different contexts sampled. First, a template was developed with some concepts of the PARIHS model as predefined categories: leadership, decision-making processes, role clarity, organizational structures and teamwork. These pre-established categories are based on the criteria that must be taken into account in leadership, according to the PARIHS framework, for EBP implementation to take place.

The analysis was performed in three steps: First is the coding of the units of meaning of the text (both open and in vivo coding); second, the codes were assigned to the categories based on the concepts from PARIHS model about leadership; it was determined whether saturation had been reached in all categories or whether there was a need to recruit more informants; and third, these categories were grouped into themes according to whether they represented low or high indicators for the leadership concepts, according to whether they are indicators that hinder the application of PBE (low) or are associated with successful implementation (high).

The purpose of this process was to find sense and meaning for the relationships between the categories and themes and to display the findings in the form of both text and matrices and concept maps. The QSR NVivo 10 qualitative data analysis software (QSR International®) was used to facilitate the management, organization and classification of information.

3.5 | Rigour

In order to increase trustworthiness and qualitative reliability, a researcher triangulation technique was used during the analysis process (Merriam, 2009). It ensured that the research team had a good understanding of the initial template and that the changes that led to the final version were analysed and discussed by all researchers. The credibility of the data was strengthened by checking each researcher's interpretation until consensus was reached; also, data on nurses' perceptions were triangulated with those of ward managers. To ensure confirmability, the researchers used reflexivity to avoid the influence of preconceived ideas in the analysis (Boeije, 2010). The researchers had no previous relationship with any of the participants. The Consolidated Criteria for Reporting Qualitative Research (COREQ) guide was followed in planning and reporting this research (Tong et al., 2007).

3.6 | Ethical considerations

The protocol of this research was approved by the Committee of Research Ethics of Jaen (CHJ-2011/4/11). Information on the objectives of the study and the procedure for collecting, storing and using the information were provided to the management of the hospitals and the participants. All participants signed an informed consent form, and anonymity and confidentiality of data were ensured. All the ethical requirements necessary to ensure proper qualitative research were met (Boeije, 2010).

4 | RESULTS

A total of 57 participants were included in eight focus groups: five focus groups from the Health Service (four with nurses and one with ward managers) and three groups from the Health Agency (two with nurses and one with ward managers). No one refused to participate. Characteristics of participants are shown in Table 1.

After the template analysis with the PARIHS framework, the experiences of the participants about nursing leadership can be organized into three level of nursing leadership: traditional, medium and transformational. The specific characteristics of each leadership style according to the sub-elements described in the PARIHS model (decision-making, attitude towards natural leaders, clarity of managers' roles, organizational structure and teamwork) are shown in Table 2.

4.1 | Traditional leadership

This style of leadership, labelled as 'traditional', is characterized by a greater emphasis on hierarchical position and the completion of administrative tasks. Nurses had a negative perception of this style of leadership, focused on tasks but not on people, because these ward managers 'do not address the needs of the staff' and the 'nurses do not feel heard'. It is a weak leadership style for the EBP that was predominant at the hospitals studied, mainly in Health Service hospitals.

These ward managers were not regarded as leaders because they did not innovate and did not motivate the staff. The nurses considered the ward managers to have no leadership capacity because they are not chosen by the professionals working in the ward from among those who stood out for leading the group, but 'they are always appointed by the hospital management' (Appendix 1).

4.1.1 | Non-participative decision-making

Nurses did not feel involved in the decision-making process, and the implementation of changes was perceived as imposed and produced rejection of the changes. Changes in practice do not last over time because nurses do not feel engaged (Table 3).

Nurses expressed their perception of a lack of power to promote changes in the practice; the management often disregards their initiatives.

4.1.2 | Ward managers do not accept natural leaders

Often, a nurse took a facilitating role in the implementation of the new EBP because the ward managers did not act as a leader. These nurses, known as natural leaders as recognized by their peers (clinical nurses), were able to motivate them to implement EBP.

However, initiatives proposed by these natural leaders were frequently blocked by the ward managers because they perceived the natural leaders as rivals, or a threat to their authority.

4.1.3 | Ward managers lack clarity of roles

Nurses perceived that ward managers did not have a clear leadership role. Sometimes, ward managers asked nurses to implement changes in practice based on evidence that the managers themselves did not believe in. The ward managers recognized that they also need guidance in their roles as managers, so they need a leader.

TABLE 1 Characteristics of the participants in the focus groups

			Gender		Working experience (years)
Group	Characteristics	Number of participants	Men	Women	Mean (range)
G1	AHS nurses	5	1	4	11 (6–28)
G2	AHS nurses	8	2	6	24 (14–37)
G3	AHS nurses	9	2	7	17.4 (11–22)
G4	AGHA nurses	6	1	5	13.3 (9–18)
G5	AGHA nurses	8	2	6	10.4 (7–17)
G6	AGHA ward managers	7	2	5	15.4 (6–32)
G7	AHS ward managers	7	1	6	28.2 (23–35)
G8	AHS nurses	7	1	6	21.1 (8–28)

Abbreviations: AGHA, 'Alto Guadalquivir' Health Agency; AHS, Andalusian Health Service.

TABLE 2 Types of leadership and determinants for evidence-based practice

Sub-elements of leadership (PARIHS framework)	Traditional leadership	Medium leadership	Transformational leadership
Decision-making processes	Non participative decision-making	Decision-making with non-transparent strategies	Participative decision-making
Attitude towards natural leaders[a]	Ward managers do not accept natural leaders	Ward managers rely on natural leaders to implement change	Ward managers promote the role of natural leader
Role clarity	Ward managers lack clarity of roles	-	Ward managers with clear roles
Organizational structures	Ward managers do not propose changes to be implemented	Ward managers do not have the autonomy to implement changes	Ward managers feel close to hospital management to promote change
Teamwork	Lack of teamwork	Moderate teamwork	Effective teamwork

[a]Non-original sub-element of the Parish model. It is generated in this research.

4.1.4 | Ward managers do not propose changes to be implemented

Ward managers did not lead the change processes but merely acted as intermediaries from the direction to enforce the instructions.

4.1.5 | Lack of teamwork

Nurses complained about the lack of multidisciplinary teamwork on the wards; they said that hospital managers are only interested in the work to be done and did not encourage multidisciplinary teamwork.

4.2 | Medium leadership

Medium leadership is a style based on the traditional style but with some improvements in the decision-making process that allow for greater involvement of the nurses. It was only identified in a minority of wards in both types of hospitals. This type of leadership was characterized by non-transparent strategies, little authority of nurses for change, moderate teamwork and lack of autonomy of ward managers (Appendice 2).

4.2.1 | Decision-making with non-transparent strategies

The decision-making process in this leadership style is characterized by lack degree of nurses' involvement along with non-transparent strategies for implementing changes. Ward managers asked a few nurses for their opinion, but then the manager imposes the change. Another strategy was to organize briefings with the nurses of the unit before to the implementation of the change; however, the nurses did not perceive these sessions a way to become involved in decision-making because the decision was made prior to the session.

However, nurses thought they had no power or influence in the decision-making for changes. Often, ward managers blocked their attempts at innovation, which means that nurses in these wards were unable to deliver the care that they know is recommended by the best evidence.

4.2.2 | Ward managers rely on natural leaders to implement change

Some ward managers from Health Agency hospitals said they rely on nurses who may influence their colleagues as natural leaders. These natural leaders may help implement evidence-based changes in practice because they are recognized as being better prepared and very motivated to professional improvement.

4.2.3 | Ward managers do not have the autonomy to implement changes

Ward managers, mainly from Health Service hospitals, complained about their lack of power to respond positively to nurses' requests for change. Ward managers felt they had no autonomy to make decisions on ward organization. Frequently, ward managers felt forced by the management of the hospital to implement changes they did not agree with.

4.2.4 | Moderate teamwork

This style of leadership was characterized by promoting teamwork. Nurses said that the nursing team worked well on these wards but that it was very difficult to coordinate with other professionals, such as doctors; thus, there was no multidisciplinary teamwork. Nurses described their feeling of being constantly questioned by the doctors in their daily work.

TABLE 3 Verbatims of the categories

Category and subcategory	Verbatims
Traditional leadership	
Non-participative decision-making	'All the changes that are made are from the outside, do not last over time'. (G2, AHS nurse) 'Many times, initiatives proposed by the nurses when presented to the management are ignored, because the people in management do not want them'. (G8, AHS nurse)
Ward managers do not accept natural leaders	'There's one person in my unit who is not a ward manager and is very good at taking the team …; they set something in motion and gently get it done'. (G1, AHS nurse) 'The ward manager perceives the leader as a potential rival. In other words, "I have a leader here, and beware! who might be trying to get my job position"'. (G1, AHS nurse)
Ward managers lack clarity of roles	'Although we are leading with a human group, we have no one to lead us'. (G7, AHS ward manager) 'The ward manager is (only) an intermediary the management and us (the nurses)'. (G4, AGHA nurse)
Ward managers do not propose changes to be implemented	'The ward manager is (only) an intermediary the management and us (the nurses)'. (G4, AGHA nurse)
Lack of teamwork	'Right now, it's a very complicated time to make teams because the doctors and nurses are so pissed off, so everybody goes to do their job and leaves'. (G2, AHS nurses)
Medium leadership	
Decision-making with non-transparent strategies	'When the ward manager has already heard the opinion of some, he says, "well, it may be that imposition is best achieved in this way", because it is imposed'. (G3, AHS nurses) 'Are you telling me that instead of going home, I stayed here for a meeting? You're going to implement it even if I think otherwise'. (G5, AGHA nurse) 'Nurses want to introduce some changes in care but they cannot deliver the care in the way they would like. Can try to make (the changes) in an underhanded manner or simply accept the way thing are and not try to change'. (G1, AHS nurses)
Ward managers rely on natural leaders to implement change	'I tried to win over the leaders and involve them so that they would pass on everything to the nurses. Try to mobilize those people to help you justify that the change for the improvement'. (G6, AGHA ward managers)
Ward managers do not have the autonomy to implement changes	'The nurses are asking me for changes, but these do not depend on me. I have to impose things that I do not agree with and that I know are counterproductive'. (G7, AHS ward managers)
Moderate teamwork	'In teamwork, I see a lot of resistance. We are trying to apply the latest in emergency triage, and here we are questioned right down to the priority we have placed on it; they have no professional confidence in us'. (G4, AGHA nurses)
Transformational leadership	
Participative decision-making	'We (the nurses) were consulted on the arrangement and equipment of the new units that were being prepared for opening. Our opinion was always considered'. (G4, AGHA nurses). 'In outpatient units yes, because we are a few, so if we implement a guideline it is very easy to do so'. (G5, AGHA nurses)
Ward managers promote the role of natural leader	'What I do is to try to win over the leaders and involve them'. (G6, AGHA ward managers)
Ward managers with clear roles	'We manage teams. You have to be with them and they (the nurses) have to be with you and trust you'. (G6, AGHA ward managers)
Ward managers feel close to hospital management to promote change	'We analyze all the proposals made to us. I ask if it is feasible'. (G6, AGHA ward managers)
Effective teamwork	'When you really work as a team it's great because everyone gets the same thing and it takes less effort'. (G8, AHS nurses)

4.3 | Transformational leadership

The transformational leadership was considered the strongest for evidence implementation. Its main characteristics are democratic decision-making, clear roles for ward managers, effective teamwork, promotion of the role of natural leader and nurses' empowerment. This style was identified by nurses from Health Agency hospitals in relation to newly established roles such as research nurse or quality manager. The functions of the research nurse included the search for evidence and its application in nursing practice. The nurse with the role of quality manager gathered new ideas for improving the procedures proposed by the clinical nurses and sought the best evidence to apply them (Appendix 3).

Some ward managers at Health Agency hospitals were doing transformative leadership by applying different strategies to promote change in practice (Table 4).

TABLE 4 Transformational leadership: Strategies used by ward managers to promote changes in practice

Strategies to promote changes in nursing practice	
Making them see the importance of change	**'If you can get it across to them that change is important for improvement, there will not be a problem; I do not have a problem'. (AGHA ward managers)**
Gathering the opinions of those involved in the change	'And it is also fundamental to ask the opinion of those who are going to make this change because they will already be more involved; if you impose it is worse. Or "what do you propose?" and it comes out of them; then the change is easier'. (AGHA ward managers)
Making it easier for them to implement change	'And simply by saying, "Do not record that; he's apathetic", if that's already on the chart. Many times, you have to say concrete things so they understand, justify it, and in the end, it comes out'. (AGHA ward managers)
Choosing the best time for change	'It's important to choose the moment of that change. There are times when you say, "not this month, next month", when you have to make this change'. (AGHA ward managers)
Implementing changes proposed by nurses	'And when the changes come out of them, they come out much better. There are many people who want to improve; an idea comes up and when it comes from them and they collaborate, it goes smoothly'. (AGHA ward managers)

Abbreviation: AGHA, 'Alto Guadalquivir' Health Agency.

4.3.1 | Participative decision-making

A participative decision-making process was identified in which the nurses felt involved, for example, in the organization of new units such as the intensive care units or the delivery room.

Some nurses working in smaller units, such as outpatient units, felt empowered to implement changes in their clinical practice. These nurses stated that they believed that they had the support of the ward managers to implement changes.

4.3.2 | Ward managers promote the role of natural leader

Some of the ward managers stressed the importance of natural leaders when implementing change. The ward managers with this leadership style considered it necessary to win over natural leaders to a leadership strategy.

4.3.3 | Ward managers with clear roles

The ward managers involved in transformational leadership at Health Agency hospitals had a clear vision of their role. They stated that the main role as a leader was team management through promoting teamwork, establishing close relationships with the nurses and adopting bi-directional initiatives.

4.3.4 | Ward managers feel close to hospital management to promote change

The ward managers from Health Agency hospitals felt closer to the hospital management, making decisions in line with the policy of the institution. In spite of betting on the implementation of initiatives that arise from the nurses, they argued that all their proposals are analysed with the hospital's management team before starting the implementation.

4.3.5 | Effective teamwork

The nurses described the effective multidisciplinary teamwork as a kind of interprofessional work adapted to the needs of patients. They reported experiences of effective teamwork only occasionally and in small clinical units. They stated that working as a team produced greater professional satisfaction along with achieving better outcomes for patients with less effort.

5 | DISCUSSION

Our study revealed that the three styles of leadership described by the PARIHS model were present in some wards of the hospitals studied, but some differences between the two groups of hospitals emerged. Traditional (weak) leadership was most often identified at Health Service hospitals; only some wards in both types of hospitals had a moderate leadership style. Finally, a limited number of wards in Health Agency hospitals were in transition towards a transformational (strong) leadership style.

Traditional leadership, with which the nurses and ward managers studied most identify, is inconsistent with the implementation of EBP according to the PARIHS framework. In contexts with this leadership style, where nurses feel excluded from decision-making, they perceive changes as imposed, and the ward managers play a bureaucratic role and are not recognized as leaders by the nurses (Cummings et al., 2018). Kvist et al. (2013) too found that the nursing leadership style in the hospitals was just administrative and autocratic; with an overload of management tasks, nurses are too busy to lead (Tewes & Fischer, 2017).

Transformational leadership was positively associated with providers' positive attitudes towards adoption of EBP in magnet hospitals (Aarons, 2006; Nurmeksela et al., 2021). Our findings show that mainly in Health Agency hospitals, ward managers try to involve the nurses in the changes and rely on natural leaders to implement

evidence, but nurses feel they have little power for change. Only in specific contexts had some attempts developed for transformational leadership. These units were characterized by nurses' perception that decision-making was democratic, ward managers had a clear role and promoted natural leaders, and they achieved effective teamwork, according to the sub-elements that the PARIHS model requires for strong leadership for the EBP (McCormack et al., 2002). In Finland (Kvist et al., 2013) and Italy (Morsiani et al., 2017), it was also found that nursing leadership needs more development to achieve transformational leadership. In our study, nurses' perception of empowerment for change was a key factor in successful evidence implementation, in accordance with other researchers (Cheng et al., 2018; Cummings et al., 2018; Liukka et al., 2018; Nurmeksela et al., 2021).

Ward managers in our research needed support for roles around effective implementation of EBP, similar to other studies (Bianchi et al., 2018; Kitson et al., 2021), and they stated that managing nursing teams was a key role for them to play. The nurses stated that truly effective teamwork is difficult to achieve because of the asymmetry in the interprofessional relationships between nurses and doctors, in concurrence with other researchers (Rega et al., 2017; Tang et al., 2018). Successful collaboration requires knowledge of and respect for the roles of other individuals and acceptance of responsibility for shared decision-making towards a common goal (Lamont et al., 2015).

5.1 | Limitations

One limitation is that the focus group sessions were conducted in a hospital environment, which may inhibit the professionals in some contributions. Moreover, the participants did not read our findings to check the descriptions and verify the meaning.

6 | CONCLUSIONS

Three types of nursing leadership have been identified in the hospitals studied: traditional leadership, medium leadership and transformational leadership. The high load of bureaucratic tasks for ward managers is incompatible with transformational leadership and EBP. The nurses do not feel empowered to make decisions, and they perceive the proposed changes as an imposition. With the lack of strong leadership for EBP, the role of the natural leader is emerging, which must be included in a new organizational structure. The results of this research establish the basis for the best method of facilitation for the implementation of evidence in the hospital contexts studied.

6.1 | Implication for nursing management

To create an environment favourable to EBP, it is necessary consider the role of the transformational leader as a replacement of the ward manager with an excessive bureaucratic function. The transformational leader should be based on the empowerment of nurses, offering them more responsibility and power in decision-making. Nurse managers need to be clear about their roles, especially those related to the implementation of EBP. In addition, both nurses and managers see organization based on effective multidisciplinary working as key.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

ETHICAL APPROVAL

This study was approved by the Committee of Research Ethics of Jaen (CHJ-2011/4/11).

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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ORIGINAL ARTICLE

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Nurses and ward managers' perceptions of leadership in the evidence-based practice: A qualitative study

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Abstract

Aim: To describe nurses and ward managers' experiences with nursing leadership in the implementation of evidence-based practice.

Background: The implementation of evidence-based practice requires to identify the most suitable styles of nursing leadership for the successful application.

Design: A qualitative descriptive study.

Methods: The study was carried out with 57 nurses (clinical nurses and ward managers) in eight focus groups from five public hospitals. Template analysis, using the Promoting Action on Research Implementation in Health Services framework, was used. The Consolidated Criteria for Reporting Qualitative Research guide was followed in planning and reporting this research.

Results: Three types of nursing leadership were identified: traditional leadership, medium leadership and transformational leadership. Traditional leadership was the most frequent, with a predominance of bureaucratic tasks for ward managers, so implementation of evidence-based practice is difficult.

Conclusion: Nurses do not feel empowered and they perceive the changes as an imposition. In the absence of strong leadership for evidence-based practice, a natural leader emerges.

Implications for Nursing Management: Clinical nurses demand more empowerment for decision-making, and ward managers need clarity of roles. To create an environment favourable to evidence-based practice, it is necessary consider the role of the transformational leader.

KEYWORDS
evidence-based practice, nursing, nursing leadership, PARIHS framework, qualitative research

1 | INTRODUCTION

Evidence-based practice (EBP) has remained a challenge for healthcare institutions for decades, with growing concern that common practices do not always reflect what is known as best practice (Seers et al., 2012). Nursing leadership may facilitate the change towards EBP by mentoring policies and helping nurses. Leadership practices that help create a healthy work environment can ultimately improve patient experiences and outcomes (Registered Nurses' Association of Ontario, 2013). From this perspective, it is necessary to gain more insight into the experiences of nurses in nursing leadership practices and how different leadership styles can act as facilitators for the implementation of the EBP.

2 | BACKGROUND

The EBP approach aims to provide the best available nursing care, considering both a nurse's judgement and a patient's preferences. Multiple barriers to EBP implementation have been identified within the strategic dimension (lack of time, leaders have other priorities, lack of resources), cultural dimension (resistance to changing practice, lack of authority for change), technical dimension (poor information systems) and structural dimension (lack of availability of research) (Solomons & Spross, 2011). The implementation of evidence requires changes at the individual, team and organizational levels of health systems. The use of theories, models and frameworks for application science is associated with successful implementation (Nilsen, 2015). There are several frameworks aimed to guide the EBP implementation: the Stetler model, Ottawa Model of Research Use, Promoting Action on Research Implementation in Health Services framework (PARIHS), Iowa model of EBP, Advancing Research and Clinical Practice through Close Collaboration model and the Joanna Briggs Institute models (Rycroft-Malone, 2010).

The PARIHS framework (Kitson et al., 1998, 2008) was generated inductively from health professionals to understand the basis for implementing evidence. This framework helps to make decisions on the steps to be taken based on the analysis of its elements (-Bergström et al., 2020). Considered as determinant framework (Nilsen, 2015), it is a multidimensional framework originally composed of three main elements, namely, evidence, context and facilitation, which are divided into sub-elements (Rycroft-Malone et al., 2002). In the revised version, described as the integrated PARIHS, the core constructs are facilitation, innovation, recipients and context (Harvey & Kitson, 2015). This model helps to predict successful implementation of evidence. It proposes that the strategy to be followed by an organization with a traditional organizational model to achieve EBP must be different from that of an institution with a culture based on continuous learning and innovation throughout its staff.

The implementation of evidence must be assessed in relation to the context in which care is provided: the organization structure, the centralization of decision-making and skills of professionals to manage the change process. It is necessary to identify the formal and informal leaders who support the implementation of evidence (Harvey & Kitson, 2015). In the PARIHS framework, indicators associated with low leadership for EBP are traditional, command and control; autocratic decision-making; lack of clarity of roles; poor organizational structures; didactic approach to learning/teaching/leadership; and lack of teamwork. At the opposite pole, as indicators of high leadership, are transformational leadership; democratic inclusive decision-making; role clarity; effective organizational structures; enabling/empowering approach to learning/teaching/managing; and effective teamwork (McCormack et al., 2002).

The 'transformational leader' is defined as someone who is able to transform organizational cultures to achieve a culture more conducive to integrate evidence into practice (Rycroft-Malone et al., 2002) and the ability to create professionals with a shared vision of future and an attitude towards change that is challenging and stimulating (McCormack et al., 2002). Transformational leadership is characterized by a strong positive correlation with leadership effectiveness; it increases nurse satisfaction and patient outcomes but requires extra effort from ward managers (Casida & Parker, 2011; McGilton et al., 2016). Some clinical outcomes attributable to the clinical nurse leader role are shorter lengths of stay, decreased readmission rates and improved patient outcomes related to nursing care (medication errors, falls, pressure ulcers, hospital-acquired infections) and lower patient mortality (Murray et al., 2018; Wong, 2015).

Leadership, considered as a modifier factor for the success of EBP implementation, needs further theoretical development within the science of implementation (Reichenpfader et al., 2015). According to the PARIHS model, it is important to identify which styles of nursing leadership exist in hospitals and to examine whether they are suitable for the implementation of EBP. The perceptions of nurses and ward managers on leadership in their units could provide a basis for understanding the style of leadership in a hospital and strategies to facilitate the change in clinical practice.

Hutchinson and Jackson (2013) establish the need to study how nursing leadership is perceived by the organizations themselves, how the context influences the leader's behaviour or how leadership is encouraged by those not in appointed leadership positions. More research based on actual descriptions of nurses' work is needed to advance in leadership rhetoric and management practices (Fast & Rankin, 2018; Hewison, 2020).

The aim of the study was to describe nurses and ward managers' experiences with nursing leadership at hospitals in relation to the implementation of EBP.

Insights from this study are expected to extend the evidence base that is necessary to provide effective nursing leadership to facilitate the EBP. Exploring the experiences of hospital care nurses and managers can provide insight into how nurse leadership shapes EBP from elements that hinder and facilitate its implementation.

3 | METHODS

3.1 | Design

This was a qualitative descriptive study using focus groups with drawing on template analysis (Brooks & King, 2012) based on the PARIHS framework.

3.2 | The participants and settings

The study was carried out in five public hospitals in Andalusia (southern Spain) with two different organizational models, three from the Andalusian Health Service with a traditional management structure and two from the 'Alto Guadalquivir' Health Agency organized as a public company to have more autonomy in management. A purposive sampling strategy was used to recruit nurses (registered nurses with 4 years of university education) and ward managers (nurses appointed by the direction of the hospital to manage each ward).

The data were collected by conducting several focus group sessions with nurses and ward managers. The focus group was chosen as a method of data collection because it provides rich descriptions of the attitudes and beliefs underlying the behavior and a context for understanding the experiences of the participants (Carey & Asbury, 2012).

The focus groups (with five to eight participants) were homogeneous in terms of the type of hospital management model (Andalusian Health Service and 'Alto Guadalquivir' Health Agency) and the professional category (clinical nurses and ward managers). In addition, the sampling was guided by maximum heterogeneity in relation to gender, age and work unit to obtain the widest range of perspectives on nursing leadership. The final sample was determined by the principle of information saturation.

3.3 | Data collection

All the focus groups were held in properly equipped meeting rooms at the hospitals, following Carey and Asbury (2012), for their planning and development. Sessions were audio recorded and then transcribed verbatim by the researchers themselves. The sessions lasted between 60 and 100 min. In each focus group, one researcher played a role as an observer, and another as a moderator. No one else was present besides the participants and researchers. The observer took detailed notes on group interaction and non-verbal communication, and the moderator posed the questions and conducted the discussion. It was not necessary to repeat any focus group in more than one session. The open-ended questions used were:

- To what extent are clinical nurses involved in making decisions about the implementation of EBP?
- What strategies should be followed to implement evidence?
- In your opinion, who should lead evidence implementation in nursing?
- How should a nursing leader facilitate evidence implementation by the nurses?
- How do you lead nurses in your hospital ward? (only in ward managers groups)

3.4 | Data analysis

The information collected through the focus groups was analysed using a template analysis method (Brooks & King, 2012; King, 2004), based on the PARIHS framework as a model, selected previously, to illuminate the relevance of the PARIHS constructs in the different contexts sampled. First, a template was developed with some concepts of the PARIHS model as predefined categories: leadership, decision-making processes, role clarity, organizational structures and teamwork. These pre-established categories are based on the criteria that must be taken into account in leadership, according to the PARIHS framework, for EBP implementation to take place.

The analysis was performed in three steps: First is the coding of the units of meaning of the text (both open and in vivo coding); second, the codes were assigned to the categories based on the concepts from PARIHS model about leadership; it was determined whether saturation had been reached in all categories or whether there was a need to recruit more informants; and third, these categories were grouped into themes according to whether they represented low or high indicators for the leadership concepts, according to whether they are indicators that hinder the application of PBE (low) or are associated with successful implementation (high).

The purpose of this process was to find sense and meaning for the relationships between the categories and themes and to display the findings in the form of both text and matrices and concept maps. The QSR NVivo 10 qualitative data analysis software (QSR International®) was used to facilitate the management, organization and classification of information.

3.5 | Rigour

In order to increase trustworthiness and qualitative reliability, a researcher triangulation technique was used during the analysis process (Merriam, 2009). It ensured that the research team had a good understanding of the initial template and that the changes that led to the final version were analysed and discussed by all researchers. The credibility of the data was strengthened by checking each researcher's interpretation until consensus was reached; also, data on nurses' perceptions were triangulated with those of ward managers. To ensure confirmability, the researchers used reflexivity to avoid the influence of preconceived ideas in the analysis (Boeije, 2010). The researchers had no previous relationship with any of the participants. The Consolidated Criteria for Reporting Qualitative Research (COREQ) guide was followed in planning and reporting this research (Tong et al., 2007).

3.6 | Ethical considerations

The protocol of this research was approved by the Committee of Research Ethics of Jaen (CHJ-2011/4/11). Information on the objectives of the study and the procedure for collecting, storing and using the information were provided to the management of the hospitals and the participants. All participants signed an informed consent form, and anonymity and confidentiality of data were ensured. All the ethical requirements necessary to ensure proper qualitative research were met (Boeije, 2010).

4 | RESULTS

A total of 57 participants were included in eight focus groups: five focus groups from the Health Service (four with nurses and one with ward managers) and three groups from the Health Agency (two with nurses and one with ward managers). No one refused to participate. Characteristics of participants are shown in Table 1.

After the template analysis with the PARIHS framework, the experiences of the participants about nursing leadership can be organized into three level of nursing leadership: traditional, medium and transformational. The specific characteristics of each leadership style according to the sub-elements described in the PARIHS model (decision-making, attitude towards natural leaders, clarity of managers' roles, organizational structure and teamwork) are shown in Table 2.

4.1 | Traditional leadership

This style of leadership, labelled as 'traditional', is characterized by a greater emphasis on hierarchical position and the completion of administrative tasks. Nurses had a negative perception of this style of leadership, focused on tasks but not on people, because these ward managers 'do not address the needs of the staff' and the 'nurses do not feel heard'. It is a weak leadership style for the EBP that was predominant at the hospitals studied, mainly in Health Service hospitals.

These ward managers were not regarded as leaders because they did not innovate and did not motivate the staff. The nurses considered the ward managers to have no leadership capacity because they are not chosen by the professionals working in the ward from among those who stood out for leading the group, but 'they are always appointed by the hospital management' (Appendix 1).

4.1.1 | Non-participative decision-making

Nurses did not feel involved in the decision-making process, and the implementation of changes was perceived as imposed and produced rejection of the changes. Changes in practice do not last over time because nurses do not feel engaged (Table 3).

Nurses expressed their perception of a lack of power to promote changes in the practice; the management often disregards their initiatives.

4.1.2 | Ward managers do not accept natural leaders

Often, a nurse took a facilitating role in the implementation of the new EBP because the ward managers did not act as a leader. These nurses, known as natural leaders as recognized by their peers (clinical nurses), were able to motivate them to implement EBP.

However, initiatives proposed by these natural leaders were frequently blocked by the ward managers because they perceived the natural leaders as rivals, or a threat to their authority.

4.1.3 | Ward managers lack clarity of roles

Nurses perceived that ward managers did not have a clear leadership role. Sometimes, ward managers asked nurses to implement changes in practice based on evidence that the managers themselves did not believe in. The ward managers recognized that they also need guidance in their roles as managers, so they need a leader.

TABLE 1 Characteristics of the participants in the focus groups

			Gender		Working experience (years)
Group	Characteristics	Number of participants	Men	Women	Mean (range)
G1	AHS nurses	5	1	4	11 (6–28)
G2	AHS nurses	8	2	6	24 (14–37)
G3	AHS nurses	9	2	7	17.4 (11–22)
G4	AGHA nurses	6	1	5	13.3 (9–18)
G5	AGHA nurses	8	2	6	10.4 (7–17)
G6	AGHA ward managers	7	2	5	15.4 (6–32)
G7	AHS ward managers	7	1	6	28.2 (23–35)
G8	AHS nurses	7	1	6	21.1 (8–28)

Abbreviations: AGHA, 'Alto Guadalquivir' Health Agency; AHS, Andalusian Health Service.

TABLE 2 Types of leadership and determinants for evidence-based practice

Sub-elements of leadership (PARIHS framework)	Traditional leadership	Medium leadership	Transformational leadership
Decision-making processes	Non participative decision-making	Decision-making with non-transparent strategies	Participative decision-making
Attitude towards natural leaders[a]	Ward managers do not accept natural leaders	Ward managers rely on natural leaders to implement change	Ward managers promote the role of natural leader
Role clarity	Ward managers lack clarity of roles	-	Ward managers with clear roles
Organizational structures	Ward managers do not propose changes to be implemented	Ward managers do not have the autonomy to implement changes	Ward managers feel close to hospital management to promote change
Teamwork	Lack of teamwork	Moderate teamwork	Effective teamwork

[a]Non-original sub-element of the Parish model. It is generated in this research.

4.1.4 | Ward managers do not propose changes to be implemented

Ward managers did not lead the change processes but merely acted as intermediaries from the direction to enforce the instructions.

4.1.5 | Lack of teamwork

Nurses complained about the lack of multidisciplinary teamwork on the wards; they said that hospital managers are only interested in the work to be done and did not encourage multidisciplinary teamwork.

4.2 | Medium leadership

Medium leadership is a style based on the traditional style but with some improvements in the decision-making process that allow for greater involvement of the nurses. It was only identified in a minority of wards in both types of hospitals. This type of leadership was characterized by non-transparent strategies, little authority of nurses for change, moderate teamwork and lack of autonomy of ward managers (Appendice 2).

4.2.1 | Decision-making with non-transparent strategies

The decision-making process in this leadership style is characterized by lack degree of nurses' involvement along with non-transparent strategies for implementing changes. Ward managers asked a few nurses for their opinion, but then the manager imposes the change. Another strategy was to organize briefings with the nurses of the unit before to the implementation of the change; however, the nurses did not perceive these sessions a way to become involved in decision-making because the decision was made prior to the session.

However, nurses thought they had no power or influence in the decision-making for changes. Often, ward managers blocked their attempts at innovation, which means that nurses in these wards were unable to deliver the care that they know is recommended by the best evidence.

4.2.2 | Ward managers rely on natural leaders to implement change

Some ward managers from Health Agency hospitals said they rely on nurses who may influence their colleagues as natural leaders. These natural leaders may help implement evidence-based changes in practice because they are recognized as being better prepared and very motivated to professional improvement.

4.2.3 | Ward managers do not have the autonomy to implement changes

Ward managers, mainly from Health Service hospitals, complained about their lack of power to respond positively to nurses' requests for change. Ward managers felt they had no autonomy to make decisions on ward organization. Frequently, ward managers felt forced by the management of the hospital to implement changes they did not agree with.

4.2.4 | Moderate teamwork

This style of leadership was characterized by promoting teamwork. Nurses said that the nursing team worked well on these wards but that it was very difficult to coordinate with other professionals, such as doctors; thus, there was no multidisciplinary teamwork. Nurses described their feeling of being constantly questioned by the doctors in their daily work.

TABLE 3 Verbatims of the categories

Category and subcategory	Verbatims
Traditional leadership	
Non-participative decision-making	'All the changes that are made are from the outside, do not last over time'. (G2, AHS nurse) 'Many times, initiatives proposed by the nurses when presented to the management are ignored, because the people in management do not want them'. (G8, AHS nurse)
Ward managers do not accept natural leaders	'There's one person in my unit who is not a ward manager and is very good at taking the team …; they set something in motion and gently get it done'. (G1, AHS nurse) 'The ward manager perceives the leader as a potential rival. In other words, "I have a leader here, and beware! who might be trying to get my job position"'. (G1, AHS nurse)
Ward managers lack clarity of roles	'Although we are leading with a human group, we have no one to lead us'. (G7, AHS ward manager) 'The ward manager is (only) an intermediary the management and us (the nurses)'. (G4, AGHA nurse)
Ward managers do not propose changes to be implemented	'The ward manager is (only) an intermediary the management and us (the nurses)'. (G4, AGHA nurse)
Lack of teamwork	'Right now, it's a very complicated time to make teams because the doctors and nurses are so pissed off, so everybody goes to do their job and leaves'. (G2, AHS nurses)
Medium leadership	
Decision-making with non-transparent strategies	'When the ward manager has already heard the opinion of some, he says, "well, it may be that imposition is best achieved in this way", because it is imposed'. (G3, AHS nurses) 'Are you telling me that instead of going home, I stayed here for a meeting? You're going to implement it even if I think otherwise'. (G5, AGHA nurse) 'Nurses want to introduce some changes in care but they cannot deliver the care in the way they would like. Can try to make (the changes) in an underhanded manner or simply accept the way thing are and not try to change'. (G1, AHS nurses)
Ward managers rely on natural leaders to implement change	'I tried to win over the leaders and involve them so that they would pass on everything to the nurses. Try to mobilize those people to help you justify that the change for the improvement'. (G6, AGHA ward managers)
Ward managers do not have the autonomy to implement changes	'The nurses are asking me for changes, but these do not depend on me. I have to impose things that I do not agree with and that I know are counterproductive'. (G7, AHS ward managers)
Moderate teamwork	'In teamwork, I see a lot of resistance. We are trying to apply the latest in emergency triage, and here we are questioned right down to the priority we have placed on it; they have no professional confidence in us'. (G4, AGHA nurses)
Transformational leadership	
Participative decision-making	'We (the nurses) were consulted on the arrangement and equipment of the new units that were being prepared for opening. Our opinion was always considered'. (G4, AGHA nurses). 'In outpatient units yes, because we are a few, so if we implement a guideline it is very easy to do so'. (G5, AGHA nurses)
Ward managers promote the role of natural leader	'What I do is to try to win over the leaders and involve them'. (G6, AGHA ward managers)
Ward managers with clear roles	'We manage teams. You have to be with them and they (the nurses) have to be with you and trust you'. (G6, AGHA ward managers)
Ward managers feel close to hospital management to promote change	'We analyze all the proposals made to us. I ask if it is feasible'. (G6, AGHA ward managers)
Effective teamwork	'When you really work as a team it's great because everyone gets the same thing and it takes less effort'. (G8, AHS nurses)

4.3 | Transformational leadership

The transformational leadership was considered the strongest for evidence implementation. Its main characteristics are democratic decision-making, clear roles for ward managers, effective teamwork, promotion of the role of natural leader and nurses' empowerment. This style was identified by nurses from Health Agency hospitals in relation to newly established roles such as research nurse or quality manager. The functions of the research nurse included the search for evidence and its application in nursing practice. The nurse with the role of quality manager gathered new ideas for improving the procedures proposed by the clinical nurses and sought the best evidence to apply them (Appendix 3).

Some ward managers at Health Agency hospitals were doing transformative leadership by applying different strategies to promote change in practice (Table 4).

TABLE 4 Transformational leadership: Strategies used by ward managers to promote changes in practice

Strategies to promote changes in nursing practice	
Making them see the importance of change	**'If you can get it across to them that change is important for improvement, there will not be a problem; I do not have a problem'. (AGHA ward managers)**
Gathering the opinions of those involved in the change	'And it is also fundamental to ask the opinion of those who are going to make this change because they will already be more involved; if you impose it is worse. Or "what do you propose?" and it comes out of them; then the change is easier'. (AGHA ward managers)
Making it easier for them to implement change	'And simply by saying, "Do not record that; he's apathetic", if that's already on the chart. Many times, you have to say concrete things so they understand, justify it, and in the end, it comes out'. (AGHA ward managers)
Choosing the best time for change	'It's important to choose the moment of that change. There are times when you say, "not this month, next month", when you have to make this change'. (AGHA ward managers)
Implementing changes proposed by nurses	'And when the changes come out of them, they come out much better. There are many people who want to improve; an idea comes up and when it comes from them and they collaborate, it goes smoothly'. (AGHA ward managers)

Abbreviation: AGHA, 'Alto Guadalquivir' Health Agency.

4.3.1 | Participative decision-making

A participative decision-making process was identified in which the nurses felt involved, for example, in the organization of new units such as the intensive care units or the delivery room.

Some nurses working in smaller units, such as outpatient units, felt empowered to implement changes in their clinical practice. These nurses stated that they believed that they had the support of the ward managers to implement changes.

4.3.2 | Ward managers promote the role of natural leader

Some of the ward managers stressed the importance of natural leaders when implementing change. The ward managers with this leadership style considered it necessary to win over natural leaders to a leadership strategy.

4.3.3 | Ward managers with clear roles

The ward managers involved in transformational leadership at Health Agency hospitals had a clear vision of their role. They stated that the main role as a leader was team management through promoting teamwork, establishing close relationships with the nurses and adopting bi-directional initiatives.

4.3.4 | Ward managers feel close to hospital management to promote change

The ward managers from Health Agency hospitals felt closer to the hospital management, making decisions in line with the policy of the institution. In spite of betting on the implementation of initiatives that arise from the nurses, they argued that all their proposals are analysed with the hospital's management team before starting the implementation.

4.3.5 | Effective teamwork

The nurses described the effective multidisciplinary teamwork as a kind of interprofessional work adapted to the needs of patients. They reported experiences of effective teamwork only occasionally and in small clinical units. They stated that working as a team produced greater professional satisfaction along with achieving better outcomes for patients with less effort.

5 | DISCUSSION

Our study revealed that the three styles of leadership described by the PARIHS model were present in some wards of the hospitals studied, but some differences between the two groups of hospitals emerged. Traditional (weak) leadership was most often identified at Health Service hospitals; only some wards in both types of hospitals had a moderate leadership style. Finally, a limited number of wards in Health Agency hospitals were in transition towards a transformational (strong) leadership style.

Traditional leadership, with which the nurses and ward managers studied most identify, is inconsistent with the implementation of EBP according to the PARIHS framework. In contexts with this leadership style, where nurses feel excluded from decision-making, they perceive changes as imposed, and the ward managers play a bureaucratic role and are not recognized as leaders by the nurses (Cummings et al., 2018). Kvist et al. (2013) too found that the nursing leadership style in the hospitals was just administrative and autocratic; with an overload of management tasks, nurses are too busy to lead (Tewes & Fischer, 2017).

Transformational leadership was positively associated with providers' positive attitudes towards adoption of EBP in magnet hospitals (Aarons, 2006; Nurmeksela et al., 2021). Our findings show that mainly in Health Agency hospitals, ward managers try to involve the nurses in the changes and rely on natural leaders to implement

evidence, but nurses feel they have little power for change. Only in specific contexts had some attempts developed for transformational leadership. These units were characterized by nurses' perception that decision-making was democratic, ward managers had a clear role and promoted natural leaders, and they achieved effective teamwork, according to the sub-elements that the PARIHS model requires for strong leadership for the EBP (McCormack et al., 2002). In Finland (Kvist et al., 2013) and Italy (Morsiani et al., 2017), it was also found that nursing leadership needs more development to achieve transformational leadership. In our study, nurses' perception of empowerment for change was a key factor in successful evidence implementation, in accordance with other researchers (Cheng et al., 2018; Cummings et al., 2018; Liukka et al., 2018; Nurmeksela et al., 2021).

Ward managers in our research needed support for roles around effective implementation of EBP, similar to other studies (Bianchi et al., 2018; Kitson et al., 2021), and they stated that managing nursing teams was a key role for them to play. The nurses stated that truly effective teamwork is difficult to achieve because of the asymmetry in the interprofessional relationships between nurses and doctors, in concurrence with other researchers (Rega et al., 2017; Tang et al., 2018). Successful collaboration requires knowledge of and respect for the roles of other individuals and acceptance of responsibility for shared decision-making towards a common goal (Lamont et al., 2015).

5.1 | Limitations

One limitation is that the focus group sessions were conducted in a hospital environment, which may inhibit the professionals in some contributions. Moreover, the participants did not read our findings to check the descriptions and verify the meaning.

6 | CONCLUSIONS

Three types of nursing leadership have been identified in the hospitals studied: traditional leadership, medium leadership and transformational leadership. The high load of bureaucratic tasks for ward managers is incompatible with transformational leadership and EBP. The nurses do not feel empowered to make decisions, and they perceive the proposed changes as an imposition. With the lack of strong leadership for EBP, the role of the natural leader is emerging, which must be included in a new organizational structure. The results of this research establish the basis for the best method of facilitation for the implementation of evidence in the hospital contexts studied.

6.1 | Implication for nursing management

To create an environment favourable to EBP, it is necessary consider the role of the transformational leader as a replacement of the ward manager with an excessive bureaucratic function. The transformational leader should be based on the empowerment of nurses, offering them more responsibility and power in decision-making. Nurse managers need to be clear about their roles, especially those related to the implementation of EBP. In addition, both nurses and managers see organization based on effective multidisciplinary working as key.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

ETHICAL APPROVAL

This study was approved by the Committee of Research Ethics of Jaen (CHJ-2011/4/11).

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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REVIEW ARTICLE

WILEY

The community nurse in Australia. Who are they? A rapid systematic review

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Abstract

Aim: This study aimed to profile the community nurse in Australia.

Background: The need for nurses in the community health care sector is increasing in response to shorter hospital stays, an aging population and chronic disease. The increase in demand has not been followed by appropriate workforce planning, leading to structural issues and lack of qualified nursing workforce in the community sector.

Evaluation: MEDLINE and ProQuest Public Health and grey literature were searched for records published between 2010 and 2020 relative to the profile of the community nurse in Australia. Twenty-five records (21 publications, 2 databases and 2 reports) were included in the review. Abstracted data followed the principles of workforce planning and included demographics, qualifications and roles.

Key Issues: Inconsistent definitions, self-reported data and a focus on practice nurses have contributed to data irregularities. Little is known about the specific aspects of community nursing work.

Conclusion: A lack of concrete data has overshadowed a community nursing workforce crisis with implications for patients' health and safety across the lifespan.

Implications for Nursing Management: There is urgent need for nurse managers globally to refocus nursing recruitment to the community sector to maintain quality and ensure sustainability of the nursing workforce.

KEYWORDS
community health, nursing, primary health care, public health, workforce

1 | INTRODUCTION

The primary and community (P&C) health care system provides prevention, treatment and rehabilitative services outside the hospital system. In Australia, as globally, populations are living longer, often with chronic disease (Australian Bureau of Statistics [ABS], 2018; Kyu et al., 2018), and lengths of hospital stays have decreased (Australian Institute of Health and Welfare [AIHW], 2017). Hospital in the Home programmes have exponentially increased (Montalto et al., 2020) as recovery from surgery or illness has moved from the acute sector to

[Correction added on 20 November 2021, after first online publication: The ORCiD has been added to the fourth author's (Pauline Murray-Parahi) name in this version.]

the home, with support from community-based health care practitioners.

The integration of nurses into P&C care services is deemed to improve access, continuity and quality of care. The World Health Organization (WHO, 2017) considers the primary health care nursing role to be integral for health promotion, disease prevention and management. However, there are some challenges to maximizing nurses' contributions in the primary care capacity. There is a global shortage of nurses and midwives (Drennan & Ross, 2019) corresponding to over 50% of the total deficit in health care workers. The WHO estimates that an additional 9 million nurses are needed by 2030 to meet sustainable health and well-being goals (WHO, 2020). In addition, there has not been an alignment of skilled and qualified nursing supply with demand required at the community sector, with evidence of recruitment of nurses from acute care to meet the shortages in the primary setting (Ashley, 2016). With changing models of care from the acute to the community, it is necessary that workforce planning encompasses the community nursing sector to ensure sustainability and retention of skilled nursing staff in this setting.

2 | BACKGROUND

Multiple terms, definitions, governance and funding mechanisms of P&C-based services exist around the globe that have contributed to confusion and debate around what is primary and/or community health (Awofeso, 2004; Goodman et al., 2014; Muldoon et al., 2006; Phillips & Bazemore, 2010). This ambiguity extends to P&C nurse roles as titles are often used interchangeably (Drennan, 2019), and in Australia, health workforce data rely on self-reports at annual registration (AIHW, 2018).

P&C nurses fall into two main groups: the practice nurse, generally accepted to refer to nurses employed by privately run general practice (GP) (Jolly, 2007) and publicly funded community nurses attached to a health centre or clinic. The roles of P&C nurses are diverse as they are responsible for a population of 26 million from birth through to aged care in metropolitan, rural and remote regions (defined simply as outside Australia's major cities), across eight states and territories (ABS, 2021a; Royal Flying Doctor Service, n.d. [see map for detail]). The health system is complex, with the Federal Government funding primary health care and the states/territories responsible for targeted community health services (Productivity Commission, 2019; Swerissen et al., 2018) based on population health, geographical and socio-economic indicators. Aboriginal health services tend to be run by state/territory governments in metropolitan regions and the local community in rural and remote regions (Fitts et al., 2021).

Nurses employed within both groups include nurse practitioners (NPs), endorsed independent practitioners with master-level qualifications; registered nurses (RNs) who may be degree qualified (from 1985 to 1993 depending upon state/territory) or be certificated (hospital trained) (Jolly, 2007; The Department of Health, 2013); certificated or diploma educated (since 2014) enrolled nurses (ENs) (Blay & Smith, 2020; Jolly, 2007); and increasingly, unregulated nurse assistants who may receive little or no training (Blay & Roche, 2020).

In light of the increasing need for P&C nurses as highlighted, it is imperative that nurse managers have a comprehensive understanding of the current workforce. As little is known about the community nurse workforce, a rapid systematic review was planned to profile the nurse working in the P&C health care sector in Australia and to ascertain future workforce needs. This review was guided by the fundamental principles of workforce planning that advocate the exploration of demographics, qualifications, activities and skills (De Bruecker et al., 2015) to answer the question who is the community nurse in Australia? Rapid reviews are vital in terms of response time for policymakers. Findings relative to employment data, role and career perceptions are important antecedents for nurse recruitment and therefore of benefit to nurse managers in the many countries with community nursing workforce shortages.

3 | METHODS

Rapid reviews are a method of systematically searching literature to inform policy in a more timely manner than can be achieved with the typical systematic review (Alliance for Health Policy and Systems Research, & World Health Organisation, 2017; Haby et al., 2016). Methods are many and remain under debate (Tricco et al., 2015), but include limiting databases, publication dates or language, excluding grey literature or a quality assessment, data abstraction by a single reviewer with verification by a second reviewer (Alliance for Health Policy and Systems Research, & World Health Organisation, 2017; Haby et al., 2016). We limited databases and grey literature searching and excluded a quality assessment as suggested above.

Two databases (MEDLINE and ProQuest Public Health) and Google's search engine using the MeSH terms Community 'AND' Nurse 'OR' Workforce 'AND' Australia were used to locate empirical research, workforce data and reports, and grey literature that described the community nurse in Australia. Searches conducted by the first author between March and July 2020 were limited to peer-reviewed journals, published in the English language between 2010 and 2020 (for decadal trend(s)) and availability of full text. Grey literature, accepted as print and electronic data, theses, and government, academic and business records that are not controlled by commercial publishers, helps to provide a more balanced review (Adams et al., 2016; Paez, 2017; Woods et al., 2020). Hand-searching and Really Simple Syndication (RSS) feeds were used to alert newly published manuscripts from selected journals. Opinion pieces, editorials and research where Australian data could not be extracted were excluded (see Figure 1).

The database search yielded 4801 published articles, whereas the yield from the grey literature was extensive ($n = 8{,}940{,}000$); therefore, only the first five pages of results ($n = 50$) were reviewed. After the removal of duplicates and following the screening of titles and abstracts, 32 published articles were retained for full-text review and two websites were retained from the grey literature.

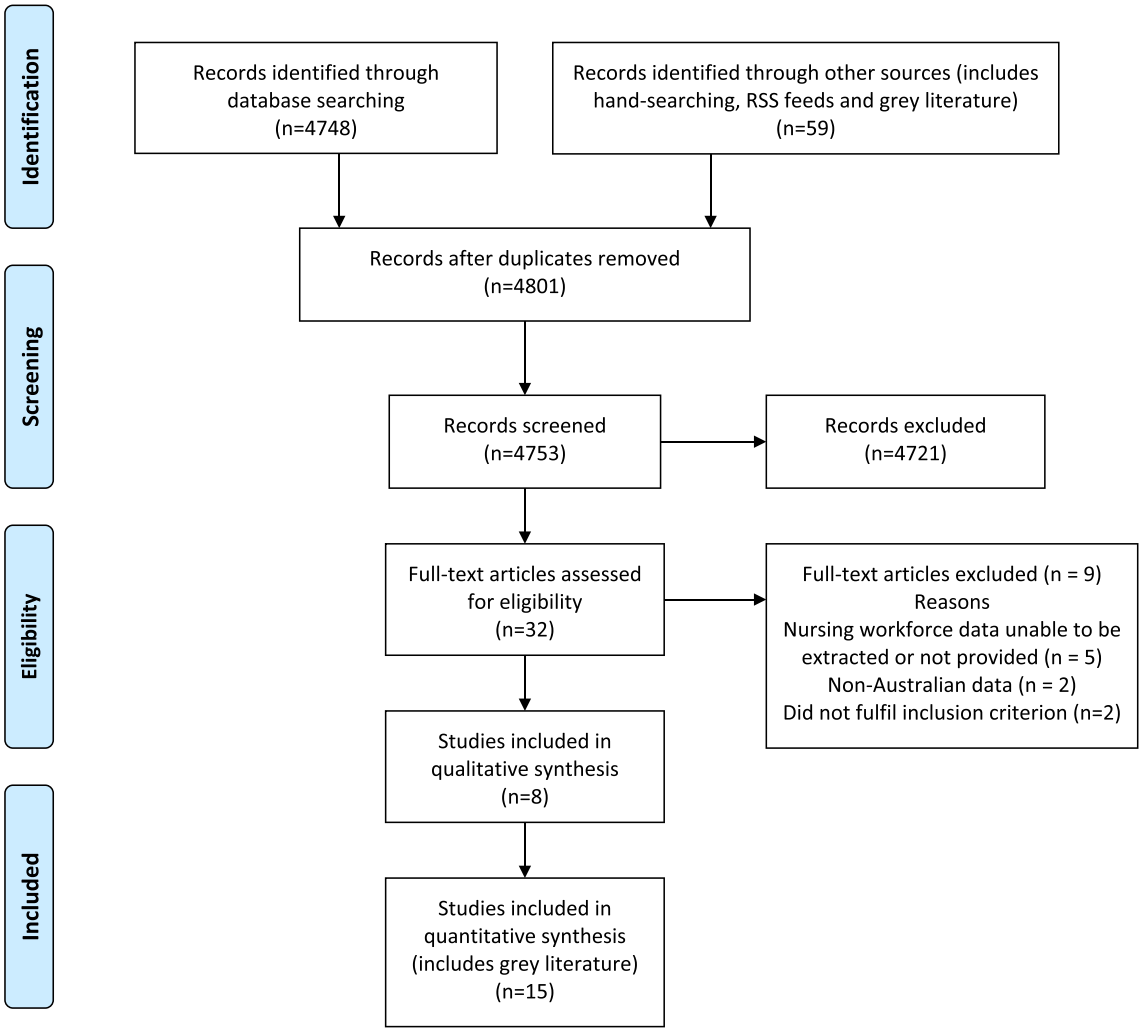

FIGURE 1 PRISMA published and unpublished studies included in the review

Record verification was conducted by a second author (P. M.-P.) with expertise in community nursing, and any differences of opinion were resolved by discussion and consensus. Following the method as outlined here, 21 published articles, 2 national datasets (comprising multiple tables) (AIHW, 2013b, 2015) and 2 workforce reports (Australian Primary Health Care Nurses Association [APNA], 2017, 2020) accessed from the respective websites were included in this review. The final review contained 25 records relative to the P&C health nurse (refer to Figure 1).

3.1 | Data abstraction and synthesis

Data on study design, aims and outcomes in terms of demographics, qualifications, work experience, activities and skills were extracted from the national databases, workforce reports and literature and entered into Microsoft Excel for integration. Descriptive statistics were applied for reporting purposes and percentage difference calculated for trend data. No assumptions were made for missing data. A risk of bias assessment of included studies was not undertaken due to their descriptive nature, and any elimination may have compromised the description of the current workforce profile.

4 | RESULTS

The 21 journal publications reported findings relative to 18 research studies focussing on P&C nurses within metropolitan, rural and remote Australia. The national workforce datasets were constructed from self-reported data at nurse registration and annual renewal, and the APNA website reported findings from membership surveys (APNA, 2017, 2020).

The majority 47.6% ($n = 10$) of publications described findings relative to the GP nurse, four publications respectively focussed on the community nurse (Aggar et al., 2018; Duiveman & Bonner, 2012; Happell et al., 2013; Terry et al., 2015) or P&C health workforce (Ashley, Brown, et al., 2018; Ashley, Halcomb, et al., 2018; Friesen & Comino, 2017; Oliver-Baxter et al., 2017), and the remainder the

remote area nurse (Lenthall et al., 2011; Zhao et al., 2017) or child and family health nurse (Borrow et al., 2011). Surveys were the preferred data collection method ($n = 9$), followed by interviews and/or focus groups ($n = 8$), secondary analyses of state and national datasets ($n = 4$) and a self-reported activity log (diary) ($n = 1$) (refer to Table 1).

4.1 | P&C workforce

As shown in Table 2, there was a 5.4% increase in the employment of P&C nurses from 2012 to 2015. (Midwives were included in 2015 data, but as they could not be extrapolated and the ratio of RNs to registered midwives was 9.2:1, the term 'nurses' has been used hereafter [AIHW, 2015].) The increase in the P&C workforce is led by a 17.3% increase in nurses working in GPs, 'locum' or 'other private practice' (not defined) and to a lesser extent (10.3%) in Aboriginal health services. A concurrent decline (4.7%) occurred in community nurses (AIHW, 2015). Heywood and Laurence (2018a, 2018b) reported a 64% increase in practice nurses over 8 years, and workforce surveys indicated that 69% of respondents worked in GP (APNA, 2020) despite practice nurse leaders describing recruitment and retention difficulties (McKenna et al., 2015). Further analyses were unable to be conducted as turnover data, vacancy rates, population and full-time equivalent nursing data were not available.

Data relative to the clinical speciality in which P&C nurses primarily worked are conflicting. Of employed nurses nationally ($n = 307{,}104$), fewer worked in community nursing (4.0%, $n = 12{,}380$) and a greater number worked in GP nursing (4.2%, $n = 12{,}821$) compared with stated employment area (AIHW, 2015) (refer to Table 2). Community nursing specialties included child and family health ($n = 5444$, 1.8%), Aboriginal health ($n = 1500$), 'health promotion' ($n = 1195$, 0.4%) (AIHW, 2015), rural and remote health ($n = 911$) (Heywood & Laurence, 2018b; Lenthall et al., 2011; Terry et al., 2015; Zhao et al., 2017), mining ($n = 51$), tourist facilities ($n = 19$) (Lenthall et al., 2011), research (Oliver-Baxter et al., 2017), corrective services, aged care and school health (APNA, 2020), although national data were not always available.

4.2 | Nurse demographics

Literature supports national data in that P&C nurses are overwhelmingly female (89.3%), RNs (87.3%) and with a mean age of 44.4 years who work part-time (mean 30.9 h/week) (AIHW, 2015). GP nurses are younger (mean 46.6 years) than community (mean 48.2 years) and child and family health nurses (mean 49.9 years) following the employment of graduate nurses in the practice environment (Aggar et al., 2017; Heywood & Laurence, 2018a; Thomas et al., 2018).

Data on NPs or ENs are limited. Data from 2012 indicated that 8.6% ($n = 4414$) of P&C nurses were enrolled; most worked in GP (4.6%, $n = 2399$), 3.2% ($n = 1630$) worked in community health and the remainder (0.7%, $n = 385$) worked in child and family health or health promotion (AIHW, 2013a). Similarly, 9% of APNA respondents were ENs and 2% were NPs (APNA, 2020).

4.3 | Qualifications and skills

The majority (55–80%) of P&C nurses were trained in the hospital system (Terry et al., 2015; Thomas et al., 2018) and had on average 17 years of nursing experience and 5 years of P&C experience (AIHW, 2015; APNA, 2020; Ashley, Brown, et al., 2018; Borrow et al., 2011; Thomas et al., 2018). Nurses educated to bachelor's degree level ranged from 20% to 70% (Aggar et al., 2018; APNA, 2020; Parker et al., 2011; Thomas et al., 2018), 2–43% were working towards or had attained postgraduate qualifications (Aggar et al., 2018; APNA, 2020; Friesen & Comino, 2017; Lenthall et al., 2011; Parker et al., 2011), and less than 15% were qualified to manage chronic diseases, including asthma, diabetes and mental health issues (APNA, 2020) (refer to Table 1).

4.4 | Nursing activities

Activities performed by P&C nurses as identified in the published literature were categorized into six recognized nursing workforce categories, namely: administration (general and administrative activities); direct care (activities directly related to patient care); indirect care (activities indirectly related to patient care); communication (communication with other health professionals, patients and/or carers); documentation (update or complete nursing or unit-related documentation by any medium); or other (activities not previously identified) (Blay et al., 2017; Blay & Roche, 2020).

As shown in Table 3, nursing activities ($n = 63$) were diverse. The majority of identified activities were direct care ($n = 39$), followed by administration ($n = 6$), communication ($n = 5$), indirect care ($n = 5$), other ($n = 5$) and documentation ($n = 3$). Wound care was the nursing activity most frequently identified (APNA, 2020; Ashley, Brown, et al., 2018; Halcomb & Ashley, 2019; McInnes et al., 2019; Terry et al., 2015; Thomas et al., 2018), followed by immunization (APNA, 2020; Halcomb & Ashley, 2019; McInnes et al., 2019; Thomas et al., 2018), mental health management (Borrow et al., 2011; Halcomb & Ashley, 2019; Happell et al., 2013; Thomas et al., 2018), home visits (APNA, 2020; Borrow et al., 2011; Duiveman & Bonner, 2012; Halcomb & Ashley, 2019) and health services communication (Borrow et al., 2011; Halcomb & Ashley, 2019; Happell et al., 2013; Terry et al., 2015). The majority of listed direct care activities are associated with the practice environment indicating the research focus on this population.

5 | DISCUSSION

This review endeavoured to profile the community nurse in Australia. It could be argued that due to the focus on the GP nurse, the

TABLE 1 Summary of included publications, datasets and reports

Citation	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Aggar et al. (2017)	To assess graduate nurse competency in a general practice transition to practice programme	Longitudinal exploratory mixed methods Survey at three monthly intervals and semistructured interviews	Graduate nurses in two metropolitan practices: Commencement ($n = 6$) Completion ($n = 4$) Programme preceptors ($n = 7$)		Skill development—practice dependent Competency assessment as per national standards Career opportunities limited
Aggar et al. (2018)	To compare competencies and experiences between graduates in a community, subacute and acute sector programme	Cohort study Survey at 6 and 12 months	Graduate nurses ($n = 12$) Community preceptors ($n = 18$)	Community graduates: Female gender 83% ($n = 10$) Mean age 33 years (SD 11.7) Previous nursing experience 33% ($n = 4$) Community preceptors: Female gender 100% ($n = 18$) Mean age 49 years (SD 8.6) Experience mean 24 years (SD 11.4)	Graduates: Bachelor's degree 75% ($n = 9$) Graduate certificate 17% ($n = 2$) Master's degree 8% ($n = 1$) Preceptors: Bachelor's degree 28% ($n = 5$) Graduate certificate/diploma 86% ($n = 12$)
Ashley, Brown, et al. (2018) and Ashley, Halcomb, et al. (2018)	To describe experiences of nurses who moved from the acute to primary or community sector	Sequential mixed methods Electronic survey Semistructured phone ($n = 12$) or face-to-face ($n = 1$) interviews	Nurse survey ($n = 111$): Metropolitan (61%, $n = 67$) Rural (24%, $n = 26$) Remote (15.5%, $n = 17$) General practice 65% Interviewees: General practice ($n = 6$) Schools ($n = 3$) Community health, remote area, sexual health and refugee nursing ($n = 1$, respectively)	Survey: Female gender 96% Registered nurse 80% Mean age 45.4 years (SD 10.45) Experience: mean 18.9 years Primary or community: mean 3.4 years	Orientation period 81% Supernumerary period 49.5% Access to preceptor/mentor 35% Education-related leave and financial support—practice dependent Role ambiguity Role autonomy—practice dependent
Borrow et al. (2011)	To describe the community-based child and family health nurse in Western Australia	Qualitative Content analysis from 2-week self-reported diary of work activities Focus groups ($n = 3$)	Nurse diarists ($n = 51$) Interviewees ($n = 24$) from metropolitan and regional centres	Mean age 48.2 years (SD 7.9) Majority (>50%) had extensive nursing experience and 5 years child and family health nursing experience Part-time 64.4%	Postgraduate child and family health (57%) Midwifery qualification <61%
Duiveman and Bonner (2012)	To explore community nurses' experiences of negotiating client's care contracts	Qualitative descriptive: thematic analysis Focus groups ($n = 2$)	Two community health centres in New South Wales	Registered nurses ($n = 14$) Female gender 86%	

(Continues)

TABLE 1 (Continued)

Citation	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Friesen and Comino (2017)	To explore facilitators and barriers to research engagement by primary and community health staff	Exploratory Research culture in context tool distributed by email or hard copy	Multidisciplinary primary and community health staff within a New South Wales health district	Survey ($n = 109$) Female gender 87% (all respondents) Nurses 66% ($n = 71$) Child and family health 64% ($n = 69$) Primary and community health nurses 25% ($n = 27$)	Graduate certificate (nursing) 17.6% ($n = 19$) Tertiary-level postgraduate qualifications 27% ($n = 29$) (all respondents)
Halcomb and Ashley (2019) and Halcomb and Bird (2020)	To explore general practice nurses' roles, satisfaction and turnover intent	Mixed methods Cross-sectional nationwide electronic survey ($n = 1166$)	General practice 81.4% ($n = 950$) Other primary and community health settings 18.5% ($n = 216$) Metropolitan 56%, ($n = 536$) Rural 38% ($n = 360$) Remote 5% ($n = 53$) Nursing experience >20 years 69% ($n = 657$) Primary and community health experience 6+ years 58% ($n = 553$)	Female gender 98% ($n = 771$) Registered nurse 98% ($n = 930$) Enrolled nurse 9% ($n = 89$) Nurse practitioner 2% ($n = 17$) Based on completed surveys ($n = 786$) Mean age 49.9 years (SD 10.1) Part-time 56.8% ($n = 441$)	Satisfied with professional development opportunities 55% Intent to remain in general practice nursing 77% Satisfied with role 82% General practice role focussed on direct care 74% ($n = 684$) Regularly practised to full skill and knowledge 29% ($n = 274$) Majority able to practice skills
Happell et al. (2013)	To identify activities performed by community mental health nurses	Descriptive Quantitative analysis of 39 nursing activities grouped into four categories (clinical care, clinical organisation, practice administration and [service] integration)	Nursing dataset ($n = 48,322$) from community and ambulatory units ($n = 252$) in metropolitan, regional and rural Queensland over a 12-month period		Nursing activities: Clinical care 58% Clinical organisation 33% Administration 5% Integration 3%
Heywood and Laurence (2018a, 2018b)	To describe, compare and estimate the future supply of the general practice nursing workforce	Descriptive Secondary analysis of self-reported national workforce data Simulation model	General practice nurses ($n = 12,746$) Metropolitan 62.5% ($n = 7966$) Regional 35% ($n = 4469$) Remote 1.5% ($n = 194$) locations (2015 data)	Female gender 97% Registered nurse 80% Age 45 years or older 60% Nursing experience: mean 18.6 years Part-time work 65%	Intent to resign within 10 years 48% ($n = 6093$)

(Continues)

TABLE 1 (Continued)

Citation	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Lenthall et al. (2011)	To describe the remote area nursing workforce	Descriptive Secondary analysis and comparison of population and remote area nursing data and surveys from 1995 to 2008	Identified remote area nurse, primary and community health positions ($n = 469$) Survey respondents: ($n = 349$, 34.6% response rate) from seven states/territories Workplace: clinics, community health, mining and tourist facilities	Female gender 89% Mean age 44 years (median 46) Mean hours 47.6 per week Employers: state/territory or Aboriginal communities	Bachelor's level 55% Postgraduate rural–remote nursing 5% Significant decline in midwifery and child health qualifications Clinics: Single nurse 15% 2–5 nurses 69% 6–13 nurses 16%
McInnes et al. (2019)	Explore nurse and mentor experiences of a graduate general practice programme	Longitudinal qualitative Thematic analysis of semistructured telephone interviews prior, during and on completion of programme	Nurse graduates: Commencement ($n = 8$) Completion ($n = 4$) Nurse mentors ($n = 9$)	12-month programme incorporating two general practices	Career opportunities limited Able to practice university-acquired skills Expectation that graduates possess specialist skills
McKenna et al. (2015)	Exploration of facilitators and barriers to advanced practice in general practice environments	Descriptive Modified Delphi: thematic analysis from multidisciplinary semistructured telephone ($n = 17$) or face-to-face interviews ($n = 5$)	General practice nurses ($n = 4$) Nursing academics ($n = 3$) Primary and community health decision makers[a] ($n = 5$) Stakeholders ($n = 11$) from across Australia[a]		Nurse education focusses on acute sector Time and financial constraints limit education No clear career pathway Recruitment and retention of skilled nurses problematic Salary less compared with acute sector Practice and culture Role can be isolating with little peer support Perception that role focusses on chronic disease and aged care Scope of practice limited by management and time constraints Role ambiguity
Oliver-Baxter et al. (2017)	To explore primary and community health higher degree research workforce	Descriptive Multidisciplinary cross-sectional: electronic survey of former higher degree research students	Survey respondents ($n = 37$) Nursing background 16% ($n = 6$) Workplace: University-based (74%) Metropolitan regions (58%)	Respondents in clinical practice ($n = 2$) Nursing respondents currently working in P&C research 67% ($n = 4$)	Research career pathway unclear 78% ($n = 29$)

(Continues)

TABLE 1 (Continued)

Citation	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Parker et al. (2011)	To explore the educational background of general practice nurses	Quantitative: electronic mail distributed survey in response to general practice network advertising	Survey respondents ($n = 58$, 74% response rate) Registered and enrolled nurses working in general practice environments	Female gender 96.5% Registered nurses 84% ($n = 49$) Mean age 46 years (range 22–60) Mean 4.6 years in P&C environment Mean hours 28.2 per week (range 8–66)	Education perceived an important mechanism to raise status Hospital-based training 55% ($n = 32$) Bachelor's degree 29% ($n = 17$) Postgraduate P&C qualifications 17% ($n = 10$) Preference for P&C short courses Staffing, time and financial constraints barriers to further education
Terry et al. (2015)	To explore any work, health and safety issues experienced by community nurses	Phenomenological Thematic analysis from semistructured telephone ($n = 10$) or face-to-face interviews ($n = 4$) with Tasmanian rural and remote community nurses	Registered nurses ($n = 15$) working in 13 state-funded community centres	Female gender 87% ($n = 13$) Age range 40–60 years Community nursing experience mean 8.8 years (range 1–31)	Community model ranged from single nurse to small teams working in clinics and/or homes Limited support mechanisms Work, health and safety issues: Fears for personal safety Manual handling Travel (roads, wildlife and weather) Home environment (cleanliness, passive smoking, uneven surfaces and pets)
Thomas et al. (2018)	To explore nurse and preceptor experiences of a graduate general practice programme	Qualitative: thematic analysis of semistructured interviews	Graduate nurses ($n = 4$, 67%) Preceptors ($n = 5$, 55.5%)	Graduates: Mean age 26 years (SD 8) Preceptors: Mean age 54 years (SD 13) Nursing experience mean 10 years (SD 7)	Limited financial support for education Acute sector perceived P&C experience to be of limited value P&C sector value acute experience Perception P&C environment more suitable for older nurses Good environment for skill development and unique skills, e.g., immunization Person-centred care, but autonomy is limited Career opportunities limited *Preceptors*: hospital-based training 80% Bachelor's degree 20% ($n = 1$)

(Continues)

TABLE 1 (Continued)

Citation	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Walters et al. (2012)	To explore the possibility of telemonitoring by general practice nurses to supporting chronic disease	Mixed methods Survey of nurse participants trained in health mentoring (intervention) for a randomized controlled trial	General practice nurses ($n = 5$) trained in health mentoring, Tasmania	Female gender 80% ($n = 4$) Age range 36–60 years Median hours 24 per week (IQR 6) Primary and community experience median 4 years (IQR 1)	Self-management support training ($n = 1$) Challenging work in a supportive environment Patient partnership important although carer involvement limited Performed health assessments 60% ($n = 3$) Confidence in capacity to devise a patient action plan 40% ($n = 2$)
Zhao et al. (2017)	To explore remote area practitioner workforce changes, turnover and costs between 2004 and 2015[b]	Retrospective cross-sectional Secondary analysis of government payroll, personnel and financial activity	Remote area nurses, midwives, Aboriginal health practitioners and administrative staff from 54 remote area clinics in the Northern Territory	Remote area nurses increased from 120 to 135 (headcount) over 12 years Female gender 77% Non-Aboriginal 14% Significant increase in nurses aged >50 years Agency employees 15–20%	

Databases and websites	Aim	Design and method	Sample, region and workplace	Demographics	Qualifications, skills and roles
Australian Institute of Health and Welfare (AIHW, 2013a, 2013b, 2015)	To profile the nursing and midwifery workforce	Microsoft Excel data tables: self-reported survey data collated at nurse registration and renewal	2015: registered, enrolled nurses and midwives in Australia ($n = 360{,}008$) Practice nursing ($n = 18{,}290$) Community nursing ($n = 22{,}310$)	Major work setting: Community health service ($n = 22{,}310$) General practice ($n = 11{,}040$) Locum or other privatepractice ($n = 7250$) Aboriginal health service ($n = 1500$)	
Australian Primary Health Care Nurses Association (APNA, 2017, 2020)	Annual membership survey	Brief reports	Survey respondents 2019 ($n = 1678$)	General practice 69% Aboriginal health[a] Aged care[a] School health[a] Corrective services[a]	Bachelor's degree 70% Working towards or holding a postgraduate qualification 43% Immunization accredited 48% <15% qualified to manage chronic diseases, including asthma, diabetes and mental health issues

[a]No further details provided.
[b]Longitudinal study: latest data reported.

TABLE 2 Primary and community nursing workforce 2012 and 2015

Employment area of main job	2012[a]	2015[b]	% difference
Community	23,362	22,310	−4.7
Community aged care	5215		
Community mental health	4833		
Other community health service	13,314		
Practice	15,117	18,290	17.3
General practice	9165	11,040	17.0
Locum or other private practice	5952	7250	17.9
Aboriginal health service	1345	1500	10.3
Total community, practice and Aboriginal health	39,824	42,100	5.4
Employment specialty	**2012[a]**	**2015[b]**	**% difference**
Community	23,362	12,380	−88.7
General practice	9165	12,821	28.5
Child and family health		5444	
Health promotion		1195	
Total	32,527	31,840	−2.2

Note: At the time of searching, data from 2010–2011 and 2016–2020 were not available.
[a]Registered nurses only.
[b]Nurses and midwives.
Source: Adapted from AIHW (2015).

community nurse role remains largely undefined. The lack of research into the community nurse is surprising considering the importance placed by state/territory governments on targeting services to population needs and the incremental rise in Hospital in the Home programmes.

Findings highlight the need for consistent terminology and definitional specificity at a global and national level, to ensure accuracy with data reporting and for comprehensive nursing workforce planning (Drennan, 2019; Weller-Newton et al., 2020). In this instance, national data relied heavily on self-reported data (AIHW, 2018) whereas other data crucial for workforce planning such as full-time equivalents and turnover rates were not available affecting result reporting. Despite these statistical artefacts, the study has highlighted that the community nursing sector is facing a severe nursing workforce crisis relative to increased demand from an aging population, chronic disease and shorter hospitalizations. The trends identified an increase in the number of nurses in GP with a parallel decline in nursing staff working in the community. Although the rise in practice nurses is encouraging, it could be argued that with emphasis on recovery at home (Montalto et al., 2020), the need for community nurses is paramount, and patient care will be compromised if the negative trend continues (Parliament of Australia, 2002). The low numbers, older age and (part-time) employment patterns of P&C nurses, particularly in child and family health, are alarming. To attain full-time equivalence, a higher headcount (of part-time employees) is needed, and considering that almost 50% of P&C nurses are intending to resign (Heywood & Laurence, 2018a, 2018b) or likely retire within the next decade, workforce shortages are set to escalate. Moreover, if it is considered that Australia in 2017 had over 309,000 births (ABS, 2019) and that approximately 6% of the population are aged under 5 (ABS, 2021b), it is probable that many infants and children are not being assessed by a child and family health nurse. The future health and developmental checks of babies and children are at risk.

Variances were found between studies and nurses' qualifications. Specifically, the APNA survey indicated that the majority of nurses were tertiary educated, whereas other studies showed that less than one third of P&C nurses had tertiary-level qualifications (Friesen & Comino, 2017; Parker et al., 2011; Thomas et al., 2018). Further research is needed, but it is possible that nurses with professional memberships are more keen to further their education or vice versa.

An astounding finding considering the rising incidence of chronic disease, and because mental health support was the third most frequently listed direct care activity, is that few nurses were accredited to manage these common reasons for GP visits (Finley et al., 2018; Kimble et al., 2020). Some have argued that postgraduate courses are limited (McKenna et al., 2015; Parliament of Australia, 2002) and that minimal attention is paid to P&C health in the undergraduate curriculum (Keleher et al., 2010; Murray-Parahi et al., 2020). However, it is almost 30 years since nursing education transitioned to the tertiary sector, and although P&C nurses acknowledged the importance of education for professional status, they also have a preference for short courses (Parker et al., 2011). This no doubt has limited capacity for P&C curriculum reform.

To ensure a sustainable workforce in line with population needs and changing models of care from hospital to the home, newly graduated and mid-level clinicians must be recruited. Little clarity is provided around the P&C role, scope of practice or a career pathway—factors that are known to influence nurse recruitment

TABLE 3 Identified nurse activities and reported frequency (*n*)

Citation(s)	Categories (*n*)	Activities (*n*)
APNA (2020) Borrow et al. (2011) Halcomb and Ashley (2019) Happell et al. (2013)	Administration (1)	Arranging transport (1) Data processing and computer work (1) Organizing health promotion (1) Photocopying, faxing and scanning (1) Reception duties (1) Scheduling appointments, visits, recalls and reminders (3)
Borrow et al. (2011) Halcomb and Ashley (2019) Happell et al. (2013) Terry et al. (2015)	Communication	Case conferencing (1) Health professional (3) Health services and facilities (4) Telephone calls (1) Telehealth consultations (1)
APNA (2020) Ashley, Brown, et al. (2018) Borrow et al. (2011) Duiveman and Bonner (2012) Halcomb and Ashley (2019) Happell et al. (2013) McInnes et al. (2019) Thomas et al. (2018) Terry et al. (2015)	Direct care	Assisting with activities of daily living (1) Assisting with surgical procedures (2) Arthritis management (1) Basic nursing care (1) Case or care management (1) Child and family support (2) Complex and chronic disease management (1) Ear syringing (2) End-of-life care (1) Health assessment (2) • Aged-related (1) • Antenatal and postnatal (2) • Child health (3) • Cardiac or respiratory (1) • Diabetes (1) • Domestic violence (1) • Mental health and cognition (1) • Men's health (1) • Smoking, nutrition, alcohol, physical activity and other risk factors (1)Home visits (4) Immunization (5) Medication prompts and administration including insulin and intravenous medications (3) Mental health management or support (4) Patient education, health promotion and disease prevention (1) • Mothercraft or breastfeeding (1) • Child health and immunization (2) • Chronic disease (1) • Community nurse role (1) • Drug, alcohol and smoking (2) • Goals for self-care or service provision (1) • Mental health (1) • Wound management (1)Plaster application and removal (1) Suturing (1) Triage (2) Venepuncture and cannulation (2) Vital signs, blood sugar levels, ECG, peak flow and spirometry (2) Wart treatment (1) Wound care (6)

(Continues)

TABLE 3 (Continued)

Citation(s)	Categories (*n*)	Activities (*n*)
Ashley, Brown, et al. (2018) Borrow et al. (2011) Halcomb and Ashley (2019) Happell et al. (2013) Terry et al. (2015)	Documentation (1)	Care plans, reports and patient records (4) Policy review (1) Service/practitioner referrals (1)
APNA (2020) Ashley, Brown, et al. (2018) Borrow et al. (2011) Duiveman and Bonner (2012) Halcomb and Ashley (2019) Terry et al. (2015)	Indirect care	Cold chain management (immunization transport and storage) (2) Establishing/directing play groups (1) Home assessment (2) Infection control and sterilizing (2) Review blood test results (1)
Borrow et al. (2011) Friesen and Comino (2017) Halcomb and Ashley (2019) Happell et al. (2013) Halcomb and Ashley (2019) Thomas et al. (2018) Terry et al. (2015)	Other	Management, leadership and mentoring (2) Ordering, restocking and cleaning (3) Research, audits and accreditation (2) Travel (1) Women's health (1)[a]

[a]No further details provided.

(Blay & Smith, 2020; Godsey et al., 2020). The APNA (2017) emphasizes, in line with global recommendations (WHO, 2017), that the P&C role is to promote health and prevent illness, yet with the exception of nurses in rural and remote locations (Roden et al., 2015), these activities are seldom realized (Ball et al., 2014; Sworn & Booth, 2020). Indeed, many of the nursing activities identified in this review are fundamental, could be performed by others and are associated with the practice environment. With a need for skilled nurses comparative with demand (WHO, 2017, 2020) nurse leaders and professional bodies can help address workforce shortages and perceived career limitations by encouraging education, upskilling and the NP role. An area for concern is the potential for vacant community nurse positions to be filled by an unregulated workforce, with negative consequences for skilled nurses' workload and patient safety. Employing more ENs would enable RNs to focus on preventative health care and help bridge the gap between fundamental care and expectations around scope of practice (Murray-Parahi et al., 2017).

Although Australia's community workforce figures are deeply concerning, they are not unique. International research has demonstrated that the majority of nurses in high-income countries work within the hospital sector (Drennan & Ross, 2019) and that globally, P&C nurses are in short supply (Buerhaus et al., 2015; WHO, 2020). Until such time that nursing research comprehensively explores and quantifies the activities undertaken by the P&C nurse, the existing confusion around role expectations (Ashley, Brown, et al., 2018; Ashley, Halcomb, et al., 2018) will continue, and current nursing workforce shortages will only worsen.

5.1 | Limitations

As a rapid review, only two databases were searched, data were cross-sectional and reported data were often generic restricting comparisons. Caution should be taken when interpreting results, as changes in classification categories used in the different sources can impact workforce data. This review has identified that data on the P&C workforce are scant. Despite these limitations and resultant knowledge gaps, the review has provided a basis for our understanding of the P&C workforce and has highlighted a looming crisis in the community nursing sector.

6 | CONCLUSION

This review has highlighted a workforce crisis in the state and territory community nursing sector. Importantly, it has determined that definitional ambiguity has impacted self-reported data and national workforce statistics. The need for rigorous research exploring the community nurse role is of paramount importance for workforce sustainability and to ensure the health and safety of the Australian population from birth through to older age.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

With changing population demographics, and models of care shifting from hospital to the home, nurse managers need to refocus nurse recruitment to the community sector. Profiling and developing the community nurse role to reduce negative role perceptions and expand scope of practice is a step towards the promotion of a sustainable community workforce, consistent with WHO recommendations.

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ETHICS STATEMENT

As a rapid systematic review, ethical approval was not required.

CONFLICT OF INTERESTS

No conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available at https://researchdirect.westernsydney.edu.au/. These data were derived from the following resources available in the public domain: AIHW (2013a, 2013b, 2015, 2017, 2018) and APNA (2017, 2020).

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ORIGINAL ARTICLE

WILEY

The prevalence of stress-related outcomes and occupational well-being among emergency nurses in the Netherlands and the role of job factors: A regression tree analysis

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Abstract

Aims: This study aims to assess the prevalence of stress-related outcomes (burnout, sleep problems and post-traumatic stress) and occupational well-being (work engagement, job satisfaction and turnover intention) of Dutch emergency room nurses and to identify job factors related to key outcomes.

Background: While emergency nurses are prone to stress-related outcomes, no large-scale studies have been conducted in the Netherlands. Furthermore, few studies considered combined effects of job factors on emergency nurses' well-being.

Methods: In 2017, an occupation-specific survey was filled out by 701 (response: 74%) emergency nurses from 19 Dutch hospitals. Decision tree methods were used to identify the most important (combination of) job factors related to key outcomes.

Results: High prevalence of stress-related outcomes and turnover intention were found, while the majority experienced work engagement and were satisfied with their job. Emotional exhaustion was mainly associated with worktime demands and aggression/conflict situations. Work engagement was mainly associated with developmental opportunities.

Conclusions: Dutch emergency room nurses are at risk of stress-related outcomes and have high turnover intention, while feeling engaged and satisfied with their job.

Implications for Nursing Management: To retain and attract emergency room nurses, it is recommended to focus efforts on increasing developmental opportunities, while reducing worktime demands and aggression incidents.

KEYWORDS
burnout, psychological, nurses, occupational stress, personnel turnover, work engagement

1 | INTRODUCTION

Emergency room (ER) nurses are exposed to a number of occupational risks including high worktime demands and potentially traumatic events such as violence and aggression, suffering in patients, severe injuries and even death (Adriaenssens et al., 2011, 2012; Richardson et al., 2018). As a result, stress-related symptoms such as burnout, post-traumatic stress and sleep problems are common in this occupational group (Adriaenssens et al., 2012; Gomez-Urquiza et al., 2017; Li et al., 2018), which can have serious consequences for patients' well-being and safety (Hall et al., 2016). In addition, high stress levels in nurses are related to both more absenteeism and presenteeism (Brborovic et al., 2017), reduced job satisfaction and higher turnover intention (Bruyneel et al., 2017; Roberts & Grubb, 2014). The latter is of particular concern as health care demands are predicted to increase in the future due to an aging population, resulting in an estimated worldwide shortage of 5.9 million nurses by 2035 (World Health Organization, 2020). Focusing on the situation in the Netherlands, ER visits of patients 65 and older are rising, while the amount of vacancies that are difficult to fill have increased from 4.3% of the total full-time equivalent (FTE) for ER nurses in 2016 to 9.1% in 2018 (Capaciteitsorgaan, 2018).

Overall, it is essential to understand how the working environment of ER nurses can be improved to reduce stress-related outcomes and increase well-being, and as such attract as well as retain qualified nurses. While large-scale studies on the well-being of ER nurses were performed in Belgium (Adriaenssens et al., 2011; Bruyneel et al., 2017), Canada (Sawatzky & Enns, 2012) and the United States (Hunsaker et al., 2015), no such screening has been conducted in the Netherlands. To fill this gap, the present study focuses on the prevalence of stress-related outcomes and occupational well-being of Dutch ER nurses and aims to identify job factors related to these outcomes.

1.1 | Background

According to the Job Demands-Resources model (JD-R model), job factors influence employee well-being through two processes (Bakker & Demerouti, 2017). The health-impairment process suggests that enduring exposure to high job demands (e.g., worktime demands) can exhaust physical and mental resources and lead to stress-related outcomes, such as burnout. On the other hand, the motivational process postulates that job resources (e.g., autonomy and social support) can have a motivational role and lead to increased occupational well-being (e.g., work engagement, job satisfaction and less turnover intention). In addition, adequate job resources can buffer the health-impairment process (Bakker & Demerouti, 2017).

Previous research has identified a number of job factors related to stress-related outcomes in ER nurses. Identified job demands include high worktime demands (Adriaenssens et al., 2011, 2015a, 2015b; Bruyneel et al., 2017; O'Mahony, 2011; Sorour & El-Maksoud, 2012), emotional demands (Adriaenssens et al., 2015b) and exposure to morally distressing (Fernandez-Parsons et al., 2013) or even traumatic events (Adriaenssens et al., 2012). In addition, identified job resources protecting ER nurses from stress-related outcomes include adequate staffing levels (Adriaenssens et al., 2015b; Bruyneel et al., 2017; Sawatzky & Enns, 2012) and social factors such as social support from the supervisor and/or colleagues (Adriaenssens et al., 2015a, 2015b; Bruyneel et al., 2017; Hunsaker et al., 2015), good collaboration between nurses and physicians (Adriaenssens et al., 2015b; Bruyneel et al., 2017; O'Mahony, 2011) and teamwork (Adriaenssens et al., 2015b; O'Mahony, 2011).

Far less research has been done on the motivational process of the JD-R model (i.e., predicting occupational well-being) in ER nurses. A quick literature search revealed four studies that (in line with the JD-R model) found a prominent role for job resources such as job control (Adriaenssens et al., 2011, 2015a; Bruyneel et al., 2017), social support from the supervisor and/or colleagues (Adriaenssens et al., 2011, 2015a; Bruyneel et al., 2017; Sawatzky & Enns, 2012), good collaboration with physicians (Sawatzky & Enns, 2012), adequate (financial) rewards (Adriaenssens et al., 2011, 2015a), adequate staffing levels (Sawatzky & Enns, 2012) and developmental opportunities (Sawatzky & Enns, 2012).

Still, many of the aforementioned studies examined only a limited range of job demands and resources. As a result, important predictors of outcomes related to well-being in ER nurses might have gone unnoticed. Furthermore, most studies performed in the ER explore the main effects of job demands and resources on outcomes, providing little insight in their additive or interactive effects (Schneider & Weigl, 2018). Yet, there is growing recognition that stressors occur and act in combination, especially in poorly designed working environments (Jimmieson et al., 2017).

1.2 | Current study

The aim of the study is twofold: First, we will assess the situation regarding stress-related outcomes (burnout, sleep problems and post-traumatic stress) and occupational well-being (work engagement, job satisfaction and turnover intention) of ER nurses in the Netherlands. Second, we aim to identify (specific combinations of) demands and resources that best predict (i.e., are most strongly associated with) reduced as well as enhanced employee well-being using regression tree analyses. Emotional exhaustion, the key dimension of burnout, was chosen as an indicator of reduced well-being as this variable typically correlates with other mental and physical stress-related symptoms (Maslach & Leiter, 2016). Work engagement, defined as a positive work-related state of mind characterized by vigour, dedication and absorption (Schaufeli & Bakker, 2003), was chosen as an indicator of enhanced well-being. Regression tree analyses can deal with a large number of predictors, as well as possible non-linearities and interactions, while also allowing for direct identification of subgroups with markedly higher or lower values of the outcome (Strobl et al., 2009). Identifying the main predictors for ER nurses' well-being will provide clear targets for improving the working environment, reducing the burden on current staff and attracting qualified nurses.

2 | METHODS

2.1 | Study design

The current study has a cross-sectional design.

2.2 | Procedure

All ERs in the Netherlands were invited to participate in the study. The human resources department of each participating hospital provided work e-mail addresses and demographic variables (age, gender, occupational role [registered nurse or in training], having a supervisory role [yes/no] and number of years of working experience in the ER) of currently enlisted ER nurses. A project manager (often the ER manager) was appointed to function as a point of contact for the researchers and to increase response rates on the questionnaires. In January/February 2017, all nurses received an e-mail including information on the study, an informed consent and a link to the online survey (about 30 minutes completion time). The survey remained open for 5–6 weeks, and regular reminders were automatically sent to employees who had not yet responded. The collected data were anonymized and stored under a personal code. Participation in the study was voluntary. The current study was approved by the ethical review board of Leiden University (approved on the 2nd of January 2017, CEP17-0102/3).

2.3 | Sample characteristics

Overall, ERs from 19 Dutch hospitals (representing 27% of all ERs and 34% of all ER nurses in the Netherlands) took part in the study, including 4 academic hospitals (representing 50% of all academic hospitals in the Netherlands) and 4 trauma centres (representing 36% of all trauma centres in the Netherlands). From the 949 ER nurses enlisted, 701 (74%) filled out the survey and were included in the current study. Most nurses were female (76%) with an average age of 42.4 ($SD = 11.4$), and 12.0 ($SD = 10.4$) years of working experience. On average, they worked 29.1 hours a week ($SD = 7.3$) in the ER. The majority of the sample were registered nurses (90.6%), the others were nurses in training (9.4%) and 4.4% had a supervisory role. Most nurses were married or living together with a partner (76.5%). About a quarter had young (≤6 years) children (23.3%), and about half (48.2%) had children between 6 and 12 years of age living at home. About one in five (22.6%) performed informal caregiving tasks, such as taking care of an elderly or disabled family member. Compared with non-respondents, respondents worked significantly more hours a week ($M = 29.1$, $SD = 7.3$, vs. $M = 27.2$, $SD = 10.1$, $p < .01$); no other differences on sociodemographic variables were found.

2.4 | Measurements

An overview of all measures is presented in Table 1.

2.4.1 | Stress-related outcomes

Two key symptoms of burnout, *emotional exhaustion* and *depersonalization*, were measured with the Dutch version of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which has excellent internal consistency and test–retest reliability (Schaufeli & Bakker, 2003). *Sleep problems* were based on the Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV) criteria for sleep disorders (American Psychiatric Association, 2000). High reliability for this tool has been found (Adriaenssens et al., 2012). *Post-traumatic stress symptoms* were measured with the Dutch version of the Impact of Events Scale, which has found to be a reliable and valid instrument (van der Ploeg et al., 2004).

2.4.2 | Occupational well-being

Work engagement was measured using the Dutch version of the nine-item Utrecht Work Engagement Scale, which has excellent internal consistency and test–retest reliability (Schaufeli & Bakker, 2003). *Job satisfaction* and *turnover intention* were measured with the Leiden Quality of Work Questionnaire for Nurses (LQWQ-n) (Gelsema et al., 2005; Maes et al., 1999), an occupation-specific screening instrument including two factors related to occupational well-being. Satisfactory to good reliability for the subscales has been found (Gelsema et al., 2005).

2.4.3 | Job factors

The LQWQ-n (Gelsema et al., 2005; Maes et al., 1999) was also used to measure job demands and resources (see Table 1). In addition to the LQWQ-n, we assessed the *frequency of verbal and physical aggression* and the *frequency of emotionally demanding situations* based on an inventory of stressful situations previously used in a study on staff working in organisations providing care for mentally and physically disabled individuals (Bolhuis et al., 2004). Furthermore, *within work-time recovery* was assessed using a self-developed questionnaire including four statements: 'If I want to, I can leave my workplace for a short while', 'I can have a chat during my work', 'During my shift, I regularly have to skip breaks' (reversed) and 'During my breaks, I must remain available for urgent cases' (reversed).

2.5 | Statistical analyses

Differences between respondents and non-respondents were assessed by *t*-tests and χ^2 tests. Prevalence of stress-related outcomes and work engagement were based on cut-offs indicated in the manuals of the questionnaires: For the prevalence of sleep problems, a score of 4 or higher on at least two statements was used (Adriaenssens et al., 2012). For turnover intention and job satisfaction measured with the LQWQ-n, a percentage of the sample that

TABLE 1 Description of measures used in the current study

Dimensions	Questionnaire	Number of items	Scale	Cronbach's alpha	Example item
Job demands					
Freq. of emotional demands	Inventory of stressful situations	4	*Never* (1) to *daily* (7)	.78	In my work I am confronted with patients in a hopeless situation.
Freq. of aggression/ conflict situations	Inventory of stressful situations	7	*Never* (1) to *daily* (7)	.86	In my work I am confronted with patients and/or accompanies who are physically aggressive.
Work time demands	LQWQ-n	5	*Totally disagree* (1) to *totally agree* (4)	.72	During my shift, I am responsible for the care of too many patients.
Social harassment	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.88	In my department, some employees are belittled and/or ridiculed.
Role ambiguity	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.70	As an emergency room nurse, I know exactly what others expect from me at work (reversed).
Job resources					
Autonomy	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.62	I can decide for myself when to carry out patient-related tasks and when to carry out non-patient-related tasks.
Social support from the supervisor	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.90	I feel appreciated by my supervisor.
Social support from colleagues	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.84	My colleagues give me emotional support when I'm having difficulties.
Collaboration with physicians	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.55	In my department, nurses and doctors work well together.
Work procedures	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.75	In my department, procedures and rules are often unclear (reversed).
Internal communication	LQWQ-n	5	*Totally disagree* (1) to *totally agree* (4)	.65	In this organisation, one must ask a question repeatedly before getting an answer.
Staffing levels	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.73	In my department, there are enough nurses to provide good patient care.
Materials/equipment	LQWQ-n	3	*Totally disagree* (1) to *totally agree* (4)	.72	Materials, equipment and/or instruments are not always available when necessary (reversed).
(Financial) rewards	LQWQ-n	6	*Totally disagree* (1) to *totally agree* (4)	.71	Nurses working in the emergency room are not sufficiently valued within this hospital (reversed).
Developmental opportunities	LQWQ-n	4	*Totally disagree* (1) to *totally agree* (4)	.84	In my work I have the opportunity to further develop my capacities.
Within worktime recovery	Self-developed	4	*Totally disagree* (1) to *totally agree* (4)	.59	During my shift, I regularly have to skip breaks (reversed).
Stress-related outcomes					
Emotional exhaustion	MBI-HSS	8	*Never* (0) to *daily* (6)	.89	I feel tired when I get up in the morning and have to face another day on the job.
Depersonalization	MBI-HSS	5	*Never* (0) to *daily* (6)	.73	I feel that I treat some patients too impersonally.
Sleep problems	Based on DSM IV	3	*Not at all* (0) to *very much* (4)	.71	Items related to the initiation, duration and maintenance of sleep (e.g., 'I have a restless or disturbed sleep').

(Continues)

TABLE 1 (Continued)

Dimensions	Questionnaire	Number of items	Scale	Cronbach's alpha	Example item
Post-traumatic stress	IES-15	15	*Not at all* (0), *rarely* (1), *sometimes* (3), *often* (5)	.92	Items measuring avoidance (avoidance of feelings and thoughts about the impactful event) and intrusion (intrusive thoughts, intrusive feelings, nightmares).
Occupational well-being					
Work engagement	UWES-9	9	*Never* (0) to *daily* (6)	.90	Items measuring absorption (e.g., 'I am completely absorbed in my work'), vitality (e.g., 'At work I am bursting with energy') and dedication (e.g., 'My work inspires me').
Job satisfaction	LQWQ-n	3	*Totally disagree* (1) to *totally agree* (4)	.78	I am satisfied with my job.
Turnover intention	LQWQ-n	3	*Totally disagree* (1) to *totally agree* (4)	.81	I plan to look for a job outside this hospital within the next 3 years.

Abbreviations: DSM IV, Diagnostic and Statistical Manual of Mental Disorders IV; IES, Impact of Events Scale; LQWQ-n, Leiden Quality of Work Questionnaire for Nurses; MBI-HSS, Maslach Burnout Inventory-Human Services Survey; UWES, Utrecht Work Engagement Scale.

answered (totally) agree on a representative item (see Table 1) was calculated.

Generalized linear mixed-model (GLMM) trees, a multilevel decision tree method (Fokkema et al., 2018, 2021), was applied to identify predictors of (i.e., variables associated with) work engagement and exhaustion. In order to account for hospital-level effects, a random intercept term with respect to hospital was estimated. We used the intraclass correlation to assess the extent of hospital-level effects (Bernaldo-De-Quiros et al., 2015). Both trees were controlled for the variables age, number of hours working a week and job title (registered vs. in training) (engagement: bivariate $r = -.11$, $r = .08$, $r = .09$; emotional exhaustion: $r = .08$, $r = -.01$, $r = -.04$). To obtain effect sizes of subgroup differences on work engagement and emotional exhaustion, we also computed standardized subgroup means, based on *z*-scores of the response variables. Due to missing values, the analyses include 695–701 cases.

3 | RESULTS

3.1 | Prevalence of stress-related outcomes and occupational well-being

Table 2 gives an overview of (sub)clinical levels of stress-related outcomes and the levels of occupational well-being. More than one third of the sample (39.6%) scores above the (sub)clinical level for emotional exhaustion and almost half (48%) above the (sub)clinical level for depersonalization. Furthermore, one out of seven ER nurses (14.4%) report sleep problems on a clinical level and almost one out of six nurses (15.7%) report post-traumatic stress symptoms on a (sub)clinical level. Overall, ER nurses score significantly higher on stress-related outcomes (emotional exhaustion, depersonalization, and symptoms of post-traumatic stress) than the normative sample (working population in general). Regarding occupational well-being, ER nurses report significantly higher levels of work engagement than the normative sample, with more than half of the ER nurses (61.4%) being (very) highly engaged. Furthermore, the majority of the ER nurses (84.9%) (totally) agree with the statement 'I am satisfied with my job', while about one third (32.7%) (totally) agree with the item 'I plan to look for a job outside the hospital within the next three years'. Finally, work engagement and emotional exhaustion have a bivariate correlation of −.40.

3.2 | Predictors for emotional exhaustion and work engagement

Figure 1 shows the GLMM tree model for emotional exhaustion. Note that variables that do not appear in the tree show weaker associations with the outcome than the variables that are selected at every split and are therefore not selected for splitting. The primary variable that distinguishes higher and lower levels of emotional exhaustion is worktime demands, which appears in inner nodes (splits) 1 and 2. A second important variable concerns the frequency of aggression/conflict situations, which appears in the nodes 5, 8 and 13. The GLMM tree algorithm recursively separated the observations into eight subgroups with different levels of emotional exhaustion. Three subgroups stand out due to high deviations from the mean: Subgroups 6 ($N = 163$; mean $z = -0.87$) and 9 ($N = 36$; mean $z = -0.87$) show low levels of emotional exhaustion and are both characterized by lower levels of worktime demands and aggression/conflict situations. Subgroup 6 in addition reports higher staffing levels. Subgroup 15 ($N = 32$; mean $z = 1.08$) shows high levels of emotional exhaustion and is characterized by high reported levels of worktime demands and aggression/conflict situations.

TABLE 2 Levels of stress-related outcomes and occupational well-being in emergency room nurses ($N = 695$) compared with a normative sample (working population in general)

Stress-related outcomes	Mean	SD	Min	Max	*p*-value	Cut-off	Subclinical level *N* (%)	Cut-off	Clinical level *N* (%)
Emotional exhaustion (MBI-HSS)									
ER nurses	2.06	1.22	0.00	5.38	$p < .001$	2.38–3.62	178 (25.6%)	≥3.63	97 (14%)
Normative sample	1.78	0.99	-	-					
Depersonalization (MBI-HSS)									
ER nurses	1.69	1.15	0.00	5.60	-	-	178 (25.6%)	-	156 (22.4%)
	F: 1.64	1.13	-	-	$p < .001$	F: 1.60–2.59			
	M: 1.86	1.20	-	-	$p < .001$	M: 1.80–2.79			
Normative sample	F: 1.12	0.77	-	-					
	M: 1.27	0.85	-	-					
Sleep problems									
ER nurses	2.19	0.92	1.00	5.00	-	-	-	≥2 × score ≥ 4	100 (14.4%)
Post-traumatic stress (IES)									
ER nurses	9.16	11.45	0.00	61.00	$p = .015$	20–25	39 (5.6%)	≥26	70 (10.1%)
Normative sample	8.10	12.30	-	-					

Occupational well-being						Cut-off	High *N* (%)	Cut-off	Very high *N* (%)
Work engagement (UWES)									
ER nurses	4.65	1.00	0.78	6.00	$p < .001$	4.67–5.50	278 (40%)	≥5.51	149 (21.4%)
Normative sample	3.74	1.17	-	-					
Job satisfaction (LQWQ-n)	2.91	0.50	1.00	4.00			84.9%[a]		
Turnover intention (LQWQ-n)	2.19	0.62	1.00	4.00			32.7%[b]		

Note: Cut-offs for MBI-HSS (Schaufeli & Van Dierendonck, 2000), sleep problems (Adriaenssens et al., 2012), IES (Briere & Elliott, 1998) and UWES (Schaufeli & Bakker, 2003).

Abbreviations: ER, emergency room; F, female; IES, Impact of Events Scale; LQWQ-n, Leiden Quality of Work Life Questionnaire for Nurses; M, male; MBI-HSS, Maslach Burnout Inventory-Human Services Survey; UWES, Utrecht Work Engagement Scale.

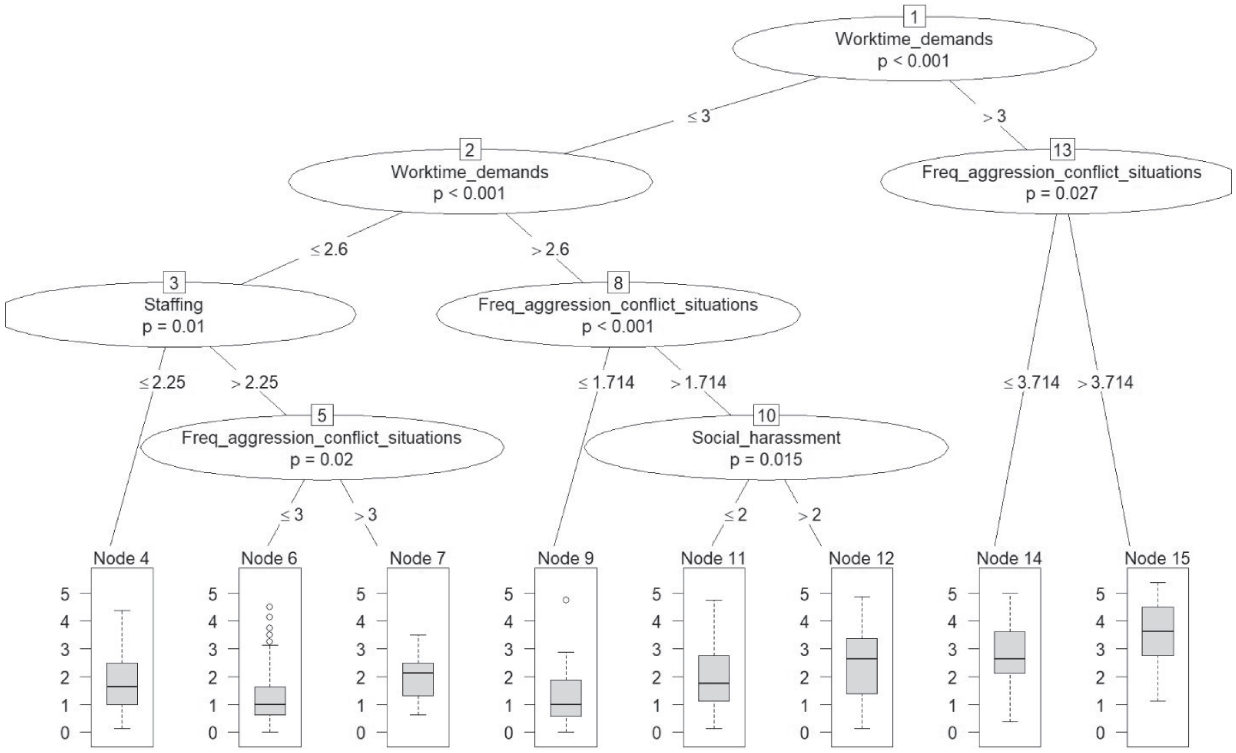
[a]Percentage (totally) agree with the item 'I am satisfied with my job'.

[b]Percentage (totally) agree with the item 'I plan to look for a job outside this hospital within the next 3 years'.

The intracluster correlation is .04, indicating 4% of variance is accounted for by hospital-level differences. The total R^2 for the GLMM tree model is .32, indicating that (32% − 4% =) 28% of variance is accounted for by the splitting variables occurring in the tree. Because computing R^2 on the data used for fitting the model gives inflated estimates of accuracy (de Rooij & Weeda, 2020), we also computed R^2 based on 10-fold cross-validation, yielding an R^2 of .20.

Figure 2 shows the GLMM tree model for work engagement. Developmental opportunities is the primary variable distinguishing lower and higher levels of work engagement, which appears in inner nodes 1, 2 and 9. Subgroups 3 ($N = 18$, mean $z = -1.90$) and 4 ($N = 126$, mean $z = -0.64$) show the strongest deviation from the overall mean reflecting lower levels of work engagement, associated with lower levels of developmental opportunities. Subgroups 6, 8 and 10 show only small deviations from the mean (mean z ranging from −0.19 to 0.17), suggesting that variables such as staffing and social support from the supervisor significantly contributed to small changes in work engagement, but to a (much) lesser extent than developmental opportunities. Finally, Group 11 ($N = 119$; mean $z = 0.48$) shows considerable deviation from the mean, a profile with high work engagement and characterized by high scores on all aforementioned job resources (social support supervisor, staffing and developmental opportunities).

The intracluster correlation is .04, indicating only minor residual hospital-level differences. The R^2 for the GLMM tree model is .28, again indicating that the majority of variance is accounted for by the splitting variables occurring in the tree. The R^2 based on 10-fold cross-validation is .17.



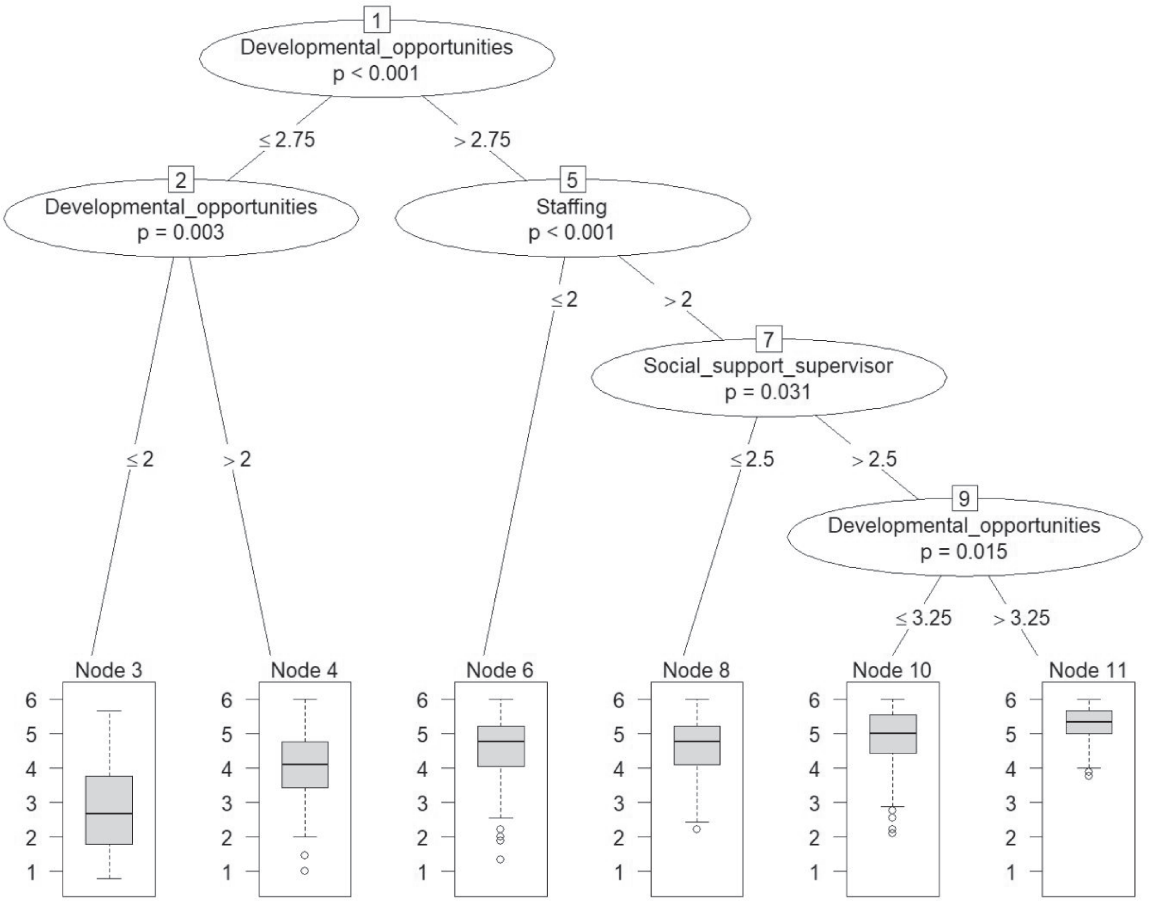
Node	4	6	7	9	11	12	14	15
N	57	163	23	36	135	109	145	32
M	1.58	1.01	1.80	1.00	1.76	2.27	2.56	3.38
M_z	-0.40	-0.87	-0.22	-0.87	-0.25	0.17	0.40	1.08

FIGURE 1 Tree for predicting emotional exhaustion. Each inner node depicts the variable used for splitting, with splitting values depicted below the nodes. The *p*-values quantify the strength of the association between the predictor variable and the outcome, with lower values indicating a stronger association. The terminal nodes provide boxplots, representing the distribution of emotional exhaustion values in each of the subgroups (terminal nodes). Below each terminal node, the table provides the corresponding group size (N); estimated group means on emotional exhaustion, corrected for covariates and hospital (M); and the same group means, standardized as a *z*-score (M_z). Predictors *not* selected by the model: emotional demands, role ambiguity, autonomy, social support supervisor, social support colleagues, collaboration with physicians, work procedures, internal communication, materials/equipment, (financial) rewards, developmental opportunities and within worktime recovery

4 | DISCUSSION

The current study conducted in 19 hospitals in the Netherlands shows a high prevalence of stress-related outcomes (emotional exhaustion, depersonalization, symptoms of post-traumatic stress and sleep problems) and substantial turnover intention among ER nurses. On a positive note, ER nurses experience high levels of work engagement and job satisfaction. The GLMM tree models (for two representative outcomes) show that emotional exhaustion is mainly related to higher worktime demands and higher prevalence of aggression/conflict situations and, to a lesser extent, lower staffing levels and more social harassment. Work engagement is mainly related to developmental opportunities and, to a lesser extent, adequate staffing levels and social support from the supervisor.

The high prevalence of stress-related outcomes and turnover intention in the current study are in line with international findings regarding this occupational group (Adriaenssens et al., 2011, 2012; Bruyneel et al., 2017; Gomez-Urquiza et al., 2017; Li et al., 2018). At the same time, more than half of the ER nurses were (highly) engaged and the vast majority reported to be satisfied with their job. The coexistence of stress-related outcomes and outcomes of positive well-being might be explained by the content of the work: The variety in patients, pathology and medical urgency renders the ER a burdening as well as an exciting and challenging place to work (Glynn & Silva, 2013). Another explanation is provided by recent research suggesting that high levels of engagement might result in overcommitment (Leiter, 2019), including exaggerating efforts beyond what is formally required and having difficulties to withdraw from work (Leiter, 2019). Especially in a situation with high job demands, overcommitment might strengthen the energy depletion process and lead to symptoms of burnout (Leiter, 2019). Finally, due to the heavy mental burden (as reflected by the level of stress-related outcomes), many



Node	3	4	6	8	10	11
N	18	126	156	41	240	119
M	2.76	4.01	4.46	4.46	4.83	5.13
M_z	-1.90	-0.64	-0.19	-0.19	0.17	0.48

FIGURE 2 Tree for predicting work engagement. Each inner node depicts the variable used for splitting, with splitting values depicted below the nodes. The *p*-values quantify the strength of the association between the predictor variable and the outcome, with lower values indicating a stronger association. The terminal nodes provide boxplots, representing the distribution of emotional exhaustion values in each of the subgroups (terminal nodes). Below each terminal node, the table provides the corresponding group size (N); estimated group means on work engagement, corrected for covariates and hospital (M); and the same group means, standardized as a *z*-score (M_z). Predictors *not* selected by the model: worktime demands, aggression/conflict situations, emotional demands, social harassment, role ambiguity, autonomy, social support colleagues, collaboration with physicians, work procedures, internal communication, materials/equipment, (financial) rewards and within worktime recovery

work-engaged and satisfied nurses might still consider changing to a less demanding profession explaining the high turnover intention in this population.

In comparison to previous research, the use of decision tree methods allowed us to study a broad range of job factors and also assess possible combined effects of these. In line with previous research (Adriaenssens et al., 2015b; Bruyneel et al., 2017; O'Mahony, 2011) and the JD-R model, we found that emotional exhaustion was mainly related to job demands, with a primary role for worktime demands. Yet, especially the combination of worktime demands and aggressive-conflict situations seemed detrimental. This is in line with the limited research on additive effects of job demands and suggests that improving some job demands can already reduce negative stress-related outcomes (Jimmieson et al., 2017). This finding has important practical implications as certain job demands (e.g., worktime demands and social harassment) are more easily to modify than others (e.g., aggression or emotional demands) in this setting (Jimmieson et al., 2017).

In contrast to previous studies, the current study did not find a large role for social factors in the occurrence of emotional exhaustion

with the exception of social harassment. This can be explained by the high levels of social support (with limited variance) found in our sample, which reduces the power to find a statistically predictive effect of this resource. On the other hand, the absence of job resources in the GLMM model of emotional exhaustion, with the exception of a small reducing effect of higher staffing levels, suggests that the buffering effect of job resources on stress-related outcomes in this setting overall is limited and efforts should focus on reducing job demands.

In line with the JD-R model, work engagement was mainly related to job resources, with a primary role for developmental opportunities and some small additive effects for staffing levels and social support from the supervisor. A comparison with the limited available literature on engagement in ER nurses shows that the identified job factors are in line with the study of Sawatzky and Enns (2012), and partly in line with studies by Adriaenssens et al. (2011, 2015a), who identified the importance of social support from the supervisor but did not include developmental opportunities in the model. Overall, this suggests that efforts should focus on creating possibilities for professional development to keep the ER nursing workforce engaged.

4.1 | Strengths

The current study has a number of strengths. First of all, this is the first study to determine the prevalence of stress-related outcomes and occupational well-being of ER nurses in the Netherlands. Second, it answers to a call for studies on combined effects of job demands and resources and thereby gives a more complete view on job factors related to well-being in the ER (Schneider & Weigl, 2018). The use of an occupation-specific questionnaire also ensured the identification of demands and resources relevant for ER nurses. Furthermore, it is the first study to explore job demands and resources in this setting by the use of regression tree analyses. This resulted in identifying important variables (e.g., aggression/conflict situations and developmental opportunities) often not considered in studies that aim to understand how job factors influence ER nurses' well-being and highlights the combined effects of job factors. Finally, the large number and diversity of the participating ERs in the study and the high response rate increase the generalizability of the findings.

4.2 | Limitations and future directions

The sole use of questionnaire data increases the probability of common method bias. This has been addressed by the including valid questionnaires and guaranteeing anonymity in the current study (Conway & Lance, 2010). Additionally, given that well-being is subjective, it is best measured using self-reported methods. A second limitation concerns the use of a cross-sectional design, which does not allow for causal attributions. Still, although stress levels might also influence how employees experience their working environment, limited evidence exists for the reverse-effects hypothesis (Guthier et al., 2020). Third, the high levels of work engagement and limited explanatory value of job factors (apart from developmental opportunities) on this outcome suggest that other factors are of influence. Future studies might consider including factors related to the job content (e.g., positive patient contact and meaningfulness of work) to enhance our understanding regarding predictors of work engagement in ER nurses. Finally, the concept of moral distress, a reaction to knowing the right thing to do but being constraint from taking this action due to environmental circumstances (e.g., lack of time, supervisory reluctance and institutional policy) (Corley et al., 2001), is receiving increased research attention in studies on health care professionals (Epstein et al., 2019). Due to high worktime pressure and overcrowding, it is possible that especially ER nurses are confronted with morally distressing events (e.g., sending patients home who under normal circumstances would be hospitalized or performing procedures for which they are not qualified), which can have a lasting negative impact on their well-being (Wolf et al., 2016). As such, future research on predictors of stress-related outcomes in this population should consider including morally distressing events next to other job demands.

5 | CONCLUSIONS

The current study shows a high prevalence of stress-related outcomes among ER nurses in the Netherlands and substantial turnover intention. At the same time, ER nurses are highly work engaged and the majority is satisfied with their job. The results of the current study suggest that stress-related outcomes in ER nurses can be reduced by creating manageable job demands, with special attention to the reduction of worktime demands and aggression/conflict situations, while opportunities for professional development are essential to keep ER nurses engaged at work.

6 | IMPLICATIONS FOR *NURSING MANAGEMENT*

The high prevalence of stress-related outcomes and turnover intention of ER nurses found in this study should be a concern for hospital management. Poor (occupational) well-being has important organisational consequences including increased absenteeism and presenteeism, of which the latter is related to reduced productivity, increases in medical errors and reduced quality of patient care (Letvak et al., 2012). In addition, with growing nursing shortages, it is important to optimize the working environment to retain and attract qualified staff. The results of the current study suggest that a reduction in job demands, mainly worktime demands and the prevalence of aggression/conflict situations, will have the most beneficial effect on stress-related outcomes. Promising effects have been found for programmes including the involvement of senior doctors on the ER, specific care pathways for geriatric emergency care, and extending the role of paramedics (e.g., paramedic practitioner), on reducing worktime demands in this setting (Manson et al., 2014). Aggression training, accurate

reporting of violent incidents, a positive context in which management and employees are committed to reduce violence and comfortable waiting rooms to reduce stress in patients can lead to less aggressive incidents at the ER (D'Ettorre et al., 2018). Furthermore, although the high levels and limited variance of social support in the current study suggest that Dutch ERs have good social structures (briefings, debriefing and chaplaincy support) in place, the importance of social support in the ER has been reported in other studies (Adriaenssens et al., 2015a, 2015b; Bruyneel et al., 2017; Hunsaker et al., 2015) and thus could be an issue in other countries. Finally, to keep employees engaged and retain and attract qualified staff, hospital management might explore possibilities for professional development including rotation with the ambulance or intensive care or opportunities to specialize (e.g., physician assistant). However, it must be noted that very high levels of engagement in a demanding environment might lead to energy depletion and stress-related outcomes. As such, ER managers should find a balance between stimulating engagement while controlling the level of job demands.

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CONFLICT OF INTEREST

Nothing to declare.

ETHICAL APPROVAL

The current study was approved by the ethical review board of Leiden University (approved on the 2nd of January 2017, CEP17-0102/3).

AUTHOR CONTRIBUTIONS

A.N. de Wijn and M. P. van der Doef both contributed to the conception and design, acquisition of data, analysis and interpretation of data and drafting the article. M. Fokkema contributed to the analysis and interpretation of data and drafting the article.

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

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Effects of a hospital-based leisure activities programme on nurses' stress, self-perceived anxiety and depression: A mixed methods study

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Abstract

Aims: To determine the effects of a hospital-based leisure activities programme on nurses' stress, self-perceived anxiety and depression.

Background: Nursing work in clinical settings is highly stressful and may result in an increase in nurses' turnover rate, which threatens the quality of nursing care and patient safety.

Methods: We used a mixed methods design and a three-month intervention (January to April, 2019) involving a convenience sample of 176 nurses working at a Chinese tertiary hospital. We conducted 12 semi-structured interviews and performed a content analysis. The pre- and post-intervention comparisons of nurses' stress, self-perceived anxiety and depression were performed using a paired *t* test.

Results: The 3-month leisure activities programme significantly decreased nurses' job stress ($t = 3.80$, $p < .01$), perceived personal stress ($t = 3.30$, $p < .01$), self-perceived anxiety ($t = 3.76$, $p < .01$) and depression ($t = 2.73$, $p < .01$). The qualitative findings revealed five mechanisms linking leisure activities to subjective well-being: detachment recovery, autonomy, mastery, meaning and affiliation.

Conclusions: A hospital-based leisure activities programme had a positive effect on job stress, self-perceived anxiety and depression, thus improving nurses' well-being.

Implications for Nursing Management: A hospital-based leisure activities programme provides a beneficial strategy for ameliorating nurses' psychosocial issues. Interventions aimed at facilitating or increasing nurses' participation in leisure activities are greatly needed.

KEYWORDS
anxiety, depression, job stress, leisure activities, nurse, perceived stress

Feifei Chen and Yuli Zang contributed equally and share the first authorship.

1 | BACKGROUND

Considering the stressful working environment in hospitals, nurses often suffer from job stress and psychosocial problems (Wu et al., 2020). Job stress is defined as a feeling of dysfunction resulting from perceived conditions or happenings within the work setting (Parker & DeCotiis, 1983). Numerous studies show that most nurses may experience medium to high levels of job stress in different health care settings (Lo et al., 2018). Increased stress or continuous exposure to stressful working environments is often associated with psychosocial problems (e.g., anxiety and depression) or preventable work outcomes (e.g., absenteeism, turnover, job dissatisfaction and decreased productivity). These outcomes threaten the quality of nursing care, and therefore, patient safety (Chang et al., 2019; Liu et al., 2018).

Perceived personal stressors refer to stressful situations in one's life (Cohen et al., 1983). The high prevalence of job stress demands effective interventions to address perceived personal stress and associated psychosocial problems among nurses. Interventions to reduce stress, anxiety and depression among nurses may contribute towards building a healthy and productive workforce on the health care frontline (Chang et al., 2007), thereby providing safe direct nursing care for patients in need.

Participating in leisure activities is an interventional strategy that offers promising outcomes, such as quality of life, functional capacity, social network and subjective well-being (Iwasa & Yoshida, 2018; Lee et al., 2014). This is because of its nature of pleasant engagement in activities that are not part of one's job (Verghese et al., 2006) and its general association with happiness and physical health (Iwasaki, 2006). Existing research recognizes that leisure activities can alleviate stress and have a restorative impact on psychosocial wellness (Lee et al., 2020). The importance of its restorative value is related to enhanced joyfulness, physical vigour, social engagement and cognitive function, as well as to the reduction of emotional exhaustion and depression (Chiu et al., 2020).

Engagement in leisure activities is generally voluntary and motivated by intrinsic desires (Gallagher et al., 2012). Experience and perception of such activities are thought to intensify happiness and attenuate negative moods. However, evidence regarding leisure activities and its psychosocial benefits among nurses is scarce (Torquati et al., 2017). The ongoing COVID-19 pandemic greatly reduces opportunities and time for leisure activities among health care workers. Having less than 2 h available per day for leisure activities has been strongly linked to higher rates of anxiety and depressive symptoms among frontline health care workers (Hasan et al., 2020). Moreover, reduced engagement in leisure activities has been found to have a significant positive correlation with the severity of posttraumatic stress disorder (PTSD) symptoms among health care workers (Geng et al., 2021). As nurses represent the main workforce on the frontlines of health care, an investigation of the impact of leisure activities on nurses is warranted, to thereby reveal ways to improve their health during the prolonged COVID-19 pandemic.

Newman et al. (2014) argued that leisure engagement is linked to subjective well-being through psychological pathways; these pathways include detachment and recovery, autonomy, mastery, meaning and affiliation. Detachment from work can refresh individuals through the restorative power of leisure activities; autonomy—viewed as a requisite of leisure—refers to the perception of freedom offered by leisure activities; mastery reflects the sense of accomplishment by gaining skills or overcoming challenges, an important value gained from leisure activities; and lastly, social leisure activities often offer affiliation with others. The theoretical framework proposed by these five pathways underpins our investigation of the connection between leisure activities and psychosocial wellness within the context of nursing.

In the course of providing holistic care, nurses work with other relevant actors within or beyond their own domain. Peer support—particularly from those performing the same functions—is not only essential for teamwork; it is also highly valuable to one's psychosocial wellness (Guillaume & McMillan, 2002). Existing studies show an increase in nurses resorting to peer support to assist them in managing stressful conditions and promoting psychosocial wellness (Moloney et al., 2018; Webster et al., 2019). With this in mind, we consider the social dimension of taking part in leisure activities.

Taking part in leisure activities involves the activation of different communication channels; this multi-channelled communication may result in or amplify relaxing and joyful responses to leisure activities. When facing job stress, sharing experiences and subjective perceptions with peers could contribute to psychological resilience and improved psychosocial wellness outcomes (Agarwal et al., 2020). However, little evidence has been found of nurses' experience of leisure activities with their peers while coping with stressful conditions, such as those related to the COVID-19 pandemic.

This mixed methods study investigated the effects of a hospital-based leisure activities programme on the stress, anxiety and depression levels of frontline nurses in hospitals. We consider nurses' experiences and perceptions of such activity as contributory to a better understanding of the impact of the programme.

On the basis of the background provided, we hypothesize the following: A hospital-based leisure activities programme can significantly decrease nurses' job stress and perceived personal stress, which can, in turn, significantly decrease their self-perceived anxiety and depression and impact quality of care and patient safety.

2 | METHODS

2.1 | Design

This congruent mixed methods study (Creswell, 2018) was primarily quantitative, with a qualitative component. A pretest–posttest pre-experimental design was used to examine the effects of leisure activities on stress, anxiety and depression among nurses. The lack of a control group is due to the predicament of separating a group of nurses without exposing the organizational efforts made to ensure research fairness and avoid potential contamination (Duffy, 1985). Semi-structured qualitative interviews were conducted to explore individual participants' experiences of participating in the leisure activities programme to corroborate the quantitative findings.

2.2 | Participants

The study was conducted at a tertiary hospital with 2,419 open beds and 1,571 registered nurses, in the capital city of Eastern China. The nursing department designed and conducted the hospital-based leisure activities programme, and all nurses were encouraged to participate in the programme. The included participants were registered nurses aged 20 years or older who were employed permanently and registered as members for regular practice (e.g., at least once per week). The exclusion criteria were those who were receiving treatment for depression during the study period.

The sample size calculation estimated an effect size of 0.30 to detect small changes related to stress reduction at an alpha error rate of 0.05 and with 95% power, using the G*Power 3 program (Faul et al., 2007). Assuming a 20% follow-up loss, the calculation resulted in a final sample of 176. Convenience sampling was used to recruit participants through email invitations before the study. For the qualitative phase, purposive sampling was used to recruit participants from the roster of each leisure activity group. Sociodemographic characteristics (e.g., sex, marital status and years of clinical practice) were used as reference variables to identify potential participants for email contact during the qualitative phase. Recruitment was discontinued when data saturation was achieved (Morse, 2015).

2.3 | Intervention

Leisure activities were designed according to the guiding framework (Newman et al., 2014) to provide opportunities for distraction from work and to satisfy participants' experiences of autonomy, mastery, meaning and affiliation. Seven leisure activity groups were established, based on nurses' preferences. These were physical activities of dancing and Tai Chi and creative activities of calligraphy and painting, photography, flower arrangement, cooking and learning English. Approximately 1,000 registered nurses participated in the leisure activities. The activity plans differed among the different groups and consisted of theoretical learning and/or practice. The mean duration of leisure activity sessions was 40 min, and courses for every activity group were organized once per week (i.e., one session) in available multipurpose rooms, such as conference rooms, in the hospital. Nurses could participate in the facilitated 40-min sessions once a week for 12 weeks during the 3-month intervention period. Relevant information was published online for some groups, such as photography, cooking, flower arrangement and learning English. Participants were encouraged to engage in extra practice at home after participating in each session. Instructions and schedules for all types of leisure activities were published in newsletters to allow participants to make arrangements; nurses were allowed to choose one or more activities according to their personal interests and leisure time availability.

The different leisure activities were each presented by one professional staff member and two group facilitators. The professional staff member was responsible for teaching participants and recording their achievements. Group facilitators were responsible for assisting professional staff members in conducting leisure activities, identifying barriers to engaging in the programme, and facilitating communication among participants. The hospital provided minimal financial support and other in-kind types of support to facilitate the implementation of the activities.

2.4 | Measures

The participants' job stress was assessed using the job stress scale (JSS) developed by Li and Liu (2000). The scale has appropriate reliability and validity for assessing nurses' job stress in China. The JSS assesses professional and career issues (seven items), workload and time pressure (five items), resources and environmental problems (three items), patient care and interaction (11 items), and interpersonal relationships and management issues (nine items). Each item in the JSS is scored on a four-point Likert scale from 1 = *not at all* to 4 = *a lot*. Higher scores indicate higher job stress. The JSS had a Cronbach's alpha of .98 for Chinese nurses, and we obtained a Cronbach's alpha of .94 in this study.

The 14-item perceived stress scale (PSS) developed by Cohen et al. (1983) and translated into Chinese by Yang and Huang (2003) was used to assess the extent to which life situations can be considered stressful. The scale consists of two subscales—perceived coping and perceived distress—with seven items each. The response to each item was scored on a 5-point Likert scale from 0 = *never* to 4 = *very often*. A higher score indicates a high level of perceived stress. The Cronbach's alpha for the overall tool was .78, indicating good internal consistency. In this study, the Cronbach's alpha was .81.

The Chinese version (Wang, 1984) of the self-rating anxiety scale (SAS) was used to assess participants' anxiety-related symptoms (Zung, 1971). The SAS has 20 items, and each item is scored on a four-point Likert scale from 1 = *not at all or rarely* to 4 = *most of the time*. Higher scores reflected higher levels of anxiety. According to the SAS, a total index score of ≥50 indicates anxiety. The Chinese version of the SAS had a Cronbach's alpha of .85. In the present study, the Cronbach's alpha was .82.

The 20-item self-rating depression scale (SDS) developed by Zung et al. (1965) and translated into Chinese by Wang et al. (1999) was used to assess the participants' depression symptoms. Each item was scored on a four-point Likert scale from 1 = *not at all or rarely* to 4 = *most of the time*. The higher the index score, the higher the level of depression; depressive symptoms were determined with an index score ≥50. In the present study, the Cronbach's alpha was .85.

2.5 | Data collection

An online questionnaire containing questions about sociodemographic characteristics as well as the items from the aforementioned scales was created using a popular web-based survey system

(https://www.wjx.cn/). In early 2019 (January to April), the questionnaire was administered via email at baseline (before the study) and again after intervention (3 months later). Additionally, 12 participants were interviewed from April to May 2019, with the aid of a predesigned interview guide. The interview questions were based on the type of leisure activities they participated in, the impact of these activities on their lives, and the factors that facilitated or impeded their participation. The principal investigator (a registered female nurse with a master's degree in nursing science and 9 years of clinical experience) initiated telephone interviews to determine participants' experience of participating in the hospital-based leisure activities programme. Interviews were audio recorded and discontinued when data saturation was achieved (Morse, 2015). The average interview time ranged from 30 to 40 min.

2.6 | Data analysis

The quantitative data were analysed using SPSS 21.0 for Windows (SPSS Inc., Chicago, IL, USA). Changes in nurses' job stress and perceived personal stress, anxiety and depression were compared using paired *t* tests. The effect size was calculated using the mean difference between pretest and posttest data, divided by the pooled standard deviation, Cohen's *d*. For Cohen's *d*, a score of .20–.50 is considered a small effect, .50–.80 a medium effect, and > .80 a large effect (Cohen, 1992). Statistical significance was set at $p < .05$.

For the qualitative data, we used a directed content analysis (Hsieh & Shannon, 2005). Audio recordings were transcribed verbatim, and texts were divided into meaning units, such as words, sentences and paragraphs. The meaning units were independently coded by two researchers (registered nurses [Masters in Nursing Science] with specific training and research experience in qualitative studies); codes were sorted into subcategories, and eventually abstracted to categories identified by Newman et al. (2014). Data that could not be coded into any of the categories derived from the theory were reexamined and resolved by the research group. Exemplar statements were translated from Chinese to English by the principal investigator, cross-checked and then confirmed by two senior researchers who were bilingual (registered nurses, one with a Doctorate in Philosophy and one with a Masters in Nursing Science).

2.7 | Methodological rigour for the qualitative inquiry

The credibility of this study was addressed following the work of Amankwaa (2016). Member checking was undertaken by involving participants in checking the proximity of themes, subthemes and exemplar statements. Senior researchers played an important role in solving discrepancies in the data analysis process to ensure credibility and confirmability. Field notes about participants' responses served as audit trails to substantiate the dependability of the findings.

2.8 | Ethical considerations

Informed consent was obtained from all participants before the start of the study. The Institutional Review Board of the hospital where the study took place approved the study. Participants were well informed of the study's aim, design, methods and ethical principles. They were also informed of their right to withdraw at any time without reason or negative impact. All collected information was kept confidential and anonymous.

3 | RESULTS

3.1 | Participant characteristics

All invited registered nurses ($N = 176$) agreed to complete the pre- and posttest online surveys. On average, participants were 31.38 (±6.89) years old and had been working for 9.58 (±7.65) years. As shown in Table 1, 86.93% were female, 65.34% were married, and 46.59% had an associate's degree; slightly more than a quarter (26.70%) participated in more than one type of leisure activity. The participants who were interviewed ($n = 12$) were aged from 22 to 44 years (mean 30.42; $SD \pm 7.19$ years).

3.2 | Effects on perceived stress, anxiety and depression

As shown in Table 2, the scores on the dimensions of job stressors and total JSS were significantly lower after the intervention. Noticeable pretest and posttest differences were detected in all ($p < .01$) but one dimension ($p > .05$) of job and personal stressors; this dimension is resource and environmental problems. The effect sizes ranged from .26 to .44, indicating a small effect.

The scores for perceived coping ($p < .01$), perceived distress ($p < .05$) and total PSS ($p < .01$) were significantly decreased after the intervention, resulting in a small effect size of .22–.34.

The SAS score decreased significantly, from 48 to 44 ($p < .01$), after the intervention, with an effect size of .42. Thus, the SDS score (48–45, $p < .01$) produced an effect size of .29.

3.3 | Thematic findings

Five themes related to the psychological mechanisms of Newman et al. (2014) were identified from the interview transcripts, based on the contribution of leisure activities to one's well-being (i.e., detachment recovery, autonomy, mastery, meaning and affiliation).

3.3.1 | Detachment recovery

Engagement in leisure activities facilitated psychological and physical detachment from work and daily life pressure, thereby offering

TABLE 1 Descriptive characteristic of participants

	Survey ($n = 176$)		Semi-structured interviews ($n = 12$)	
	N (%) or range	Mean (*SD*)	*N* (%) or range	Mean (*SD*)
Age (years)	22-51	31.38 (6.89)	22-44	30.42 (7.19)
Tenure (years)	1-32	9.58 (7.65)	1-26	7.92 (7.53)
Gender				
Female	153 (86.93)		9 (75.00%)	
Male	23 (13.07)		3 (25.00%)	
Marital status				
Married	115 (65.34)		8 (66.67%)	
Unmarried	60 (34.09)		4 (33.33%)	
Separated	1 (.57)		0	
Education				
Associate degree	82 (46.59)		3 (25.00%)	
Bachelor degree	80 (45.45)		5 (41.67%)	
Master degree	14 (7.96)		4 (33.33%)	
Professional post				
Nurse	146 (82.95)		11 (91.67%)	
Head nurse	30 (17.05)		1 (8.33%)	
Types of leisure activities				
One	129 (73.30%)		7 (58.33%)	
Two	30 (17.05%)		3 (25.00%)	
Three	13 (7.39%)		2 (16.67%)	
Four	4 (2.26%)		0	

Abbreviation: *SD*, standard deviation.

TABLE 2 Mean scores of variables pre and post leisure activities programme with paired *t* test ($N = 176$)

Variables	Pre test Mean (*SD*)	Post test Mean (*SD*)	Pretestposttest		
			Mean differenceES	*t*	(95% CI)
Total job stressors	71.26 (±16.62)	64.99 (±15.84)	6.27	3.80**	.39 (3.029.53)
Professional and career issues	16.56 (±4.18)	14.72 (±4.12)	1.84	4.19**	.44 (.972.71)
Workload and time pressure	12.41 (±3.71)	11.05 (±3.34)	1.36	3.67**	.39 (.632.09)
Resource and environmental problems	5.41 (±2.06)	5.27 (±1.96)	.14	.66	.07 (−.27.55)
Patient care and interaction	22.75 (±5.74)	20.98 (±5.45)	1.77	3.07**	.32 (.632.90)
Interpersonal relationships and management issues	14.14 (±4.67)	12.97 (±4.39)	1.17	2.65**	.26 (.302.04)
Total perceived stress	25.78 (±6.43)	23.67 (±5.82)	2.10	3.30**	.34 (.843.35)
Perceived distress	12.15 (±4.02)	11.27 (±4.06)	.89	2.14*	.22 (.011.70)
Perceived coping	13.61 (±3.71)	12.40 (±3.51)	1.21	3.18**	.34 (.461.96)
Self-rating anxiety	48.11 (±10.27)	44.14 (±8.78)	3.97	3.76**	.42 (1.896.05)
Self-rating depression	48.13 (±10.70)	45.16 (±9.84)	2.97	2.73**	.29 (.825.11)

Abbreviations: CI, confidence interval; ES, effect sizes; *SD*, standard deviation.
*$p < .05$. **$p < .01$.

opportunities for nurses to recover from stress. Some participants regarded attending the sessions as a good alternative emotional expression, as they enjoyed participating. Different types of leisure activities acted as resources to meet different needs, which aided recovery. For example, the Tai Chi practice promotes physical health, while painting, dancing, cooking and flower arranging enhanced life satisfaction. Photography and learning English may increase their self-confidence.

> I really enjoyed the painting activity, losing track of time, and not worrying about work and family. It feels so good. (Registered nurse 4, female, 42, married, with one child, 23 years of working experience, gynaecology ward)

3.3.2 | Autonomy

When nurses engage in activities of their own will, they were autonomously motivated. This satisfied their intrinsic motivation through the enjoyment of the activity they did, leading to psychological well-being. Group participation promoted individuals' participation in leisure activities, particularly when their leaders, such as head nurses and managers, were involved.

> I like the leisure activity that I participated in. I never felt that it [leisure activity] took up my free time. And if you are interested in the activity, then you won't feel stress all of the time. (Registered nurse 8, female, 25, single, with 4 years of working experience, neonatal intensive care unit)

3.3.3 | Mastery

The programme offered the nurses many learning opportunities and challenges. Mastery is the experience of overcoming a challenge or improving a skill in leisure activities, thereby promoting self-actualization, which, in turn, leads to positive emotions. Some participants expressed concern in terms of professional knowledge, suggesting that some leisure activities groups could be a potential burden for nurses. One nurse suggested:

> We learned a lot of professional skills from flower arrangement. These skills strengthened my confidence. (Registered nurse 9, female, 52, married, with one child, with 34 years of working experience, gynaecology ward)

3.3.4 | Meaning

Engaging in meaningful leisure activities adds purpose to one's life, which helps individuals to cope with difficult situations.

> I didn't have the chance to touch dancing when I was young. However, now we can learn that in our hospital. It fulfilled my dream. And I am so glad to talk about that. (Registered nurse 12, female, 37, married, with two children, with 15 years of working experience, geriatric medical ward)

3.3.5 | Affiliation

Nurses' participation in leisure activities promoted engagement among colleagues. Most nurses stated that they enjoyed socializing during leisure activities sessions and that the social network was helpful in reducing stress. Some nurses said that the programme increased familiarization with their units and the hospital through interpersonal communication, thus enhancing their sense of belonging.

> I am the only male nurse at my unit. When I started working, I was very happy to learn that there are eighty male nurses working at our hospital. We shared our experiences beyond work—such as career planning and the trends of male nurses—through the leisure activities. (Registered nurse 6, male, 36, married, with one child, with 17 years of working experience, operating room)

4 | DISCUSSION

This study evaluated the effects of a group leisure activities intervention on the job stress and psychosocial wellness of Chinese nurses. At the 3-month follow-up, we found that the programme had a significantly favourable effect on job stress, perceived personal stress, self-perceived anxiety and depression. These results substantiate available evidence that participation in leisure activities influences job stress and psychosocial wellness in nurses (Webster et al., 2005). The results also validate Newman et al.'s (2014) psychological mechanisms that linked leisure time to subjective well-being, expanded engagement of all categories of care workers and proposed strategies for quick familiarization with different types of leisure activities.

The programme significantly decreased job stress and perceived personal stress. This finding is consistent with the findings of a Danish national health survey, which found that stress reduction corresponds to involvement in leisure activities (Corazon et al., 2010). The perception that leisure activities improve nurses' stress fits with emerging evidence that leisure activities are generally beneficial in terms of stress management and work outcomes. The benefit could have resulted from the opportunities of being distracted from a stressful environment or the detachment from work-related issues offered by leisure activities (Sonnentag et al., 2017). For example, painting is a leisure activity that might yield positive feelings through detachment from work. Furthermore, the benefit could have resulted from good interpersonal relationships that were achieved through interactive communication. Throughout the programme, participants were encouraged to achieve and maintain good interpersonal relationships. It is possible that engagement in leisure activities with good interpersonal relationships extended their social networks and promoted their affiliation with the organization. This enhanced mutual trust and collaboration among peers leads to stress reduction. Additionally, acquiring cooking, photography and foreign language skills might contribute to an individual's self-confidence by overcoming certain challenges.

Notably, the programme did not significantly improve stress related to resource and environmental issues (e.g., crowded wards, poor work environments and lack of equipment), because participants were nurses who understood that they had little control over those problems (Nantsupawat et al., 2017). However, head nurses also participated in the programme, which might have improved nursing resources and work environments over longer periods.

The programme significantly decreased self-perceived anxiety and depression among participants. This result corresponds with the findings of a previous observational study of 2,264 nurses that showed a positive association between leisure-time physical activity and well-being. A national survey of Portuguese nurses' perceptions of their mental health also reported that nurses who engaged in leisure activities experienced improved mental health (Seabra et al., 2019). Our results support this finding, which suggests the effectiveness of a leisure activity intervention to alleviate anxiety and depression. The participants indicated improved confidence and social interaction; these aspects could act as coping strategies in managing psychosocial factors, leading to decreases in anxiety and depression.

Nurses often work in stressful conditions, which often results in acute and chronic severe stress; this, in turn, may lead to PTSD (Schuster & Dwyer, 2020). The importance of the restorative value of leisure activities is related to enhanced joyfulness, physical vigour, social engagement and cognitive function, as well as a reduction in emotional exhaustion and depression (Chiu et al., 2020). We therefore posit that providing opportunities for leisure activities in hospitals, the most convenient place for nurses to participate, would be beneficial to all frontline nurses. These findings could help hospital managers to find new ways of addressing PTSD among nurses. However, further studies are required to identify the effectiveness of leisure activities on PTSD.

In the view of Newman et al. (2014), participation in leisure activities are linked to subjective well-being (i.e., leisure satisfaction, positive feelings, and negative feelings) through the mechanisms of detachment recovery, autonomy, mastery, meaning and affiliation. These findings can contribute towards explaining why participation in leisure activities decreased nurses' stress, self-perceived anxiety and depression, in this study. Participation in leisure activities provided participants with moments to be away from stressful conditions. They therefore had more time to relieve psychosocial distress and ameliorate negative feelings, contributing to improved psychosocial wellness. Further, participation in leisure activities met nurses' psychological needs. For instance, taking part in the dancing activity with colleagues satisfied their needs for affiliation and detachment relaxation, while photography may have promoted psychological wellness by stimulating the feeling of mastery and autonomy. Considering these findings, understanding nurses' psychological needs and providing opportunities for them to participate in leisure activities that suit their needs may promote nurses' psychosocial wellness.

4.1 | Limitations

Several issues remain for future research on leisure activity interventions. First, this study did not include a control group. It is unclear whether the changes in our participants' perceptions of stress, anxiety and depression were caused by the intervention programme or whether there were other concurrent factors, such as improved workload. A randomized controlled trial should be conducted to examine the effects of this programme on the outcomes. Second, the current study lacks possible standardized implementation, as the leisure activities programme was designed according to Chinese culture, which might jeopardize the generalizability of the results. However, leisure activity interventions satisfying individuals' preferences and settings have been recommended in a previous study (Lee et al., 2018). This study featured a short-term intervention; the long-lasting effects of a leisure activities intervention on stress, self-perceived anxiety and depression still need to be determined.

5 | CONCLUSION

The findings of this study empirically support the hypothesis that participation in leisure activities improves stress and self-perceived anxiety and depression among nurses. The underlying mechanism can be explained by detachment recovery, autonomy, mastery, meaning and affiliation. Taking part in various leisure activities that are suitable for individual interests could potentially be a way of relieving the symptoms of PTSD and enhancing psychosocial wellness and teamwork among nurses; this, in turn, could improve care quality and patient safety.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

A hospital-based leisure activities programme had a significant beneficial effect on job stress, perceived personal stress, self-perceived anxiety and depression among Chinese nurses. Hospital-based group leisure activities are sustainable options for promoting psychosocial wellness among nurses. Investing in providing activities for improving the psychosocial wellness of staff can offer benefits that far outweigh the costs, as nurses' well-being has larger implications for hospitals in terms of decreasing the costs of turnover and increasing patient safety and care quality.

Our findings also have important implications for administrators and managers concerned about the well-being of nurses during the COVID-19 pandemic, where nurses have limited opportunities for leisure activities outside hospitals. Hospital-based leisure activities can serve as a means of facilitating recovery from stressful work. These programmes can be used flexibly by hospital nursing managers to maintain nurses' well-being. For example, flexible work schedules can be arranged to facilitate nurses to follow their passions by actively participating in leisure activities.

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CONFLICT OF INTEREST

None.

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ETHICAL APPROVAL

The Institutional Review Boards of the Second Hospital, Cheeloo College of Medicine, Shandong University approved the study [#KYLL 2019 (LW) 015].

AUTHOR CONTRIBUTIONS

FFC, YLZ, HD, XYW, JPB and XFL made substantial contributions to conception and design. FFC, YLZ and XFL drafted the manuscript or revised it critically for important intellectual content. FFC, YLZ, JPB and XFL were responsible for acquisition of data or analysis and interpretation of data. FFC, YLZ, HD, XYW, JPB and XFL were accountable for the accuracy or integrity of any part of the study. FFC, YLZ, HD, XYW, JPB and XFL gave the final approval of the study to be published.

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

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Effects of a hospital-based leisure activities programme on nurses' stress, self-perceived anxiety and depression: A mixed methods study

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Abstract

Aims: To determine the effects of a hospital-based leisure activities programme on nurses' stress, self-perceived anxiety and depression.

Background: Nursing work in clinical settings is highly stressful and may result in an increase in nurses' turnover rate, which threatens the quality of nursing care and patient safety.

Methods: We used a mixed methods design and a three-month intervention (January to April, 2019) involving a convenience sample of 176 nurses working at a Chinese tertiary hospital. We conducted 12 semi-structured interviews and performed a content analysis. The pre- and post-intervention comparisons of nurses' stress, self-perceived anxiety and depression were performed using a paired *t* test.

Results: The 3-month leisure activities programme significantly decreased nurses' job stress ($t = 3.80$, $p < .01$), perceived personal stress ($t = 3.30$, $p < .01$), self-perceived anxiety ($t = 3.76$, $p < .01$) and depression ($t = 2.73$, $p < .01$). The qualitative findings revealed five mechanisms linking leisure activities to subjective well-being: detachment recovery, autonomy, mastery, meaning and affiliation.

Conclusions: A hospital-based leisure activities programme had a positive effect on job stress, self-perceived anxiety and depression, thus improving nurses' well-being.

Implications for Nursing Management: A hospital-based leisure activities programme provides a beneficial strategy for ameliorating nurses' psychosocial issues. Interventions aimed at facilitating or increasing nurses' participation in leisure activities are greatly needed.

KEYWORDS
anxiety, depression, job stress, leisure activities, nurse, perceived stress

Feifei Chen and Yuli Zang contributed equally and share the first authorship.

1 | BACKGROUND

Considering the stressful working environment in hospitals, nurses often suffer from job stress and psychosocial problems (Wu et al., 2020). Job stress is defined as a feeling of dysfunction resulting from perceived conditions or happenings within the work setting (Parker & DeCotiis, 1983). Numerous studies show that most nurses may experience medium to high levels of job stress in different health care settings (Lo et al., 2018). Increased stress or continuous exposure to stressful working environments is often associated with psychosocial problems (e.g., anxiety and depression) or preventable work outcomes (e.g., absenteeism, turnover, job dissatisfaction and decreased productivity). These outcomes threaten the quality of nursing care, and therefore, patient safety (Chang et al., 2019; Liu et al., 2018).

Perceived personal stressors refer to stressful situations in one's life (Cohen et al., 1983). The high prevalence of job stress demands effective interventions to address perceived personal stress and associated psychosocial problems among nurses. Interventions to reduce stress, anxiety and depression among nurses may contribute towards building a healthy and productive workforce on the health care frontline (Chang et al., 2007), thereby providing safe direct nursing care for patients in need.

Participating in leisure activities is an interventional strategy that offers promising outcomes, such as quality of life, functional capacity, social network and subjective well-being (Iwasa & Yoshida, 2018; Lee et al., 2014). This is because of its nature of pleasant engagement in activities that are not part of one's job (Verghese et al., 2006) and its general association with happiness and physical health (Iwasaki, 2006). Existing research recognizes that leisure activities can alleviate stress and have a restorative impact on psychosocial wellness (Lee et al., 2020). The importance of its restorative value is related to enhanced joyfulness, physical vigour, social engagement and cognitive function, as well as to the reduction of emotional exhaustion and depression (Chiu et al., 2020).

Engagement in leisure activities is generally voluntary and motivated by intrinsic desires (Gallagher et al., 2012). Experience and perception of such activities are thought to intensify happiness and attenuate negative moods. However, evidence regarding leisure activities and its psychosocial benefits among nurses is scarce (Torquati et al., 2017). The ongoing COVID-19 pandemic greatly reduces opportunities and time for leisure activities among health care workers. Having less than 2 h available per day for leisure activities has been strongly linked to higher rates of anxiety and depressive symptoms among frontline health care workers (Hasan et al., 2020). Moreover, reduced engagement in leisure activities has been found to have a significant positive correlation with the severity of posttraumatic stress disorder (PTSD) symptoms among health care workers (Geng et al., 2021). As nurses represent the main workforce on the frontlines of health care, an investigation of the impact of leisure activities on nurses is warranted, to thereby reveal ways to improve their health during the prolonged COVID-19 pandemic.

Newman et al. (2014) argued that leisure engagement is linked to subjective well-being through psychological pathways; these pathways include detachment and recovery, autonomy, mastery, meaning and affiliation. Detachment from work can refresh individuals through the restorative power of leisure activities; autonomy—viewed as a requisite of leisure—refers to the perception of freedom offered by leisure activities; mastery reflects the sense of accomplishment by gaining skills or overcoming challenges, an important value gained from leisure activities; and lastly, social leisure activities often offer affiliation with others. The theoretical framework proposed by these five pathways underpins our investigation of the connection between leisure activities and psychosocial wellness within the context of nursing.

In the course of providing holistic care, nurses work with other relevant actors within or beyond their own domain. Peer support—particularly from those performing the same functions—is not only essential for teamwork; it is also highly valuable to one's psychosocial wellness (Guillaume & McMillan, 2002). Existing studies show an increase in nurses resorting to peer support to assist them in managing stressful conditions and promoting psychosocial wellness (Moloney et al., 2018; Webster et al., 2019). With this in mind, we consider the social dimension of taking part in leisure activities.

Taking part in leisure activities involves the activation of different communication channels; this multi-channelled communication may result in or amplify relaxing and joyful responses to leisure activities. When facing job stress, sharing experiences and subjective perceptions with peers could contribute to psychological resilience and improved psychosocial wellness outcomes (Agarwal et al., 2020). However, little evidence has been found of nurses' experience of leisure activities with their peers while coping with stressful conditions, such as those related to the COVID-19 pandemic.

This mixed methods study investigated the effects of a hospital-based leisure activities programme on the stress, anxiety and depression levels of frontline nurses in hospitals. We consider nurses' experiences and perceptions of such activity as contributory to a better understanding of the impact of the programme.

On the basis of the background provided, we hypothesize the following: A hospital-based leisure activities programme can significantly decrease nurses' job stress and perceived personal stress, which can, in turn, significantly decrease their self-perceived anxiety and depression and impact quality of care and patient safety.

2 | METHODS

2.1 | Design

This congruent mixed methods study (Creswell, 2018) was primarily quantitative, with a qualitative component. A pretest–posttest pre-experimental design was used to examine the effects of leisure activities on stress, anxiety and depression among nurses. The lack of a control group is due to the predicament of separating a group of nurses without exposing the organizational efforts made to ensure research fairness and avoid potential contamination (Duffy, 1985). Semi-structured qualitative interviews were conducted to explore individual participants' experiences of participating in the leisure activities programme to corroborate the quantitative findings.

2.2 | Participants

The study was conducted at a tertiary hospital with 2,419 open beds and 1,571 registered nurses, in the capital city of Eastern China. The nursing department designed and conducted the hospital-based leisure activities programme, and all nurses were encouraged to participate in the programme. The included participants were registered nurses aged 20 years or older who were employed permanently and registered as members for regular practice (e.g., at least once per week). The exclusion criteria were those who were receiving treatment for depression during the study period.

The sample size calculation estimated an effect size of 0.30 to detect small changes related to stress reduction at an alpha error rate of 0.05 and with 95% power, using the G*Power 3 program (Faul et al., 2007). Assuming a 20% follow-up loss, the calculation resulted in a final sample of 176. Convenience sampling was used to recruit participants through email invitations before the study. For the qualitative phase, purposive sampling was used to recruit participants from the roster of each leisure activity group. Sociodemographic characteristics (e.g., sex, marital status and years of clinical practice) were used as reference variables to identify potential participants for email contact during the qualitative phase. Recruitment was discontinued when data saturation was achieved (Morse, 2015).

2.3 | Intervention

Leisure activities were designed according to the guiding framework (Newman et al., 2014) to provide opportunities for distraction from work and to satisfy participants' experiences of autonomy, mastery, meaning and affiliation. Seven leisure activity groups were established, based on nurses' preferences. These were physical activities of dancing and Tai Chi and creative activities of calligraphy and painting, photography, flower arrangement, cooking and learning English. Approximately 1,000 registered nurses participated in the leisure activities. The activity plans differed among the different groups and consisted of theoretical learning and/or practice. The mean duration of leisure activity sessions was 40 min, and courses for every activity group were organized once per week (i.e., one session) in available multipurpose rooms, such as conference rooms, in the hospital. Nurses could participate in the facilitated 40-min sessions once a week for 12 weeks during the 3-month intervention period. Relevant information was published online for some groups, such as photography, cooking, flower arrangement and learning English. Participants were encouraged to engage in extra practice at home after participating in each session. Instructions and schedules for all types of leisure activities were published in newsletters to allow participants to make arrangements; nurses were allowed to choose one or more activities according to their personal interests and leisure time availability.

The different leisure activities were each presented by one professional staff member and two group facilitators. The professional staff member was responsible for teaching participants and recording their achievements. Group facilitators were responsible for assisting professional staff members in conducting leisure activities, identifying barriers to engaging in the programme, and facilitating communication among participants. The hospital provided minimal financial support and other in-kind types of support to facilitate the implementation of the activities.

2.4 | Measures

The participants' job stress was assessed using the job stress scale (JSS) developed by Li and Liu (2000). The scale has appropriate reliability and validity for assessing nurses' job stress in China. The JSS assesses professional and career issues (seven items), workload and time pressure (five items), resources and environmental problems (three items), patient care and interaction (11 items), and interpersonal relationships and management issues (nine items). Each item in the JSS is scored on a four-point Likert scale from 1 = *not at all* to 4 = *a lot*. Higher scores indicate higher job stress. The JSS had a Cronbach's alpha of .98 for Chinese nurses, and we obtained a Cronbach's alpha of .94 in this study.

The 14-item perceived stress scale (PSS) developed by Cohen et al. (1983) and translated into Chinese by Yang and Huang (2003) was used to assess the extent to which life situations can be considered stressful. The scale consists of two subscales—perceived coping and perceived distress—with seven items each. The response to each item was scored on a 5-point Likert scale from 0 = *never* to 4 = *very often*. A higher score indicates a high level of perceived stress. The Cronbach's alpha for the overall tool was .78, indicating good internal consistency. In this study, the Cronbach's alpha was .81.

The Chinese version (Wang, 1984) of the self-rating anxiety scale (SAS) was used to assess participants' anxiety-related symptoms (Zung, 1971). The SAS has 20 items, and each item is scored on a four-point Likert scale from 1 = *not at all or rarely* to 4 = *most of the time*. Higher scores reflected higher levels of anxiety. According to the SAS, a total index score of ≥50 indicates anxiety. The Chinese version of the SAS had a Cronbach's alpha of .85. In the present study, the Cronbach's alpha was .82.

The 20-item self-rating depression scale (SDS) developed by Zung et al. (1965) and translated into Chinese by Wang et al. (1999) was used to assess the participants' depression symptoms. Each item was scored on a four-point Likert scale from 1 = *not at all or rarely* to 4 = *most of the time*. The higher the index score, the higher the level of depression; depressive symptoms were determined with an index score ≥50. In the present study, the Cronbach's alpha was .85.

2.5 | Data collection

An online questionnaire containing questions about sociodemographic characteristics as well as the items from the aforementioned scales was created using a popular web-based survey system

(https://www.wjx.cn/). In early 2019 (January to April), the questionnaire was administered via email at baseline (before the study) and again after intervention (3 months later). Additionally, 12 participants were interviewed from April to May 2019, with the aid of a predesigned interview guide. The interview questions were based on the type of leisure activities they participated in, the impact of these activities on their lives, and the factors that facilitated or impeded their participation. The principal investigator (a registered female nurse with a master's degree in nursing science and 9 years of clinical experience) initiated telephone interviews to determine participants' experience of participating in the hospital-based leisure activities programme. Interviews were audio recorded and discontinued when data saturation was achieved (Morse, 2015). The average interview time ranged from 30 to 40 min.

2.6 | Data analysis

The quantitative data were analysed using SPSS 21.0 for Windows (SPSS Inc., Chicago, IL, USA). Changes in nurses' job stress and perceived personal stress, anxiety and depression were compared using paired *t* tests. The effect size was calculated using the mean difference between pretest and posttest data, divided by the pooled standard deviation, Cohen's *d*. For Cohen's *d*, a score of .20–.50 is considered a small effect, .50–.80 a medium effect, and > .80 a large effect (Cohen, 1992). Statistical significance was set at $p < .05$.

For the qualitative data, we used a directed content analysis (Hsieh & Shannon, 2005). Audio recordings were transcribed verbatim, and texts were divided into meaning units, such as words, sentences and paragraphs. The meaning units were independently coded by two researchers (registered nurses [Masters in Nursing Science] with specific training and research experience in qualitative studies); codes were sorted into subcategories, and eventually abstracted to categories identified by Newman et al. (2014). Data that could not be coded into any of the categories derived from the theory were reexamined and resolved by the research group. Exemplar statements were translated from Chinese to English by the principal investigator, cross-checked and then confirmed by two senior researchers who were bilingual (registered nurses, one with a Doctorate in Philosophy and one with a Masters in Nursing Science).

2.7 | Methodological rigour for the qualitative inquiry

The credibility of this study was addressed following the work of Amankwaa (2016). Member checking was undertaken by involving participants in checking the proximity of themes, subthemes and exemplar statements. Senior researchers played an important role in solving discrepancies in the data analysis process to ensure credibility and confirmability. Field notes about participants' responses served as audit trails to substantiate the dependability of the findings.

2.8 | Ethical considerations

Informed consent was obtained from all participants before the start of the study. The Institutional Review Board of the hospital where the study took place approved the study. Participants were well informed of the study's aim, design, methods and ethical principles. They were also informed of their right to withdraw at any time without reason or negative impact. All collected information was kept confidential and anonymous.

3 | RESULTS

3.1 | Participant characteristics

All invited registered nurses ($N = 176$) agreed to complete the pre- and posttest online surveys. On average, participants were 31.38 (±6.89) years old and had been working for 9.58 (±7.65) years. As shown in Table 1, 86.93% were female, 65.34% were married, and 46.59% had an associate's degree; slightly more than a quarter (26.70%) participated in more than one type of leisure activity. The participants who were interviewed ($n = 12$) were aged from 22 to 44 years (mean 30.42; $SD \pm 7.19$ years).

3.2 | Effects on perceived stress, anxiety and depression

As shown in Table 2, the scores on the dimensions of job stressors and total JSS were significantly lower after the intervention. Noticeable pretest and posttest differences were detected in all ($p < .01$) but one dimension ($p > .05$) of job and personal stressors; this dimension is resource and environmental problems. The effect sizes ranged from .26 to .44, indicating a small effect.

The scores for perceived coping ($p < .01$), perceived distress ($p < .05$) and total PSS ($p < .01$) were significantly decreased after the intervention, resulting in a small effect size of .22–.34.

The SAS score decreased significantly, from 48 to 44 ($p < .01$), after the intervention, with an effect size of .42. Thus, the SDS score (48–45, $p < .01$) produced an effect size of .29.

3.3 | Thematic findings

Five themes related to the psychological mechanisms of Newman et al. (2014) were identified from the interview transcripts, based on the contribution of leisure activities to one's well-being (i.e., detachment recovery, autonomy, mastery, meaning and affiliation).

3.3.1 | Detachment recovery

Engagement in leisure activities facilitated psychological and physical detachment from work and daily life pressure, thereby offering

TABLE 1 Descriptive characteristic of participants

	Survey ($n = 176$)		Semi-structured interviews ($n = 12$)	
	N (%) or range	Mean (*SD*)	*N* (%) or range	Mean (*SD*)
Age (years)	22-51	31.38 (6.89)	22-44	30.42 (7.19)
Tenure (years)	1-32	9.58 (7.65)	1-26	7.92 (7.53)
Gender				
Female	153 (86.93)		9 (75.00%)	
Male	23 (13.07)		3 (25.00%)	
Marital status				
Married	115 (65.34)		8 (66.67%)	
Unmarried	60 (34.09)		4 (33.33%)	
Separated	1 (.57)		0	
Education				
Associate degree	82 (46.59)		3 (25.00%)	
Bachelor degree	80 (45.45)		5 (41.67%)	
Master degree	14 (7.96)		4 (33.33%)	
Professional post				
Nurse	146 (82.95)		11 (91.67%)	
Head nurse	30 (17.05)		1 (8.33%)	
Types of leisure activities				
One	129 (73.30%)		7 (58.33%)	
Two	30 (17.05%)		3 (25.00%)	
Three	13 (7.39%)		2 (16.67%)	
Four	4 (2.26%)		0	

Abbreviation: *SD*, standard deviation.

TABLE 2 Mean scores of variables pre and post leisure activities programme with paired *t* test ($N = 176$)

Variables	Pre test Mean (*SD*)	Post test Mean (*SD*)	Pretestposttest		
			Mean differenceES	*t*	(95% CI)
Total job stressors	71.26 (±16.62)	64.99 (±15.84)	6.27	3.80**	.39 (3.029.53)
Professional and career issues	16.56 (±4.18)	14.72 (±4.12)	1.84	4.19**	.44 (.972.71)
Workload and time pressure	12.41 (±3.71)	11.05 (±3.34)	1.36	3.67**	.39 (.632.09)
Resource and environmental problems	5.41 (±2.06)	5.27 (±1.96)	.14	.66	.07 (−.27.55)
Patient care and interaction	22.75 (±5.74)	20.98 (±5.45)	1.77	3.07**	.32 (.632.90)
Interpersonal relationships and management issues	14.14 (±4.67)	12.97 (±4.39)	1.17	2.65**	.26 (.302.04)
Total perceived stress	25.78 (±6.43)	23.67 (±5.82)	2.10	3.30**	.34 (.843.35)
Perceived distress	12.15 (±4.02)	11.27 (±4.06)	.89	2.14*	.22 (.011.70)
Perceived coping	13.61 (±3.71)	12.40 (±3.51)	1.21	3.18**	.34 (.461.96)
Self-rating anxiety	48.11 (±10.27)	44.14 (±8.78)	3.97	3.76**	.42 (1.896.05)
Self-rating depression	48.13 (±10.70)	45.16 (±9.84)	2.97	2.73**	.29 (.825.11)

Abbreviations: CI, confidence interval; ES, effect sizes; *SD*, standard deviation.
*$p < .05$. **$p < .01$.

opportunities for nurses to recover from stress. Some participants regarded attending the sessions as a good alternative emotional expression, as they enjoyed participating. Different types of leisure activities acted as resources to meet different needs, which aided recovery. For example, the Tai Chi practice promotes physical health, while painting, dancing, cooking and flower arranging enhanced life satisfaction. Photography and learning English may increase their self-confidence.

> I really enjoyed the painting activity, losing track of time, and not worrying about work and family. It feels so good. (Registered nurse 4, female, 42, married, with one child, 23 years of working experience, gynaecology ward)

3.3.2 | Autonomy

When nurses engage in activities of their own will, they were autonomously motivated. This satisfied their intrinsic motivation through the enjoyment of the activity they did, leading to psychological well-being. Group participation promoted individuals' participation in leisure activities, particularly when their leaders, such as head nurses and managers, were involved.

> I like the leisure activity that I participated in. I never felt that it [leisure activity] took up my free time. And if you are interested in the activity, then you won't feel stress all of the time. (Registered nurse 8, female, 25, single, with 4 years of working experience, neonatal intensive care unit)

3.3.3 | Mastery

The programme offered the nurses many learning opportunities and challenges. Mastery is the experience of overcoming a challenge or improving a skill in leisure activities, thereby promoting self-actualization, which, in turn, leads to positive emotions. Some participants expressed concern in terms of professional knowledge, suggesting that some leisure activities groups could be a potential burden for nurses. One nurse suggested:

> We learned a lot of professional skills from flower arrangement. These skills strengthened my confidence. (Registered nurse 9, female, 52, married, with one child, with 34 years of working experience, gynaecology ward)

3.3.4 | Meaning

Engaging in meaningful leisure activities adds purpose to one's life, which helps individuals to cope with difficult situations.

> I didn't have the chance to touch dancing when I was young. However, now we can learn that in our hospital. It fulfilled my dream. And I am so glad to talk about that. (Registered nurse 12, female, 37, married, with two children, with 15 years of working experience, geriatric medical ward)

3.3.5 | Affiliation

Nurses' participation in leisure activities promoted engagement among colleagues. Most nurses stated that they enjoyed socializing during leisure activities sessions and that the social network was helpful in reducing stress. Some nurses said that the programme increased familiarization with their units and the hospital through interpersonal communication, thus enhancing their sense of belonging.

> I am the only male nurse at my unit. When I started working, I was very happy to learn that there are eighty male nurses working at our hospital. We shared our experiences beyond work—such as career planning and the trends of male nurses—through the leisure activities. (Registered nurse 6, male, 36, married, with one child, with 17 years of working experience, operating room)

4 | DISCUSSION

This study evaluated the effects of a group leisure activities intervention on the job stress and psychosocial wellness of Chinese nurses. At the 3-month follow-up, we found that the programme had a significantly favourable effect on job stress, perceived personal stress, self-perceived anxiety and depression. These results substantiate available evidence that participation in leisure activities influences job stress and psychosocial wellness in nurses (Webster et al., 2005). The results also validate Newman et al.'s (2014) psychological mechanisms that linked leisure time to subjective well-being, expanded engagement of all categories of care workers and proposed strategies for quick familiarization with different types of leisure activities.

The programme significantly decreased job stress and perceived personal stress. This finding is consistent with the findings of a Danish national health survey, which found that stress reduction corresponds to involvement in leisure activities (Corazon et al., 2010). The perception that leisure activities improve nurses' stress fits with emerging evidence that leisure activities are generally beneficial in terms of stress management and work outcomes. The benefit could have resulted from the opportunities of being distracted from a stressful environment or the detachment from work-related issues offered by leisure activities (Sonnentag et al., 2017). For example, painting is a leisure activity that might yield positive feelings through detachment from work. Furthermore, the benefit could have resulted from good interpersonal relationships that were achieved through interactive communication. Throughout the programme, participants were encouraged to achieve and maintain good interpersonal relationships. It is possible that engagement in leisure activities with good interpersonal relationships extended their social networks and promoted their affiliation with the organization. This enhanced mutual trust and collaboration among peers leads to stress reduction. Additionally, acquiring cooking, photography and foreign language skills might contribute to an individual's self-confidence by overcoming certain challenges.

Notably, the programme did not significantly improve stress related to resource and environmental issues (e.g., crowded wards, poor work environments and lack of equipment), because participants were nurses who understood that they had little control over those problems (Nantsupawat et al., 2017). However, head nurses also participated in the programme, which might have improved nursing resources and work environments over longer periods.

The programme significantly decreased self-perceived anxiety and depression among participants. This result corresponds with the findings of a previous observational study of 2,264 nurses that showed a positive association between leisure-time physical activity and well-being. A national survey of Portuguese nurses' perceptions of their mental health also reported that nurses who engaged in leisure activities experienced improved mental health (Seabra et al., 2019). Our results support this finding, which suggests the effectiveness of a leisure activity intervention to alleviate anxiety and depression. The participants indicated improved confidence and social interaction; these aspects could act as coping strategies in managing psychosocial factors, leading to decreases in anxiety and depression.

Nurses often work in stressful conditions, which often results in acute and chronic severe stress; this, in turn, may lead to PTSD (Schuster & Dwyer, 2020). The importance of the restorative value of leisure activities is related to enhanced joyfulness, physical vigour, social engagement and cognitive function, as well as a reduction in emotional exhaustion and depression (Chiu et al., 2020). We therefore posit that providing opportunities for leisure activities in hospitals, the most convenient place for nurses to participate, would be beneficial to all frontline nurses. These findings could help hospital managers to find new ways of addressing PTSD among nurses. However, further studies are required to identify the effectiveness of leisure activities on PTSD.

In the view of Newman et al. (2014), participation in leisure activities are linked to subjective well-being (i.e., leisure satisfaction, positive feelings, and negative feelings) through the mechanisms of detachment recovery, autonomy, mastery, meaning and affiliation. These findings can contribute towards explaining why participation in leisure activities decreased nurses' stress, self-perceived anxiety and depression, in this study. Participation in leisure activities provided participants with moments to be away from stressful conditions. They therefore had more time to relieve psychosocial distress and ameliorate negative feelings, contributing to improved psychosocial wellness. Further, participation in leisure activities met nurses' psychological needs. For instance, taking part in the dancing activity with colleagues satisfied their needs for affiliation and detachment relaxation, while photography may have promoted psychological wellness by stimulating the feeling of mastery and autonomy. Considering these findings, understanding nurses' psychological needs and providing opportunities for them to participate in leisure activities that suit their needs may promote nurses' psychosocial wellness.

4.1 | Limitations

Several issues remain for future research on leisure activity interventions. First, this study did not include a control group. It is unclear whether the changes in our participants' perceptions of stress, anxiety and depression were caused by the intervention programme or whether there were other concurrent factors, such as improved workload. A randomized controlled trial should be conducted to examine the effects of this programme on the outcomes. Second, the current study lacks possible standardized implementation, as the leisure activities programme was designed according to Chinese culture, which might jeopardize the generalizability of the results. However, leisure activity interventions satisfying individuals' preferences and settings have been recommended in a previous study (Lee et al., 2018). This study featured a short-term intervention; the long-lasting effects of a leisure activities intervention on stress, self-perceived anxiety and depression still need to be determined.

5 | CONCLUSION

The findings of this study empirically support the hypothesis that participation in leisure activities improves stress and self-perceived anxiety and depression among nurses. The underlying mechanism can be explained by detachment recovery, autonomy, mastery, meaning and affiliation. Taking part in various leisure activities that are suitable for individual interests could potentially be a way of relieving the symptoms of PTSD and enhancing psychosocial wellness and teamwork among nurses; this, in turn, could improve care quality and patient safety.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

A hospital-based leisure activities programme had a significant beneficial effect on job stress, perceived personal stress, self-perceived anxiety and depression among Chinese nurses. Hospital-based group leisure activities are sustainable options for promoting psychosocial wellness among nurses. Investing in providing activities for improving the psychosocial wellness of staff can offer benefits that far outweigh the costs, as nurses' well-being has larger implications for hospitals in terms of decreasing the costs of turnover and increasing patient safety and care quality.

Our findings also have important implications for administrators and managers concerned about the well-being of nurses during the COVID-19 pandemic, where nurses have limited opportunities for leisure activities outside hospitals. Hospital-based leisure activities can serve as a means of facilitating recovery from stressful work. These programmes can be used flexibly by hospital nursing managers to maintain nurses' well-being. For example, flexible work schedules can be arranged to facilitate nurses to follow their passions by actively participating in leisure activities.

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CONFLICT OF INTEREST

None.

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ETHICAL APPROVAL

The Institutional Review Boards of the Second Hospital, Cheeloo College of Medicine, Shandong University approved the study [#KYLL 2019 (LW) 015].

AUTHOR CONTRIBUTIONS

FFC, YLZ, HD, XYW, JPB and XFL made substantial contributions to conception and design. FFC, YLZ and XFL drafted the manuscript or revised it critically for important intellectual content. FFC, YLZ, JPB and XFL were responsible for acquisition of data or analysis and interpretation of data. FFC, YLZ, HD, XYW, JPB and XFL were accountable for the accuracy or integrity of any part of the study. FFC, YLZ, HD, XYW, JPB and XFL gave the final approval of the study to be published.

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

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What relationships can be found between nurses' working life and turnover? A mixed-methods approach

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Abstract

Aim: This study aimed to describe why registered nurses decide to leave their work and to investigate relationships between registered nurses' working life and turnover (leaving the unit vs. leaving the profession).

Background: Much research has explored nurses' intention to leave, whereas less research has looked at turnover and especially leaving the profession.

Methods: Data were collected using questionnaires and interviews.

Results: The three most common reasons for both groups (leaving the profession, $n = 40$; leaving unit but not profession, $n = 256$) were high workload, low salary and applied for and got a new job. Multivariate logistic regression analysis revealed statistically significant relationships between turnover and empowering structures, such as access to resources and informal power as well as the factor learning in thriving.

Conclusions: Structural empowerment, such as good access to resources and informal power, is important to keeping nurses in the profession, whereas learning seems to increase the risk of leaving the profession when variables such as vitality, resources, informal power and age are held constant.

Implications for Nursing Management: To counteract nurses leaving the profession, managers must provide nurses with good access to resources and informal power, such as networks within and outside the organisation, and focus on nurses' vitality.

KEYWORDS
registered nurses, resigning, structural conditions, thriving, turnover

1 | INTRODUCTION

There is a global shortage of nurses (World Health Organization, 2020) and a need to better understand why some nurses leave the profession. Across several studies, about one third of nurses have reported intention to leave their unit or hospital due to job dissatisfaction (e.g., Sasso et al., 2019; Wan et al., 2018), whereas the proportion intending to leave the profession is typically lower (Heinen et al., 2013). Intention to leave, in turn, has been related to actual turnover (Nei et al., 2015). Turnover is sometimes natural (e.g., parental leave and retirement) and even good (e.g., further education and desire to have a broader knowledge base through working at different units), whereas other reasons are less desirable and can be changed, such as workload, salary, management and psychosocial work environment. The present study focuses on why registered nurses (RNs) leave the profession, exploring relationships between

RNs' working life and turnover, measured as leaving the unit but remaining in the profession or leaving the unit and the profession in an attempt to describe why some leave the profession.

2 | BACKGROUND

In a study including 10 European countries (Heinen et al., 2013), 9% of nurses reported their intent to leave the profession and 33% reported their intent to leave their workplace. Figures on actual turnover among nurses vary across studies. One Australian study (Roche et al., 2015) found an annual turnover rate per ward of 15%, whereas a study from New Zealand (North et al., 2013) reported an average annual turnover rate of 44%.

A case–control study (Kerzman et al., 2020) of turnover found that resigning nurses had a higher educational degree, but fewer managerial positions and lower seniority in the hospital compared with remaining nurses. Furthermore, resigning nurses reported lower levels of professional autonomy and higher levels of aspiration for professional advancement (Kerzman et al., 2020). Another study of nurses' actual turnover and personal characteristics found increased likelihood of being single, aged 30 or younger, and ≤3 years of hospital working experience (Dewanto & Wardhani, 2018). Chao and Lu (2020) found that intention to stay was related to actual retention 2 years later; other predictive factors were married, optimization and low emotional exhaustion. A meta-analysis (Nei et al., 2015) of voluntary turnover found that nurses who had worked at the organisation for a longer period, were older and had higher network centrality, higher job control, perceived good leadership (supportive and communicative), higher commitment, job involvement and job satisfaction were less likely to leave. In contrast, turnover was more likely among nurses with greater role tension, job strain, more overtime and shift rotation, and nurses who felt they had other job opportunities, and who had turnover thoughts.

Regarding turnover intentions, relationships have been found with lower relation-oriented leadership, younger age (Fontes et al., 2019), being male (Sasso et al., 2019), burnout or emotional exhaustion (Lee et al., 2020; Sasso et al., 2019), and ethical dilemmas (Hognestad Haaland et al., 2021). Factors found to decrease turnover intentions are good nurse–physician relationship, leadership (Sasso et al., 2019), supervisor support (Hognestad Haaland et al., 2021), work engagement (Wan et al., 2018), meaning of work (Hognestad Haaland et al., 2021), participation in hospital affairs, high job satisfaction, personal accomplishment (Sasso et al., 2019), organizational commitment, higher educational level (Lee et al., 2020) and supportive work practice environment (Lee et al., 2020; Wan et al., 2018). A study of intention to leave the *profession* in 10 European countries found the following relationships: lower odds for good nurse–physician relationships, leadership, participation in hospital affairs, working full time, and female gender and higher odds for older age and burnout (Heinen et al., 2013). Arslan Yürümezoğlu and Kocaman (2019) found that structural empowerment had an indirect effect on intention to leave the profession. In contexts outside health care, turnover intention has been found negatively related to thriving at work (Chang & Busser, 2020; Hafeez, 2019; Kleine et al., 2019). Within nursing research, we have not found any studies on thriving and turnover. Thriving at work is an interesting construct and has been described as a positive psychological state, including both vitality and learning, which enhances staff health and personal development. Thriving at work is thought to be facilitated by decision-making discretion, broad information sharing, performance feedback and a climate that is characterized by civility and promotes diversity (Spreitzer et al., 2012). Within nursing, an increase in lean maturity (the 4P model: philosophy, processes, people and partners, and problem-solving) over time was related to an increase in thriving at work mediated by increased job resources (Kaltenbrunner et al., 2019). Furthermore, thriving has also been found to be a mediator between structural and psychological empowerment together with person-centred care and climate (Silén et al., 2019). A conclusion from a review of thriving at work was that the model could guide managers towards creating a healthy nursing workforce (Moloney et al., 2020). A systematic review (Kleine et al., 2019) of thriving at work (not specific to health care) reported positive associations with antecedents such as supportive co-workers, supportive and empowering leadership, trust and organizational support. Regarding outcomes, thriving was related to, for example, burnout, commitment, job satisfaction, task performance and turnover intention.

In sum, earlier research has shown high turnover rates as well as high rates of intention to leave among nurses. Most research conducted thus far has focused on intention to leave, whereas fewer studies have looked at actual turnover, specifically why some RNs decide to leave the profession. In the present study, we were also interested in constructs that focus on positive psychological states in working life. Thus, the aim of the present study was to describe why RNs decide to leave their work and to investigate relationships between RNs' working life (psychological empowerment, affective job satisfaction, thriving and empowering structures) and turnover (leaving the unit vs. leaving the profession).

3 | METHODS

3.1 | Design

The study had a descriptive correlative design and took a mixed-methods convergent parallel approach, in which interview data were used to illustrate the survey results.

3.2 | Sample

A convenience sample of 907 RNs working in four different hospitals and in primary care were asked to participate. All of them had ended their employment during the period December 2014 to March 2018. The response rate was 40.2% ($n = 365$) after deleting four with missing values for the outcome. Nurses ≥65 years were thereafter

removed, and the remaining sample for the study included 296 nurses. Retirement age for minimum guaranteed pension in Sweden at the time of the study was 65 years, and the mean age for national old-age pension during 2014–2018 ranged from 64.5 to 64.6 years (Swedish Pensions Agency, 2019). Most participants were female ($n = 262$), the mean age was 43 years and 40 reported having left the profession. There were statistically significant differences between the participants leaving their unit and those also leaving the profession with regard to age, work experience as an RN and total work experience in health care (Table 1). A purposive sample of seven nurses who had left the profession were also interviewed. The intention was to interview about 10 nurses, but this was challenging as 18 declined participation in an interview.

3.3 | Data collection

In the survey, data were collected on RNs' background characteristics and reason for leaving their unit; validated instruments, all with good psychometric properties, were used to collect data on nurses' working life. Instruments used were Spreitzer's empowerment scale (Spreitzer, 1995), the Swedish version (Hochwalder & Bergsten Brucefors, 2005), the Brief Index of Affective Job Satisfaction (Thompson & Phua, 2012), the thriving scale (Porath et al., 2012) and, for structural empowerment, the Swedish version (Engström et al., 2011) of the Conditions of Work Effectiveness Questionnaire Version II (Laschinger et al., 2001). For a description of the instruments and factors, see Table 2. The interviews covered questions concerning thoughts on and expectations of the profession (whether they have been met and if not what has been missing), thoughts of leaving the profession and situations crucial to the decision as well as what could have changed the decision.

3.4 | Data analysis

Survey data were analysed using descriptive statistics, Fisher's exact test and logistics regression analysis, IBM SPSS Statistics 24. For relationships between variables, we began with one analysis for each variable, that is, structural empowerment, job satisfaction, thriving and psychological empowerment (included factors or total scale depending on the instrument) as the independent variables and turnover as the dependent variable. All analyses were adjusted for age, as there were statistically significant differences in age between the two groups. Thereafter, the statistically significant variables were included in a final model. Transcribed interview data were analysed by the last author using qualitative inductive content analysis (Patton, 2002). First, the interview texts were read several times to obtain an understanding of the whole. Second, meaning units describing why the nurses left the profession and what they expressed as important aspects in the organisation and for the profession were selected and thereafter condensed. Third, each meaning unit was assigned a code describing its content. Fourth, the codes were compared for similarities and differences, and similar codes were grouped into subthemes. Fifth, similar subthemes were grouped into themes. The analysis process was discussed by the first and last author until consensus was reached.

3.5 | Ethical considerations

The study was approved by the Regional Ethical Review Board (Uppsala Reg. No. 2014/192). Participants received written information about the study and were assured confidentiality. The participants in the interviews gave their written informed consent. For the survey, a returned and completed questionnaire was regarded as consent to participate.

4 | RESULTS

4.1 | Reasons for leaving

In the group leaving the profession, the three most common reasons for leaving were 'too much work with high workload', 'low salary' and 'applied for a new job and got it'. The three most common reasons in the group 'left the unit' were also these three, but in a different order. A higher proportion of participants in the group 'left the profession' had started studying (17.5%; $n = 7/40$) compared with the other group (5.1%; $n = 13/256$), $p = .010$ (Table 3). For the last question, regarding reason for leaving, the responses were open-ended and the results were inductively categorized. The most common reasons in both groups were management, followed by retirement before the

TABLE 1 Participants' characteristics, survey data

	Leaving the profession		All participants	
	Yes ($n = 40$)	No ($n = 256$)	$n = 296$	p value
Gender (female), *n* (%)	34 (85%)	228 (89.1%)	262 (88.5%)	.429[a]
Age (years), mean (SD)	48.6 (13.4)	42.6 (12.2)	43.4 (12.5)	.005[b]
Work experience as a nurse (years), mean (SD)	20.4 (13.7)	13.1 (11.2)	14.0 (11.8)	.004[b]
Total work experience in health care (years), mean (SD)	27.0 (14.4)	19.1 (13.4)	20.2 (13.8)	.001[b]

Abbreviation: SD, standard deviation.
[a]Fisher's exact test.
[b]Independent samples *t* test.

TABLE 2 Survey instruments and descriptions of the constructs and factors

Instruments and dimensions	Description	References
The Psychological Empowerment Scale Response alternatives 7-point Likert scale from 1 to 7	'*Psychological empowerment is defined as a motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact. Together, these four cognitions reflect an active, rather than a passive, orientation to a work role*'	Spreitzer, 1995, p. 1444
• Meaning (3 items, α .85)	'*the value of a work goal or purpose, judged in relation to an individual's own ideals or standards*'	Spreitzer, 1995, p. 1443
• Competence (3 items, α .90)	Belief in oneself in relation to work role '*capability to perform activities with skill*'	
• Self-determination (3 items, α .87)	Sense of autonomy in relation to work role '*autonomy in the initiation and continuation of work behaviors and processes*'	
• Impact (3 items, α .90)	'*the degree to which an individual can influence strategic, administrative, or operating outcomes at work*'	
The Brief Index of Affective Job Satisfaction (4 items, α .76) Response alternatives 5-point Likert scale from 1 to 5	The instrument assesses affective job satisfaction, an individual's overall feeling about the job '*how much people subjectively and emotively like their job as a whole*'	Thompson & Phua, 2012, p. 277
The thriving at work scale Response alternatives ranging from 1 to 7	'*Thriving is defined as the psychological state in which individuals experience both a sense of vitality and learning*'	Porath et al., 2012, p. 250
• Vitality (5 items, α .83)	'*People who are thriving experience growth and momentum marked by both a sense of feeling energized and alive (vitality)*	
• Learning (5 items, α .88)	*and a sense that they are continually improving and getting better at what they do (learning)*'	
Structural empowerment, measured with the Conditions of Work Effectiveness Questionnaire II (CWEQ-II) Response alternatives ranging from 1 to 5	The instrument CWEQ is based on Kanter's Theory of Organizational Empowerment (Kanter, 1993). Structures in the organisation that help the employees to feel empowered	Laschinger et al., 2001; Spence Laschinger et al., 2010
• Opportunities (3 items, α .80)	Access to job conditions with opportunity to learn and grow	
• Information (3 items, α .92)	Access to information about the organisation and work	
• Support (3 items, α .85)	Access to support and feedback about work performance	
• Resources (3 items, α .82)	Access to resources such as time and equipment needed for the work to be done	
• Formal power (3 items, α .70)	A visible and central job in relation to the organisation's goal	
• Informal power (4 items, α .67)	Networks within and outside the organisation that facilitate work	

Note: Cronbach's alpha (α) values in the present study.

age of 65. Looking at participants who responded to the open-ended question ($n = 136$), there were significant differences regarding the reasons management ($p = .050$) and earlier retirement ($p = .003$), with a higher proportion reporting this in the group 'left the profession' than in the other group (Table 4).

The analysis of the interviews revealed four themes that described the reason for leaving the profession: 'preconditions', 'leadership', 'how the work was structured and organized' and 'culture'. The analysis also provided a fifth theme that described the focus on patients and the willingness to help and give care as the most important reason they wanted to become nurses in the first place. For themes, subthemes and examples of quotes, see Table 5. The participants reported that the reason for leaving was the sum of several aspects, where the most frequent could be related to poor preconditions, leadership and how the work was structured and organized. This together with laborious working hours, low wages and the fact they could see no signs of change had finally caused them to leave the profession. A few participants also highlighted the culture on their unit as a problem, indicating they felt a lack of support from their colleagues. At the same time, some participants reported feeling they had support from their colleagues but not from management.

4.2 | Relationships between RNs' working life and turnover (leaving the unit vs. leaving the profession)

In the multivariate analyses of structural empowerment (the included factors), statistically significant relationships were found between

TABLE 3 Reasons for leaving (yes group = left the profession; no group = left the unit but still in the profession)

Reasons for leaving the profession	Yes ($n = 40$)	No ($n = 256$)	All ($n = 296$)	p value[a]
Too much work with high workload	19 (47.5%)	102 (39.8%)	121 (40.9%)	.390
Low salary	13 (32.5%)	122 (47.7%)	135 (45.6%)	.088
Applied for a new job and got it	9 (22.5%)	100 (39.1%)	109 (36.8%)	.052
Bad working hours	8 (20%)	79 (30.9%)	87 (29.4%)	.193
Health reasons	8 (20%)	36 (14.1%)	44 (14.9%)	.340
Unhappy in the workplace	7 (17.5%)	46 (18%)	53 (17.9%)	1.000
Irregular working hours	7 (17.5%)	71 (27.7%)	78 (26.4%)	.246
Started studying	7 (17.5%)	13 (5.1%)	20 (6.8%)	**.010**
Changed place of residence	4 (10%)	30 (11.7%)	34 (11.5%)	1.000
The temporary position ended	1 (2.5%)	1 (0.4%)	2 (0.7%)	.252
Dismissed	0	0	0	
Reorganization	0	6 (2.3%)	6 (2.0%)	1.000

Note: Bold text/figures indicate statistically significant values.
[a]Fisher's exact test.

TABLE 4 Inductively categorized open-ended responses ($n = 136$) regarding reasons for leaving (yes group = left the profession; no group = left the unit but still in the profession)

Reasons for leaving the profession	Yes ($n = 20$)	No ($n = 116$)	All
Management	9	26	35
Retirement (before the age of 65)	8	13	21
Work environment	2	20	22
Other	1	15	16
Travelling to and from the job	0	7	7
Opportunities for development	0	12	12
Salary	0	4	4
Private/family reasons	0	6	6
Working hours	0	6	6
Offered a new job	0	7	7

Note: Fisher's exact test was only tested for the three most common open-ended responses: management, $p = .050$; retirement (before the age of 65), $p = .003$; and work environment, $p = .529$.

turnover and the factors 'resources' ($p = .002$) and 'informal power' ($p = .003$) (Table 6). An increase of one unit in resources decreased the risk of leaving the profession by odds ratio (OR) 0.47, and an increase of one unit in informal power decreased the risk of leaving the profession by OR 0.45, controlling for the other factors and age. In the interviews, the subthemes to the theme preconditions confirm that access to resources is one important aspect of why the nurses left the profession. The interviewees described experiencing the organisation as understaffed and reported having to spend considerable time on administration and the work of other professions, all of which was not related to care. 'Look at what RNs do all day, they sit in front of a computer' (I1). They experienced time constraints and could not give patients as much time as they wished. One nurse said: 'It is terribly unsatisfying when you cannot provide the care you want and give patients the time you want to' (I1). Another nurse said: 'You do not get the time you need to do a good job. In the end you get tired of it' (I5).

For the other factors in structural empowerment and for all factors in psychological empowerment and the total job satisfaction scale, the results were non-significant. This was also clear in the analysis of the interviews. The reason for leaving the profession was not because the nurses did not find their profession satisfying or because they felt they did not have the competence to perform the work. The participants said they were proud of their profession and that the reason they wanted to be a nurse was to make a difference for the patients, to help them and provide care. But their perception was that this was impossible given the circumstances (cf. survey data on workload—question reasons for leaving and the factor resources in structural empowerment). The interviewees who had been in the profession for many years described a change over time in their possibilities to carry out their profession. The conditions for doing a good job were worse today than previously. The participants who had only been in the profession a short period after graduating described that

TABLE 5 Overview of themes, subthemes and examples of quotes describing why the nurses left the profession and what they expressed as important aspects in the organisation and for the profession

Themes	Preconditions		Leadership		How the work was structured and organized		Culture	Focus on patients and the willingness to help and give care
Examples of subthemes	Administration	Resources (low staffing, lack of time, inadequate facilities)	Management's competence	Receptive mangers	Power to change	Hierarchies	Working group	Patient focus
Quotes	The reason you want to be a nurse is to help people in need […]. That's not possible because there's so much with computer records and lots of registers to be filled in.	But you have to stick to the schedule 100% when there are more and more patients and less time. You do not get the time you need to do a good job, instead you have to rush. Then you get tired of it in the end.	It's mostly a matter of a worsening situation with managers who no longer understand what they are managing.	They do not want to acknowledge when good staff members have solutions to problems.	They commission lots of investigations and working groups and you meet and discuss things and then it comes to nothing.	If you work far from the patient, then you are supposed to wear regular clothes with your ID on the side and carrying a folder. Then you are higher up in the hierarchy.	Felt like it was a bit hard to fit in there. It was like 'who are you to come in here and be a little …'. The manager told me later on that there was a certain mentality or culture among the X.	The feeling of those times when you make a difference for someone, I think that's been really fantastic. I mean, what I'm doing for you now, when you get that response and you feel like, 'this really turned out well'. I've liked caring for people.

TABLE 6 Relationships between nurses' working life (independent variables) and turnover (leaving the unit vs. leaving the unit and the profession, dependent variable), one model for each variable/instrument (Models 1–4) and thereafter a final model

Variables	Models adjusted for age[a] Exp(*B*) (95% CI)	*p* values
Model 1		
Psychological empowerment		
Meaning	0.804 (0.598, 1.080)	.147
Competence	0.899 (0.626, 1.290)	.563
Self-determination	1.000 (0.757, 1.322)	1.000
Impact	1.082 (0.834, 1.404)	.551
Model 2		
The Brief Index of Affective Job Satisfaction	0.707 (0.479, 1.044)	.081
Model 3		
Thriving		
Learning	1.649 (1.079, 2.520)	**.021**
Vitality	0.578 (0.392, 0.853)	**.006**
Model 4		
Structural empowerment		
Opportunities	1.003 (0.609, 1.651)	.992
Information	1.218 (0.828, 1.790)	.317
Support	0.877 (0.526, 1.459)	.612
Resources	0.470 (0.293, 0.754)	**.002**
Formal power	1.701 (0.929, 3.115)	.085
Informal power	0.452 (0.270, 0.757)	**.003**
Model 5/final model including significant factors from Models 1–4		
Learning	1.736 (1.125, 2.679)	**.013**
Vitality	0.682 (0.455, 1.023)	.064
Resources	0.545 (0.349, 0.850)	**.007**
Informal power	0.523 (0.327, 0.836)	**.007**

Note: Bold text/figures indicate statistically significant values.
Abbreviation: CI, confidence interval.
[a]Multivariate logistic regression analyses, reference category is leaving the unit and age was controlled for in all models.

working life did not match the expectations they had concerning what one should do in the profession.

From the survey, a higher proportion gave management ($p = .050$) as a reason for leaving in the group 'left the profession' than did in the other group. The interviewees who had left the profession described the organisation as being characterized by top-down management. 'Too many decisions are taken at the top, and they do not understand what things are like farther down in the organization' (I7). They reported feeling the managers did not know the employees or their competences. Top-down management resulted in limited opportunities to have an influence. The participants also pointed out that the managers did not respond to or consider ideas and suggestions for change that came from the employees. One nurse said: 'Early on I started thinking that I'm not going to keep working here if they do not go back and run things like they used to, when they took advantage of the staff and their ideas and opinions' (I2). The management did not ask the staff to help with problem-solving. 'They take things up in their closed management group, and if they cannot solve the problem themselves they bring in a consultant' (I2). This resulted in the feeling of not being seen and not being taken seriously for the competence the participants actually had.

From the survey results on thriving (the included factors), there were statistically significant relationships between turnover and the factors 'learning' ($p = .021$) and 'vitality' ($p = .006$) (Table 6). An increase of one unit in vitality decreased the risk of leaving the profession by OR 0.58, controlling for learning and age, whereas an increase of one unit in learning increased the risk of leaving the profession by OR 1.65, controlling for vitality and age. In the interviews, one nurse said: 'If I do not feel the passion or the calling I have, that I want to help someone, if I feel I could help someone by having a good caring conversation, but I do not have any opportunity to do that, why should I be there?' (I4). Such a statement may be an indication of lack of vitality.

In the final model, including the significant variables and adjusted for age, the results revealed that nurses who scored higher on resources (OR 0.55; $p = .007$) and higher on informal power (OR 0.52; $p = .007$) were more likely not to leave the profession, whereas a higher score on learning (OR 1.7; $p = .013$) increased the risk of leaving the profession (given a fixed value of the other variables; resources, informal power and vitality) (Table 6). The *p* value for omnibus test of the model was $p \leq .001$, and summary Nagelkerke *R* was .183.

5 | DISCUSSION

Our results confirm the importance of empowering structures such as access to resources and informal power. However, they also point out the importance of learning in combination with vitality, that is, if you learn but do not experience vitality, there is a higher risk of turnover in the form of leaving the profession than in the form of leaving the unit but remaining in the profession. In the interviews, the informants who had left the profession also indicated that lack of resources was one of the main reasons for leaving, in combination with management.

The results are in line with the theory of structural empowerment and the model of thriving at work. According to Kanter's (1993) theory of structural empowerment, having good access to resources, information, support and opportunities is of importance to staff well-being and effectiveness. Informal power (alliances/networks within and outside the organisation that facilitate work) and formal power (work that is visible and central in the organisation), in turn, facilitate staff access to the mentioned structures. In our multivariate analysis, access to informal power (networks) and access to resources remained significant. In a meta-analysis (Nei et al., 2015) of turnover, factors such as high network centrality decreased turnover and

factors such as greater role tension, job strain, more overtime and shift rotation increased turnover. In regard to thriving, our results demonstrate the importance of both having a sense of vitality and learning at work, which is in line with Spreitzer's description of a socially embedded model of thriving at work, where learning without vitality, that is, without feelings of aliveness and having energy available, may instead diminish thriving (Spreitzer et al., 2005). And as Porath et al. (2012) (p. 251) wrote: 'If one is learning but feels depleted, thriving suffers'—and this, in turn, hampers development. In our multivariate analysis, learning seemed to increase the risk of leaving the profession when variables such as vitality, resources, informal power and age were held constant. Our results also show that a higher proportion of participants in the group 'left the profession' had started studying compared with those in the other group, which might indicate their need for development and growth. In a case–control study (Kerzman et al., 2020), resigning nurses reported higher levels of aspiration for professional advancement than did remaining nurses. Interviewees who had been RNs for a short period reported that working life did not match their expectations of what they would be doing as nurses. This mismatch might influence their vitality, and thus, it needs to be investigated in future studies. Factors that enable thriving, such as decision-making discretion, may help (Spreitzer et al., 2012), as may leadership styles such as authentic leadership. In our interviews, the participants described how top-down management gave limited opportunities for having an influence. Mortier et al. (2016) found that authentic leadership was positively related to thriving among nurses and that the relationship was mediated by emphatic managers for vitality, but not for learning. Interestingly, positive cognitions towards work role—as measured in psychological empowerment, that is, meaning, competence, self-determination and impact—were not related to turnover (leaving the profession vs. leaving the unit) or the affective feeling of job satisfaction, whereas a sense of thriving at work was. Thus, the combination of continually learning (cf. feeling of competence in psychological empowerment that was non-significant) and vitality (feeling energized and alive), as in thriving, seems to be more important. According to Spreitzer et al. (2012, p. 161), employees today want a job in which they can thrive, because they 'aren't content to be merely satisfied with their work'.

Our results from the open-ended question concerning reasons for leaving reveal a higher proportion reporting management as a reason for leaving in the group 'left the profession' than in the other group. Management and leadership have been found to be related to turnover (Nei et al., 2015) as has intention to leave the profession (Heinen et al., 2013). Furthermore, leadership styles such as empowering leadership, supportive leadership (Kleine et al., 2019) and authentic leadership (Mortier et al., 2016) have been shown to be related to thriving at work. It was clear from the interviews that the reason for leaving the profession was multifaceted, a finding also seen in other interviews covering reasons for staying or leaving (Kerzman et al., 2020). The same reasons for leaving, highlighted in the interviews, can also be found in the survey. For both groups, the three most common reasons were 'too much work with high workload', 'low salary' and 'applied for a new job and got it', and the most common reason found in answers to the open-ended question was management. In the interviews, the participants commented on their reason for leaving the profession as follows: bad management, managers do not listen to staff, high workload, understaffing, top-down management and far too few nurses. Of these reasons, bad management, managers do not listen to staff and top-down management have similarities with antecedents described for thriving at work (Kleine et al., 2019; Spreitzer et al., 2012), and understaffing and far too few nurses constitute a lack of resources (cf. empowering structures) (Spence Laschinger et al., 2010).

6 | METHODOLOGICAL CONSIDERATIONS

Using cross-sectional data and convenience sampling of nurses limit the ability to study cause and effect as well as the generalizability of the results. However, earlier research, the theory of structural empowerment and the socially embedded model of thriving at work support the results, as does the use of validated scales with good psychometric properties.

7 | CONCLUSIONS

Having good access to empowering structures such as resources and informal power (alliances within and outside the organisation that facilitate work) is important to keeping nurses in the profession. On the other hand, when variables such as vitality, resources, informal power and age are held constant, learning seems to increase the risk of leaving the profession. Thus, the positive effects of learning can be negative if feelings of vitality are kept at the same level. These results are also in line the model of thriving at work, which emphasizes the importance of both learning and vitality in healthy organisations. Working with aspects such as resources, informal power and thriving at work may provide an opportunity to get more people to stay in the nursing profession.

8 | IMPLICATIONS FOR NURSING MANAGEMENT

The study adds to the body of positive organizational scholarship, especially new knowledge regarding thriving at work and its relationship with turnover (leaving the profession) among RNs. With global shortage of nurses, high turnover rates and increasing demands on health care, there is a need to focus more on how we can improve positive psychological states among staff and good access to empowering structures. Our results showed that to prevent nurses from leaving the profession, managers should strive to provide staff with good access to empowering structures such as resources and informal power. Informal power, such as networks within and outside the organisation that facilitate the work, may help nurses to perform

their work and feel connected to others and decrease the risk of nurses leaving the profession. In addition, the positive psychological state of thriving at work, that is, having a sense of both learning and vitality (a sense of feeling energized and alive), is essential to staff personal development and growth. However, regarding nurse turnover, learning without a sense of vitality may counteract development and increase the risk of nurses leaving the profession. Learning without an increase in vitality may increase the risk of feeling depleted (Porath et al., 2012). Thus, to increase overall thriving, managers need to strive for increased staff thriving through the antecedents of thriving, which include relational aspects (e.g., supportive colleagues, supportive leadership, empowering leadership, organizational support and trust) (Kleine et al., 2019), decision-making discretion, broad information sharing, feedback and a climate of civility (Porath et al., 2012).

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CONFLICT OF INTERESTS

The authors declare no conflicts of interest.

ETHICS STATEMENT

The study was approved by the Regional Ethical Review Board (Uppsala Reg. No. 2014/192).

AUTHOR CONTRIBUTIONS

All the authors designed the study. M. E. and A. S. analysed the data and wrote the manuscript, which was critically revised by Y. P. and G. M. All the authors read and approved the final version of the manuscript.

DATA AVAILABILITY STATEMENT

The authors elect to not share data due to privacy/ethical restrictions.

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