Global Health Promotion

Health in All Policies: for a healthy and equitable post COVID-19 recovery?

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Health in All Policies (HiAP) is a cross-sectoral approach aiming to strengthen the links between health and other policies. This concept finds its origin in public health initiatives including the Declaration of Alma-Ata (1978), the Ottawa Charter (1986), and public health policies (1988). Promoted by the World Health Organization, HiAP aims to ensure that health, equity, and well-being issues are taken into account when developing policies in all sectors. It promotes understanding by non-health-related sectors of the consequences of their decisions on the determinants of health, and therefore on the determinants that influence the population's state of health and well-being. The main idea is to hold policy makers, in all sectors and at all decision-making levels, accountable for the population's health and health equity (1).

The HiAP is part of a greater desire to place health at the center of society's development objectives and actions. It is based on a common vision and shared objectives between the health sector and other sectors, as well as a win–win strategy to help engage various sectors. All sectors must benefit from it. This approach offers a new role to the health sector: on the one hand, that of supporting the other sectors in achieving their objectives; and, on the other hand, of helping them to understand that these objectives are not without impact on health. The health sector, including health promotion stakeholders, must adopt a truly collaborative approach and its contribution must be seen by other sectors as a real added value.

The COVID-19 pandemic that has hit the entire world since the beginning of 2020 has revealed the fragility of our health system. Governments have focused on reducing viral transmission to drive down hospitalizations in order to protect the healthcare system. From this perspective, response measures to COVID-19 have been taken, affecting the whole of society and requiring collaboration between the health sector and other sectors (2) (for example, the economy, employment, education, transport, security, culture, leisure, etc.). The two years that have passed since the beginning of the health crisis have shown us that the management of this pandemic cannot be the business of a government alone, even less so a health department. It requires a set of stakeholders coming together for a common purpose — to contain the pandemic and manage its negative impacts. As such, we are witnessing unprecedented cross-sectoral collaboration at different levels to deal with COVID-19. The silos in the way many administrations operate have been broken down during this crisis.

Throughout the pandemic, health has been elevated to political and societal levels like never before. It has obtained legitimacy to intervene in the policies and actions of all sectors and at all levels of decision making. The public health response has been a multi-sectoral one. The COVID-19 crisis has highlighted the link between the economy, health, and well-being. Political decision makers have repeatedly reminded us that decision making in this context of health crisis was guided by science and evidence. Everything is scrutinized through the prism of COVID-19.

However, this pandemic has highlighted an exacerbation of pre-existing social and health inequalities. As such, Richard Horton, editor-in-chief of British journal, *The Lancet*, affirmed that two categories of disease interact in the population against the backdrop of a social and economic context marked by profound inequalities: COVID-19 and a certain number of noncommunicable diseases such

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as, for instance, diabetes, cardiovascular diseases, chronic respiratory diseases, and cancers. In Horton's view, this context aggravates the effects of each disease, and he therefore considers that COVID-19 is not a pandemic but a syndemic (3).

It would be a mistake to think that the COVID-19 pandemic is only a health crisis linked to infection by the virus. Admittedly, this infection had a direct effect on the health of the population, but its repercussions, like the measures taken to stop the spread of the virus, affected individuals differently depending on, among other things, their socioeconomic status. A social divide has been created between people who have the possibility of respecting the lockdown measures and the others, due in particular to their socioeconomic profile, housing conditions, type of job, age, gender, etc.

Significant sums have been invested by governments to deal with the health crisis. The pressure will be significant for post-COVID-19 recovery, particularly in terms of the economy to balance budgets. And in this context, cross-sectoral approaches such as HiAP will be very relevant to address the long-term impacts of this pandemic on health, mental health, and inequalities, and to ensure a recovery that is not only focused on the economy but which places health and well-being at the heart of its efforts. The same is true for health impact assessment (HIA), which has been identified on several occasions as one of the tools capable of promoting and enabling the implementation of the HiAP concept. HIA enables systematic consideration of health concerns in decision making. This tool has been used during the COVID-19 pandemic in several countries, such as Wales (4), Scotland (5), and Austria (6), to assess the impacts of COVID-19 response measures taken in the context of a health emergency on the health of the population. HIA is therefore a tool that could be useful to decision makers to predict the potential future effects of post-COVID-19 recovery policies on the health and well-being of the population, and to identify actions to minimize the negative effects and maximize the positive effects of these policies before they are implemented (7).

COVID-19 has highlighted the importance of having a strong health system and the need for cross-sectoral collaboration to protect the population's health and promote equity. For post-COVID-19 recovery, we should move from a logic of health protection to a logic of prevention and health promotion in all policies. In addition, the question that arises is the maintenance of the various cross-sectoral collaborations initiated during the crisis. From this perspective, research should focus on studying the cross-sectoral approaches mobilized during the pandemic, and analyzing the sustainability of these for post-COVID-19 management.

We must also not forget that before this health crisis, we had the climate crisis and that of noncommunicable diseases, the risk factors of which are linked to, among other things, our way of life and our environment. These crises will remain after COVID-19, and cross-sectoral approaches such as HiAP (8) are effective ways to deal with these complex issues and better prepare for managing future crises. We must draw upon the lessons learned during this crisis in terms of cross-sectoral collaboration, and maintain the momentum of this collaboration at government level to rebuild society for the better. This will be a major challenge for the health sector, including researchers and health promotion practitioners, but we must seize the opportunity offered by the COVID-19 pandemic to try to achieve it.

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Tackling social inequalities in health: acceptability and feasibility of a systematic approach toward health impact assessment of urban projects

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Abstract:
Introduction: The general objective of this research project was to explore the feasibility and acceptability of an original method intended to systematically identify urban planning projects whose potential impacts on health and social inequalities in health (SIH) would be most damaging. An approach based on a short meeting and a tool would help to discuss whether or not to engage in a more comprehensive health impact assessment.
Methods: A tool was developed by the research team based on various tools reported in the literature and modified with urban planners. Meetings were organized for each development project with the volunteer planners, who were working on the projects selected. Reviews of six projects at different stages of design made it possible to assess the acceptability and feasibility of this approach to identify public health and social equity issues in health.
Results: The process and the use of the tool were found to be feasible. The tool was easily understandable, adapted to the practices of planners and usable without real training other than a quick introduction to tool usage. It was also found to be acceptable. Despite an interest in the inclusion of SIH, the integration of the relationship between SIH and urban development was not easy for most of the urban planners.
Conclusion: This exploratory work suggests that a systematic approach to assessing the impact of urban projects on health and SIH is feasible and acceptable. Dealing with SIH was not found to be easy by the urban planners.

Keywords: determinants of health, health impact assessment, healthy cities/healthy communities, participation, public health, socio-economic status, urban planning/urban health/urbanization

Introduction

Social inequalities in health (SIH) are increasing in most countries (1). Beyond individual behaviours, these inequalities are rooted in the 'causes of causes' (2), in the ways in which society and its environment shape the health of individuals, as early as in intra-uterine life, and accumulate throughout life (3). Urban planning policies are likely to have major impacts on health and health inequalities (4,5). However, research to improve knowledge of interventions and policies that have an impact on population health and to reduce SIH remains limited. Among these interventions, Health Impact Assessment (HIA) is an interesting strategy for primary prevention and control of SIH.

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The International Association of Impact Assessement defines HIA as a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, programme or project on the health of a population and the distribution of those effects within the population (6). This approach may lead to the modification of social determinants of health in territorial projects that do not have health as their primary initial objective (4,5,7,8). It is a decision support tool aimed at improving the health of populations and health equity from a 'health in all policies' perspective (9). HIA thus enables action on social determinants and includes the engagement of the population in the decision-making process (2,10).

While HIA is particularly useful for addressing health and SIH, several limitations have been identified. It is often considered time-consuming, needing significant budgetary mobilization, and thus often perceived as too cumbersome to be used systematically (11). Urban planning projects have a major potential impact on health and SIH, but given their number, it is impossible to perform an HIA for each of them. In order to expect a real benefit from such an approach in terms of public health, it thus seems relevant to develop a systematic strategy capable of rapidly detecting development projects that have potential impact on health and SIH which would require further analysis by a more in-depth HIA. For such a systematic approach to be used routinely, it should be quick, require limited resources, and be based on a methodology easily understandable and appropriate for non-public health experts (11). Practice standards of HIA include five steps: screening, scoping, assessment, recommendations and monitoring (6). These steps take place after the decision has been made to consider a HIA, regardless of the reason. Tools have been developed with this goal (12,13). Our approach adds a preliminary step, addressing any urban project, in order to detect a project which could potentially require a HIA. The term 'screening' could apply to this approach since the idea is to screen any urban project in an exhaustive way. However, this word has been used with another meaning in the HIA literature. For this reason, we will use the word 'detection'. Another goal of our approach is to introduce among urban planners and elected representatives the concepts of health in all policies and promote the idea that urbanism is involved in creating, perpetuating and possibly reducing SIH.

Although it lies at the heart of their values, the consideration of equity does not appear systematic in HIAs. Already in the 2000s, equity was 'an aspiration rather than a reality' (14), despite the potential of HIAs (15). Specific approaches are needed to effectively address the differential impacts of territorial policies and projects on health and SIH (16) such as the Equity-Focused Health Impact Assessment (EFHIA) (14) or rapid equity-focused HIA experiments (17,18). Some tools quickly identify impacts on health inequities, but have difficulty distinguishing between different categories of populations or quantifying the impacts (16). Thus, only a limited number of projects have been analyzed in terms of their impact on SIH (18).

The project presented here is based on the following assumptions: systematic examination of urban development projects, in order to identify the need for a more in-depth implementation of equity-based HIA, would improve population health and reduce SIH; short processes and co-built tools would improve the acceptability and feasibility of this approach by elected representatives and developers; introducing a focus on health equity at all stages of the analysis would enhance the impact of HIA in terms of SIH reduction.

The general goal of this research project is therefore to explore the feasibility and acceptability of an original process, called URBAN-ISS, intended to examine urban planning projects, in a systematic way, as a method to detect those requiring an HIA. This approach is based on gathering together stakeholders for short meetings (urban planners, public health professionals, elected representatives, residents, users, etc.). During these short meetings, stakeholders discuss the project with the help of a tool. This provides both a checklist of potential health problems and an appraisal of the potential impact on SIH.

Methods

This approach was initiated following an innovative collaboration between a research team (Institut Fédératif d'Etudes et de Recherche Santé Société, IFERISS) and the Toulouse urban planning agency (Agence d'Urbanisme et d'Aménagement de

Toulouse Aire métropolitaine, AUAT). The goal was to assess the feasibility and acceptability of an approach based on the systematic examination of any urban project by urban stakeholders, using a co-built tool.

The URBAN-ISS process

The meetings

For each urban project, meetings are organized with the volunteer urban planners who piloted and/or worked on the projects selected. The meetings are held systematically at the headquarters of each of their institutions. The duration announced is from 1.5 to 2 hours. Each meeting is guided by one or more members of the research team. These working meetings follow an introductory collective meeting that is co-hosted by the research team and the planning agency and which makes it possible to present the objectives of the intervention research project and to answer questions, both on the content and the organization of the 'test' meetings.

The tool

A tool for examining urban development projects was developed by the research team. The main objective of this tool was to contribute to identifying projects that have potential effects on health and SIH determinants and may require a subsequent HIA process. The proposed tool which was tested is the result of a co-construction between researchers and urban planners. The latter were invited to comment, question, modify or clarify the first version of the tool, so that it could be understandable and relevant to both urban and public health professionals.

This tool is presented in an easily accessible digital format (spreadsheet). It is organized around some 20 issues related to the social determinants of health impacted by urbanism, such as food, physical activity, water quality, social diversity, accessibility, etc., as described in the social determinants of the health model (19). Examples are provided to facilitate reflection and exchange with urban stakeholders. For each question, space is left for the users to transcribe vigilance points about public health to address collectively and are important to keep for later consultation. In order to show possible SIH, this tool offers assessment of potential impact on different social groups (affluent populations, upper middle class, lower middle class, modest income), which are chosen to highlight the potential existence of a social gradient (19). This gradient would exist if the project had more health consequences among the poorer populations than others (or the reverse). This categorization is based on relative differences and is expressed in five categories, from a very negative to a very positive effect. It is intended to be adapted to the knowledge of urban planners and to facilitate awareness of the existence of SIH. The list of questions is provided in Table 1. The examples given to explain the questions are not included. The complete tool (Creative Commons BY-NC-SA) can be sent on request.

The spreadsheet format allows users to generate an automatic report once it has been filled in. Following the responses to each question, a message recommending whether or not to pay attention to specific populations or to engage in an HIA is generated automatically. A graphic is generated to depict the differentiated impact of the project on the different population groups. However, this tool is not intended to produce a score or epidemiological data, but to be used as an alert on the most impacted social determinants.

Assessment of feasibility and acceptability

Working meetings related to projects discussed and testing with urban professionals with regards to the tool were systematically recorded. All suggested changes, comments and clarifications to the tool were noted. Additional interviews with professionals were recorded.

By making it possible to assess the process and the level of participation and involvement in the tool test approach, these elements form the basis for assessing the acceptability of the approach and the proposed tool. The critical analysis issued by the planners during the meetings, the questions raised about their own practices and the changes proposed, as rendered by these recordings, also allow the feasibility of the approach to be assessed. Reviewing six projects at different stages of design made it possible to judge the ability of the tool to identify public health and social equity in health issues. Such reviews also evaluated need for complementary HIA.

Table 1. The items of the URBAN-ISS tool for identifying projects that may warrant a health impact assessment.[a]

Individual behaviours
1. What impact will the project have on how people feed themselves?
2. What impact will it have on people's ability to exercise?
Specific populations and populations
3. What impact can the project have on social isolation?
Social determinants and social support
4. What impact can the project have on citizen participation/decision-making or involvement in community life?
5. What impact can the project have on early childhood care?
6. Does the project promote 'living together'?
Cultural offers and access to employment
7. What impact does the project have on people's access to a public school (free)?
8. What impact does it have on the access (distance, offer) people have to cultural places such as clubs and organizations, artistic workshops, cinema, theatre)?
9. What impact does it have on access to employment (distances and offers from the neighbourhood or from neighbourhoods nearby)?
Access to health professionals
10. What impact does the project have on access to primary health care professionals?
11. What impact does it have on access to pharmacies?
Public space
12. Does the project facilitate the use of public space (green spaces, benches, games for children, accessibility of biking/strips, pedestrian areas, illuminated spaces, etc.)?
13. Does the project design space to foster a sense of security?
14. What impact does it have on access to public transportation?
15. Does the project expose people to noise pollution?
Physical environment
16. Does the project expose people to deteriorated outdoor air quality?
17. Does the project expose people to deteriorated indoor air quality?
18. Does the project expose populations to degraded soil quality?
19. Does the project expose populations to degraded water quality?
20. Does the project expose people to urban heat islands? (Can be existing ones or those potentially created by the project.)
Accommodation
21. Does the project facilitate access to housing for all?
Positive or negative externalities to the project
22. Can the project have an impact on populations outside the project?

[a]For each question, examples are provided to clarify them. An answer to each question is required for each subgroup of the population, in order to assess social inequalities resulting from the project.

Table 2. List of projects included in the study.

Projects	*Type of project*	*Project outline*	*Geographic area*
Project 1	OAP	Subdivision with building lots, semi-detached houses and collective housing (social housing)	Less than 5000 inhabitants
Project 2	ZAC	Project over 15 years. Mixed housing Sports complexes Services	Around 25,000 inhabitants
Project 3	PRU	Neighbourhood renovation Recentralization	More than 100,000 inhabitants
Project 4	ZAC	Rental housing and home ownership Social housing Services	More than 100,000 inhabitants
Project 5	ZAC	Green spaces Rental housing and home ownership Social housing Cultural services Services Road infrastructure	Less than 10,000 inhabitants
Project 6	Plan guide	Renovation of the city centre	Less than 10,000 inhabitants

OAP: Operation d'Amenagement et de Programmation; ZAC: Zone d'Aménagement Concerté; PRU: Projet de Rénovation Urbaine.

Selection of research sites

The development projects were selected based on two criteria: the project leader had to be willing to participate and the proposed project had to be at a sufficiently advanced stage for its characteristics to be known, but not implemented, leaving some room for modification.

In France, the definition and implementation of major urban planning guidelines is ensured at the local level. These guidelines are specified in the urban planning documents (at municipal, intercommunal or supracommunal level), which guide the various development projects in the territories. The urban design and implementation of these development projects by communities take different forms. The 'Operation d'Amenagement et de Programmation' (OAP) (planning and programming guidelines) are operational planning arrangements, which are mandatory in the local planning plan, and are intended to define spatial planning intentions in a given sector. The Zones d'Aménagement Concertée (ZAC) are public planning operations with the objective of controlling the development and equipment of building land for the purpose of transferring them to public or private users. The 'Projets de Rénovation Urbaine' (PRU) are urban renewal projects. Three ZACs, one OAP and one PRU were included in the tool test process (Table 2).

Results

Feasibility

Although some reluctance and scepticism were sometimes expressed, no refusal to participate in the research programme was recorded among those contacted. The tool was tested on diverse projects at different stages of design advancement. The meetings lasted from 1 to 1.5 hours, depending on the projects and the wealth of discussion. All meetings were completed without noticeable difficulty. 'An hour is acceptable in a schedule for a 10-year project; it can be considered' (Mrs E, urban planner). The tool thus seems to comply with the criteria of feasibility, namely in that it is practical, easily comprehensible, adapted to the practices of urban planners and usable without real training other than a quick introduction. On the other hand, introductory

training on the connections between urban planning and public health appears necessary in order to facilitate understanding of the issues and detailed reflection on urban projects. A fact sheet on this topic was distributed to planners at the informational meeting. However, some require more training or information, depending on the level of awareness of urban actors about public health and the link between public health and urban planning for both urban and public health professionals. On two occasions, urban planners to whom the tool had been presented decided to use it on a project without the presence of researchers. Involved in a first test, they wanted to use the tool in a step further upstream in the urban planning process and include it in a multicriterial analysis before defining areas which could be urbanized. They tested the utility of the tool to identify gaps in the territorial diagnostic and the concepts of urban projects.

Acceptability

General approach

Overall, among the urban planners involved in this project, a curiosity and an interest in talking about health in relation to the city planning were observed. The process was described as 'original'. The discussions it provokes on projects and the opportunity to gather urban and public health professionals who are not used to working together are appreciated: 'It prompts exchanges and questioning ... there is a brainstorming aspect' (Mrs A, urban project manager); 'It allows you to meet people you don't usually work with' (Mr H, public health partner). Opportunities for reflection on projects were highlighted by participants: 'It always allows for a step back from the projects, at a time when you typically keep your nose to the grindstone'; 'Yes, it can allow us to get perspective on the project' (Mrs E, urban planner). Urban planners also recognize in the process an opportunity for exchange on urban planning and health, and a different way of designing urban planning, gathering worlds that are not used to working together: 'The tool brings together two different worlds': a world called 'binary' — that of the urban planner — and 'the world of more societal issues — health promotion — which do not give a precise answer' (Mr H, public health partner).

While some developers (two out of six projects) were doubtful, even suspicious, of the research during the initial contact and the detecting meeting due to an a priori reluctance to academic research ('I would like to be really free to tell you what we think about your questionnaire...' (Mr G, urban project manager)), they nevertheless contributed to the construction of the tool ('This question is artificial in the sense that it does not correspond to the way projects are carried out' (Mrs A, urban project manager)). All of them were strong proponents and did not hesitate to correct and add questions. Some topics were questioned more than others, including feelings of security, women in public spaces and urban heat islands ('There's a missing question about security for women, I think' (Mr R, urban project manager)). One topic might ask, 'Does the project design spaces so that they foster a sense of security?' An example of a correction might be: 'Sense of security perceived by women, children, parents. Facilities that make you feel safer...' (Mrs N, urban planner).

The link between health and urban planning

Urban developers are aware of the link between health and urban planning and the challenge it represents in the development phase. However, for the majority of them, health is mainly affected by the physico-chemical environment and architectural approach. 'There are a number of public initiatives for environmental openness. We will say that there is a certain bridge with health issues', 'When you talk about health, there are connections with environmental issues that are fairly obvious', 'The architectural and construction approach, in my opinion, has such a strong influence, with respect to health, we produce health' (Mr R, urban project manager). Others see the proposed approach as an interesting way to create or strengthen legitimacy for working on health and SIH and to improve their practices in urban project development: 'You can get some perspective, you get a view of everything' (Mrs E, urban planner). However, participants highlighted the difficulties in integrating health and urban approaches into their practices, as they add new steps and new constraints: 'Some of my colleagues do not dare tell developers that they want to initiate this health process' (Mrs G, urban planner). Others

highlight their working conditions; urban planners face a variety of constraints, including time, financial concerns and policy that limit the translation of certain findings or the awareness of the potential impact of the project on health. 'None of these questions are ones that you don't ask when you think about a project. But even if we thought about it, maybe the answer to these questions is no' (Mrs A, urban project manager). Some participants underline the fact that, in the years following the design of a district, the reality of uses might differ from what was planned.

The relationship between social inequalities in health and urban development

Despite a certain interest in the inclusion of SIH, their integration in the design of urban planning was not easy for all the urban planners interviewed. 'It's interesting, we don't usually work from this angle of Inequality' (Mrs G, urban planner). On several occasions, the debate was limited and planners, uncomfortable with this approach, left it to the researchers to assess the differentiated impact: 'Go ahead and write down what you like. I don't know, it's not obvious to me' (Mr C, urban project manager). On the six observed sites, only half of the urban planners started thinking about the differentiated impact. The other half, while interested, failed to assess it, claiming that it was not among their skills. 'I fully understand the relevance and challenges of this differentiated approach, but I am not able to answer that' (Mrs A, urban project manager). A few of the participants thought that the inhabitants of the area should be involved in the health assessment process.

Discussion

This pilot project suggests the feasibility and acceptability of an original approach aimed at detecting urban projects in a systematic way in order to discuss those that would need an HIA, and concerning SIH as well as health. The whole process, including the meeting, did not last more than 1.5 hours in the six projects tested. In the opinion of the urban planners, finding a little over an hour to assess the need for a more in-depth assessment of a possible health impact is entirely possible and suggests the feasibility of the exercise. The process was also acceptable to urban planners. Deepening their thinking about the link between cities and health seemed natural for most, even though they acknowledged some gaps in their own public health competence. In contrast, the inclusion of SIH appeared to be a problem that did not concern them and was too difficult for them to manage. Another set of constraints mentioned were those arising from the entire regulatory, financial and land-related framework that could contradict the desire to take health into account. The urban planners underlined the constraints that did not allow for investigation of all impacts, as would be needed.

The tool does not produce a score and has no epidemiological value. The important thing is that the relative scale chosen shows potential differences between groups of population, revealing a gradient, based on social criteria with which urban developers are familiar, whether these criteria are income, quality of housing or level of education. The tool was conceived to be meaningful for health and urban sectors. The latter were able to identify sensitive issues and use the result of the meeting to discuss further with urban professionals, health professionals and decision-makers. The tool allows for more relevant selection of HIA candidates in urban development projects, thus becoming a decision support tool.

However, some limitations must be discussed. Funded as a pilot project, the tool was tested on only six research projects. Its acceptability has been observed in a reduced sample of projects, with a small group of volunteer project leaders, within the limits of a large French metropolis. One condition for the initiation of this approach was a strong partnership between urban and health stakeholders. A lack of perceived legitimacy in talking about health was expressed by urban actors even though the connections between urban planning and health are known in the profession. On the other hand, it was difficult to include health professionals in the project. Their inclusion in these efforts remains a real challenge.

Addressing SIH was the main obstacle encountered in this approach. The issue of health is well understood through exposure to the physico-chemical environment. In contrast, the concepts and type of intervention for reducing SIH were not

perceived as being under their responsibility for most of the urban planners. In our sample of participants, those who fed the discussions on SIH had an academic background in sociology and/or had worked on poor neighbourhood projects. This seems to show that the multidisciplinary training of urban planners is a key factor to introduce health and SIH as relevant issues in urban planning.

Screening tools have been developed by other teams. After an extensive review, the partners of a European project (EURO-URHIS2) concluded that none of the HIA screening tools met the criteria they had defined for such a tool. Therefore, they developed a tool (UrHIST) to be used for screening (12,13). This tool shares with our tool the goal of being easy to use and meaningful for health and urban professionals, as well as being based on the social determinants of health conceptual background (19). It is suggested by the authors that this tool might act as a light HIA. It differs from our approach, which is characterized by being systematic and in order to provide a rapid assessment regarding the necessity or not to perform an HIA. We tried in designing the URBAN-ISS tool to make it as explicit as possible in its description and in giving examples (not shown in Table 1). In addition, we tried to figure the social gradient, using more than one vulnerable group, but suggesting through a graph on the results of the tool, the increasing impact of the urban project with decreasing resources of the social groups of the population, in case of an impact on SIH. Explaining and showing how SIH have their roots in the cities was part of our project.

The links between health and urban conditions of living has been shown repeatedly (4). The health and economic value of investing in housing and providing shelter to homeless people rather than funding them for the care they receive given their poor health status has been shown (20,21). But the inability to transfer a health budget to a habitat budget limits the value of these approaches (20). It has been shown that the costs of urban renewal are largely offset by the savings, including in the use of health services (21). Reducing SIH has to take into account two mechanisms: differential exposure and the greater vulnerability of socially disadvantaged groups to environmental factors (22). Exposure to environmental risk factors differs according to the socio-economic status of resident populations, the lower social categories being more exposed. In a Danish study, the risk of stroke in people over 65 years of age increases with residential exposure to road traffic noise (23). A recent study in 16 European cities shows that residents of neighbourhoods most affected by unemployment are most exposed to nitrogen dioxide (24). Even where people from more disadvantaged social backgrounds live in less risk-prone areas, the health consequences of this exposure remain more pronounced than in those from more favoured areas (22). While the ease of access to green spaces reduces mortality across all social classes, this risk remains significantly higher for the most disadvantaged social groups (25).

Conclusion

This first exploratory work suggests that a systematic approach to assessing the impact of urban projects on health and SIH is feasible and acceptable. Other questions remain, in particular the question of the involvement of citizens in the use of the results. Indeed, empowerment of populations is an essential element of HIA, and for some authors, the process is as important as the outcome (5,8,10). In the long term, it may be necessary to review the results of initial findings in the light of the actual uses of spaces by people over the years. A project with a priori positive impact may evolve throughout the years and change to have a negative impact.

This type of approach is all the more necessary now that cities must face the challenge of climate change. There is a major risk of worsening health and SIH issues in this context. The worlds of health and urban planning will have the task of making it possible to design resilient cities. Particular attention should be paid to social impacts, since the ability to adapt to changing risks will likely depend on each person's socio-economic resources and might increase SIH.

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Health services, intersectoriality and social control: a comparative study on a conditional income transfer program

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Abstract: The Bolsa Família Program (BFP) is one of the largest conditional cash transfer programs in the world, providing cash transfers and intersectoral actions. The aim of this study was to compare whether there is a difference in access to health services, intersectoral actions and social control, between families entitled or not, to the BFP. A cross-sectional study was carried out. A representative sample of a peripheral, socioeconomically vulnerable population from a large urban center in southeastern Brazil was calculated, totaling 380 families. Chi-square or Fisher's exact tests and multiple correspondence analysis were used to compare groups. Families entitled to the BFP had worse living conditions in general and greater access to health services, such as: medical care (p-value 0.009), community healthcare agent (p-value 0.001) and home visits (p-value 0.041). Being entitled or not affected the variability in the pattern of access to services by 31%; low access to intersectoral actions was identified in both groups; social control was incipient. There was an adequate focus on the program; greater access to health services was related to compliance with conditionalities; low access to intersectoral actions can restrict the interruption of the cycle of intergenerational transmission of poverty.

Keywords: Bolsa Família Program, nutrition programs and policies, conditional cash transfer, intersectoral collaboration, public policy

Introduction

Conditional cash transfer programs (CCTPs) have been adopted in countless developing countries over the last decades and aim to fight poverty and social inequalities through direct cash transfer and access to universal public policies, particularly health, education and work, on a conditional basis, to receive cash transfers (1).

Among the impacts of CCTPs around the world, the literature reports a reduction of income inequalities (2), improvement in the nutritional status and reduction of child labor (3), increase in use of health services (4), a significant reduction in chronic malnutrition (5), reduction in maternal mortality (6), and increase in education (7), among others.

In Brazil, the Bolsa Família Program (BFP), established in 2003, is the largest CCTP in the world and the one that requires most of the monetary resources destined to the Política Nacional de Segurança Alimentar e Nutricional (National Food and Nutritional Security Policy, PNSAN) (8).

In parallel to the monetary resource intended for families in situations of poverty and extreme poverty, the Program provides access to health and education

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services in the form of conditionalities, in addition to intersectoral actions to be agreed upon by the municipal administrations of these two sectors and the social assistance sector. Thus, the design of the BFP endeavors to interrupt the typical fragmentation of Brazilian assistance public policies (9).

Intersectoriality is understood as a process of combining knowledge and practice of subjects, groups and sectors for the development of shared interventions, establishing links, co-responsibility and co-management for common objectives (10–12). Although intersectoriality is a theme for reflection in different fields of knowledge, its applicability is unclear (11,13).

Among the effects of the BFP is the increased use of primary healthcare services, especially those related to the fulfillment of health conditionalities (odds ratio (OR) = 3.1; 95% confidence intervals (CI) 1.9–5.1 (14)). Consequently, there has been a decrease in the post-neonatal infant mortality rate (when BFP coverage was 60%, predicted post-neonatal infant mortality was 1.38) (15) and in the children under five years old rate, whose death was related to poverty and malnutrition (relative risk (RR) 0.35; CI 95% 0.24–0.50) (16). Neves *et al.* (17) identified, in a literature review, that the BFP is a potent intersectoral policy for reducing inequities; however, the interruption of an intergenerational cycle of poverty was not observed. In turn, there are few records in the literature on intersectoral actions in the context of the CCTP and the BFP, more precisely, although it is recognized that more promising results can be obtained if the actions of the Program go beyond those predicted by the conditionalities (14).

The aim of this study was to analyze and compare whether or not there is a difference in being entitled to the BFP regarding access to health services, intersectoral actions and the identification of social control mechanisms between families entitled to the BFP and those not entitled to BFP, in a suburban region of a large urban center in Southeastern Brazil.

Method

This is a cross-sectional comparative study, conducted in 2017 with families entitled and not entitled to the BFP. It was carried out in a region with high levels of social vulnerability in an urban center in southeastern Brazil, which contains the largest portion of families entitled to the BFP in the municipality (18).

A sampling procedure was used to define and select the study population, that is, families entitled or not to the BFP, using a test power (β) of 95% and a significance level (α) of 5% (19). A representative sample of the population was obtained, consisting of 380 families, of which 190 families were entitled to the BFP and 190 families were not. The two groups of the study share sociodemographic characteristics and access to public services.

Interviews were conducted with the population using semi-structured questionnaires divided into the following stages: (a) identification of the interviewee; (b) socioeconomic profile; (c) access to services and participation in the actions of the region; (d) social control; and (e) intersectoral actions. The interviews were conducted by professionals trained in the use of such instruments. The interviewed population signed a free and informed consent form and the collected data were organized and validated by double typing in Excel spreadsheets.

A simple descriptive analysis of the data was performed. Chi-square test or Fisher's exact test were used to compare regular and non-regular families in relation to socioeconomic variables, social control mechanisms and access to intersectoral actions in the region. The level of significance was set at 5% ($p = 0.05$).

To investigate the behavior of the variable group (families entitled or not to the BFP) with those whose statistical significance was verified, multiple correspondence analysis (MCA) was performed, which is a multivariate technique for exploratory analysis of categorized data. The data were analyzed using the R software, with the FactoMineR package (20).

The study was approved by the Research Ethics Committee of Federal University of São Paulo (process no. 2.351.259).

Results

Data from 380 families from the suburb of a large urban center in southeastern Brazil were analyzed, of which 190 families were entitled to the BFP and 190 were not; all respondents were women, with a mean age of 33 and 31 years, respectively. The

average income of BFP family members was R$592.12 and the average income transfer was R$186.89. Families not entitled to the BFP had an average income of R$1977.37 ($p = 0.001$).

Most of the families not entitled to the BFP were married or were in a stable relationship ($p = 0.002$). The number of children was higher among families entitled to the BFP ($p = 0.001$). Most families not entitled lived in brick houses ($p = 0.001$) (Table 1). They had more access to public infrastructure services, with statistical significance for the following variables: water supply by urban network ($p = 0.001$), public lighting ($p = 0.001$), garbage collection ($p = 0.049$) and bathroom at home ($p = 0.024$).

Access to secondary education was also greater among families not entitled to the BFP ($p = 0.001$). Regarding the work relationships of families entitled to the BFP, self-employment without formal employment was more common; among families not entitled, wage labor with formal contract was frequent ($p = 0.001$).

Routine consultations were more frequently accessed by families not entitled to the BFP ($p = 0.001$). In turn, healthcare provided by a doctor, nutritionist and community healthcare agent (CHA) prevailed among families entitled to the BFP. Similarly, children's immunization and home visits were more frequent, as shown in Table 2.

Table 1. Sociodemographic characteristics of family members entitled or not to the Bolsa Família Program (BFP) ($n = 380$) from a suburban area in a large urban center in Southeastern Brazil, 2017.

Characteristics	*Entitled to BFP*				*p-value*[a]
	Yes		*No*		
	n	%	*n*	%	
Marital status					
Married/stable relationship/lives together	80	42.1	114	60	0.002
Single	75	39.5	55	28.9	
Separated/divorced/widowed	35	18.4	21	11.1	
Number of children					
One	35	18.6	87	49.7	0.001
Two	42	22.3	40	22.9	
Three	64	34	25	14.3	
Four	27	14.4	12	6.9	
Five or more	20	10.6	11	6.3	
Habitation					
Finished masonry house	82	43.2	133	70	0.001
Unfinished masonry house	54	28.4	37	19.5	
Wooden house	28	14.7	7	3.7	
Rudimentary house	26	13.7	13	6.8	
General water supply network					
Yes	120	63.2	158	83.2	0.001
No	70	36.8	32	16.8	
Public lighting					
Yes	122	64.2	165	86.8	0.001
No	68	35.8	25	13.2	
Sewage system					
Yes	144	75.8	158	83.2	0.099
No	46	24.2	32	16.8	

(Continued)

Table 1. (Continued)

Characteristics	*Entitled to BFP*				*p-value*[a]
	Yes		*No*		
	n	%	*n*	%	
Garbage collection system					
Yes	158	83.2	172	90.5	0.049
No	32	16.8	18	9.5	
Home bathroom					
Yes	179	94.2	188	98.9	0.024
No	11	5.8	2	1.1	
Schooling					
Incomplete elementary school	71	37.4	33	17.4	0.001
Elementary school	21	11.1	20	10.5	
Incomplete high school	38	20.0	39	20.5	
High school	56	29.5	79	41.6	
Incomplete higher education	1	0.5	5	2.6	
University education	3	1.6	14	7.4	
Employment					
Yes	90	47.4	105	55.3	0.151
No	100	52.6	85	44.7	
Work relationships					
Employee without a formal contract	7	7.7	9	8.6	0.001
Wage labor	8	8.8	62	59.0	
Self-employed without establishment	70	76.9	26	24.8	
Self-employed with establishment	3	3.3	6	5.7	

[a]Chi-square or Fisher's exact test.

Table 2. Access to health services by family members entitled or not to the Bolsa Família Program (BFP) ($n = 380$) from a suburban area in a large urban center in Southeastern Brazil, 2017.

Characteristics	*Entitled to BFP*				*p-value*[a]
	Yes		*No*		
	n	%	*n*	%	
Routine or scheduled appointments	100	52.6	117	61.6	0.001
Doctor care	182	95.8	167	87.9	0.009
Nurse care	141	74.2	124	65.3	0.074
Nutritionist care	23	12.1	10	5.3	0.018
Community healthcare agent	171	90.0	147	77.4	0.001
Dental care	68	35.8	63	33.2	0.666
Assistant nurse care	101	53.2	96	50.5	0.681
Immunization of children	161	84.7	143	75.3	0.029
Home visit	122	64.2	102	53.7	0.048
Participation in group activities	27	14.2	18	9.5	0.204

[a]Chi-square or Fisher's exact test.

Table 3. Social control mechanisms offered to family members entitled or not to the Bolsa Família Program (BFP) ($n = 380$) from a suburban area in a large urban center in Southeastern Brazil, 2017.

Characteristics	*Entitled to BFP*				*p-value*[a]
	Yes		*No*		
	n	%	*n*	%	
Participation in social control council	10	5.3	6	3.2	0.444
Municipal health council	65	34.2	76	40.0	0.288
School feeding council	40	21.1	39	20.5	0.999
Municipal council for food and nutritional security	22	11.6	25	13.2	0.755
Municipal council for education	78	41.1	90	47.4	0.256
Municipal council for social assistance	90	47.4	96	50.5	0.608
Knowledge about the performance of the councils	48	25.3	69	36.3	0.026

[a]Chi-square or Fisher's exact test.

Table 4. Access to intersectoral actions or services of family members entitled or not to the Bolsa Família Program (BFP) ($n = 380$) from a suburban area in a large urban center in Southeastern Brazil, 2017.

Characteristics	*Entitled to BFP*				*p-value*[*]
	Yes		*No*		
	N	%	*n*	%	
Child participation in activities in the territory	58	30.5	41	21.6	0.061
Training, qualification, languages or professional activity	8	4.2	11	5.8	0.266
Sport activities	44	23.2	29	15.3	0.077
Cultural activities	31	16.3	8	4.2	0.001
Activities for parents or guardians of children	16	8.4	16	8.4	0.999

*Chi-square or Fisher's exact test.

Table 3 shows the social control mechanisms identified by the families. The knowledge of the existence of councils for social participation is rarely mentioned in both groups. Even so, among families not entitled to the BFP, the knowledge about the performance of these public policy instruments is more frequently mentioned ($p = 0.026$).

The participation in intersectoral actions by families is shown in Table 4. Access to cultural activities was the only variable that showed a statistically significant difference, when comparing families entitled or not to the BFP ($p = 0.001$).

According to the multiple correspondence analysis, two patterns were observed that may explain 31.2% of the variability in the access between the groups. According to the first standard, families entitled to the BFP had access to cultural activities, received healthcare from doctors, nutritionists and CHA, used the healthcare service for vaccinations, routine and emergency consultations and received home visits, even if they did not know the role of social participation councils. On the other hand, the second pattern revealed that families not entitled to the BFP did not receive healthcare from nutritionists, did not have access to cultural activities, did not use the healthcare service for vaccination and did not receive home visits (Figure 1).

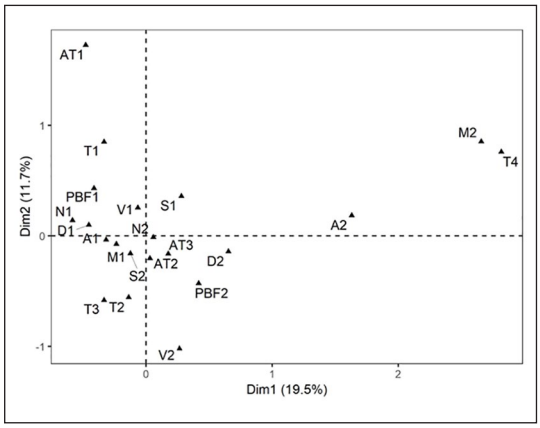

Figure 1. Correspondence map of variables of access to health services, identified social control mechanisms and access to intersectoral actions, by families entitled or not to the Bolsa Família Program from a suburban area in a large urban center in Southeast Brazil, 2017.
BFP1, entitled to the Bolsa Família Program; T4, do not use the healthcare service for consultation; BFP2, not entitled to the Bolsa Família Program; V1, use healthcare service for vaccination; M1, receive doctor consultation; V2, do not use healthcare service for vaccination; M2, do not receive doctor consultation; D1, receive home visits; N1, receive nutritionist care; D2, do not receive home visits; N2, do not receive nutritionist care; S1, know what councils do; A1, community healthcare agent (CHA) provides care; S2, do not know what councils do; A2, CHA does not provide care; AT1, participate in cultural activities; T1, use healthcare service for routine and emergency consultation; AT2, do not participate in cultural activities; T2, use healthcare service for routine consultation; AT3, not applicable; T3, use healthcare service for emergency consultation.

Discussion

In this study, access to healthcare services, intersectoral actions and social control mechanisms by families entitled or not to the BFP, who lived in a suburban area in a large urban center in Southeastern Brazil, were comparatively analyzed.

Compared to women who were not entitled to the Program, those entitled had worse living conditions in general, which include habitation, basic sanitation, schooling, working conditions and three times less income. In addition, they had a greater number of children and less marital bond. Such data indicate an adequate focalization of BFP on the population entitled to the Program considering that, although the two groups are from the same suburban area, the population entitled to the BFP are more vulnerable, which demands the development of actions and services as well as income transfer.

Unlike the findings in this study, Schmidt *et al.* (21) and Silva *et al.* (22) identified low percentages of focus of the BFP, 32.4 and 33.8%, respectively. Conditional cash transfer programs developed in Ecuador and Mexico also have a low percentage of focus (23). The focus is an indicator that allows for an assessment of whether the conditional cash transfer program is properly aimed at its target audience.

According to the findings of this study, there was greater access by families entitled to the BFP to medical and routine consultations, nutritionists and healthcare workers, vaccination, emergency care, home visits and cultural activities. Whether or not one is entitled to the Program seemed to affect 31% of the variability in the pattern of access to some of these services, which reinforces the results of the association tests.

The service with different health professionals and home visits, which is greater for the families entitled to the BFP, can be explained by the commitment to fulfill health conditionalities required by the design of the BFP. In a study on differences in the profile of access to health services between families entitled or not to the BFP, using data from the 2013 National Health Survey, families entitled had a greater likelihood of receiving medical professional advice (24). However, activities within groups and access to professional nutritionists are less expressive, which can restrict integrality in health, since these are important tools for health promotion (25).

In spite of the debate around the conditionalities in income transfer programs (26), we found that this mechanism is reaffirmed by the potential to facilitate access to health services, enabled by access to medical consultations and home visits.

The social control is unknown to the population of this study, particularly those entitled to the BFP. This is a weakness in the operationalization of the Program and other Brazilian social public policies, since social control is a relevant mechanism to support broader changes for the development of food and nutrition security policies in Brazil, ensured by the Federal Constitution (27,28).

The weakness identified became more evident after the recent demise of the Conselho Nacional de Segurança Alimentar e Nutricional (National Council for Food and Nutrition Security - CONSEA), an agency that was part of the Sistema Nacional de Segurança Alimentar e Nutricional (National System for Food and Nutrition Security - SISAN), and directly assisted the Presidency of the Republic in proposing interventions to address food insecurity and nutrition in Brazil (8,29). The decentralization for Brazilian states and municipalities of the model of intersectoral governance with social participation, after the re-establishment of CONSEA (30), is one of the great challenges of the Brazilian food and nutrition policies (28,30).

Although there are few reports available in the literature on social control in CCTPs, Ndlovu and Ndlovu (31) reported the experience in a region of great social vulnerability in sub-Saharan Africa, in which social participation in the design, implementation and evaluation of the program boosted the development of the local economy.

The low access to intersectoral actions in both groups participating in this study, reinforces the historical neglect suffered by vulnerable populations in Latin America (32). In this specific case, belonging or not to an income transfer policy of an intersectoral nature, which offers services and actions in addition to income transfer, did not result in greater access of the population entitled to the Program. Although intersectoral actions are considered strategic to improve equity in health systems, they continue to be major challenges in different countries, as they demand deeper changes in the organization and in intra and intersectoral management (33–36).

Although this research is representative of the population from a poor region in a large urban center in Southeastern Brazil, it is not a population-based study, which may limit more robust inferences. Otherwise, it contributes to the advancement of knowledge, as it is unprecedented comparative research on the access to intersectoral actions between families entitled or not to the BFP. Additionally, the results presented here open possibilities for new investigations, such as the timely aggregation of qualitative analysis regarding those involved with the BFP. The expectation is that these findings contribute to the proposition of public policies by local managers, in order to improve intersectoral actions provided in the design of the Program.

Conclusion

Adequate focus of the BFP was observed, but its actions were limited to income transfer and those established by the conditionalities, such as greater access to health services by the families entitled. Access to intersectoral actions did not differ between families entitled or not, which could compromise the potential to interrupt the cycle of intergenerational transmission of poverty intended by the BFP, highlighting a legacy of the historical assistantialism which characterizes Brazilian social public policies. It is necessary to strengthen and combine complementary policies to expand the effects of BFP.

Authors' contributions

JAN contributed to the study design, data collection, analysis, discussion of results and writing of the manuscript. LTOZ contributed to the analysis, discussion of results and review. MAT de M contributed to the study design, analysis, discussion and critical review of the manuscript for intellectual content. All authors approve the version submitted to *Global Health Promotion*.

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Validation of an educational game to promote cardiovascular health in children

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Abstract

Objective: The aim of this study was to validate the content and appearance of an educational game for children aged 7 to 10 years, focusing mainly on cardiovascular health promotion.

Method: The study used methodological research, with a quantitative approach. The validation process included the participation of 17 specialists in children and/or cardiovascular health. A concordance index of at least 0.80 was considered for content validation and 0.75 for the appearance of the proposed educational material.

Results: The proposal of the educational game was considered valid, through some suggestions, in view of the purpose of sensitizing children in relation to the promotion of cardiovascular health while still in childhood.

Final considerations: As a relevant factor in the use of games as strategies to improve health education, we emphasize that the participant is the active agent and the protagonist of the health-disease process.

Keywords: health promotion, cardiovascular diseases, child health

Introduction

Annually, an increasingly high number of people die prematurely as a result of chronic noncommunicable diseases (NCDs) when compared to other causes (1). It is estimated that 16 million people die each year before the age of 70. However, these early deaths can be significantly reduced through government policies that reduce tobacco use, alcohol abuse, unhealthy diets and a sedentary lifestyle. In Brazil, the mortality rate due to NCDs is decreasing by 1.8% per year, due in part to the expansion of primary health care (1).

In this context, cardiovascular diseases (CVDs) stand out as one of the main causes of deaths, morbidities and disabilities at a worldwide level (2). Overall, CVDs more often affect the elderly population, but the risk factors may originate in childhood. Therefore, the importance of educational actions in the school context is ratified, as it is the place with the best access for children and the young population. Among such actions, collective strategies

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that integrate physical and recreational activities, in addition to offering healthy snacks and meals, must be implemented (3).

It is known that health education practices carried out in a conservative way, such as educational lectures, are not so attractive to the child population and very often provoke disinterest in the child, making it necessary to develop playful educational strategies that are attractive to children and adolescents, such as educational games.

Particularly, it can be observed that games are consolidated every day as an important tool in health advice. It has been stated that the use of games as a health education strategy can result in changes in attitude and behavior among those who use them. However, in the development of any educational material, it is necessary for it to undergo a validation process aiming to guarantee the effectiveness of its use by the target population (4).

Considering the abovementioned facts, the question is: does the educational game contribute to the promotion of cardiovascular health in children aged 7 to 10 years? Therefore, the aim of this study was to validate the content and appearance of an educational game aimed at children aged 7 to 10 years, focused on promoting cardiovascular health.

Method

The present study used methodological research, which consists of the creation, evaluation and improvement of something that has been constructed (5). In this case, it is a board game in the format of a trail, which has a starting line and a finishing line. It consists of 18 squares made of ethylene vinyl acetate material, each measuring 50 cm × 50 cm, a dice measuring 30 cm × 30 cm, an hourglass and 25 cards. The illustrations in each game square, as well as in the overall format, came from a study that assessed children's knowledge regarding life habits and risk factors for CVD (6). Other pictures were also present, especially in the 'Challenge' house, which were obtained from Google Images (2017).

The participating children (7 to 10 years old) begin by positioning themselves at the starting line, either individually or in pairs. The game starting order is decided by throwing the dice, and the participant with the highest score is the first to start the game. The game pathway consists of five domains: (1) 'Healthy heart', (2) 'Risk factors for heart disease', (3) 'Challenge', (4) 'Healthy eating' and (5) 'Physical activity'. Each of these domains has five cards, which are to be chosen one at a time. Cards 1 to 5 include questions about the topic, expected answers and instructions to be performed for each domain. Moreover, there are five cards related to the 'challenge' of the game, for which the participant must perform practical activities. The game is over when everyone reaches the last square, 'Getting a healthy heart'.

Upon reaching the last square (number 18: called 'Getting a healthy heart'), the participant must give a summary of the knowledge acquired during the game. Based on this report, this and other teammates who reach this house will win a Meritorious Medal of Honor.

The criteria for selecting the group of expert judges were: having a minimum degree of specialist knowledge; having at least one publication in the area of child health and/or child cardiovascular health and/or child education; and having a minimum experience of 1 year in the field of child health and/or child cardiovascular health and/or early childhood education, from varied areas. To improve the content and appearance validation process, such as that in the study by Cruz *et al.* (7), a multidisciplinary group of judges should be included, for example from Education, Physical Education, Nursing, Medicine, Nutrition, Child Education and Occupational Therapy, among others.

The sample size of the specialist group required to validate the educational game was defined based on the information which states that there is no consensus on the number of specialists to constitute a group of judges (8). However, recruiting an odd number is recommended, considering the characteristic of what will be validated, the method of analysis of the findings from these judges and, also, the researcher's preferences.

The survey of eligible specialists was initially carried out at the Database of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (CAPES, *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) using the following keywords: 'cardiovascular health' AND 'child'. From them, the first contact was initiated through the Lattes Platform of the CNPq Portal. Moreover, the indication of other professionals who met the selection criteria for the training of the judges was also requested, which resulted in some being selected by snowball sampling, an ideal method when one

intends to study populations that are difficult to access or where there is no precision about quantity, as in the present study (9). The participants indicated through the snowball sampling technique were invited to participate in the group of experts by email and/or the WhatsApp application (9).

The recommended specialists had their Lattes curricula analyzed to verify they met the inclusion criteria. It is pointed out that there was a limitation regarding the fact that many education professionals do not have this type of curriculum, and it was necessary to ask early childhood and elementary education teachers for referral of professional colleagues.

To reach the sample size, 89 people from different regions of the country were invited. Of these, 72 did not respond to the initial contact and 17 responded to the evaluation of the educational game, using the Google Forms form.

The validation process took place between September and November 2019, with the participation of 17 specialists with experience in child health and/or child cardiovascular health, thus constituting a multidisciplinary group of judges who evaluated the educational game, in terms of its content and appearance.

For data collection, a form was made available via the internet with approval by the judges, accompanied by the invitation letter, the Free and Informed Consent Form and the educational game analysis protocol. The educational game analysis form and protocol were adapted from the literature (10).

The game analysis protocol was divided according to the proposed domains, evaluating in addition to them, the last square 'Getting a healthy heart'. After the data collection was performed, these were extracted from the online form in the form of a Google data spreadsheet and the consistency of responses was analyzed. For the analysis of the five game cards for each domain, the validation variables were carried out as shown in Figure 1.

To perform the analysis of the findings, a descriptive quantitative evaluation, represented as absolute frequency and the percentage of valid responses, was chosen.

The Likert scale was used in the educational game analysis protocol, including five options, with a rating range of: 1 – 'totally disagree' (TD), 2 – 'disagree' (D), 3 –'neither disagree nor agree' (ND/NA), 4 – 'agree' (A) and 5 – 'totally agree' (TA), in addition to spaces for comments and suggestions for the game. In the last session, the relevance of the educational game was evaluated, when the expert's general opinion about the game was requested.

Domains	
	1) Healthy heart
	2) Risk factors for cardiovascular diseases
	3) Challenge,
	4) Healthy eating and
	5) Physical activity
Content Validity	
	Appropriate to the target audience.
	Sufficient to meet the needs.
	Logical text sequence.
Validity of appearance	
	Illustration relevant to the material content.
	Clear and easy to understand illustration.
	Amount of illustration appropriate to the content.
	Colors used are pertinent to reading.
	Letter font facilitates pertinent reading.
	Attractive and organized visual composition.
	Adequate font size.

Figure 1. Domains related to the educational game squares and characterization of the assessment items considering the content and appearance validation.

The evaluation was guided by the Content Validity Index (CVI) of the cards available for the first version of the educational game. The CVI calculation proposes the measurement of the proportion of judges who are in agreement with the material to be validated, with an agreement index of no less than 0.80 (8). For the validity of appearance, the recommendations were followed (11,12), considering the relevance criterion and agreement index between the judges of at least 0.75 (13).

Results

Selected evaluators

The group of specialists consisted of 17 people, including 11 nurses, three physical education

professionals, one occupational therapist and two educators, of which 16 were female and one male. Their ages ranged from 28 to 60 years (mean ($\bar{x}$) = 39.41 ± 9.64 years) and the time since graduation ranged from 4 to 30 years (mean ($\bar{x}$) = 14.76 ± 11.37 years).

Regarding the nurses (n = 11), considered specialists in the thematic area, after analysis of the Lattes curriculum, six had a PhD and five had a Master's degree as their highest degree. The other professionals, who answered the instrument requirements to evaluate the proposed game, met the previously defined criteria.

Validation of content

All the evaluation results are shown in Table 1. In the evaluation of the 'Healthy Heart' domain, in the individual analysis of the cards in relation to the content, the cards 1 (0.90), 2 (0.84) and 3 (0.82) were shown to be adequate, while cards 4 (0.76) and 5 (0.76) did not reach the agreement value. When referring to Risk Factors for heart disease, cards 1 (0.86), 4 (0.88) and 5 (0.88) obtained a CVI > 0.80. Card 2 also reached its average >0.80 for content validation. Card 3, on the other hand, showed a lower agreement rate among the specialists in all its items, with an average of 0.51. As for the 'Challenge' domain, the agreement index was higher than the referenced minimum of 0.80 in all cards.

Cards 1 to 5 showed a variation in the average related to the validity index from 0.88 to 1. It is observed that Card 1 (1) obtained the highest level of agreement among the evaluators.

The 'Healthy eating' domain also had a CVI higher than 0.80 in all of its cards, corresponding to the agreement between the judges. However, some suggestions for changes were reported for this domain.

According to Table 1, the 'Physical activity' domain reached the CVI in relation to the content of 0.80, in all evaluated items, with an agreement value of 1 in some of these.

The last square, 'Getting a healthy heart', was also evaluated and obtained a mean CVI value of 1 for content validation.

Validation of appearance

Regarding the validation of appearance for the 'Healthy Heart' domain, all items reached a CVI > 0.75. When referring to 'Risk Factors for heart disease,' according to cards 1, 4 and 5, the CVI was >0.75, with the respective averages of 0.88, 0.86 and 0.87. Card 2, for one of its items, showed a value of 0.70, related to the topic 'the illustration is clear and easy to understand'; however, even if this card had a lower index in one of its items, the card average was >0.75 (0.84).

Card 3, on the other hand, showed a lower agreement rate among the specialists for all its items, with an average of 0.49 for appearance validity.

As for the 'Challenge' domain, the agreement index was higher than the minimum of 0.70 in all cards.

It is observed that Card 1 obtained the highest level of agreement among the evaluators. Regarding the appearance validity index, the range was from 0.89 to 0.94. In contrast, for 'Healthy eating', all cards reached a CVI of 0.75, and in some items the agreement value was equal to 1. Cards 1 (0.92), 2 (0.95), 3 (0.87), 4 (0.88) and 5 (0.87) showed the mean CVI values.

According to Table 2, the 'Physical activity' domain reached the CVI in relation to the appearance of 0.75 in all assessed items, considering the agreement value of 1 in some of these.

Square number 18, 'Getting a healthy heart', also obtained a higher than expected average of 0.75, obtaining a value of 0.95 of agreement among the judges.

Figure 2 shows the judges' suggestions for changes in the cards and also demonstrates the reformulated ones.

Among the judges' suggestions, modifications were suggested for two cards, corresponding to

Table 1. Judges' assessment of the Content Validity Index in the cards according to each domain.

Domains	*Cards (IVC[a])*				
	C1	*C2*	*C3*	*C4*	*C5*
1) Healthy heart	0.90	0.84	0.82	0.76	0.76
2) Risk factors for cardiovascular diseases	0.86	0.84	0.51	0.88	0.88
3) Challenge	1	0.96	0.92	0.88	0.96
4) Healthy eating	0.92	0.96	0.88	0.82	0.92
5) Physical activity	0.96	0.88	0.86	0.98	0.88

[a]Mean rating of the Content Validity Index.

Table 2. Judges' assessment regarding the Content Validity Index of the cards' appearance in all domains.

Domains	*Cards (IVC[a])*				
	C1	*C2*	*C3*	*C4*	*C5*
1) Healthy heart	0.93	0.88	0.87	0.85	0.82
2) Risk factors for cardiovascular diseases	0.88	0.84	0.49	0.86	0.87
3) Challenge	0.93	0.93	0.91	0.89	0.94
4) Healthy eating	0.92	0.95	0.87	0.88	0.87
5) Physical activity	0.88	0.92	0.88	0.94	0.92

[a]Mean rating of the Content Validity Index.

Card 2 of the 'Risk factors for heart disease' domain and Card 4, 'Healthy eating', one of which was accepted. The non-reformulation is due to the fact that the suggestion did not cover the association between the foods described in the card and the questioning.

Discussion

Among the judges' responses, after analyzing the data, it was observed that the educational game proposal was considered valid, after some suggestions, to achieve its purpose of encouraging children to think about cardiovascular health promotion.

The suggestions for improving the educational game were taken into account, in relation to the content and appearance of some cards, such as in the 'Healthy Heart' domain, related to changes in the card written text, in addition to the color of the card and its design, aiming to make the game even more attractive for children. However, regarding the design, the suggested changes were not accepted, and this fact can be considered a limitation of this proposal, as the drawings used were obtained and adapted after the authors' authorization (6).

The main objective of the first domain addressed in the 'Healthy Heart' game was to raise awareness among children about healthy behaviors to promote cardiovascular health, since it was observed, based on other studies, that the ideal time to start this awareness, as well as the prevention of CVD, is during childhood. This is because it is still possible to change risk factors that are modifiable, such as being overweight, physical inactivity, dyslipidemia and exposure to tobacco. By working with this child population, we can have healthy adolescents and adults with a lower risk of developing CVD (14).

As for the validated domain 'Risk factors for heart disease', changes were suggested for two cards, one of which was accepted. One of the cards was not reformulated because the suggestion did not include the association between the foods described in the question included in the letter and the questioning.

The purpose of presenting this topic to children was to provide knowledge about risk factors for heart disease, by demonstrating several risk factors for CVD, which can be grouped into two main groups: modifiable and non-modifiable (15). The same author also mentions as modifiable risk factors: dyslipidemia, tobacco exposure, lack of physical exercise/physical activity and body mass index (BMI) $\geqslant 30\,kg/m^2$. Genetic predisposition, ethnicity, age and gender are risk factors for heart disease, but are characterized as non-modifiable.

Regarding the validated 'Healthy food' domain, only one card had suggestions for its reformulation, which were not accepted, as it is understood that the term attitude, which was requested to be replaced by behavior, is in agreement with the purpose of the educational game.

The attitude outweighs the behavior, by influencing it; thus, the attitude acts as a precursor for judgments and decisions (16).

The aforementioned domain reinforced the importance of starting healthy eating habits as early as during childhood, considering that it is at this stage of life that food acceptance is at its greatest. However, better eating habits must be encouraged, as they are an essential behavior for optimal physical, motor and cognitive development and energy supply (17). It was observed, based on the validation of the proposed game, that of the 25 cards, seven had suggestions for reformulations. However, only five of these were reformulated as a result of the experts' recommendations.

Therefore, the validated game proposal fills a gap identified by other authors regarding the impact of CVD on society (18), by addressing risk factors as early as in childhood (19,20), 80% of which can be prevented (1).

Different studies have identified the importance of using educational games for the development of activities related to child health promotion

Topic	Card Version 1	Card Version 2 (specialists' suggestions)	Reformulated card
"Healthy heart"	"Sleeping is important for our heart's health. How many hours of sleep should we get per day?"	"Sleeping is important for the heart's health. Thus, how many hours should we sleep per day?"	YES
"Healthy heart"	"Who has drunk water today? How important is water for the heart's health?"	"Who has drunk water today? Water is very important for our heart's health, as it helps the heart to work better."	YES
"Healthy heart"	"Physical activity is very important for our heart to be healthy, as it helps the heart not to apply so much force to carry blood throughout our body."	"Physical activity and/or physical exercise are very important for the heart to be healthy, as they help us to have a strong heart to be able to carry blood throughout the body."	YES
"Healthy heart"	"Relaxation and physical activity practices help to relieve stress and control diseases that affect the heart. Is this statement true or false?"	"Relaxation practices, such as playing, reading a book, doing physical activity, help to relieve stress and control diseases that affect the heart. Is this statement true or false?"	YES
"Risk factors for heart disease"	"If you start feeling very heavy, what can it do to your heart?"	"If you start feeling overweight, what can it do to your heart?"	YES
"Risk factors for heart disease"	"Can I eat hamburgers, sandwich cookies and snacks always, at any time? What can we do about it so that our hearts are healthy?"	"Can I eat hamburgers, sandwich cookies, snacks, and finger foods very often? What can be done so that our hearts are healthy?"	NO
"Healthy eating"	"Nowadays, many people usually eat in front of the television or computer or cell phone or tablet. What effect can this attitude have on the heart?"	"Nowadays, many people usually eat in front of the television or computer or cell phone or tablet. What effect can this behavior have on the heart?"	NO

Figure 2. Judges' suggestions for the 'Game for Cardiovascular Health Promotion in Children' cards.

(21,22). However, what can be observed in the literature is that individual educational programs are effective, but costly (23), whereas more conservative methods for providing education, such as lectures and pamphlets, are more accessible to the population, but do not significantly improve clinical outcomes (24). In this context, it is understood that educational technologies can be used as health education strategies, as they more easily provide advice and understanding among the participants (25).

Within the context that refers to the promotion of children's cardiovascular health, increasingly early interventions must be implemented in the school space, aiming at the prevention of NCDs in adult life, including CVDs, as they will influence the population's quality of life (26).

It is understood that an educational game, such as a health education strategy, must be something simple, yet playful, and attractive, as well as motivating. It must also have clear and understandable language, and the rhythm must be guided by the children.

Conclusion

The validation of a game with an educational purpose that is also playful is of utmost relevance,

because the importance of the analysis of concepts seen from different perspectives and realities is understood.

As a limiting factor of the study, we emphasize the participation of only two professionals in early childhood education among the specialists. This fact should be reassessed for future validation of educational games.

It can be concluded that the educational game was validated and the suggestions for reformulations were accepted within the context of maximum use to guarantee its effectiveness, and for further evaluation with the target audience, as this is a health education strategy that can become more attractive, interesting, dynamic and motivating. Moreover, it has a low cost design and is easy to use, without the need for supplementary equipment or instruments.

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Structured internship in health promotion: an approach used in a middle-income developing country – Jamaica

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Abstract: Internship programmes have the potential to provide learning and professional experiences, build students' competency and strengthen partnerships between community and training institutions. In this paper, we examine the extent to which a structured internship at The University of the West Indies contributed to experience and competency-building, provided focus and met learners' expectations and satisfaction among a cohort of unpaid health promotion interns. The contribution of placements to the strengthening of health education and promotion competencies and interns' feelings about their experiences are included. Twenty-four (24) internship reports were reviewed using a mix of quantitative and qualitative methods. The majority of interns were Jamaicans (70.8%), 12.5% were from Dominica and the remaining 16.7% represented other nationalities. Health professionals comprised the highest percentage of cohorts (79.2%) and governmental agencies comprised the largest proportion (63%) of internship sites. Activities undertaken were in the areas of planning, implementing and evaluating programmes (71%) and conducting needs assessments (63%). Communication-related activities were reported by 43% of interns. Twenty-one per cent were engaged in lobbying and collaboration with other partners, while 23% established committees to oversee the sustainability of initiatives. While some interns reported negative experiences with supervision at their placement agencies, all valued internship seminars, which they found as a supportive environment in which they were able to share their progress with peers and academics. The opportunity for applying theory to practice and acting as resource persons were reflected as positives. The structured internship approach seems to have merits for building competence and engendering individual satisfaction.

Keywords: structured internship, health promotion competency, Jamaica

Introduction

With financial challenges and high demand for scarce resources, low- and middle-income countries are often faced with inadequate numbers of trained health professionals to properly address the needs of their populations (1). With changes in the epidemiologic transition, there are issues such as the emergence of new diseases and the re-emergence of others. There are challenges due to the aging of populations and issues surrounding climate change and environmental management. At this time, it is imperative that the health workforce be diverse to address a wider cross-section of health issues while engendering collaboration and partnerships. An important area of focus, therefore, must be health promotion which seeks to promote increased attention to social determinants of health as we pursue the Sustainable Development Goals (2).

To address the need of what is referred to as the 'looming public health workforce crisis', it was proposed by the Association of Schools of Public

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Health that public health education programmes be increased at the undergraduate level (3). Not only is there an increased need for health promotion at the undergraduate level, but there is a growing need for training at the postgraduate level. Health promotion by nature is a cross-cutting tool for all public health programmes and requires special skills and competencies for successful implementation. In Brazil in 1999, the cohort of health promotion specialists at the University of Franca was primarily nurses, physical therapists and teachers. This has changed and since 2011 a wider cross-section of professionals has been enrolling in the health promotion training programme, to include doctors, dentists, psychologists, nutritionists, business managers and lawyers (4). Inter-professional education (IPE) at both the graduate and postgraduate levels has been identified as one recommendation for transforming and improving health professionals' education and training (5).

The training of a workforce competent in health promotion has afforded the opportunity to address actual health determinants in the field, and can ultimately lead to improvements in health care. There is increased demand for competency-based education which equips the learner with the attitude and knowledge to act appropriately in a given scenario (4). According to the International Labour Organization (ILO) (6), the 'world of learning and the world of work' are often viewed as having different objectives and not necessarily influencing each other. The ILO posits that in order to produce the best workforce, training must be relevant to bridge this gap. The inclusion of internships can be one of the strategies in bridging this gap.

Internship has been defined as any period of time during which a beginner acquires experience in an occupation, profession or pursuit, or any official or formal programme. This is aimed at providing practical experiences for beginners in an occupation or profession (7). An internship period provides students with the real-life experiences needed to build their competencies before graduation. In India both the employment and education sector have agreed on the importance of internship with the All Indian Council for Technical Education, making it mandatory for students to be deemed qualified (8).

Coco cited by O'Neill (9) described internship as a period that serves to benefit all stakeholders, including the interns, employers and the university. For interns, this period has been described as making a positive impact on career and future academic pursuits. Other benefits to be derived from an internship programme include the fact that it is one of the best ways to gain experience, make decisions about career paths and improve one's resume and readiness for employment. The period of internship allows potential employers the chance to assess the suitability of candidates for employment, while interns often seize the opportunity to impress the employers. As interns gain new experiences, both hard and soft skills are developed, including time management skills and other professional habits. According to Schnoes *et al.* (10), internship builds confidence and is a critical element for entering unfamiliar territories.

While many benefits from internship have been described, some negatives have been documented, including the lack of direction and meaning. It has been posited that internships are more worthwhile when they are well organized and students are given the opportunity to apply theory to practice and receive feedback (9). Some persons further recommend flexibility around the structure of internship and believe that unpaid internships would discourage students from gaining the internship experience (11,12).

Justification

While internships facilitate professional preparation, how they are organized is important to satisfy the needs of interns and participating organizations and workplaces. Preparation starts with the training content that prepares students for application in the field. It is further enhanced if organizations have a basic understanding of what to expect of interns and if there is scope for health promotion practice.

Internship in some countries is a period of paid work

Jamaica, an upper-middle-income country, struggles with low economic growth and high public debt (13). These realities have resulted in limited high-level jobs and also act as a deterrent to paid internships. With many employed persons entering graduate studies while on paid leave, internships that offer payments may also contravene government policies, especially from organizations

that are aligned with government. The concept of structured internships can play a key role in meeting the needs of interns and key stakeholders without added financial expectations, burden and breach of government policies.

According to Bloom's taxonomy theory, for effective learning we need to impact competence in the areas of cognitive, affective and psychomotor domains (14). Internship often provides the first real opportunity to demonstrate affective and psychomotor skills. This paper will examine the extent to which a structured internship at the University of the West Indies, Mona, contributed to experience and competency-building, provided focus and met learners' expectations and satisfaction among a cohort of unpaid health promotion interns. While the benefits of internship are well documented in various areas of study for graduate and undergraduate students (11,12), the same cannot be said for health promotion as there is a paucity of information in the literature about this. As a consequence, this paper will, in addition to the foregoing aims, seek to fill this void in the health promotion literature by sharing an approach using structured internship for health promotion specialists in a developing country setting.

Background

The internship experiences described in this paper originate at the University of the West Indies, Mona. A Master of Public Health (MPH) degree programme at this university is based in the faculty of medical sciences and includes a health education and promotion track (15). Health promotion competencies developed in this graduate programme are informed by recommended standards for the practice of health education and promotion (16,17). They include assessing needs, planning, implementing and evaluating health promotion programmes and communicating and advocating for improvements in health. As a means of ensuring that the students are knowledgeable and gain experience in the application of theory to practice, a 12-month classroom component is executed. This is then followed by a 12-week structured internship that is mandatory to completion of the training. This is an unpaid internship, although some organizations opt to give their interns a stipend.

Guidelines for the programme (15) outline that internship is pursued after students have completed all the theoretical aspects of the course and successfully completed written and oral examinations. The theoretical component consists of health promotion and public health core courses. The internship must be completed before being recommended for graduation and has five general objectives. These objectives can be grouped into two categories, learning and administrative. The learning objectives are threefold: to provide experiences that will allow for theory to be put into practice, to enable the development of health education and promotion competencies in a new work setting, and to provide opportunities for teamwork and creativity. The administrative objectives are to expose participating interns to the various disciplines and organizations involved in the promotion of health and wellbeing and to experience the range of opportunities for influencing health determinants.

Structure of the internship

The University of the West Indies, Mona maintains a growing list of agencies that are willing to collaborate in providing internship experiences. As outlined in the resource manual for interns (15), participating agencies must be willing to accommodate an intern, have the capacity to provide a professional experience in the field and provide suitable supervision for the intern. The agency supervisor is provided with guidelines which include orientation of the intern, assigning responsibilities, and providing assistance in identifying a project or specific area of service based on the organization's mandates. The agency is expected to complete mid and end of internship evaluation reports indicating interns' progress and performance. A prescribed evaluation tool is provided for this purpose.

Each intern is provided with a list of guidelines for internship and each must submit to a faculty supervisor, before the internship period begins, a list of personal internship learning goals. Additionally, interns are expected to have periodic meetings with their agency supervisors with one of the agenda items being 'personal learning goals and organization's goals'. All interns must attend at least two of three monthly seminars organized for them to present oral reports of each block of activities.

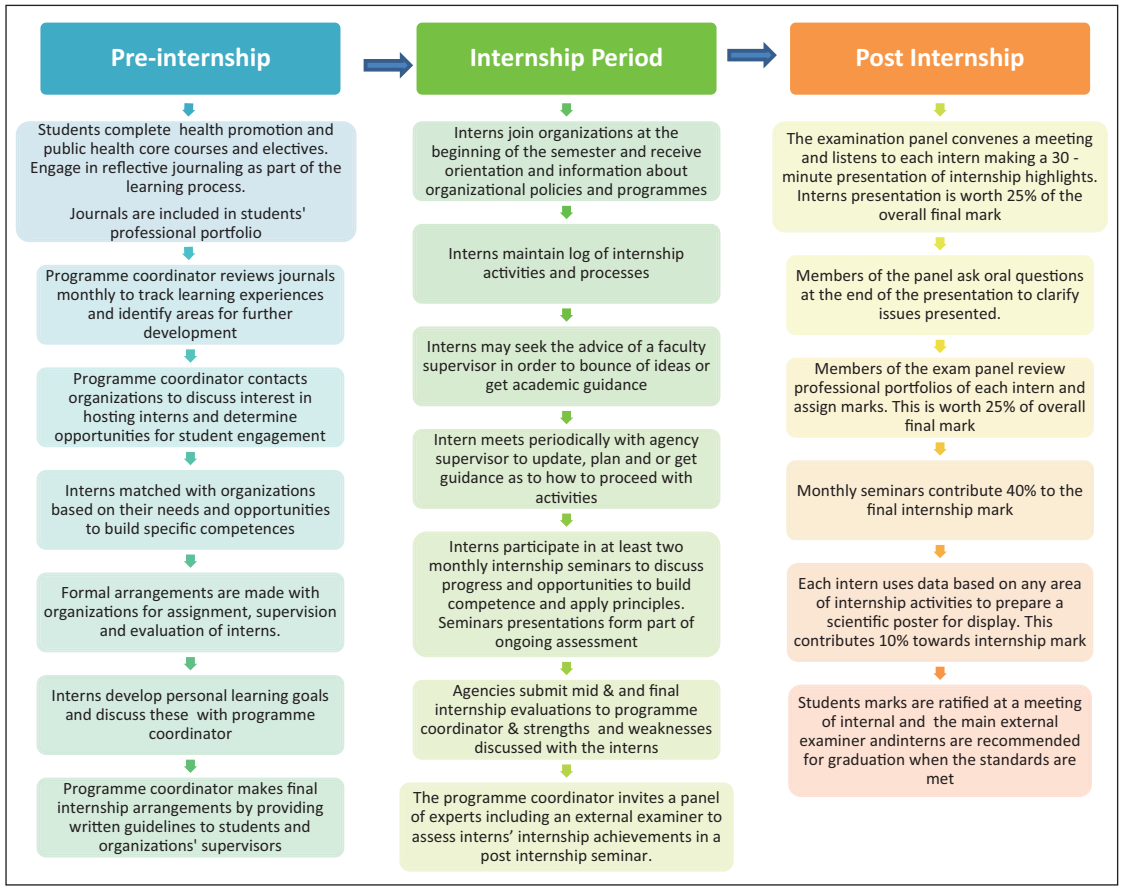

Figure 1. Summary of the structured internship process.

These seminars are organized by faculty at the university and are for all interns in a given cohort. A final report of the overall internship experience is submitted and kept by the faculty supervisor and one copy submitted to respective agencies. For this paper, available written internship reports of health promotion specialists completing the programme during the period 2007 to 2017 were targeted for analysis. Details of the programme along with the structured internship component are outlined in Figure 1.

Methods

A mix of quantitative and qualitative approaches was integrated in the analysis to provide both objective and subjective accounts of the internship arrangements and experiences. Twenty-four reports were available for review and all were included. Quantitatively, a data extraction sheet was developed and used to summarize the information describing the internship process and experiences in each report. The variables included were: demographics including professional background, country of residence of the interns, internship agencies and their locations; the activities in which interns participated; and the relevant areas of health promotion competency engaged. This information was then entered on an Excel spreadsheet and analysed using descriptive statistics with some data displayed in figures and tables.

Qualitatively, content analysis of participants' personal reflections about their experiences was used to connect with the quantitative component.

The analysis was done manually and was started by reading and re-reading the reflections section of each report, then identifying and colour-coding key words and statements as recommended by Vaismoradi *et al*. (18) about qualitative content analysis. The selected words and phrases were analysed for meanings and led to the development of themes. The focus of the analysis was more on participants' perspectives as described by them since the aim is to describe their experiences. The essence of the experiences based on these themes is described using predominantly their language and supported by relevant excerpts from the reflections. Both quantitative and qualitative findings are then discussed together.

Findings

Demographics

The reviewed documents represented the work of interns mostly from countries within the region, with only one intern being a resident of Canada. Of the interns from the region, the majority, 70.8%, was from Jamaica, while Dominica accounted for three (12.5%) reports. The vast majority, 87.5%, completed their internships in Jamaica, while only one person (4.16%) interned in Canada.

The interns were of varied professional backgrounds inclusive of health (79.2%) and non-health (20.8%) disciplines. Internship agencies varied and included governmental agencies (63%) such as schools, regional health authorities and health centres. The non-governmental agencies (37%) included a humanitarian agency, a social services agency, a public/private facility and an international agency.

Learning goals and actual experiences gained

Personal learning goals

In three reports, personal goals were missing. Of those reports with goals included, 19 (90%) interns had a goal that was aimed at either planning, implementing or evaluating a health promotion programme. Eight (38%) of the interns wanted to conduct needs assessments and nine (42.8%) had goals to apply theory to practice. Sixty-seven per cent (14) of interns had a goal that addressed communication competency and 14.3% (3) to improve skills in research. Acting as a resource person was a skill that 19% (4) of interns had as a goal.

Experiences gained

Activities undertaken by interns were varied and addressed areas of professional competencies. Activities in the areas of planning, implementing and evaluating were conducted by 71% (17) of all interns, with the majority of these (10) engaging in the planning of projects they initiated or as part of pre-existing activities. There were 15 (63%) interns who conducted needs assessments, including paper-based surveys (47%), focus group discussions (13%) and SWOT analysis (3%).

Sixty per cent (15) of interns reported gaining experience in communication-related activities, including the development, pre-testing and production of educational and training materials, oral presentations and facilitating collaboration and team meetings. There were eight (33.3%) who identified serving as health education resource persons by developing and revising health-related policies and in advancing programme evaluation initiatives. Advocacy and collaboration with other agencies to achieve goals were reported by 21% (5) of interns and one intern represented the assigned organization at an international conference. Table 1 shows comparisons.

The basic principle of ensuring sustainability of initiatives was assessed in the reports. There were two reports (8.3%) that did not record plans for sustainability. For others, several approaches were taken, with some interns and their teams using multiple approaches. In 55% of cases, stakeholders were included from the planning stage to ensure buy-in. In 23% of cases, planning committees were established and in another 14% of cases persons were trained along the way to take charge of activities. Written documents were produced to provide guidelines in 59% of cases and as much as 48% of interns reported employment of more than one measure.

Qualitative findings: reflections on internship in the reports

One hundred and twenty-five significant statements were identified from the reflections section of the 24

Table 1. Projected goals and reported achievements of interns.

Areas	*Projected*		*Achieved*	
	N = 21%		*N = 24%*	
Planning, implementing and evaluating programmes/activities	19	90.0	17	71.0
Communication	14	67.0	15	43.0
Apply theory to practice	9	42.8	–	–
Needs assessment	8	38.0	15	63.0
Research	3	14.0	–	–
Act as resource person	4	19.0	8	33.3
Advocacy and collaboration	0	0	5	21.0

students' reports. From these significant statements, meanings were summarized then organized into six overarching themes about satisfaction or lack thereof, with respect to internship. These themes were: 'Supervisors are busy people', 'Making things work', 'Embrace emerging opportunities', 'Seminars provide supportive environment', 'Internship facilitates real learning' and 'Experiencing satisfaction'.

Supervisors are busy people

The issue of supervision was a recurrent theme as 'supervisors are busy people'. Except in a few cases, supervisors were often unavailable for various reasons, to give feedback on actions taken or to serve as a sounding board for ideas. Some were either traveling, participating in meetings or caught up with other regular duties. This for some interns was disruptive but often encouraged problem-solving and relationship-building skills. These included situations in which answers were not readily available and where resources were inadequate to facilitate the implementation of some activities. At other times there was reportedly a lack of interest among some team members to support or participate in some activities and in other cases competing priorities became barriers.

Making things work

The issue of supervisors being busy engendered the use of initiatives among interns. Some reported how at times, when supervisors were unavailable, they found ways to 'make things work' so that their internship goals could be met. Sometimes it was through building relationships with other agency personnel and volunteering to assist in other agency activities that doors were opened for 'making things work'.

Embracing emerging opportunities

When faced with barriers to the achievement of personal goals, some interns found new ways to either change their perspectives or to pursue other goals by 'embracing emerging opportunities'. Those reporting this kind of change also reflected on how such moves helped them to gain experience and strengthen areas of competence that were not part of projections at the start of internship. There were, however, those who just reflected on the fact that they were unable to achieve all their goals due to lack of opportunity to do so.

Seminars provide supportive environment

The reflections revealed a common perception that 'internship seminars provide a supportive environment'. Comments across 20 reports included sentiments that feedback received from peers and faculty when internship activities were shared facilitated necessary foci and changes in perspectives. One reflection read: 'I looked forward to internship seminars. Sometimes I felt nervous about sharing, doubting if I was on the right track but I would then leave seeing things clearer and even learnt from the work of other interns'. Another said: 'I left the first seminar determined to improve my internship activities and my classmates gave me needed support.' Others mentioned benefits such as being nudged to consider missed opportunities and viable alternatives around issues previously perceived as barriers. One

value repeatedly reflected relates to being questioned in seminars about the principles that should be applicable in given situations and how helpful this was in getting them to put things in context.

Internship facilitates real learning

Interns reflected on real opportunities for applying classroom concepts to real issues. Opportunities described included use of the PRECEDE-PROCEED planning model and behaviour change theories, engaging in research and developing guidelines including terms of references for working with partners. Commenting on planning, one intern reflected as follows: 'The first two phases of PRECEDE PROCEED were critical in providing guidance to focus on the issues.' Another excerpt exemplifying this was: 'While behaviour change theories are taught during the programme, there was not enough opportunity for me to test them and as a practical learner I seized the opportunity on internship to do so.'

Internship was also a time for some to change their human relations skills: an important comment in this regard was made by someone in a workplace wellness assignment. It said: 'I learnt to appreciate communication cascades and to slow down my usual "let's get the work done" attitude.'

Experiencing satisfaction

Satisfaction with the acquisition of new skills and concepts is the ultimate goal for an adult learner and there were different ways in which interns expressed feeling satisfied. Phrases used that seem to sum up the various ways in which satisfaction was experienced included: 'It was worth it,' 'I am pleased,' '[They] were very appreciative of my input,' 'I am satisfied, my goals were achieved,' and 'There is no price I can put to this experience.' Table 2 shows a joint display of projected goals and selected quotes indicating interns' feelings of satisfaction. There were some other reflections showing evidence that some interns wanted things to be more compatible with their desires, although they experienced varying levels of satisfaction.

Discussion

In this paper we set out to describe the extent to which a structured internship approach contributed to experience and competency-building, provided focus and met learners' satisfaction among a cohort of unpaid health promotion interns. Generally, internships can benefit relevant organizations, educational institutions involved and interns themselves. O'Neill (19) posits that interns should not be left on their own to plan and complete internships that are expected to strengthen professional development. She further asserts that internships that offer opportunities for mentoring by supervisors and faculty members can make a great impact on interns' professional development. It has been highlighted in the findings that getting real work experiences and feedback from peers and faculty were achieved in this structured internship approach. However, the qualitative findings also show how competing priorities sometimes led to a lack of feedback from supervisors due to various issues. On the other hand, however, resilience and creativity driven by this very issue, with supervisors' absence, created a balance. Both of these qualities are necessary in the real world of work.

The primary objective of the structured internship programme was to enable the health promotion specialists to strengthen various areas of competence as described in the literature (16,17). Based on the reflections of the interns, the opportunities for developing these competencies were available in the various organizations. The skills garnered from the experience were varied and included both softer skills such as building relationships to the more complex skills of experiential learning in areas of required competence described in the literature (16,17). Planning, evaluating and implementing programmes were areas of competency that most interns (90%) reported (including those without projected goals). For needs assessment alone, 63% of interns reported gaining experience. The proportion for needs assessment is notably much higher than the proportion of interns who included it in projections. This may have been due to reporting of research with needs assessment skills.

While in the quantitative findings participants did not set goals for applying theory to practice, the qualitative findings highlighted this achievement. These are evidence of experience gained and interns' satisfaction. Two comments that exemplify this are references to the application of behaviour change theory and the PRECEDE PROCEED model. These values about bridging classroom learning with field experiences cannot be overlooked.

Table 2. Joint display of interns' projections (quantitative) and areas of satisfaction (qualitative).

Quantitative findings	*% of interns (n = 21)*	*Selected qualitative quotes about interns' satisfaction*
Areas of competence projected		
Planning, implementing and evaluating programmes/projects	90	*'Planning and implementing with the team was key to success of the activities.'* *'My personal learning goals were met in terms of assessing needs, planning and evaluating.'*
Communicating	67	*'The need for proper documentation was reinforced for me.'* *'I learnt how to prepare terms of reference.'* *'I learnt to mobilize a team and was helped by using the broken squares activity I learnt in class.'*
Applying theories to practice	42.8	*'. . .behaviour change theories are taught during the programme. . . there was not enough chance for me to test them and as a practical learner I seized the opportunity on internship to do so.'*
Needs assessment	38	*'The first two phases of PRECEDE PROCEED were critical in providing guidance to focus on the issues.'*
Research	14	*'In doing the needs assessment I had to apply research principles.'* *'To complete the evaluation of the diabetes programme, I had to apply research principles and this was very useful.'*
Acting as resource person	19	*'I gained experience in training community leaders.'*

The role of internship seminars in gaining support and building confidence seemed to have been a high point for interns. Opportunities for advocacy and intersectoral collaboration were other key areas of experience highlighted by 21% of interns. This is of particular importance as a health promotion specialist since advocacy can lead to collaboration and, according to Corbin *et al*. (20), intersectoral collaboration is imperative in health promotion. Additionally, credence is given to collaboration through the WHO's expanded mandate that social determinants of health must be addressed to bridge gaps in health and is best achieved through intersectoral collaboration (21). In the real world of work, health promotion practice must also uphold the value that health is a fundamental human right (22) and attention to the social determinants of health advocated in Sustainable Development Goal 4 (23) is best pursued through collaborative efforts.

Planning for sustainability of health promotion initiatives is important since this is in keeping with the Ottawa Charter's tenet of empowering communities to achieve health and wellbeing (24). The findings show that several attempts were made by interns to engender leadership to foster sustainability of activities. Planning with their teams (55%), training individuals to lead (14%) and developing guidelines (59%) were listed among the multiple approaches utilized, and this is a positive.

The literature shows that interns' fear of being penalized may have influenced under-reporting of negative experiences and personal deficiencies and a greater emphasis on reporting positive experiences (25). This and the fact that feedback from the organizations involved are excluded from this analysis contribute to limitations of this paper. One strength of the paper, however, is the use of mixed methods to make subjective and objective analyses of the value of the structured internship approach in helping to achieve goals and lead to satisfaction among interns.

Conclusions/recommendations

It can be concluded from these reports that the structured internship approach for health promotion specialists provided experiences to strengthen competence. Opportunities included: acting as health promotion resource persons, planning, implementing and evaluating health promotion programmes, communicating at different levels and in various forms, collaboration, advocacy and policy-related contributions. While agency supervision was often

limited, internship seminars facilitated support through feedback from faculty and peers. Interns reported growth and satisfaction with the exposures they received. Future analysis of this approach should include agency evaluation of interns and the benefit of the internship from the perspectives of the agencies. We recommend that extensive research be done to investigate the benefits of including structured internships in the training of health education and promotion specialists.

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Individual and community experience of rising burden of non-communicable diseases in two case districts of Nepal: a qualitative exploration

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Abstract:

Introduction: Non-communicable diseases (NCDs) are a rapidly emerging global health challenge with multi-level determinants popularly known as social determinants. The objective of this paper is to describe the individual and community experiences of NCDs in the two case districts of Nepal from a social determinants of health perspective.

Method: This study adopted qualitative study design to identify the experiences of NCDs. Sixty-three interviews were conducted with key informants from different sectors pertinent to NCD prevention at two case districts and at the policy level in Nepal. Twelve focus group discussions were conducted in the selected communities within those case districts. Data collection and analysis were informed by the adapted Social Determinants of Health Framework. The research team utilised the framework approach to carry out the thematic analysis. The study also involved three sense-making workshops with policy level and local stakeholders.

Results: Three key themes emerged during the analysis. The first theme highlighted that individuals and communities were experiencing the rising burden of NCDs and metabolic risks in both urban and rural areas. The other two themes elaborated on the participant's experiences based on their socio-economic background and gender. Disadvantaged populations were more vulnerable to the risk of NCDs. Further, being female put one into an even more disadvantaged position in experiencing NCD risks and accessing health services.

Conclusion: The findings indicated that key social determinants such as age, geographical location, socio-economic status and gender were driving the NCD epidemic. There is an urgent need to take action on social determinants of health through multi-sectoral action, thus also translating the spirit of the recommendations made a decade ago by the Commission on Social Determinants of Health in addressing a complex challenge like NCDs in Nepal.

Keywords: non-communicable diseases (NCDs), metabolic risks, social determinants, Nepal

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Background

Nepal has observed a rapid growth in the burden of non-communicable diseases (NCDs) in the last two decades, with more than half of the disease burden due to NCDs (1–3). The majority of NCDs in Nepal belong to the four main groups of NCDs (cardiovascular diseases, diabetes, chronic respiratory diseases and cancer) with cardiovascular diseases alone contributing to 22% of the total burden (1,2,4). National surveys indicate that metabolic (elevated blood pressure, total cholesterol and glucose levels) and behavioural risk (tobacco use, alcohol consumption, limited physical activity and poor dietary habits) factors of NCDs are driving the epidemic of NCDs in Nepal (5,6).

Global evidence suggests that NCDs are a complex problem and driven by multi-level determinants, popularly known as social determinants (7,8). It is thus clear that understanding and tackling NCDs must move beyond behavioural factors and take multi-level factors into account, including socio-economic and commercial determinants of health (7,9). However, developing countries like Nepal have limited evidence regarding social determinants of health in addition to pre-existing health system issues, which present as barriers in preventing complex problems like NCDs (10). Prevention efforts relating to NCDs are often confined to limited behavioural campaigns in Nepal due to limited understanding of NCDs and their social determinants. Local evidence relating to the social determinants of NCDs could provide valuable insights to inform health system action. This study is an effort to present such local evidence. The objective of this study is to describe the individual and community experiences of NCDs from a social determinants of health perspective in Nepal.

Methods

This study is part of the first author's PhD programme, which adopted qualitative study design to identify the experiences of NCDs as discussed below.

Study area

The selected key informants were interviewed between July and October 2016 from two purposively selected case districts (Bhaktapur and Morang districts) and at policy level (Kathmandu, the capital city) in Nepal. Further, one municipality (urban geo-political administrative units) and two Village Development Committees (rural geo-political administrative units that are commonly abbreviated as VDC) from each district totalling six clusters (Madhyapur Thimi Municipality, Dadhikot VDC and Sipadol VDC from Bhaktapur, and Biratnagar Municipality, Tankisinwari VDC and Bahuni VDC from Morang) were purposively selected for community level data collection (key informant interviews and focus group discussions).

Study techniques and tools

Key informant interview and focus group discussion (FGD) were the qualitative research techniques employed, and accordingly interview schedules and FGD guidelines containing semi-structured open-ended questions were developed. The *WHO Framework for Action on Social Determinants of Health* was utilised to shape the research tools and analysis (8). The interview schedule and FGD guideline were first developed in English and translated into Nepali.

Study procedure

The sampling strategy to select key informants entailed purposively identifying stakeholders knowledgeable and experienced in NCD prevention and control at policy and district levels from across the sectors (11). The potential policy level key informants ($n = 24$) were identified by referring to the list of the multi-sectoral committee members proposed by the *Multi-sectoral Action Plan for the Prevention and Control of NCDs 2015–2020* in Nepal and accordingly, finalised in consultation with supervisors and local experts in Nepal. The district and VDC/municipality level key informants ($n = 39$) were identified through consultation with District Public Health Offices, who also helped us identify two communities within each VDC/Municipality for the focus group discussion.

Policy level key informants included participants from the Ministry of Health, Department of Health Services, other sectoral ministries, national level non-government organisations and international non-government organisations. District and community level key informants included participants from the District Health Office, Local Development Office, local non-government organisations, primary health centres, health posts, local schools and VDC/municipality offices. The purpose of the key informant

interviews was to illuminate the experience and perspectives of key stakeholders in relation to the current situation of NCDs in Nepal. The time of interviews ranged from 30 to 60 minutes and they were conducted in Nepali.

Twelve FGDs were conducted at the community level in the six selected VDCs/municipalities. Each FGD included 5 to 10 community people experiencing and/or caring for family members with NCDs and their metabolic risks. The purpose of FGD was to capture negotiated views on NCDs and metabolic risks as experienced by individuals, families and community members belonging to different socio-economic groups. Therefore, two FGDs were conducted in each VDC/municipality with one FGD conducted in a socio-economically disadvantaged community and the other in an advantaged/mixed community. The FGDs were facilitated by the first author with the help of local Female Community Health Volunteers and all FGDs were recorded after obtaining informed consent. FGDs were conducted in Nepali. The time of an FGD ranged from 45 minutes to 1 hour.

The interview and FGD audio recordings were first transcribed in Nepali and then translated into English for coding and thematic analysis. The research team utilised the *Framework Approach* to carry out the thematic analysis guided by the study framework (12). *Dedoose (Socio-cultural Research Consultants)* (13), a web-based data management platform, and *MS Excel 2016 (Microsoft)* (14) were used to manage the qualitative data and facilitate the analysis. Two sense-making workshops at each of the case districts and one at the national level were conducted in early 2018 to obtain feedback and suggestions on the preliminary findings from the stakeholders. Ethical approval for this study was obtained from the Massey University Human Ethics Committee (SOA 16/37) and Nepal Health Research Council Ethics Committee (Reg. no. 163/2016) respectively. The participants were clearly informed about the purpose and voluntary nature of the study using a simple information sheet. Written consents were obtained from all participants involved in the study.

Results

Three significant themes relating to individual and community experience of NCDs and metabolic risks emerged through the analysis.

Everyone is experiencing the rising burden of NCDs and metabolic risk factors, both in urban and rural areas

Almost all key informants and FGD participants shared that their communities were experiencing a rapid increase in NCDs such as cardiovascular diseases, cancer and diabetes and their metabolic risks, particularly hypertension, hyperglycaemia and high cholesterol. An FGD participant from urban Bhaktapur stated:

> Here, many people are suffering from sugar [Diabetes]. Amrita and many others have sugar. They had sugar earlier than I had. (ID: 71)

An FGD done in a rural indigenous community in Morang district revealed that just as many people were suffering from hypertension in their communities.

> In the house of about 4 members, 3 people have high [blood] pressure. (ID: 67)

Another commonly discussed concern by both policy and local level key informants was how the burden of NCDs was affecting the younger population. Hypertension or hyperglycaemia were previously unheard of in younger adults (under 40s) in those communities as well as Nepal. A policy level key informant added:

> Increase in blood pressure with increasing age and increasing blood pressure at young age is quite different things. We have been observing high blood pressure in people below 20 years of age. (ID: 5)

Almost all participants raised strong concerns about the how key behavioural risks of NCDs such as junk food habits, tobacco and alcohol consumption, and physical inactivity were increasing. An FGD participant from rural Bhaktapur observed the negative influence of junk food on the traditional dietary practice, even in rural settings.

> We used to have fried corn, soya bean and stuffs like that. But we now have noodles [Pre-packed noodles]. (ID: 76)

Participants also reflected on the contribution of tobacco and alcohol use in increasing the burden of NCDs. The use was facilitated by the easy availability of those products in both rural and urban areas. A community level key informant from rural Morang shared:

> You are asking about shops where cigarette isn't found. Cigarette is found in each and every shops but not all shops sell drinks. (ID: 64)

Experience of NCDs and metabolic risk factors by disadvantaged groups is worse than that of advantaged groups

NCDs were affecting everyone irrespective of socio-economic status. However, the degree of exposure and vulnerability was reported differently among the advantaged and disadvantaged groups. Key informants discussed frequently how disadvantaged groups were more exposed and vulnerable to the risk of NCDs and how these groups had limited ability to change their socio-economic circumstances influencing their choices and behaviours linked to NCDs. A policy level key informant described:

> If a poor has a sedentary life style, and even if he is made aware, it is very difficult for him to take corrective action due to his social circumstances. Like you see in malnutrition chain, a poor is circled by different disadvantages keeping him in vicious cycle. (ID: 15)

Participants indicated that disadvantaged groups gave less priority to their health, possibly due to low awareness and socio-economic circumstances. A Female Community Health Volunteer from Bhaktapur shared how a disadvantaged rural community reeling under underemployment and low socio-economic progress was experiencing a rise in addictive behaviours and possibly NCDs:

> Typical drinking start from the morning and will continue till evening as many people are unemployed and gather in such local shops and discuss about charm of foreign employment and politics. No wonder the problem [NCDs] is increasing in our communities. (ID: 33)

A rural health worker from Morang highlighted poor dietary practice among the disadvantaged groups and possible linkage to increased metabolic risks among them.

> The maximum number of patients in OPD belongs to Magar community and Rishidev community [Disadvantaged Groups]. They don't eat balanced diet, and Magar eat more fatty food like pork meats. (ID: 61)

Long duration of NCD progression often resulted in recognising one's risk of NCDs and accessing services for the prevention and treatment of one's health conditions at the late stages among disadvantaged groups. In particular, socio-economic circumstances deterred the disadvantaged group in seeking timely treatment of their health conditions due to the fear of catastrophic health expenditures. A municipality level key informant shared:

> If they [Disadvantaged Group] get checked up then new disease will come up and then this will increase tension. (ID: 44)

Further compounding the vulnerability to the stresses of poverty and low awareness was key informants frequently describing the disadvantaged groups' access to public health services as being very limited. A policy level key informant elaborated:

> If we further look deeper into the system, our health system have not been able to reach the lower tier. We need to ensure and be capable that the basic minimal services reach to unreached and marginalised groups. (ID: 3)

In contrast, advantaged groups have increased access to services, which has decreased their vulnerability to NCDs and widened the health inequity gap in the Nepalese context. A policy level key informant described:

> The reason for decreasing disease burden among rich is because of timely availability of treatment, physical activity, healthy diet, periodic health check-ups, health awareness. Rich people undergo treatment even when they see minor symptoms. (ID: 4)

Gendered experience of NCD problem

Gendered experience of the NCD problem was often observed during both interviews and focus group discussions. Females were much less likely to know their NCD risk status compared to males. A female FGD participant from rural Morang stated a common expression as follows:

> I don't know mine since I have never taken measurement. (ID: 67)

A key informant from urban Morang shared that women often accessed health services at the very late stages of disease symptoms.

> Males generally go for checking their pressure level while females go after they encounter problem. (ID: 59)

This delay in accessing preventive services could be related to the widely prevalent gender discrimination in Nepalese society, which was reflected upon by a key informant from rural Morang.

> This [Gender] discrimination is prevalent everywhere. This is not only the problem of poor and lower caste people but also prevalent among the rich and higher caste people. (ID: 53)

Some key informants noted that the effect of gender discrimination was readily reflected in access to and use of health services. A vivid example of the impact of cultural norms was in the way that men could easily access health services while women needed to seek approval from male members or elders. A key informant from urban Bhaktapur elaborated:

> Due to this discriminatory and dominating cultural norms, female do not go to treatment often unless serious. They also have limited outside knowledge including food and calorie related information. (ID: 44)

Table 1 presents a summary of the individual and community experiences of NCDs from the two case districts.

Discussion

This study indicated that communities have been experiencing increasing burden of NCDs in Nepal with geographic location, socio-economic status and gender influencing the vulnerability and exposure of different population groups to those NCDs. National surveys and research have indicated the increasing prevalence of NCDs and metabolic risks among adults in both urban and rural areas (3–6,15). The STEPwise approach to surveillance survey of 2014 showed that NCD metabolic risks were only slightly higher in urban areas compared to rural areas in Nepal, particularly diabetes and obesity (6). However, these quantitative surveys do not highlight the lived experiences and vulnerability of the poor, rural communities and women, or critically discuss the linkages of those experiences with social and commercial determinants of NCDs. This study complements the national surveys by illuminating how the local context influences community experiences of NCDs and their risk factors.

Urbanisation and rural–urban interaction facilitating rise in NCDs

Our study demonstrated that the rural population experienced NCDs as much as the urban population. A possible explanation could be that rapid urbanisation is occurring in Nepal (16), which is facilitating rural–urban interaction and transference of urban influences into rural areas of Nepal. In particular, junk food and inadequate physical activity-based urban lifestyles are gradually being introduced to the rural environment due to urban–rural movement, hence nurturing similar businesses and lifestyle as noted in rural areas of the case districts. Research in India has documented findings that diets in rural India may be transitioning towards urban dietary practices due to increased urbanisation and urban–rural interaction (17). In addition, the availability and accessibility of junk food in many low- and middle-income countries have been well noted (18). In this study, participants did report that junk food companies have overwhelmed the market of both urban and rural areas in the case districts and communities are falling victim to their marketing strategies and developing junk food habits, especially among children.

The study also reported that tobacco and alcohol products were widely available and consumed in the

Table 1. Key experiences of non-communicable diseases (NCDs) and their social determinants from the two case districts in Nepal.

S.N.	*Themes*	*Key experiences shared by participants*
1	Everyone is experiencing the rising burden of NCDs and metabolic risk factors, both in urban and rural areas	Number of community members suffering from hypertension, sugar and similar metabolic risks rapidly increasing Many adults in a single house suffering from high blood pressure Younger adults being increasingly affected by metabolic risks Key behavioural risks of NCDs increasing. For example, traditional food which are often nutritious and locally sourced being rapidly displaced by junk food; tobacco products sold in almost all shops in the village, etc.
2	Experience of NCDs and metabolic risk factors by disadvantaged groups is worse than that of advantaged groups	Addiction to alcohol and tobacco products high among unemployed youths and disadvantaged groups resulting in possible high burden of NCDs in such groups Poor dietary practice among disadvantaged groups Disadvantaged group having fatalistic attitude towards their health due to socio-economic stressors and low awareness Local health system severely limited in its capacity to deliver equitable and quality health services contributing to delay in presentation and service utilisation by disadvantaged groups
3	Gendered experience of NCD problem	Late presentation of female for the treatment of NCDs and/or metabolic risks Limited ability of female members within a family to make their own decisions to access health services Gender discrimination and disempowerment of female root cause of inequitable access by female

case districts, resulting in an increased prevalence of NCDs. Tobacco and alcohol products have a cultural significance in the context of Nepal (19,20). With the commercialisation of tobacco and alcohol products, the consumption of these products has further increased in both urban and rural areas (19). A *Lancet* review has critically analysed how these commercial motives of tobacco, alcohol and junk food companies are driving behavioural risks associated with increasing burden of NCDs (18). This commercial motive could explain the increased consumption of tobacco and alcohol, especially among young people, who have developed drinking and smoking habits due to easy availability. This has been further bolstered by limited monitoring activities from the respective authorities (21,22). Authorities have not been able to strictly monitor the production and sales of tobacco and alcohol products as per the regulations. Evidence from India also suggests that alcohol companies are driving the drinking patterns among the young population in both urban and rural areas through marketing and influences at policy level (23). Overall, increasing rural–urban interaction is facilitating the increasing influence of commercial determinants in blurring the boundary of the concentration of NCDs in rural and urban areas of Nepal.

The multiple challenges impacting disadvantaged communities and their risk of NCDs

A disadvantaged community, in terms of socio-economic conditions and ethnicity, usually lies in the fringes and/or deprived areas of the villages/cities. The disadvantaged communities in particular have difficulty in accessing the public health services due to distance and socio-economic barriers (24). In this study, disadvantaged groups were often unaware of their metabolic risk status, resulting in delayed treatment of the conditions. Evidence from Nepal has shown that disadvantaged groups often have limited health literacy and service utilisation rates (25,26). Further evidence from developing countries

has indicated that young people and adults from these disadvantaged backgrounds are more likely to fall into the habit of smoking tobacco and consuming alcohol at an early stage due to stressful circumstances and get caught in the vicious circle of addiction and poor health (27,28).

Furthermore, this study found that NCDs posed a significant financial burden to the families of the patient and deter individuals from disadvantaged groups from seeking care. A qualitative study in Uganda showed that due to pressure of meeting the basic needs and fear of catastrophic expenses, the disadvantaged group at risk perceive themselves at low risk of NCDs and delay the check-up and treatment (29). Health is considered as a need that can be delayed until any obvious disease occurs, which is complicated by the socio-economic circumstances and access to health services. Importantly, a lack of social safety protection within Nepal and similar developing countries may be preventing the vulnerable group from knowing their status of NCDs and getting themselves treated (30). In addition, government facilities in Nepal provide limited NCD-related services, and private sectors are often expensive and out of reach for the poor (3).

Gender inequality and its impact on NCD risks

This study has indicated that women cannot access NCD-related services they need when they want them. Men can access any health services easily and without having to seek anybody's consent, while females must seek approval from a male member or mother-in-law. Evidence from Nepal has shown that women have limited access to health services due to their low social status (31,32). Due to their subordinate role and their family responsibilities, women often hesitate to seek care for their problems in the early stages of development of NCDs. These observations are common throughout the South Asia region and are linked with gender discrimination that a woman faces throughout her life (33). The participants in the study shared that gender discrimination was widely prevalent with sons getting better care and opportunities compared to daughters. Males are considered as breadwinners and future investment for the families, leading to preferential treatment of male children and neglect of female children (34,35). In particular, the limited quality education opportunities for a girl child in her early years has a knock-on effect on empowerment and financial independence, often resulting in early marriage and early pregnancy (36). As a result, males have more autonomy and control of financial resources compared to females (37,38). Comparatively, urban women, who tend to be more educated and economically active, are more autonomous in terms of decision-making and health service utilisation, yet they also endure some form of dominance by men. Studies in Nepal have shown that women's autonomy was influenced by education status, income level and age of the female, with patriarchal construct driving these root causes of female disadvantages (39,40).

A key limitation of this study is that the results and analysis were based on the limited data available from the first author's PhD study, which had broader scope (assessing the situation, and exploring behavioural risks and their interaction with social determinants and modelling). The other notable limitation was limited participation of non-health stakeholders during the sense-making workshops, which may have affected the quality of feedback obtained during the workshops.

Conclusion

This study was able to highlight some of the key social determinants such as age, geographical location, socio-economic status and gender that influence the NCD epidemic in Nepal. NCDs were widespread in both urban and rural areas and needed an urgent multi-sectoral response. Particularly, disadvantaged groups were the most vulnerable to, and the worst affected by NCDs. There is a need to monitor the exposure and vulnerability of rural residents, women and the poor to NCDs and their metabolic risks. This is further impeded by a disconnected and under-resourced health system. The findings of this study strongly indicated that lack of policy action for preventing NCDs and their social and commercial determinants is contributing to the escalation of the NCD problem in Nepal. The study reiterated the importance of understanding the complex issue of NCDs from the social determinants of health perspective. The findings of this study can help contextualise any generic social determinants of health framework to

develop local tools to understand complex problems like NCDs and initiate local actions to prevent NCDs and their social determinants.

Authors' contributions

SRS conceived and drafted the initial manuscript. AM, JF, DL, DWL, AV and RP critically reviewed and revised the initial manuscript. SRS prepared the final manuscript. All authors read and approved the final manuscript.

Declaration of conflicting interests

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Original Article

The picture of smoking in my mind: a need for effective anti-smoking public service announcements based on the self-construals of smokers

Mutlu Önen and Forrest Watson

Abstract: This qualitative study sought to understand the behaviours of smokers with independent and interdependent self-construals to design effective anti-smoking public service announcements (PSAs). Findings from the participants' narratives and drawings suggest that individualistic message content (focused on the individual smoker) can be effective for smokers with independent self-construal, while collectivistic message content (focused on a smoker group) can be effective for smokers with interdependent self-construal to increase their quitting intentions. This study also revealed characteristics of the smoker groups in terms of routines, meanings and symbolic values of smoking, which can be used to enrich the contents for anti-smoking PSAs. The implications of this study are discussed for public policy makers and nonprofit organizations that seek to match their message with the audience to improve public health.

Keywords: self-construal, smoking, anti-smoking public service announcements, social marketing, culture

Introduction

Anti-smoking public service announcements (PSAs) are a tool commonly used by state institutions and non-governmental organizations to change smoking attitudes and behaviours of a large target audience. Despite evidence for the effectiveness of anti-smoking media campaigns (1), there is general recognition of their insufficient success (2) and need for continual improvement. While ongoing marketing efforts of tobacco companies are one factor counteracting PSAs (3), institutions must also continually re-evaluate the possibility of ineffective anti-smoking messages.

To develop effective health messages and increase campaign success, message features and how messages are processed must be understood (4). Much research has considered matching the ideal message with the cultural factors of an intended audience (5,6). Congruence between message content and the audience is a vital part of all health communication and specifically anti-smoking PSAs (7).

There is an ongoing debate in the health communication literature about the effect of self-congruent messages on individuals. The self-congruency effect suggests that advertising appeals that are consistent with the self-concept of the individuals can be more effective (8,9). For example, Chang (7) supported the effect of self-congruent messages by showing that anti-smoking messages focusing on the self are more influential with independent self-construal Taiwanese student smokers. Other research has challenged the self-congruency effect (5,10,11). For example, Yang *et al.* (11) demonstrated that nonsmokers in the

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USA with interdependent self-construal were counter-intuitively more affected by anti-smoking messages emphasizing personal (rather than relational) consequences of smoking.

This research re-examines the discrepancy over the self-congruency effect on health messaging in three somewhat unique ways. Firstly, because most studies challenging the self-congruency effect were conducted primarily in the individualistic USA, studying the subject in a less individualist culture may provide balance. Secondly, the current study utilizes the strengths of qualitative inquiry to explore the routines, meanings and symbolic importance of smoking and their connection to self-congruency. Thirdly, this study utilizes a non-student sample to mitigate the limitations of student samples (12). The current study therefore differentiates from others in terms of using a non-US Turkish participant profile, a qualitative methodology and including 25- to 35-year-old smokers.

To understand the effect of self-congruent messaging, this study considers anti-smoking PSAs broadcast in Turkey. Although Turkey has been implementing the measures set by the World Health Organization (WHO) with great effort since 2008, smoking rates are still high (3). Turkey is the fourth highest country in terms of the percentage of daily smokers in 2017 (13). According to this data, 26.5% of the population above the age of 15 constitutes daily smokers in Turkey, trailing only Indonesia, Russia and Greece.

To decrease smoking rates in Turkey, the government uses anti-smoking PSAs as one of its main tools. The themes of PSAs in Turkey are mostly negative health effects of smoking on individuals, and the most common message strategy is creating fear and disgust towards tobacco (14,15). Moreover, the focus is the quitting attempts of an individual, not a group. Therefore, the ineffectiveness of PSAs in Turkey (15,16) and its continued high smoking rate motivates this research to better understand and communicate with Turkish smokers. Accordingly, our study aims to answer the following research question: how can anti-smoking PSAs be designed in terms of effective message contents for smokers with independent and interdependent self-construals to increase their quitting intentions?

Methodology

Participants

The sample in this study is composed of eight males and nine females who are between the ages of 25 and 35 years and currently smoking cigarettes. This age group constitutes approximately 33% of the smoker population in Turkey (17). To reach the participants for the current study, the snowball technique was used. The researcher first asked for her personal contacts to participate in the study and reached nine participants initially. Afterwards, those contacts connected with their acquaintances and informed the researcher about their participation willingness. The sample is well-educated, with variation in marital status and occupation. The demographics and smoking information for the sample are given in Table 1.

Data collection

In this study, two different qualitative methods were used to gain an in-depth understanding about the smoking behaviour and self-construals of the participants: semi-structured interviews and art-based method in the form of personal drawings. The interview guide was prepared to explore individuals' beliefs, experiences, perceptions and motivations (18). To determine the independent and interdependent self-construals of the participants, questions were prepared based on the INDCOL (Individualism-Collectivism) scale (19) as well as descriptive measures in the broader literature. The main questions in the interview guide are provided in Table 2.

The interviews were conducted by the first author who is a native Turkish speaker. A consent form was taken from each participant before starting. The interviews were done in Ankara, the capital of Turkey, from January to March 2019. Because the researcher aimed to get as close to the participants' natural settings as possible while maintaining a professional distance, the interviews took place in cafes or homes considering each participant's preference. The researcher recorded each interview for a total of over 11 hours (average of 40 minutes per interview), which yielded over 128 pages of single-spaced transcripts.

Table 1. Demographic characteristics of the sample.

Name[a]	*Gender*	*Age*	*Education*	*Occupation*	*Marital status*	*Years smoked*
Smokers with independent self-construal (independent smoker group)						
Mert	Male	26	Bachelor's	Masters student	Single	10
Ufuk	Male	27	Graduate	Research assistant	Single	4
Veli	Male	27	Bachelor's	Engineer	Single	10
Deniz	Male	27	Bachelor's	Engineer	Single	11
Onur	Male	28	Graduate	Doctor	Single	9
Sibel	Female	28	Bachelor's	Consultant	Married	12
Burcu	Female	29	Graduate	Research assistant	Married	12
Yasin	Male	31	Bachelor's	Engineer	Single	13
Meltem	Female	35	Bachelor's	Nurse	Married	17
Smokers with interdependent self-construal (interdependent smoker group)						
Merve	Female	25	Bachelor's	Pharmaceutical representative	Single	6
Pelin	Female	27	Bachelor's	Engineer	Single	2
Mustafa	Male	29	Bachelor's	Gov't official	Single	13
Ceren	Female	29	Bachelor's	Engineer	Single	10
Buket	Female	29	Graduate	Engineer	Married	4
Alper	Male	30	Graduate	Engineer	Married	11
Sevgi	Female	32	Graduate	Academician	Married	8
Elif	Female	35	Bachelor's	Teacher	Single	11

[a]Names changed to protect the privacy of the participants.

Table 2. Interview guide.

Interview questions
Warming-up questions:
When and how did you start smoking?
What do you like about smoking? Do you have any smoking routines?
If you ever stopped smoking, what do you think will be missing in your life?
What can you say about the positive and negative consequences of smoking on you?
Questions about self-construals:
How do you make your decisions regarding life?
How does it feel to you to have a disagreement with your family and friends about a subject? And what do you do when you have a disagreement?
What does it mean for you to become successful in life? And how do you feel when people around you become more successful than you on a particular subject?
Do you think that you are different from people around you? How do you feel about this?
Does anyone in your life express any concerns about your smoking? How do you feel about this?
Drawing section:
Now, I request you to draw a picture that represents you. In what kind of scene do you draw yourself while smoking?
Questions about anti-smoking public service announcements (PSAs):
What do you think generally about anti-smoking PSAs that are broadcasted on TV?
Can you exemplify the catchiest parts from the anti-smoking PSAs that you have watched? And what is your reaction to those parts generally?

(Continued)

Table 2. (Continued)

Interview questions
If you were to prepare anti-smoking PSAs, what kind of contents would you consider encouraging yourself to quit smoking?
Based on your answer, do you prefer that the content is intended only for the person who smokes so that the message you give will be more effective? Or do you prefer that family and friends of the smoker are also involved in the content?
Why do you think that this kind of content you create will be more effective?
Ending question:
When you consider this conversation, what kind of conclusion do you make for yourself?

To enrich the interview data, an art-based method in the form of personal drawings, a projective technique practised in consumer research to encourage self-expression (20), was also used. Participant artwork 'allows visual documentation of behaviours and contexts that are often unconscious, giving researchers access to participants' subjective worlds (21)'. Creative methods can reveal the emotional and symbolic meanings in more detail than mainstream methods (22). For drawing, participants were given paper and coloured pencils and asked to draw a picture of themselves while smoking. Participants were asked to explain their drawing in a detailed manner, which elicited deeper reflections (20).

Data analysis

All interviews were recorded and transcribed verbatim. Afterwards, interview transcripts and artwork were first scanned for emerging themes. During the open coding, dominant themes from the interviews were gathered and then categorized and linked with each other during the axial coding (23). The combination of open and axial coding was utilized to organize the data in meaningful themes (24). To ensure the trustworthiness of the study, triangulation of different data collection methods (e.g. semi-structured interviews and personal drawings) was used for credibility, and neutrality was sustained through the second author who was not in the interviews and a coding strategy for confirmability and dependability.

The data analysis of the interviews and the participants' drawings was based on three main objectives. Firstly, self-construal analysis was done to understand the dominant self-construal of the participants, and then the participants were categorized into independent and interdependent smoker groups. Secondly, the similarities and differences between the identified independent and interdependent smoker groups were analyzed in terms of the routines and meanings of smoking. Finally, the researchers reviewed each smoker groups' suggestions on how PSAs could be more influential and integrated them with the main points revealed throughout the interviews and artwork. Considering the purpose of the study, two primary themes emerged of individualistic message content for the independent smoker group and collectivistic message content for the interdependent smoker group.

Findings

Self-construal findings

Based on the self-construal analysis, nine smokers were categorized as having dominant independent self-construal while eight smokers were categorized as having dominant interdependent self-construal (see Table 1). The self-construal analysis of the participants was evaluated in four main dimensions, namely decision-making styles, conflict styles, perception of uniqueness/ordinariness and perception of success, each of which shows how the two groups differ from each other. Through analyzing the individuals based on these dimensions, we saw evidence emerge of independent and interdependent smoker groups. In decision-making styles, the independent (vs. interdependent) group applies decision-making based on one's own (vs. in-group's) preferences. In conflict styles, the independent (vs. interdependent) group has dominating (vs. compromising) conflict

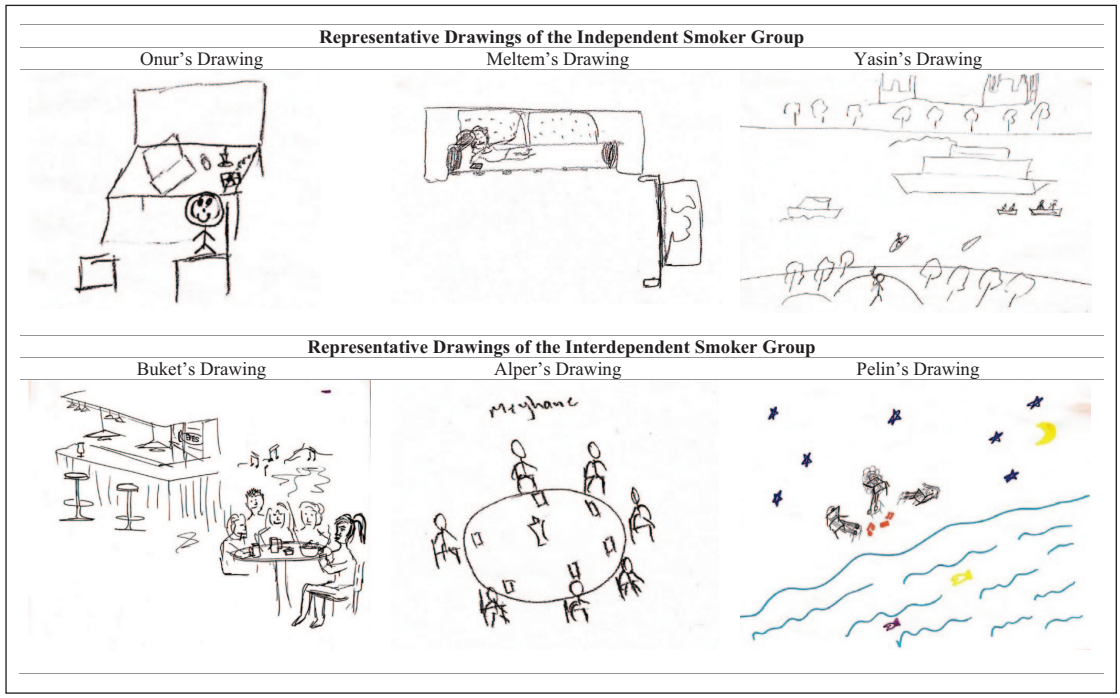

Figure 1. Representative drawings of the independent and interdependent smoker groups.

style. Considering the perception of uniqueness/ordinariness, the independent (vs. interdependent) group has a perception of uniqueness (vs. ordinariness). In the perception of success, the independent (vs. interdependent) group sees success as a self-oriented (vs. group-oriented) achievement. Since individuals can have the characteristics of both independent and interdependent self-construals at the same time (25,26), the researchers looked at which of them outweighed the others. For example, a participant can have the characteristics of independent self-construal in some dimensions although he or she has a dominant interdependent self-construal.

Independent smoker group

Based on the analysis of the drawings and narratives of the smokers, the independent smoker group tended to associate their smoking behaviour with specific routines, symbols and meanings. Figure 1 shows representative drawings from both the independent and interdependent smoker groups.

The participants from the independent smoker group associate their smoking behaviour with some routines. For example, Onur draws his smoking routine of drinking tea (see Figure 1). The participant shares,

> Here is my room. I am sitting there. After I ate my dinner, I am coming to my room, drinking my tea and turning on my computer. My smoking routine is tea, there is not any other. In fact, with every cup of tea that I am drinking, I also want to smoke. (Onur)

As the informant explains, drinking tea is a kind of complement to his smoking behaviour. Owing to the positive associations between them, coffee and tea can be thought of as triggering factors that increase cigarette consumption (27). When the participant was further asked the reason for drawing such a scene, he explained,

> I think I am getting tired during the day and I want to have a rest when I am at home. When I am in my room, I feel myself more peaceful. I do things that I want to do. This is a moment of pleasure. I feel happy at that moment. (Onur)

Since Onur is a doctor, he may get overwhelmed during the day at the hospital in terms of dealing with the patients who are complaining about their illnesses all day. This situation may create a kind of situation for Onur where he feels trapped. Therefore, the cigarette may give him a freedom in terms of allocating his time to his favourite activities such as smoking in his room, drinking tea and surfing on the Internet. Therefore, smoking symbolizes the freedom and peacefulness after work.

A female informant also shared how she experiences joy when coffee accompanies her cigarette, 'I usually like drinking coffee while I am smoking. That cigarette will be there if I am smoking. I feel its joy that moment' (Meltem). When we look at Meltem's drawing (see Figure 1), we also see that the participant describes a comfortable scene with the images of couch, television, smart phone and cigarette as her smoking routine. Therefore, the participant associates her smoking behaviour with some elements that make her relaxed and comfortable. Since Meltem is working outside the home and has two children, her smoking behaviour symbolizes her leisure time after she completes the housework and takes care of her children. The participant even mentions how the cigarette may symbolize a kind of reward which is taken after accomplishing the daily tasks,

> I really like smoking alone while lying on a couch, watching TV and looking at my phone at the same time. It is so comfortable and relaxing! But I cannot always do this as I don't have too much time due to work. Still I can say that it is the best moment that I can think about smoking. (Meltem)

Other than the routines, the clearest point observed in the narratives and drawings of the independent smoker group is thinking of smoking as an 'individual' activity. Therefore, they mostly draw themselves alone while they are smoking. For example, Yasin drew himself alone on the top of the hill where he can see the beautiful view of Istanbul (see Figure 1).

> Lighting up a cigarette across a beautiful landscape feels good. I am drawing the Bosporus here. Over there, Hagia Sophia Mosque! I am on the top of a hill and there are trees, nature, and historical places around me. I am smoking. It is very pleasurable. (Yasin)

Considering his explanations, Yasin associates smoking with pleasure and joy and he can visualize the scene where he feels good and relaxed while smoking. This may explain how independent smokers give a self-related meaning to their smoking behaviour. Each of their drawings is a picture where the smoker is concerned with his or her own pleasure in his or her own space. Therefore, smoking is usually symbolized with freedom, peacefulness, uniqueness and pleasure in those drawings.

Interdependent smoker group

The participants from the interdependent smoker group associate their smoking behaviour with different specific routines, symbols and meanings than the first independent group. The narratives and drawings of the interdependent smoker group show that they tend to connect their smoking behaviour to drinking alcohol with their friends. For example, both Buket and Alper drew themselves at a bar drinking alcohol with their friends. Buket shares, 'Here is a bar. There is the bartender's table at the back. Music is playing. There is a group of friends of mine and everyone is drinking beer, eating peanut and chips. We are chatting and smoking at the same time.' Participants from the interdependent smoker group emphasize the atmosphere where both smoking and drinking alcohol play a role in strengthening the interpersonal dialogue and sustain group harmony.

Alper's drawing also shows one of the meanings of alcohol in Turkish culture. Alper writes 'meyhane' (bar) above his drawing, which is associated with drinking 'rakı' (a special Turkish alcoholic drink). This place is usually preferred by males to socialize and have fun with their friends. Alper explains, 'If I have one chance to smoke, I would prefer this setting. I prefer smoking with my close friends while drinking alcohol. It feels good and you can get relaxed there. I mean we are happy at that moment.' Considering his explanation, Alper draws a picture in which smoking symbolizes a focal point for the members of the friend group by enabling warmth and comfort, also shown the inclusion of candlelight.

The drawings and narratives of interdependent smokers show smoking as a 'social' activity. Contrary to the first group, they mostly draw themselves with other people while smoking. One participant mentions:

> I usually prefer to smoke with my friends while we are sitting together and listening to good music. I like smoking during nighttime, so I drew stars and the moon. You can see that we are also chatting and having fun together. (Pelin)

Pelin sees smoking as a way to express oneself close to others. The cigarette can become a kind of bridge from one person to another, enabling a deeper conversation and strengthening the bonds between people. As the drawings show, interdependent smokers see smoking as a way to socialize and share deep conversation with others.

Individualistic message content

After carefully analyzing the narratives and drawings of the participants, we saw that individualistic message content of showing *the quitting attempts of a smoker* can be effective for the independent smoker group. Since these smokers are more concerned with their self-related goals, showing examples from former smokers can encourage smoking cessation. Some of the participants mentioned that PSAs should first show that smoking cessation is achievable, before showing the ways to quit smoking. For instance, an informant shared:

> I think quitting smoking difficult, but I also believe that it is not impossible. The PSAs can present a kind of applicable model for people to quit smoking. For example, if you do this you can quit smoking easily. The content can be related with the easiness of quitting smoking. (Sibel)

Presenting applicable methods can be an alternative way to show smokers that smoking cessation is possible. Real-life examples will increase the persuasiveness of the message. Another shared:

> If I were the one who designs the PSA, I would try to give more information about how to quit. Sometimes they give an advertisement in three parts in terms of introduction, development and conclusion like a story. If the PSAs can be divided into three parts; the first one can be an intro, the second one can show the methods of quitting and the third one can show a man who quit smoking with method X. I mean showing the one who gets benefit instead of the dying one motivates people more. (Onur)

In summary, showing the successful quitting attempts of a smoker (rather than a fear appeal) can encourage people to quit smoking. A more personalized tone can attract the attention of smokers with independent self-construal who want to be encouraged by the applicable ways of quitting smoking.

Collectivistic message content

Showing *the quitting attempts of a smoker group* can be an effective collectivistic message content for the interdependent smoker group. Throughout the interviews, some participants mentioned they are motivated by acting as a group. One informant shared:

> We are smoking as a friend group. Recently, there have been some quitting attempts of one of my friends. She is trying to quit smoking and she has not smoked for a week. We are thinking that smoking has lost its attraction already. We are having fun while smoking together but we can also find other things to do instead of smoking. (Pelin)

The informant gives clues about her motivation to quit smoking after one of her friends also tried it. Since smoking is usually an activity done with a group of friends for the interdependent smoker group (as discussed based on Figure 1), when one quits, it may create a chain reaction for others as well. The group of friends can find a different activity to do together. Since a group can create both motivation and disincentive towards smoking, showing the quitting attempts of a group of smokers can be effective in encouraging interdependent people to quit smoking.

Discussion

The purpose of the present study was to explore effective message contents for anti-smoking PSAs based on the independent and interdependent self-construals of smokers to increase their quitting intentions. Consistent with the self-construal

literature, this study corroborates the idea that individuals with independent and interdependent self-construals will have different intentions (28) and they will be influenced by different message strategies to quit smoking (7,29). The self-congruency effect that individuals will get affected by different messages that are congruent with their self-aspects (9) was seen in this study. Although some research has not supported the self-congruency effect (5,10,11), the reason for observing the self-congruency effect in this study might be that, unlike most cultures where the research was conducted, Turkey is classified as a collectivistic culture (30). This may be part of the reason why the participants having interdependent (vs. independent) self-construal indicated favourable reactions to others-related (vs. self-related) health messages.

This research intends to contribute to the literature by proposing specific contents for PSAs. Based on the participants' independent and interdependent self-construals, two message contents emerged (individualistic and collectivistic). The independent smoker group is more motivated to quit smoking when the anti-smoking message is self-oriented and shows the ways of quitting with examples from former smokers (e.g. the story of how a former smoker quits smoking and lives a healthy life). Considering our participant profile, males constitute the majority of smokers in the independent smoker group. This suggests males may be more often motivated by messages focusing on self-aspects rather than group-aspects (31). On the other hand, it was shown that the interdependent smoker group is more motivated to quit smoking when the message is socially oriented and shows a group of people trying to quit smoking together (e.g. a group of former smokers socializing together through a different activity like picnicking or playing sports). Females constitute the majority of smokers in the interdependent smoker sample, suggesting females may be more often motivated by acting as a group (31). These contents may offer fresh approaches to the anti-smoking PSAs in Turkey that have lacked effectiveness (15,16). However, further research is needed to explore these observations at the population level.

The analysis of participants' drawings is another contribution to the existing literature because the drawings provide a window into the possible symbolic meanings of smoking. When given a neutral prompt to draw oneself smoking, it is striking how positive the pictures are. These drawings not only represent the participants' self-construal characteristics, but they also show routines of smokers and positive associations of smoking.

Firstly, when we look at the dominant self-construal of the participants, we can realize the connection between the representations of the self and the dimensions of the self-construals. For instance, the drawings of the independent smoker group mostly emphasize self-related aspects of smoking, and these can be associated with the independent self-construal dimensions of decision-making based on one's own preferences (e.g. continuing smoking as it gives pleasure), perception of uniqueness (e.g. smoking in a private, self-determined, unique environment) and success as a self-oriented achievement (e.g. smoking as a kind of reward). For the interdependent smoker group, drawings mostly emphasize the group-related aspects of smoking, and these can be associated with the interdependent self-construal dimensions of decision-making based on the in-group's preferences (e.g. continuing smoking since close others are also smoking), perception of ordinariness (e.g. not distinguishing self among the drawing of similar stick figures around a table) and success as a group-oriented achievement (e.g. enabling group harmony/identity with smoking). Considering the drawings, participants' representations of their smoking behaviours by linking them with their self-construal characteristics show how self-congruent messages can become effective for individuals as other research has indicated (7,9).

Secondly, the drawings also showed some of the routines of smokers and positive meanings of smoking. Other research has indicated the importance of cultural orientations on health communication literature (29). Therefore, participants' drawings are important in terms of revealing how Turkish culture shapes the smokers' routines and meanings of smoking. For example, the independent smoker group mostly highlights smoking with tea/coffee and smoking to get relaxed in their drawings while the interdependent smoker group emphasizes smoking with alcohol and smoking to socialize. Therefore, these drawings showed the picture of smoking in smokers' minds in terms of combining the self-construal aspects of the smokers and their smoking behaviours. The symbolic meanings of a cigarette should be considered in understanding what smokers

are being asked to give up if they quit (6). Drawing sensitively on such symbolic meanings could enrich the contents of PSAs and deal with the deeper aversions to quitting.

Strengths and limitations

The findings of this study have many implications for public policy makers who are responsible for designing anti-smoking campaigns. If they become aware of the characteristics of the independent and interdependent smoker groups, they can design the contents for anti-smoking PSAs in a way that will appeal to each group's sensitivities. The findings of this study showed that people's meanings and routines play an important role in their smoking behaviour. Since the self-construal literature is a reflection of culture, policy makers should consider the needs and motives of smokers with independent and interdependent self-construals separately.

We hope that this study also contributes to the broader practice and research of health communications. This study underscores the importance of exploring concepts in non-western contexts which may differ, for example, in their degree of individualism and corresponding response to different types of health messages. The qualitative approach also enabled the discovery of routines and meanings that can open up new paths for effective understanding and communication. More specifically, we hope that the innovative art-based method may be utilized by others to understand the symbolic importance of current behaviours. Health communicators should go into greater depth in understanding differences in the audience and their varying practices and underlying meanings in order to most effectively communicate with them.

The findings of this study should be considered with its limitations as well. Since this study applied a qualitative approach, a relatively small number of participants (17 smokers) constitute the research sample of this study. These smokers are situated in a particular time and cultural context. Since the aim of our qualitative methodology was to gain an in-depth understanding about the phenomenon in one culture, it will be up to future research to measure the discovered themes and extend the findings to a wider population. Moreover, the sample of this study was smokers aged 25–35 years who are well-educated and employed; therefore the findings reflect the motivations of the young adult smoking population in Turkey. Future research may extend the participant profile to show whether the findings change according to different age groups or education levels. Findings of this study showed that smoking has many strong positive associations in smokers' minds. Future studies can explore possibilities of substitutes for smoking that could still offer some of the same positive meanings.

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Original Article

The potential effects of autonomous vehicles on walking

Simone Pettigrew

Abstract: Vehicle automation is progressing rapidly and autonomous vehicles (AVs) are forecast to become a central feature of transportation systems globally. This development has the potential to result in profound changes in walking behaviors. The present study examined this issue from the perspective of relevant experts for the purpose of informing health policy. Interviews were conducted with 44 key stakeholders in Australia ($n = 34$), the European Union ($n = 5$), the UK ($n = 4$), and the US ($n = 1$). The stakeholders represented a wide range of sectors including government, AV manufacturing/servicing companies, transport policy consortiums, technology firms, insurers (public and private), trade unions, consumer representation organizations, and academia. Two potential scenarios were evident in interviewees' discussions of the ways AVs are likely to be introduced and the implications for walking behaviors. The most beneficial scenario, but the least likely to eventuate, was considered to be the situation where people relinquish private vehicle ownership and rely on a combination of walking, public transport, and on-demand transport. The alternative scenario involved greater private AV ownership, traffic congestion, and urban sprawl, resulting in less walking activity. The convergence of the stakeholders' views around the opposing identified scenarios highlights the need for proactive policy development to ensure the emerging transport transformation does not result in substantial increases in sedentarism.

Keywords: active transport, environment, health behavior, sedentary behavior

Introduction

Autonomous vehicles (AVs) are in development and have been introduced in the form of trial applications in many countries around the world (1). AVs are forecast to bring a diverse range of health and well-being benefits across individual, social, and economic domains (2). These benefits include a reduction in injury and death resulting from crashes, greater mobility for the elderly and disabled, enhanced safety for pedestrians and cyclists, and increased leisure time (3–11). Once widely implemented, AVs are expected to be a highly cost-effective form of transport provision due to the large reduction in labor costs compared with forms of transport with paid drivers (12).

The aim of the present study was to investigate the ways in which AVs may influence walking as a form of physical activity to inform ongoing discussions about how to optimize public health via the introduction of vehicle automation. Levels of physical activity are already well below recommended levels in many countries (13), and it is therefore of importance to human health to identify whether the emergence of AVs is likely to exacerbate or alleviate this situation through impacts on walking and other forms of activity. Recent survey research suggests that once they have access to AVs, individuals will be substantially less likely to engage in various forms of active transport, including walking (14). Similarly, while modeling studies have produced varying results dependent on implementation

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scenario assumptions (e.g., whether autonomous public transport is made widely available), they have generally concluded that a reduction in physical activity is likely (15,16).

Much previous research examining the interaction between pedestrians and AVs has focused on the specific ways in which these entities are likely to interact with each other and the technical implications for how AVs should be programmed to anticipate pedestrians' road-use actions (7,17–19). Little is known about how broader system changes resulting from the introduction of AVs could impact on people's activity-related choices and behaviors (10,20). The present study represents an early investigation of this issue via consultations with a broad range of stakeholders with relevant expertise to explore the particular implications of AVs for walking-related behaviors.

Method

As part of a larger study examining the potential effects of AVs on various aspects of human life (21,22), 39 interviews were conducted with 44 stakeholders representing a wide range of sectors involved in the implementation of vehicle automation. The represented sectors included government (local, state, and federal departments responsible for health, transport, and/or infrastructure), AV manufacturing/servicing companies, transport policy consortiums, technology firms, insurers (public and private), trade unions, the law, consumer representation organizations, and academia. Ethical approval to conduct the study was obtained from the University Human Research Ethics Committee and informed consent was provided by all participants on the basis of assured anonymity in reporting.

Most of the interviews were conducted in Australia ($n = 29$), with international context incorporated via additional interviews undertaken in the European Union ($n = 5$), the UK ($n = 4$), and the US ($n = 1$). The need to access stakeholders with specialist knowledge resulted in the use of a recruitment process involving a combination of selective identification based on interviewees' profiles and snowball sampling (23). This process involved Internet and literature searches to identify relevant individuals and asking interviewees to recommend other potential study participants. Almost all of the interviews were conducted in a one-on-one format, the exceptions being three of the Australian interviews that were conducted with multiple representatives at the request of the participating organizations.

The interviews were primarily unstructured, with each interviewee asked to discuss issues relating to AVs that were particularly relevant for their roles, organizations, and sectors. In this manner, topics relating to how human behavior is likely to change in response to the introduction of AVs emerged naturally throughout the interviews. The average interview length was around 70 min. All interviews were recorded with permission and the transcripts were provided to enable any corrections. The interview transcripts were imported into NVivo 11 qualitative data management software for progressive coding and thematic analysis (24). Coding was undertaken by a single coder (the author) due to the highly exploratory nature of the study and the resulting emergent coding approach rather than the use of a pre-established coding framework (25).

The transcripts were initially read in full, followed by an iterative coding process that involved line-by-line coding of transcript content and use of the constant comparative method to generate an interpretation of the data (26). The resulting coding hierarchy comprised deductive and inductive codes. The deductive codes were those derived from the AVs, transportation, and health literature, and included topics such as public transport, ridesharing, and aging. The inductive codes represented additional topics raised by interviewees that had not been incorporated into the initial coding hierarchy prior to commencing coding, and included topics such as trip length, working in transit, and grocery shopping.

The quality of the emergent interpretation was enhanced through the use of several strategies. These included source triangulation, which involved incorporating the perspectives of a diverse range of interviewees with differing areas of expertise (27), and providing verbatim quotes to illustrate the study findings (28). In addition, data collection and analysis continued until saturation was achieved and no new concepts emerged during coding (29). The results reported in this paper relate to the findings pertaining to the potential implications of AVs for walking as a specific form of physical activity.

Table 1. Potential outcomes of the introduction of AVs on walking behaviors.

Scenario 1: AVs promote walking through	*Scenario 2: AVs discourage walking due to*
Decreased personal car ownership	Door-to-door transport
Greater urban density	Expanded home delivery services
Increased safety of road environments	Distrust of vehicle programming
Enhanced mobility options for the elderly	Greater urban sprawl
More discretionary time	

AVs: autonomous vehicles.

Results

The interviewees described a range of potential implications resulting from the advent of AVs. It was generally recognized that the effects would be different depending on the form of roll-out that occurs. At one end of the spectrum would be the proliferation of privately owned AVs, resulting in increased congestion through the presence of empty vehicles traversing the roads on their way to or from their owners:

> If we just have this idea that, 'Great, I can send it home, it can drop me off in the city and send it home', then it's actually made it more congestion because it's two trips now. It's driving in, back, in, back, instead of going in, stop, park, and then back. We'd have all these ghost rides running around (insurance provider representative, interviewee #37).

At the other end of the spectrum is a scenario characterized by wide-scale investment in shared AVs in the form of ridesharing fleets and autonomous forms of public transport. This was described as facilitating highly cost-effective 'mobility as a service' (MaaS) arrangements that enable people to access affordable transport when and where they need it without owning their own vehicle. In this scenario, traffic congestion is reduced and space previously dedicated to parking is liberated for other purposes:

> I've seen some modelling and some studies say that there'll be probably 30 or 40 per cent less vehicles on the road once they become mainstream... So, in terms of congestion, [if] you've still got the same capacity we've got now – if 30 or 40 per cent less vehicles, it will all flow a lot better (government, transport division, interviewee #31).

> As parking is less required, we'll start shedding it and using it for other things. Turning it into wider playgrounds, putting in more street trees – actually claiming back our cities for livable human spaces (government, local council, interviewee #8).

Based on these two different implementation scenarios, the discussions indicated the possibility of two highly divergent situations, one associated with the maintenance or improvement of current walking levels and one associated with a substantial decrease. The characteristics of these two alternative realities are summarized in Table 1 and outlined below.

Scenario 1: AVs promote physical activity

In this scenario, large numbers of people choose to eschew private vehicle ownership because advances in technology mean that alternative autonomous transportation options are highly affordable and convenient. This is expected to translate into increased daily activity due to people choosing to walk their shorter trips and pay for on-demand or public transport when taking longer trips. However, it was noted that highly responsive on-demand vehicle availability would be critical in determining whether this arrangement would be adequately attractive to encourage individuals to relinquish the convenience of owning their own vehicles given that active modes of transport are not always desirable or feasible:

> It's all very well if you're walking to work and you've got to walk a mile or two miles and it's a nice day. It's not so much fun when it's a howling gale as it is here quite often, and it's raining, and you're carrying a bag and wearing a suit (technology company, interviewee #25).

Increased walking activity was also seen to be a likely consequence of the anticipated large reduction in parking infrastructure required in city areas, resulting in higher density living as apartments utilize space previously allocated to parking. It was noted that inner-city living is associated with both reduced personal car ownership and greater engagement in more active forms of transport.

> I don't think personal owned cars will be something in the future. Looking at movement of the populations into city centers, then it's already shown that there's a movement away from car ownership. Because they don't need it, because they can walk, bus, cycle, scoot... (AV development company, interviewee #2)

The advent of AVs was described as being conducive to safer road environments, potentially promoting greater levels of both incidental walking and walking for exercise and leisure purposes. This increased safety was attributed to a range of factors including reduced traffic levels, lower emissions, and non-susceptibility to human lapses in attention. In particular, interviewees discussed how AVs will ultimately rely on multiple forms of detection that involve both (i) on-vehicle sensors and (ii) communications with various forms of infrastructure that can convey information relating to conditions beyond the immediate detection range of the vehicle. Compared with traditional vehicles, the advanced sensing abilities of AVs will provide them with much greater ability to anticipate and avoid collisions with pedestrians and other road users:

> [They will] communicate with infrastructure and utilize that data so you get a 'look ahead' capability. So it's not just what the vehicle can see around it, it's what the infrastructure is also telling it is there ... That helps a lot because you can see round corners effectively, you can tell if there's been an accident up ahead, if there are pedestrians on the road (technology company, interviewee #25).

The ability of AVs to be constantly vigilant with 360-degree vision was seen to be especially important given the increasing distraction of pedestrians due to their use of mobile phones while walking or exercising, resulting in impaired vision and hearing:

> They are like zombies... they are just focusing on their mobile. They have their headset, so they are not seeing or hearing anything (AV manufacturer, interviewee #21).

Older people were predicted to receive substantial benefits in terms of being able to stay active due to the availability of on-demand autonomous transport. It was recognized that once people are unable to hold a driver's license, they tend to become more house-bound with fewer opportunities for physical activity. Access to inexpensive and convenient transport options that provide door-to-door service for short distances can assist in keeping those with limited mobility up and moving:

> Transport is a really big issue for [older people]. It could be simply getting people to a dining room for breakfast, as opposed to them being socially isolated in their unit because it's too difficult to get out, to walk to wherever it is (government – health division, interviewee #32).

The final identified potential positive impact on activity levels related to freeing up time used for driving for more active pursuits. Interviewees discussed how the work commute could be integrated into one's working hours because of the ability to be productive in transit rather than undertaking the driving task. The saved time could then be allocated to other activities that may involve walking and other forms of exercise:

> I can go walking in the park with my children, and I can go and play sport, and I can go and do other things. We win the time, and with this time you

can do many things (AV manufacturer, interviewee #30).

Scenario 2: AVs discourage physical activity

This scenario is characterized by high levels of personal AV ownership and/or usage of on-demand services that result in the large-scale uptake of door-to-door transport. While this situation was described above as a favorable outcome for the elderly, applied to the population in general this would constitute a disbenefit where it results in substantial decreases in incidental activity. A further dampening effect would be observed where households can send the AV out to do the shopping and other tasks, without any need to leave the home:

> Just think about the daily shopping that people do for food... You can do the booking online and this optimized, environmentally friendly vehicle will deliver this to your door (transport academic, interviewee #3).

Even among those who do wish to venture out, distrust in the ability of AVs to detect and avoid pedestrians could reduce willingness to engage in forms of incidental or purposeful activity that involve road use. Interviewees provided anecdotes of people being concerned that AV owners would program their vehicles to prioritize the driver's safety at the expense of other road users. It was acknowledged that high levels of distrust in the community require a very cautious approach to AV introduction:

> Right now, we are running at quite low speeds, under 25 kilometers an hour. It's a choice to not scare people, to go at kind of pedestrian speed, to help them overcome their fears or their worries (AV manufacturer, interviewee #21).

Finally, the counterpoint to the possibility of increased urban density in the previous scenario is the potential for private AV ownership to result in exacerbated urban sprawl. Some interviewees described a situation where large numbers of people take advantage of the benefits of AVs to enable them to live on larger properties further away from central business districts.

> What will that do for urban sprawl is a really interesting question. Because the danger is that it may re-encourage urban sprawl because things like congestion, travel times to work, and all those kinds of associated things can be less important in an autonomous vehicle (government, local council, interviewee #8).

Implications

There was agreement among the interviewees that Scenario 1 is the most optimal in terms of human welfare in general and individuals' activity levels in particular. However, it was also acknowledged that market forces are likely to work in favor of Scenario 2:

> The only way to gain anything, to have less vehicles on the road per capita, is to make it attractive and safe for people to actually use [AVs]. There is a danger that we will get it wrong. If we just leave it to the manufacturers, they're all about selling however many units they can, and how much money they can make. They're not worried about whether this is great for the community – the bottom line for them is about profit (insurance provider representative, interviewee #37).

This creates the situation in which strategic public policy is required to ensure potential adverse consequences are anticipated and addressed:

> We need to make sure that this comes with some very clear indications of strategies of how to make sure that people maintain and increase healthy living, healthy lifestyles, cycling, walking – that we're not basically introducing a barrier to that, unintended as it might be (transport consortium, interviewee #28).

Discussion

The views of the interviewed stakeholders in regard to the potential effects of AVs on incidental

and planned walking are consistent with more general recommendations in the literature for governments to take an active and early role in AV planning to optimize health and well-being outcomes at the societal level (11,14,30). The two future scenarios discussed in the present study have divergent possible outcomes for the amount of walking that will be undertaken by individuals in their daily lives, highlighting the need for governments to engage in strategic efforts to increase the likelihood that Scenario 1 eventuates. The specific elements of these scenarios have been noted across previous work forecasting the social and health effects of AVs (e.g., 2,3,9–11,31). The contribution of the present study is the explicit consideration of the effects on walking behaviors of the combination of these elements into overall scenarios.

Working toward Scenario 1 would involve the benefits of AVs being harnessed by governments with the specific intention of encouraging and facilitating healthy lifestyle behaviors, including walking, rather than allowing commercial business models to determine the ways in which AVs are introduced (2). Specific aspects of a strategic AV implementation process are likely to include (i) road usage or congestion charges to prevent 'ghost rides' and encourage individuals to prioritize active and public forms of transport where feasible (14,32), (ii) clear communications disseminated to the general public to allay safety concerns that may prevent them from being willing to walk in close proximity to AVs (33), and (iii) a focus on city livability and controls on urban sprawl in city planning processes (9,30,34).

A further finding that has received less attention in previous research relates to the potential for AVs to create more time for physical activity beyond that incurred in the form of active transport. Being able to use commute time for productive work and using AVs to perform tasks such as collecting food shopping were described by interviewees as releasing time for more enjoyable forms of physical activity. While occasionally hypothesized in previous work (10), empirical research on this potentiality appears to be lacking and could represent a useful topic of future studies. Similarly, the proposition that exercise could be done in transit by fitting AVs out with appropriate equipment is worthy of greater consideration in both future research and the development of proactive policy actions (20).

The identified themes provide insights of relevance to the ripple effects model of automated driving (6). This model differentiates between more immediate and longer-term outcomes of vehicle autonomy. For example, transport choices, including those relating to walking as a form of active transport, are contained within the first ripple, while the provision of active transport infrastructure is in the second ripple and ultimate public health outcomes in the third. The themes within each scenario represent a mixture of proximal (e.g., increased home delivery services) and distal outcomes (e.g., urban sprawl vs. urban density). Overlaying the ripple model on the emergent themes provides an indication of which trends are likely to eventuate first and the resultant policy implications. Extending the active transport example, the likely delay shown in the model between the commencement of changes in active transport resulting from the introduction of AVs and the provision of related pedestrian infrastructure suggests that active transport uptake may not be optimized in the early years of the transport transformation. Proactive efforts to establish such infrastructure prior to the wide-scale availability of AVs could thus serve to enhance active transport outcomes by avoiding this time lag (14).

The primary limitations of this study are the convenience sampling approach to recruitment and the overrepresentation of Australian stakeholders. However, previous research conducted in Australia identified key AV-related issues that were noted as being consistent with those identified in the international literature (31,35), providing some assurance that the national context is aligned with global trends. This was supported by the lack of notable differences in responses according to stakeholder nationality in the present study. Study strengths include the steps taken to achieve methodological rigor: (i) achieving deliberate sample diversity through participation of representatives from a wide range of stakeholder groups from public and private sectors across multiple countries to enable triangulation across sources and saturation of concepts (i.e., sample sufficiency) (27,29); (ii) the use of extensive coding processes and the constant comparative method to glean meaning from the dataset (36); and (iii) the use of thick transcription (i.e., providing verbatim quotes to enable the interviewees' words to be heard) (28). Finally, few studies have made physical activity the primary

focus of analyses of the likely health and social outcomes associated with the introduction of AVs. By clustering the issues identified by a highly diverse sample of interviewees around the two polarized future scenarios for walking behaviors, this analysis highlights the specific policy areas that will need to be addressed to minimize the likelihood of people becoming substantially more sedentary in the AV era. Future research could focus on the potential impacts of AVs on other forms of physical activity to extend this work.

In conclusion, this study presents early insights into the future world of AVs and the implications for physical activity behaviors. The results are purely speculative given that actual outcomes cannot be known until AVs are readily available (2,6). However, the convergence of the expert stakeholders' views around the opposing characteristics of the two identified scenarios highlights the need for careful policy development to ensure this emerging transport transformation reaches its potential for promoting walking and other forms of physical activity, as well as the more commonly acknowledged outcomes of preventing injury and death through reductions in road-related incidents.

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Designing a multi-component 'Stop Bullying-School Intervention Program' in Chandigarh, a North Indian Union Territory

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Abstract: Bullying, a prevalent global public health issue, is proven to have an adverse impact on the physical and psychological health of school students. There are few intervention programs to prevent bullying in the South East Asian Region, and none in India. The objective of this study was to design a multi-component antibullying intervention program known as 'Stop Bullying–School Intervention Program (SB-SIP)' for school students. It was developed in five stages. Stage one was the review of existing literature on intervention studies to prevent bullying, globally. A qualitative study to explore the beliefs and perceptions of teachers, students, and parents regarding antibullying intervention programs was conducted in stage two. In the third stage, a conceptual model was framed. A consultation workshop was conducted to finalize the contents of the intervention in the fourth stage. Pretesting of the intervention was done in the fifth stage. The literature review provided evidence that a whole-school intervention program based on the socio-ecological model was the most effective. The awareness of the effects of bullying and effective strategies to prevent it in the school setting was suggested to be part of the SB-SIP by the majority of the participants in the focus group discussions. The recommendations given by the stakeholders in the consultation workshop contributed mainly to the method of delivery of the program. The five-stage process helped in recognition of the conceptual model and modifiable factors, which exerts its effects on bullying and its psychosocial outcome, through which the multi-component antibullying intervention program SB-SIP was finalized.

Keywords: bullying, intervention, socio-ecological model, multi-component, school, formative research

Introduction

Bullying, a form of school violence, is a significant public health problem among adolescents. It is one of the underlying causes of depression, anxiety, and suicide (1,2). Olweus (3) described bullying as a behavior in which the intention was to inflict injury or discomfort upon another individual who had difficulty defending himself or herself.

School-based prevention programs have been developed and evaluated in various high-income countries (HICs) to deal with bullying. Though their curricula vary, in general, these provide students with information about bullying, with the intention

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of changing how adolescents think and feel about it, and the development of skills to avoid bullying and resolve disputes through nonviolent means (4).

In comparison, minimal strategies exist in the national health programs in low-middle income countries (LMICs). *Lancet*'s commission on adolescent health and wellbeing mentioned in their report that in LMICs, the stress is mainly on reproductive and sexual health, and essential health priorities like mental health and unintentional injuries, have been neglected (5). Though many bullying prevention programs have been developed and implemented globally, such information from LMICs is limited.

Sivaraman *et al*.'s (6) systematic review on antibullying intervention programs reported the inclusion of only three antibullying prevention programs from LMICs. Only these interventions met the criteria related to age (adolescents aged 10–19 years) and aimed at preventing bullying perpetration and victimization in LMICs. None of the included studies reported a significant reduction in bullying, except the Olweus Bullying Prevention Program (OBPP) implementation in Malaysia by Yaakub *et al*. (7). They reported that overall the three types of bullying (physical, verbal, and relational) showed an upward trend in the experimental schools. However, when assessed separately, an all-girls experimental school showed a decrease in all three types of bullying. This points to the mixed evidence of the effectiveness of adapting an existing program used in HICs. No literature provided evidence of the programming adaptability in the schools' different languages or cultural contexts in LMICs. There is substantial evidence of effective antibullying intervention from HICs; simultaneously, we cannot assume that these interventions might be useful in LMICs, where education systems, socio-economic and cultural factors are entirely different (6).

The existing literature, the majority of which comes from HICs, was reviewed to understand the crucial components for the success of an antibullying intervention program. Some of the intervention programs have been designed after extensive literature searches and implementing the successful strategies; for example, 'Friendly schools', an intervention program launched in Australia, was based on the results of the systematic review done by the authors (8). Also, the Sheffield antibullying intervention program in England was based on the knowledge and available resources on bullying (9). The same literature review strategy and adapted successful strategies were also used in designing the present intervention program in addition to formative research.

There is no literature on the development or impact of the intervention program to prevent bullying in Indian schools, which has the world's second-largest adolescent population. Hence, it is crucial that evidence-based interventions are developed and tested in LMICs and that all program stakeholders are involved in this process. In particular, including the views of adolescents themselves is likely to enhance program acceptability and feasibility. Hence, the decision to design the intervention program was taken for the more considerable benefit of the adolescents in LMICs, including reviewing existing literature to understand and incorporate the components of successful antibullying programs with stakeholders' involvement to make it culturally relevant and acceptable. This paper describes the development of the 'Stop Bullying-School Intervention Program (SB-SIP)' in Chandigarh, India, and its conceptual model.

Steps to design the SB-SIP

The SB-SIP was developed in five stages: (1) literature review, (2) formative research, (3) framing the conceptual model, (4) consultation workshop, and (5) pretesting of the intervention to finalize the intervention program, from March to October 2016 (Table 1).

Stage 1. Literature review

A comprehensive literature review of studies on assessing antibullying intervention programs' effectiveness published from 1985 to 2015 was done. This step's goal was to identify effective school-based antibullying intervention programs and their components globally to prepare a draft intervention program. Literature for this review was identified through PubMed, Clinical Key, Science Direct, Google Scholar, PsychINFO, Scopus, Campbell Collaboration, and EMBASE. Databases of unpublished work were also searched to include gray literature in the review. Searches included a variety of combinations of terms: 'adolescents',

Table 1. The five-stage process in designing the Stop Bullying-School Intervention Program (SB-SIP).

Stage	*Objective*	*Outcome*
Stage 1: Literature review	Identify effective antibullying intervention programs and their successful components implemented in the schools globally	There was limited data from low- and middle-income countries regarding the effectiveness of antibullying intervention programs The components of successful intervention programs implemented globally were identified: 1. Multi-component school-based intervention programs, which involved parents, teachers, students, and school administrators (Socio-ecological model) 2. Parental involvement 3. Setting up classroom rules 4. Use of videos to depict the problem of bullying 5. Setting up strict antibullying policies 6. A school committee that addressed all the bullying incidents was also a successful strategy
Stage 2: Formative research	To understand the current scenario of bullying in schools and perceptions regarding a bullying prevention program	The focus group discussions (FGDs) helped to gain an understanding of the need for an antibullying intervention program. The themes identified in the FGDs helped us to understand the content required in SB-SIP. The FGDs helped us to understand the strategies essential for antibullying intervention programs (Table 3)
Stage 3: Framing the conceptual model	To develop a conceptual model for SB-SIP	The conceptual framework of SB-SIP was established by identifying modifiable variables and specific strategies, identified through literature review and FGDs (Figure 1)
Stage 4: Consultation workshop	Acquiring expert review on the manual of the intervention	A consultation workshop with psychologists, counsellors, psychiatrists, school staff, and public health experts. The purpose of the consultation workshop was (a) to collect feedback on the content and (b) the feasibility of SB-SIP The following suggestions and recommendations were incorporated in the SB-SIP: 1. To use interactive ways like videos and group activities to increase student's engagement in the intervention 2. A session on responding to bullying on-the-spot in the classroom was recommended for teachers 3. Parental involvement was agreed as an important component for the program 4. The use of a parent–teacher meeting day was suggested to reach out to the parents for increasing their awareness regarding the bullying problem in school 5. To constitute a school committee for bullying prevention comprising of school counsellors, the principal, vice-principal, and a teacher All the recommendations fell in alignment with the literature review and FGDs
Stage 5: Pretesting of the intervention	Pretesting was done to examine the feasibility of the intervention and identify structural or content changes that might be needed	Pretesting was done in a high school among 49 students from seventh and eighth grade, eight teachers, 36 parents, and two school administrators • The school administrators and teachers acknowledged the need for the antibullying intervention program • The pilot testing helped to identify the duration of implementation of SB-SIP • The feasibility of SB-SIP was assessed by measuring the extent of implementation • Overall, the extent of implementation in pretesting was 82%

'bully', 'victim', 'aggression', 'perpetration', 'cyberbully' combined with 'school-based', 'review', 'evaluation', 'implementation', 'prevention', 'program', 'intervention' 'systematic' and 'meta-analysis'. When relevant articles were identified, related article links were also explored to expand the search. References from systematic reviews on bullying were also reviewed for the inclusion of relevant studies in this review.

Goldstein *et al.* (10) documented a similar approach (i.e. developing the intervention in steps) in adapting the empirically researched program in different population settings. The adaptation steps mentioned by Goldstein *et al.*, of conducting focus groups among the target population for the content and structure of the intervention, obtaining feedback from experts, incorporating their feedback, and conducting initial pilot testing of the program were similarly used to design SB-SIP. However, the difference was that Goldstein *et al.* used a base manual (empirically supported intervention), whereas SB-SIP was based on incorporating components of the various successful antibullying programs.

A total of 28 studies were reviewed that aimed at targeting or preventing bullying perpetration and/or victimization among adolescents. Among these, 14 programs were excluded as they were either evaluated without comparison or control group, or their intervention program was less rigorous, or interventions were designed for different age groups as compared with this study. We also made sure that the components of the programs could be adapted to the Indian school system. The details of the intervention programs including the components that were adapted in SB-SIP ($N = 14$) are given in supplemental Table S1. A literature review of antibullying interventions delivered globally indicated that most of the evidence was from HICs like the USA, European countries, and Australia (4). Of these interventions, the most effective were multi-component school-based intervention programs, which involved parents, teachers, students, and school administrators. The successful components identified in the 14 antibullying intervention programs were parents' training and meeting, teachers' involvement, setting up classroom rules, using videos to depict the problem of bullying, and setting up strict antibullying policies. A school committee that addressed all the bullying incidents was also a successful strategy (4,11). Two systematic reviews on the effectiveness of antibullying intervention programs have documented that whole-school interventions, that is, based on socio-ecological models, are more successful programs (11,12). The bullying intervention based on the socio-ecological model (13) included all the factors that affect the adolescents, including the personal capacity of adolescents against bullying, relationships like parents and teachers that affect them, and school, which can provide them with safety (14,15). Olweus (3) has designed one of the most successful antibullying intervention programs using a socio-ecological perspective. As bullying does not occur in isolation but is a result of interactions between an individual and his/her family, peers, teachers, and school environment, the intervention should not only focus on an individual but on the social relationships and environment of adolescents as well (16,17), which was acknowledged in the present intervention program. The whole-school interventions consistent with a socio-ecological framework establish school-wide policies and expectations and involve teachers, parents, and staff from the school in the program. Anti-bullying programs based on a socio-ecological framework have shown positive results in reducing bullying and victimization in schools globally (18–20). Hence, the SB-SIP was based on the same model.

Stage 2. Formative research

Six focus group discussions (FGDs) with a total of 30 participants, which includes two FGDs with parents ($n = 10$), two with teachers ($n = 10$), and two with students ($n = 10$), were conducted to explore the beliefs and opinions about bullying, and strategies to reduce it in schools in Chandigarh. The participants were purposively selected by contacting the school authorities, who helped reach out to the participants. A pretested guide was used among students, teachers, and parents to conduct the FGDs (Supplemental File S1). These interviews were audio-video recorded, transcribed, and translated into English. The thematic analysis of the textual data was done manually to understand the antibullying intervention program's perceptions. The background characteristics of the participants of FGDs are given in Table 2. Thematic analysis of the FGDs' textual data was conducted using grounded theory, which helped us understand what components were

Table 2. Background characteristics of the participants of focus group discussion.

S. no.	*Characteristics*	*N = 30 (%)*
1.	Age in years	
	10–19 years	10 (33)
	20–29 years	5 (17)
	30–39 years	12 (40)
	40–49 years	3 (10)
2.	Gender	
	Male	18 (60)
	Female	12 (40)
3.	Residence	
	Urban	23 (77)
	Rural	5 (17)
	Slum	2 (6)
4.	Religion	
	Hindu	22 (73)
	Sikh	5 (17)
	Muslim	2 (7)
	Others	1 (3)

N = 30.

necessary for a bullying intervention program as per the stakeholders. Memos and codes were identified using textual data. Codes were then placed under overarching subthemes and themes, which have been summarized in Table 3.

Stage 3. Framing the conceptual model

Based on the literature review findings and thematic analysis of the FGDs, modifiable and non-modifiable variables that affected bullying outcomes were identified. After that, a conceptual model was framed to design SB-SIP (Figure 1). According to this framework, there were non-modifiable variables or independent variables, which affected the modifiable variables that were related to the outcome, that is, involvement in any bullying and psychosocial health outcomes. Modifiable variables were identified through the literature review and FGDs. These will be targeted using the socio-ecological model, through parent level, student level, teacher level, and whole-school level interventions that might affect the final bullying-related outcomes. Hence, based on the conceptual model, a draft multi-component intervention named SB-SIP was designed.

Stage 4. Consultation workshop

A consultation workshop was conducted among 30 experts and stakeholders. The purpose of the consultation workshop was to collect feedback on the content of SB-SIP and the feasibility of implementing it in the school settings. The workshop contributed mainly to the method of delivery. They were purposively selected, with equal participation from school principals, counsellors, teachers, parents, students, psychologists, psychiatrists, and public health experts in the Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, India, to review and finalize the draft intervention program SB-SIP. The education department (Chandigarh) was contacted regarding the schools' contact details for school principals, counsellors, and teachers involved in the school's health program committee. Parents and students were contacted through the schools. The psychologists, psychiatrists, and public health experts were contacted in the Postgraduate Institute of Medical Education and Research, Chandigarh, who had the experience of working with youth in mental health programs, including bullying. The experts recommended using interactive ways like videos and group activities to increase students' engagement in the intervention. A session on responding to bullying on-the-spot in the classroom was recommended for teachers. They suggested that the parents' involvement was crucial for the program, and the use of a parent–teacher meeting day would help reach out to more parents for giving them awareness regarding the bullying problem in school. They also suggested forming a school committee for bullying prevention comprising school counsellors, the principal, vice-principal, and a teacher representative. All the recommendations fell in alignment with the FGDs and literature review.

Additionally, experts of the bullying prevention program 'Bully free' were contacted to understand their experience of implementing the intervention in the USA, especially related to challenges and difficulties faced and how they were overcome. They provided us with CDs of their program for better understanding. Bean's (21) book mentioned the framework of a bully-free program, which was considered while finalizing the intervention program. They specifically provided advice on

Table 3. Themes and codes as per thematic analysis.

Themes	*Subthemes*	*Codes*
1. Awareness and perceptions regarding bullying problem in school		
1.1. Reasons bullying happens in schools	Power dynamics	• Powerful students bully weak students • Students from senior class bully students in junior class
	Socio-economic inequalities	• Children belonging to higher socio-economic status bully children from low socio-economic backgrounds
	Environment at home	• Overpampered children • Overprotective parents
1.2. Sites of bullying	Places with less supervision	• Empty classes in school • Washrooms • Corridors • School bus • Playground
1.3. Ways of bullying	Verbal bullying	• Calling mean names
	Physical bullying	• Beating
	Damaging property	• Throwing and tearing books
	Cyberbullying	• Making videos of victims
2. Management of bullying at school level	Nonexistent school level committees to tackle bullying	• Teachers and school administrators ignore the problem • Teachers do not take strict action against the bullies
3. Effects of bullying	Individual level	• Behavioral problems in bullies and victims • Victims are irritated all the time • Victims are afraid • Victims do not talk much if they are bullied • Bullies have an anger problem
	School-level	• Affects the whole-school environment • There is a negative school environment due to bullying incidents
4. Suggestions to prevent bullying	Student level	• Awareness of the effects of bullying on students • Having video sessions on bullying
	Parents and teachers level	• Awareness and training sessions for teachers to handle the bullying situation effectively • Training of parents on bullying issues is very important • Parents should be told how to recognize signs of bullying in their children
	School level	• Supervision of high-risk areas • Teachers and confident students should monitor the high-risk area effectively • Involving school administrators and teachers to handle bullying situations • Teachers, principal and vice-principal together should be involved in handling bullying situations

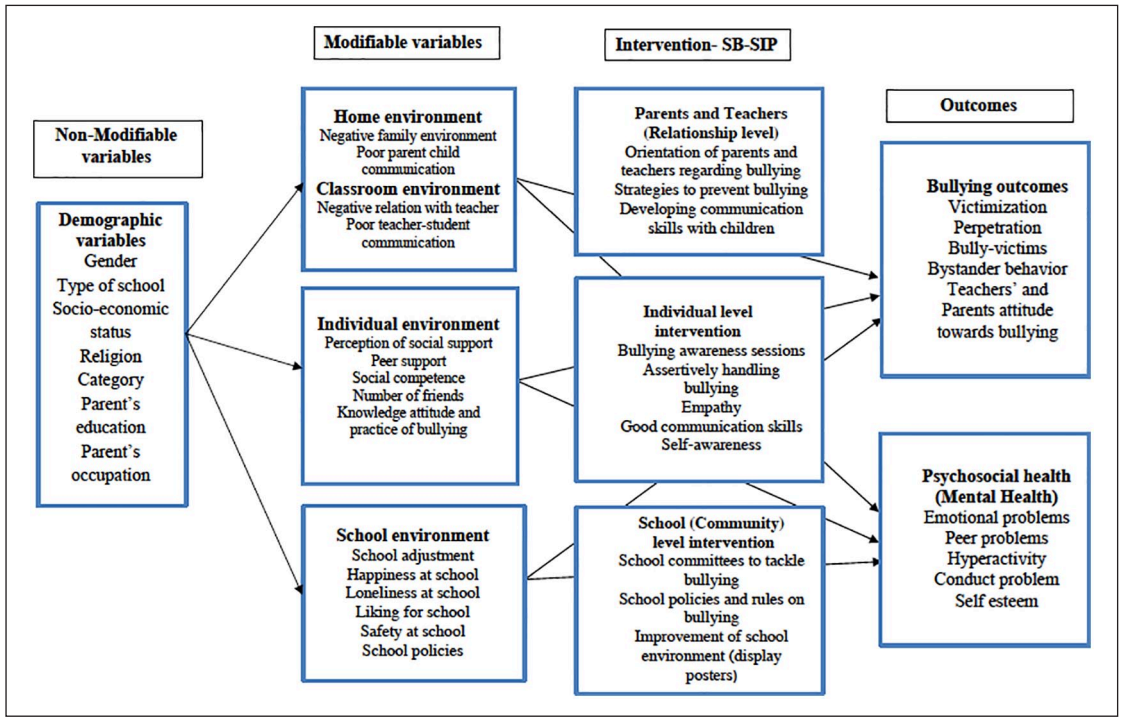

Figure 1. Conceptual model of Stop Bullying-School Intervention Program.

conducting a bullying program in schools and improving interaction with the participants.

Based on the recommendations of the experts during the consultation stage, the content of SB-SIP was finalized.

Bullying intervention package: Stop Bullying-School Intervention Program (SB-SIP)

SB-SIP is a multi-component school-based intervention program that is designed to be administered at three levels, that is, individual (students), relationship (parents and teachers) and school level. The components of the intervention package are given in Supplemental Table S2. The details of the components are explained in the published study protocol (22). Briefly, the individual-level strategy was targeted at the students. It comprised of a classroom-based curriculum, which was delivered through conducting group meetings with students in their classrooms. It aimed to increase students' knowledge regarding bullying behaviors and their harmful effects, and strengthen their skills to prevent bullying and victimization. Relationship level strategy was delivered through a parent's module and teacher's module separately. The parents' module comprised bullying awareness sessions and strategies to prevent and manage if their child is involved in any kind of bullying. The teacher's module comprised sessions on the safe classroom environment and responding to bullying rumours and dealing with bullying on the spot. The school-level strategy was delivered to the school administrators who were sensitized to the bullying problem. The antibullying committee was set up to introduce school rules against bullying. The SB-SIP curriculum was delivered through PowerPoint presentations and in bilingual language.

Stage 5. Pretesting of the intervention

Pretesting of the intervention was conducted in a purposively selected high school. This school had a similar school system as other high schools in

Chandigarh but was not located in the study area. This school was different from the schools where FGDs were conducted. All seventh- and eighth-grade students were eligible for the pretesting from the selected school as bullying tends to peak in this age group (23). A total of 60 students (30 each in seventh and eighth grade), 8 teachers, 36 parents, and 2 school administrators were contacted to pretest the intervention. All the participants that provided consent were then enrolled in the study.

Out of the 60 students, 49 returned the signed parental consent forms; hence they were recruited for the study. Among those who consented, 49% of students were from seventh grade, and 52% were from eighth grade. There were about 57% boys and 43% girls. The age range was between 13 and 15 years. All 36 parents and 8 teachers were enrolled in the study to pretest the parent level and teacher level curriculum, respectively. A separate session was conducted for the school administrators.

A self-administered pretested Olweus (24) Bully-Victim questionnaire was given to the students. The pre-intervention survey was helpful to look at the quality of data received, especially the non-response rate of students who filled the questionnaire. We then delivered the SB-SIP at all levels and assessed the intervention program's feasibility by assessing the extent of implementation of all the intervention's components. It was measured by preparing a checklist that had 11 items at various levels. The indicators were assessed by observations made by the intervention team during the visit to the school. The overall extent of the intervention's implementation was 82%, including 80% at the student level, 69% parent level, 88% teacher level, and 100% school level (Supplemental Table S3). The school administrators and teachers unanimously acknowledged the need for antibullying intervention programs in schools.

Discussion

We have developed a new bullying prevention program known as Stop Bullying-School Intervention Program (SB-SIP) for India through a rigorous scientific method and incorporating the successful strategies from existing antibullying intervention programs. This study provided the process of the development of SB-SIP using literature review, formative research (FGDs), a consultation workshop, and pretesting in the school setting in Chandigarh, North India. The novelty of this method is the recognition of modifiable and non-modifiable factors, primarily through formative research. These factors were then juxtaposed on the socio-ecological model to target at three levels: individual level, relationship level, and school level, as the individual behavior is affected by interactions between an individual and its surroundings (13), so that the targeted intervention has maximum benefit. The results from the present study might help us understand how an antibullying intervention program is developed to be both culturally acceptable and contextually relevant, especially in LMICs. This intervention package is also readily available to be tested for its effectiveness and scalability.

Perceptions and beliefs regarding antibullying intervention programs were obtained from the FGDs with the parents, students, and teachers. Further feedback from various stakeholders during the consultation workshop was also included in the design of the SB-SIP. A case report on health promotion programs reported that when stakeholders' views and opinions were used to design an intervention program and the participants had an opportunity to bring improvements to the interventions, the program became more acceptable and feasible (25). Acceptability and feasibility can also be concluded from the pretesting results, which reported high (82%) overall implementation of the program. A similar strategy to assess the acceptability of the intervention program was conducted by Shinde *et al*. (26), in which they developed and pilot tested the multi-component health promotion intervention (SEHER) for secondary schools in India, where the feasibility of the intervention program was evaluated using the coverage of various activities planned in the program.

The design strategy for several antibullying intervention programs from developed countries is not readily available. Previous antibullying intervention programs from LMICs have also not documented strategies to design the program (6). SB-SIP, thus, is an antibullying intervention program, a combination of successful strategies from literature and suggestions/recommendations of the stakeholders and experts obtained by conducting formative research (FGDs and a consultation workshop) to make it relevant to the study population. The study's key outcomes were the recognition of the complex conceptual model

(Figure 1) and modifiable factors identified, notably through formative research, through which multi-component intervention was designed, which exerts its effects on bullying and its psychosocial outcomes. The present study adds to the literature the process of designing an antibullying intervention program for school students in India, which has not yet been documented in the literature.

The study's limitation includes a purposive selection of the participants of the FGDs, therefore the views and suggestions may not be generalizable. However, we believe that the participants' suggestions could be used to design the intervention program as the participants recruited for the FGDs were from schools with a similar school system to the other high schools in the region.

The effectiveness of SB-SIP is planned to be evaluated using a quasi-experimental study design. If the program is found to be effective, it could be implemented as an antibullying intervention program for schools in India and could be translated to other Asian countries.

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Supplemental material

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Original Article

Scoping health literacy in Latin America

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Abstract: Studies evaluating the influence of health literacy on patient behavior and outcomes suggest a positive relationship between health literacy and health knowledge, health behaviors, and health status. In Latin American countries, studies assessing health literacy are few, regional, and demonstrate considerable variation, with reported rates of adequate health literacy ranging from 5.0% to 73.3%. In this paper, we examine and explore the state of health literacy and efforts to promote it in Latin America. Key challenges to those efforts include socioeconomic inequality, social/geographic isolation, and cultural-, language-, and policy-related barriers, many of which disproportionately affect indigenous populations and others living in rural areas. Greater use of infographics, videos, and mobile apps may enhance health literacy and patient empowerment, especially when language barriers exist. This paper provides strategies and tools for tailored programming, examples of successful health literacy interventions, and policy recommendations to improve health literacy in Latin America, intending to spur additional discussion and action. Centrally organized collaboration across multiple sectors of society, with community involvement, will enhance health literacy and improve health and well-being across Latin America.

Keywords: health literacy, health education, community engagement, patient empowerment, Latin American health policy, health promotion

Introduction

There is a critical need for health literacy initiatives across Latin America to improve navigation of healthcare systems and empower individuals to make informed decisions regarding lifestyle and health. Health systems in Latin America are often uncoordinated and segmented, which can adversely impact the people they serve. This is especially true for the aging population, individuals with comorbid chronic conditions, and those experiencing epidemics (e.g. chikungunya, Zika, coronavirus disease 2019 [COVID-19]) (1,2).

Health literacy embodies the skills and motivation needed to find, understand, evaluate, and use health information (3). Health literacy influences

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knowledge, attitudes, and behaviors, including disease prevention and self-management. Low health literacy impacts health outcomes and health-related costs, leading to inefficient healthcare utilization and delivery (4,5). Improving health literacy increases the ability to obtain and understand health information, facilitates informed decision-making, and improves the ability to manage and cope with health disparities. This allows for greater autonomy and empowerment (4).

At the population level, promoting health literacy may lead to improved equity and sustainability in public health. As a modifiable social determinant of health, it is considered an outcome of education and health promotion (6) and is closely linked to general literacy (4). Hence, improving primary education, expanding adult education, reducing health system complexity, and expanding conceptions of health beyond medicine to include social, economic, and environmental (built and natural) factors are all parallel policy goals that must be promoted to enhance health literacy (1).

In this paper, we examine the current state of health literacy in Latin America, including challenges and barriers, and explore initiatives to promote health literacy and health in the region. We also suggest strategies to address disparities, with the intent of spurring future discussion among healthcare workers, governments, patient groups, industry, and academia. The 33 countries that make up Latin America have diverse cultures, resources, and healthcare systems. Integrating health literacy principles into healthcare, disease prevention, and health promotion initiatives is one way to improve the health of individuals, their families, and society as a whole.

Current state of health literacy in Latin America

We found no studies that evaluated national levels of health literacy in Latin American countries. Table 1 shows considerable variation of measurement approaches in regional studies, with adequate health literacy ranging from 5.0% to 73.3%, although assessments did not always use the same scale, and definitions of adequate health literacy were inconsistent (7–14). Condition-specific assessments have also been evaluated. For example, a Brazilian study demonstrated the validity and reliability of a health literacy assessment scale for drug treatment adherence among patients with diabetes (15).

Studies evaluating health literacy often did so in association with concerns about prevalent diseases that cause high morbidity and mortality, like cardiovascular disease in Suriname, diabetes in Brazil, and tuberculosis in Peru (9,13,14). This is important, as adequate health literacy may enable people to engage in positive behaviors related to modifiable risk factors for non-communicable diseases and help people recognize and slow the transmission and progression of communicable diseases.

Studies evaluating the impact of health literacy on health behaviors and outcomes demonstrate a positive relationship with knowledge of health, health behaviors, and health status (16–18). For example, among 156 patients with diabetes in Argentina, glycated hemoglobin (an indicator of management of diabetes, with a generally recommended goal of $<7\%$ (19)) was 8.15% among those with inadequate health literacy versus 7.15% among patients with adequate health literacy ($P = 0.0001$) (16). In another example, two overlapping surveys of 651 adult patients in La Paz, Bolivia (all with at least one chronic disease) showed that people with low health literacy were 37% more likely to have poor adherence to medication compared to people with higher health literacy (17). In a third example, a cross-sectional study of 248 adults in Piracicaba, São Paulo, Brazil showed an association between low oral health literacy and the presence of dental plaque, use of dental services for emergency treatment only, use of dental services due to pain, and a 'not good' dental service evaluation (18).

Barriers to improved health literacy in Latin America

While limited health literacy is common across all backgrounds, certain sociodemographic groups (e.g. older adults, those with low socioeconomic status or less education, people who speak a language other than the national/majority language at home) are more likely to have limited health literacy (4,9,13). Given the language diversity in the region — over 270 languages are spoken in Brazil alone (20) — limited fluency in the national language can be a significant barrier to health

Table 1. Health literacy levels in Latin America.

Country	*Study description*	*Assessment tool*	*Outcome*	*Year*	*Reference*
Argentina	Cross-sectional study of 229 patients at a University Hospital	Short Assessment of Health Literacy for Spanish-speaking adults	69.9% adequate health literacy	2009	Konfino *et al.* (7)
Brazil	Cross-sectional study evaluated understanding of food serving sizes in 176 adult patients who visited select outpatient units	Brief Test of Functional Health Literacy	58% inadequate health literacy, causing greater difficulty understanding the food guide	2014	Coelho *et al.* (8)
Brazil	Cross-sectional study of 150 literate adult outpatients with type 2 diabetes mellitus	Short version of Test of Functional Health Literacy In Adults (s-TOFHLA)	73.3% adequate health literacy, 11.3% marginal, 15.3% inadequate	2014	de Castro *et al.* (9)
Brazil	Assessment of 302 adult users of services at a university clinic in Santa Catarina, Brazil	Health literacy test for the Brazilian Portuguese language based on the TOFHLA	54.6% adequate health literacy, 19.2% marginal, 26.2% inadequate	2019	Maragno *et al.* (10)
Guatemala	Assessment of 210 youths in Guatemala City ages 10–16 using the Newest Vital Sign	Newest Vital Sign, a 6-item assessment of reading comprehension and numeracy aspects of health literacy	Less than one-third with adequate health literacy	2016	Hoffman *et al.* (11)
Mexico	Cross-sectional study of 477 adults	European Health Literacy Survey Questionnaire, Spanish version	8.6% excellent health literacy, 39.8% sufficient, 43.4% problematic, 8.2% inadequate	2018	Mávita-Corral (12)
Peru	Cross-sectional survey evaluated health literacy and tuberculosis-related knowledge among 272 adults in outpatient waiting areas in a hospital in Lima, Peru	Survey including 16 questions	71.0% high health literacy, 54.8% high knowledge of tuberculosis (associated with knowing someone with tuberculosis)	2019	Penaloza *et al.* (13)
Suriname	Study evaluated health literacy among 99 adults approached in the waiting rooms of an urban outpatient center and a semi-rural primary healthcare center in Suriname	Rapid Estimate of Adult Literacy in Medicine (REALM-D), adapted for the Dutch language	5.0% adequate health literacy, and overall health literacy was moderate	2017	Diemer *et al.* (14)

literacy. To help navigate this obstacle, some organizations have integrated indigenous languages into health education. During the COVID-19 pandemic in 2020, the Tekove Katu School of Health (Gutiérrez, Bolivia) and the Pan American Health Organization/World Health Organization

(PAHO/WHO) developed a training and communication program in Bolivia's Chaco region to help prevent the spread of COVID-19 among indigenous communities. Working with the local community and community health workers, they created leaflets, folders, radio broadcasts, and infographics in both Spanish and Guaraní, the primary language for most Chaco residents (21). In another regional initiative, the United Nations High Commissioner for Refugees developed a training program to improve healthcare for Venezuelan migrants who moved to Brazil. To facilitate communications between Brazilian health professionals and Venezuelan citizens, training and educational materials were developed in several indigenous languages, like Warao and Panare (22). Still, bridging culture and language barriers remains a significant hurdle in Latin America. Inadequate proficiency in the national language puts people at a marked disadvantage, as language comprehension and communication are essential to advocate for oneself, to understand and act on health information, and to navigate complex healthcare systems (4).

Another barrier to health literacy in Latin America is poverty. Social inequities, like poverty, have had a profound effect on health in Latin America. Member states in PAHO have been working to reduce inequalities as a key aspect of their 'Strategy for Universal Access to Health and Universal Health Coverage,' and the region has experienced commendable economic growth. Yet, despite these advances, Latin America remains one of the most economically challenged regions globally, with almost one-third of people living below the poverty line and the poorest 40% receiving less than 15% of the overall income (1). Although 49% of indigenous people in Latin America live in urban areas, they are 2.7× more likely to live in extreme poverty compared to nonindigenous urban residents (23). The widening economic divide that separates indigenous and nonindigenous communities also contributes to health disparities. Improving health literacy is one way to improve well-being and boost regional economies. While no comparable statistics are available in Latin America, a 2020 analysis conducted by UnitedHealth Group suggests that improving health literacy in the United States could save the US Medicare program up to $25.4 billion (24).

Marginalization has been associated with lower educational attainment and socioeconomic status, which in turn are associated with lower health literacy. Among indigenous populations in Latin America living in urban areas, primary education completion is 1.6× higher, secondary education 3.6× higher, and tertiary education 7.7× higher than those living in rural areas (23), indicating that social marginalization may be associated with less education opportunities among indigenous populations. Opportunities are also limited for nonindigenous populations in rural areas of Brazil, Argentina, Uruguay, and Paraguay (25). Further, both indigenous and nonindigenous people in rural areas are more likely to be poor (23). Disparities associated with social/geographic isolation — especially combined with the fact that healthcare budgets are often inequitably distributed nationwide (1) — have important implications regarding the potential impact on health literacy and health outcomes.

When addressing health literacy in vulnerable groups, it is important to consider historical experiences, gender, cultural differences (e.g. language), and the political climate. In Mexico, historical experiences (like mass sterilization under false pretenses) have led to distrust among indigenous populations, contributing to fears that government-sponsored healthcare programs will not respect them. Gender discrimination often prevents women from making the healthiest decisions and can reduce their feelings of engagement and empowerment (26). Language barriers disproportionately affect vulnerable populations. Indigenous Latin American populations do not always speak Spanish or Portuguese; many communicate primarily in native languages. While not all countries officially recognize these languages in government communications, some do. For example, in Paraguay, both Spanish and Guaraní are official languages (23). Finally, political systems and views affecting public health policy pose challenges to improving health literacy, and incoming governments should prioritize continuity in initiatives across Latin America.

Initiatives to improve health literacy in Latin America

Culture, civics, and science should be equally addressed in health literacy initiatives and policies to address key challenges in Latin America. Programs should address socioeconomic inequality, social/

geographic isolation, cultural/language barriers, and policy-related barriers. Patient organizations, healthcare organizations, governments, foundations, and community leaders have taken various approaches to address these challenges, mostly within the realm of preventive healthcare.

Patient organizations in Latin America focus on increasing patient-centered care and patient empowerment (27). As part of the patient advocacy postgraduate program at the Biomedical Faculty of Austral University in Argentina (28), leaders from different countries representing patients' organizations can learn to implement health literacy strategies in their countries.

Healthcare organizations can empower the people they serve — as well as their doctors, nurses, and other care team members — to actively engage in making collaborative decisions about their health. To help in this effort, Table 2 provides tips for developing written materials, and Table 3 provides links to communication tools. These approaches can enhance the partnership between healthcare providers and patients to empower patients and engage them in the decision-making process (32). However, there remains a significant need for health literacy materials to be translated into and developed in Spanish, Portuguese, and local languages.

Table 2. Practices for developing health-literate materials to empower patients (29,30).

Get to know your audience
Identify the intended users
Conduct formative research with the intended users
Address culture and respect differences
Use well-trained and certified interpreters
Listen first
Directly engage your audience in constructing materials and programs
Tailor materials to your audience and goals
Create text that is easy to follow
Limit the number of key points
Use plain language
Use narratives to tell a complete story
Focus on behaviors and action
Use design to enhance your text
Use culturally appropriate images to reinforce main messages
Pay attention to font size and white space
Check for understanding
Use open-ended questions
Use the 'teach-back' method

Mexico

Government-led vaccination campaigns headed by the Ministry of Health in Mexico successfully increased awareness and encouraged immunization (35). In another example from Mexico, Previn IMMS, an integrated health program of the Mexican Institute of Social Security, focuses on promoting preventive healthcare through education (35). One aspect of this program is the development of an online portal to improve health literacy with modules on cancer, hypertension, heart health, addiction, diabetes, and influenza.

Colombia

In Colombia, government efforts aim to improve sources of health information, standardize health information and services, generate evidence (e.g. national health observatories in conjunction with analytic strategies), and share data through searchable databases. Mobile apps and interactive data tools were provided to increase access to health information and national health observatories were established to monitor health outcomes with the aim to help individuals access and apply information in self-care (36).

In 2017, recognizing a need to address antimicrobial resistance and the appropriate use of antibiotics, the Colombian Minister of Health, the Colombian Association of Infectious Diseases, and MSD Colombia agreed to promote the appropriate use of antibiotics through a health literacy campaign named 'Twelve Commandments for Avoiding Antimicrobial Resistance' (37). The campaign included a set of educational materials (video, infographics) that generated nationwide media attention and reached an audience of approximately 10,500,000 people. Phase II of the campaign focused on creating an alliance with the Colombian Hospitals and Clinics Association to expand outreach by sharing content on social media.

Peru

The Arts for Behavior Change Program, implemented in two shantytowns in Peru, combined

Table 3. Tools that use health literacy principles to aid in clear communication with patients.

Tools	*Description*	*Reference*
CDC Clear Communication Index https://www.cdc.gov/ccindex/index.html	Research-based tool to help create and assess materials for patients and caregivers Index contains 20 items, broken into 4 sections, that guide the focus, wording, design, and impact of the material	Centers for Disease Control and Prevention (31)
Shared Decision-Making https://www.safetyandquality.gov.au/our-work/shared-decision-making/patient-decision-aids	A 5-step tool developed by the Agency for Healthcare Research and Quality Framework for patients and care providers to explore, reach, and evaluate treatment options together	Shared Decision-Making (32)
The Rural Women's Health Project Fotonovela https://www.rwhp.org/fotonovela.html	Community-based outreach tool that brings health information to locations outside of healthcare settings Slide show includes examples of when to use a fotonovela, the benefits of using them, and 15 steps to help outreach workers create them	Rural Women's Health Project (33)
The *Teach-Back* Technique: Communicating Effectively with Patients https://www.merckconnect.com/static/pdf/TeachBack.pdf	Verbal communication tool that aids patients in understanding and retaining health information Brochure includes tips for how and when to use teach-back, examples of conversations and open-ended questions, and common mistakes	Merck Sharp & Dohme Corp (34)

music, dance, theater (Theater for Health), and visual arts with best practices of health literacy to reduce disease risk by improving personal and household hygiene (38). This program involved medical experts and team members with expertise in the arts, public health, health literacy, and communication. Participants learned about healthy practices at home and in the community to prevent disease and foster a healthier environment. Through direct testing in homes, statistically significant reductions in disease-causing microorganisms were seen in areas targeted by the performance messages.

Paraguay

Structured interviews in rural Paraguay examined factors influencing pregnant women's maternal health literacy in a community-based prenatal care program (39). The program was taught in a common local dialect, and it measured maternal health literacy. Improvements in knowledge and health literacy were significantly greater for women who received services by personnel with formal healthcare training than from healthcare volunteers with less or no training. Improvements were also greater for those in housing with adequate water supply and lavatories. The study found that wider implementation of the community-based prenatal care program to people who have shown to be functionally illiterate in the standard national languages would increase maternal health literacy. They also concluded that maternal health literacy could be enhanced by additional training for health-care personnel and improved social networking capabilities and resources for the community.

Chile

Patient-focused programs have been shown to be beneficial. Motivational interviewing is a patient-focused strategy that can support and assist people with examining and resolving opposing attitudes, ideas, and emotions (40). Uncovering a person's motivation to change can increase awareness of potential problems, risks, and consequences. A motivational interviewing approach to improving oral health literacy is currently under evaluation among preschoolers and their caregivers in two disadvantaged urban areas in Concepción, Chile (40).

Brazil

Communication and health education on new media (e.g. infographics, videos, apps) can enhance health literacy. Infographics can be especially useful when language is a barrier. In Brazil, educational materials on chronic kidney disease incorporating infographics (41) and mobile health technology for prevention and control of obesity are under development, using the principles of health literacy (42).

Community leaders are important champions of health literacy and social mobilization. At the 9th Global Conference on Health Promotion held in Shanghai, China in 2016, many health literacy projects were presented. One project represented three indigenous communities in Brazil. In a collaborative effort between the Special Indigenous Sanitary District Cuiabá and the School of Public Health of the State of Mato Grosso, 20 students from villages in Chapada dos Guimarães, Poconé, and Cuiabá were trained in oral health, helping to reduce periodontal disease and cavities in their communities (43).

Health literacy policy recommendations

Latin America requires a comprehensive and integrative approach to improve health literacy. The aforementioned initiatives may serve as stepping-stones for future programs. Global organizations, such as PAHO, the International Health Literacy Association, the International Union for Health Promotion and Education, and the United Nations Educational, Scientific, and Cultural Organization, call for actions to improve health literacy in Latin America (6,44,45). In this regard, several policy recommendations pertaining to health literacy have been proposed: (see Table 4) (5).

- Ensure that health literacy materials are available in common local languages and dialects
- Combine health literacy assessment in resource-poor communities with initiatives to improve health and well-being
- Challenge local communities and regional governments to identify individuals who can set an example and champion local health literacy initiatives (5)
- Start education on health literacy as early as preschool and continue through university studies and beyond (5)
- Motivate employers to make health literacy training available to their employees, as a healthier and happier employee is also a more productive employee
- Assimilate health-literate messages through the media in print, radio, TV, and the internet to help improve community health
- Include health literacy training in educational curricula and professional development

Conclusions

Given the wide range of disparities and the burdens of communicable and non-communicable diseases in Latin America, improving health literacy has never been more important. Although there have been substantial advances in health resulting in part from economic and social development, poverty remains a significant barrier to health literacy, education, and health outcomes (1). Clinicians, educators, patients, patient advocates, caregivers, health authorities, churches, the private sector, and governments need to collaborate and take action to improve health literacy, enhance health, and lower costs. There is awareness of this need among former and current government officials, but it is not widely discussed or adequately addressed. While there is a desire to enhance health literacy, there is less awareness about how to do so.

Understanding the state of health literacy across Latin America and initiating the proposed recommendations are first steps toward improving health literacy and health. Additional research on health literacy's impact on health outcomes in Latin America is warranted. While a variety of assessment tools have been employed (46), an overall assessment of health literacy in Latin America, similar to the health literacy survey in Europe conducted by the WHO Action Network on Measuring Population and Organizational Health Literacy, is recommended (47).

We are optimistic that these recommendations will increase awareness about health literacy, improve patient care, improve health, and lead to the development of health-literate policies that enhance well-being in Latin America.

Table 4. Health literacy policy recommendations to improve health literacy in Latin America.

Adapted from the WHO Health Evidence Network Synthesis Report 57 (5)
Integrate lessons learned from barriers and initiatives presented in this review to inform future health literacy policy
Orchestrate a holistic approach to improve health literacy policy, including the home environment, workplaces, traditional and social media, communities, and legislative systems
Support and prioritize evidence-based health literacy research that addresses policy needs at community and national levels
Incorporate evaluation protocol into health literacy initiatives to show the impacts made on health and cost
Facilitate successful implementation by involving all sectors, exhibiting astute political leadership, and thoughtfully weaving doctrines of local culture into health literacy policy
Additional recommendations
General
Standardize health literacy definitions
Encourage development of health literacy assessment scales in Spanish, Portuguese, and local languages, incorporating local culture
Use a multidisciplinary, people-centered approach, focusing on population-level aspects of health literacy (e.g. social cohesion, empowerment)
Training
Broaden knowledge and responsibility for health literacy to the entire care team, not just physicians and nurses. All health professional education (medical and public health) should address health literacy in the curricula and measurable outcomes of success
Include questions on national exams to establish a baseline for health literacy on topics such as healthy eating and exercise habits
Private sector
Inspire communities, including churches, to conduct/sponsor health literacy programs; health and health literacy could form the basis for study groups at churches as well as messages from church leadership
Leverage the private sector to promote organization-wide cultures of well-being to foster health literacy such as a pan-national health literacy organization across Latin America
Government
Incorporate principles of health literacy, especially as they relate to complex medical terminology or necessary actions, into public health programs (this will also help to combat misinformation)
Encourage national, regional, and municipal governments to take a more active role in promoting health literacy and developing policies that will enhance health literacy and healthcare; health promotion departments can advocate for promotion of health literacy
Ensure collaboration between a given country's Ministries of Health and Education to implement an effective health literacy program

Author contribution statement

All authors made substantial contributions to the conception/design of this work, drafting/revision of the work, have approved the final version, and agree to be accountable for the submitted work.

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‘Let me move to another level’: career advancement desires and opportunities for community health nurses in Ghana

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Abstract: Career advancement and continued education are critical components of health worker motivation and retention. Continuous advancement also builds health system capacity by ensuring that leaders are those with experience and strong performance records. To understand more about the satisfaction, desires, and career opportunities available to community health nurses (CHNs) in Ghana, we conducted 29 in-depth interviews and four focus group discussions across five predominantly rural districts. Interview transcripts and summary notes were coded in NVivo based on pre-defined and emergent codes using thematic content analysis. Frustration with existing opportunities for career advancement and continued education emerged as key themes. Overall, the CHNs desired greater opportunities for career development, as most aspired to return to school to pursue higher-level health positions. While workshops were available to improve CHNs knowledge and skills, they were infrequent and irregular. CHNs wanted greater recognition for their work experience in the form of respect from leaders within the Ghana Health System and credit towards future degree programs. CHNs are part of a rapidly expanding cadre of salaried community-based workers in sub-Saharan Africa, and information about their experiences and needs can be used to shape future health policy and program planning.

Keywords: community health, career advancement, health workforce, Ghana, professional opportunities, nurses

Introduction

Many countries in sub-Saharan Africa face a shortage of health workers, which threatens the sustainability of health systems and ability to achieve sustainable development goals (SDGs). In 2015, the physician to patient ratio in Sub-Saharan Africa was 2.3 per 10,000 (1) and the projected shortfall of doctors, nurses, and midwives totaled 800,000 (2). Rural areas face an even greater deficiency, as trained health workers are concentrated in urban centers. For instance, in Ghana, only 32% of physicians and nurses work in rural districts where over half of the population resides (3). In this

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context, volunteer and paid community-based health staff play a critical role in the delivery of health education, disease prevention, and reproductive and child health services. In response, a number of studies have explored factors affecting the retention and motivation of community health workers (CHWs) (4). Through this research, career advancement has emerged as an important component of satisfaction.

Career advancement is frequently mentioned as a factor compelling unpaid CHWs to volunteer. A study of CHWs in South Africa found that 'career benefits' was one of the two most frequently mentioned motivators (5), while another reported that many unpaid CHWs remained in their posts to increase their chances of being hired as paid nurses (6). Through their work as CHWs, they hoped to acquire the skills needed to take on more demanding jobs in the health sector while gaining access to social capital and resources. In addition, in a systematic review of CHW motivation, not having clear opportunities for career advancement was reported as a disincentive to remain in one's post (4).

Career advancement is also a source of motivation for paid health workers (7). While salary is a primary drive for many paid health staff, career advancement opportunities are nevertheless essential for job satisfaction, particularly among low-level health staff and those working in challenging or rural regions (7). In a systematic review of health worker motivation in 17 low- and middle-income countries in Africa and Asia, career development (the ability to specialize or get a promotion) and continuing education (the ability to attend seminars or classes while employed) were identified as priorities for paid health workers. Career development was mentioned as a motivator in 85% of the studies, surpassed only by financial incentives, mentioned in 90% (7).

In addition to enhancing health worker motivation, career advancement is a form of capacity building and means of ensuring that leaders within a health system have experience and a strong performance record. Establishing career ladder systems for nurses, which allow for continuing education, certification, and promotion, has been shown to increase clinical competence, improve collaboration between providers at different levels, and decrease the cost of care (8). Therefore, career advancement is an important policy aim, particularly as countries work to institutionalize their community-based health workforces.

Many CHW programs in sub-Saharan Africa emerged in an *ad hoc* fashion in response to pressing health crises, such as HIV and tuberculosis, and have relied heavily on community members' volunteer labor (9). Yet, as these programs mature, many governments are working to formalize the role of CHWs within the health system (10). For instance, the Ethiopian government employs a team of salaried health extension workers who are selected from the communities where they will work and receive a year of training to deliver disease prevention, reproductive health, hygiene, and health education services, while Malawi employs health surveillance assistants who receive 3 months of training, reside in their catchment areas, and perform health promotion and prevention activities (11). This trend is likely to continue as the most recent World Health Organization guidelines for CHW programs recommend paying CHWs for their work with a financial package commensurate with their job demands and training (12). As more countries establish salaried community health roles, it will be important to understand the factors that motivate existing cadres of paid community-based workers, such as community health nurses (CHNs) in Ghana.

Study context

In Ghana, primary health care is delivered through an integrated three-tiered system (13). Level C operates at the District Hospital and District Health Administration, where management works with local government to plan, supervise, and monitor health service delivery. Level B works at the sub-district level to plan, develop, and assess the implementation of community-based service delivery. This level includes health facilities where registered nurses, midwives, and other clinical staff may supervise CHNs. CHNs work at the community level, Level A, alongside unpaid community health volunteers (CHVs) to bring healthcare services directly to residents through house visits (13). This paper focuses on the experiences of CHNs working at the sub-district and community levels.

In order to become a CHN, senior high school (SHS) graduates may apply for and complete a 2-year CHN training school certificate or a 3-year

CHN training school diploma, after which they can be posted to a community (14). After 3 years of service, CHNs may be promoted to senior CHN positions and are eligible for partial or full sponsorship to pursue higher degree programs. However, evidence suggests that these incentives have not been consistently applied (15). CHNs may complete an additional 3–6 months of training focused on community engagement, outreach, community health planning, and midwifery to become community health officers (CHOs), who hold the additional responsibility of managing CHVs (16).

Previous studies of paid health workers in Ghana, including doctors, nurses, midwives, and CHNs, have found that lack of career development opportunities is a major disincentive to accepting positions in rural areas (17–19). In a qualitative study exploring nurse motivation to accept rural postings, two of the nurses' most pressing concerns were professional development/continued education and career advancement (18). The nurses noted that in rural locations there are few workshops or opportunities for in-service training, and thus it was more challenging to take the steps necessary to return to school to pursue a midwifery or medical degree. However, these studies did not specifically address the career advancement desires of CHNs, who start from a different place on the career trajectory.

In this qualitative study, we explore the factors that motivated respondents to become CHNs, satisfaction with existing opportunities for career advancement, and desires for continuing education. These results can inform program planning for salaried health workers, both at health facilities and in the community.

Methods

This study was conducted as part of the Innovations for Maternal, Newborn, and Child Health Community Care Hub project. Participants were selected randomly from a list of active CHNs working in five primarily rural districts in Ghana: Ningo Prampram, Ada East, Ada West, South Dayi, and South Tongu. Results from Ada East and Ada West were combined, as they had been one administrative district that was divided shortly before data collection. Selected CHNs were contacted in their districts and asked to participate voluntarily.

From May to June 2014, the research team conducted 29 in-depth interviews with CHNs and 4 focus group discussions with 23 individual participants. The topics raised included work challenges, job satisfaction, and relationships with peers and supervisors. Qualitative data were collected by trained, local staff using topic guides piloted during a training session and revised to fit the local context. Interviews and focus group discussions were typically held in a centrally located rented office space in each district, providing privacy and independence from health centers or community demands. They ranged from 40 min to 2 h, and participants received compensation of 20 Cedis (about $3.50 USD) to cover their travel costs. Respondents gave written informed consent to participate and be audio-recorded; they were assured that their supervisors and employers would not be made aware that they had chosen to participate. Names and identifying information were redacted from the written transcripts and the audio files were stored on a password-protected computer.

Interview transcripts and summary notes were coded in NVivo (version 10) by the research team based on pre-defined codes; additional codes were added which emerged during review of transcripts. Data were analyzed using thematic content analysis. The research staff met to check interrater reliability and consistency using randomly selected transcripts and agreement was reached through consensus.

The broader Care Community Hub project baseline assessment also involved 11 in-depth interviews with CHN supervisors, a CHN knowledge assessment tool, and a quantitative survey on CHN job satisfaction, motivation, communication with supervisors, career goals, and workplace challenges, the results of which are presented in Sacks *et al*. (20) and Bellerose *et al*. (21). The survey instruments and baseline results for the full study are available in a Care Community Hub report by Alva *et al*. (22). The findings were used to develop a mobile health application called 'CHN on the Go', which contained networking tools and training modules for CHNs, and were shared with Ghana Health Service and other partners working to improve CHN performance.

This study was approved by the Institutional Review Board at John Snow Inc. and the Ethical Review Committee at Ghana Health Service (GHS-ERC: 07/09/13).

Results

Among the 52 CHNs who participated in interviews and focus group discussions, the average age was 29 years (range 22–56 years), and 87% were female. The CHNs were distributed evenly across the five districts (with Ada East and West combined), and ranged in years of experience from 1 to 34, with a median of 2.5 years of experience. The main themes that emerged were: original motivation for becoming a CHN, overall satisfaction with role, respect and integration within the health system, desire for career advancement, and satisfaction with opportunities for career advancement and continued education.

Original motivation for becoming a CHN

Many CHNs noted that they always wanted to become a nurse and serve their communities. They described feeling passionate about increasing access to lifesaving healthcare and improving community members' health literacy.

> I want to be a community health nurse because those in the typical community, because of where they are, don't have access to health care, so I want to work as a community health nurse so that I can render the health care services to them. (Female, age 27, 1.5 years as a CHN)

> I particularly have the desire of taking care of people and especially the children. And community health nurses, the majority of their work is on the babies side – that is why I choose community health nursing, so that I can help children who are more vulnerable to be able to grow and develop well both mentally and physically. (Female, age 28, 2 years as a CHN)

However, others chose to become CHNs because they did not have the grades to pursue a higher-level degree, and community health nursing offered an alternative with a lower entry requirement.

> I studied science at the SS [SHS] level and my aim was to become a medical doctor but the grade I had then couldn't permit me to go straight. So, I went into community health nursing. (Female, age 25, 2.5 years as a CHN)

Satisfaction with CHN role

CHNs largely expressed that, for someone with their skill set, they had a desirable job with a reasonable salary; however, they named specific areas of dissatisfaction. These included little respect and recognition, limited opportunities for career advancement, and insufficient training sessions to continuously improve their clinical skills and knowledge.

> At the end of the day and looking at the things I have done, most of times I feel fulfilled that I have done something. I have impacted life. I have spoken to someone, and I have changed someone's way of thinking. Though the salary is there, our needs are many. No matter what you are needing, still you will need more. (Female, age 45, 14 years as a CHN)

Respect and integration within the health system

The majority of CHNs reported maintaining cordial relationships with other health workers at their facilities. Yet, a few CHNs noted that tensions exist between nurses of different levels.

> There is a kind of division between we the health workers, especially community health nurses, registered health nurses, and then midwives, which is a challenge to our work. (Male, age 28, 2 years as a CHN)

> In the health aspect, they all discriminate. So, if you see sometimes you will hear something and you will feel very bad. You cannot commit yourself to the work as such. (Female, age 25, 3 years as a CHN)

In addition, CHNs noted that they do not always feel respected within Ghana Health Service due to their lower status role.

> Nowadays it has been like a crime that we have committed to become a community health nurse. I am saying this because you are trying to kill yourself for the job. You try everything. You are working hard. There is no way the top people will recognize your work. There is no single day they will praise you, always fault finding... You are at the grassroot level. They don't respect us. (Female, age 35, 2 years as a CHN)

Desire for career advancement

When asked where they hoped to be in 5 years, most CHNs expressed wanting to return to school to pursue a higher degree that would enable them to move into a Level B role as a public health nurse, midwife, or medical assistant.

> I want to be a midwife... It's like when I entered into nursing, ..., I was enjoying the course very much, so now that I'm in, I said let me move to another level. (Female, age 35, 5 years as a CHN)

> In 5 years' time, I am planning to go back to school, so maybe from there I will be a public health nurse. (Female, age 24, 1.5 years as a CHN)

> Next year, god willing, I will be going to school... I want to do midwifery. Then after that will go to the University... I want to pursue public health. (Female, age 25, 4 years as a CHN)

> I would like to continue with my education. Now they say there is a top up [subsidy] for us in the university. So, if am able to get the admission, then I will continue and if I will be able to do the diploma and I can go to the university, I will continue. (Male, age 35, 6 years as a CHN)

Satisfaction with current opportunities for career advancement

Many CHNs were frustrated with existing opportunities for career advancement and the little recognition given for their work experience in healthcare when pursuing other degrees. In order to become a midwife or public health nurse with more responsibility and prestige, CHNs needed to return to school to pursue a different degree and could not count their hours as a CHN toward that goal. Furthermore, going to school required funding and additional training that was sometimes unavailable to CHNs.

> We community health nurses, if you want to maybe further your education, ... you have to go back and write WASSCE [exams], maybe you will go better your core math or whatever the mark is you have to better. Meanwhile, maybe you've been working in the field for maybe 4 years, you have working experience... so that thing is difficult. (Female, age 25, 2 years as a CHN)

> Right now, if you want to advance, it's either you leave community health nursing, or maybe I'm a diploma holder, and I want to go further, I can't go and do the degree... I have to divert. (Female, age 25, 2 years as a CHN)

> We are restricted as to how to progress educationally. As we've completed the community health nursing... the chances for us to progress is very limited. (Female, age 26, 2 years as a CHN)

Respondents also mentioned that this system disadvantages older CHNs.

> Some of our colleagues are old in the system. They cannot go to any school or advance in any education again. So, what I would like them, our in charges, to do is to find some ways to upgrade them so that they can also be happy. (Female age 25, 2.5 years as a CHN)

> If that facility sponsors me, fine, I can come and work up to a time and go. And, if it did not and I sponsor myself, there is no way I will come back [to school]. (Female, age 35, 2 years as a CHN)

> Is just that there are no avenues for us to go to school quickly. (Female, age 25, 3 years as a CHN)

Opportunities for continued education

Workshops were available for CHNs to attend to improve their skills and knowledge; however, they were infrequent and irregular. Typically, not all CHNs were allowed to attend each workshop;

rather, a few CHNs would attend and then teach their colleagues the information. CHNs asked for more refresher courses and suggested that online workshops be used when possible.

> Ever since I started [as a CHN], I think there's only been one or two [workshops]...it's not that regular. It just happens once in a while. (Male, age 25, 2 years as a CHN)

> Anytime there is changes in the system, new things are coming. So, I think immediately when there is something new, they have to call us and educate us. (Female, age 25, 1.5 years as a CHN)

> The more you go through that training, the more new ideas you get because health is dynamic each day, each time. Things are changing. The way of treatment is changing. New medicines are coming out. (Female, age 45, 14 years as a CHN)

Although nearly all CHNs expressed confidence in their clinical abilities, CHNs noted that most of their confidence came from years of learning from other CHNs and honing their skills on-the-job while delivering care to their communities, rather than formal training opportunities.

> We don't do [the] clinical aspect in the training college; it is on the field that you learn it. So, for my 3 years, I have been here, I have learned a lot to the extent that if my in-charge [supervisor] is not around, I can treat malaria, diarrhea... (Male, age 35, 6 years as a CHN)

Discussion

Overall, this study suggests that CHNs desire greater opportunities for career advancement and continued education, as many aspire to occupy higher-level health positions. As most CHNs planned to return to school for an advanced degree within 5 years of the interview, the lack of opportunities to pursue higher positions in the course of their work emerged as a clear source of frustration and demotivation. While some training workshops were available for CHNs to improve their skills, they were infrequent and offered inconsistently throughout the year. In addition, although subsidies for further education are listed as an incentive available to CHNs in national guidelines (15), study participants were unaware of this benefit or unsure that they would receive it. These results indicate that some career advancement opportunities were available for CHNs willing to seek them out, but needed to be better incorporated into CHN degree programs and communicated to current CHNs and supervisors.

CHNs multi-year training represents a considerable investment, yet our findings highlight that most CHNs see their position as a stepping-stone and do not intend to remain in it for more than a few years. While previous analyses have highlighted additional resources needed to improve CHN retention in their roles, such as stronger supervision and transportation to conduct home visits (20), resources are also needed to improve CHN retention within Ghana Health Service, including policies to ensure that CHNs can move up to higher levels within the system. When these resources are not in place, CHNs may become disgruntled or leave the Ghana Health Service.

Dissatisfaction may be greater for CHNs who do not feel respected by higher level clinical staff or the Ghana Health Service. Disrespectful relationships between community-based workers and facility health staff are a missed opportunity for the newest members of a health system to learn about others' roles and network with senior members.

Despite our expectation that younger CHNs would desire greater opportunities for career advancement and continued education, we found few major differences across age groups. While CHNs in their mid-20s with 1–3 years of work experience mentioned wanting to return to school to pursue higher degrees most often, there were multiple CHNs between age 30 and 40 years who also shared that aim. In addition, CHNs of all ages and experience levels desired opportunities to improve their clinical skills while in their current roles.

When asked about job satisfaction and challenges, salary was mentioned infrequently and never as CHNs most pressing concern. This finding aligns with research demonstrating that receiving a competitive salary can validate the work of community-based health staff, but is often not sufficient for retention, as staff greatly want to be recognized for their hard work, especially when they

feel their jobs are challenging (17). Studies exploring the determinants of turnover intention among paid health workers in Ghana revealed that while there was low satisfaction with compensation, it was not the primary driver of turnover intent or employment abroad (17, 23).

A limitation of this study is that some CHNs included held the additional designation of CHO, but were not identified as such within the qualitative data. The CHO role includes an additional 3–6 months of training and greater responsibility. It therefore may be viewed by CHNs as an important career advancement step. In addition, since 2014, when these data were collected, small changes have been made to strengthen the CHN advancement structure. CHNs can now use their certifications to complete a top-level university course, and upon passing, can be enrolled in a midwifery or public health degree program (24). In addition, newly qualified nurses, nursing assistants, and midwives from accredited universities now receive a PIN or AIN, a professional identification that must be renewed yearly. As part of the renewal process, CHNs must complete a small number of continued professional development activities organized by the Nursing and Midwifery Council of Ghana (24). More research is needed to understand whether these career development programs are accessible to CHNs across Ghana and if they have been successful in improving clinical skills and motivation.

Our results highlight the importance of continuing to strengthen the career advancement pathways available to community-based health staff in Ghana and other contexts. These opportunities for advancement should be equitable and affordable. They should also be sustained over time, rather than delivered one-off, to avoid 'expectation-gaps' (25). Potential policy solutions include (a) providing educational subsidies to CHNs pursing higher education during the course of their work, commensurate with number of years of service; (b) allowing CHNs to receive credit toward future degree completion for each year of service; (c) assuring that existing mentorship programs for CHNs are being implemented consistently and in accordance with national policies; (d) increasing opportunities for CHNs to receive coaching from others in the healthcare field, including midwives, nurses, physicians, and public health professionals; and (e) ensuring mechanisms are in place for CHNs to offer ongoing feedback on career advancement pathways to policy-makers. Mobile applications, such as CHN on the Go and WhatsApp, are commonly used by CHNs to exchange information and could be formally integrated into national professional development approaches to increase access to technical information, coursework, mentorship, and feedback mechanisms.

When designing policies to promote CHN career advancement, it is important to consider their potential impact on staff turnover. As CHNs leave their posts to pursue additional degrees, strong recruitment, training, and retention practices must be in place to ensure that enough clinically skilled CHNs remain available to meet community needs. CHNs wanted to gain credit toward higher-level health positions or complete their studies during the course of their work as CHNs, which could potentially keep posts filled while CHNs pursue their educational goals. It may also improve recruitment outcomes if SHS students know that becoming a CHN could provide an advantage when pursuing a higher-level health career.

Strengthening career advancement opportunities for health staff is a worthwhile policy aim. An abundance of research, including evidence from this study, suggests that providing clear, achievable opportunities for career advancement and development will improve CHN motivation and retention (7). This may occur directly by increasing external motivation or indirectly by boosting organizational commitment (26). Providing strong opportunities for career advancement and development will also build workforce capacity by ensuring that high-level positions are occupied by qualified staff who have progressed through a pipeline.

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Ethical approval

This study was approved by the Institutional Review Board at John Snow Inc. and the Ethical Review Committee at Ghana Health Service (GHS-ERC: 07/09/13).

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Tobacco epidemic in Jordan: the time to act is now

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Abstract: Tobacco use still represents a major threat to global public health and this calls for extensive efforts to control tobacco products and advocate harm-reduction policies. Recent global trends of prevalence rates in smoking are promising, as trajectories show a decline in all World Health Organization regions. Yet, this decline varies significantly at the national level. Jordan, as a country in the Eastern Mediterranean Region, has been in a long battle against tobacco. Despite that, the country is found to have one of the highest prevalence rates of tobacco use in the region and the world. Many challenges slow down effective and successful anti-tobacco policy implementation in Jordan, most notably cultural influences on smoking and the interference of the tobacco industry in tobacco policy making. Decision makers in Jordan should consider strengthening of anti-tobacco measures to avoid a public health catastrophe if tobacco use keeps rising at the current pace.

Keywords: Jordan, tobacco use, anti-tobacco policies, Framework Convention on Tobacco Control (FCTC), MPOWER, tobacco epidemic

Introduction: a global lens on tobacco use

Tobacco smoking still represents a major threat to global public health and a main risk factor for a wide range of preventable illnesses. More than 8 million lives are lost every year due to tobacco use, of which 1.2 million deaths occur among non-smokers exposed to tobacco smoke (1,2). It is also important to stress that the majority of tobacco users and tobacco-related morbidity and mortality are found in low- and middle-income countries (1). Over the past decades, tobacco control has been a tough mission even in the 182 countries that are party to the Framework Convention on Tobacco Control (FCTC) (3).

Despite the immense and extensive efforts taken by the FCTC parties in tackling tobacco use, collecting essential data on usage patterns, advocating tobacco use reduction and cessation, strengthening tobacco harm-reduction policies, and promoting the MPOWER package (Monitor, Protect, Offer help, Warn, Enforce and Raise taxes), only 23 countries provide financially covered (full or partial) comprehensive cessation services (4), while many countries are still facing struggles in this mission.

While global trends in the prevalence of tobacco use are promising, and the age-standardized prevalence keeps declining in the six World Health Organization (WHO) regions, it is essential to mention that this reduction varies significantly at the country level (2,5). Based on the WHO global report on trends of tobacco use 2000–2025, a declining projection in the global prevalence of tobacco use among both sexes is noted. Nevertheless, the forecasted projection revealed a gap of (–1.8%) between the targeted rate (19.1%) and the projected rate (20.9%) in 2025 (2). According to the same report, the prevalence rates are expected to decline in the following trends (from rates in 2000 to projected rates in 2025): 18.5–11.2% in Africa, 30.8–15.4% in the Americas, 29.5–17.0% in the Eastern Mediterranean Region (EMR), 34.2–24.1%

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Table 1. Main outlines of anti-smoking policies in Jordan.[a]

Main policy	*Effective year*	*Act*
First anti-smoking regulation as part of public health law	1971	Jail sentences or fines on those who smoke in public places/public transport or advertise/promote tobacco use
Jordan ratified the FCTC	2004	More systematic anti-smoking strategies were adopted from the FCTC
The Control of Juvenile Conduct Law	2006	Prohibiting the sale of tobacco to minors
Ministry of Education Law	2007	School-based anti-smoking regulation
Public Health Law No. 47, Chapter 12	2008	Addressing smoke-free places, tobacco advertising, and tobacco packaging and labeling
The Public Transport Law and The Traffic Law	2008	A ban on smoking in public transport
A circulatory letter from the Ministry of Health to corresponding authorities	2009	Smoking ban in malls, airports, restaurants including fast-food restaurants
Technical regulations by the Jordan Standards and Metrology Organization – Cigarettes (with amendments)	2011, 2012	Addressing obligatory national standards for tobacco products
Tobacco Products Display Regulation, Regulation Number 73	2013	Addressing tobacco products display according to national regulations
Technical regulations by the Jordan Standards and Metrology Organization – Waterpipe Tobacco (Amendment)	2014	Addressing obligatory national standards for waterpipe tobacco –Meassel
Special Tax Regulation on Tobacco Products (Amendment)	2014	Updating tobacco products taxation system
Instruction No.1 and No.2 on the Required Criteria and Conditions for the Display of Tobacco Products at Points of Sale	2015	– Various regulations regarding the display of tobacco products in retail stores – Prohibiting tobacco retail licensure near educational institutions and hospitals (a safety distance of 250 m)
Law No. 11 of 2017 on the Amendment to the Public Health Law	2017	Amending the public health law of 2008 with a wide range of penalties for smoking-related public health violations

[a]Data extracted from the World Bank (9), Tobacco Control Law (10), and World Health Organization (11).

in the European region, 46.6–25.1% in South-East Asia, and 30.9–24.8% in West Pacific region (2).

Tobacco use in Jordan: a historical overview with an update on current status

The EMR consists of 22 countries with an overall population of 679 million inhabitants. The Hashemite Kingdom of Jordan, popularly known as Jordan, is one of the EMR countries, with a population of 10.8 million. Also, the World Bank classifies Jordan as an upper-middle-income country with a gross national income per capita of 4410 current US$ in 2019 (6). The battle against tobacco use in Jordan started back in the 1970s when the first tobacco control legislation was declared (7). In 2004, Jordan was the second country in the EMR to join the FCTC for more systematic and committed actions to control tobacco use in the country (7,8). Joining the FCTC had resulted in more serious steps in anti-tobacco regulations in Jordan (8), despite the lack of effective law enforcement. Table 1 outlines the evolution of main policies regarding tobacco control in Jordan.

A recent spotlight published in *The Lancet* points to a high rate of tobacco use in Jordan, with around 70% of men believed to be tobacco smokers (12). Also, tobacco smoking was cited as being part of Jordanian culture despite extensive efforts to control tobacco use. In a national survey carried out in 2019, 8 out of 10 Jordanian men were found to be regular

smokers, with an average daily consumption of 23 cigarettes, surpassing the figures from Indonesia (13). Moreover, alarming data retrieved in 2021 from World Population Review (14) declared Jordan to be among the countries with the highest rates of smoking, ranked sixth globally with an overall prevalence of 40.45% (70.2% among men and 10.7% among women). Moreover, statistics on tobacco use are also alarming among teenagers in the country. A school-based survey of students aged between 11 and 18 years found that the rate of past-week waterpipe smoking was 30% (15). Another longitudinal study among school children found that 29.8% of 1454 students surveyed had started smoking combustible cigarettes by the tenth grade (16).

Despite high poverty and unemployment rates in Jordan, the country still tops its neighboring countries in rates of tobacco use (17,18). Availability, easy accessibility, and affordability of various forms of tobacco products that are being sold in the Jordanian market add additional burden to the effective control of tobacco use. For example, waterpipe or Argileh is served in most restaurants and cafes in the country, exposing a significant proportion of youths and young adults, who usually underestimate the danger of tobacco use, to a high risk of developing tobacco-related diseases due to direct use or indirect exposure to smoke. Previous figures on the prevalence of tobacco use in Jordan warn of an upcoming public health catastrophe if smoking rates keep rising at this rate.

Alongside tobacco products, the recent legislation of importation, distribution, and use of electronic cigarettes (E-cigarettes) in Jordan is expected to impose more challenges and burden on the anti-tobacco efforts (19,20). In the midst of the COVID-19 pandemic, the government announced licensing of 184 retail stores to display and sell E-cigarettes and their liquids as well as heated tobacco products (21). This seems contradictory to the national anti-smoking efforts, considering the potential of E-cigarettes as a gateway for initiating tobacco smoking among non-smoking youths due to their appealing flavors.

Major challenges of anti-tobacco efforts in Jordan

Despite the extensive history of tobacco control in Jordan, it seems that the responsible authorities have not been successful in providing effective implementation of anti-tobacco policies, as seen in the previously reported statistics. According to Heydari et al. (22), Jordan was amongst the countries that had low scores in implementing the MPOWER measures and ranked the 13th in the EMR (22). Also, total MPOWER scores in 2011, 2013, and 2015 were 26, 25, 19, respectively, which demonstrates a worrying decline in ideal implementation of MPOWER measures in Jordan (22).

No one would deny that tobacco use could be culturally influenced in Jordan, which imposes a difficult cultural norm to change; nevertheless, more stringent, and law-enforced measures should be implemented and monitored for a noticeable reduction in tobacco use. For example, despite the existence of anti-smoking regulations and warning signs, smoking in public transport and many public places is a normal sight in Jordan, and this explicitly reveals a severe deficiency in the enforcement of anti-smoking measures and weaknesses in the monitoring system.

Based on a recent report on the level of adherence and compliance to the WHO MPOWER package, some domains were not sufficiently advocated or implemented in Jordan (23). For example, regarding monitoring (M) of tobacco use and tobacco policies, Jordan has minimal policy adherence to having recent and representative smoking data for either adults or youth. Regarding protection and smoke-free environments (P), Jordan also has minimal adherence to policies of smoke-free areas and scored 3 out of 10 on this item. Regarding offering help and cessation programs (O), Jordan has a moderate-level policy implementation, although smoking cessation support is not widely available and a toll-free telephone quitline with a person to discuss cessation with callers is not available. Concerning health warnings on tobacco packages (W) and anti-tobacco mass media campaigns (W), Jordan has moderate-level policy implementation and complete policy implementation, respectively. For enforcement of advertising bans (E), Jordan has moderate-level policy implementation and scored 5 out of 10 in compliance with this item. And finally, regarding taxation (R), Jordan has complete policy implementation in this item (23).

Alongside the challenges in the ideal implementation of MPOWER strategies in Jordan, the interference of tobacco companies in tobacco policy development represents a major obstacle in the anti-tobacco mission. A worrying influence from the tobacco industry and its front groups is present

in the process of tobacco policy making in Jordan (24,25). Moreover, Jordan scored 77 points in Global Tobacco Index and was ranked 31st among the surveyed 57 countries, representing a high level of influence and interference in tobacco policy-making by tobacco companies (26). In addition, lack of transparency in disclosing the interactions between the government and tobacco industry, absence of laws that exclude tobacco front groups during regulating tobacco products in Jordan, and the absence of regulations that prevent government officials and relatives from holding positions in tobacco industry, all are a major drawback in the Jordanian anti-tobacco mission (26).

Recommendations

In the current situation, it is wise to carry out nationwide campaigns to raise awareness about the dangers of tobacco use in the country. Utilizing social media platforms to spread anti-smoking messages is believed to be a cost-effective and time-efficient way to target Jordanian society with these messages. High school students and university students could be also reached through regular awareness lectures as part of university-based or high-school-based campaigns.

The Jordanian government and decision-makers should realize that the profits and economic rewards from tobacco sales have a price that is taken from people's health and wealth. It is irrational to try implementing anti-tobacco measures and at the same time encourage the tobacco industry in the country. It should be noted that, without complete governmental jurisdiction and governance over tobacco policymaking in the country, it will be almost impossible to achieve an impactful policy implementation and tobacco harm reduction. Hence, the interference of the tobacco front groups in tobacco policy-making should be halted. All national anti-tobacco efforts should be strengthened and enforced effectively to lower the rates of tobacco use in order to achieve a healthier community and generation; thus, more 'healthy' economic revenues can be achieved than that from tobacco sales. More reliable actions should be effectively advocated to reverse the significant economic losses that result from tobacco-related morbidity and mortality. Looking at the current status of tobacco use in the country, the taxation system on tobacco products should be also reviewed and adjusted regularly to achieve a continuous and stepwise annual rise aiming at reducing tobacco affordability. The current situation of tobacco use in Jordan calls for immediate and well-executed action in collaboration between the government and non-state anti-tobacco actors to avoid further negative impacts on health and the economy that may result from a tobacco epidemic in the country. Lastly, anti-tobacco measures should also consider the complexity and roots of tobacco use in the community, considering socio-economic determinants, gender-influenced tobacco use, adolescents at high risk of adopting unhealthy behaviors due to peer pressure, macro-and micro-socioeconomic influences, and a balance between legal frameworks and effective implementation of anti-tobacco policies (27).

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Abstracts

Impacts and implementation of the French *service sanitaire des étudiants en santé* (SSES) [health service for students in health professions]: Case study in two French academies

Ollivier Prigent, Aurélia Bureau, Olivier Aromatario, and Linda Cambon

Background: In France, the health service for students in health professions (SSES in its French acronym) is a 2018 health promotion (HP) outreach program for students in health profession. It includes time spent training and acting on various populations. It has been rolled out on French territory without prior assessment. The study we conducted aims to i) document the perception and degree of appropriation of the objectives of the SSES by the stakeholders (students and supervising professionals), ii) analyze the interventions carried out by the students in relation to good HP practices.
Methods: This was a qualitative case study conducted in two academies in the Nouvelle-Aquitaine region, Poitiers and Bordeaux. Interviews were conducted with stakeholders, as well as observations of actions taken by students.
Results: We conducted 87 interviews and 18 observations. The data obtained show that: (i) even if the stakeholders were strongly involved, conditions for implementation were difficult and unequal, (ii) the objectives are out of step with the prevention issues in the healthcare system, (iii) the students endorsed a mistaken vision of rational HP which individualize health-related behaviors, and (iv) majority of the actions carried out contravene the HP quality criteria, whether postural, methodological, or ethical.
Conclusion: These results were confirmed by the Academy of Normandy. To our knowledge, no other evaluation of this type has been carried out on French territory. This raises questions because the impacts observed seem sufficiently worrying to call for a reform of the system, both in terms of objectives and support for action in HP (e.g. on the social determinants of health).
Keywords: health service, students, health professions, prevention, health promotion (Global Health Promotion, 2022; 29(2): 107–115)

Poor nutrition in the Mexican student population: associated graphic and educational factors

Abelardo Ávila Curiel, Carlos Galindo Gómez, Liliana Juárez Martínez, Armando García-Guerra, Marti Yareli Del Monte Vega, Jesús Martínez Domínguez and Marco Antonio Ávila Arcos

Objectives: To determine the prevalence of poor nutrition (overweight or obesity and short stature) in the Mexican population of six- to twelve-year-olds in primary school, and its association with geographic characteristics (environment, marginalization, and region of the country) and school characteristics (type, shift/hours of study, and grade).
Methods: With information from 10,528,676 students, we estimated (C.I. 95%), at the national level and by characteristics of interest, prevalence and its association using logistic regression models.
Results: The national prevalence of overweight or obesity was 34.4%, with 36.5% in the urban environment and 40.2% in private schools. The national prevalence of short stature was 8.7%, with 13.7% in rural areas and 28.8% in indigenous schools. Overweight or obesity and short stature were significantly associated with geographic and school characteristics.
Conclusions: There is a nutritional polarization in the country's educational context. It is important to continue systems of nutritional monitoring and surveillance.
Keywords: students, overweight, obesity, Mexico, nutritional surveillance. (Global Health Promotion, 2022; 29(2): 126–135)

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Development of a participative process for community health diagnosis in students at Miguel Hernández University: project #beUMHealthy

Desirée Valera-Gran, Daniel Prieto-Botella, Miriam Hurtado-Pomares, Sergio Hernández-Sánchez, Manoli Garcia-de-la-Hera, Eva María Navarrete-Muñoz and María Teresa Pérez-Vazquez

Summary: Participatory processes allow a community to analyze, comprehend, debate, and promote collective action in matters of significance for the community. These active methodologies favor the identification of health needs and assets to create a community health diagnosis to promote collective actions. In this sense, the application of participatory processes in the university context stems from great interest in strengthening universities as health-promoting communities. In this work, we describe the development of the participatory process #beUMHealthy, whose principal objective was to strengthen the debate over health and health-promotion initiatives in the student body of Miguel Hernández University (UMH). This project was developed between May and November of 2019. Twenty-two participants were recruited using WhatsApp and 173 questionnaires were filled out online. This process allowed for the identification of health needs and assets in the student body of UMH as well as generating ideas for improvement. This information will be used to promote future actions to increase the health of the university community.
Keywords: participatory process, community health, health assets, health promotion, students, university. (Global Health Promotion, 2022; 29(2): 136–140)

Éditorial

La Santé dans toutes les politiques : pour une relance post-COVID-19 saine et équitable?

Thierno Diallo

La Santé dans toutes les politiques (SdTP) est une forme d'approche intersectorielle visant à renforcer les liens entre la santé et les autres politiques. Ce concept trouve son origine dans les initiatives de santé publique menées au niveau international notamment la déclaration d'Alma-Ata (1978), la Charte d'Ottawa (1986) et les politiques publiques saines (1988). La SdTP, promue par l'Organisation mondiale de la Santé, vise à faire en sorte que les questions de santé, d'équité et de bien-être soient prises en compte lors de l'élaboration des politiques de tous les secteurs. Elle favorise la compréhension par les secteurs autres que la santé des conséquences de leurs décisions sur les déterminants de la santé et donc sur les facteurs qui influencent l'état de santé et le bien-être de la population. L'idée de base est de responsabiliser les décideurs politiques de tous les secteurs et de tous les paliers de décision à l'égard de la santé de la population et de l'équité en matière de santé (1).

La SdTP s'inscrit dans une volonté plus grande de placer la santé au centre des objectifs et actions de développement de la société. Elle repose sur une vision commune et des objectifs partagés entre le secteur de la santé et les autres secteurs ainsi que sur une stratégie gagnant-gagnant pour aider à faire participer divers secteurs. Tous les secteurs doivent y trouver leur bénéfice. Cette approche offre un nouveau rôle au secteur de la santé : d'une part, celui de soutenir les autres secteurs pour l'atteinte de leurs objectifs et d'autre part, de les aider à comprendre que ces objectifs ne sont pas sans impacts sur la santé. Le secteur de la santé, y compris les intervenants en promotion de la santé, doivent adopter une approche véritablement collaborative et son apport doit être vu par les autres secteurs comme une réelle valeur ajoutée.

La pandémie de COVID-19 qui frappe le monde entier depuis le début de l'année 2020 a révélé la fragilité de notre système de santé. Les gouvernements ont mis l'accent sur la réduction de la transmission virale pour faire baisser les hospitalisations afin de protéger le système de santé. Dans cette perspective, des mesures de réponses à la COVID-19 ont été prises touchant toute la société et nécessitant une collaboration entre le secteur de la santé et les autres secteurs (2) (par exemple l'économie, l'emploi, l'éducation, les transports, la sécurité, la culture, les loisirs, etc.). Les deux années écoulées depuis le début de la crise sanitaire nous ont montré que la gestion de cette pandémie ne peut pas être l'affaire d'un gouvernement seul, encore moins uniquement du département de la santé. Elle requiert un ensemble d'acteurs se réunissant dans un but commun, contenir la pandémie et gérer ses impacts négatifs. Ainsi, nous assistons à une collaboration intersectorielle sans précédent à différents niveaux pour faire face à la COVID-19. Les silos dans la manière de fonctionner de plusieurs administrations ont été brisés pendant cette crise.

Durant cette pandémie, la santé a été élevée au niveau politique et au niveau de la société comme cela n'a jamais été le cas auparavant. Elle a obtenu une légitimité pour intervenir dans les politiques et actions de tous les secteurs et ce, à tous les paliers de décision. La réponse de la santé publique a été une réponse multisectorielle. La crise de la COVID-19 a mis en évidence le lien entre l'économie, la santé et le bien-être. Les décideurs politiques ont rappelé, plusieurs fois, que la prise de décision dans ce contexte de crise sanitaire était guidée par la science et les données probantes. Tout est scruté sous le prisme de la COVID-19.

Toutefois, cette pandémie a mis en lumière une exacerbation des inégalités sociales et de santé

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préexistantes. À ce titre, Richard Horton, le rédacteur en chef de la revue Britannique, *The Lancet*, affirmait que deux catégories de maladies interagissent dans la population, la COVID-19 et un certain nombre de maladies non transmissibles comme, par exemple, le diabète, les maladies cardiovasculaires, les affections respiratoires chroniques et les cancers, sur fond d'un contexte social et économique marqué par de profondes inégalités. Selon lui, ce contexte aggrave les effets de chaque maladie et il considère ainsi que la COVID-19 n'est pas une pandémie, mais une *syndémie* (3).

L'erreur serait de penser que la pandémie de COVID-19 n'est qu'une crise sanitaire liée à l'infection par le virus. Certes, cette infection a eu un effet direct sur la santé de la population, mais ses répercussions, tout comme les mesures prises pour arrêter la propagation du virus, ont affecté différemment les individus en fonction, entre autres, de leur statut socio-économique. Une fracture sociale s'est créée entre les personnes ayant la possibilité de respecter les mesures de confinement et les autres, en raison notamment du profil socioéconomique, des conditions de logements, du type d'emploi, de l'âge, le genre etc.

Des sommes importantes ont été investies par les gouvernements pour faire face à la crise sanitaire. La pression sera importante pour la relance post-COVID-19, notamment au niveau de l'économie pour équilibrer les budgets. Et dans ce contexte, les approches intersectorielles comme la SdTP seront très pertinentes pour adresser les impacts à long terme de cette pandémie sur la santé, la santé mentale et les inégalités et pour s'assurer d'une relance pas seulement axée sur l'économie, mais qui place la santé et le bien-être au cœur des efforts. Il en est de même pour l'évaluation d'impact sur la santé (EIS), qui a été identifiée à plusieurs occasions, comme un des outils capables de promouvoir et de permettre la mise en œuvre du concept de la SdTP. L'EIS permet une prise en compte systématique des préoccupations de santé dans les décisions. Cet outil a été utilisé durant la pandémie de COVID-19 dans plusieurs pays comme le Pays de Galles (4), l'Écosse (5) et l'Autriche (6) pour évaluer les impacts des mesures de réponse à la COVID-19, prises dans un contexte d'urgence sanitaire, sur la santé de la population. L'EIS constitue donc un outil qui pourrait être utile aux décideurs pour prédire les effets potentiels futurs des politiques de relance post-COVID-19 sur la santé et le bien-être de la population et d'identifier les actions pour minimiser les effets négatifs et maximiser les effets positifs de ces politiques avant leur mise en œuvre (7).

La COVID-19 a souligné l'importance d'avoir un système de santé solide et la nécessité d'une collaboration intersectorielle pour protéger la santé de la population et promouvoir l'équité. Pour la relance post-COVID-19, il faudrait passer d'une logique de protection de la santé à une logique de prévention et de promotion de la santé dans toutes les politiques. En outre, la question qui se pose est le maintien des différentes collaborations intersectorielles engagées durant la crise. Dans cette perspective, la recherche devrait s'intéresser à étudier les approches intersectorielles mobilisées durant la pandémie et à analyser la pérennisation de celles-ci pour la gestion post-COVID-19.

Il ne faut pas oulier aussi qu'avant cette crise sanitaire, nous avions la crise climatique et celle sur les maladies non transmissibles dont les facteurs de risque sont liés entre autres à notre mode de vie et à notre environnement. Ces crises resteront après la COVID-19 et les approches intersectorielles, telles que la SdTP (8), constituent des moyens efficaces pour faire face à ces enjeux complexes et pour mieux se préparer à gérer de futures crises. Il faudra tirer les leçons apprises durant cette crise en matière de collaborations intersectorielles et maintenir l'élan de ces collaborations au niveau des gouvernements pour rebâtir la société en mieux. Ce sera un défi important pour le secteur de la santé, incluant les chercheurs et intervenants en promotion de la santé, mais il doit saisir l'opportunité offerte par la pandémie de COVID-19 pour essayer de le relever.

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Impacts et mise en œuvre du service sanitaire des étudiants en santé (SSES) français : étude de cas dans deux académies françaises

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Résumé :
Contexte : Le service sanitaire des étudiants en santé (SSES) est un programme de 2018 de sensibilisation à la promotion de la santé (PS), à destination d'étudiants en santé français. Il comprend un temps de formation et un temps d'action des étudiants sur diverses populations. Il est déployé sur le territoire français sans évaluation préalable. L'étude que nous avons conduite a pour objectifs de i) documenter la perception et le degré d'appropriation des objectifs du SSES par les parties prenantes (étudiants et professionnels encadrants), ii) analyser les interventions réalisées par les étudiants au regard des bonnes pratiques de promotion de la santé (PS).
Méthodes : Il s'agissait d'une étude de cas qualitative menée dans deux académies de la Région Nouvelle-Aquitaine : Poitiers et Bordeaux. Des entretiens ont été conduits auprès des parties prenantes, ainsi que des observations d'actions menées par les étudiants.
Résultats : Nous avons réalisé 87 entretiens et 18 observations. Les données obtenues montrent que : (i) si les parties prenantes se sont fortement impliquées, les conditions de mise en place étaient difficiles et inégales, (ii) les objectifs se révèlent en décalage avec des enjeux de la prévention dans le système de soins, (iii) les étudiants ont entériné une vision erronée de la PS rationnelle et individualisant les comportements liés à la santé, et (iv) les actions menées contreviennent pour la majorité aux critères de qualité en PS, qu'ils soient pédagogiques, méthodologiques ou éthiques.
Conclusion : Ces résultats ont été confortés dans l'académie de Normandie. À notre connaissance, aucune autre évaluation de ce type n'est réalisée sur le territoire français. Ceci pose des questions car les impacts observés semblent suffisamment inquiétants pour appeler à une réforme du dispositif, tant sur les objectifs que sur les accompagnements à l'action en PS (ex. sur les déterminants sociaux de la santé).

Mots clés : service sanitaire, étudiants, professions de santé, prévention, promotion de la santé

Introduction

En France, le gouvernement s'est engagé dans ce qu'il appelle le virage préventif. Dans ce cadre, une des actions portées par le Président est l'instauration d'un service sanitaire des étudiants en santé (SSES), lancé en 2018. Il s'inscrit dans le cadre de la stratégie nationale de santé et notamment son premier axe qui s'intitule mettre en place une politique de promotion de la santé (PS) (1).

Ce dispositif a été annoncé comme devant permettre de diffuser, partout sur le territoire, des interventions de prévention conduites par des étudiants en santé (les étudiants en santé regroupent des étudiants des filières médicales [p.ex. médecine, pharmacie, maïeutique] et paramédicales [p.ex. infirmiers, kinésithérapie]) sur

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différentes thématiques (alimentation tout au long de la vie, activité physique, addictions, santé sexuelle intégrant la prévention des infections sexuellement transmissibles (IST), etc.). Ce dispositif poursuit 4 quatre objectifs : (i) permettre l'acquisition par les étudiants en santé de compétences pour conduire un projet de prévention primaire, (ii) favoriser l'inter-profession-nalité des étudiants en santé, (iii) participer à réduire les inégalités sociales et territoriales de santé (ISTS), et (iv) promouvoir des comportements favorables à la santé. Pour cela, il est intégré au cursus des étudiants en santé et prévoit en interfilière un temps de formation théorique et pratique pour préparer les étudiants à réaliser une action, un temps d'intervention auprès de publics prédéfinis et un temps d'évaluation de l'action. Pour accompagner ce dispositif, sont nommés dans chaque université et école gérant des filières santé (médecine, soins infirmiers, odontologie, kinésithérapie, pharmacie) des formateurs, des référents de proximité chargés d'accompagner les étudiants sur les lieux de stage, des coordinateurs appelés « référents pédagogiques » dans les textes, chargés de l'articulation entre les enseignements et, selon les endroits, l'organisation des interventions menées par les étudiants. La formation calibrée sur 30h doit suivre le référentiel de compétences élaboré spécifiquement par la Direction générale de la santé. Dès le début du mandat présidentiel, le SSES a été mis en place sur toute la France sans évaluation préalable ni test de faisabilité, bien qu'il concerne un grand nombre d'étudiants (environ 47000 étudiants par an) et qu'il ne soit pas prévu de ressources et moyens humains supplémentaires au sein des universités et écoles.

Dans ce contexte, il est apparu nécessaire d'analyser cet objet organisationnel. Cet article présente la méthode et les résultats de cette étude menée dans deux académies (unité de gestion des enseignements universitaires) : celles de Poitiers et Bordeaux, dans de la Région Nouvelle-Aquitaine. Son objectif était double : (i) documenter la perception et le degré d'appropriation des objectifs du SSES (voir détails paragraphe « recueil de données » ci-dessous) du point de vue des acteurs directement concernés : coordinateurs-formateurs (CF) (voir description en ANNEXE 1), référents de proximité (R) (voir description en ANNEXE 2), étudiants (E) (voir description en ANNEXE 3), bénéficiaires des interventions de terrain (B) (voir description en ANNEXE 4), (ii) analyser les interventions réalisées par les étudiants au regard des bonnes pratiques en PS.

Méthodes

Nous avons conduit une étude qualitative de cas (2) après la première année de mise en œuvre du SSES (2018/2019). En effet, l'étude de cas est une méthodologie de recherche utilisée pour étudier des phénomènes complexes nouveaux en situation réelle ou étendre les connaissances sur des phénomènes déjà investigués en apportant une analyse profonde et détaillée (3).

Recueil de données

Pour répondre au premier objectif, les données ont été recueillies entre mars et juin 2019 par entretiens semi-directifs réalisés par un des deux investigateurs auprès de l'ensemble des parties prenantes ayant participé à la mise en œuvre du dispositif sur le terrain : les étudiants ayant réalisé les interventions, les formateurs, les coordinateurs, les référents de proximité et les bénéficiaires des interventions. Les critères de sélection des panels étaient : pour les coordinateurs/formateurs, la variété des structures de formation en santé, pour les référents de proximité et les étudiants, la variété des filières accueillies, pour les bénéficiaires des interventions menées par les étudiants, la variété des interventions. Les CF et les R étaient contactés directement par mail ou par téléphone, les bénéficiaires étaient rencontrés après avoir suivi les interventions. Le cadre éthique était énoncé en début d'entretien pour validation de l'acceptation. Il informait de l'objet de l'étude, du respect de l'anonymat, de l'enregistrement de l'entretien, des modalités de traitement et de conservation des données. Ce recueil s'est effectué sur la base de grilles spécifiquement conçues pour l'étude. Elles ont été élaborées spécifiquement pour chaque catégorie d'intervenants pour prendre en compte les spécificités de leur rôle dans la mise en place des interventions. Ainsi, elles permettront de recueillir pour les étudiants ayant réalisé les interventions, les référents de proximité et les formateurs/coordinateurs : l'acceptabilité du SSES, le degré de préparation, la perception des conditions de mise en œuvre, les apports perçus / impacts du SSES, les propositions d'amélioration. Pour les bénéficiaires des actions menées par les étudiants étaient

recueillies : l'acceptabilité de l'intervention, la perception des conditions de mise en œuvre, les bénéfices perçus, les propositions pour améliorer les interventions. Les guides d'entretien sont présentés in extenso en ANNEXE 5.

Pour répondre au second objectif, les données ont été recueillies par observation des actions réalisées par les étudiants (deuxième temps de leur stage en mai et juin 2019), choisies de manière à représenter une variété de thèmes, de publics, et de la faisabilité. Il s'agissait d'observer les critères de qualité en PS (objectif 2) dans la mise en œuvre des actions à travers trois aspects : la conduite de projet (analyse de situation, approche éducative, évaluation, etc.), les principes en PS (principes éthiques, approche globale, compréhensive positive de l'intervention, approche participative de l'intervention, approche interactive et expérientielle, utilisation de données probantes), la méthode d'animation. Pour élaborer cette grille de critères de qualité, différentes sources ont été analysées et compilées comme faisant référence dans le domaine de la PS (4–11) et validées par le groupe de travail (cf. ANNEXE 6). La grille d'observation ainsi construite est présentée in extenso en ANNEXE 7.

Enfin, les observations et les analyses (entretiens et observations) ont été faites par les deux investigateurs qui ont partagé et discuté leurs constats jusqu'à consensus, et sur la base des mêmes grilles d'analyse.

Analyse des données

Une analyse de contenu thématique a été réalisée sur les données issues des entretiens et des observations. Concernant les entretiens, deux grilles d'analyse ont été élaborées en fonction de critères spécifiques : une pour les professionnels et les étudiants qui concernait leur perception du dispositif et de sa mise en œuvre, et l'autre pour les bénéficiaires qui concernait leur avis sur l'intervention (cf. le descriptif des guides d'entretiens ANNEXE 8). L'analyse est réalisée de façon thématique par public dans les deux académies, puis transversale intra-académie pour définir les récurrences et spécificités entre les étudiants, coordinateurs/formateurs, référents de proximité et enfin, transversale inter-académique pour définir des récurrences et des spécificités par académie. Concernant les observations, les critères de la grille d'observation ont été repris pour constituer la grille d'analyse. Une note entre 1, « pas du tout respecté » , et 4, « tout à fait respecté » , a été attribuée par consensus entre les deux investigateurs pour chaque critère de qualité (voir ANNEXE 7 : Grilles d'observation). Les données ont également été analysées thématiquement, par académie puis transversalement.

Résultats

Au total, 87 entretiens ont été menés (voir le nombre et la qualité des personnes interrogées en ANNEXE 9). Afin de mettre en évidence les récurrences, les résultats sont présentés transversalement aux deux académies et aux publics, car malgré les différences de mise en œuvre, de stages et de types d'intervention, les résultats sont globalement identiques, hormis quelques rares spécificités qui sont précisées au fil du texte.

Ces résultats sont présentés autour de quatre aspects : (i) la perception de la PS et le degré d'appropriation des objectifs du dispositif, (ii) la perception de la mise en œuvre, (iii) la perception des effets, et (iv) les critères de qualité des actions menées.

Perception de la PS et degré d'appropriation des objectifs du dispositif

Les acteurs interrogés, qu'ils soient E, CF ou R, percevaient la PS comme étant une simple délivrance de messages de prévention, contrairement au référentiel de compétences support du SSES qui reprend les enjeux d'empowerment et de développement des habilités en phase avec les principes de la Charte d'Ottawa (12). Dans la même ligne, être compétent en PS signifie donc « être en capacité de délivrer les bons messages ». En ce sens, les CF s'estimaient globalement formés bien que venant de domaines de formation différents tels que l'économie de la santé, la santé environnementale, l'hygiène, la médecine hospitalière, voire même la chimie ou la toxicologie. Il est donc difficile d'estimer les compétences réelles des CF qui ont ce type de formation au regard des référentiels internationaux de compétences en PS tels que le CompH européen (13) qui demande par exemple de pouvoir s'assurer que les programmes d'éducation et de formation sont bien adaptés aux pratiques et aux besoins de santé. Du côté des R, pour ceux qui ne s'estimaient pas ou peu formés, ils associaient parfois ce défaut de compétences à celui de ne pas être

professionnels de santé, traduisant ainsi un amalgame entre la formation médicale et celle en promotion de la santé. Du côté des E, une majorité ne s'estimait pas compétente en PS à l'issue de la formation, mais compétente à l'issue du stage, perçu rappelons-le comme une délivrance de messages. À Poitiers, cette perception était plus mitigée eu égard aux compétences thématiques perçues comme nécessaires. Enfin, concernant les objectifs du SSES, les acteurs retenaient majoritairement les objectifs opérationnels de faire des actions de prévention, ou ne connaissaient aucun objectif. Certains acteurs ont néanmoins jugé les objectifs comme trop ambitieux, essentiellement ceux dont la formation initiale incluait la thématique PS tels que les infirmières formatrices.

Perception de la mise en œuvre

Assez inquiètes à l'annonce du dispositif, les parties prenantes semblaient satisfaites d'avoir pu mettre en œuvre le SSES malgré des conditions jugées délétères. Une nette majorité des CF, R et E jugeait la mise en œuvre précipitée, avec un manque criant de soutien et de ressources, appelant à revoir les conditions de mise en œuvre. Les discours laissaient d'ailleurs souvent transparaitre une surcharge de travail et des réserves quant à l'intérêt de poursuivre dans ces conditions.

Au-delà de ce constat général, différents attributs de cette organisation ont été plus spécifiquement étudiés. Ainsi, l'obligation de participer a été majoritairement perçue de manière négative en ce que cela ne favorise ni la motivation ni la concertation. La communication et l'information au sein du dispositif sont considérées comme une faille majeure de la mise en œuvre, que ce soit sur le SSES lui-même, les textes le supportant ou encore les modalités pratiques de mise en œuvre, introduisant de fait les conditions difficiles énoncées ci-dessus. Le manque de moyens dédiés a, là encore, été identifié comme étant la principale cause. Ceci a d'ailleurs induit des inégalités de traitement entre filières en matière : (i) d'intégration du SSES dans des programmes, (ii) de conditions d'indemnisation des stages, (iii) du nombre d'étudiants à intégrer dans le SSES, et (iv) de modalités de validation des acquis. Concernant la formation, on observe une ambivalence traduisant à la fois une forme de satisfaction, tout en reconnaissant qu'elle ne peut répondre aux objectifs annoncés du SSES. Les étudiants ont particulièrement souligné le défaut de cohérence entre cette dernière (prévention primaire, hors du milieu de soins, animations collectives) et avec leur future pratique professionnelle basée sur le colloque singulier (14) dans une relation de soins. Ainsi, pour les étudiants, notamment de Bordeaux, ils l'estiment trop «théorique» (déterminants de la santé, complexité des changements de comportements) et trop conséquente. Enfin, pour ce qui concerne le stage à Poitiers, une moitié des étudiants était satisfaite par le fait que les lieux et les thématiques de stage (addictions, alimentation, etc.) étaient imposés par les CF, car cela a facilité l'organisation. Les étudiants bordelais partageaient moins cette perception car les stages avaient parfois lieu au même moment que d'autres stages cliniques ou examens. Sur l'encadrement, les avis des étudiants étaient mitigés, estimant manquer d'information sur les attendus du stage.

Effets perçus par les parties prenantes

À Poitiers, pour une majorité des parties prenantes, les interventions ne pouvaient être efficaces en raison : (i) du manque de suivi des effets, (ii) de la non-correspondance avec les besoins des publics, (iii) du manque de compétence des étudiants, et (iv) du défaut d'encadrement solide. Les différents acteurs de Bordeaux estimaient que la raison principale du manque d'efficacité est la ponctualité des interventions. Une majorité des étudiants et des référents de proximité soulignait qu'apporter des connaissances aux bénéficiaires des actions était un résultat positif en soi. Du point de vue des bénéficiaires eux-mêmes, les actions ont été appréciées en raison notamment des approches ludiques/participatives mobilisées et de l'ambiance vécue comme « sympathique » (terme récurrent repéré dans les entretiens), même s'ils estiment que cela se limite à un apport de connaissances, notamment sur les risques.

De manière générale, les parties prenantes estiment que le SSES sensibilise les étudiants à la fois sur des thèmes de prévention, mais également sur des aspects méthodologiques ou d'animation. Certains ont alerté sur le risque du SSES d'entériner une conception erronée et obsolète de la PS, centralisant les questions de santé et de prévention sur une approche individuelle et rationnelle en décalage avec les recommandations et référentiels existants, quand d'autres n'y voyaient pas d'inconvénient.

Enfin, bien qu'elles soient affichées comme objectif du SSES, le dispositif n'est pas perçu comme

capable de lutter contre les inégalités, voire il peut contribuer à les renforcer. Les raisons évoquées par certains participants sont notamment liées au fait que les actions ont été réalisées en milieu urbain (métropole), sur un mode ponctuel, avec un défaut de compétences pour intervenir auprès de publics socialement/territorialement défavorisés.

Respect des bonnes pratiques en promotion de la santé

Les bonnes pratiques sont celles qui respectent les critères de qualité décrits ci-dessus pour élaborer les grilles d'entretien et d'observation. Les résultats issus de l'analyse des observations et des entretiens au travers de ces critères de qualité sont présentés selon les approches méthodologique, éthique et pédagogique en PS.

Volet méthodologique

L'analyse de situation était quasiment inexistante. Le peu d'analyse effectué l'était sur la base d'un entretien avec un professionnel ou un contrôle écrit de connaissances préalable à l'intervention. Les thématiques choisies ont été imposées par les référents et les choix stratégiques (éducatifs, informatifs, supports) n'étaient pas basés sur une analyse de situation précise qui aurait permis de mettre en évidence les besoins d'intervention. À Poitiers, les étudiants reproduisaient les techniques vues en cours. À Bordeaux, ils suivaient les conseils de leurs référents. Une fois ces choix opérés, les étudiants, dans l'ensemble, identifiaient et partageaient des objectifs précis, souvent en termes d'apport de connaissances. En outre, la moitié des étudiants n'était pas à l'aise lors de leur intervention, conduisant à un usage dévoyé, mal adapté ou à des difficultés dans la gestion du groupe ou dans la non-maitrise des débats. De plus, ils ne connaissaient pas toujours les réponses à apporter aux bénéficiaires induisant (i) au mieux à un recours explicite au référent, au pire à (ii) des non-réponses, (iii) des fausses réponses ou (iv) des réponses contradictoires entre elles aux demandes des bénéficiaires. Enfin, pour ce qui concerne l'évaluation, à Bordeaux, les groupes d'étudiants évaluaient majoritairement leur action via un questionnaire distribué à l'issue des interventions sur l'apport de connaissances (mais sans questionnaire avant permettant de comparer) et la satisfaction générale sans utiliser d'autres critères de qualité.

Volet éthique

À l'analyse, les interventions ne respectaient pas de critères éthiques essentiels en raison : (i) d'un non-recours aux critères de qualité en PS, (ii) de choix stratégiques polémiques eu égard à leurs effets délétères connus (ex. usage de la peur ou inapproprié du registre émotionnel) (15), (iii) de la transmission de messages faux ou inadaptés aux publics, (iv) de propos culpabilisants concernant des comportements à risque. *Intervention C : un étudiant a affirmé « 1verre de vin par jour, c'est protecteur »; Intervention B : des vidéos . (https://www.youtube.com/watch?v=aDuqA2FtWmU), ou des propos mal adaptés ont été utilisés à des fins anxiogènes, « l'absorption excessive d'alcool peut entrainer une mort subite » Intervention D : «votre consommation ne regarde que vous et votre conscience »*.

Volet pédagogique

Toutes les interventions étaient basées sur une approche rationnelle ne prenant pas en compte la complexité des comportements (effet de l'environnement, littératie, etc.). La plupart des contenus était basée sur une approche par les risques, transmis sous forme de conférences (informations données de manière descendante) ou interactivement (jeux basés sur les connaissances des risques). Dans l'ensemble, une véritable posture d'écoute a été majoritairement adoptée par les étudiants, les interactions restaient duelles (étudiant-bénéficiaire) même si des débats étaient parfois organisés par les étudiants pour essayer de maintenir la dynamique de groupe (à Poitiers). Des outils d'animation participatifs ont été mobilisés, mais portaient essentiellement sur les connaissances et n'étaient pas toujours maitrisés (gamification, le jeu prend le dessus sur le contenu éducatif et l'objectif). À Bordeaux, les étudiants mettaient souvent les bénéficiaires en situation, contrairement à Poitiers (ex. poser un préservatif, réaliser un petit déjeuner, exprimer un ressenti après un compliment [atelier autour des compétences psychosociales], simuler un brossage de dents). Enfin, les contenus étaient majoritairement trop vastes, sans forcément de priorisation, conduisant

parfois à des confusions chez les élèves ou à l'usage de termes inadaptés de la part des étudiants. Les étudiants se sont en réalité majoritairement positionnés comme experts informant sur les risques plus qu'animateurs cherchant la parole et la réflexion collective.

Discussion

L'étude proposée est une étude qualitative de la mise en œuvre du SSES portant sur deux académies de la Région Nouvelle-Aquitaine, une région française. Ce dispositif est présenté en France comme une innovation, d'où l'intérêt d'étudier en profondeur sa réelle plus-value.

Globalement, les résultats de cette étude de cas mettent en évidence que, malgré la mobilisation des différents acteurs mus par leur intérêt pour le SSES et la PS, les objectifs de ce programme de formation, tels qu'ils sont décrits en introduction, demeuraient inatteignables dans les conditions de mise en œuvre actuelles. Ces conditions de mise en œuvre se sont avérées compliquées pour la plupart des acteurs, voire, dans certains cas, délétères pour la motivation initiale de ces derniers, pour l'encadrement des étudiants et, peut-on imaginer, pour les sites de stage où l'intérêt de telles actions reste à expertiser au regard du temps consacré à l'accompagnement. Pour autant, les acteurs semblent satisfaits de la mise en œuvre, vécue comme une épreuve que l'on aurait réussie.

Concernant les effets du SSES, l'évaluation est sans concession. Perçus comme minimes par les acteurs, le SSES n'a pas fait ses preuves, que ce soit pour les bénéficiaires ou pour les étudiants. Concernant la réduction des inégalités sociales et territoriales de santé, pourtant un des objectifs affichés du dispositif, celle-ci n'est jamais abordée ni même citée dans les interventions. En cela, les parties prenantes sont assez clairvoyantes et sans appel sur le bénéfice perçu de ce SSES. Au mieux, il apporte des connaissances aux bénéficiaires et « sensibilise » les étudiants à la prévention. Au pire, il accroit les inégalités. En réalité, l'analyse en profondeur de ce qui a été fait laisse apparaitre des impacts négatifs sur plusieurs aspects. Premièrement, la perception qu'ont retirée les étudiants du SSES de la PS se résume à une transmission de messages de prévention, induisant l'idée que les comportements liés à la santé sont une question de connaissances sur les risques. Ainsi, en termes de résultat pédagogique, le SSES, tel que conçu, conduirait finalement à entériner une mauvaise définition de la PS qui ne pourra plus, dès lors, être excusée par le défaut de formation dans les études médicales puisque les étudiants s'estiment à l'issue compétents dans le domaine. Deuxièmement, le dispositif s'est centré sur la prévention primaire universelle, mobilisant des méthodologies d'intervention décalées avec la future pratique professionnelle, alors même que la France souffre d'une prise en compte de la prévention (ciblée) dans le système de soins et que de nombreux rapports appellent à la mise en œuvre de dispositifs du type *Making every contact count* (16,17). En d'autres termes, le SSES forme mal des étudiants sur une pratique qu'ils ne rencontreront pas et faillit à les former là où ils sont attendus : accompagner au sevrage tabagique, au repérage des troubles de la consommation d'alcool, au repérage de la fragilité chez les personnes âgées, à l'orientation des patients vers les réseaux de prise en charge, à l'accompagnement des vulnérabilités dans l'adhésion thérapeutique, à la réduction de l'obésité, à la vaccination, etc. Dans d'autres pays, des dispositif analogues au SSES sont centrés sur la prévention dans le système de soin reconnaissant cet enjeu particulier et les particularismes de ce mode d'intervention (18,19). Pire encore, le risque est d'entrainer l'idée dans le milieu soignant que la prévention se fait seulement en dehors des lieux de soins, délégitimant alors le peu de prévention qui se structure en milieu de soins. Troisièmement, les résultats observés dans les deux académies posent un questionnement éthique, celui de la qualité des actions conduites. En effet, en France, alors qu'il est impensable qu'un étudiant en santé en devenir fasse le moindre acte sur un patient sans être accompagné d'un professionnel formé, la prévention fait exception. Ainsi, des actions par milliers sont conduites auprès de publics parfois vulnérables (jeunes, précarité, grossesse, personnes âgées) avec un accompagnement aléatoire et non certifié par une véritable compétence dans le domaine et une absence totale de démarche probante. Les observations réalisées sont sans équivoque, que ce soit sur le choix des interventions, la non-maitrise de l'animation, la fiabilité des messages. Et ceci s'observe alors même que depuis 10 ans, les acteurs professionnalisés sont appelés à évaluer l'efficacité de leurs actions et à intégrer une démarche probante, et ce, à moyens constants voire réduits. Quatrièmement, alors même que la question des inégalités est portée à l'agenda, au moins dans le texte, le dispositif est, là encore, sans appel sur le sujet

(20–24) : au mieux, il ne contribue pas à les réduire, au pire, il les aggrave, tant dans la nature des actions conduites qui n'ont pas su prendre en compte les déterminants sociaux de la santé, fondements des actions de PS, que de la faisabilité géographique de leur implantation. Enfin, l'argument du SSES est basé sur le fait que l'éducation par les pairs est positive. Or, certaines stratégies peuvent s'avérer péjoratives par nature (15) ou par défaut d'implémentation (25) et, ici, particulièrement par leur formation et leur accompagnement. Il est surtout reconnu maintenant que cette stratégie a principalement un effet sur les pairs (9,26). Le postulat était donc faible à la base quand bien même l'enseignement de la prévention est un enjeu majeur dans les filières en santé.

L'académie de Normandie a accepté de réaliser l'évaluation avec la même méthode. Elle confirme nos résultats sur les points suivants : (i) une acception biaisée de la PS centrée sur les connaissances, (ii) le sentiment d'une incohérence entre les contenus des parties théoriques et pratiques du SSES, (iii) le peu d'effets du SSES concernant les bénéficiaires, les étudiants, et les ISTS, (v) le non-recours aux données probantes, (vi) des objectifs d'intervention informationnels, (vii) une approche participative des interventions appréciée des bénéficiaires, et (viii) des problèmes de communication sur le SSES et le besoin de ressources supplémentaires pour le déploiement. Néanmoins, des divergences ont pu être constatées, notamment sur la perception de la PS par les CF et R, plus en phase avec les principes de la charte d'Ottawa (27) (les déterminants de la santé, un moyen de renforcer la capacité d'agir des bénéficiaires). Cette différence de perception peut s'expliquer par l'existence d'une formation à la PS dispensée par des professionnels du domaine, notamment auprès des R en amont de la mise en œuvre du SSES. Les conditions de mises en œuvre ont été aussi globalement mieux perçues par les acteurs en Normandie. Cela peut s'expliquer d'une part, par le fait que l'étude portait sur la deuxième année du SSES, ainsi ses conditions avaient évolué, et d'autre part, le fait que l'académie de Normandie draine moitié moins d'étudiants avec un réseau associatif en PS fortement mobilisé dans l'accompagnement en tout point du territoire. Ces constats n'ont cependant pas permis d'infléchir les résultats de l'évaluation. Il serait intéressant d'en mettre en évidence les raisons.

Limites de l'étude

Certes, ces résultats sont rencontrés dans deux académies, ce qui limite la généralisabilité des résultats. Or, partant du principe que ce dispositif n'avait pas à être remis en question, seule une académie, celle de Normandie, a accepté de conduire la même évaluation, les autres ayant centré leur évaluation sur la satisfaction des parties prenantes d'une part, la mise en œuvre et l'intérêt de l'inter-professionnalité mobilisée dans le dispositif d'autre part.

Perspectives

Concrètement, il ressort de cette étude deux failles dans le dispositif SSES tel que mis en place en France. La première est la précipitation avec laquelle il a été mis en œuvre sans recul, ni évaluation préalable sur un site pilote. Les promoteurs de ce dispositif parlent d'innovation sans finalement avoir étudié la plus-value de cette dernière ni les effets collatéraux qu'elle est susceptible de créer au regard des bonnes pratiques. De fait, les acteurs de la PS n'ont pas été consultés, ni sur l'objet lui-même, ni sa mise en œuvre, le tout ayant été mené dans une approche assez descendante. Aujourd'hui, il parait compliqué aux acteurs, y compris à certains évaluateurs, de revenir en arrière en dénonçant des objectifs mal calibrés ou trop ambitieux, tant l'investissement est énorme au niveau des territoires. La deuxième faille tient aux objectifs du SSES. Leur ambivalence permet d'adapter en permanence le discours : inter-professionnalité, volonté pédagogique, mise en place d'action. En fonction des résultats, c'est l'un ou l'autre qui est mis en avant. Pour autant, les faits sont là. Le dispositif est en décalage avec les besoins de terrain, avec des acteurs de PS à renforcer et soutenir, et les besoins des étudiants eu égard à leur pratique. D'ailleurs, dans les autres pays, les dispositifs analogues sont majoritairement centrés sur un enseignement adapté à la pratique dans le système de soins (prévention ciblée, exercice singulier, thématiques spécifiques) (18,19), ce qui était appelé par les étudiants français.

Enfin, à la vue des résultats et des concordances avec l'autre académie (Normandie) ayant réalisée la même évaluation, pour poursuivre la réflexion, il serait souhaitable, vu la reproductibilité de la

méthode et les résultats négatifs posant question quant à la pertinence du dispositif, que la mission confiée au Haut Conseil de la Santé Publique mène ce type d'étude dans les autres académies, à côté de l'évaluation des processus déjà mise en œuvre.

Conclusion

L'évaluation souligne des effets suffisamment préoccupants pour appeler à revoir ce dispositif. Sans doute serait-il plus profitable de maintenir un SSES, mais (i) centré sur l'accompagnement préventif du patient (thématique et stratégie adaptée), (ii) enseigné en fin de cursus afin d'ancrer les stratégies de PS dans le cadre des pratiques préventives en milieu de soins, (iii) sanctionné par un stage accompagné par des professionnels formés spécifiquement sur la PS, et (iv) validé spécifiquement en termes de compétences mises en œuvre (et non seulement la satisfaction). En cela, la France se doterait des moyens de mise en œuvre du modèle *Making every contact count* (16) et d'un outil solide au service du virage préventif.

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Matériel supplémentaire

Du matériel supplémentaire pour cet article est disponible en ligne.

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Résumés

Lutter contre les inégalités sociales en santé : l'acceptabilité et la faisabilité d'une approche systématique pour l'évaluation des impacts sur la santé de projets urbains

Geneviève Bretagne, Jeanne Blanc-Février et Thierry Lang

Introduction : L'objectif général de ce projet de recherche était d'explorer la faisabilité et l'acceptabilité d'une méthode originale destinée à identifier de manière systématique les projets de planification urbaine dont les impacts potentiels sur la santé et les inégalités sociales en santé (ISS) seraient les plus dommageables. Une approche basée sur une brève rencontre et un outil permettrait de discuter pour savoir s'il convient ou pas de s'engager dans une évaluation des impacts sur la santé plus complète.
Méthodes : Un outil a été développé par l'équipe de recherche sur base de divers outils rapportés dans la littérature et modifiés avec des planificateurs urbains. Des rencontres ont été organisées pour chaque projet de développement avec les planificateurs volontaires qui travaillaient sur les projets sélectionnés. Les examens de six projets à différents stades de leur conception ont permis d'évaluer l'acceptabilité et la faisabilité de cette approche pour identifier les problématiques de santé publique et d'équité sociale en santé.
Résultats : Le processus et l'utilisation de l'outil se sont avérés faisables. L'outil était facilement compréhensible, adapté aux pratiques des urbanistes et utilisable sans réelle formation autre qu'une rapide introduction à son utilisation. Il s'est également avéré acceptable. Malgré un intérêt pour l'inclusion des ISS, l'intégration de la relation entre les ISS et le développement urbain n'était pas aisée pour la plupart des planificateurs urbains.
Conclusion : Ce travail exploratoire suggère qu'une approche systématique pour évaluer l'impact des projets urbains sur la santé et les ISS est faisable et acceptable. Pour les planificateurs urbains, il n'était pas facile d'aborder les ISS.
Mots clés : déterminants de la santé, évaluation des impacts sur la santé, villes en santé/communautés en santé, participation, santé publique, statut socioéconomique, planification urbaine/santé urbaine/urbanisation.
(Global Health Promotion, 2022; 29(2): 5–13)

Services de santé, intersectorialité et contrôle social : une étude comparative d'un programme de transfert conditionnel de revenus

José Anael Neves, Lia Thieme Oikawa Zangirolani et Maria Angélica Tavares de Medeiros

Le programme Bolsa Família (PBF) est l'un des plus vastes programmes de transfert conditionnel en espèces au monde ; il fournit des transferts en espèces et des actions intersectorielles. Le but de cette étude était de faire une comparaison pour savoir s'il existait une différence en termes d'accès aux services de santé, d'actions intersectorielles et de contrôle social entre les familles habilitées au PBF et celles qui ne le sont pas. Une étude intersectorielle a été menée. Un échantillon représentatif de la population périphérique socioéconomiquement vulnérable d'un grand centre urbain du Sud-Est du Brésil a été calculé, totalisant 380 familles. Des tests du khi carré ou des tests exacts de Fisher ainsi qu'une analyse des correspondances multiples ont été utilisés pour comparer les groupes. Les familles habilitées au PBF avaient de plus mauvaises conditions de vie d'une manière générale, et un plus grand accès aux services de santé tels que : soins médicaux (p-valeur 0,009), agents de santé communautaires (p-valeur 0,001) et visites à domicile (p-valeur 0,041). Le fait d'être habilités ou pas affectait la variabilité du schéma d'accès aux services de 31 % ; un faible accès aux actions intersectorielles a été identifié dans les deux groupes ; le contrôle social était balbutiant. Un accent était mis sur le programme de manière adéquate ; un plus grand accès aux services de santé était lié au respect des conditionnalités ; un faible accès aux actions intersectorielles pouvait restreindre l'interruption du cycle de transmission intergénérationnelle de la pauvreté.
Mots clés : Programme Bolsa Família, programmes et politiques de nutrition, transfert conditionnel en espèces,

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collaboration intersectorielle, politiques publiques. (Global Health Promotion, 2022; 29(2): 14–22)

Validation d'un jeu éducatif pour promouvoir la santé cardiovasculaire chez les enfants

Francisca Bertilia Chaves Costa, Ana Maria Fontenelle Catrib, Lana Paula Crivelaro Monteiro de Almeida, Zélia Maria de Souza Araújo Santos, July Grassiely de Oliveira Branco et Carlos Antonio Bruno da Silva

Résumé
Objectif : Le but de cette étude était de valider le contenu et l'aspect d'un jeu éducatif destiné à des enfants âgés de 7 à 10 ans, principalement axé sur la promotion de la santé cardiovasculaire.
Méthode : L'étude a utilisé une recherche méthodologique avec une approche quantitative. Le processus de validation incluait la participation de 17 spécialistes de la santé des enfants et/ou de la santé cardiovasculaire des enfants. Un indice de concordance d'au moins 0,80 a été considéré pour la validation du contenu et de 0,75 pour l'aspect du matériel pédagogique proposé.
Résultats : La proposition du jeu éducatif a été considérée comme valide, au travers de certaines suggestions, pour ce qui était de l'objectif de sensibiliser les enfants à la promotion de la santé cardiovasculaire dès l'enfance.
Considérations finales : Comme facteur pertinent de l'utilisation des jeux comme stratégies visant à améliorer l'éducation pour la santé, nous mettons l'accent sur le fait que le participant est l'agent actif et le protagoniste du processus santé-maladie.
Mots clés : promotion de la santé, maladies cardiovasculaires, santé des enfants. (Global Health Promotion, 2022; 29(2): 23–30)

Stage structuré en promotion de la santé : une approche utilisée dans un pays en développement à revenus moyens - la Jamaïque

Nickesha Noreen Fowler-Holdham, Desmalee Holder-Nevins et Dawn Walters

Les programmes de stage ont le potentiel de fournir des apprentissages et des expériences professionnelles, de développer les compétences des étudiants et de renforcer les partenariats entre la communauté et les établissements de formation. Dans cet article, nous examinons parmi une cohorte de stagiaires en promotion de la santé non rémunérés dans quelle mesure un stage structuré à l'Université des Indes occidentales a contribué au développement de l'expérience et des compétences des apprenants, leur a fourni une orientation et a satisfait leurs attentes. La contribution des placements au renforcement de l'éducation pour la santé et à la promotion des compétences ainsi que le ressenti des stagiaires par rapport à leurs expériences sont inclus. Vingt-quatre (24) rapports de stage ont été examinés à l'aide d'une combinaison de méthodes quantitative et qualitative. La majorité des stagiaires étaient Jamaïcains (70,8 %), 12,5 % étaient issus de la Dominique, et les 16,7 % restants représentaient d'autres nationalités. Les professionnels de la santé formaient le pourcentage le plus élevé de cohortes (79,2 %) et les organismes gouvernementaux constituaient la proportion la plus importante (63 %) de lieux de stage. Les activités entreprises concernaient les domaines de la planification, de la mise en œuvre et de l'évaluation de programmes (71 %), et l'évaluation des besoins (63 %). Des activités liées à la communication ont été rapportées par 43 % des stagiaires. Vingt-et-un pour cent étaient engagés dans le lobbying et la collaboration avec d'autres partenaires, tandis que 23 % avaient établi des comités pour superviser la durabilité des initiatives. Si certains stagiaires rapportaient des expériences négatives par rapport à la supervision dans leurs agences de placement, tous avaient apprécié les séminaires de stage ; il s'agissait pour eux d'un environnement favorable dans lequel ils avaient pu partager leurs progrès avec des pairs et des universitaires. L'opportunité de mettre la théorie en pratique et d'agir en tant que personne ressource était décrite comme positive. L'approche du stage structuré semble présenter l'avantage de développer les

compétences et de générer de la satisfaction individuelle.
Mots clés : stage structuré, compétences en promotion de la santé, Jamaïque. (Global Health Promotion, 2022; 29(2): 31–40)

Expérience individuelle et communautaire du fardeau croissant de maladies non transmissibles dans deux districts du Népal : une exploration qualitative

Sudesh R. Sharma, Anna Matheson, Danielle Lambrick, James Faulkner, David W. Lounsbury, Abhinav Vaidya et Rachel Page

Introduction : Les maladies non transmissibles (MNT) sont un problème en rapide expansion pour la santé mondiale, avec des déterminants à plusieurs niveaux communément appelés déterminants sociaux. L'objectif de cet article est de décrire les expériences individuelles et communautaires des MNT dans deux districts du Népal, à partir d'une optique de déterminants sociaux de la santé.
Méthode : Cette étude a adopté une conception d'étude qualitative pour identifier les expériences en matière de MNT. Soixante-trois entretiens ont été menés avec des répondants clés issus de différents secteurs pertinents pour la prévention des MNT dans deux districts et au niveau politique au Népal. Douze discussions en groupes thématiques ont été menées dans les communautés sélectionnées au sein de ces districts. La collecte et l'analyse des données ont été documentées par le cadre de référence adapté sur les déterminants sociaux de la santé. L'équipe de recherche a utilisé l'approche du cadre de référence pour réaliser l'analyse thématique. L'étude impliquait aussi trois ateliers de construction de sens avec des parties prenantes locales et au niveau politique.
Résultats : Trois thèmes clés ont été dégagés durant l'analyse. Le premier thème a mis en évidence le fait que les individus et les communautés étaient confrontés à un fardeau croissant de MNT et de risques métaboliques dans les zones à la fois urbaines et rurales. Les deux autres thèmes ont été développés à partir des expériences des participants sur base de leur milieu socioéconomique et de leur sexe. Les populations défavorisées étaient plus vulnérables au risque de MNT. En outre, le fait d'être une femme plaçait l'individu dans une position encore plus défavorisée face aux risques de MNT et à l'accès aux services de santé.
Conclusion : Les résultats ont indiqué que les déterminants sociaux clés tels que l'âge, la localisation géographique, le statut socioéconomique et le sexe contribuaient à l'épidémie de MNT. Il existe un besoin urgent d'agir sur les déterminants sociaux de la santé au travers d'une action multisectorielle, qui traduirait également l'esprit des recommandations émises il y a une décennie par la Commission sur les déterminants sociaux de la santé pour aborder un problème complexe tel que les MNT au Népal.
Mots clés : maladies non transmissibles (MNT), risques métaboliques, déterminants sociaux, Népal. (Global Health Promotion, 2022; 29(2): 41–49)

La représentation du tabagisme dans ma tête : la nécessité de messages d'intérêt public efficaces contre le tabac, basés sur les conceptions de soi des fumeurs

Mutlu Önen et Forrest Watson

Résumé : Cette étude qualitative a cherché à comprendre les comportements des fumeurs ayant des conceptions de soi indépendantes et interdépendantes afin de concevoir des message d'intérêt public (MIP) efficaces contre le tabac. Les résultats issus des récits et des dessins des participants suggèrent que des messages au contenu individualiste (axés sur le fumeur individuel) peuvent être efficaces pour les fumeurs ayant des conceptions de soi indépendantes, tandis que des messages au contenu collectiviste (axés sur un groupe de fumeurs) peuvent être efficaces pour les fumeurs ayant une conception de soi interdépendante si l'on veut accroître leurs intentions d'arrêter. Cette étude a également révélé les caractéristiques des groupes de fumeurs en termes de routines, de significations et de valeurs symboliques du tabagisme, ce qui peut être utilisé pour enrichir les contenus des MIP contre le tabac. Les implications de cette étude sont discutées pour les

responsables des politiques publiques et les organisations sans but lucratif qui cherchent à adapter leurs messages au public dans le but d'améliorer la santé publique.
Mots clés : conception de soi, tabagisme, messages d'intérêt public contre le tabac, marketing social, culture.
(Global Health Promotion, 2022; 29(2): 50–59)

Conception d'un programme d'intervention en milieu scolaire à composantes multiples contre le harcèlement à Chandigarh, un territoire du nord de l'Union indienne

Monica Rana, Madhu Gupta, Prahbhjot Malhi, Sandeep Grover et Manmeet Kaur

Le harcèlement, une problématique prédominante pour la santé publique mondiale, s'est avéré avoir un impact néfaste sur la santé physique et psychologique des élèves. Peu de programmes d'intervention visent à prévenir le harcèlement dans la région de l'Asie du Sud-Est, et aucun en Inde. L'objectif de cette étude était de concevoir un programme d'intervention à composantes multiples contre le harcèlement à destination des élèves appelé « Stop Bullying–School Intervention Program (SB-SIP) » (Stop au harcèlement - Programme d'intervention en milieu scolaire). Ce programme a été développé en cinq étapes. La première de ces étapes consistait à examiner la littérature existante à l'échelle mondiale sur les études d'intervention visant à prévenir le harcèlement. Durant la deuxième étape, une étude qualitative afin d'examiner les croyances et les perceptions des enseignants, des élèves et des parents au sujet des programmes d'intervention contre le harcèlement a été menée. Un modèle conceptuel a été élaboré au cours de la troisième étape. Un atelier consultatif a été mené pour finaliser les contenus de l'intervention lors de la quatrième étape. Enfin, à la cinquième étape, l'intervention a subi un test préalable. L'examen de la littérature a montré qu'un programme d'intervention portant sur l'école dans son ensemble et basé sur le modèle socio-écologique était le plus efficace. La conscience des effets du harcèlement et des stratégies efficaces pour le prévenir à l'école a été suggérée comme faisant partie intégrante du programme SB-SIP par la majorité des participants dans les discussions en groupes thématiques. Les recommandations données par les parties prenantes au cours de l'atelier consultatif ont contribué principalement à la méthode de livraison du programme. Le processus en cinq étapes a permis la reconnaissance du modèle conceptuel et des facteurs modifiables qui exercent leurs effets sur le harcèlement et ses résultats psychosociaux, au travers desquels le programme d'intervention à composantes multiples contre le harcèlement SB-SIP a été finalisé.
Mots clés : harcèlement, intervention, modèle socio-écologique, composantes multiples, école, recherche formative.
(Global Health Promotion, 2022; 29(2): 68–77)

Les effets potentiels des véhicules autonomes sur la marche

Simone Pettigrew

L'automatisation des véhicules progresse rapidement et il est prévu que les véhicules autonomes (VA) deviennent une caractéristique centrale des systèmes de transport à travers le monde. Ce développement a le potentiel d'entraîner de profonds changements des comportements par rapport à la marche. La présente étude a examiné cette problématique à partir de la perspective d'experts pertinents pour la finalité de documenter les politiques de santé. Des entretiens ont été menés avec 44 parties prenantes clés en Australie (n = 34), dans l'Union européenne (n = 5), au Royaume-Uni (n = 4) et aux États-Unis (n = 1). Les parties prenantes représentaient une large variété de secteurs, notamment le gouvernement, des sociétés de fabrication de VA/de services aux VA, des consortiums de politique des transport, des firmes technologiques, des assureurs (publics et privés), des syndicats, des organisations représentant les consommateurs, et des universités. Deux scénarios potentiels sont apparus clairement dans les discussions avec les personnes interrogées sur les manières dont les VA sont susceptibles d'êtres introduits et leurs implications pour les comportements de marche. Le scénario le plus bénéfique, mais le moins susceptible de se produire, était considéré comme la situation dans laquelle les personnes renoncent à posséder un véhicule privé et ont recours à une combinaison

de marche, de transports publics et de transports à la demande. Le scénario alternatif impliquait une plus grande part de possession de VA, d'encombrement de la circulation et d'expansion urbaine, ce qui entraînait une diminution de l'activité de marche. La convergence des visions des parties prenantes autour des scénarios opposés identifiés a mis en évidence la nécessité du développement de politiques proactives pour garantir que la transformation émergente des transports n'entraîne pas d'augmentation conséquente de la sédentarité.
Mots clés : transports actifs, environnement, comportements de santé, comportements sédentaires. (Global Health Promotion, 2022; 29(2): 60–67)

Évaluer la littératie en santé en Amérique latine

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Les études évaluant l'influence de la littératie en santé sur les comportements et les résultats des patients suggèrent une relation positive entre la littératie en santé et les connaissances en santé, les comportements de santé, et l'état de santé. Dans les pays d'Amérique latine, les études évaluant la littératie en santé sont peu nombreuses, régionales, et démontrent des variations considérables, avec des taux rapportés de littératie en santé adéquate allant de 5,0 % à 73,3 %.
Dans cet article, nous examinons et explorons l'état de la littératie en santé et les efforts pour la promouvoir en Amérique latine. Les principaux obstacles à ces efforts incluent les inégalités socioéconomiques, l'isolement social/géographique, et les barrières culturelles, linguistiques et liées aux politiques, dont beaucoup affectent de façon disproportionnée les populations autochtones et celles qui vivent dans les zones rurales. Une plus grande utilisation d'infographies, de vidéos et d'applications mobiles pourrait favoriser la littératie en santé et l'autonomisation des patients, en particulier lorsque la barrière de la langue existe. Cet article fournit des stratégies et des outils pour une programmation adaptée, des exemples d'interventions en littératie en santé réussies, et des recommandations politiques pour améliorer la littératie en santé en Amérique latine, dans l'intention de stimuler des discussions et des actions supplémentaires. Une collaboration organisée de façon centrale à travers différents secteurs de la société, avec l'implication de la communauté, favorisera la littératie en santé et améliorera la santé et le bien-être à travers l'Amérique latine.
Mots clés : littératie en santé, éducation pour la santé, engagement communautaire, autonomisation des patients, politiques de santé en Amérique latine, promotion de la santé. (Global Health Promotion, 2022; 29(2): 78–87)

« Qu'on me laisse accéder à un autre niveau » : désirs et opportunités d'avancement professionnel pour les infirmiers/ères en santé communautaire au Ghana

Meghan Bellerose, Koku Awoonor-Williams, Soumya Alva, Sophia Magalona et Emma Sacks

L'avancement professionnel et la formation continue sont des composantes essentielles de la motivation et de la rétention des travailleurs de la santé. L'avancement professionnel développe aussi les capacités du système de santé en garantissant que les dirigeants soient les personnes reconnues pour leur expérience et leurs bonnes performances. Afin de mieux comprendre la satisfaction, les désirs et les opportunités de carrière disponibles pour les infirmiers/ères en santé communautaire (ISC) au Ghana, nous avons mené 29 entretiens approfondis et quatre discussions en groupes thématiques à travers cinq districts principalement ruraux. Les transcriptions des entretiens et les notes synthétiques ont été codées en NVivo sur base de codes définis au préalable et émergents à l'aide de l'analyse de contenu thématique. La frustration par rapport aux opportunités existantes d'avancement professionnel et de formation continue est apparue comme un thème clé. Dans l'ensemble, les ISC souhaitaient de plus grandes opportunités d'évolution de carrière, tandis que la plupart d'entre eux

aspiraient à retourner à l'école pour pouvoir prétendre à des positions plus élevées dans le domaine de la santé. Si des ateliers étaient disponibles pour améliorer les connaissances et les compétences des ISC, ils étaient cependant peu fréquents et irréguliers. Les ISC voulaient une plus grande reconnaissance de leur expérience professionnelle sous forme de respect de la part des dirigeants du système de santé ghanéen et de crédits pour de futurs programmes d'études. Les ISC font partie d'un cadre de travailleurs salariés communautaires en rapide expansion en Afrique subsaharienne, et les informations sur leurs expériences et leurs besoins peuvent être utilisées pour concevoir les politiques de santé et la planification de programme à l'avenir.

Mots clés : santé communautaire, avancement professionnel, main d'œuvre en santé, Ghana, opportunités professionnelles, personnel infirmier. (Global Health Promotion, 2022; 29(2): 88–96)

Épidémie de tabagisme en Jordanie : il est temps d'agir

Ala'a B. Al-Tammemi

La consommation de tabac représente toujours une menace majeure pour la santé publique mondiale et nécessite des efforts importants pour contrôler les produits tabagiques et plaider en faveur de politiques de réduction des risques. Les tendances mondiales récentes en matière de taux de prévalence du tabagisme sont prometteuses tandis que les courbes indiquent une diminution dans toutes les régions de l'Organisation mondiale de la Santé. Pourtant, cette diminution varie de manière significative au niveau national. La Jordanie, pays de la Région de la Méditerranée orientale, a connu une longue bataille contre le tabagisme. Malgré cela, le pays s'avère avoir l'un des taux de prévalence du tabagisme les plus élevés dans cette région et dans le monde. De nombreuses difficultés ralentissent une mise en œuvre efficace et réussie des politiques antitabac en Jordanie, en particulier les influences culturelles sur le tabagisme et l'interférence de l'industrie du tabac dans l'élaboration des politiques antitabac. Si le tabagisme continue à augmenter au rythme actuel, les décideurs de Jordanie devraient envisager le renforcement des mesures antitabac pour éviter une catastrophe de santé publique.

Mots clés : Jordanie, tabagisme, politiques antitabac, Convention cadre pour la lutte antitabac (CCLA), MPOWER, épidémie de tabagisme. (Global Health Promotion, 2022; 29(2): 97–101)

Mauvaise alimentation de la population scolaire mexicaine : facteurs géographiques et scolaires associés

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Objectifs : Déterminer la prévalence d'une mauvaise alimentation et ses effets observés en matière de surpoids ou d'obésité (Sp+O) et sur la croissance (petite taille) dans la population mexicaine âgée de 6 à 12 ans scolarisée au niveau primaire et leur association avec des caractéristiques géographiques (milieu, marginalisation et région du pays), et de l'école (type, classe et niveau).

Méthodes : la prévalence a été estimée à partir des données de 10 528 676 enfants scolarisés au niveau national et par caractéristiques d'intérêt et leur association au moyen de modèles de régression logistique.

Résultats : la prévalence nationale du surpoids et de l'obésité est de 34,4 %, 36,5 % en milieu urbain et 40,2 % dans les écoles privées. La prévalence du déficit de croissance (petite taille) est de 8,7 %. En millieu rural, elle est de 13,7 % et de 28,8 % dans les écoles qui accueillent les enfants autochtones. On ne peut que noter l'association importante surpoids + obésité et petite taille avec les caractéristiques géographiques et des établissements scolaires.

Conclusions : il existe une polarisation nutritionnelle dans le contexte scolaire du pays. Il est important de

poursuivre la mise en place de systèmes de surveillance et de vigilance nutritionnelle.
Mots clés : enfants scolarisés, dénutrition, surpoids, obésité, México, vigilance nutritionnelle. (Global Health Promotion, 2022; 29(2): 126–135)

Développement d'un processus participatif pour réaliser un diagnostic de santé communautaire chez les étudiants de l'Université Miguel Hernández : Projet #beUMHealthy

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Les processus participatifs permettent d'analyser, de comprendre, de débattre et de promouvoir l'action collective sur des questions importantes pour une communauté. Ces méthodologies actives favorisent l'identification des besoins et des ressources en matière de santé en vue de l'élaboration d'un diagnostic de santé communautaire et pour promouvoir des actions collectives. À cet égard, la mise en œuvre de processus participatifs dans le contexte universitaire est d'un grand intérêt pour le renforcement des universités en tant que communautés promotrices de santé. Dans cet article, les auteurs décrivent le développement du processus participatif #beUMHealthy dont l'objectif principal était de renforcer et d'enrichir les débats sur la santé et les initiatives de promotion de la santé auprès des étudiants de l'Université Miguel Hernández (UMH). Le projet s'est déroulé entre mai et novembre 2019. 22 participations ont été recueillies via WhatsApp et 173 questionnaires diligentés en ligne. Ce processus a permis d'identifier les besoins et les ressources en matière de santé des élèves de l'UMH et d'obtenir des propositions pour son amélioration. Cette information sera utilisée pour promouvoir des actions futures qui effectivement améliorent la santé de la communauté universitaire.
Mots clés : processus participatif, santé communautaire, ressources en santé, promotion de la santé, étudiants, université. (Global Health Promotion, 2022; 29(2): 136–140)

Editorial

Salud en Todas las Políticas: ¿una reactivación pos-COVID-19 sana y equitativa?

Thierno Diallo

La Salud en Todas las Políticas (STP) es un enfoque intersectorial que busca consolidar los vínculos entre la salud y las otras políticas. Este concepto nació en las iniciativas de salud pública gestionadas en el ámbito internacional, tales como la Declaración de Alma-Ata (1978), la Carta de Ottawa (1986) y las políticas públicas saludables (1988, en inglés). La STP, promovida por la Organización Mundial de la Salud, propende por que los asuntos de salud, equidad y bienestar sean tenidos en cuenta a la hora de elaborar las políticas de todos los sectores. Favorece, asimismo, la comprensión, por parte de los sectores diferentes del de la salud, de las consecuencias de sus decisiones sobre los determinantes de la salud y, por ende, sobre los factores que influyen en el estado de salud y en el bienestar de la población. La idea básica es responsabilizar a quienes toman las decisiones políticas en todos los sectores y a todos los niveles con respecto a la salud de la población y de la equidad en materia de salud (1).

La STP se inscribe en una voluntad más grande de ubicar a la salud en el centro de los objetivos y de las acciones de desarrollo de la sociedad. Se apoya en una visión común y en objetivos compartidos entre la salud y los otros sectores, así como en una estrategia en la que todos ganan para ayudar a que la participación sea diversa. Todos deben obtener su beneficio. Este enfoque le otorga una nueva función al sector de la salud: por un lado, apoya a los demás para que alcancen sus objetivos, y por el otro, les ayuda a comprender que estos objetivos no se pueden alcanzar sin dejar un impacto en la salud. El sector de la salud, incluidos los intervinientes en promoción de la salud, deben adoptar un enfoque realmente colaborativo y su apoyo debe ser visto como un valor agregado real.

La pandemia de la COVID-19 que azota al mundo entero desde los comienzos del 2020, ha puesto al descubierto la fragilidad de nuestros sistemas de salud. Los gobiernos se han concentrado en reducir la transmisión viral para controlar el número de hospitalizaciones con el fin de proteger el sistema de salud. En esta perspectiva, las medidas que se tomaron para responder a la COVID-19 afectaron a toda la sociedad y necesitaron de una colaboración entre el sector de la salud y los otros sectores (2) (por ejemplo, la economía, el empleo, la educación, los transportes, la seguridad, la cultura y el entretenimiento). Los dos años que han transcurrido desde que comenzó la crisis sanitaria nos demuestran que la gestión de esta pandemia no puede ser un asunto del gobierno solamente y aún menos, del departamento de salud como único actor. Se requiere de un conjunto de actores que se reúnen bajo el objetivo común de contener la pandemia y de controlar sus impactos negativos. De este modo, somos testigos de una colaboración intersectorial sin precedentes, a diferentes niveles, para enfrentar la COVID-19. La incomunicación y el aislamiento en la manera de operar de buen número de administraciones se rompieron durante esta crisis.

A lo largo de la pandemia, la salud logró ascender a los niveles político y social como nunca antes lo había hecho, obtuvo una legitimidad para intervenir en las políticas y en las acciones de todos los sectores, a través de todas las instancias de decisión. La respuesta de la salud pública fue multisectorial. La crisis de la COVID-19 puso en evidencia la relación entre la economía, la salud y el bienestar. Los responsables políticos reconocieron en múltiples ocasiones que la toma de decisiones en el marco de la crisis sanitaria estuvo guiada por la ciencia y las evidencias. Todo fue escrutado bajo la óptica de la COVID-19.

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Sin embargo, esta pandemia sacó a la luz una exacerbación de las desigualdades sociales y de salud preexistentes. En tal sentido, Richard Horton, jefe de redacción de la revista británica *The Lancet*, afirma que dos categorías de enfermedades interactúan en la población: la COVID-19 y un cierto número de enfermedades no trasmisibles como la diabetes, las enfermedades cardiovasculares, las afecciones respiratorias crónicas y el cáncer, con el trasfondo de un contexto social y económico marcado por profundas desigualdades. A su juicio, este contexto agrava los efectos de cada enfermedad, por lo cual él considera que la COVID-19 no es una pandemia sino una sindemia (3).

Sería un error creer que la pandemia de la COVID-19 es solo una crisis sanitaria ligada a la infección por el virus. Es cierto que esta infección tuvo un impacto directo sobre la salud de la población, pero sus repercusiones y las medidas impuestas para frenar la propagación del virus afectaron de forma diferente a los individuos en función, entre otras, de su condición socioeconómica. Surgió una fractura social entre las personas que tienen la posibilidad de respetar las medidas de confinamiento y las que no pueden debido a su perfil socioeconómico, sus condiciones de vivienda, su tipo de empleo, su edad, su género, etc.

Los gobiernos invirtieron sumas importantes para enfrentar la crisis sanitaria. La presión será intensa durante la reactivación pos-COVID-19, especialmente en el ámbito económico para equilibrar los presupuestos. En ese contexto, los enfoques intersectoriales como la STP serán muy pertinentes para abordar los impactos a largo plazo de esta pandemia sobre la salud, la salud mental y las desigualdades, y para garantizar una reactivación no solamente orientada a la economía, sino centrada en la salud y el bienestar. De la misma forma, la Evaluación del Impacto en la Salud (EIS), que fue identificada en múltiples ocasiones como una de las herramientas capaces de promover y de permitir la implementación del concepto de la STP, facilita la integración sistemática de las preocupaciones de la salud en las decisiones. Esta EIS ha sido utilizada durante la pandemia en el País de Gales (4), en Escocia (5) y en Austria (6), entre otros, para evaluar el impacto que tienen en la salud de la población las medidas tomadas en respuesta a la COVID-19, en un contexto de emergencia sanitaria. La EIS se constituye entonces en una herramienta que podría ser útil para predecir los futuros efectos potenciales de las políticas de reactivación pos-COVID-19 sobre la salud y el bienestar de la población, y para identificar las acciones que permitan minimizar los efectos negativos y maximizar los positivos de dichas políticas antes de su implementación (7).

La COVID-19 resaltó la importancia de contar con un sistema de salud sólido y la necesidad de la colaboración intersectorial para proteger la salud de la población y promover la equidad. Para la reactivación pos-COVID-19 se tendría que pasar de una lógica de protección de la salud a una lógica de prevención y de promoción de la salud en todas las políticas. El punto que se plantea es el mantenimiento de las diferentes colaboraciones intersectoriales emprendidas durante la crisis. En tal perspectiva, la investigación debería interesarse en estudiar los enfoques intersectoriales movilizados durante la pandemia y en analizar su sostenibilidad para la gestión pos-COVID-19.

Tampoco se debe olvidar que antes de esta crisis sanitaria, ya teníamos la climática y la de las enfermedades no transmisibles, cuyos factores de riesgo están ligados, entre otros, a nuestro modo de vida y a nuestro medio ambiente. Las crisis permanecerán después de la COVID-19 y los enfoques intersectoriales como la STP (8) constituyen medios eficaces para enfrentar esas problemáticas complejas y para preparar la mejor forma de gestionar futuras situaciones.

Habrá que aprender de las experiencias adquiridas durante la crisis en materia de colaboraciones intersectoriales y mantener el impulso de esas interacciones a nivel de los gobiernos para reconstruir mejor la sociedad. Este será un reto importante para el sector de la salud, incluidos investigadores y promotores de la salud, pero deberá aprovechar la oportunidad ofrecida por la pandemia de la COVID-19 para superarlo.

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Mala nutrición en población escolar mexicana: factores geográficos y escolares asociados

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Resumen: *Objetivos*: Determinar prevalencias de mala nutrición [sobrepeso u obesidad (Sp+O) y talla baja (TB)] en población mexicana de 6 a 12 años de edad de nivel básico de primaria, y su asociación con características geográficas (ámbito, marginación y región del país), y de la escuela (tipo, turno y grado). *Métodos*: Con información de 10 528 676 escolares, se estimaron prevalencias (e I.C. 95%), a nivel nacional y por características de interés, y su asociación mediante modelos de regresión logística. *Resultados*: La prevalencia nacional de Sp+O fue 34.4%, 36.5% en ámbito urbano y 40.2% en escuelas privadas. La prevalencia nacional de TB fue 8.7%; en área rural, 13.7% y 28.8% en escuelas tipo indígenas. El Sp+O y la TB se asociaron significativamente con características geográficas y de escuelas. *Conclusiones*: Existe una polarización nutricional en el contexto escolar del país. Es importante continuar con sistemas de monitoreo y vigilancia nutricional.

Palabras clave: escolares, desnutrición, sobrepeso, obesidad, México, vigilancia nutricional

Introducción

Las dietas tradicionales en países en desarrollo se han reemplazado por alimentos procesados altos en grasas, azúcar y sal (1). En México existe un aumento en la ingesta de alimentos con alta densidad energética y bebidas calóricas y, por el contrario, una disminución del consumo de frutas y verduras, así como una menor práctica de actividad física (2). Un estudio en niños mexicanos mostró por medio de acelerometría, un decremento significativo del 37% y 40% de actividad física moderada/vigorosa al pasar de educación preescolar a primero y segundo año de primaria (3). Al mismo tiempo, la urbanización y el uso de computadoras han aumentado las conductas sedentarias en los últimos veinte años (4). Estas son causas importantes para padecer sobrepeso u obesidad en niños (5). Por otro lado, la desnutrición infantil crónica (talla baja) resulta de la ingesta insuficiente de alimentos (en cantidad y calidad), una atención inadecuada en salud y la aparición de enfermedades infecciosas (6). Ambas condiciones de mala nutrición tienen consecuencias considerables en salud (7). En escolares la obesidad se encuentra asociada al síndrome metabólico (8), mientras que la desnutrición incrementa la morbilidad, influye en la reducción del cociente intelectual e inasistencia escolar (9).

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En la mayoría de países en América Latina de medianos ingresos, coexisten altas prevalencias de mala nutrición (10). En México, para 2008 se reportaron prevalencias de sobrepeso u obesidad en el ámbito nacional de 30.3% para niños de escuelas públicas (11) y para 2016 de 33.2% en niños de 5 a 11 años de edad (12). La serie de censos nacionales de talla en población escolar en escuelas primarias públicas realizados para el primer grado de primaria (13) reporta prevalencias de talla baja de 15.1% en 1994, 13.3% en 1999 y 9.1% en 2004. También se documentaron prevalencias de talla baja de 8.6% en niños y 7.8% en niñas en 2008 (11).

La información de los censos es útil como una herramienta para tener el diagnóstico periódico del sobrepeso y la obesidad. Las mediciones de peso y talla en escolares demandan fuentes de datos constantes para asegurar una continuidad en el tiempo. También sirven para implementar estrategias de intervención en grupos de alta vulnerabilidad de mala nutrición (14). Las escuelas son un espacio físico adecuado para realizar estos estudios: la población es cautiva, esto reduce costos de desplazamiento y los servicios instalados son aprovechados (7).

Por lo anterior, los objetivos de este estudio fueron determinar las prevalencias de mala nutrición (sobrepeso u obesidad y talla baja) a nivel nacional, por ámbito urbano y rural en la población infantil mexicana de 6 a 12 años de edad, que cursa el nivel básico de primaria. Además, estimar la asociación entre mala nutrición con características geográficas como ámbitos urbanos y rurales, grados de marginación y regionalización de estados del país, y con características de escuelas como tipo, turno y grado escolar.

Métodos

Diseño y población de estudio

Estudio transversal con información del registro nacional de peso y talla 2016 (RNPT 2016) en México, coordinado por la Dirección de Nutrición del Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán (INCMNSZ), Ciudad de México. El Sistema Nacional para el Desarrollo Integral de la Familia (SNDIF, Ciudad de México) (15), participó en el levantamiento de información entre octubre de 2015 y marzo de 2017. La población de estudio partió del universo de todos los centros escolares del sistema educativo de nivel primaria de la Secretaría de Educación Pública (SEP) (16). Se incluyeron 10 528 676 niños y niñas de 6 a 12 años de edad con matrícula escolar. Se obtuvo información de nombre, fecha de nacimiento, género y grado escolar; provenientes de 76 346 escuelas del ciclo escolar de septiembre de 2015 a julio de 2016, en los 32 estados del país, con cobertura del 74.0% de la matrícula oficial de la SEP.

Levantamiento de información

Personal estandarizado y con experiencia en la toma de medidas antropométricas del INCMNSZ, realizó la capacitación y un ejercicio de estandarización en la medición de peso y talla con personal participante en cada estado, según protocolos aceptados (17,18). La capacitación fue en tres niveles. Primero consistió en capacitar a personal (técnico y licenciatura) de la Coordinación Nacional del SNDIF. Segundo, consistió en la réplica de esta capacitación a responsables operativos estatales/municipales (formación mínima técnica), tanto del Sistema Estatal para el Desarrollo Integral de la Familia (SEDIF) como de la SEP. Este segundo nivel capacitó a un tercero, que fue el profesorado de la SEP y promotores comunitarios del SEDIF, que fueron los responsables de la toma de medidas antropométricas en cada escuela. Además, se elaboraron materiales de apoyo como manuales y videos técnico-operativos. Los SEDIF en cada estado coordinaron la logística del levantamiento. La validez de la información antropométrica del RNPT 2016 se ha documentado previamente mediante la comparación con la generada para escolares de ENSANUT 2012, a través de un modelo probabilístico (19). El INCMNSZ adquirió 100 000 básculas digitales e igual número de estadímetros. Cada estado a través de SNDIF se encargó de la adquisición de estos equipos según recursos y necesidades de logística.

La captura de información se realizó en línea mediante el sistema de vigilancia nutricional en escolares (SIVNE® VER 2.1 05102016), diseñado por el INCMNSZ, con su manual respectivo. La matrícula escolar fue ingresada previamente. La información fue capturada por el profesorado y promotores comunitarios con asesoría del INCMNSZ. El procesamiento de información fue

validado de manera automatizada, mediante algoritmos integrales al sistema de captura y monitoreado permanentemente.

La medición del peso fue sin zapatos y con ropa mínima. Se utilizó una báscula digital modelo 803 (150 kg y precisión de 100 g; marca SECA®, Hamburgo, Alemania). La talla se midió en posición erguida, sin objetos sobre la cabeza y sin zapatos. Se utilizó un estadímetro de pared modelo 206 (200 cm y precisión de 1 mm; marca SECA®, Hamburgo, Alemania).

Variables de estudio

En la población escolar

Las variables de interés fueron: 1) sobrepeso u obesidad (Sp+O) y 2) talla baja (TB). Se calcularon puntajes *Z* del índice de masa corporal (IMC=kg/m^2) para la edad y puntajes *Z* de talla para la edad (T/E), según recomendaciones de la OMS. El Sp+O fue definido con puntajes *Z* mayores a +1 DE y para TB los menores a –2 DE de la población de referencia (20).

Geográficas

a) Ámbito. Se definió rural a las localidades con menos de 2 500 habitantes, y urbano con una población igual o mayor a 2 500 habitantes (21).
b) Grados de marginación en 5 categorías: 1) muy bajo, 2) bajo, 3) medio, 4) alto, 5) muy alto, según la clasificación del Consejo Nacional de Población 2015 (22), que contempla variables socioeconómicas como educación, vivienda, distribución de la población e ingresos monetarios.
c) Regiones del país: 1) Norte (Baja California, Baja California Sur, Coahuila, Chihuahua, Durango, Nuevo León, San Luis Potosí, Sinaloa, Sonora, Tamaulipas y Zacatecas); 2) Centro (Aguascalientes, Colima, Guanajuato, Hidalgo, Jalisco, México, Michoacán, Morelos, Nayarit y Querétaro); 3) Ciudad de México (Ciudad de México, y municipios conurbados del Estado de México) y 4) Sur (Campeche, Chiapas, Guerrero, Oaxaca, Puebla, Quintana Roo, Tabasco, Tlaxcala, Veracruz y Yucatán).

En las escuelas

a) Grado escolar: 1) Primaria baja; de primero a tercer año y 2) Primaria alta; de cuarto a sexto año.
b) Tipo de escuela. Según criterios de la SEP (23): 1) Públicas: sin cuota económica, con al menos un docente para atender a un grupo de un mismo grado escolar; 2) Particulares o privadas: con cuota económica, con al menos un docente para atender a un grupo de un mismo grado escolar; 3) Indígenas: localizadas preferentemente en comunidades rurales con población indígena monolingüe y bilingüe, y 4) El Consejo Nacional de Fomento Educativo (CONAFE): ubicadas en pequeñas localidades rurales y dispersas con máximo de 29 niños. Además, benefician población migrante residente en campamentos agrícolas.
c) Turno escolar: 1) matutino (8:00 a 12:30 horas), 2) vespertino (14:00 a 18:30 horas), y 3) tiempo completo para alumnos con estancia escolar prolongada (dos horarios: 8:00 a 14:30 y 8:00 a 16:00 horas).

Análisis estadístico

Se obtuvieron prevalencias e intervalos de confianza al 95% (IC95%) para Sp+O y talla baja como variables dependientes, según diversas covariables geográficas y de escuelas. Se calcularon ponderadores para su estimación en el ámbito nacional. La estimación de la asociación entre las covariables o factores y las variables de interés (SP+O y TB), fue mediante el cálculo de razones de momios e intervalos de confianza. Se realizó el ajuste por estratos o regiones de estudio (norte, centro, sur y Ciudad de México). Los errores estándar fueron ajustados por las dependencias en los datos al interior de las escuelas, utilizando el método de linealización de series de Taylor (24). Todos los análisis estadísticos fueron realizados con Stata, versión 14.0.

Aspectos éticos

El estudio fue aprobado por los comités de investigación y ética del INCMNSZ. Se obtuvo consentimiento informado de padres o tutores, además del asentimiento oral de los escolares.

Resultados

En el ámbito nacional, la prevalencia de Sp+O fue 34.4%. Las proporciones más altas fueron para el

género masculino (37.1%), escuelas privadas (40.2%), y localidades con marginación muy baja (37.0%). Las prevalencias menores fueron para escuelas indígenas (20.8%) y localidades con muy alta marginación (19.9%). El Sp+O en estratos urbanos fue de 36.5% y 28% en rurales ($p < 0.001$). La talla baja fue 8.7% en el ámbito nacional (7.0% para estrato urbano y 13.7% para rural, $p < 0.001$). Fue mayor en niñas (9.0%), en el grupo de 10 a 12 años (10.1%), en centros escolares indígenas (28.8%), y escolares de la región sur (13.1%) (Tabla 1).

Las variables asociadas al Sp+O ($p < 0.001$) fueron estar matriculados en escuelas ubicadas en el ámbito urbano y el asistir a escuelas privadas. Las variables asociadas a talla baja fueron: aquellas escuelas con grado de marginación muy alto, las ubicadas en Ciudad de México, así como escuelas indígenas y de turno vespertino ($p < 0.001$) (Tabla 2).

Discusión

Se documenta que el Sp+O fue de 34.4%, similar a encuestas nacionales en población escolar en 2012 (34.4%) (25) y 2016 (33.2%) (12). También el Sp+O fue mayor en niños que en niñas, y por ámbito urbano/rural. Para el ámbito nacional fue similar al 2012 (36.9% niños; 32% niñas) (25). Consistentemente un estudio por el *Global Burden of Disease Study* en 2013 en menores de 20 años, encontr diferencias en la prevalencia de Sp+O por género (mayor en niños que en niñas) en países del sur de América Latina, del Este de Asia y de altos ingresos de Asia Pacífico (26). Estas diferencias pueden depender de costumbres, creencias y características de las poblaciones; particularmente, tipo de actividad y práctica de conductas sedentarias entre niños y niñas (27). En países de altos y medianos ingresos se ha sugerido que en edades entre 5 a 19 años, las mujeres prefieren alimentos bajos en energía y ricos en nutrientes, mientras que los niños consumen alimentos ricos en calorías (28). Para México la ENSE 2008, documentó patrones de consumo poco saludables en población de escolares, como bajo consumo de frutas, verduras y una elevada ingesta de refrescos y golosinas (11). Por otro lado, nuestro estudio mostró prevalencias mayores en el ámbito urbano que en el rural (36.5% vs 28.0%), similar al 2016 en México, en una encuesta representativa (34.9% vs 29.0%) (12).

En cuanto a TB existen otros estudios realizados en México. En 1994 y 2004 según censos de talla realizados con el SNDIF, estimaron prevalencias nacionales de 15.1% y 9.1% en niños de primer año de primaria (13). En nuestro estudio fue menor para escolares de 6 a 7 años de edad (8.1%:6.7% urbano y 12.1% rural) y los de primer grado de primaria (8.9%:7.4% urbano y 13.2% rural). En escolares de 6 a 12 años fue 8.7%.

Otros países han reportado prevalencias similares en población escolar, como Brasil (9.1%) (29) y Colombia (9.9%) (30). En otros estudios se han encontrado prevalencias mayores, como en Nigeria (31) y Chad (32). Es probable que estas diferencias provengan de situaciones socioeconómicas, culturales y políticas en cada país. Al analizar por género, la prevalencia nacional fue levemente mayor en niñas que en niños, similar con escolares mexicanos en 2012 (7.2% niñas vs 6.6% niños) (25). Otros estudios particularmente de encuestas nacionales, reportan hallazgos contrarios, como en 2006 (10.4% niños; 9.5% niñas) (33) y 2008 (8.6% niños; 7.8% niñas) (11). Pocos estudios en Latinoamérica reportan diferencias de TB por género como en Brasil (9.9% niños; 8.2% niñas) (29) y Colombia (10.3% niños; 9.5% niñas) (30). En Argentina fue de 8.7% en niñas y 5.5% en niños (34). En Nicaragua (35) y Ecuador (36) en menores de dos años, el género fue predictor de TB. También, desde la etapa preescolar: un estudio documentó para América Central y el Caribe una TB severa (<-3 DE) mayor en niños (17.1%) que en niñas (13.1%) (37). Existe evidencia donde esta vulnerabilidad por género se encuentra condicionada por determinantes sociales como el nivel socioeconómico (NSE) en el hogar en Argentina (34) y Perú (38). Además, discriminación en atención y prevención médica en niños en Chile (39). Otros países como Nicaragua (35), Colombia (30) y Brasil (40) reportaron el nivel educativo de la madre como factor para el retraso en el crecimiento en niños. Se ha considerado la TB como una expresión de inequidad en Latinoamérica (41).

Además, encontramos un comportamiento similar para ambos estratos de TB, aunque en el rural, su prevalencia fue considerablemente mayor que en el urbano. De manera consistente, un estudio en Oaxaca, México, demostró que la estatura es mayor en escolares que habitan zonas urbanas que en rurales (42). En este sentido, es importante considerar el estado nutricional en la población

Tabla 1. Prevalencias de sobrepeso u obesidad y talla baja en escolares mexicanos, ámbito nacional y por ubicación urbano/rural de escuelas.

Características	*Sobrepeso u obesidad*					*Talla baja*				
	Nacional	*n (miles)*	*N (miles)*	*Urbano*	*Rural*	*Nacional*	*n (miles)*	*N (miles)*	*Urbano*	*Rural*
	% (IC, 95%)			*% (IC, 95%)*	*% (IC, 95%)*	*% (IC, 95%)*			*% (IC, 95%)*	*% (IC, 95%)*
Sexo										
Masculino	37.1 (37.0, 37.3)	1,993.8	2,692.9	39.5 (39.3, 39.6)	30.1 (29.9, 30.3)	8.3 (8.2, 8.4)	446.2	602.7	6.7 (6.6, 6.8)	13.2 (13.0, 13.4)
Femenino	31.6 (31.5, 31.7)	1,631.9	2,204.1	33.5 (33.4, 33.6)	25.9 (25.7, 26.0)	9.0 (8.9, 9.1)	461.9	623.9	7.3 (7.2, 7.4)	14.1 (13.9, 14.4)
Grupos de edad										
6 a 7 años	27.6 (27.5, 27.7)	865.1	1,168.4	28.8 (28.7, 28.9)	24.0 (23.8, 24.3)	8.1 (8.0, 8.2)	251.8	340.1	6.7 (6.6, 6.8)	12.1 (11.8, 12.3)
8 a 9 años	35.8 (35.7, 36.0)	1,230.7	1,662.3	38.0 (37.8, 38.1)	29.2 (29.0, 29.4)	7.6 (7.5, 7.6)	258.2	348.7	6.2 (6.1, 6.3)	11.9 (11.7, 12.1)
10 a 12 años	38.6 (38.5, 38.8)	1,529.8	2,066.3	41.4 (41.2, 41.5)	30.2 (30.0, 30.5)	10.1 (10.0, 10.2)	398.1	537.7	8.0 (7.9, 8.1)	16.5 (16.3, 16.8)
Grado de marginación										
Muy bajo	37.0 (36.9, 37.1)	2,139.9	2,890.3	37.3 (37.2, 37.4)	33.0 (32.6, 33.5)	6.0 (5.9, 6.0)	343.2	463.6	5.9 (5.8, 6.0)	6.4 (6.1, 6.7)
Bajo[¥]	35.2 (34.9, 35.4)	661.9	894.0	36.2 (35.9, 36.5)	32.6 (32.2, 32.9)	7.9 (7.7, 8.0)	147.3	198.9	7.9 (7.7, 8.1)	7.8 (7.5, 8.1)
Medio	32.6 (32.3, 32.9)	396.7	535.7	35.6 (35.1, 36.1)	29.4 (29.1, 29.8)	8.7 (8.5, 8.9)	105.6	142.7	8.0 (7.7, 8.3)	9.4 (9.2, 9.7)
Alto	28.3 (28.0, 28.6)	336.7	454.8	33.2 (32.6, 33.7)	25.2 (24.9, 25.5)	14.9 (14.6, 15.2)	176.5	238.4	12.2 (11.6, 12.8)	16.7 (16.3, 17.1)
Muy alto	19.9 (19.5, 20.3)	90.4	122.1	24.3 (23.4, 25.3)	18.4 (18.0, 18.9)	30.0 (29.3, 30.8)	135.5	183.1	21.5 (20.0, 23.1)	32.8 (32.1, 33.6)
Región país										
Norte	36.8 (36.5, 37.0)	734.3	991.8	37.5 (37.3, 37.7)	31.5 (31.0, 32.0)	3.9 (3.8, 4.0)	77.1	104.1	3.7 (3.6, 3.7)	5.5 (5.2, 5.8)
Centro	34.6 (34.4, 34.8)	1,279.5	1,728.2	36.6 (36.4, 36.8)	29.5 (29.3, 29.8)	6.8 (6.7, 6.9)	249.4	336.8	5.9 (5.8, 6.1)	9.0 (8.7, 9.2)
Ciudad de México	36.4 (36.1, 36.7)	518.5	700.3	36.5 (36.2, 36.8)	30.1 (28.0, 32.3)	9.6 (9.4, 9.8)	136.9	184.9	9.5 (9.3, 9.8)	15.7 (13.6, 18.2)
Sur	32.1 (31.9, 32.3)	1,093.3	1,476.7	35.7 (35.5, 36.0)	26.2 (25.9, 26.4)	13.1 (12.9, 13.3)	444.9	600.8	9.5 (9.3, 9.7)	18.9 (18.5, 19.2)
Grado escolar										
Primaria baja	30.0 (29.8, 30.1)	1,573.3	2,125.0	31.5 (31.4, 31.7)	25.2 (25.0, 25.4)	8.2 (8.1, 8.3)	430.8	581.8	6.8 (6.6, 6.9)	12.7 (12.5, 13.0)
Primaria alta	38.9 (38.8, 39.0)	2,052.4	2,772.0	41.6 (41.4, 41.7)	30.8 (30.6, 31.0)	9.1 (9.0, 9.2)	477.4	644.8	7.3 (7.2, 7.4)	14.6 (14.4, 14.9)
Tipo escuela										
Pública	34.7 (34.6, 34.9)	3,163.6	4,273.0	36.3 (36.2, 36.4)	29.6 (29.4, 29.8)	7.9 (7.8, 7.9)	712.3	962.1	7.1 (7.0, 7.2)	10.3 (10.1, 10.5)
Privada[¥]	40.2 (39.8, 40.6)	340.6	460.0	40.4 (40.0, 40.7)	33.8 (32.0, 35.5)	4.2 (4.0, 4.3)	35.2	47.5	4.2 (4.0, 4.3)	4.1 (3.4, 5.0)
Indígena	20.8 (20.4, 21.2)	106.4	143.7	23.4 (22.4, 24.3)	20.1 (19.7, 20.6)	28.8 (28.2, 29.5)	146.3	197.6	21.3 (19.9, 22.9)	30.9 (30.1, 31.6)
CONAFE[#,¥]	23.4 (22.8, 23.9)	15.1	20.4	23.0 (19.2, 27.3)	23.4 (22.8, 24.0)	22.3 (21.6, 23.1)	14.3	19.3	25.5 (20.6, 31.0)	22.3 (21.6, 23.0)
Nacional	34.4 (34.3, 34.5)	3,625.6	4,897.0	36.5 (36.4, 36.7)	28.0 (27.8, 28.2)	8.7 (8.6, 8.7)	908.1	1226.6	7.0 (6.9, 7.1)	13.7 (13.5, 13.9)

Datos totales para la obtención del estado de nutrición: 10 528 676 escolares.
Prueba de χ^2 para diferencia de proporciones entre estratos urbano vs rural. Todas las comparaciones son estadísticamente significativas ($p < 0.001$), excepto las marcadas(#) para sobrepeso u obesidad, y las marcadas (¥) para talla baja.

Tabla 2. Razones de Momios (RM) para la asociación entre sobrepeso u obesidad y talla baja con características geográficas y de las escuelas en escolares mexicanos*.

Variables	*Sobrepeso u obesidad*	*E.E.*	*Valor de p***	*Talla baja*	*E.E.*	*Valor de p***
	*RM** (IC, 95%)*			*RM** (IC, 95%)*		
Geográficas						
Grado de marginación[a]						
Bajo	0.96 (0.95, 0.98)	0.006	<0.001	1.21 (1.18, 1.25)	0.019	<0.001
Medio	0.90 (0.88, 0.91)	0.007	<0.001	1.31 (1.26, 1.35)	0.024	<0.001
Alto	0.76 (0.75, 0.78)	0.008	<0.001	1.95 (1.87, 2.03)	0.040	<0.001
Muy alto	0.56 (0.54, 0.58)	0.009	<0.001	3.32 (3.15, 3.5)	0.088	<0.001
Ámbito[b]						
Urbano	1.30 (1.29, 1.32)	0.009	<0.001	0.74 (0.71, 0.76)	0.012	<0.001
Región[c]						
Centro	0.97 (0.96, 0.98)	0.006	<0.001	1.57 (1.52, 1.62)	0.025	<0.001
Ciudad de México	0.96 (0.94, 0.97)	0.008	<0.001	2.82 (2.73, 2.92)	0.049	<0.001
Sur	1.02 (1.01, 1.04)	0.007	0.001	2.06 (2.0, 2.13)	0.035	<0.001
Escuelas primarias						
Tipo escuela[d]						
Privada	1.10 (1.08, 1.12)	0.011	<0.001	0.68 (0.65, 0.71)	0.016	<0.001
Indígena	0.74 (0.72, 0.76)	0.010	<0.001	2.02 (1.94, 2.11)	0.042	<0.001
CONAFE	0.80 (0.77, 0.83)	0.014	<0.001	1.70 (1.62, 1.78)	0.039	<0.001
Turno escolar[e]						
Vespertino	0.78 (0.77, 0.79)	0.005	<0.001	1.35 (1.32, 1.39)	0.019	<0.001
Tiempo completo	1.01 (1.0, 1.02)	0.006	0.065	0.86 (0.83, 0.88)	0.013	<0.001
Categoría grado escolar[f]						
Primaria baja	0.78 (0.78, 0.79)	0.003	<0.001	1.34 (1.32, 1.36)	0.011	<0.001

*Población estudiada: n = 10 433 326 escolares de 6 a 12 años de 75 611 escuelas de las 32 entidades federativas de la República Mexicana. Aplicando factores de expansión representan a 14 091 855 escolares. E.E.: Error Estándar. Ajustados por las dependencias en los datos al interior de las escuelas utilizando el método de linealización de series de Taylor.
**RM estimadas por modelos de regresión logística ajustados por edad, género, mala nutrición (talla baja o sobrepeso u obesidad respectivamente para cada modelo) y número de alumnos por escuela. Ajustadas por regiones o estratos de estudio, o agrupación según condiciones geográfico económicas de los 32 estados (norte, centro, sur y Ciudad de México).
***Significancia $p < 0.05$.
[a]Grado de marginación. Referencia: muy bajo.
[b]Ámbito. Referencia: rural.
[c]Región del país. Referencia: norte.
[d]Tipo de escuela. Referencia: pública
[e]Turno escolar. Referencia: matutino.
[f]Categoría grado escolar. Referencia: primaria alta.

escolar en los diferentes lugares que habitan; ejemplo, vivir en el estrato rural se ha asociado con escaso desarrollo social y económico (43).

En las variables relacionadas con talla baja (TB), estuvo asociado el pertenecer a comunidades con grados de marginación más altos. Se ha documentado que el lugar donde habitan los niños y las condiciones socioeconómicas se relacionan con esta situación nutricional crónica (44). En un estudio en Yucatán, México, escolares de 6 a 12 años de familias de ingresos económicos intermedios y bajos tuvieron doble probabilidad de tener TB (45). Nuestro estudio tuvo una prevalencia de TB de 28.8% en escolares provenientes de escuelas indígenas, tres veces mayor que la nacional. En Oaxaca, México, en otro estudio, niños y niñas entre 6 y 11 años de edad

provenientes de albergues-escuela indígenas, tuvieron prevalencias de TB de 35.8% y 34.7%, respectivamente (46). También, reportaron prevalencias de TB mayores en municipios con altos grados de marginación (46%), que en menores grados (27%) en el grupo de 9 a 11 años (46). Este comportamiento fue similar en nuestro estudio de 30% a 6%, según grados de marginación de las escuelas. Consistentemente, la alta marginación se ha asociado con estatura más corta con análisis multivariado (46).

Por el contrario, la probabilidad de sobrepeso u obesidad se asoció positivamente con los grados de marginación media y baja. Otros estudios han observado disparidades, según NSE y nivel educativo como factores relacionados (47). Ambos factores se utilizaron para la construcción de las categorías de marginación en nuestro estudio (22). Otros estudios realizados en el país y en otras regiones, han documentado hallazgos similares al nuestro (48,49). En países en desarrollo la prevalencia de obesidad es alta en población de NSE alto (50), lo cual pudiera estar relacionado con ambientes obesigénicos, malos hábitos de alimentación y estilos de vida (51).

Nuestro estudio documenta una asociación positiva de talla baja con las regiones sur, centro y Ciudad de México. Para sobrepeso u obesidad se asoció la región sur. En México, las regiones con mayor atraso económico tienen menor desarrollo en educación, salud, alimentación e infraestructura, lo que afecta el bienestar de su población (52). En este sentido, un análisis de esta asociación debería abordar además de condiciones socioeconómicas, el desempleo y la productividad, entre otras (12).

Dentro de las características estudiadas, destacan el tipo de escuela donde asisten los niños, algunas de ellas podrían estar relacionadas con componentes demográficos o económicos. Diversos estudios nacionales y regionales en edades de 6 a 12 años, en escuelas públicas y privadas en Honduras, Paraguay y en México, encontraron mayores prevalencias de sobrepeso y obesidad en escuelas privadas (48,53,54). Es probable que estas escuelas pertenezcan a estratos socioeconómicos medios y altos con una mayor disponibilidad económica y, como consecuencia, la adquisición de alimentos no saludables.

Referente al turno de asistencia a la escuela, niñas y niños que acuden al turno vespertino, tienen mayor probabilidad de talla baja y menor de sobrepeso u obesidad. Posiblemente se relaciona con características particulares, un estudio en México en escuelas públicas documentó que alumnos provenientes de entornos familiares en situación de pobreza, son remitidos mayoritariamente a este tipo de turno (55).

El RNPT al ser un censo es de los pocos sistemas útiles para el diagnóstico, monitoreo y vigilancia nutricional en población escolar mexicana (14). Su metodología ha sido probada anteriormente (56) y aplicada en diversos países (57). Con la cobertura alcanzada permite un análisis de desagregación mínima, válida y confiable. Su confiabilidad y validez han sido evaluadas mediante la estabilidad de estimaciones de área pequeña de puntuación *Z* media de altura para la edad (19,58).

Las escuelas pueden servir como centros para fomentar hábitos para prevenir una mala nutrición, y estos ser extendidos a la comunidad. En escolares, se ha comprobado que el consumo de agua potable en sustitución de bebidas azucaradas, contribuye al control del peso y restricción de alimentos ricos en calorías y pobres en nutrientes, dentro y fuera de las escuelas (59). Se han llevado acciones dentro de estas, como la implementación en escuelas públicas del programa nacional de bebederos, que debe seguir promoviéndose en conjunto con otras acciones integrales (60). También deben regularizarse de manera estricta, algunos marcos vigentes reguladores de publicidad en alimentos y bebidas no alcohólicas dirigida a la población infantil, y así evitar el consumo de alimentos de baja calidad nutricional (61). Identificar geográficamente y con alta precisión escuelas con niños en alto riesgo de mala nutrición, puede contribuir a la focalización de la inversión en nutrición de un país. Por lo anterior, el RNPT es una metodología y herramienta útil como elemento de planeación estratégica en nutrición pública.

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Desarrollo de un proceso participativo para el diagnóstico de salud comunitaria en estudiantes de la Universidad Miguel Hernández: Proyecto #beUMHealthy

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Resumen Los procesos participativos permiten analizar, comprender, debatir y promover la acción colectiva en asuntos significativos para una comunidad. Estas metodologías activas favorecen la identificación de necesidades y activos en salud para elaborar un diagnóstico de salud comunitaria y promover acciones colectivas. En este sentido, la aplicación de los procesos participativos en el contexto universitario resulta de gran interés para el fortalecimiento de las universidades como comunidades promotoras de la salud. En este trabajo se describe el desarrollo del proceso participativo #beUMHealthy, cuyo objetivo principal fue potenciar el debate sobre la salud y las iniciativas de promoción de la salud en el alumnado de la Universidad Miguel Hernández (UMH). El proyecto se desarrolló entre mayo y noviembre del 2019. Se recogieron 22 participaciones mediante WhatsApp y 173 cuestionarios diligenciados en línea. Este proceso permitió identificar necesidades y activos en salud en el alumnado de la UMH y obtener propuestas para su mejora. Esta información se usará para promover acciones futuras que incrementen la salud de la comunidad universitaria.

Palabras claves: proceso participativo, salud comunitaria, activos en salud, promoción de la salud, estudiantes, universidad

Introducción

Los procesos participativos aplicados al ámbito de la salud promueven el trabajo colaborativo como herramienta para construir la salud de una comunidad (1). Este tipo de metodologías activas ofrecen una oportunidad a los miembros de una comunidad para analizar, comprender, debatir y promover acciones colectivas en asuntos significativos para su salud (2). De manera importante, favorecen la identificación de necesidades y activos relacionados con la salud que, junto con otros factores, actúan como elementos esenciales para la elaboración de un diagnóstico de salud comunitaria (3). En este sentido, los procesos participativos son recursos con un gran potencial para responder a necesidades de salud y abordar asuntos de

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promoción de la salud de una comunidad (4), por lo que su aplicación en el contexto universitario resulta de gran interés para el fortalecimiento de las universidades como comunidades promotoras de la salud (5).

La metodología de un proceso participativo responde a un proceso dinámico que articula distintas fases o etapas de desarrollo de un programa de acción comunitario (3,6,7). En términos generales, suele distinguirse una fase inicial dedicada al desarrollo de la red de trabajo, a través de la creación de alianzas entre agentes clave y la comunidad, y a la formación del grupo motor (3,7). Esta primera etapa es determinante para establecer las condiciones necesarias para que la participación de la comunidad se realice de forma efectiva, con el fin de asegurar que las posteriores etapas del proceso se desarrollen de manera adecuada (6). Las siguientes etapas corresponden a la fase del diagnóstico de salud, a partir de la identificación de las necesidades y activos existentes en la comunidad; a la fase de priorización, diseño e implementación de acciones, y a la fase de seguimiento y evaluación (3,6,7). Si bien la mayoría de las guías prácticas disponibles para la aplicación de metodologías participativas sugieren el desarrollo consecutivo de estas fases para completar la realización de programas de acción comunitarios, idealmente sería conveniente añadir otra etapa para evaluar la sostenibilidad de las acciones (3).

El proyecto #beUMHealthy fue un proceso participativo orientado a potenciar el debate sobre la salud y las iniciativas de promoción de la salud entre el alumnado de la Universidad Miguel Hernández (UMH). En este trabajo presentamos la experiencia de este proceso participativo que corresponde a la fase de constitución de la red de trabajo para la elaboración del diagnóstico de salud en la comunidad universitaria de la UMH.

Desarrollo de la experiencia: proyecto #beUMHealthy

El proyecto #beUMHealthy fue una iniciativa propuesta por el Vicerrectorado de Relaciones Institucionales de la UMH dentro del proyecto UMH Saludable (https://umhsaludable.umh.es/), que trataba de responder a los problemas de salud identificados en el informe de la Encuesta de Nutrición y Salud en Estudiantes UMH del 2018 (https://umhsaludable.umh.es/files/2018/05/ENCUESTA-DE-NUTRICION-Y-SALUD-UMH-2018-VERSION-FINAL.pdf), realizado en colaboración con la Unidad de Epidemiología de la Nutrición de esta universidad. Los objetivos principales de #beUMHealthy fueron: 1) fomentar el debate y la actuación de la población estudiantil sobre su salud en la UMH; 2) impulsar la participación de esta población para potenciar acciones de promoción de la salud en todos los campus de la UMH; 3) identificar activos y amenazas para la salud en los campus de la UMH, y 4) realizar propuestas de mejora en los campus para incrementar la salud de la comunidad. El proceso participativo se desarrolló entre mayo y noviembre del 2019 en los cuatro campus de la UMH: Elche, San Juan de Alicante, Altea y Orihuela. Para la puesta en marcha del proyecto se contactó a la cooperativa APLICA (www.aplicacoop.com) que actuó como facilitadora y asesora metodológica de todo el proceso y que se encargó del diseño del plan de comunicación, del análisis de resultados y del informe final. En la Tabla 1 se muestran los principales elementos del diseño del proyecto.

Para la puesta en marcha del proyecto y constitución del grupo motor, se organizó una primera reunión entre diversos miembros del equipo de rectorado (n = 3) y del profesorado (n = 4), técnicos de la cooperativa APLICA (n = 2) y un grupo de estudiantes de pregrado (n = 7) y posgrado (n = 4) de distintos campus de la UMH. Se realizó una presentación del proyecto y de la metodología basada en la identificación de necesidades y de activos en salud, incidiendo en que el proyecto debía basarse en la información proporcionada por el alumnado, por lo que el grupo motor ejercería un papel central para promover la participación de sus compañeros/as. El grupo motor quedó conformado finalmente por los/las alumnos/as asistentes a la reunión (n = 11) y matriculados/as en cursos de pregrado o máster de las facultades de ciencias sociales y jurídicas (n = 3) y medicina (n = 5) y de las diferentes escuelas politécnicas (n = 3) de la UMH. Entre los participantes del grupo motor se encontraba la delegada general de estudiantes de esta universidad.

Para las siguientes tareas del proyecto (acordar nombre, recopilar y priorizar lemas, seleccionar hashtag y mensajes para redes sociales y canales de recolección de información y comunicación), se utilizaron como metodología las técnicas y de

Tabla 1. Diseño del proyecto #beUMHealthy.

Población diana: Alumnado de pregrado y posgrado de la UMH	
Red de trabajo	*Funciones*
Cooperativa APLICA: Asesores técnicos en acciones comunitarias	Diseño del plan de comunicación Análisis de los resultados obtenidos Informe final
Grupo promotor: Profesorado y miembros del rectorado	Difusión del proyecto Establecimiento de contactos en la comunidad universitaria
Grupo motor: Estudiantes de pregrado y posgrado	Toma de decisiones sobre la forma y orientación del proceso (nombre, lemas, mensajes, etc.) Apoyar la difusión del proyecto Validar el análisis de resultados Consensuar conclusiones
Difusión del proyecto	
Agentes	*Canales*
Estudiantes de pregrado y posgrado	Redes sociales institucionales de la UMH: Facebook, Instagram, Twitter WhatsApp Web UMH (https://bit.ly/3cvg73c) Canales de televisión de circuito cerrado en los 4 campus (https://bit.ly/2TtAZPn) Presentación del proyecto en actos oficiales Carteles en los campus (Figura 1)
Recolección de información	
Cuestionario en línea diseñado *ad hoc:* #BeUMHealthy ¿Qué SUMA y qué RESTA a tu salud? (https://bit.ly/2TpV1dG)	Datos sociodemográficos: campus, edad, sexo Identificación de activos en salud: ¿Cuáles son las cosas, actividades o personas que SUMAN salud en tu campus? Identificación de necesidades (amenazas/problemas): ¿Qué cosas, actividades o personas RESTAN (obstruyen, limitan) salud en tu campus? Propuestas de mejora en aspectos específicos de la salud identificados como problemas en el informe de la Encuesta de Nutrición y Salud en Estudiantes UMH de 2018 (https://umhsaludable.umh.es/files/2018/05/ENCUESTA-DE-NUTRICION-Y-SALUD-UMH-2018-VERSION-FINAL.pdf): nutrición y actividad física tabaco y uso de drogas salud sexual y reproductiva salud mental discriminación participación otros aspectos no abordados
Pregunta vía WhatsApp: ¿Qué SUMA y qué RESTA a tu salud?	Respuestas mediante textos Respuestas mediante fotos Respuestas mediante grabaciones de audio

Figura 1. Diseño del cartel usado para el proyecto #beUMHealthy.

tormenta de ideas y de consenso mediante asamblea. A modo de ejemplo de las dinámicas para la realización de tareas, se pidió a cada asistente que describiera sus primeras impresiones con una sola palabra, con el fin de seleccionar un nombre para el proyecto. Las respuestas fueron: "confortable", "movimiento", "multitud", "bienestar", "innovación", "control", "multidisciplinar", "futuro", "contigo/juntos", "progreso", "unión", "equilibrio", "oportunidad". Tras la selección por consenso de algunas palabras, cada participante debía proponer un nombre con el que mejor identificaray/o caracterizara el proyecto. En tormenta de ideas se sugirieron varios nombres: "Proyecto healthy UMH", "Practica salud UMH", "Aporta(T) salud UMH", "Seamos salud UMH". Finalmente, el grupo decidió el nombre realizando una combinación de algunas de las propuestas: "Proyecto UMHealthy. Seamos salud".

Para la campaña de difusión de #beUMHealthy entre el estudiantado de la UMH, se ofreció un programa de prácticas voluntarias para los/las estudiantes de pregrado y posgrado de terapia ocupacional, donde parte del profesorado que participa en el grupo motor impartía docencia. Se contó con 6 estudiantes de segundo curso de pregrado y 1 estudiante de posgrado (como coordinador) que ejercieron como agentes de difusión del proyecto. El reclutamiento de este alumnado se llevó a cabo a través de un anuncio en el tablón virtual del pregrado y del máster de terapia ocupacional. El alumnado que participó en este programa de prácticas recibió un certificado final que podría convalidar por 2 créditos ECTS de competencias profesionales y transversales de los créditos de su grado.

El programa de prácticas incluía 50 horas extracurriculares dedicadas a realizar las siguientes acciones: 1) visitas semanales a los distintos campus; 2) distribución de impresos y carteles (Figura 1); 3) jornadas de presentación del proyecto; 4) promoción del proyecto a través de las redes sociales, y 5) reclutamiento de estudiantes para apoyo en la campaña. Previo al inicio de las prácticas, los/las agentes de difusión recibieron una formación específica por los técnicos de la cooperativa APLICA sobre estrategias de acción participativa para la organización y desarrollo de la difusión del proyecto. Por ejemplo, se dieron recomendaciones para asistir a espacios abiertos como pasillos, cafeterías y exteriores. También se propusieron algunas estrategias de "entrada" a los grupos de estudiantes, como: "Hola ¿sois estudiantes de UMH? ¿Os habéis planteado qué SUMA y qué RESTA salud en vuestro campus?" o "Perdonad que os interrumpa ¿Conocéis el proceso participativo #beUMHealthy?" En síntesis, el objetivo final de los/las agentes de difusión

fue el de lograr que el estudiantado participara en el proceso mediante las redes sociales o contestara el cuestionario.

La recolección de información mediante el cuestionario en línea o la participación a través de mensajes WhatsApp se llevó a cabo durante 5 semanas, entre el 21 de octubre y el 20 de noviembre del 2019. Durante este periodo, los/las agentes de difusión realizaron un total de 22 visitas a los diferentes campus de la UMH con el fin de desarrollar acciones de información sobre el proceso y animar al estudiantado a participar. El cuestionario estuvo accesible mediante un enlace en todos los canales de difusión anteriormente mencionados. La participación por WhatsApp podía ser con textos, fotos o grabaciones de audio/video. Se recogieron 22 participaciones por WhatsApp y 173 mediante cuestionarios en línea. El 20 de noviembre del 2019 se llevó a cabo una reunión a la que fueron invitados todos los participantes de este proyecto (técnicos de la cooperativa APLICA, grupo promotor, grupo motor y agentes de difusión), con el fin de analizar los resultados del cuestionario y de los aportes por WhatsApp y priorizar las diferentes propuestas de mejora para plantear futuras acciones directas. A esta reunión asistieron 8 participantes y fue coordinada por los miembros de la cooperativa APLICA.

Conclusiones

Esta experiencia describe las fases de constitución de la red de trabajo y desarrollo del proceso participativo #beUMHealthy para el diagnóstico de salud en la comunidad estudiantil universitaria. La recolección de casi doscientas opiniones sobre la salud del estudiantado de la UMH mediante el trabajo realizado por los/las agentes de difusión es una muestra positiva del funcionamiento de este proceso. El proyecto incluyó también la identificación de activos en salud y de recursos disponibles en los diferentes campus de la universidad, lo que posibilitará la realización de acciones futuras para incrementar la salud del alumnado. El desarrollo de esta experiencia ha facilitado el acercamiento entre los diferentes miembros de la comunidad universitaria (miembros directivos, profesorado, representantes de estudiantes, estudiantes, etc.) favoreciendo una mayor interacción social, así como una mejor comprensión de los asuntos que preocupan y conciernen a la comunidad. Asimismo, este proceso brindó la oportunidad de desarrollo de liderazgo y de empoderamiento que proporciona el trabajo participativo realizado entre los miembros de una comunidad.

Declaración de conflicto de intereses

Ningún conflicto declarado.

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Resúmenes

Contra las desigualdades sociales en salud: un enfoque sistemático aceptable y viable para una evaluación del impacto en la salud de proyectos de urbanismo

Geneviève Bretagne, Jeanne Blanc-Février y Thierry Lang

Introducción: el objetivo general de este proyecto de investigación fue el de explorar la aceptabilidad y la viabilidad de un método original tendiente a identificar sistemáticamente proyectos de urbanismo cuyos impactos potenciales para la salud y para las desigualdades sociales en salud sean los más perjudiciales. Un enfoque basado en una corta reunión y en una herramienta podrían ayudar en la discusión de si vale la pena o no implementar una evaluación del impacto en la salud más integral. Métodos: el equipo de investigación desarrolló una herramienta basada en otras reportadas en la literatura y modificada con urbanistas. Para cada proyecto de desarrollo se organizaron reuniones con planificadores voluntarios, quienes estaban trabajando en los proyectos seleccionados. Las revisiones de seis proyectos en diferentes etapas de diseño posibilitaron evaluar la aceptabilidad y la viabilidad de este enfoque para identificar problemas de salud pública y de equidad social en salud.
Resultados: se encontró que el proceso y el uso de la herramienta eran factibles. Esta fue fácilmente comprensible, adaptada a las prácticas de los planificadores y utilizable sin necesidad de un entrenamiento real, solo requirió de una rápida introducción para su uso. También se consideró aceptable. A pesar de un interés en la inclusión de las desigualdades sociales en salud, la integración de la relación entre estas y el desarrollo urbano no fue fácil para la mayoría de los urbanistas.
Conclusión: este trabajo exploratorio sugiere que un enfoque sistemático para evaluar el impacto de los proyectos urbanos en la salud y en las desigualdades sociales en salud es viable y aceptable. Lidiar con las desigualdades sociales en salud no fue fácil para los planificadores.
Palabras clave: determinantes de la salud, evaluación del impacto en la salud, ciudades saludables/comunidades saludables, participación, salud pública, estatus socioeconómico, planeación urbana/salud urbana/urbanización. (Global Health Promotion, 2022; 29(2): 5–13)

Servicios en salud, intersectorialidad y control social: un estudio comparativo sobre un programa de transferencia condicionada de ingresos

José Anael Neves, Lia Thieme Oikawa Zangirolani y Maria Angélica Tavares de Medeiros

El Programa Beca Familia (Bolsa Família, en portugués) es uno de los programas más grandes de transferencia condicionada de dinero en el mundo. Ofrece transferencia de dinero y acciones intersectoriales. El objetivo de este estudio fue comparar si existe una diferencia en el acceso a los servicios de salud, acciones intersectoriales y control social, entre familias con derecho o no al Programa Beca Familia. Se llevó a cabo un estudio transversal. Se calculó una muestra representativa de 380 familias de una población de la periferia, vulnerable socioeconómicamente, ubicada en un centro urbano importante en el suroriente de Brasil. Se utilizaron pruebas Chi cuadrado o exacta de Fisher y un análisis de correspondencia múltiple para comparar los grupos. Las familias con derecho al Programa Beca Familia tenían peores condiciones de vida en general y un mayor acceso a los servicios de salud como atención médica ($p = 0.009$), agente comunitario de atención en salud ($p = 0.001$) y visitas domiciliarias ($p = 0.041$). Tener derecho o no al Programa afectó la variación en el patrón de acceso a los servicios en un 31%; en ambos grupos se identificó un bajo acceso a las acciones intersectoriales, y el control social era incipiente. Hubo un adecuado enfoque en el programa; un mayor acceso a los servicios en salud se relacionó con el cumplimiento de las condiciones; el bajo acceso a las acciones intersectoriales puede restringir la interrupción del ciclo de la transmisión intergeneracional de pobreza.
Palabras clave: programa Bolsa Família, programa Beca Familia, políticas y programas en nutrición, transferencia condicionada de dinero, colaboración intersectorial, políticas públicas. (Global Health Promotion, 2022; 29(2): 14–22)

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Validación de un juego didáctico para promover la salud cardiovascular en niños

Francisca Bertilia Chaves Costa, Ana Maria Fontenelle Catrib, Lana Paula Crivelaro Monteiro de Almeida, Zélia Maria de Souza Araújo Santos, July Grassiely de Oliveira Branco y Carlos Antonio Bruno da Silva

Objetivo: el propósito de este estudio fue validar el contenido y la apariencia de un juego educativo para niños de 7 a 10 años, enfocado principalmente en la promoción de la salud cardiovascular.
Método: el estudio utilizó investigación metodológica, con un enfoque cuantitativo. El proceso de validación incluyó la participación de 17 especialistas en niños y/o salud cardiovascular. Un índice de concordancia de al menos 0.80 fue considerado para la validación del contenido y de 0.75 para la apariencia del material educativo.
Resultados: la propuesta del juego didáctico se consideró válida, con algunas sugerencias, en vista del propósito de sensibilizar a los niños con relación a la promoción de la salud cardiovascular en la infancia.
Consideraciones finales: como factor relevante en el uso de juegos como estrategias para mejorar la educación para la salud, hacemos énfasis en que el participante es el agente activo y el protagonista del proceso salud-enfermedad.
Palabras clave: promoción de la salud, enfermedades cardiovasculares, salud infantil. (Global Health Promotion, 2022; 29(2): 23–30)

Pasantía estructurada en promoción de la salud: enfoque utilizado en Jamaica, un país en desarrollo de ingreso medio

Nickesha Noreen Fowler-Holdham, Desmalee Holder-Nevins y Dawn Walters

Los programas de pasantías tienen el potencial de ofrecer aprendizaje y experiencias profesionales, de fomentar la competencia de los estudiantes y de fortalecer las alianzas entre la comunidad y las instituciones formadoras. En este artículo examinamos la medida en la que una pasantía estructurada de la Universidad de West Indies contribuye a la experiencia y al desarrollo de competencias, ofrece un objetivo y cumple con las expectativas y las satisfacciones de los aprendices, entre una cohorte de practicantes en promoción de la salud no remunerados. Se incluye la contribución de esta oportunidad en el fortalecimiento de la promoción y la educación para la salud y en los sentimientos de los pasantes sobre su experiencia. Fueron revisados los reportes de veinticuatro (24) practicantes, mediante una combinación de métodos cuantitativos y cualitativos. La mayoría son de Jamaica (70.8%), 12.5% de Dominica y el restante 16.7% representa otras nacionalidades. Los profesionales de la salud constituyeron el mayor porcentaje de cohortes (79.2%) y las agencias gubernamentales la más grande proporción (63%) de sitios para las pasantías. Las actividades se desarrollaron en las áreas de planeación, ejecución y evaluación de programas (71%) así como en la aplicación de evaluaciones de necesidades (63%). Las actividades relacionadas con la comunicación fueron reportadas por un 43% de los pasantes; 31% se comprometió con las tareas de *lobby* y colaboración con otros asociados, mientras que el 23% estableció comités para supervisar la sostenibilidad de las iniciativas. Mientras que algunos practicantes reportaron haber vivido experiencias negativas con la supervisión en sus agencias de contratación, todos valoraron los seminarios de pasantías como un entorno favorable en el cual podían compartir sus progresos con sus pares y con los académicos. La oportunidad de llevar la teoría a la práctica y el hecho de verse como personas recurso fueron otros dos puntos positivos. Las pasantías estructuradas demuestran tener méritos para capacitar y formar competencias, así como para suscitar la satisfacción personal.
Palabras clave: pasantía estructurada, competencias en promoción de la salud, Jamaica. (Global Health Promotion, 2022; 29(2): 31–40)

Experiencia individual y comunitaria de la creciente carga de enfermedades no transmisibles en dos distritos de Nepal: una exploración cualitativa

Sudesh R. Sharma, Anna Matheson, Danielle Lambrick, James Faulkner, David W. Lounsbury, Abhinav Vaidya y Rachel Page

Introducción: las enfermedades no transmisibles (ENT) son un desafío de salud mundial que ha surgido rápidamente con determinantes multinivel, conocidos popularmente como determinantes sociales. El objetivo de este artículo es describir las experiencias individuales y comunitarias de las ENT en dos distritos de Nepal desde la perspectiva de los determinantes sociales de la salud.
Método: este estudio adoptó un diseño cualitativo para identificar las experiencias con las ENT. Se realizaron 63 entrevistas con informantes claves de diferentes sectores relacionados con la prevención de ENT en dos casos de distrito y a nivel político en Nepal. Se organizaron 12 discusiones de grupo en las comunidades seleccionadas de cada distrito. La recolección y el análisis de los datos fueron fundamentados en el Marco de los Determinantes Sociales de la Salud. El equipo de investigación utilizó el enfoque de este marco conceptual para llevar a cabo el análisis temático. Igualmente, el estudio involucró tres talleres de reflexión con las partes interesadas de los ámbitos político y local.
Resultados: Durante el análisis surgieron tres temas claves. El primero sostiene que los individuos y las comunidades experimentaron la creciente carga de las ENT y de los riesgos metabólicos en las áreas urbanas y rurales. Los otros dos temas se relacionaron con las experiencias de los participantes de acuerdo con sus contextos socioeconómicos y su género. Las poblaciones desfavorecidas mostraron ser más vulnerables al riesgo de las ENT. Además, la mujeres están aún más en desventaja frente a los riesgos de las ENT y el acceso a los servicios de salud.
Conclusión: Los hallazgos indicaron que los determinantes sociales claves, como la edad, la ubicación geográfica, el estatus socioeconómico y el género impulsaban la epidemia de las ENT. Hay una necesidad urgente de actuar frente a los determinantes sociales de la salud con un enfoque multisectorial, adoptando el sentido de las recomendaciones que dejó hace una década la Comisión sobre los Determinantes Sociales de la Salud y abordarlas frente a un complejo desafío como el de las ENT en Nepal.
Palabras clave: enfermedades no transmisibles (ENT), riesgos metabólicos, determinantes sociales, Nepal. (Global Health Promotion, 2022; 29(2): 41–49)

La imagen del cigarrillo en mi mente: se requieren anuncios efectivos de los servicios públicos contra el consumo de tabaco, basados en los autoconstructos de los fumadores

Mutlu Önen y Forrest Watson

Este estudio cualitativo buscaba entender los comportamientos de los fumadores con autoconstructos independientes e interdependientes para diseñar anuncios públicos efectivos contra el consumo de tabaco. Los hallazgos en las narraciones de los participantes y los dibujos sugieren que el contenido del mensaje individualista (enfocado en el fumador individual) puede ser efectivo para consumidores con autoconstructos independientes, mientras que el contenido del mensaje colectivista (enfocado en un grupo de fumadores) puede ser efectivo para consumidores con autoconstructos interdependientes para incrementar sus intenciones de dejar de fumar. Este estudio reveló también las características de los grupos de fumadores en términos de rutinas, significados y valores simbólicos del consumo de cigarrillo, lo cual puede servir para enriquecer los contenidos de los anuncios de los servicios públicos contra el consumo de tabaco. Las implicaciones de este estudio son discutidas por legisladores y organizaciones sin ánimo de lucro que buscan integrar su mensaje en la audiencia para mejorar la salud pública.
Palabras clave: autoconstructos, fumar, anuncios de servicios públicos contra el consumo de tabaco, mercadeo social, cultura. (Global Health Promotion, 2022; 29(2): 50–59)

Diseño de un programa multicomponente de intervención contra la intimidación escolar en Chandigarh, un Territorio de la Unión en el norte de India

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La intimidación, un problema prevalente de la salud pública mundial, tiene un impacto adverso en la salud física y psicológica de los escolares, tal como ya se ha comprobado. Hay pocos programas de intervención para prevenir la intimidación en la región del Sureste Asiático, y ninguno en India. El objetivo de este estudio fue el de diseñar un programa de intervención multicomponente, conocido como *'Stop Bullying– School Intervention Program (SB-SIP)'* para escolares. Este fue desarrollado en cinco etapas, la primera de las cuales consistió en hacer una revisión de la literatura existente sobre estudios de intervención para prevenir la intimidación, en el ámbito mundial. Durante la segunda etapa se realizó un estudio cualitativo para explorar las creencias y las percepciones de los profesores, los estudiantes y los padres, relacionadas con los programas de intervención contra la intimidación. En la tercera fase se estructuró un modelo conceptual. Un taller de consulta para finalizar los contenidos de la intervención fue conducido durante la cuarta etapa. Y, finalmente, la quinta sirvió para realizarle pruebas piloto a la intervención. La revisión de la literatura aportó evidencia para determinar que el más efectivo era un programa de intervención escolar integral basado en el modelo socioecológico. La mayoría de los participantes en las discusiones de grupo sugirieron que tener certeza de los efectos de la intimidación y las estrategias efectivas para prevenirla en el entorno escolar debe ser parte del SB-SIP. Las recomendaciones que dejaron las partes interesadas durante los talleres de consulta contribuyeron principalmente con el método utilizado para implementar el programa. El proceso de cinco etapas ayudó a reconocer el modelo conceptual y los factores modificables, que ejercen sus efectos sobre la intimidación y sus efectos psicosociales, a través de los cuales se finalizó el programa multicomponente de intervención contra la intimidación SB-SIP.
Palabras clave: intimidación, intervención, modelo socioecológico, multicomponente, escuela, investigación formativa. (Global Health Promotion, 2022; 29(2): 68–77)

Impactos potenciales de los vehículos autónomos en el desplazamiento a pie

Simone Pettigrew

La automatización vehicular progresa rápidamente y las proyecciones apuntan a que los vehículos autónomos serán una característica central de los sistemas de transporte en el mundo. Este desarrollo tiene el potencial de generar profundos cambios en los comportamientos al caminar. El presente estudio examina este fenómeno desde la perspectiva de especialistas en el tema con el propósito de fundamentar las políticas de salud. Se realizaron entrevistas con 44 partes interesadas claves en Australia (n = 34), en la Unión Europea (n = 5), en el Reino Unido (n = 4) y en Estados Unidos (n = 1). Estas representan una amplia gama de sectores como el gobierno, los fabricantes y compañías de servicio de vehículos autónomos, consorcios de políticas de transporte, firmas de tecnología, aseguradoras (públicas y privadas), sindicatos, representantes de los consumidores, y la academia. Dos potenciales escenarios se hicieron evidentes durante las discusiones con los entrevistados sobre la manera como probablemente se introduzcan los vehículos autónomos y las implicaciones sobre los comportamientos de marcha. El escenario más favorable considerado, pero el menos probable, es aquel donde la gente renuncia al vehículo privado propio y depende de una combinación de marcha, transporte público y transporte sobre pedido. El escenario alternativo involucró una mayor propiedad privada de vehículos autónomos, congestión vehicular y crecimiento urbano desordenado, y el consecuente resultado de una menor actividad de caminar. La convergencia de los puntos de vista de las partes interesadas sobre los escenarios identificados opuestos resalta la necesidad del desarrollo de políticas proactivas para asegurar que la transformación emergente del transporte no resulte en un incremento sustancial del sedentarismo.
Palabras clave: transporte activo, medio ambiente, comportamiento saludable, comportamiento sedentario. (Global Health Promotion, 2022; 29(2): 60–67)

Alcance del alfabetismo para la salud en Latinoamérica

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Los estudios que evalúan la influencia del alfabetismo para la salud en el comportamiento de los pacientes y los resultados sugieren la existencia de una relación positiva entre el alfabetismo para la salud y el conocimiento en salud, los comportamientos en salud y el estado de salud. En los países de Latinoamérica, los estudios que evalúan el alfabetismo para la salud son pocos, regionales y demuestran variaciones considerables, con tasas de un adecuado alfabetismo para la salud que van del 5.0 % al 73.3%. En este artículo examinamos y exploramos el estado del alfabetismo para la salud y los esfuerzos para su promoción en Latinoamérica. Los desafíos relevantes incluyen la desigualdad socioeconómica, el aislamiento social/geográfico y las barreras culturales, lingüísticas y políticas, la mayoría de los cuales afectan desproporcionalmente a la población indígena y a aquellas que viven en las áreas rurales. El uso extendido de infografías, videos y aplicaciones móviles puede fortalecer el alfabetismo para la salud y empoderar al paciente, especialmente cuando existen barreras lingüísticas. Este documento ofrece estrategias y herramientas de programación a la medida, ejemplos de intervenciones exitosas en alfabetismo para la salud y recomendaciones normativas para mejorar el alfabetismo para la salud en Latinoamérica, con la intención de fomentar discusiones y acciones adicionales. La colaboración organizada de manera central a través de múltiples sectores de la sociedad, con la participación de la comunidad, favorecerá el alfabetismo para la salud y mejorará la salud y el bienestar en Latinoamérica.
Palabras clave: alfabetismo para la salud, educación para la salud, compromiso comunitario, empoderamiento del paciente, política de salud latinoamericana, promoción de la salud. (Global Health Promotion, 2022; 29(2): 78–77)

‘Déjenme pasar a otro nivel’: aspiraciones y oportunidades de carrera para las enfermeras de salud comunitaria en Ghana

Meghan Bellerose, Koku Awoonor-Williams, Soumya Alva, Sophia Magalona y Emma Sacks

El progreso profesional y la educación continua son componentes críticos para la motivación y la retención de los trabajadores de la salud. Los avances permanentes también desarrollan la capacidad del sistema de salud al asegurar que los líderes sean aquellos que tienen experiencia y sólidos registros de rendimiento. Para comprender más sobre la satisfacción, las aspiraciones y las oportunidades profesionales disponibles para las enfermeras de salud comunitaria en Ghana, realizamos 29 entrevistas en profundidad y cuatro grupos de discusión en cinco distritos de predominancia rural. Las transcripciones de las entrevistas y los resúmenes de las anotaciones se codificaron en NVivo, con base en códigos predefinidos y emergentes utilizando análisis temático de contenido. La frustración frente a las actuales oportunidades de avance profesional y la educación continua surgieron como temas clave. En general, las enfermeras de salud comunitaria anhelaban tener mayores opciones para desarrollar su carrera, la mayoría aspiraba regresar a la escuela para alcanzar empleos en salud de mayor nivel. Aunque se ofrecían talleres para mejorar los conocimientos y las habilidades de las enfermeras de salud comunitaria, estos fueron irregulares y poco frecuentes. Ellas pidieron que su trabajo y experiencia tenga mucho mayor reconocimiento y respeto por parte de los líderes del sistema de salud de Ghana y que les den créditos para futuros programas de grado. Estas enfermeras forman parte de un grupo de trabajadores comunitarios asalariados, en rápida expansión en el África subsahariana. La información sobre sus experiencia y necesidades puede ser utilizada para moldear futuras políticas de salud y para la planificación de programas.
Palabras clave: salud comunitaria, desarrollo de carrera, trabajadores de la salud, Ghana, oportunidades profesionales, enfermeras. (Global Health Promotion, 2022; 29(2): 88–96)

Epidemia de tabaquismo en Jordania: es hora de actuar

Ala'a B. Al-Tammemi

El consumo del tabaco representa una de las mayores amenazas para la salud pública mundial, lo que exige grandes esfuerzos para el control de los productos derivados y para defender las políticas de reducción de daños. Las recientes tendencias sobre la tasas de prevalencia del tabaquismo son alentadoras, ya que las trayectorias reflejan una reducción en todas las regiones de la Organización Mundial de la Salud. Sin embargo, esta disminución varía significativamente a nivel nacional. Jordania, en la región del Mediterráneo Oriental, ha mantenido una extensa batalla contra el cigarrillo. A pesar de ello, se ha detectado que tiene uno de los mayores niveles de prevalencia de consumo tanto en la región como en el mundo. Varios obstáculos frenan la implementación exitosa y efectiva de las políticas antitabaco en este país, en particular las influencias culturales sobre el tabaquismo y la interferencia de esa industria en la formulación de las regulaciones. Los responsables de la toma de decisiones deberían considerar el fortalecimiento de las medidas antitabaco para evitar una catástrofe de salud pública si el consumo mantiene su actual ritmo de crecimiento.
Palabras clave: Jordania, consumo de tabaco, políticas antitabaco, Convenio Marco para el Control del Tabaco (CMCT), MPOWER, epidemia de tabaquismo. (Global Health Promotion, 2022; 29(2): 97–101)

Impactos e implementación del servicio sanitario de estudiantes en salud (SSES) francés: estudio de caso en dos academias francesas

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Contexto: el servicio sanitario de estudiantes en salud (SSES) es un programa de sensibilización de la promoción de la salud (PS) de 2018 dirigido a estudiantes de salud franceses. Incluye un tiempo de formación y un periodo de práctica de los estudiantes sobre diversas poblaciones, y se extiende sobre el territorio francés sin evaluación previa. Los objetivos del estudio que realizamos fueron: (i) documentar la percepción y el grado de apropiación de las metas del SSES por los grupos de interés –estudiantes y profesionales encargados– y (ii) analizar las intervenciones realizadas por los estudiantes con respecto a las buenas prácticas de la promoción de la salud (PS).
Métodos: se trata de un estudio de caso cualitativo realizado en dos academias de la región de la Nueva Aquitania: Poitiers y Burdeos. Se realizaron las entrevistas con las partes interesadas así como las observaciones sobre las acciones adelantadas por los estudiantes.
Resultados: efectuamos 87 entrevistas y 18 observaciones. Los datos obtenidos demostraron que (i) si bien los grupos de interés estuvieron fuertemente comprometidos, las condiciones de la implementación fueron difíciles y desiguales, (ii) los objetivos están en desfase con relación a los retos de la prevención en el sistema de atención en salud, (iii) los estudiantes refrendaron una visión errónea de la PS racional individualizando los comportamientos relacionados con la salud y (iv) las acciones efectuadas contravienen en su mayoría los criterios de calidad en PS, sean pedagógicos, metodológicos o éticos.
Conclusión: estos resultados fueron consolidados en la academia de Normandía. Hasta donde sabemos, ninguna otra evaluación de esta naturaleza se ha realizado en territorio francés. Esto plantea interrogantes, pues los impactos observados parecen ser lo suficientemente preocupantes para solicitar una reforma del programa, tanto en los objetivos como en el acompañamiento a las acciones en PS (por ejemplo, en lo relacionado con los determinantes sociales de la salud).
Palabras clave: servicios en salud, estudiantes, profesiones de la salud, prevención, promoción de la salud. (Global Health Promotion, 2022; 29(2): 107–115)