Original research

The article is based on a study which was an assessed part of the author's MPH degree at the university of Liverpool in 2018.

Title

"Managing health promotion and prevention activities in the workplace: Exploring occupational health nurses' experiences"

Abstract

Aim
The study aimed at exploring OHNs' experiences in managing health promotion activities[1] in the workplace to identify enablers and barriers to health promotion.

Methods
A qualitative interpretivist-constructivist approach was employed to explore OHNs' health promotion activities in their specific work context. Semi-structured, in-depth interviews were conducted with 11 OHNs. The study used thematic analysis and an inductive approach to data analysis.

Results
OHNs use different strategies to promote health in the workplace. These strategies depend on the company context as well as the OHNs' characteristics. Multiple factors influence the role of OHNs in health promotion. In line with companies' preferences and common nursing practice OHNs use mostly behaviour change and educational approaches. Strategies, role, and health promotion approaches are interdependent and shape each other without, however, being systematically analysed.

Conclusion
The findings of this study indicate that OHNs with broader knowledge of business and safety related subjects fare better in managing health promotion activities at the workplace. Professional training in business organisation, occupational safety, and broader health promotion approaches could empower OHNs in their interactions within the companies and allow them to strategically choose their strategies in health promotion. Furthermore, OHNs' scope of practice across companies and within the wider professional and political network needs to be actively marketed.

Keywords: Occupational health nursing, prevention, health promotion

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[1] In this article the term health promotion designates all activities aimed at the protection and the promotion of health, on an individual, community or structural level.

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CONTENT

1 Introduction

The rising number of non-communicable diseases and specific health risks due to working conditions, combined with the prolonged presence of people at work make the workplace an ideal setting for health promotion activities [1]. In many companies all over the world, nurses are active in caring for the workers' health and wellbeing [2]. According to an international quantitative questionnaire survey, at least half of the Occupational health nurses (OHNs) decided independently about health promotion activities [3]. Although curative tasks take up a large part of their time, activities linked to health promotion are expected to increase in the future according to a questionnaire survey of Australian OHNs and their managers [4, 5]. However, OHNs experience obstacles in these activities. In a randomised questionnaire survey of Finnish OHNs [6], it was found that from the OHNs' perspective the barriers to health promotion activities were linked to insufficient involvement in development of programs and program evaluation, and limited inclination of companies to follow suggestions for improvement. Moreover, OHNs perceived their lack of skills and time to be most relevant in specific risk areas, such as chemical and biological hazards, and psychological risks [ibid]. Collaboration issues present additional barriers to OHNs' activities, health promotion included. A qualitative study on working relationships within occupational health and safety services in Brazil, found that geographical distance between team members and power relations between OHNs and physicians hinder collaboration and joint actions [7]. Power relations with physicians have specifically been identified as barriers to both collaboration and health promotion activities [8, 9]. The quality of working relationships between OHNs and physicians in general influences collaboration and health promotion activities [6, 7, 8 ,9]. Although educational articles [10, 11] strongly advocate OHNs' leading position in health promotion programmes, they generally do not comment on obstacles that OHNs may encounter in different companies.

Overall, scientific literature on OHNs is scarce, and hardly any research on OHN's roles and experiences in health promotion at the workplace has been found. A methodical search of all major databases and extensive hand search for the period of 2007 to 2017 has yielded few published articles. To identify differential barriers and enablers to health promotion, it is essential to investigate how OHNs with different levels of expertise and training manage health promotion activities in different workplace settings.

2 Methods

2.1 Aims
To explore Occupational Health Nurses' experiences in managing health promotion activities in the workplace in French-speaking Switzerland, and to identify barriers and enablers to managing health promotion activities.

2.2 Study design
A qualitative study design was employed. Individual, semi-structured, in-depth interviews encouraged OHNs to elaborate on their experiences and allowed them to explore the underlying reasons for their actions and interpretations [12]. The study used an interpretivist-constructivist approach which considers peoples' perceptions and understandings as the principal source of knowledge. Reality is thought to be socially constructed rather than an absolute truth to be discovered [13]. The study focused on OHNs' multiple realities in the workplace while acknowledging the researcher's role in the co-construction of the accounts, e.g. through the kind of questions asked in the interview, and subsequent interpretation [14]. Exploring OHNs' in-depth knowledge of their health promotion

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activities, i.e. the sense they make of them in their specific circumstances, enabled a deeper understanding of the interactions between OHNs and context [15].

2.3 Ethical considerations

The Swiss ethics commission does not require approval for qualitative research that does not involve patients or vulnerable participants. The study was approved by the ethics committee of the University of Liverpool because it was an assessed part of the author's MPH degree. To ensure anonymity gender-neutral pseudonyms in French language were attributed to the participants, and names and places removed from transcripts. Demographic details were limited to categories without information on gender or canton of practice. Participants' quotes were chosen according to their low potential for recognition within the OHN community [16]. Participant information sheets and written consent forms were sent in advance to allow participants to reflect further on their willingness to participate and to inform them about all salient facts, including the right to withdraw at any time.

2.4 Positionality

The author is an OHN with knowledge of several workplace settings and personal experience of the topic but has not been working in this domain during the research process. Although most of the participants were either unknown to the author or had only been encountered at training events, her peer status within a small network may have led some participants to anticipate confidentiality issues, thus restraining them from speaking freely [ibid]. The author kept a reflexive journal to reduce any unwarranted influence on the participants' elaboration and to avoid unjustified assumptions about the meaning of the accounts [17].The journal also enhanced the conscious use of subjectivity to explore the data in more depth [18]. Regular consultation of the journal improved consciousness about the influence of the author's own experience on the research process [19]. Written memos throughout the analytic procedure increased the author's awareness of personal biases during interpretation [20].

2.5 Setting

The study took place in the French-speaking region of Switzerland. Roughly two million people live in this region and about half of them are in paid employment: predominantly in industry and service domains [21]. Switzerland has a dense primary healthcare network and mandatory health insurance. The Swiss legal framework does not entail access to occupational health services for employees but focuses on accident prevention, leaving more extensive health promotion to the goodwill of companies [22]. Notwithstanding the lack of legal obligations, the Swiss Association of OHNs estimates that approximately 100 OHNs currently work in occupational health settings. Their roles are defined according to professional characteristics and needs of the company; they vary considerably across companies. Due to cultural and historical reasons, OHNs practice almost exclusively in the French-speaking part of Switzerland. They are mostly employed by large companies, healthcare institutions or public administrations. Few OHNs work for external OH services or are self-employed.

2.6 Participants

To allow for maximum diversity of experiences and backgrounds and to ensure participants' in-depth knowledge of managing health promotion activities, purposive sampling has been applied [23]. Inclusion criteria contained a minimum of one year of practice as OHN in the region, experience in managing health promotion activities in the workplace and being explicitly hired as OHN or similar. Exclusion criteria covered being employed as a security specialist, health manager, etc., rather than OHN, having last practised more than two years before the interview, and working for an employer who explicitly excludes OHNs from health promotion.

Most OHNs are members of the Swiss Association of OHNs (ASIST). ASIST relayed the author's invitation to participate in the study to its members and published the information sheet on its website. The author's professional network further spread information to reach possible non-

members. Appointments were fixed with interested participants who covered a range of settings and training backgrounds. The author subsequently focused recruitment on underrepresented or missing profiles. The last three interviews did not yield new insights but confirmed the findings of the first eight interviews; recruitment was stopped at that point.

11 OHNs participated in the study, ten women, and one man, thus reflecting the gender distribution in the OHN community. All cantons with a wide variety of employment and company types, as well as a broad range of professional experience and training, were represented. Participants' mean age was 49 years (36 - 62 years), which is similar to results from a recent study in the region [24]. Participants had a mean nursing experience of 26 years (6 - 41 years) and mean OHN experience of 10 years (1-16 years).

TABLE 1 : SAMPLE DEMOGRAPHICS

Pseudonym	Age	Workplace	Nursing practice (years)	OHN practice (years)	Occupational Health and/or Public Health training
Alex	50-59	Industry	>30	6-10	Public Health diploma, specialisation in OH
Andrea	>60	Healthcare	>30	6-10	Hospital OHN (specific local short course)
Chris	30-39	Mixed	15-29	6-10	CAS OHN
Claude	30 -39	Healthcare	5-14	1-5	-
Dany	50-59	Industry	15-29	>15	CAS OHN
Dominique	40-49	Industry	5-14	1-5	-
Kai	40-49	Industry	15-29	11-15	CAS OHN
Kim	50-59	Healthcare	>30	6-10	Public Health diploma, CAS OHN
Lou	>60	Healthcare	>30	6-10	CAS OHN
Manu	40 -49	Industry	15-29	6-10	CAS OHN
Nicky	50-59	Mixed	>30	>15	Public Health diploma

Most participants had worked in at least two distinct OHN positions and were the sole OHN in the company. Few participants worked in small teams or shared their position with another OHN. Two participants were self-employed or worked for an OH provider; the others were employed by the company. Two OHNs worked for more than one company. Roughly half of the participants had experience in community health before working as OHNs. The number of workers per company varied from 170 to 2700. "Industry" comprises both blue-collar and white-collar workers and "Mixed" comprises all categories of companies, including public administrations. OHNs' employment rates covered 30% to 100%. Hierarchical links varied, but many participants reported to an OHS manager, while one reported to an occupational physician. Most participants working in healthcare settings had direct hierarchical links to executive management. The currently formal training available to OHNs is a «Certificate of Advanced Studies in Occupational Health Nursing Practice» (CAS OHN) and the majority had done this training. Three participants held a Public Health diploma, a training with the option of specialising in OHN that had been discontinued in 2007. Two participants had no specific OH training. Many participants held additional qualifications in the health domain and had undergone specific

occupational health-related short courses, e.g. in ergonomics. Some participants had management training and experience at various levels.

2.7 Data collection

The interviews in French language were held between January and April 2018 and lasted from 41 to 72 minutes; mean duration was one hour. Rather than strictly following the interview guide, the author allowed participants' accounts to flow freely while ensuring that the main topics were covered. The interview guide contained open-ended questions about participants' educational and professional background, and subjects related to the management of health promotion. Topics included the context in which the health promotion activities took place, the role of the OHN in needs assessment and policy decisions, as well as experiences during the managing process. The guide was pre-tested with a community health worker. Two pilot interviews were conducted to test the interview guide's applicability. They were included in the analysis because they had not resulted in significant changes. The topics of professional identity and gender influences in health promotion had come up in initial interviews and were added during the data collection process.

2.8 Data analysis

Thematic analysis with a predominantly inductive, data-based approach was applied to identify themes linked to the study aim [25]. The author transcribed the interviews verbatim in French and translated them into English. This procedure helped to familiarise with the data and to identify repetitive patterns across the data set [26]. All recordings had been listened to shortly after the interview and notes had been taken on participants' non-verbal reactions and the author's impressions. Once all the interviews had been transcribed and translated, the author applied descriptive codes and memos to the whole data set to summarise the content and to enhance receptivity to the meaning behind the data [27].The second step consisted of applying analytic codes to the latent and manifest content of the dataset. The totality of the initial analytic codes was then organised into clusters. A mind mapping approach was used to categorise these codes into themes, subthemes and associated codes deemed relevant. The resulting codebook was then applied to the whole dataset while continuing the definition of themes, subthemes, and codes [28].

TABLE 2: CODEBOOK

Themes	Subthemes	Codes
Strategies used by OHN to promote workers' health	Blend in	- Use "company speak" - Navigate in existing structures - Use activities valued by company culture
	Refer to a higher authority	- Refer to legal frameworks - Seek back-up
	Make yourself useful	- Go beyond your formal responsibilities - Accept wider tasks - Solve problems
	Use leeway	- Deploy autonomous activities - Focus on the Individual
Professional role in health promotion	Traditional Nurse role	- Hinders recognition - Leads to non-expert tasks - Leaves space to less competent persons - Satisfaction - Facilitating - Ambivalence
	Power aspects	- Assert oneself - Avoid conflicts - Recognition - OHN as negligible factor
	Values	- Values in accordance with company's provisions - Values not in accordance with company's provisions
Health promotion in the workplace	Approaches	- Aimed at the individual - Aimed at the organisation
	Doubts	- Outputs - Needs - Impact
	Experience	- Rely on experience - Lack experience
	Gender	- Overlooked element

The codes were then compared within individual accounts and across the dataset to identify how they affected each other [29]. Finally, the un-coded text was identified and analysed to ensure that no aspects relevant to the study aim had been missed [30].

3 Results

Three main themes have been identified from participants' accounts: 1) Strategies used to promote workers' health, 2) OHN role, and 3) OHNs' view of the health promotion concept. These themes are related and embedded in complex interactions between characteristics of both the companies and the OHNs, see figure 1.

3.1 Strategies used by OHNs

OHNs use strategies such as blending into the company, referring to higher authorities, making themselves useful, and using their autonomy for independent actions. Independent from the category of company, some OHNs explicitly use strategies aimed at implementing a health promotion culture in the company, while others adapt to the existing context.
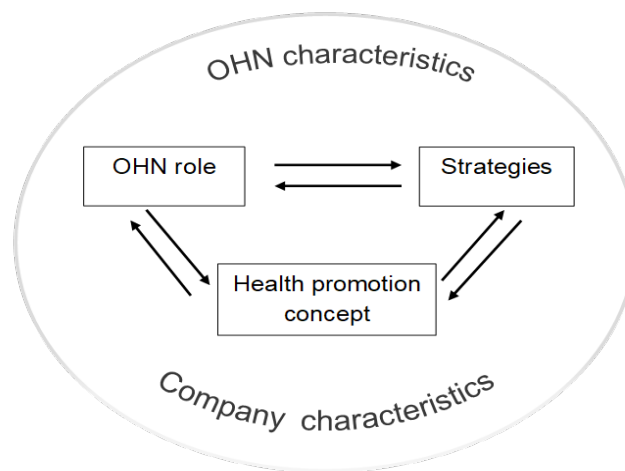

FIGURE 1: INTERACTIONS IN OHNS' HEALTH PROMOTION ACTIVITIES

3.1.1 Blend in

The most widely used strategy is to become part of the company. All OHNs' adapt their attitudes and actions to the companies' culture. They navigate in the companies' structures and use existing platforms for health promotion:

> "[…] we have a whole structure underneath, for communication, so we will use the means, email, this is our intranet site […]" (Alex)

This strategy implies extensive knowledge of the company and can be arduous in complex organisations. While some experienced OHNs take advantage of the formal and informal structures to set up activities, it is more difficult for relative novices:

> "But now I have to put a request to Quality. Will they agree with that? There is an entire process of approval. Then I must implement this process […] It's really the process, I have got it, but it takes a lot of time." (Dominique)

Another widely employed approach is to deploy activities in line with the company's culture. These activities are not necessarily valued by the specific OHNs in terms of health promotion, but they are appreciated by some companies for their wellbeing aspect:

> *"It's a virtual challenge […] that create teams, in fact, and then it allows to create this team idea and then to work on the promotion and prevention part. […] So, they saw that this had quite an impact and people were boosted and motivated. So that made a buzz […]" (Chris)*

Especially less experienced OHNs deploy information campaigns on unchallenged topics:

> *"Well, for all that is tobacco, alcohol, cardiovascular disease and the campaign against the flu, it's really things that are commonly done." (Claude)*

3.1.2   Refer to a higher authority

Independent from their professional training and experience OHNs put forward senior management, physicians, or legal frameworks to increase acceptance of interventions.

Several OHNs refer explicitly to specific OHS acts or use the argument of potential controls by labour inspectorates. This approach seems to be easier for seasoned OHNs:

> *"It's just that I show them the way, when it's legal, when it's not legal. It is true that there are some cases where, well, where they were a little annoyed or upset because sometimes you were limited […] well, it is an obligation, be it for the OProMa ((maternity protection law)), the person must not come to work during sickness absence. When you show them that, well, that it's not legal. Then, you tell them that «you are free to do what you want, but I have informed you»." (Chris)*

Most OHNs seek back-up from recognised authority persons, such as senior management. A few experienced OHNs involve physicians to enhance the impact of interventions:

> *"And I told myself that it will have more impact of authority. This isn't the belief that I have as a nurse in relation to the doctor, I don't place the doctor above me. But I thought by myself that maybe this will bear more fruits in the population of supervisors, that's it." (Kai)*

3.1.3   Make yourself useful

OHNs take up wider tasks or help others to achieve their objectives. This approach is used to "gain good marks", but also to shape the health promotion culture of the company and to develop activities. Especially experienced OHNs go beyond their formal responsibilities to guide actors in strategic positions and improve health promotion management:

> *"So, in my discussions with [the engineer] I am going to orient her in relation to what I know, to get things moving a little with the management. Where I use that too, to avoid going ahead knowing that I will hit a wall or that I will run into a director who says, "but me in my team I've never decided that we were doing this […]." (Manu)*

In accepting broader tasks, not necessarily related to their role, several experienced OHNs aim at shaping the company's health management culture or paving the way for future activities.

Although problem-solving is rarely an explicit strategy, most OHNs make themselves useful by answering requests of individuals or departments:

> *"[…] if he notices that an employee who has been doing well all of a sudden is unwell, he can call me to say «I am worried about this employee and I don't know what is going on»." (Kim)*

3.1.4 Use leeway

Independent from their setting and training some OHNs use their autonomy to set up activities which may lay outside of specifications while corresponding to OHNs' professional standards. They target groups and individuals. The latter is sometimes perceived as the only means for health promotion:

> *"Because at the current moment, I don't have the means to do prevention and promotion, with the group, I do it individually but not with the group." (Dany)*

To summarise, all OHNs use different strategies to promote health. They adapt to the company's culture and structure, use their autonomy, and seek back up from recognised authority persons. Their competencies help OHNs to establish themselves as useful actors in the company. While relative novices use mostly general nursing competencies, expert OHNs tend to extend their strategies using specific occupational health knowledge. Both groups rarely evaluate these strategies and their potential pitfalls explicitly.

3.2 Professional role in health promotion

The second theme identified from OHNs' accounts relates to designated or rejected tasks and roles of OHNs.

3.2.1 Traditional nurse role

In this context "traditional" pertains to the general public's perception of nurses as caring/curing and trustworthy health professionals in a mostly subordinate position. The traditional role can hinder recognition as an expert by different means, e.g. physicians' attitudes:

> *"It was the physician, yes the vaccination, I wanted to do it myself with the support of the medical adviser and he refused […] he did not want to take this responsibility." (Lou)*

Many OHNs, novices and experts alike, perceive that their role is reduced to curative tasks by different actors in the company:

> *"The nurse for them, occupational health is «ah well I have a headache I'll go to see the nurse» it remains that. We explain, that it's not our job, but for the moment «ah you are a nurse ah well, my foot hurts». That's not it, our job! No not really yet understood what it is. It's still very, very mysterious." (Dominique)*

However, only experienced OHNs seem to confront their hierarchy with this unwanted role:

> *"She actually envisioned us with the white coat and sticking in needles all the time. So we had big conflicts about working skills." (Dany)*

The nurse perceived as the physician's assistant leads for some OHNs, to non-expert tasks, e.g. managing the physicians' appointments and documents, without relation to their level of training or expertise. A few experienced OHNs perceive the companies' traditional role perspective as providing space to less competent professionals:

> "Then our ((i.e. OHN)) training, our stance is not necessarily known [...]. So they say to themselves, «I do not need a nurse, I need someone who can guide me», and now there are a lot of companies that answer this need like ((regional OH consultant)) for sickness absence management, like there is stuff for massages that are now done for well-being at work. They are not occupational health specialists. So, our job it is not necessarily valued and acknowledged." (Chris)

For many OHNs, the traditional role is also a source of satisfaction. The relevant interventions build on a full scope of nursing competencies and result in visible outcomes:

> "Because the person who leaves the office and says «thank you». Behind that, a lot of things have happened, we took a lot of time together, it is very dense, it is very difficult [...]." (Andrea)

Most OHNs' accounts also reveal the facilitating aspect of the traditional role. The perception of nurses as trustworthy professionals facilitates needs assessment and engagement of workers:

> I have many collaborators who contacted me [...] people who worked but had some difficulties and wanted to share that with a professional." (Kai)

Individual consultations are used by many experienced OHNs to inform activities. Facilitated needs assessment, however, bears its downsides:

> "And then, what is very difficult in the nursing profession, that's it is, that we rely a lot on perceptions, on intuition, on things that we are told, but which people do not want to have transmitted further." (Dany)

Some accounts reveal the ambivalence connected to the traditional role. For one OHN with minimal OHN training the desired collaboration with the physician seems to put into peril the much-appreciated autonomy:

> "Yes, I would like to work with a doctor who is, who is more often present [...] But, me, I love this autonomy, I love this activity, my proper activity and then if there is a doctor present, perhaps he would take over the work that I like, too. So here you are. Yes, for the organisation it would be interesting. For me in a very selfish way, maybe a little less." (Andrea)

3.2.2 Power aspects

OHNs assert their role or decide to refrain from affirming themselves according to their characteristics and contexts. Structural aspects determine both the recognition of OHNs' professional competencies or reveal OHNs being considered as a negligible factor. Most OHNs' assert their expert role to enhance the quality of activities, or to define their position in collaborations:

> "One of my first questions was, «That's fine. Now, how do we go on (.) after? How do we do for all the new people who enter the company [...]»." (Manu)

They affirm the boundaries of their role horizontally, but only a few of the more experienced OHNs assert their role by transcending hierarchical levels to the top:

> "I went to see the CEO and I told him that more than 60% of the counselling interviews […] were about psychological issues […] here we are, either I continue to do that […] or we really create a job around the management of these risks." (Chris)

A few OHNs with hazy mandates, tightly structured or non-supportive hierarchies tend to avoid conflicts, independent from their training and experience:

> "[…] We are often solicited for things that don't concern the health service and then, that's a great waste of time". (Alex)

Recognition of the expert role seems to be linked to both pre-existing hierarchical structures and to OHNs' training and expertise. recognition is revealed through direct hierarchical links with executive management, involvement in decision-making processes, and few non-expert tasks:

> "[…] it was me who was coordinating these two working groups, who brought the subject to the different head of functions to be done […]" (Kim)

Nevertheless, structural aspects which indicate that OHNs are perceived as a negligible factor take up a large part in all interviews. OHNs without formalised access to executive management have a fragile role in health promotion, especially if they have little experience in OHN:

> "[…] but we do not know how to position ourselves, it is hard for us and then, in fact we have no backing from the direction, no management support, there is no dynamic, no, cohesion between our service and the rest of the [company]. We sometimes feel that we are a necessary evil." (Claude)

Even experienced OHNs perceive power gradients within large companies, as well as centralised objectives and inconsistent organisation, as disenfranchising:

> "[…] there is a lady in our senior management who is very […] she loves health promotion a lot. So she often puts up projects, like that in parallel, to set up things that are not necessarily in connection with expertise that one would expect." (Nicky)

3.2.3 Values

Most accounts indicate both positive and negative experiences in regard to the values underlying their role. OHNs' values are in accordance with companies' provisions if the company supports them to set up prevention activities based on perceived workers' needs. Some accounts suggest that values can also be in accordance with companies' provisions for OHNs who are fully integrated into decision-making processes, or for those who rally to the company's standpoint:

> "I'm pretty clear about my limitations and the context, I know that the attitude is benevolent, beneficial, and there is the desire to develop our services […]." (Kim)

Novices and seasoned OHNs alike feel uncomfortable with companies' short-term priorities, refusal of structural changes and sole interest in outputs:

> *"[...] everything that is prevention, that does not yield immediate gain or that saves money, now these are things that are likely to be left behind even more." (Dany)*

And:

> *"[...] it's only quantified, it's always numbers in the companies, [...] looking for quantity [...]." (Dominique)*

To sum up, OHNs' role is influenced by the traditional nurse role and constitutes barriers and enablers to health promotion. OHNs assert their role mostly to enable health promotion but only some experienced OHNs access senior management to do so. Recognition of the expert role is favoured by direct hierarchical links with policy-makers while complex structures and powerplays within the company negatively affect all OHNs' influence. The influence of novices seems more strongly dependant on the companies' characteristics, but not the category of company. Independent from training and experience agreement between OHNs' values and company provisions depends mostly on the latter's support for perceived needs-based health promotion. Neither novices nor expert OHNs systematically analyse the power aspects of their role.

3.3 Health promotion concept

The third theme relates to OHNs' views on what constitutes health promotion as well as their more theoretical approaches.

3.3.1 Approaches

OHNs' account of their use and understanding of health promotion approaches differ slightly across the data set, not necessarily linked to expertise or training. All OHNs adopt behaviour change and educational approaches. Depending on their convictions and companies' expectations, OHNs exclusively target work-related topics or extend activities to broader health issues:

> *"[...] I had set up a whole training related to aggression. There are social workers who have big problems with the clients, so we set up a training [...]" (Lou)*

And:

> *"Well, these are always small posters on prevention, for example protection against the sun, during the heat wave it was hydration. So this, every month we try to make small posters." (Claude)*

Despite their different levels of experience and training, OHNs working in multinational companies tend to consider that health promotion depends on finances:

> *"[...] it is a private company that has more resources. I would say that where I worked before it was more difficult to get funding. [...] here it's easier to I think they understood that (.) health is important and that [...] that it makes sense to promote health and. I think also there, where I worked before, but they simply didn't have the means." (Alex)*

And:

> *"But behind that, there is the budget. Who pays? It is always the same problem there are plenty of ideas, of consultants." (Dominique)*

Independent from their training and setting, OHNs consider actions, such as chair massages, as health promotion or as "alibi" activities, i.e. aimed exclusively at the companies' public image:

> *"[…] we once called an expert in massage. […] we had someone come in for a seated massage. It was a consultant who came for one day, for example. So, it really pleased." (Dominique)*

And:

> *"[…] personally, I have a lot of difficulty with these campaigns, I would say a little alibi, "bike to work" that we do, finally, in our company, these "apple and drink" campaigns." (Kai)*

Approaches aimed at the organisation are less frequent. They are the realm of OHNs with both experience and direct links to executive management:

> *"[…] to also sensitize to the repartition of work, is all night work really needed in a [company] or are there areas in which one can perhaps decrease the workload?" (Kim)*

OHNs' interventions in work-specific risks are linked to more extensive professional competencies as well as to company provisions:

> *"[…] all that we do in vaccination, to prevent diseases for travellers, but also influenza […] the trainings we give, especially to first aiders for personal protection." (Alex)*

Seasoned OHNs who are involved in rehabilitation define this as health promotion:

> *"Our role, too, is to verify that the person is protected at her place of work and that the functional limitations are respected for the health of the collaborator." (Kai)*

3.3.2 Doubts

Doubts and questions related to needs, outputs, and impact are frequent and not always linked to the level of training. Many OHNs express difficulties in assessing workers' needs because of unrealistic recommendations and lacking indicators:

> *"[…] this questionnaire that we would like to put in place […] it will perhaps allow us to identify what the employees expect from us […] without the questionnaires we cannot know it." (Claude)*

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Doubts about outputs, i.e. activities and participation, are voiced by novices but also by experienced OHNs who are expected to achieve centralised objectives. Many OHNs question the impact of health promotion. Their doubts are related to a perceived lack of measurable results:

> *"[…] then how -again it's the overall problem of occupational health- it's when we do prevention how can we see, how can it be assessed that what has been put in place has an impact in the medium and long-term." (Dany)*

And:

> *"[…] in prevention work we don't often get results, well, we don't know what is happening […] we work in the background" (Lou)*

Measuring impact is an issue for most OHNs, although the pressure to "produce number"s seems more pronounced in some multinational companies:

> *"Unfortunately, well, we have observed. We could not demonstrate with record tracking from time X to time X. And all that, it doesn't happen overnight." (Chris)*

3.3.3 Experience

This sub-theme relates to OHNs' perceptions of how their experience influences health promotion. While novices consider their lack of experience as partly responsible for unsatisfying health promotion activities, seasoned OHNs who feel overall comfortable in their role and work context perceive their experience to be the leading factor in determining needs and outputs:

> *"But I would say that it was mostly the experience in the field that was helpful to me". (Nicky)*

3.3.4 Gender

OHNs' perceptions of how gender influences health promotion indicate gender as an overlooked element. Independent from their level of training or professional setting OHNs acknowledge gender influences, but mostly relate to general aspects, such as cultural influences, and gender-matched activities:

> *"[…] when we talk with a pregnant woman, it's interesting that it's a woman OHN who can take care of them." (Manu)*

To summarise, most OHNs favour behaviour change and educational approaches although many of them routinely set up personal protective measures. Their doubts about needs, outputs and impact are related to the extent of their training and experience, but also to the work context. Unsupportive settings foster doubts notwithstanding a high level of expertise. The perceived influence of experience is mainly linked to OHNs' current work context, independent of training and nature of their experience, while gender influence seems little reflected upon.

4 Discussion

Strategies

The sample in this study used different strategies to promote health. They made themselves useful to the company and people in strategic positions and adapted their activities to the company's culture. Research on stakeholder perspectives on workplace health promotion sanction this strategy. The human resources participants in a US study doubted the efficacy of health promotion in reducing costs and improving workers' health; they wanted readily available and affordable activities [31]. The sample in the US study was recruited from low-wage industries; it may, therefore, not entirely apply to large multinational companies or healthcare institutions, which form the main employers of the sample in the present study.

The strategy of using activities valued by the companies' culture may reinforce inequalities. A review of socioeconomic inequalities and workplace interventions provide examples of interventions that increased inequality, e.g. physical activity-based challenges [32].

Accepting wider tasks and using leeway to promote workers' health carries the risk of perpetuating the invisibility of OHNs' expert role, especially at the senior management level. US employers for instance were found to highly valued OHNs' social competencies, such as communication and teamwork, while the ability to design and implement programs and policies was considered much less important [33]. The low value given to OHNs' management competencies may be linked to OHNs' lack of affirming their interest in decision-making processes. A Finnish study found that nurse practitioners in their health promotion role put the least importance on being knowledgeable about municipalities' decision- and policymaking [34]. Although the participants in the present study mostly practice in business settings, few of them assert their expert role and their interest in decision-making processes nor do they analyse their strategies systematically.

OHN role

The participants' choice of strategies and their application depends on the companies' structures, the persons in strategic positions and their representations of OHNs' roles and capacities. Participants' competencies and values, on the other hand, influence their choice in the given context. The findings show that OHNs' strategies are related to power aspects and the influence of the traditional nurse role. The perception of a lack of recognition of their expert role by companies and workers alike is confirmed by a review of international studies on public perceptions of nursing: nurses were trusted but not respected and their roles were not well understood [35]. The Finnish study on OHNs' difficulties in health promotion in the workplace found that the companies' lack of knowledge and their attitudes hindered OHNs in implementing projects [36]. As that study used a quantitative design, it is impossible to affirm that these attitudes were related to power aspects. The findings of the present study indicate furthermore that OHNs' values impact their strategies and tasks. Understanding or rallying to the companies' priorities can help some OHNs to reconcile their values with the companies' provisions if they perceive the companies' attitude to workers as benevolent. This is supported by a review of studies on nurses' identity [37] that confirms the importance that nurses give to clients' needs. The review further indicates that this attitude acts as an obstacle to recognition as expert professionals if it is not adequately communicated to the public and within the nursing community.

Health promotion concept

The sample's approach to health promotion is shaped by their training but also by what companies consider acceptable, i.e. mainly health education and behaviour change. Quantitative research in Finland has shown that companies are willing to accept behaviour change activities but are less likely to support the development of the worker community [38]. Other studies indicate that health education is in general nurses' most common health promotion activity and that nurses' need

support to learn about health policies and multidisciplinary approaches to health promotion [39]. Most of the participants in the present study work in teams with non-health professionals. Still, they may lack proficiency in a broader scope of health promotion approaches that are not based on biomedical expertise.

OHNs doubts about assessment aspects of health promotion and the value they attribute to experience are again linked to the organisational pressures under which they operate, e.g. short-term objectives. This has also been highlighted in other studies [40]. However, there may also exist a lack of theoretical knowledge, and for some participants, uncertainty about their role. Lacking role clarity was a barrier to health promotion in Norwegian Public health Nurses (PHNs) as it could lead to contradictory interpretations and reduced PHNs capacity to assert their health promotion role [41].

In the present study, the perception of experience as an essential factor in health promotion may also be influenced by knowledge seeking habits. A recent study investigated how Swedish PHNs' searched for knowledge and found personal experience to be one of the primary knowledge sources [42]. Lack of time and ability to assess research-based knowledge were the principal barriers to accessing information for these PHNs. Participants in the present study have frequently mentioned insufficient time resources. While some of the participants have both the linguistic and academic capacities to look for and assess research-based knowledge, it is not the case for all of them.

Gender appears to be an overlooked element in health promotion in this sample which is in line with results of a scoping review on interventions aimed at women. The review confirms an overall scarcity of gender-sensitive health promotion interventions aimed at women but highlights good results for those that did take gender into account [43]. The same applies to a study on "experiential knowing" about men's health promotion interventions [44].

The findings of the present study do not show differences attributable to participants' gender, canton of practice or category of company.

5 Implication of the findings

The findings of this study indicate that OHNs with broader knowledge of business and safety related subjects fare overall better in managing health promotion activities at the workplace. The study identified how barriers linked to company structures and short-term priorities in current corporate environments limit OHNs' health promotion activities in the worker community. OHNs are public health actors without, however, being recognized or acknowledged in their public health role. Moreover, OHNs may unwillingly participate in increasing health inequalities by setting up activities valued by companies.

It is important that OHN training addresses OHNs' corporate environment and companies' short-term objectives. Management capacities, solid knowledge of organisational structures, and economics would increase OHNs ability to analyse their strategies [45]. Additionally, evidence-based information about managers' perceptions and experiences of health promotion would help OHNs to identify strategies that integrate companies' realities [46]. Fostering occupational safety competencies would additionally ease OHNs' integration into companies and facilitate collaboration [47].

Furthermore, it is essential to market OHNs competencies and scope of practice within companies and political and social agencies concerned with workers' health to support OHNs' health promotion efforts [48]. Providing companies and OHNs with a formal, comprehensive OHN framework issued by professional associations would increase OHNs' recognition as a crucial public health workforce and guide companies in workforce health management.

Finally, curricula need to include population-based health promotion approaches aimed at occupational health and the workers' community. Proficiency in gender-sensitive approaches and inequality issues could empower OHNs to affirm their expert position more confidently and enable them to strategically choose the best possible options [49].

Future research should investigate company managers' experience of health promotion, i.e. what they do to promote health in the company and how this is influenced.

6 Limitations

Despite the diversity of the sample in the present study, it may not reflect the entire OHN community. No OHNs working for external OH providers, i.e. with a workplace outside the company, could be recruited. These OHNs are probably less involved in health promotion and may have felt less knowledgeable about the topic. Nevertheless, the purposive sampling approach resulted in a broad scope of experiences and a rich data set and enhanced the validity of the findings [50]. However, OHNs' accounts may not have been an elaboration of their actual experiences [51] but that of an ideal state.

Conflict of interest

The author declares no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

7 References

[1]World Health Organization, WHO, *"Workplace health promotion,"* 2017.
http://www.who.int/occupational_health/topics/workplace/en/index1.html.

[2]S. Whitaker, B. Baranski, "*The Role of the Occupational Health Nurse in Workplace Health Management, 2001*. http://www.who.int/occupational_health/regions/en/oeheurnursing.pdf.

[3]B. Rogers, et al., "International Survey of Occupational Health Nurses' Roles in Multidisciplinary Teamwork in Occupational Health Services," Workplace Health &Safety, vol. 62, no. 7, 2014, pp. 274-281.

[4]G. Mellor, W. St John, "Occupational health nurses' perceptions of their current and future roles," Journal of Advanced Nursing, vol. 58, no. 6, 2007, pp. 585-593.

[5]G. Mellor, W. St John, W. "Managers' Perceptions of the Current and Future Role of Occupational Health Nurses in Australia," AAOHN Journal, vol. 57, no. 2, 2009, pp. 79-87.

[6]P. Naumanen, J. Liesivuory, "Workplace health promotion activities of Finnish occupational health nurses," Public Health Nursing, vol. 26, no. 39, 2009, pp. 218-228.

[7]D. I. T. Roloff, et al., "Occupational health nurses: interdisciplinary experience in occupational health," Revista Brasileira de Enfermagem, vol. 69, no. 5, 2016, pp. 842-855.

[8]C. Higounenc, "Les enjeux autour de l'intégration des infirmiers dans les Services de Santé au Travail Interentreprises (MA), Université de Toulouse, Dumas, 2014. https://dumas.ccsd.cnrs.fr/dumas-01168953.

[9]S. Pantoni, J. Kubiak, L. Horn, P. Depezeville, "Etude des modalités de coopération et de coordination des actions et des acteurs de la prévention des risques professionnels dans les entreprises du Nord," 2012. http://gestes.net/wp-content/uploads/2012/10/Rapport-scientifique-v4.pdf?x16711.

[10]Y. C. Lang, "Occupational Health Nursing in the Driver's Seat for Health Promotion, " AAOHN Journal, vol. 57, no. 1, 2009, pp. 9-11.

[11]J. Harrison, L. Dawson, "Occupational Health: Meeting the Challenges of the Next 20 Years," Safety and Health at Work, vol. 7, 2016, pp. 143-149.

[12]D. O. Noonan, "Preparing and conducting interviews to collect data," Nurse Researcher, vol. 20, no. 5, 2013, pp. 28-32.

[13]J. Green, N. Thorogood, " Qualitative methods for health research," Sage, 2016.

[14]K. Charmaz, "Constructionism and the Grounded Theory," In: Holstein, J. A. & Gubrium, J. F. (ed.). Handbook of Constructionist Research, The Guilford Press, 2008, pp. 397-412.

[15]J. Mason, " Qualitative researching," 2nd ed., Sage, 2002.

[16]F. McDermid, K. Peters, D. Jackson, J. Daly, "Conducting qualitative research in the context of pre-existing peer and collegial relationships," Nurse Researcher, vol. 21, no. 5, 2014, pp. 28-33.

[17]R. Berger, "Now I see, now I don't: Researchers position and Reflexivity in Qualitative Research," Qualitative Research, vol. 15, no. 2, 2015, pp. 219-234.

[18]W. Darawshew, "Reflexivity in research: Promoting rigour, reliability and validity in qualitative research," International Journal of Therapy and Rehabilitation, vol. 21, no.12, 2014, pp. 560-568.

[19]M. Ortlipp, "Keeping and using reflexive research journals in the Qualitative research process," The Qualitative Report, vol. 13, no. 4, 2008, pp. 695-705.

[20]L. Tufford, P. Newman, "Bracketing in qualitative research," Qualitative Social Work, vol., 11, no. 1, 2010, pp. 80-96.

[21]Office fédéral de la statistique, OFS, 2018. https://www.bfs.admin.ch/bfs/fr/home.html.

[22]Office fédérale de la santé public, OFSP, "Stratégie nationale de prévention des maladies non transmissibles," 2017. https://www.bag.admin.ch/bag/fr/home/themen/strategien-politik/nationale-gesundheitsstrategien/strategie-nicht-uebertragbare-krankheiten.html.

[23]S. J. Gentles, C. Charles, J. Ploeg, K. A. McKibbon, "Sampling in Qualitative Research: Insights from an Overview of the Methods Literature, " The Qualitative Report, vol. 20, no. 11, 2015, pp. 1772-1789.

[24]P. Longchamp, K. Toffel, F. Bühlmann, A, Tawfik, "De la sociologie de l'innovation à l'imagination sociologique : La théorie des champs à l'épreuve de la profession infirmière," Cahiers de recherche sociologique, vol. 59/60, 2016, pp. 135-156.

[25]J. Green, N. Thorogood, " Qualitative methods for health research," Sage, 2016.

[26]J. Fereday, E. Muir-Cochrane, "Demonstrating Rigor using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development," International Journal of Qualitative methods, vol. 5, no. 1, 2006. https://sites.ualberta.ca/~iiqm/backissues/5_1/PDF/FEREDAY.PDF

[27]M. Birks, Y. Chapman, K. Francis, " Memoing in qualitative research, " Journal of Research in Nursing, vol. 13, no. 1, 2008, pp. 68-75.

[28]M. Vaismoradi, H. Turunen, T. Bondas, "Content analysis and thematic analysis: Implication for conducting a qualitative descriptive study," Nursing & Health Sciences, vol. 15, 2013, pp. 398-405.

[29]G. R. Gibbs, "Thematic Coding and Categorizing," In: Analyzing qualitative data. SAGE, 2007, pp. 38–56. http://srmo.sagepub.com.ezproxy.liv.ac.uk/view/analyzing-qualitative-data/n4.xml

[30]V. Braun, V. Clarke, "Using Thematic Analysis in Psychology," Qualitative Research in Psychology, vol. 3, 2006, pp. 77-101.

[31]P. A. Hannon, et al. "Stakeholder Perspectives on Workplace Health Promotion: A Qualitative Study of Midsized Employers in Low-Wage Industries, " American Journal of Health Promotion, vol. 27, no. 2, 2012, pp. 103-110.

[32]J-M. Cairns, et al., "Weighing up the evidence: a systematic review of the effectiveness of workplace interventions to tackle socio-economic inequalities in obesity," Journal of Public Health, vol. 37, no. 4, 2014, pp. 659 –670.

[33]P. A. Hart, D. K. Olson, A. L. Fredrickson, P. McGovern, "Competencies Most Valued by Employers - Implications for Master's-Prepared Occupational Health Nurses, " AAOHN Journal, vol. 54 no. 7, 2006, pp. 327-335.

[34]V. Maijala, K. Tossavainen, H. Turunen, " Identifying nurse practitioners' required case management competencies in health promotion practice in municipal public primary health care. A two-stage modified Delphi study," Journal of Clinical Nursing, vol. 24, 2015, pp. 2554-2561.

[35]J. Girvin, D. Jackson, M. Hutchinson, "Contemporary public perceptions of nursing: a systematic review and narrative synthesis of the international research evidence," Journal of Nursing Management, vol. 24, 2016, pp. 994-1006.

[36]Naumanen, J. Liesivuory, "Workplace health promotion activities of Finnish occupational health nurses," Public Health Nursing, vol. 26, no. 39, 2009, pp. 218-228.

[37]Y. Ten Hoeve, G. Jansen, P. Roodbol, "The nursing profession: public image, self-concept and professional identity. A discussion paper," Journal of Advanced Nursing, vol. 70, no. 2, 2013, pp. 205-309.

[38]Naumanen, J. Liesivuory, "Workplace health promotion activities of Finnish occupational health nurses," Public Health Nursing, vol. 26, no. 39, 2009, pp. 218-228.

[39]D. Whitehead, "Reconciling the differences between health promotion in nursing and "general" health promotion," International Journal of Nursing Studies, vol. 46, 2009, pp. 865-874.

[40]Naumanen, J. Liesivuory, J. "Workplace health promotion activities of Finnish occupational health nurses," Public Health Nursing, vol. 26, no. 39, 2009, pp. 218-228.

[41]S. Wilhelmsson, M. Lindberg, "Health promotion: Facilitators and barriers perceived by district nurses," International Journal of Nursing Practice, vol. 14, 2009, pp. 156-163.

[42]M. Weum, L. Bragstad, K. Glavin, "How public health nurses use sources of knowledge," Sykepleien Forskning, vol. 12, e-64242, 2017. https://static.sykepleien.no/sites/default/files/pdf-export/pdf-export-65510.pdf?c=1517994738.

[43]M. L. Fang, J. Gerbrandt, A. Liwander, A. Pederson, "Exploring Promising Gender-Sensitive Tobacco and Alcohol Use Interventions: Results of a Scoping Review, " Substance Use & Misuse, vol. 49, 2014, pp. 1400-1416.

[44]S. Robertson, K. Witty, S. Zwolinsky, R. Day, "Men's health promotion interventions: what have we learned from previous programmes? ," Community Practitioner, vol. 86, no. 11, 2013, pp. 38-44.

[45]D. J. Hunter, "Managing For Health," Routledge, 2007.

[46]K. Blizzard, "The Meaning of Occupational Health Among Human Ressources Professionals-A Qualitative Study, " AAOHN Journal, vol. 54, no. 6, 2006, pp. 282-289.

[47]R. R. Loeppke, et al., "Integrating Health and Safety in the Workplace," Journal of Occupational and Environmental Medicine, vol. 57, no. 5, 2015, pp. 585-597.

[48]G. Mellor, W. St John, C. McVeigh, C. "Occupational health nursing practice in Australia: What occupational health nurses say they do and what they actually do," Collegian, vol. 13 no. 3, 2006, pp. 18-24.

[49]L. Engbers, "Monitoring and Evaluation of Worksite health Promotion Programs – Current state of knowledge and implications for practice" 2007. http://www.who.int/dietphysicalactivity/Engbers-monitoringevaluation.pdf

[50]J. M. Morse, "Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry," Qualitative Health Research, vol. 25, no. 9, 2015, pp. 1212-1222.

[51]J. Green, N. Thorogood, " Qualitative methods for health research," Sage, 2016.