

**ORIGINAL RESEARCH:  
EMPIRICAL RESEARCH - QUALITATIVE**



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# To initiate the conversation – Public health nurses' experiences of working with obesity in persons with mobility disability

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## Abstract

**Aim:** Developing a theory explaining how public health nurses accomplish and adapt counselling in lifestyle habits to decrease obesity in people with mobility disability.

**Design:** Empirical research - qualitative.

**Method:** Classic grounded theory with face-to-face interviews, 2017–2018, using inductive approach to understand public health nurses' intervening experiences with obesity patients.

**Results:** To initiate the conversation emerged as the main concern meaning having difficulties initiating conversations about obesity with patients. Public health nurses' facilitators to communicate lifestyle changes emerged as the pattern generating the theory, which consists of the categories; person-centeredness in the situation, experience and knowledge, strengthening conditions, access to other professionals and prioritization in everyday work.

**Conclusions:** Public health nurses hesitate to raise topics of obesity in patients with mobility disability. They advocate increased integration with lifestyle changes in everyday work including multi-professional cooperation. The implication is testing the emerged theory at primary health care centres.

**Impact:** Obesity is more common in people with mobility disability than in those without. There is a need to understand how public health nurses adapt counselling in lifestyle habits. Public health nurses hesitate to talk about obesity with patients in fear of offending anyone. Public health nurses did not distinguish between patients with or without mobility disability. Several facilitators could be helpful initiating conversation with the patients. Public health nurses need more time and resources to facilitate conversation with patients with mobility disability to counsel lifestyle changes.

## KEYWORDS

chronic condition, grounded theory, interdisciplinary team, lifestyle, mobility disability, nurses, obesity, primary health care, primary health care centre, public health nurses

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## 1 | INTRODUCTION

In treatment and prevention of obesity-related diseases and weight control, regular physical activity is fundamental (Shaw, Gennat, O'Rourke, & Del Mar, 2006; WHO, 2010), which is difficult for people with a mobility disability (MD). Motivational interviewing (MI) and cognitive behaviour therapy increase physical activity level in obesity treatment (Barrett, Begg, O'Halloran, & Kingsley, 2018). But several barriers to behaviour changes have been highlighted, for example poor motivation, lack of time, societal and social pressures and lack of enjoyment of exercise (Burgess, Hassmén, & Pumpa, 2017). Public health nurses (PHNs) have a central role in primary health care and in prevention of obesity diseases and are often the first and sometimes the only health care professional that people meet (Swedish Association of Public Health Nurses, 2008; WHO, 2018b). PHNs, with a specialist education in public health, work with long-term illness and qualified health counselling in lifestyle habits in primary care (Stephen, McInnes, & Halcomb, 2018; Swedish Association of Public Health Nurses, 2008) which are central in obesity treatment. In addition, PHNs are effective in delivering behaviour changes to decrease risk factors associated with obesity (Sargent, Forrest, & Parker, 2012). The professionals at Primary health care centre (PHCC) should provide health care including counselling in lifestyle habits such as nutrition and physical activity, equally to the whole population (Region Skane, 2018; WHO, 2018d). But those with disabilities have greater unmet medical needs (Holmgren, Sandberg, & Ahlstrom, 2018; Mahmoudi & Meade, 2015) and face greater barriers to accessing health care than those without (Horner-Johnson, Dobbertin, Lee, & Andresen, 2014). To our knowledge, research on how nurses at PHCCs work with lifestyle change counselling for people with MD to treat obesity at nurse-led clinics is lacking.

### 1.1 | Background

Overweight and obesity is a worldwide epidemic with associations to diseases such as diabetes, hypertension, coronary heart disease and stroke (Bray & Bellanger, 2006; NCD-RisC, 2016; WHO, 2018c). In 2016, the worldwide prevalence of overweight in adults was 39% and 13% for obesity (WHO, 2018c), with similar numbers in Sweden (Public Health Agency of Sweden, 2017b). In the US, the obesity rate is 58% higher in adults with disability than in adults without disability (Center for Disease Control & Prevention, 2018); the corresponding number in Sweden is 26% (Holmgren, Lindgren, de Munter, Rasmussen, & Ahlstrom, 2014). The global disability rate is estimated to be about 15% whereof 2.2%–3.8% have significant difficulties in functioning (WHO, 2018a). In Sweden, 21% live with some kind of disability and 7% live with MD (Public Health Agency of Sweden, 2017a). A common MD definition is the inability to walk at a moderate walking speed or to climb stairs (Bostrom, 2008; Chung, Demiris, & Thompson, 2015; Public Health Agency of Sweden, 2008), which is important for many activities that are necessary for independent life (WHO, 2011). People with MD also have increased risk of secondary conditions than in those without MD

### Why is this research needed?

- Overweight and obesity are more common in people with mobility disability and there is a need to understand how public health nurses adapt counselling in lifestyle habits to decrease obesity in people with mobility disability at primary health care centres.

### What were the key findings?

- The public health nurses have difficulties starting a conversation regarding obesity in patients with and without mobility disability. Initiating a conversation about obesity was perceived as a sensitive topic with fear of offending anyone.
- The emerging theory included several facilitators that will be helpful when initiating the conversation with the patients.

### Implications for the practice

- The theory should be tested empirically and evaluated how valuable it might be for the public health nurses in their work with counselling of lifestyle changes for persons with mobility disability. This include prioritizing obesity in the daily work with designated time and with a multi-professional cooperation among those who work with lifestyle changes at primary health care centres.

such as obesity, depression and pain (Liou, Pi-Sunyer, & Laferrere, 2005; Rimmer, Chen, & Hsieh, 2011; Rimmer, Rowland, & Yamaki, 2007). Considering both the risk and the high prevalence of obesity and other secondary conditions in people with MD, counselling lifestyle changes in the treatment of obesity is crucial. PHNs are one important professional at PHCC that have the possibility of delivering such counselling.

In the literature, there are guidelines for managing obesity (American College of Cardiology, 2014) including weight and lifestyle history, assessment and treatment of cardiovascular risk factors and obesity-related comorbidities, assessment of readiness to make lifestyle changes and determine weight loss and health goals and interventions strategies. Moreover, a model of evidence-based guidelines adapted for people with MD has been developed (Rimmer et al., 2014), including interventions in eating habits (Plow, Moore, Husni, & Kirwan, 2014; Reichard et al., 2015) and recommendations by rehabilitation professionals (Rimmer, Vanderbom, & Graham, 2016). In a recent review (Marrocco & Krouse, 2017) both people with disability and health care providers revealed barriers in the health care providers' encounters with people with disabilities, such as lack of knowledge about disabilities, communication and collaboration in health care. However, that study did not include obesity treatment nor distinguish between different health providers (34). Furthermore, a pilot study in adapted lifestyle counselling to people with MD showed

PHN	Interview step	Gender	Age	RN since	PHN since
1	Step 1	Female	48	1990	2013
2		Female	56	1997	1999
3		Female	58	1986	2000
4	Step 2	Female	40	2002	2012
5		Female	57	1984	1995
6		Female	46	1994	2011
7	Step 3	Female	55	1989	2003
8		Female	52	1986	2014
9		Male	47	1999	2009
10		Female	56	2000	2005

**TABLE 1** Participants' characteristics

Note: Abbreviations: PHN, Public health nurse; RN, Registered nurse.

significant weight loss (Betts & Froehlich-Grobe, 2017). PHNs are responsible for nurse-led clinics at PHCCs where most of the population receives their care (Drevenhorn & Österlund Efraimsson, 2013), with focus on changing lifestyle habits to decrease obesity. Because of PHNs' role at PHCC and their ability to deliver counselling effectively (Sargent et al., 2012), it becomes important to understand any concerns in their work with lifestyle change counselling and treatment to decrease obesity in people with MD.

## 2 | THE STUDY

### 2.1 | Aim

The aim of the study was to develop a theory to explain how PHNs accomplish and adapt counselling in lifestyle habits to decrease obesity in people with MD. The research questions guiding the study were: (a) what is the main concern when guiding people with MD in the lifestyle change counselling and treatment to decrease obesity; and (b) how do PHNs solve this concern?

### 2.2 | Design

This study applied the grounded theory (GT) qualitative approach, which involves the discovery of emerging patterns in data and the generation of a theory through parallel gathering and analysis of data (Glaser, 1978, 1998). Classic GT was chosen because of its inductive approach to understand the action in a substantive area. The goal of GT is to discover the core variable to solve the problem that explores the patterns of the participants' behaviour (Glaser, 1978). In line with Glaser (Glaser, 1998), no literature review was performed before the researchers entered the field. Data collection was conducted between September 2017–February 2018.

### 2.3 | Sampling procedure and participants

A purposeful selection of PHNs with a specialist education in public health on master level from both rural and urban PHCC in southern Sweden were made. The last author (GA) sent a letter

with information about the study to medical directors at PHCCs asking for permission to contact the PHNs who were most experienced in healthy lifestyle interventions for people with MD. Twenty-six medical directors were contacted and asked to recommend PHNs suitable to interview. The first author (MH) then sent an information letter to these PHNs who were thereafter contacted by telephone in a week, received additional verbal information and were asked if they had any questions and if they were willing to participate in the study. The participants were nine female and one male PHNs, aged 40–58, with work experience between 3–22 years (Table 1).

### 2.4 | Data collection and data analysis

In total, ten face-to face interviews were conducted at the PHNs' workplace, except one that was conducted at Lund University. Interviewing, analysing and coding occurred in an iterative process in accordance with GT by Glaser (Glaser, 1978, 1998) by the first author (MH). All interviews were digitally recorded and lasted between 33–66 min. The study began with three interviews (Interview step 1, Table 1) and, was thereafter analysed by open coding, which means coding the participants' own words, line by line. These three interviews included three open questions: 'What is your experience with meeting persons with MD?' Followed by: 'What is your experience with treating obesity when you meet a person with MD?' And 'In which way would you work with lifestyle counselling and tailoring obesity treatment to people with MD.' To process the PHNs' narratives from the interviews, open coding conceptualizes the underlying pattern of a set of empirical indicators in the data. Open coding includes questioning the data and the narratives during the analysis. Memos, which are the interviewers' thoughts that appear during the analysis and are a core ingredient in GT (Glaser, 1978), were written throughout the analysis to capture new questions and angles. The open coding of the first three interviews generated more refined interview questions.

After the first three interviews were analysed, another three interviews were performed (Interview step 2, Table 1). These three interviews were performed one at a time with an analysis phase

between the interviews where the raw data were coded. Further new questions emerged that were used in later interviews, for example: 'In what way is it difficult to discuss obesity with the patient?,' 'How does the discussion differ if the patients have MD?' and 'How can you facilitate addressing the problem? The codes generated concepts, which were compared continuously during the analysis to ensure that the data and the concepts were related to each other and through this process, the core concept emerged. When the main concern to initiate the conversation and the core concept public health nurses facilitators to communicate lifestyle changes emerged, the next phase of selective coding began.

The core concept explains how participants resolve their main concern (Glaser, 1998). During the selective coding, only those indicators that were related to the main concern in sufficiently significant ways were used (Glaser, 1978). Questions related to the core concept and main concern were asked during the additional three interviews (Interview step 3, Table 1). This included questions, until saturated, such as: 'I have understood that it can be difficult and sensitive to address weight problems with the patient, do you recognize that?,' 'What determines if you address the concern?' and 'Who has the responsibility in weight loss and being physically active?' were asked.

## 2.5 | Ethical considerations

Ethics approval was obtained from the Regional Ethical Review Board in Lund (Dnr: 2015/773). Oral and written informed consent was obtained from all participants. The research was guided by the Helsinki Declaration ("World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects," 2013). To maintain the principle of non-maleficence, the participants were guaranteed confidentiality. All participants were informed that they had the right to withdraw from the study at any time without giving a reason.

## 2.6 | Rigour

In accordance with pre-understanding, the first author (MH) has experience in qualitative research and an education in public health nursing but has no experience working as PHN. Both co-authors (MS and GA) are nurses with experience in performing research in the primary health area and of qualitative research; the third author (GA) has experience with GT. The co-authors read several interviews and reviewed the data to acquire an understanding of the data. All authors continuously discussed the concern, concepts and categories until a consensus was reached. The credibility increases when two or more researchers independently read and review the data objectively and with congruence (Glaser, 1998). When the interviewer assessed that saturation was achieved in the coding of the interview data, this was reviewed by the co-authors, who read the three latest performed interviews and assessed saturation in relation to the content of the coding results. Furthermore, the interviewer made an additional interview, but no new content emerged. The literature was

reviewed after the data collection process. Classic GT was chosen because of its inductive approach and because classic GT allows the researcher to use the GT strategies in a more flexible way (Charmaz, 2014) and thereby allows a more comprehensive, creative and open-minded analysis. Trustworthiness such as fit, relevance, workability and modifiability, are the fundamental sources of trust in GT (Glaser, 1998). Fit represents the pattern of data in accordance with the concept. Experienced and educated PHNs working in large and small PHCCs situated in both urban and rural areas were chosen to represent different cultures, norms and organization sizes.

To ensure the relevance, the co-authors actively participated in the process to guarantee the indicators fit to the concept and its relation to the substantive area narrated by the PHNs. The co-authors' participation in the process also confirmed the integration (workability) of the concepts. 'Workability' describes the work with integration of concepts that fit and are relevant into core category and sub-categories in the theory that explain most of the variation of behaviour in the substantive area to solve the main concern. Modifiability describes how the theory through the constant-comparative method does not miss anything that fits and works with relevance into the theory. These criteria generate trust and make transferability possible to transfer the theory into similar contexts (Glaser, 1998). Another way to strengthen the credibility is using quotations from the participants (Denzin & Lincoln, 2005).

## 3 | FINDINGS

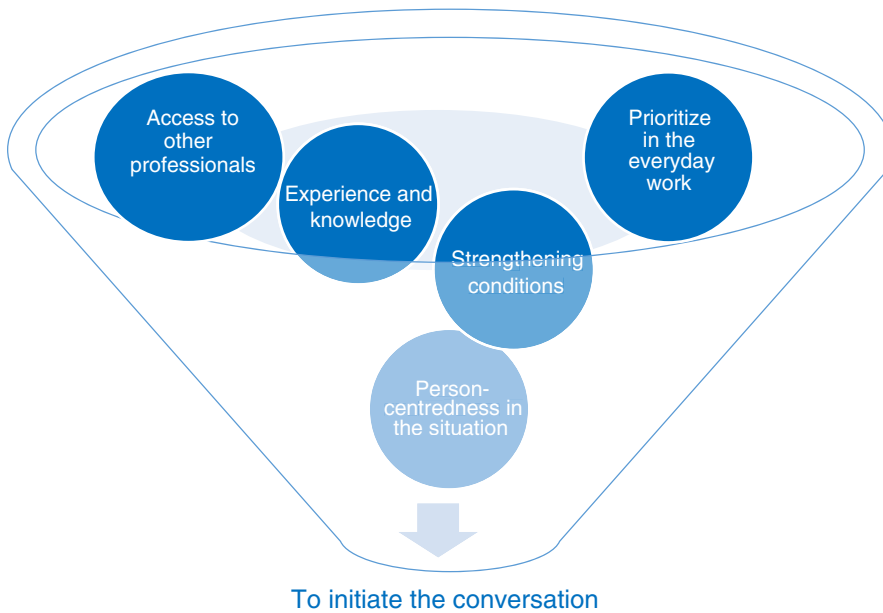
*To initiate the conversation* emerged as the main concern for the PHNs, which means having difficulties starting a conversation about obesity with the patients. Initiating a conversation was perceived as a sensitive topic with fear of offending anyone and therefore, the PHNs hesitated to initiate a conversation, regardless of whether the patients had MD or not:

It is always sensitive to address it, with people who have obesity, it is always a sensitive subject, but I can't say that I think it is more sensitive with them (people with MD) than others..... perhaps we could do much better (#2)

The theory *public health nurses facilitators to communicate lifestyle changes* generated from the data as the pattern of behaviour where PHNs facilitate the possibilities to resolve the concern is illustrated in Figure 1.

### 3.1 | The theory – Public health nurses facilitators to communicate lifestyle changes

*The theory* consists of various categories to overcome the main concern and to enable the PHNs to initiate the conversation. Those categories were: *person-centeredness in the situation, experience and knowledge, strengthening conditions, access to other professionals and prioritization in everyday work*. The categories and sub-categories are presented in Table 2.



**FIGURE 1** The theory 'Public health nurses facilitators to communicate lifestyle changes' explains the need of facilitators taking into account to initiate the conversation. The theory, generated from the data as the pattern of behaviour facilitates the possibilities for the Public health nurses (PHNs) to resolve the concern

### 3.1.1 | Person-centeredness in the situation

The PHNs stated that they did not act differently if they had a patient with or without MD in front of them; instead, they acted on an individual basis, aiming to adapt every meeting to the patients' *needs and conditions*. Despite this, the PHNs mentioned that more time with the patients with MD, or more time to plan the adapted physical activity was needed and could increase the possibility to initiate the conversation talking about obesity. The PHNs talked about the need to 'feel in the situation' and emphasized trust and continuous contact with the patient as important aspects. With 'feel in the situation', the PHNs meant to interpret the patient to

determine if it was possible to initiate the conversation or if there was a resistance to discuss obesity. The PHNs said that *continuous* contact with the patient, could provide an opportunity to initiate the conversation gradually. When obesity was *related to medical issues* such as high blood pressure, diabetes, respiratory problems or arthrosis, the PHNs experienced those as facilitators to initiate the conversation. The PHNs' experiences when starting a conversation related to body weight were described as difficult and uncomfortable when it was for a procedure such as a catheter. Because of the difficulties finding a natural passage into the conversation, the PHNs needed to have counselling of lifestyle changes to decrease obesity in their mind to be prepared to catch the opportunity when the chance arrived:

I try to personalize, try to scan that person's ability to do and that you give advices based on that... (#6)

**TABLE 2** Overview of the categories and sub-categories of the core concept 'public health nurses facilitators to communicate lifestyle changes'

Categories	Sub-categories
Person-centeredness in the situation	Needs and conditions
	Continuous
	Related to medical issues
Experience and knowledge	Years of experiences
	Educated in motivating interviewing
Strengthening conditions	Motivation
	Responsibility
	Group physical activity
Access to other professionals	Physiotherapist
	Dietician
	Physicians
Prioritization in everyday work	Resources
	Management
	Time

### 3.1.2 | Experience and knowledge

Experience and knowledge became important to enable PHNs to act in different situations and thus, to initiate the conversation. PHNs' with prior extensive experiences, who had worked with different patients with MD both at PHCC and at hospitals meant this was important. Through *years of experience*, the PHNs learned to be sensitive in the meetings with the patients that facilitated the initiation of the conversation raising sensitive topics. The PHNs who worked or who had worked as diabetic nurses said that they may have an advantage to initiate the conversation because they were used to talking to patients about lifestyle changes, as nutrition and physical activity are highly important in diabetes self-management. Further, PHNs mentioned that initiating the conversation was easier if obesity and physical activity had been discussed before and recorded in the medical record because they could then refer to the previous conversation. The PHNs said that

their own weight, regardless of weight status, might influence how the patients received their advice. The PHNs mentioned that their own obesity could lead to easier initiation of the conversation because they can talk about their own concerns with the patients. On the other side, PHNs experienced that PHNs who were too thin could be perceived as less trustworthy because they did not understand the patients' concerns. The PHNs express that even though their education in public health focused on preventive work, their daily work did not include prevention or counselling in lifestyle changes to decrease obesity or prevent obesity-related diseases as they would like. In addition, some PHNs were *educated in motivated interviewing* and they expressed feeling confident in their attempts to initiate the conversation but that it is a method more for patients who already have started a lifestyle change process and not primarily to initiate the conversation. The PHNs also wanted the PHCCs to provide more education in communication methodology:

I think the more years you have worked, the easier it is for you to dare and find opportunities where it would be appropriate to initiate it... (#8)

### 3.1.3 | Strengthening conditions

Strengthening conditions were seen among the PHNs when initiating the conversation. *Motivation* was experienced from two perspectives: the PHNs' and the patients'. The PHNs experienced that it was not always easy to motivate the patient, but their motivational attitude could be a necessity for initiating the conversation even though they said that the patient was unwilling to change his or her lifestyle. Furthermore, the PHNs said that it was important to be satisfied with their own contribution to be able to continue motivating the patient. The PHNs expressed having *responsibility* in making the patient aware of their lifestyle and the risks of increased or new health problems, but said that, in the end, it was the patient's responsibility to change their lifestyle. Through questioning, that also facilitates the initiation of the conversation, the PHNs mapped the patient's life situation and made a suitable plan for the patient. This adapted advice and recommendations, considering the patient's size of obesity and physical activity level:

... then the doctors put notes in my mail-box," wish to lose weight..."... "need to lose weight" and then I start by calling and asking about the motivation. I mean, working with a patient who absolutely not... Is it the doctor who wants it or is it the patient? It is first and foremost important in all behavioral changes (#7)

The nurses advocated *group physical activity* due to the positive dynamics a group could make to individuals. However, group physical activity was not offered as an obvious option at the PHCCs for patients with or without MD. Thus, initiation of the conversation should be facilitated through the provision of group physical activity to patients with or without MD.

### 3.1.4 | Access to other professionals

The PHNs worked closely with other professionals, such as *physiotherapists* and *dieticians* and consulted with them for their specific expertise. The physiotherapist was described as an important resource for giving recommendations on physical activities for patients who had special needs such as MD and/or pain. Furthermore, the physiotherapists were also often experienced professionals who organized various kinds of group activities. Teamwork with physiotherapists and dieticians was advocated by the PHNs who could think of themselves as a key person in the team. Initiating the conversation could be facilitated by offering group meetings with both the physiotherapist and the dietician together with the patient, which was suggested by the PHNs. However, the dietician often worked at several PHCCs and it was common that they only worked once a week at the same PHCC, which hampered such meetings. *Physicians* were also suggested as members of the team who needed to work towards the same goal. Thus, close collaboration with other professionals such as physiotherapists, dieticians and physicians strengthens shared goals in the work. The PHNs told that all in the team should give the same advice to the patient so that a culture would exist that facilitate teamwork to provide security and thereby, facilitate the initiation of the conversation. In addition, to diminish the workload for the PHNs, suggestions were given about cooperation with private weight-loss companies that could be subsidized as a treatment, national sports federations and/or health coaches at the PHCCs:

... you have to have multi-professional collaboration with physiotherapist and dietician. You can't do it yourself, there has to be a collaboration around it all (#3)

### 3.1.5 | Prioritization in everyday work

*Resources* in terms of staff at the PHCCs were experienced as a necessity to initiate the conversation. The PHNs said that when the PHCC was understaffed, other everyday work such as injections was prioritized before work with lifestyle changes. The PHNs said that even though lifestyle changes are considered to be the first-hand treatment in lifestyle diseases, it was still difficult to prioritize this in the everyday work schedule. They experienced that answering the telephone had been prioritized by *management* as a result of a politic initiative connected to reimbursement where patients had the option to choose the PHCC they wanted. Management was crucial for the included professionals and depending on the PHCCs' priorities. Dieticians seemed to be the professionals who were either 'in or out' in comparison to the other professionals, such as PHNs, physicians and physiotherapists. Some PHCCs prioritized dieticians to work with patients with obesity, others did not but instead prioritized their work with malnutrition patients. Preventive work and counselling of lifestyle changes to decrease obesity was *time-consuming* and the PHNs had little time for planning group activities focused on nutrition and physical activity together with the other professionals. Independent of management at the PHCCs, a lack of

resources and time were barriers and did not facilitate the initiation to the conversation:

....a lot is given low priority and this is such a thing  
– lifestyle habits. It is after all, the first choice in all  
treatment with regard to osteoarthritis, hypertension,  
obesity. The first achievement, comes last (#9)

## 4 | DISCUSSION

In this GT study, the pattern of behaviour *Public health nurses' facilitators to communicate lifestyle changes* explains the PHNs need to resolve their main concern *To initiate the conversation*. This study shows that the PHNs need a theory/model to work from to facilitate the conversation, including *person-centeredness in the situation, experience and knowledge, strengthening conditions, access to other professionals* and *prioritization in everyday work*. These areas suggest that if the barriers were decreased, the PHNs could better succeed with the primary goal to initiate the conversation. GT is fitting for health care research because of its empirical orientation (Nathaniel & Andrews, 2007) and the theory derived from this study can help PHNs to understand certain patterns that seem to emerge in predictable ways. An important finding in this study was that the PHNs hesitated to talk about obesity in fear of offending the patient despite existing guidelines for obesity treatment, in general, as well as guidelines for counselling in lifestyle changes (American College of Cardiology, 2014; The National Board of Health & Welfare, 2018). This hesitation likely depends on the sensitivity of the topic. This fear has been given attention in previous literature, from both physicians' and nurses' perspectives, who express difficulties in raising the sensitive topic of obesity with patients (Blackburn, Stathi, Keogh, & Eccleston, 2015; Jansen, Desbrow, & Ball, 2015; Michie, 2007). Despite being acknowledged in previous research, the present study revealed that it is still a concern which needs greater attention. In addition, the PHNs did not distinguish between patients with or without MD when initiating the conversation. This is unexpected as there is need for adapted counselling in lifestyle changes and obesity treatment for people with disabilities (Rimmer et al., 2014, 2016). Therefore, more focus on this group in the lifestyle changes and obesity treatment is needed. Although several parts of the findings are in line with previous findings the theory/model needs to be tested in its entirety.

Medical issues were mentioned as a facilitator in *person-centeredness in the situation*. The PHNs described that it was unnatural to initiate the conversation when obesity was not related to medical issues, which is in line with a previous study by Blackburn et al. (2015). Stigmatization may also influence the ability to raise the topic of obesity. It has been shown that health care providers' negative attitudes about people with obesity contribute to less person-centred communications (Phelan et al., 2015). Stigmatization of people with physical disability (Green, 2007; Read, Morton, & Ryan, 2015), may also contribute as an additional barrier to the initiation of the

conversation in people who have both MD and obesity. Further, the PHNs said that they 'feel in the situation' before they decide to initiate the conversation or not. To facilitate these barriers and more easily overcome the issues, one proposal could be to routinely screen for obesity in all patients visiting the PHCC, which includes patients with MD, as suggested by Kushner and Ryan (2014). Routinely screening could be performed at annual visits depending on the patients' risk factors. All PHCCs and all patients need a consequent screening routine to minimize the providers' fear of uncomfortable questions and to "point out" any certain group. Screening all adult patients should also facilitate using MI that is experienced by the PHNs as a method for patients who already have started a lifestyle change process. MI is an effective behavioural lifestyle counselling method that is reported in the literature (Noordman, van der Weijden, & van Dulmen, 2012). The PHNs' *experience and knowledge* in MI could be useful but more focus is needed on the initiation of the conversation. Although MI and other behaviour change methods have shown significant but modest effectiveness in weight loss and increased physical activity (Samdal, Eide, Barth, Williams, & Meland, 2017) and are used by the PHNs, it will not be useful if the PHNs do not initiate the conversation about obesity. Strategies expressed by people with MD themselves (Holmgren et al., 2018) could also facilitate initiation to the conversation about obesity. However, increased knowledge is needed about the complexity of living with MD in a broader view than focus on obesity (Mudge et al., 2013).

In present study, *strengthening the condition* was seen through the positive attitude and willingness to work with lifestyle changes described by the PHNs to initiate the conversation. This has also emerged in a study Kardakis, Weinehall, Jerden, Nystrom, and Johansson (2014) where health professionals, especially PHNs expressed a need to develop PHCC programmes to promote healthy lifestyle intervention such as healthy eating and physical activity. Thus, the theory/model in the present study could be useful in the development of such programmes adapted to people with MD.

Screening and *access to other professionals* could initiate the conversation and thereby, PHNs could intervene with counselling of healthy lifestyle. The PHNs described the physiotherapist as an important resource when it came to recommendations of physical activity for patients who had special needs such as MD and/or pain. Physical activity is one evident method to reduce pain and increase body function (Gomes-Neto et al., 2017; Sampath, Mani, Miyamori, & Tumilty, 2016).

The PHNs also mentioned the importance of teamwork at the PHCC. Interdisciplinary interventions including disciplines such as dieticians, behavioural psychologists and exercise physiologists has shown effectiveness in weight loss (Tapsell et al., 2017; Tapsell & Neale, 2015). Despite effectiveness in weight loss, there are still challenges in implementing interdisciplinary weight management in PHCCs. A qualitative study (Asselin, Osunlana, Ogunleye, Sharma, & Campbell-Scherer, 2016) showed the clinic environment to be a key factor and they emphasized firm interdisciplinary relationships and communication as strategies to overcome this. Another study in a PHCC context found barriers and facilitators similar to those in the

present study and suggested multidisciplinary care settings to overcome these barriers (Aboueid, Bourgeault, & Giroux, 2018). This study also showed that nutrition in weight management was not a priority, to refer to medical records during the conversation facilitated talking about nutrition, working together facilitated patient information consistency and lack of time was described as a great barrier talking about nutrition. Additionally, they showed that it was easier to talk about nutrition if the patient was already diagnosed with a secondary condition, for example diabetes. However, they did not highlight the importance of physical activity which is a barrier to people with MD (Aboueid et al., 2018). Therefore, research with, multi-professional interventions including PHNs, patients themselves, dieticians, physiotherapists and physicians with a focus on lifestyle changes with weight loss outcomes delivered to people with MD in PHCC settings is needed. A first step would be to test the theory presented in the present study and to invite the different professionals to develop an intervention adapted to people with MD at PHCCs.

*Prioritization in everyday work* was a great challenge for the PHNs to be able to counsel about healthy lifestyle and treatment of obesity. A lack of time and resources, such as staff, were barriers in their attempts to initiate the conversation in the present study. This result is in line with previous literature where a lack of time and resources have been shown as barriers to obesity management (Blackburn et al., 2015; Hansson, Rasmussen, & Ahlstrom, 2011; Jansen et al., 2015). A lack of time and resources hardly favours persons with MD, who are a vulnerable group and therefore more time and resources are needed if counselling of lifestyle changes and obesity treatment should become a reality for people with MD.

#### 4.1 | Limitations

According to Creswell (2007) a GT study should include a larger number of interviews than in this study. Data in this study were saturated after nine interviews. This may be because the participants had similar experiences due to the work situation. In addition, the PHN defined persons with MD from their own perceptions, which probably had been influenced by the extent of the experiences. However, the experiences among PHN were mainly concordant in this study.

## 5 | CONCLUSION

The PHN described that they hesitate to initiate a conversation about obesity because of their fear of offending anyone. The emerging theory included several facilitators such as; person-centeredness in the situation, experience and knowledge, strengthening conditions, access to other professionals and prioritization in everyday work to solve the concern; to initiate the conversation. The PHN implied that the conversations should be facilitated by prioritizing obesity in the daily work with designated time and should include multi-professional cooperation with all those who work with lifestyle changes at the PHCC. This is especially important for people with MD who are in need of more time with health

care staff when visiting PHCCs and that the professionals they meet have greater knowledge about MD and the specific needs of people with MD.

In addition, routine screening of all patients at annual visits could also facilitate raising the sensitive topic of obesity. The real need of time and resources must be anchored politically. The theory should be tested empirically and evaluated how valuable it might be for the PHNs in their work with counselling of lifestyle changes for persons with MD.

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#### CONFLICT OF INTEREST

The authors declare they have no conflict of interests.

#### AUTHOR CONTRIBUTIONS

MH and GA, made substantial contributions to the conception and design of the study in collaboration with MS, acquisition of data, analysis and interpretation of data. MH performed the literature review and the interviews. The analysis was performed by MH and was independently validated by GA and MS. MH drafted the manuscript. GA and MS contributed to the interpretation of the results and the content as well as critically reviewed the manuscript. All authors read and approved final manuscript.

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