Paper I

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Healthy Life Centre participants' perceptions of living with overweight or obesity and seeking help for a perceived "wrong" lifestyle - a qualitative interview study

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Abstract

Background: Overweight and obesity are complex conditions, associated with a wide range of serious health issues. In contemporary society, body size is an important part of a person's self-representation. Lifestyle changes are difficult and long-term weight management is associated with a high risk of failure. In primary health care in Norway, lifestyle interventions are offered by Healthy Life Centres (HLCs) to those seeking help with weight management. The aim of this study was to explore HLC participants' experiences of living with overweight or obesity and perceptions of seeking help to change dietary and activity habits.

Method: This exploratory study employed a qualitative design. Semi-structured in-depth interviews were conducted with 13 participants. Data were transcribed verbatim and analysed using qualitative content analysis.

Results: The analysis resulted in one main theme: Searching for dignity, based on two themes: 1) Needing to justify avoidance of personal responsibility and 2) A desire to change.

Conclusion: Changing dietary and activity habits is difficult as the emotional alternation between shame, guilt and pride influences the ability to assume personal responsibility. A deeper understanding of each participant's perceptions and experiences is important for the ability to tailor and provide a high quality health service. Addressing participants' emotional distress and search for dignity is necessary for enabling dietary and activity change. This should be considered in the future development of HLCs and health promotion interventions in order to educate service users about emotions and the role they play in food consumption and inactivity. Weight stigma at individual and system level as well as responsibility related to dilemmas about "right" or "wrong" lifestyle should be addressed.

Keywords: Overweight, Obesity, Help-seeking, Personal responsibility, Healthy life Centres, Shame and pride, Qualitative research

Background

Overweight and obesity present an increased risk to health and are major risk factors for a number of non-communicable diseases (NCDs) including type-2 diabetes (T2DM), cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), some types of cancer, musculoskeletal disorders and mental health problems [1–3]. The risk of NCDs is primarily driven by tobacco use, physical inactivity, unhealthy diet and alcohol abuse [2]. The Norwegian Directorate of Health recommends the establishment of Healthy Life Centres (HLCs) in all municipalities in order to assist persons at risk of NCDs, or in need for support for health behav-iour change or weight management [4]. Empirical evi-dence highlights the importance of lifestyle change as a key component of risk reduction and the promotion of healthy development [5]. A healthy lifestyle is associated

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with protective risk factor levels and lower levels of symptoms and illness, including psychological illness [6]. The outcome of educational interventions aimed at increasing the level of physical activity (PA) with follow up in primary care is uncertain [7]. In addition, a quantitative study of HCL lifestyle interventions reveals that participation in a prescribed group-based exercise programme for 3 months may improve physical fitness and Health Related Quality of Life (HRQoL) [8]. In a literature review, the main barriers to the success of educational programmes were found to be psychological and environmental, but also socio-economic [9].

The individualization of health has been discussed in recent decades and this ideological shift in health promotion makes every individual responsible for her/his own health and for learning to adopt rational lifestyle behaviours [10, 11]. Studies of attitudes towards obesity show that as many as 72% mentioned individual reasons for obesity. Media and public health campaigns may solidify beliefs that obesity is due to individual causes, thus increasing the stigma [12]. A Norwegian study of normative newspaper messages on obesity and health, revealed a focus on bodily conformity, linking leanness with attractiveness, obesity with ugliness and lack of control with lack of responsibility [13]. Numerous stud-ies have documented harmful weight-based stereotypes such as persons with overweight and obesity are lazy, unintelligent, have poor willpower and are noncompliant with weight-loss treatment [14, 15]. These stereotypes give rise to stigma, prejudice and discrimination against obese persons in multiple domains of life [15, 16], thus contributing to their lower psychological functioning and well-being [17]. Stigma can be a barrier to seeking help for weight management [18, 19].

In a qualitative study of primary care physicians and nurses responsible for lifestyle change, a majority reported that a major barrier was patients' unwillingness to change their habits [20]. In earlier studies of participants' percep-tions of self-responsibility in an intervention to prevent T2DM, the informants had an ambivalent attitude to-wards self-responsibility and their own role in lifestyle change and its maintenance [21]. A majority of lifestyle intervention participants characterize lifestyle change as a constant struggle [21, 22] and weight management as an endless battle against temptations [21]. In a study about lifestyle issues in clinical dialogues, patients took a pro-active role in defending themselves against shame and made great efforts to present themselves as responsible agents in matters of health [23]. The participants in a pre-vious qualitative study of Norwegian HLCs described how earlier life experiences and emotional baggage can influ-ence lifestyle change and questioned whether or not HLCs can actually help participants with substantial emotional baggage to change their lifestyle [22]. In addition, HLC stakeholders have a wide range of expectations and they describe HLCs as a concept in development [24]. In a newly published cross-sectional study of the characteristics of participants who started attending a HLC, the most frequent reasons were being overweight, wanting to increase physical activity, improve dietary habits and cope with musculoskeletal health challenges [25].

The scientific evidence of the long term effects of health promotion interventions in primary care is still not convincing [9, 26, 27]. There are few studies of life-style interventions in HLCs in Norway and sparse know-ledge of the participants' background, and help-seeking needs. There is a need for a better understanding of the participants' experiences and perceptions in order to understand how HLCs can provide a qualitatively good health service and support them to change their lifestyle. More research is needed to understand their perspective, as well as the more complex, less articulated influences such as knowledge, skills, motivation and emotional sta-tus that can lead to weight gain and inactivity, but also to change. The aim of this study was therefore to ex-plore HLC participants' experiences of living with obes-ity and perceptions of seeking help to change dietary and activity habits.

Method

Design

We chose a qualitative, descriptive and interpretative design grounded in hermeneutic methodology and trad-ition [28, 29]. The purpose of a qualitative approach is to explore complex phenomena and discover themes or patterns based on experiences and perceptions to under-stand behaviour in order to inform clinical practice [30].

Study context

The Norwegian healthcare system provides health promotion in primary healthcare. HLCs constitute an interdisciplinary primary healthcare service providing effective, knowledge-based measures for people with, or at high risk of disease, who need support for health be-haviour change and to cope with health problems and chronic disease [31]. This low threshold service is easily accessible through direct contact or by referrals from general practitioners (GPs) and participation is not based on Body Mass Index (BMI). At the HLCs, health educa-tion is provided by healthcare professionals (including physiotherapists, public health nurses, psychiatric nurses and bachelors in public health) to help participants change their lifestyle habits. The health conversation is based on each participant's perception and understand-ing of the challenges for which she/he is seeking help. Physical activity in the form of individual or group-based in- and outdoor activities, often with a physical therapist, is offered two to three times a week.

HLCs also have a healthy diet course consisting of 4 to 5 two-hour sessions with practical tasks and theory, often with a public health nurse or nutritionist. An interven-tion lasts for 3 months with the possibility to extend it on two occasions, although this is practiced differently in the various municipalities. The organisation of the HLC differs between the various municipalities and small communities have inter-municipal cooperation that enables participants to attend courses across muni-cipal boundaries.

Participants

Purposive sampling [32] was used to identify partici-pants for interview to ensure that the sample in-cluded individuals of both sexes and various ages, from small and medium-sized municipalities, with ex-perience of living with overweight or obesity. The in-clusion criteria were; women and men aged 18 to 80 years with overweight or obesity, who had contacted the HLC to obtain help with weight management, and who were able to speak and understand the Nor-wegian language. HLC administrators were asked to send requests to service users who had participated in lifestyle courses. The participants in this study were recruited from five different HLCs in Norway. The first author contacted all the service users after they had consented to participate. A total of 13 par-ticipants were included in this study (Table 1). The majority had contacted the HLC on their own initia-tive because they wanted to change their lifestyle habits and lose weight. Some were recommended life-style changes such as regular moderately intensive physical activity, healthy diet and weight reduction by their GP. The participants were either overweight or obese and had additional challenges and diagnoses which put them at risk (Table 2).

Table 1 Participant characteristics

Characteristics	Number of participants
Gender	
Female	8
Male	5
Age	
30–69	13
Mean age women	47,5
Mean age men	55,4
Civil status	
Single/divorced	1
Widow/widower	1
Partner/married	11
Education	
Secondary school	11
Bachelor degree or higher	2
Occupational status	
Employee 50–80%	4
Unemployed	2
Disability pension	5
Retired	2
Participation in HLC	
Healthy diet courses	11
Activity groups	12
Individual conversations with HP	13

Data collection

Individual semi-structured in-depth interviews were conducted to gather data on the service users' percep-tions of living with overweight or obesity and seeking help to change dietary and activity habits. ES and ALH developed the thematic interview guide with follow up questions in accordance with Kvale and Brinkman [33] and the first author (ES) performed the individual inter-views over a five-month period in 2017. In accordance with the participants' wishes, 11 interviews took place in the local HLCs and two at a university campus. After a presentation about the purpose of the study each inter-view was tape-recorded. The form of the interview was open and the interviewer invited the participants to speak freely about their experiences. The main questions asked were; What is your perception of changing dietary and activity habits and why did you contact the HLC and ask for help? Other questions explored personal goals, their need for help and their challenges. The inter-views, which lasted between 66 and 131 min, were tran-scribed verbatim by the first author (ES). ES, ALH and BSH discussed the data in relation to the participants' de-scriptions and if, and to what degree, the data material could answer the research question. Information power as discussed by Malterud et al. [32] guided the sample size.

Analysis

The theoretical framework of qualitative content analysis in this study is grounded in a data-driven inductive ap-proach, conventional qualitative content analysis,

Table 2 Self-reported challenges, strain and additional diagnoses (number of participants in brackets)

One or several of somatic diagnosis: type 2 diabetes (3), cardiovascular disease (CVD) (4), Chronic Obstructive Pulmonary Disease (COPD) (2), celiac disease (1), multi sclerosis (MS) (1), sleep apnoea (1), various chronic pain conditions (8), fibromyalgia (3), cancer (2)
One or several of psychosocial strains and challenges: anxiety (3), depression (4), loss and grief (1), identity reactions (12), eating disorders (2), suicidal thoughts (2), alcohol abuse (1), isolation (6), financial difficulties (2)

described by Hsieh and Shannon [34] and a text-driven search for patterns as described by Krippendorf [35]. The analysis process in our study was systematic and the codes, categories and themes are strongly linked to the raw data [34, 36]. Data were analysed by the analytical steps in Qualitative Content Analysis (QCA) described by Graneheim & Lundman [37] and in the light of the methodological discussion by Gran-eheim, Lindgren & Lundman [36]. According to Graneheim and Lundman, categories present the manifest content of the text. A theme is a tread of an underlying meaning on an interpretative level and an expression of the latent content of the text [37]. Both the phenomenological description of the manifest content (categories close to the text) and the hermen-eutical interpretation of the latent content (themes distant from the text) [36] was used in our study. In line with the QCA method, all authors read the anon-ymized transcripts independently to obtain an overall impression, after which they met to discuss the ma-terial. The text was analysed by searching for content that described the participants' perceptions of living with overweight or obesity and seeking help to change their dietary and activity habits. Based on the discussion all authors agreed on preliminary themes and categories. The first author (ES) then coded the interviews according to these themes. The text was divided into meaning units, abstracted and labelled with a code. The whole context was considered when labelling meaning units and codes. The various codes were compared based on differences and similarities and sorted into categories, sub-themes and themes. Categories were identified through an iterative process of identifying, grouping and regrouping. The develop-ment of the main theme and themes based on sub-themes and categories took the form of a her-meneutic spiral [36, 38] in a back and forth discus-sion process between all the authors over a period of several months.

Results

The analysis resulted in one main theme: Searching for dignity, which was based on two themes: Needing to jus-tify avoidance of personal responsibility and A desire to change.

Searching for dignity

The main theme reflected the participants' experience of living with overweight or obesity and their percep-tions of seeking help to change their dietary and ac-tivity habits. For all the participants, living with overweight or obesity impaired their body image and self-esteem, causing a negative self-representation of living a perceived wrong lifestyle. The participants was seeking help with lifestyle change at the same time as they felt shame about their body and not managing on their own, and guilt of not adhering to a healthy diet or doing enough exercise. They had earlier experience of losing weight and relapses, and experienced a constant struggle between a healthy lifestyle and pleasure. They felt a need to explain their weight gain and barriers to change. On the other side, they desired change and motivation and felt pride about taking initiative and ask for help, exhibiting willpower and discipline. The participants tried to balance protection and disclosure of self with pride for taking the initiative and responsibility for change in order to feel normal, accepted and worthy. Searching for dignity seemed to be a red tread throughout the data, themes and sub-themes. The main theme is based on two themes with associated sub-themes and categories presented in Table 3. We will elaborate further on the findings below.

Needing to justify avoidance of personal responsibility

The participants' need to justify avoidance of personal responsibility was based on the sub-themes Strain and challenges as barriers to change as well as A constant struggle and negotiation between healthy living and pleasure, and Feelings of shame, guilt and discourage-ment affect weight management.

Strain and challenges as barriers to change

It was important for the participants to explain their weight-gain and give reasons for why they ended up seeking help to change their lifestyle. Although the par-ticipants wanted to change their dietary and activity habits, they mentioned numerous barriers to change. These included grief, loss and identity issues, strain and life challenges such as depression, eating disorders, in-activity, alcohol abuse, suicidal thoughts, isolation, finan-cial difficulties, being stuck in old habits and postponing things. Some of the participants were affected by their personal employment situation, changes in life, identity issues and the struggle to maintain their dignity and sense of worthiness. Only four were employed on a 50– 80% basis, while the others were in receipt of a disability pension, retired or unemployed. One participant ex-plained her loss of identity due to unemployment as follows:

> I identified myself with the job ... that was what made me. I worked in a kindergarten then and received a salary for what I did, but suddenly there was nothing. I felt like I was nothing. I could not go to work and could not manage what was normal for people to do ... self-image and everything…(Female 50-59)

Table 3 Overview of the main theme, themes, sub-themes and categories

Main theme: Searching for dignity		
Theme	Sub-Theme	Category
Needing to justify avoidance of personal responsibility	Strain and challenges as barriers to change	Grief, loss and identity reactions
		Strain and life challenges
		Stuck in old habits and deferral
	A constant struggle and negotiation between healthy living and pleasure	Knowledge of healthy living
		Recognition of health risk and consequences
		Lack of willpower and relapses
		Expression of personal responsibility
	Feelings of shame, guilt or discouragement affect weight management	Negative feelings related to body image, self-esteem and confidence
		Feeling bad about not adhering to the diet or activity plan
		Lack of management in daily life
A desire to change	Health challenges and the need for improved self-respect trigger change	Personal goals to improve health, fitness, weight loss and better management of everyday life
		Health challenges, illness and risks
	Pride in self-management	Taking the initiative to change and asking for help
		Maintaining new habits and exhibiting willpower
	Hope, self-efficacy and meaningfulness increase motivation	Hope and self-belief
		Meaningfulness in life

Another participant explained that he started to gain weight when he lost his job and developed serious depression:

> I was a CEO and then I was fired… and after that… I have had no work... because after that my world shattered. (Male 60-69)

One participant described different kinds of grief reaction in response to the loss of his spouse and later his dog, stating that he isolated himself, started drinking, ate unhealthy food, just sat on the sofa and became inactive:

> I have to admit that after my wife died, I sat down… and then died ... we had a dog and the dog died too, and I couldn't bear anything…and I didn't go out…it was a voluntary isolation…(Male 60-69)

The participants described being stuck in old habits, making multiple excuses, procrastination, deferrals and denial. Some of the participants expressed fear of losing control and stated that they put up walls to escape responsibility. One described how she intended to address the issue:

> I have really neglected the diabetes a little bit ... I have parked it on the stairs for a long time. It's very hard to accept it! I have to learn to live with... that's what it's all about, right? (Female 30-39)

A constant struggle and negotiation between healthy living and pleasure

This struggle can be described as negotiation between knowledge of healthy living and recognition of the health risks and consequences of being unable to resist the temptation of unhealthy food. It is a clear expression of personal responsibility to act upon this knowledge on the one hand and lack of willpower and discipline on the other. All the participants described their know-ledge and understanding of healthy diets, the import-ance of being physically active and the relationship between lifestyle habits and illness. Their problem was not lack of knowledge and information but adhering to the new habits and changing routines. One of them expressed:

> We know what we should eat and what to do, but don't act accordingly. That's why we are gaining weight. (Female 50-59)

Several participants found it difficult to be active and to resist unhealthy foods and some also described that lack of willpower to resist temptation is often reinforced by repeated efforts and relapses. The eternal struggle against temptation and pleasure was illustrated as fol-lows:

> I have a problem with sugar. When I taste it, it's hard

…weaning is difficult. I think it's the same mechanism as with alcoholics that you get hooked and you have to empty the bottle. That's the way it is for me too, even if I'm stewed ... if there is more chocolate left in the bowl I cannot leave before its empty, even if I know I'll get a headache and feel sick ... But anyway, sugar ... it's not good, but for some reason I eat it... it is completely sick! (Male 50-59)

Sometimes you want to live your life too. To always be in focus and think about lifestyle change and think of exercise ... it's quite tiring and a mental strain to be in focus in the long term. (Female 30-39)

I have to be aware of what I eat, right? It's the first commandment to know what I'm eating, but I'm vacuuming the fridge in the evening, open the doors ... "is there anything good here" ... you know ... then you'll figure out, right in the mine-field… (Male 70-79)

The participants recognised the health risks, seriousness and future consequences of their situation. Two of the participants with T2DM explained:

It's almost five years since I got type 2 diabetes and if I don't do anything about it… I know the consequences. Diabetes is actually quite serious and maybe I underestimate it a little because I ... the later harm and consequences are quite brutal. You can actually become blind, your legs can become numb, amputation ... these are the major aspects of having diabetes. (Female 30-39)

I knew if I didn't turn over a new leaf I would never live to be an old man ... and I would like to ... at least live a little longer ... because the lifestyle I had, sitting still, diabetes, the imminent risk of a heart attack... (Male 60-69)

The participants blamed themselves for gaining too much weight and believed that they all have a personal responsibility to do something about their situation. Some of the participants suggested that people should take more responsibility for own health and that the health authorities should make more demands on the personal responsibility of people at risk and oblige them to participate in lifestyle interventions. One of them said:

I thought when I was diagnosed with COPD... now I just have to start training... one can't go around being so overweight with a COPD diagnosis ... it's hopeless ... but I did not start here only because of my COPD ... it's the weight ...it was clear…I can't have it anymore ... I have to do something... (Female 40-49)

Feelings of shame, guilt or discouragement affect weight management

Most of the participants had negative thoughts and ambivalent feelings about their body image, self-esteem and confidence, describing shame, discomfort and uncer-tainty related to their body. Many of them mentioned insufficiency in the areas of self, work, family, partner and children. It was evident that several of the participants had strong feelings about their body image and some of them expressed:

I was afraid to go to the gym… pictures of slim and young people…I didn't fit in with my big body… (Male 60-69)

At first it was incredibly difficult... it was scary ... I was pretty scared because there is prejudice against people with obesity … being at the gym, exercising, sweating and feeling uncomfortable, all of these ... and all these walls I've built up around myself ... (Female 30-39)

Some experienced challenges related to sexuality:

Overweight and sexuality are a combination that does not work well. Sexuality is a core of life that is quite important for many people, but there are many problems. I have a lot of complexes in relation to my sexuality ... and the desire for sex has become low because of the way I look and feel ... but that's how I feel ... less nice, less appealing ... and it's about putting yourself down ... self-image and self-esteem, because it's part of yourself... (Female 30-39)

A clear sense of shame was described, both in relation to their own body, but also to not managing to lose weight and change to a healthier lifestyle by themselves. Some found asking for help difficult:

Firstly, because you have to admit that you need help ... it becomes such a mental process to admit that you cannot quite manage it yourself ... and to train with others ... it was one of those barriers .... you pant and gasp ... I will never forget the first time ... knowing that others will see what bad shape you are in ... (Female 40-49)

The participants had a great deal of experience trying to change their dietary and activity habits to lose weight. They described their negative weight loss experience and efforts as difficult due to constant relapses. Before start-ing at the HLC they had attended several "slimming pro-grammes" and followed various diets, experiencing an initial weight loss but after a time gaining weight again.

Several of the participants described feeling guilty for not sticking to their diet and activity plan. The challenge is to maintain the changes and make the new routines and habits permanent. After repeatedly slimming, diet-ing, gaining weight again and lack of a mastery experi-ence, many participants experienced defeat, resignation and discouragement:

> I cannot say I did not wish there was an easier way to see progress. I saw it when I was training ... in the first two months I lost weight, but after that it stopped and I think stayed the same for three months… without losing anything… (Male 30-39)

A desire to change

The participants' desire to change is based on the sub-themes Health challenges and the need for improved self-respect trigger changes, Pride in self-management and Hope, self-efficacy and meaningfulness increase motivation.

Health challenges and the need for improved self-respect trigger changes

All the participants had additional diagnoses (Table 2), which constitute a risk to their health. Their under-standing of the severity and consequences triggered the turning point at which they made the decision to change their dietary and activity habits. They also had different personal goals and wishes for change. The desire to change to a healthier lifestyle was triggered by feedback from their body about health challenges, illness and risks, but also for preventive purposes. Several of the participants stated that they were limited in terms of the activities they could perform. Limitations in daily life, such as being unable to climb the stairs, play with grandchildren or partici-pate in activities with one's partner and children, make life more challenging and affect self-image. This desire to lose weight and be able to keep up with one's children was expressed as:

> I have two youngsters at home…and I knew… when we were doing things together, I had to sit down because I was so tired. So my goal was to become more physically active… but it was that weight ... I knew I had to lose weight ... yes ...that was the starting point ... (Female 40-49)

For several participants, better health, feeling strong, im-proved fitness and managing everyday tasks was most im-portant. Others had additional needs and a desire for change, such as to control their blood glucose and reduce their medication. Some of the participants wanted to keep their job or be able to work again, while for others it was just about surviving. One participant stated:

> My goal is to survive ... quite simply. Get rid of those negative thoughts as well by being active ... (Male 60-69).

One young participant described his need for normality and independence:

> That's my reason…, basically, I may never get rid of it ... but the point is that I wish to get into such good shape that I no longer need the c-pap machine … that's my goal… (Male 30-39)

The desire to lose weight was described by all partici-pants as a means of achieving a feeling of normality, ac-ceptance and worth. One of them stated:

> There is a big body-focus in society. You actually feel less worthy when you are overweight and it's very tir-ing. I've probably just felt it myself yes... but I feel it ... yes ... (Female 40-49)

Pride in self-management

Recognition of the health risks, seriousness and conse-quences of their situation led them to take the initiative to ask for help and do something about their situation. Tak-ing responsibility for one's own health and changing diet-ary and activity habits leads to pride. Participants taking the initiative to change and asking for help, adhering to new habits and exhibiting willpower and discipline, expressed this pride directly and indirectly. Most of the participants presented themselves as responsible and ex-plained how they took the initiative to change. They had read about HLCs and searched the internet for informa-tion and help, several of them had asked their GP for a re-ferral to the HLC. Some of the participants emphasized their ability to maintain new habits and what they had ex-perienced and managed to change in their diet and daily activity level. Even if some of them did not succeed in changing their dietary habits, they had a need to describe how they changed their activity habits or other things.

> My goal was to quit insulin injections before Christmas last year and I managed it in November… in the hospital they said that I was one of the few who had followed their advice. (Male 60-69)

Several of the participants found it necessary to highlight what they actually managed and were proud of, how they took care to do their best. Will-power and discipline are two of the significant

aspects that the participants described as necessary to successfully change habits. One participant de-scribed his willpower as follows:

> When I started cycling I had to turn back after 500 m because I was so out of breath. The following day, it was only sheer willpower that made me get on my bike. However, within a week, I went from cycling 500 meters and having to turn back, to cycling halfway to the city, which is 6 km! Now that's pretty good progress ... (laughter)
> (Male 30-39)

One of the participants showed pride and willpower by describing how he performed despite the fact that he did not enjoy it:

> I've been spinning before and did not like it then, so I saw no reason that I'll like it now. However, I joined in and never missed a lesson. Nevertheless, I hate it as much now as I did before…but it works. (Male 60-69)

Hope, self-efficacy and meaningfulness increase motivation

The participants believed they would manage to change their activity and dietary habits, while some even believed they could lose weight using their own resources. They were of the opinion that such change would increase their quality of life. All of them found motivation in self-management and mastering small changes, as well as management of daily life and everyday tasks. For several participants, volun-tary work became a meaningful part of their life. Some of the participants had already experienced a change in strength and fitness, which they described as making them more socially active, leading to a feeling of hope, self-efficacy and well-being, which in turn strengthened their motivation to continue implementing lifestyle changes.

> It's about those little things, the small milestones and steps and they are just as important as the chocolate I could enjoy after three months or ... Being able to go and work out with my daughter ... they are the important things ... to be able to do. I feel now ... now there's a lot more inner drive ... (Female 40-49)

Several of the participants described their hope and be-lief that someday, in one way or another, they will man-age to change their dietary and activity habits to achieve a healthier lifestyle. No one perceived this as simple or easy, but hope is important for remaining motivated.

Discussion

This study explored how HLC participants experienced living with overweight or obesity and their perceptions of seeking help to change their dietary and activity habits. Below, we discuss the findings in the context of existing literature within this field.

The results suggest that the participants are basically seeking dignity to gain a better self-image and maintain their integrity. Several of the participants described low self-esteem and mental health issues, while some were painfully aware that they weigh too much and their weight issues reflect a deep sense of unworthiness. The desire to change may be seen as a wish to be normal and thereby feel worthy. Dignity can be related to self-esteem, as it refers to the worth of human beings, the right to be valued and respected. According to Scho-penhauer, dignity is the opinion of others about our worth, while a subjective definition of dignity is our fear of others' opinion [39]. This can illuminate the basic search for dignity in all human beings and in particular for persons with overweight and obesity.

There are a number of possible explanations for this search for dignity. It can be seen as a response to the stigma linked to being afflicted by overweigh or obesity. Goffman describes stigma as a deviation from our expec-tations of normality [40]. When reporting how they ex-perienced living with overweight or obesity, the participants in our study described negative feelings re-lated to body image, self-esteem and confidence (feelings of shame), feeling bad about not adhering to the dietary and activity plan (guilt) and lack of self-management in daily life (discouragement). This is consistent with previ-ous studies showing that persons afflicted by overweight or obesity perceive that they are less worthy and experi-ence a great deal of guilt, discouragement and shame [14, 23, 41, 42]. Several previous studies have described lifestyle change as an eternal struggle [22, 43], leading to feelings of unworthiness [14, 42, 44].

The participants in our study tried to explain the rea-sons behind their weight challenges and why they find change so difficult. In some cases it was a reaction to grief, the loss of a spouse, while others perceived chal-lenges to their identity related to losing a job or being diagnosed with a chronic disease. These findings are in line with earlier studies and support the view that changing lifestyle habits is difficult as psychological and emotional distress can influence the ability to change [22, 45–47]. Participants with complex challenges and insufficient coping strategies, many of whom suffered from mental health problems, often struggled with fol-low up [8, 24]. Our participants also reported previous experiences of attending slimming programmes and los-ing weight, but subsequently gaining weight again after the intervention period. Some of them experienced these efforts as a hopeless enterprise and the relapses as shameful. This struggle is supported in earlier studies that the risk of weight regain includes a history of weight

cycling and relapses [48]. Grant and Boersma [44] sug-gest that it is better to understand the nature of the problem rather than change the person. As the domin-ant counselling approach in weight management pro-grammes is based on behavioural or cognitive behavioural paradigms, the benefits of a psychodynamic approach would be worth further exploration.

Several of the participants in our study reported lack of discipline and willpower as a challenge, and blamed themselves for not having more control. Jallinoja et al. [43] suggest that no matter how self-disciplined individ-uals are, if the dilemma between pleasure and health are not disentangled, lifestyle change will only be short term. In general, the participants in our study stated that their personal responsibility for a healthy lifestyle and chan-ging their own situation was important to them. These findings are supported by an earlier study, which re-vealed that participants in an intervention to prevent type 2 diabetes had an ambivalent stance towards self-responsibility, yet constructed themselves as respon-sible and knowledgeable pro-health persons [21]. This can be supported by Goffman's argument that people are likely to present themselves in a light that seems favourable [49].

Self-conscious emotions like shame, guilt, embarrass-ment and pride play a central role in motivating and regulating almost all of people's thoughts, feelings and behaviour, and differ from basic emotions because they require self-awareness and self-representation [50]. This issue of self-representation was very clear in our study and is in line with the study by Guassora, Reventlow & Malterud [23] where patients presented themselves as responsible in dialogues about lifestyle and tried to de-fend themselves against shame [23].

The participants in our study expressed and believed that their overweight or obesity was self-inflicted and considered themselves guilty of not eating healthy food and adhering to their dietary and activity plan. This is in line with previous studies where positive attributes are accorded to people who are healthy, while those who be-come ill or have a less perfect body are blamed and con-sidered self-indulgent, lazy, unmotivated, lacking self-discipline, less competent or even irresponsible and immoral [13, 14, 41, 42]. The personal attributes assigned to persons with overweight or obesity highlight the victim-blaming that occurs [12, 42]. Brownell et al. [51] hold that the two most important words in the na-tional discourse about obesity are personal responsibility and that the concept of personal responsibility for health is deeply ingrained in our culture and political system. They state that good health has become more than a means to achieving personal goals such as greater at-tractiveness and increased longevity, but symbolizes self-control, hard work, ambition and success in life. Inherent in this symbolism is the concept that the indi-vidual controls behaviour, which in turn controls health. [51]. This paradox of control places many people in an untenable situation whereby they feel guilty about failing to perform the ideal behaviours [42] and are ashamed when they become ill, as is the case with the participants in our study (T2DM, CVD, COPD). According to the re-view by Puhl & Heuer, obese persons are blamed for their weight and a common perception is that weight stigmatization is justifiable and may motivate individuals to adopt healthier behaviours [14]. However, stigmatization of persons with overweight or obesity threatens psychological and physical health [14–16, 41] and generate health disparities [16]. Findings in a study by Täuber et al. [17] suggest that weight bias internaliza-tion in the form of moral condemnation contributes to the lower psychological functioning and well-being of people with overweight and obesity. The participants' perceptions of responsibility in our study are clear, but we suggest that this emphasis on personal responsibility may lead to even greater shame when people experience lack of management or condemnation from society.

The theory of these self-conscious emotions is de-scribed by Tangney [50], Tangney & Fisher [50] and Tracy, Robins & Tangney [52]. In relation to shame and guilt, they argue that shame involves negative feelings about the stable, global self («I am a fat person»), whereas guilt involves negative feelings about a specific behaviour or action taken by the self ("I didn't try hard enough to lose weight"). When the attentional focus is directed towards the public self, such as being publicly exposed as incompetent, it becomes an embarrassment. The public self is always present because it reflects the way we see ourselves through the real or imagined eyes of others [52, 53]. Goffman [40] noted that every social act is influenced by even the slightest chance of public shame or loss of face and people worry about losing so-cial status in the eyes of others.

Some of the participants described isolating them-selves from the outside world. This isolation was partly due to depression, but also because of negative feelings attached to self-esteem and body image. According to previous literature, the immediate response to shame is often to retreat or make oneself as small as possible [54, 55], which may explain why some of the participants in our study isolated themselves. There is a tremendous pressure in post-modern Western society to be thin and have a specific body shape, which for many symbolizes self-control, discipline, hard work, success and ability to manage indulgence [42, 54]. In the self-esteem theory, Maslow [56] described self-esteem as a basic human need or motivation that reflects a person's overall subjective emotional evaluation of her/his own worth. He claimed that all people have a need or desire for

a stable and high evaluation of themselves and self-respect in the form of self-confidence, skills and capability. Ignoring these needs produces feelings of inferiority and helplessness, which in turn give rise to basic discouragement.

In general, the participants described their desire for change as feedback from their body. Some seemed to be motivated to change their diet and level of activity by their appearance or health challenges, while for others the desire for change was for preventive reasons. Several participants reported that the seriousness of the health challenges serve as an ultimatum if they want to live longer and achieve better health. Several of our partici-pants were either at risk of or had already developed NCDs as reported in Table 2. This finding is consistent with a previous study by Følling et al. [22], which re-ported that 91% of the participants in a HLC lifestyle intervention had multi-comorbidities, such as over-weight, obesity, T2DB, muscle- and skeletal diseases and psychological issues. It is also in line with previous find-ings from Samdal et al. [25] describing the reasons for attending a HLC as the wish to increase physical activity and achieve a healthier diet in order to manage over-weight, obesity and multiple health challenges. Our study adds to the literature about the challenges in-volved in health promotion interventions for overweight and obesity. In addition, we add to the literature on help-seeking needs, the underlying importance of self-representation, integrity, acceptance and dignity.

The participants in our study described pride in self-management. They were eager to talk about their initiative to change and the fact that they themselves asked for help. Theories of pride explain that when it comes to motivating social behaviour, pride may be the most important human emotion [52, 57]. Our most meaningful achievements, both on an everyday and life changing level, are accompanied by a feeling of pride. It is likely that pride evolved to provide information about an individual's current level of social status and accept-ance. Self-esteem may be an important part of this process and the development of pride may be closely linked to the development of self-esteem [52]. In a study by Guassora et al. [23], patients described their achieve-ments as matters of honour, shifting from problematic issues to achievements of which they were proud. Our study supports these findings and highlights the meaning of pride in people's presentations of self. In addition, our study contributes to descriptions of how participants al-ternate between shame, guilt and pride and how these self-conscious emotions influence the ability to assume or avoid responsibility.

The turning point can appear when the individuals in question understand the severity of the situation and realise that after several attempts and mistakes doing things by themselves, they need help and sup-port from others, as the participants in our study rec-ognized. Asking for help may involve swallowing hubristic pride as described by Tracy & Robins [52]. Studies have shown that individual motivation to lose weight and perceived self-efficacy are associated with better weight loss and beneficial effects on physical health and life satisfaction [58, 59]. Bandura's theory of self-efficacy, the belief in one's own ability to man-age different tasks and reach specific goals, is import-ant for behavioural change [60]. Previous studies have shown that participants who contacted a HLC them-selves more often expressed a will for lifestyle change and less often dropped out than those referred by GPs [8, 24, 25]. Although the participants in the study by Samdal et al. [25] had autonomous motiv-ation, they suggest that interventions have to address impaired self-efficacy. Our findings suggest that the participants experienced hope and self-efficacy related to using their own resources, but most of all as a re-sult of the support they experienced at the HLC, which in turn strengthened their motivation to con-tinue implementing lifestyle changes.

Trustworthiness, strengths and limitations

A qualitative design may provide insight into complex phenomena. In line with the hermeneutic approach employed in this study, there is always a possibility of ambiguity and different interpretations of the meaning of the text. Addressing aspects of credibility, dependabil-ity, transferability and confirmability to increase trust-worthiness is important [29]. We argue that the credibility, confirmability and dependability of the find-ings were strengthened by coherently and systematically analysing data using inductive coding [34, 35] and categorization in the interpretation process (hermeneut-ical circle) [28, 38]. The discussion of the findings on several occasions, as well as the variation in the discip-linary backgrounds of the author and co-authors, who are public health nurses (ES and BSH), a nurse specializ-ing in health education (GF) and a psychiatric nurse (ALH), enriched the analysis and increased trustworthi-ness and confirmability. The analysis and data interpret-ation were influenced by the authors' preunderstanding, therefore the findings are a constructionist coproduction of the participants' perception of reality [30, 33, 61]. The first author (ES) conducted the data collection and the co-authors read all the transcribed interviews in order to minimize potential bias. The first author (ES) has several years of clinical experience as a public health nurse and also worked in an interdisciplinary team helping chil-dren, adolescents and their families to change their dietary and activity habits. Her background provided a preunderstanding and experienced based knowledge of

the research phenomenon, in addition to valuable in-sights concerning lifestyle change and social stigma. The second author (BSH) and third author (GF) also have experience of health promotion and health educa-tion, which provides a valuable and useful overview of health promotion perspectives. The fourth author (ALH) contributed understanding of and valuable in-sights into the psychological and emotional findings. Another strength of this study is the semi-structured in-depth interviews, which allowed the participants to focus on their needs and perceptions. Each interview lasted from 66 to 131 min, providing opportunities to elaborate on the questions and follow up the responses. The variety in age, gender and socioeconomic status strengthens the utility and transferability of the find-ings, which are enhanced by the rich descriptions of the context, the informants from five different HLCs in Western Norway, the data collection and analysis, as well as the inclusion of quotations from a number of participants. Information power [32] guided the data collection in order to ensure a variety of percep-tions. This paper meets the requirements of the COREQ [62] checklist.

The strength of our study is the contribution to know-ledge of HLC participants' experiences of living with overweight or obesity and seeking help to change their dietary and activity habits. As a relatively new health ser-vice, there is a need for a better understanding of this phenomenon in order to provide a high quality health service. The findings of the Finnish study, in which nurses and GPs reported that the participants' unwilling-ness to change lifestyle behaviour was a major barrier to lifestyle change [20], are in contrast to our findings, where the participants themselves stated that it is not unwillingness but rather shame, guilt and ambivalence towards assuming responsibility that hinder them. The unwillingness reported by the nurses and GPs may be a result of stigmatization and prejudice. However, the fact that it differs from the perceptions of the participants in the present study is also an interesting issue, which high-lights the importance of the service user perspective.

Some methodological limitations should be taken into account when interpreting the results. Providers re-cruited participants from ongoing lifestyle interventions, thus it is possible that the participants were selected be-cause it was known that they were satisfied with the HLC programme. The participants may have also been influenced by the ongoing process of change, and par-ticipation in both dietary and activity interventions over a period of time prior to the interviews.

Conclusion

This study explored HLC participants' experiences of liv-ing with overweight or obesity and perceptions of seeking help to change dietary and activity habits. Being stigmatized and feeling shame and guilt for not man-aging to live a healthy lifestyle and have a normal body, have consequences for people's psychological and emo-tional health and affect their quality of life. This study contributes to the descriptions of emotional distress ex-perienced by persons afflicted by overweight or obesity. In addition, the findings add to previous knowledge by illustrating the impact of shame, guilt and pride, as well as demonstrating the complexities involved in assuming responsibility for changing dietary and activity habits. Self-conscious emotions such as shame, guilt and pride play a central role in motivating and regulating almost all of people's thoughts, feelings and behaviour. It is therefore necessary to address these emotions in lifestyle interventions and offer treatment that takes account of such feelings. It is easy to forget the person living with overweight or obesity when both the person her/himself and the provider are mainly focused on weight loss treatment. Future HLC and health promotion interven-tions need to educate service users about emotions such as shame, guilt and pride, and their role in food con-sumption and inactivity so that people with overweight or obesity are able to regulate their intake of food and physical activity. We suggest that regaining positive self-esteem and dignity will lead to the ability to assume personal responsibility for achieving a better quality of life. Weight stigma at individual and system level and as well as responsibility related to dilemmas about the "right" or "wrong" lifestyle should be addressed.

Abbreviations

BMI: Body Mass Index; COPD: Chronic obstructive pulmonary diseases; CVD: Cardio vascular diseases; GP: General Practitioners; HLC: Healthy Life Centres; PA: Physical activity; T2DM: Type 2 diabetes

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Ethical approval and consent to participate

This study was registered and approved at the Norwegian Centre for Research Data (NSD) project number 48025. The ethical guidelines in the Helsinki Declaration were followed. Participants received oral and written information about the study and signed an informed consent form before the interview started. Participation in the study was voluntary and the participants were informed about their right to withdraw at any stage without compromising their future health care. For reasons of confidentiality, the participants are coded with gender and age-cohort. In this study an interview could be an unpleasant reminder that the participant is not living a healthy life in line with health authority guidelines, which can cause dis-tress to her/him. The interview setting was well prepared and a respectful, non-judgmental atmosphere was emphasised.

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Availability of data and materials
Due to considerations of confidentiality and to ensure the participants' anonymity, there are restrictions on the availability of the raw data material.

Authors' contributions
ES planned and designed the study in cooperation with ALH. ES collected the data and performed the interviews with guidance from ALH and BSH. ES transcribed and conducted the initial analysis and coding of the data material with guidance from ALH, BSH and GF. The manuscript was drafted in close collaboration with all the co-authors. All authors contributed to the writing process before the final version was approved. All authors read and approved the final manuscript.

Consent for publication
Not applicable.

Competing interests
The authors declare that they have no competing interests.

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Paper II

Title Page

Title: **Service users` experience of beneficial self-management support and user involvement in Healthy Life Centres – a qualitative interview study**

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Service users` experience of beneficial self-management support and user involvement in Healthy Life Centres – a qualitative interview study

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Abstract

Aim: The aim of this study was to explore beneficial self-management support (SMS) and user involvement for persons afflicted by overweight or obesity attending lifestyle interventions in Norwegian Healthy Life Centres.

Method: Semi-structured in-depth interviews were conducted with 13 service users (5 men and 8 women). Data were analysed using qualitative content analysis.

Results: One main theme was identified: Regaining self-esteem and dignity through active involvement and long-term self-worth support in partnership with others. This main-theme comprised four themes: 1) Self-efficacy through active involvement and better perceived health, 2) Valued through healthcare professionals (HPs) acknowledgement, equality and individualized support, 3) Increased motivation and self-belief through fellowship and peer support and 4) Maintenance of lifestyle change through accessibility and long-term support.

Conclusion: Service users' active involvement, acknowledgement and long-term self-worth support from HPs and peers seem to be some of the successful ingredients to lifestyle change. However, prolonged follow-up support is needed. A collectivistic and long-term perspective can integrate the importance of significant others and shared responsibility.

Keywords: empowerment, dignity, lifestyle change, long-term individualized support, overweight and obesity, partnership, self-management support, self-efficacy, self-worth, user involvement

Background

Overweight and obesity are considered some of the primary drivers of chronic non-communicable diseases (NCDs), such as cardiovascular diseases, cancer, type 2 diabetes and chronic respiratory conditions [1, 2]. Worldwide more than 1.9 billion adults are afflicted by overweight, of whom 650 million present with obesity [3]. Due to this high prevalence, overweight and obesity have become a significant national and international health concern and place an extensive burden on healthcare services worldwide [1-4]. The main challenge of overweight and obesity treatment is not merely weight loss, but long-term weight loss maintenance [5-8]. People need help to achieve lifestyle change because they find it difficult to manage on their own [9, 10]. Findings provide initial evidence that overlooking psychosocial factors, such as weight stigma, may hinder weight-loss maintenance and hamper help-seeking [11-13]. Implications for addressing emotional distress (guilt and shame) and stigma in overweight and obesity-focused clinical interventions are highlighted [13-15].

The vast burden on healthcare services has led to the increased development of educational self-management interventions [16-19]. These behavioural interventions aim to help patients and service users better manage their own conditions (self-care) and healthcare needs [4, 16, 17, 19-21]. Self-management may be one means of bridging the gap between patients' needs and the capacity of healthcare services to meet those needs [18]. An individual's ability to detect and manage symptoms, treatment, physical and psychosocial consequences, as well as the lifestyle changes (such as exercise and diet) inherent in living with a chronic condition is the core of self-management [18, 22]. Raising self-efficacy, the belief of individuals in their own ability to manage different tasks [23], is one key goal of educational interventions for persons living with chronic conditions [17, 19], while the desired outcome of self-management support (SMS) is behavioural change [24].

There has been a growing interest in national and international health policies to more actively involve and empower patients in their healthcare [25-27]. The literature highlights patient and user involvement as a means of ensuring the quality of care and health services [28, 29]. In this study, user involvement is understood as a clinical partnership between the service user and HPs [29].

According to Greenhalg, structured self-management programmes focusing on building patients' self-efficacy can be seen as synonymous with patient or user involvement in managing chronic diseases [29]. The purpose of health promotion is to enable people to have increased control over their lives in order to improve their health [30]. Individual empowerment is a process through which people gain greater control over decisions and actions affecting their health [31]. Therefore, self-management, self-efficacy and empowerment are important elements in health promotion.

The literature on lifestyle change and self-management interventions in chronic conditions or NCDs is extensive. Systematic reviews and meta-analysis demonstrate that both individual and group-based interventions designed to target dietary and physical activity behaviours are recommended strategies for lifestyle change [5, 10, 32] and weight loss maintenance [6, 33-35].

The literature in the field of obesity is scarce with regard to patient education and self-management interventions, while self-management terminology is rarely used in the context of overweight and obesity. The two analysis of reviews and the meta-analysis found in the literature on patient education about obesity suggest that patient health outcomes, including self-management skills and quality of life, could be improved [36, 37]. However, these analyses are based on the literature related to specific NCD diagnoses such as diabetes and not on generic programmes targeting educational interventions for overweight and obesity per se.

Changing dietary and activity habits involves processes and practices embedded in social life, ingrained in people's everyday routines. Most efforts to change behaviours have limited success [9, 38]. There is a need to rethink the idea that it is sufficient to give people information and guide them towards becoming empowered and motivated individuals [9]. It is also necessary to consider the outcome as something in addition to weight loss and to address well-being and self-management for persons living with overweight or obesity. The Norwegian Directorate of Health recommends the establishment of Healthy Life Centres (HLCs) in primary healthcare to meet the challenge of overweigh, obesity and NCDs. HLCs offer lifestyle self-management interventions for persons in need of support for lifestyle change who already have or are at risk of NCDs. The purpose of the intervention is to empower the participants, leading to self-management and improved health [39].

HLCs are a novelty in primary healthcare and health service research, thus the knowledge of their efficacy is sparse. One study shows that less physically active persons became more physically active after attending a HLC [40]. Both physical fitness and Health Related Quality of Life (HRQoL) improved significantly in the short and the long term [41] and at the 24 month follow-up no one had developed type 2 diabetes [42]. One qualitative study from a HLC found that having a trustful relationship with the healthcare professionals (HPs), being respected and experiencing continuity in the care were essential for service user involvement [43]. Another qualitative study highlighted social support and pointed out the need for more research on how HPs in HLCs can help with and promote lasting lifestyle changes and whether HLCs can help participants who want and need such changes [14]. However, to the best of our knowledge there are no studies exploring what the participants really find beneficial when they seek help to change their lifestyle at a HLC and little is known about the significance of user involvement for lifestyle change in overweight and obesity care. Knowledge about the service users' experiences of SMS as well as how aspects of user involvement affect participation in interventions could be helpful in understanding the overall process of lifestyle change, and how HLCs may provide beneficial support and a qualitative good healthcare service. Such knowledge is highly relevant for the future development of lifestyle interventions in HLCs. Thus, the aim of this study was to explore beneficial SMS and user involvement for persons afflicted by overweight or obesity attending lifestyle interventions in HLCs. (26) The following research question (RQ) guided our study:

> RQ: What do beneficial SMS and user involvement implies for persons afflicted by overweight or obesity attending lifestyle interventions in HLCs?

Methods

Design

A qualitative, interpretative interview study grounded in hermeneutic methodology and tradition was designed to explore and deepen our understanding of beneficial SMS and user involvement for the service users in HLCs.

Study context

HLCs offer individual and group-based lifestyle interventions focusing on the promotion of healthy dietary and physical activity habits. This interdisciplinary primary healthcare service provides educational self-management interventions aimed at empowering people to manage their condition or health behaviour change. The HLC emphasizes the strengthening of physical, mental and social resources for health and self-management based on a health promoting, preventive and salutogenic foundation. User involvement is a key principle that is enshrined in the legislation and the interventions are based on a person-centred approach, adjusted to service users' needs, individual resources and self-management skills [39, 44]. HPs, including physiotherapists, public health nurses, psychiatric nurses, nutritionists and bachelors in public health, provide the self-management interventions. HPs should have basic competence in the Motivational Interview (MI) conversation method. HLCs are easily accessible through direct contact or by referrals from general practitioners. The initial health conversation is based on each service user's needs and desire for help, after which a group-based healthy diet course and/or physical activity sessions is offered. The healthy diet course consists of four to five two-hour sessions with practical tasks and theory. Physical activity in the form of group-based in- and outdoor activities is offered two to three times a week. If desired, individual counselling is also available. An intervention lasts for three months with the possibility to extend it on two occasions. The organisation of the HLC differs between the various municipalities and small communities have inter-municipal cooperation that enables service users to attend courses across municipal boundaries. The purpose of HLCs is to enable service users to maintain changes and continue with activities after the follow-up at the HLC has been completed, as well as encourage the participants to take part in local activities in the municipality [39].

Recruitments and participants

The participants in this study were recruited from five different small and medium-sized HLCs in Norway. The first author contacted HLC administrators and asked them to send an information letter about the study with an invitation to take part to both women and men who had participated in lifestyle courses. The inclusion criteria were; persons aged 18 to 80 years who had contacted the HLC to obtain help to change their dietary and activity habits, afflicted by overweight or obesity and who were able to speak and understand the Norwegian language. Purposive sampling [45] was used to identify participants for interview to ensure that the sample included individuals of various

ages and both sexes from small (rural) and medium-sized (urban) municipalities. The first author contacted all the service users who consented to participate. A total of 13 service users, five men and eight women, were included in this study (Table 1). Some had been recommended lifestyle changes such as regular moderately intensive physical activity, healthy diet and weight reduction by their general practitioners. However, the majority had contacted the HLC on their own initiative because they wanted to lose weight and needed help to change their lifestyle habits. The participants were either overweight (Body-Mass Index (BMI) $\geq$25) or obese (BMI $\geq$ 30) and had additional diagnoses that put them at risk. These included diabetes type 2, cardiovascular diseases, chronic obstructive pulmonary disease, celiac disease, various chronic pain conditions, sleep apnoea, multiple sclerosis, fibromyalgia, anxiety, depression, eating disorders, inactivity, alcohol abuse, suicidal thoughts, isolation and financial difficulties.

Table 1. Participant characteristics and participation in HLCs

	Sex	Age	Occupational status	Proposal and/or referral from GP / own initiative	Type of intervention	Participation period
1	Male	60-69	Retired	Own	IHC, HDG	9 months
2	Female	60-69	Disability pension	Own	IHC, HDG, PAG	2 years
3	Male	60-69	Retired	Own and GP proposal	IHC, HDG, PAG	1-2 years
4	Female	40-49	Disability pension	Own, GP referral	IHC, HDG, PAG	2-31/2 years
5	Male	30-39	Unemployed	Own and GP proposal	IHC	9-12 months
6	Female	50-59	Disability pension	Own, GP referral	IHC, HDG, PAG	2 years
7	Female	40-49	Employed 50-80%	Own	IHC, HDG, PAG	9-12 months
8	Female	60-69	Disability pension	Own, GP referral	IHC, HDG, PAG	2-31/2 years
9	Male	60-69	Unemployed/ long term sick leave	Own and GP proposal	IHC, PAG	2-31/2 years
10	Female	30-39	Employed 50-80%	GP proposal and referral	IHC, HDG, PAG	1-2 years
11	Female	30-39	Unemployed	Own	IHC, HDG, PAG	3-6 months
12	Female	40-49	Employed 50-80%	GP proposal and referral	IHC, HDG, PAG	9-12 months
13	Male	50-59	Employed 50-80%	Own, GP proposal and referral	IHC, HDG, PAG	2-31/2 years
	Abbreviations in Table 1: Individual Health Conversation (IHC), Healthy Diet in Groups (HDG), Physical Activity in Groups (PAG)					

Data collection

Over a five-month period in 2017, the first author (ES) conducted 13 individual in-depth interviews with service users at five different HLCs in Western Norway. The thematic interview guide with follow-up questions was developed by ES and ALH in line with Kvale and Brinckmann [46] (table 2). In accordance with the participants' wishes, 11 interviews took place in their local HLC and two at a university campus. The purpose of the study was presented and confidentiality was emphasized. The interviews, which lasted between 60 and 130 minutes, were audio-taped and transcribed verbatim by ES. Information power as discussed by Malterud et al. [45] guided the sample size.

Table 2 Thematic guide for individual interviews

Self-management support (SMS):
• Can you describe what you have experienced as beneficial support in the lifestyle interventions in HLCs?
• What do you perceive as helpful for lifestyle change?
• How was the information and support in the intervention adjusted to your needs?
• What have given you strength to start or continue lifestyle change?
• Can you describe your need for follow up in the future?
User involvement:
• What do you understand by user involvement at the HLCs lifestyle interventions?
• What is the significance of user involvement for you?
• What is important for you regarding user involvement?
• How did you get involved?
• What give you a sense of being involved?
• How was your opinions met?
• Can you describe your own role in the involvement?

Analysis

Data were analysed by the analytical steps in Qualitative Content Analysis suggested by Graneheim & Lundman [47] and Graneheim, Lindgren & Lundman [48] to deepen our understanding of beneficial SMS and user involvement for the service users in HLCs. According to these authors, categories present the manifest, descriptive content of the text, while a theme presents the latent content, a thread of an underlying meaning on an interpretative level [47]. ES was responsible for the analysis with input from all the co-authors (ALH, GF and BSH). Each anonymized interview was read by all the authors independently to obtain an impression of what was said. The text was

divided into meaning units where each meaning unit was related to the same central content. Meaning units were condensed into a more formalized written style and labelled with codes. Codes and categories reflecting the manifest content were sorted into sub-themes. The latent content of the sub-themes and themes was discussed in collaboration with all the co-authors. After further analysis the themes were interpreted and integrated into one main theme. To capture complete ideas and something important in relation to the research question, the main-theme and themes have been labelled with å phrase or a sentence [49, 50]. The theoretical framework of qualitative content analysis in this study is grounded in a text-and data-driven search for patterns based on the inductive approach described by Krippendorf [51] and abductive approach (hermeneutic process) described by Alvesson and Sköldberg [52].

Results

Table 3. Main-theme, themes and sub-themes describing service users' experiences of user involvement and beneficial self-management support in the HLCs

Main-theme	**Regaining self-esteem and dignity through active involvement and long-term self-worth support in partnership with others.**						
Theme	**T1: Self-efficacy through active involvement and better perceived health**			**T2: Valued through HPs acknowledgement, equality and individualized support**			
Sub-theme	Being in control by having ownership of personal goals	Responsibility by showing initiative and participating	The significance of the effects of training	Knowledgeable health professionals increase trust and safety	Feeling stronger by perceiving emotional support from interested and sensitive health professionals	Sense of equality and worth through acknowledgement	The importance of flexibility and individualized support
Theme	**T3: Increased motivation and self-belief through peer support and fellowship**			**T4: Maintenance of lifestyle change through accessibility and long-term support**			
Sub-theme	Encouragement and a sense of worth through peer support in an inclusive environment	A sense of identity and fellowship through the sharing of experience	Meaningfulness by obtaining structure and commitment	A need for continued awareness and focus		A need for long-term support to maintain lifestyle change	The importance of accessibility

The analysis resulted in one main-theme and four themes compromising several sub-themes related to the service users' experience of user involvement and beneficial SMS when attending to lifestyle interventions in the HLC (table 3). These themes are the sub-headings in the following presentation of the findings and the quotations illustrate aspects of the themes abstracted from the sub-themes and themes.

Regaining self-esteem and dignity through active involvement and long-term self-worth support in partnership with others

Overall, the participants were taking personal responsibility for active involvement and were very satisfied with the HLC and the help they had received. They described help as supporting self-worth and increasing their belief in self-management. They perceived being strengthened and regaining self-esteem and dignity by being invited to become involved in an equal partnership, built on a trustful relationship with competent HPs. User involvement was described as acknowledgement and the HPs' ability to personalize and tailor SMS and lifestyle intervention to service users' needs and everyday life. Participation in supervised groups and emotional support from peers increased motivation and self-belief. Several of the participants expressed a need for long-term support, and accessibility and long term support was critical to maintenance of lifestyle change.

Self-efficacy through active involvement and better perceived health

The participants described taking responsibility for the initiative to engage in the lifestyle interventions in the HLC. Several emphasized that starting at the HLC was their own initiative, just getting some help and information from their general practioners. They had a personal engagement in and an internal motivation for lifestyle change due to their desire to lose weight and enjoy better health. They described maintaining new habits, what they had managed to change in their diets and how much weight they had lost. They also outlined new routines and habits related to activity. They showed willpower and discipline by describing how they performed even if they disliked it, and how they planned and prepared to stand on their own two feet. Everyone had already experienced the positive effects of training such as improved strength, fitness and weight loss. Some experienced sleeping better, using less painkillers and that their knees and hips were better off during periods of active lifestyle and training. Feelings of progress and positive health outcomes made them enjoy activity and training. This experience of well-being, more energy and strength gave them a sense of meaningfulness and motivation to continue lifestyle changes.

> *It's motivating to see the changes in my body fat, change in this abdominal fat and muscle mass, very motivating. I think quitting smoking and starting to work out is the best thing I`ve done… at least I feel much better with myself.* (Male 60-69)

> *I feel that life is much easier now. My body has become stronger, both physically and mentally.* (Female 60-69)

Several of the participants experienced having developed a belief in their own ability to manage lifestyle change, be in control and also of being aware of and developing personal skills related to willpower, knowledge, understanding of consequences and using their own resources in the process of change (self-management-skills). Hope, belief in their own ability (self-efficacy) and experience of well-being and support strengthened their motivation to continue implementing lifestyle changes. One of the participants described support and hope as important for remaining motivated:

> *If it wasn't for the HLC, those people working there and the other participants I am not sure that I would be here today. I must be optimistic and have belief. If I had no hope I might not be sitting here.* (Male 60-69)

Valued through HPs acknowledgement, equality and individualized support

The participants experienced mutual trust and a strong relationship with their providers, revealing that their relationship with HPs in the HLC was important for their participation. Everyone noted that the HPs were highly competent and knowledgeable possessing both communication- and relational skills. They experienced the first meeting at the HLC, the individual counselling and all the subsequent meetings with HPs as supportive, with an emphasis on confidentiality that led to a feeling of safety. HPs created a positive and welcoming atmosphere, shared their knowledge, as well as inviting and encouraging service users to participate, which in turn led to a positive commitment. HPs were described as being helpful, sensitive, including everyone, having a positive personality and attitude, taking time to listen to the participants' stories and showing genuine interest in them as individuals:

They exude a desire to be there for you, they are genuinely interested in you. They want you to participate… The openness and the way everyone is included have been the most important experience for me. The philosophy here is fantastic! (Male 60-69)

She is a very competent professional. She is knowledgeable and good in how she does it, including handling people. When I started in the HLC, I was sitting here telling my whole story, personal issues in life, my fear of death and she took time to listen to me! (Male 50-59)

The participants experienced being met, listened to and receiving emotional support in terms of a coherent and holistic approach. Feedback, encouragement and emotional support were very important for all the participants. They described this as “they build you up”, meaning giving them belief in own ability to manage, self-respect and worth. This can be exemplified by one of the participants:

The way they do it…they encourage you to perform, everything is good enough, they build you up and you get a feeling of being able to manage. This is a great motivation for me and I feel I am doing well even if I am not a world champion. (Female 40-50)

The participants experienced that their condition, personal goals and needs was properly and respectfully addressed by the HPs. They were asked “what worked for you previously and how would you like to do it?” HPs gave them responsibility for choice, but motivated, encouraged and provided positive feedback on their choices in the process of change. HPs emphasized “raising awareness” and the service users’ personal resources and skills, focusing on what they managed, not what they failed to accomplish. The service users’ views was respected and their needs and values recognized. Being listened to, respected and acknowledged increased the feeling of being taken seriously and a sense of being in a partnership and equal relationship with the “experts”. This attitude shows respect for service users’ autonomy and is illustrated by one of the participants:

I experience that my opinions are at least as important as theirs (HPs), so I have a strong feeling of being met, seen and heard. (Female 60-69)

The service users experienced being free to choose to participate in dietary interventions, activity interventions or both and to some degree the freedom to choose individual counselling, group interventions or both. HPs emphasised group participation, but there was an opportunity to just have individual consultations. The participants appreciated the opportunity to choose what is best for them:

> *What I appreciate is that they don't force you in one direction. They say "you're welcome. This is our menu. What do YOU want?"* (Male 60-69)

HPs made adjustments due to service users' personal needs and the participants highly appreciated the opportunity for follow up conversations when they experienced relapses. Everyone reported receiving individual practical guidance from HPs in the form of, e.g., alternative exercises, how to avoid energy dense food and how to reward themselves. Flexibility and adjustment to service users' needs stimulated engagement and involvement in the participants' own change process and management, serving as an invitation to codetermination in issues related to the participants' need for healthcare. This individualized adjustment was also important for the sense of worth, which was exemplified by one of the participants:

> *They listen to what you say. They don't overrule you! They just facilitate and adjust. They listen very carefully to your opinions and adjust according to your needs. They tell you to listen to your body, try as much as you can and it's good enough. That made me feel safe.* (Female 40-49)

Increased motivation and self-belief through peer support and fellowship

When starting at the HLC, several of the participants experienced a sense of being unsafe and feeling uncomfortable in group sessions. The thought of working out with others and exposing their big body and bad shape was frightening, hence they needed time to become familiar with this form of participation. After some time, most of the participants experienced the group as a safe place. They experienced inclusion, an atmosphere of humour, respect and acknowledgement, as well as a safe place to express personal views. Several of the participants experienced group affiliation and a

common identity while struggling towards the same lifestyle change goals. The participants expressed fairly unambiguously that training together with someone else is much easier. Getting inspiration from, sharing experiences and being supported and encouraged by the other participants was essential for endurance and motivation:

> *I prefer group training because it's so difficult to do the exercises alone… the motivation in the spinning sessions when your fellow participants tell you how well you are doing…the motivation and the encouragement that's what group training is all about and it keeps you going.* (Female 30-39)

In the group sessions, the social and emotional support, fellowship, the feeling of togetherness and creation of new friendships became more and more important for participation, joy, well-being and meaningfulness in everyday life and served as a motivation for the continuation of change:

> *Participating in the training groups is like balsam to me, something I need to do. I can't do without it. It's not only the exercise but the whole group. The whole group contributes…the persons participating are fantastic, their personality makes it joyful. We care about each other and you get a feeling of being wanted and your presence is appreciated. It makes me feel so good.* (Female 30-39)

The participants also described both a need for structure and a sense of commitment to meet and participate in relation to the other participants and to themselves. Several of the participants were unemployed, retired or on a disability pension, thus participating in diet groups and especially physical activity groups helped to create structure, routines and meaning in everyday life:

> *The group is a commitment. So simple and so important! When you don't have a job to go to, it's important to get up in the morning, have something to do, have someone to meet, to be together in a group, training… it means everything for my mental health…to have this fellowship, meeting people with a positive attitude. I have bonded with some of them and meet them on a regular basis in my daily life. I don't know if I would have continued without her (fellow participant).* (Female 40-49)

Maintenance of lifestyle change through accessibility and long-term support

The service users described a need for someone to contact when they experience adversity and relapse. They considered that the HCL was a locally situated and easily accessible (low threshold) healthcare service that was easy to contact if they needed something, which created a sense of trust. The participation period for these service users, ranged from 3 to 42 months (Table 1), depending on individual needs and availability. One of the participants expressed:

> *It's very important to have someone to contact when you experience adversity. I have sent a SMS to my provider at the HLC and she always found time for me to have a talk about what is happening and how to manage it. The follow-up is the best experience, from the first health conversation and now, two years later, getting support and encouragement when I need it.* (Male 50-59)

Some of the participants described needing someone to "put you on track again" when relapses and old habits occur. They expressed a need for someone who could make them aware and help them to maintain focus on the healthy diets and the importance of being physically active. The service users expressed a need for continuing participation in groups and follow-up by HPs. Some expressed a desire for permanent follow-up. Everyone experienced that HLCs offered a low cost intervention, stretching over a long period of time, which is important for letting the change process take place:

> *It is so important that the interventions and the activity group stretches over a period of time and that this is a healthcare service that lasts and gives me the opportunity to apply for a new period.* (Female 60-69)

Discussion

HLCs offer self-management interventions for persons in need of support for lifestyle change, with the intention of empowering the participants to achieve self-management and improved health. The aim of this study was to explore beneficial SMS and user involvement for persons afflicted by overweight or obesity attending lifestyle interventions in HLCs. In the following, we will discuss

the results in relation to previous research within this field and in the context of HLC and primary care. The main-theme and themes will guide the discussion.

Regaining self-esteem and dignity through active involvement and long-term self-worth support in partnership with others

Active involvement and long-term self-worth support in partnership with HPs and fellow participants seems to be an overall means to achieve individual empowerment and self-management. We suggest that acknowledgement and individualized support from competent HPs promotes self-worth and participation, which are a prerequisite for user involvement. Over time, acknowledgement, equality and self-worth support may contribute to a feeling of dignity. Previous studies on HLC participants' perceptions of seeking help for lifestyle change show that persons afflicted by overweight or obesity experience emotional distress and search for change and dignity [14, 15]. How one looks at her/himself is an existential question of identity. Self-worth support may lead to an increased feeling of being a valuable person, and belief in oneself. Autonomy support (provided in HLCs) can be related to self-determination theory as a way to facilitate self-determined motivation, healthy development and optimal functioning [53].

The service users experience *self-efficacy through active involvement and better perceived health.* This indicate that individual elements influencing user involvement and self-management were related to the service users' motivation. Perceived control and self-efficacy are important elements in individual empowerment and health promotion [30, 54]. We suggest that taking the initiative to change and to participate in HLC shows autonomous motivation. Previous research confirms that a participant whose motivation was more autonomous would attend intervention programmes more regularly [55]. Autonomous motivation, self-efficacy, as well as self-regulation skills and a positive body image are suggested to be the best individual psychological mechanisms for successful weight management and physical activity outcomes [56]. In addition, perceived self-efficacy is associated with better weight loss, long lasting behaviour change, beneficial effects on physical health and life satisfaction [6, 57-59]. Self-efficacy focused education would probably enhance self-efficacy, regulate self-management behaviours, increase knowledge and improve HRQoL[60]. Belief in one's own ability and self-esteem are important concepts in Antonovsky's salutogenic approach and theory of general resistance resources [61]. Based on the salutogenic approach in HLC, HPs should continue to provide emotional self-worth support in order to promote self-efficacy as a means for

self-management, thus achieving the key goal of educational interventions [17, 19]. This includes personal responsibility for active involvement and a desire to lose weight and improve physical strength, health and well-being. Experiencing positive effects of training and receiving beneficial support seemed to influence their motivation and initiation of activity. Better perceived health, feelings of progress, strength, fitness and well-being made most of our participants enjoy physical activity and gave them a sense of meaningfulness, belief in their own ability and motivation to continue with lifestyle change. Previous experience and control are key factors for self-efficacy, as control is related to the expectations of management [23, 62].

The present study reveals that the service users are *valued through HPs acknowledgement, equality and individual support*. The participants experienced a strong partnership with their providers, and described that emotional support, acknowledgement and having a sense of equality in a partnership with HPs, create a sense of worth and are essential for the service users involvement in their process of change. Previous studies describe that a trustworthy relationship between service users and HPs seem to be based on respect, trust and acknowledgement [43, 63, 64]. Acknowledgement and a sense of equality are described by our participants as a feeling of being listened to and taken seriously. This is consistent with other studies of lifestyle interventions, showing that acknowledgement, equality and individualization are core elements of user involvement [43, 65]. Thus, the importance of trained HPs who possess effective communication skills, and are competent, confident and supportive was highlighted [43, 63, 66]. In our study, HPs' flexibility and ability to personalize and tailor self-management support and lifestyle intervention to the service users' needs and everyday life was important for their participation and adherence to the intervention programme. Other studies from patient education programmes and lifestyle consultations in primary care confirm that HPs' ability to be observant and individualize and tailor interventions to the service users' values, needs and situation is essential, which underscores the necessity of a person-centred approach [32, 43, 59, 63, 66-68]. Client-centred therapy emphasizes acknowledgement and a trustful relationship as fundamental in therapy and behavioural change processes [69].

Increased motivation and self-belief through peer support and fellowship is demonstrated by the service users' experience of the value of being included, group affiliation and a common identity

while struggling towards the same lifestyle change goals. Group-based interventions are characterized by opportunities for social interactions and support from others who are experiencing similar challenges. The group dynamic during patient education interventions might be more important for improving self-management skills than the actual content of the programme [70]. The social and emotional support in the fellowship with peers, the feeling of togetherness and the creation of new relationships and friendships became important for well-being and meaningfulness in everyday life and as well as serving as a motivation for the continuation of change. This is also supported by studies from Norwegian primary care, where service users argued that the group-based approach would improve social peer support, which could have a positive impact on participants' well-being and subsequently on self-management [71]. Learning from other patients' experiences, being with peers, having a feeling of belonging and being with equals or people who understand you are described as the key to success in diabetes patient education [72]. Our study supports these findings and we believe that the sense of belonging and identity may be especially important for our participants, taking into account the stigmatisation experienced by persons with overweight or obesity [13, 15, 73]. A Norwegian study shows that group-based diabetes self-management education improved self-management skills and psychosocial outcomes such as self-efficacy and the authors suggest that other factors such as peer identification, normalization and group interactions are the "active ingredients" and as such, substantially influence the effectiveness of group-based education interventions for the management of Type 2 diabetes [74]. Future research should explore these factors in weight self-management for persons afflicted by overweight or obesity.

Maintenance of lifestyle change through accessibility and long-term support is evident through the service users concerns about how they would manage on their own after the conclusion of the HLC intervention. Most of them expressed a desire for continued or prolonged follow-up by competent HPs in the HLC, highlighting the value of an easily accessible, locally based healthcare service. A major challenge in the treatment of overweight and obesity is the long-term maintenance of weight loss [5, 75]. The reasons for high relapse rates in overweight and obesity treatment are complex and not fully understood. Nevertheless, there is a considerable amount of literature documenting that people need further follow-up after participation in a lifestyle interventions [7, 76, 77] and comprehensive evidence of the necessity for long-term support or prolonged contact between HPs

and service users to enable weight loss maintenance [5, 8, 35, 75, 78-82]. Frequent long-term treatment and user-HP contact, e.g., provided in group sessions, are perhaps the most successful methods for preventing weight regain [5, 81, 82]. Over the last 20-30 years there has been an extensive amount of research that investigated long-term weight loss, including professional contact and relapse prevention. These studies demonstrate that successful long-term management of obesity may require maintenance programmes involving years rather than months of follow-up care and extended treatment in the form of weekly or bi-weekly individual or group therapy sessions [8, 35, 79] in person, by phone or internet [78]. On the other hand, prolonged follow-up involves a cost. It is reasonable to believe that HLC participants need further support and motivation to continue regularly monitoring their food intake and physical activity in order to maintain their lifestyle change and self-management. Our findings demonstrate that several of the participants continued to take part, especially in activity group sessions, after the conclusion of their three assigned periods (Table 1). We believe that some HPs recognize the need for long-term follow-up and in some way are “gaming the system” by letting the participants continue to attend in group sessions. By so doing, they recognize each service user’s need for continued support, which can be seen as adjusted and individualized healthcare support, as well as a shared responsibility of partnership. Given the chronic nature of obesity, extended care may be necessary to achieve long-term health benefits [75], but first and foremost, obesity should be recognized as a chronic condition that requires lifelong support [7, 8]. The considerable amount of literature on self-management in chronic conditions like type 2 diabetes and cardiovascular diseases, in contrast to the sparse literature on overweight and obesity may be explained as a lack of recognition of overweight and obesity as a chronic disease. The World Obesity Federation considers obesity to be a chronic relapsing disease process [3, 83]. However, recognition of obesity as a disease is by no means universal [84]. HPs play a critical role in facilitating long-term changes and follow-up after lifestyle interventions [78]. We suggest that cost effective follow-up programmes, maybe over years, should be developed, including long-term self-care strategies with a supportive design and practise to promote self-esteem and dignity. Further studies should also focus on methods to improve these programmes with regard to social support, e.g., recruitment of participants with friends or family to safeguard the necessary long-term support. There is a need to investigate HPs’ role and understanding of these matters to fully understand how self-management support and user involvement are beneficial for self-management and lifestyle change in HLCs.

Methodological considerations

The trustworthiness of the findings is related to confidence in the analysis [85] and to the researchers' preunderstanding and interpretation of the statements made by the service users [86, 87]. We argue that the trustworthiness of our findings was strengthened by systematically analysing the data using inductive coding and categorization [51, 88]. The first author (ES) performed the analysis and interpretation of the data, while the co- authors (ALH, BSH and GF) critically reviewed the interpretations. Discussion of the sub-themes and themes on several occasions over a period of time was a process aimed at finding the most appropriate interpretation and increasing the credibility of the findings. The interpretation was a process of finding suitable meaning units that best represented the participants' perceptions [89] and quotations from the participants are presented to illustrate the themes. The analysis and interpretation were influenced by the researchers' pre-understanding, which must be considered when interpreting the participants' reality, as there is always a risk of ambiguity and different interpretations of the meaning of the data. ES conducted the interviews and in order to minimize potential bias, the co-authors read all the transcribed interviews. The researchers' various disciplinary backgrounds and clinical experience as a psychiatric nurse (ALH), a public health nurse (ES, BSH), patient education (GF) and intensive care (BSH) enriched the analysis and interpretation, thereby increasing the trustworthiness. The reporting quality in the present paper was cross-checked to comply with the consolidated criteria for reporting qualitative studies using the 32-item COREQ checklist [90].

To the best of our knowledge, this is the first study to explore experiences of beneficial SMS from the perspective of service users in HLCs and only the second study to explore user involvement in HLCs [43]. Qualitative studies may provide insight into complex phenomena and this study deepens our understanding of beneficial SMS in HLCs. HLC is a novelty in primary healthcare and health service research and our study contributes to the knowledge and development of lifestyle interventions in HLCs. The strengths of the present study include the richness of each semi-structured in-depth interview. The variation in age, gender, background and current situation, in addition to the collection of data from five different HLCs in both rural and urban municipalities, reflect multiple realities and practices, which might increase the transferability to other settings.

However, some methodological limitations should be addressed. HPs' recruitment of participants could be influenced by their knowledge of service users who were especially satisfied. The self-selection of volunteers to participate and the service users' opportunity to participate in HLC

interventions in the daytime (due to their employment situation) may have influenced their descriptions of user involvement and satisfaction (structure and social support). We have no data on those who declined to take part in the study, or those who were prevented from participating for various reasons. However, as the research question concerned experience of beneficial SMS and user participation (and not useless support and barriers to participation), the participants recruited were therefore suitable.

Conclusion

Long-term self-worth support from significant others seem to be some of the successful ingredients to lifestyle change. Our findings suggest that active involvement and long-term self-worth support in partnership with others seems to promote individual empowerment and self-management. Acknowledgement from HPs in HLCs, SMS tailored to service users' needs, and peer support in supervised group sessions seems to be important mechanisms for increasing user involvement, self-efficacy and self-esteem, leading to dignity and individual empowerment. We believe that lifestyle change is not simply a question of individual autonomous motivation and willpower, but primarily concerns relational, emotional and social support. A collectivist perspective can integrate the importance of significant others, involvement and shared responsibility. Motivating participants to participate in HLC interventions together with a friend or a partner may lead to more independence, "self"-management and lasting lifestyle changes. Recognizing overweight and obesity as a chronic condition in line with diabetes type 2 etc. and providing long-term support, maybe over many years for those in need, will strengthen the ability of HLCs to provide beneficial "self"-management support to persons afflicted by overweight or obesity.

Abbreviations

HLC (Healthy Life Centres), HRQoL (Health Related Quality of Life), HPs (healthcare professionals), NCDs (non-communicable diseases), SMS (self-management support)

Ethical approval and consent to participate

The ethical guidelines in the Helsinki Declaration were followed. Participants received oral and written information about the study and signed an informed consent form before the interview started. The interview setting was well prepared and a respectful, non-judgmental atmosphere was emphasised. Participation in the study was voluntary and the participants were informed about their right to withdraw at any stage without compromising their future healthcare. For

reasons of confidentiality, the participants are coded by gender and age-cohort. This study was registered and approved at the Norwegian Centre for Research Data (NSD) project number 48025.

Consent for publication

Not applicable

Availability of data and materials

Due to considerations of confidentiality and to ensure the participants' anonymity, there are restrictions on the availability of the raw data material.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

ES planned and designed the study and was responsible for the ethical approval application in cooperation with ALH. ES collected the data and performed the interviews with guidance from ALH and BSH. ES transcribed the interviews, conducted the analysis and interpretation of the data material with guidance and input from ALH, BSH and GF. The manuscript was drafted in close collaboration with all the co-authors. ES was the main contributor in writing and revising the manuscript with input from ALH, GF, and BSH. All authors read and approved the final manuscript.

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Paper III

Title: Understanding beneficial self-management support and the meaning of user involvement in lifestyle interventions: a qualitative study from the perspective of healthcare professionals

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Understanding beneficial self-management support and the meaning of user involvement in lifestyle interventions: a qualitative study from the perspective of healthcare professionals

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Abstract
Background: In light of the high prevalence of overweight and obesity among adults and the subsequent stigmatization and health consequences, there is a need to develop effective interventions to support lifestyle change. The literature supports the key role of healthcare professionals (HPs) in facilitating self-management through lifestyle interventions for those with chronic conditions. However, there is a lack of knowledge about how HPs practice self-management support (SMS) and user involvement for persons afflicted by overweight or obesity in lifestyle interventions in primary care Healthy Life Centres (HLC). The **aim** of this study was to explore how HPs provide SMS and what user involvement implies for HPs in HLCs.
Methods: An interpretative exploratory design, employing a qualitative thematic analysis of data from two focus group interviews with ten HPs from eight different HLCs was performed.
Results: The analysis resulted in one overall theme; A partnership based on ethical awareness, non-judgemental attitude, dialogue and shared responsibility, comprising four interrelated themes: 1) Supporting self-efficacy, self-worth and dignity through an attitude of respect, acknowledgement and generosity, 2) Promoting self-belief and self-perceived health, 3) Collaborating and sharing responsibility, and 4) Being flexible, adjusting and sharing time.
Conclusion: HPs in HLCs see service users as equal partners in a collaboration based on shared responsibility, acknowledgement and generosity. In order to help, their practice involves a heightened level of ethical awareness, including a non-judgemental attitude and dialogue. HPs in HLCs have something to teach us about ethical acting and helping persons who are struggling with overweight or obesity to change their lifestyle and regain dignity. They seem to see the service users' existential needs and have learned the art of meeting the other in her/his most vulnerable situation i.e., seeking help for a "wrong lifestyle". It may be time to highlight the need for SMS and user involvement to focus on shared responsibility in partnership rather than personal responsibility. More research is required to explore the conditions for such practice.
Keywords: dialogue, dignity, healthcare professionals, overweight and obesity, primary care, partnership, self-management support, shared responsibility, user involvement

Background

Overweight and obesity are complex conditions with serious social and psychological dimensions and one of the contributing factors of non-communicable diseases (NCDs), including type 2 diabetes, cardiovascular diseases, chronic respiratory conditions and cancer [1, 2]. Lifestyle changes are difficult and long-term weight management is associated with emotional distress and a high risk of failure [3, 4]. Shame and stigma can be a barrier to seeking help for weight management [5-7] and people with internalized stigma tend to have a lower self-worth [8].

The increasing number of patients with chronic diseases represents a challenge for the healthcare system and has led to an increase in the development of educational self-management interventions [9-12]. There is a growing interest in the impact and outcomes of self-management interventions [13]. The literature supports the key role of healthcare professionals (HPs) in facilitating self-management in chronic conditions and lifestyle interventions [14, 15]. These self-management support (SMS) interventions aim to equip service users and patients with the necessary information and skills to manage their own healthcare (independency), maintain optimal health and minimize the consequences of their conditions [9, 10, 12, 16]. Self-management is defined as an individual's ability to detect and manage symptoms, treatment, physical and psychosocial consequences, as well as the lifestyle changes (such as exercise and diet) inherent in living with a chronic condition [11, 17]. One of the key goal of SMS is to raise self-efficacy [10, 12], the belief of individuals in their own ability to manage different tasks [18]. SMS approaches emphasize a clinical partnership, collaborative care, promote service users' identification and achievement of realistic goals and teach problem-solving skills [10, 19]. Potential benefits of SMS include quality care tailored to the service users' preferences and situation [17], which in some cases improve outcomes and reduce costs [10, 13].

There has been an increased commitment in health policies to empower and more actively involve patients in their healthcare through a bottom-up approach [20-23]. The intended consequences of user involvement include heightening people's level of independence, with the objectives of enabling greater equality and more democratic decision-making [24]. Additionally, user involvement is seen as a means of ensuring accountability and balancing professional power, as well as improved health services and quality of care [22, 25]. According to Beresford [24], user

involvement is a term which is poorly defined and carelessly used. User involvement is often treated in isolation as a technical rather than an ideological matter and needs to be understood in the historical, political, ideological and cultural context [24]. In this study, user involvement is understood as a clinical partnership between the service user and HPs [22], and characterised in terms of co-production of healthcare service [20, 21].

As a part of Norway's national strategy to prevent NCDs, improve health and reduce morbidity, HLCs have been established as part of the municipalities' primary healthcare system [16, 26]. The purpose of HLCs is to support lifestyle change and promote self-management. The interventions offered are based on a salutogenic foundation, using motivational interview (MI) as one of the conversational approaches [16]. MI is a directed, person-centred counselling style that involves users and elicits behaviour change. It is defined by its spirit as a facilitative style for interpersonal relationship [27, 28]. The underlying spirit of MI, its mind-set or perspective on how to practise it is important, emphasizing four interrelated elements; partnership (collaboration), acceptance, compassion and evocation [28]. MI is also described being based on the principles of experimental social psychology and the concept of self-efficacy [29].

Previous studies from the service user perspective reveal that user involvement is significant for the quality of the healthcare service in HLCs and highlight acknowledgement and individualized SMS [30, 31]. One qualitative study from a HLC found that having a trustful relationship with the providers, being respected and experiencing continuity in the care were essential for service user involvement . The support from significant others, peers, family, friends and health professionals is important for self-management and individual empowerment [3, 30-32]. Long-term self-worth support is essential for starting, continuing and participating in lifestyle change processes and a means to self-management [31].

From HPs' perspective, one qualitative study by Abildsnes et al. [33] found that HPs emphasized person-centred advice based on the participants' willingness to change and their impression of the participants' condition and life circumstances. Another qualitative study by Sagsveen et al. [34] explored how HPs described involving service users in individual- and group-based counselling and

activities at HLCs. It demonstrates the importance of HPs building a trustful relationship, adjusting to the users' needs, strengthening the users' ownership of and participation in the lifestyle change process and that HPs are involving users through MI. Sagsveen et al. [34] call for greater reflection on what user involvement implies in the HLC and in each user's situation. There is a need for more knowledge of HPs' experience and perceptions in order to understand how they can provide a qualitatively good healthcare service for persons afflicted by overweight and obesity. There is also a need to better understand how HPs create a mutual relationship (partnership) with service users, practise SMS, promote self-management and what user involvement implies for HPs in HLCs. Due to the paucity of studies pertaining to the perspective of HPs in HLCs, the aim of this study was to explore how HPs provide SMS and what user involvement implies for HPs in HLCs.

Method

Design

Qualitative methodologies aim to explore complex phenomena of human experiences, meaning and attitudes [35, 36]. An interpretative exploratory design was chosen in order to gain a deeper understanding of beneficial SMS and user involvement as described by HPs working in HLCs. Focus groups are a suitable method for data collection [37, 38]. In this study data were collected by means of two focus group interviews, collecting data through group interaction and discussion on a topic determined by the researcher [38].

Study context

The HLC is an interdisciplinary primary healthcare service, which offers individual and group-based lifestyle interventions for people at risk of NCDs or in need of support to change their lifestyle or manage chronic conditions [16]. The initial health conversation is based on each service user's needs and desire for help, after which a group-based healthy diet course and/or physical activity sessions was offered. If desired, individual counselling is also available. Group-based healthy diet courses consist of four to five two-hour sessions with theory and practical tasks. Physical activity sessions, two to three times a week, are based on both in-and outdoor activities. The purpose of HLCs is to promote health and empower service users to engage in better self-management. HLCs are easily accessible for service users through direct contact or by referrals

from general practioners (GPs). The lifestyle interventions that are provided by HPs (including public health nurses, psychiatric nurses, physiotherapists, dietitians and bachelors in public health) employ a person-centred approach and use e.g. MI as a conversational method. An intervention lasts for three months with the possibility to extend it on two occasions. The practice of extending participation and the organisation of the HLCs differs between the various municipalities. Small communities often have inter-municipal collaboration [16].

Participants and recruitment

The participants for this focus group study were recruited from different HLCs in Western Norway, and 15 HLCs was invited to participate. The aim was to recruit HPs with experience from lifestyle interventions in HLCs working with people afflicted by overweight and obesity. Purposive sampling [39, 40] was used to establish focus groups with variation in terms of occupational background, from well-established and new HLCs as well as urban and rural, small and medium-sized municipalities. Ten HPs (nine women and one man, aged 26 to 49 years) from eight different HLCs participated in two focus groups (table 1). Information power guided the sample size [39].

Table 1 Characteristics of HLCs and participants in the two focus groups

	Occupational background	Gender	Years of clinical experience (HLCs)	Rural /Urban	Population	Years of HLC establishment	Number of employees
Focus group 1 (FG-1)	Physiotherapists (2), psychiatric nurse (1) and public health nurse (1)	Female (3) Male (1)	1 -7	Urban (2) Rural (2)	8.500 - 38.000	2-5	1-2
Focus group 2 (FG-2)	Physiotherapists (4), bachelor in public health (1) and nutritionist (1)	Female (6)	2-7	Urban (3) Rural (1)	12.000 - 19.500	2-7	1-4

Data collection

Focus group interviews are suitable for exploring new areas with sparse knowledge [37], and to explore experiences, attitude and views [38, 41]. Focus groups were employed to collect the

qualitative data in this study [37-39]. The characteristic of focus groups (FG) and group interviews as research method and data collection method is their explicit use of group interaction and discussions to produce data and insights that would be less accessible without the interaction found in a group [38].

Participation was voluntary and everyone received both an oral and a written invitation and information about the study prior to the interviews. The focus group interviews took place at one university campus and one local HLC in 2017, based on practical considerations such as the shortest possible travel distance for the participants. Most of the participants had met before and several of them collaborated in an inter-municipal cooperation network. In accordance with an explorative design [42], a flexible format topic guide (table 2) with loosely phrased questions was developed to guide the group discussions [37, 38]. The form of the focus group interview was open and the participants were invited to speak freely about their experiences of work in the HLC. The participants played an active part in the discussions in a highly reflective manner and the familiarity from previous networks and working together made them feel comfortable. The first author (ES) moderated the discussions, and added supplementary open- ended question when necessary. A co-moderator made notes and observed the interaction and dynamics in the group [38]. Each focus group interview lasted 120 minutes, was recorded on audio-files and subsequently transcribed.

Table 2 Topic guide in focus group interviews

Self-management support (SMS):
• What do you experience as beneficial help and support for the service users afflicted by overweight or obesity attending lifestyle interventions in the HLCs?
• What do you perceive as beneficial support for lifestyle change?
• How do the service users describe beneficial support?
• How do you promote self-management in the interventions?
• Can you describe how you work?
• What is important in the promotion of self-management and supporting lifestyle change?
User involvement:
• What do you understand by user involvement at the HLCs?
• What is important in the involvement of the service users?
• How do you involve the users in the intervention and in the process of change?
• What is the significance of user involvement?
• What do user involvement imply?

Data analysis

Thematic analysis as described by Braun and Clarke [43] and Vaismoradi et al. [36] was used to analyse the data from the focus groups. Thematic analysis is a method to identify, analyse and report patterns and themes in qualitative data [36, 43]. The aim is to provide description of both the manifest (semantic, explicit) and latent content (underlying interpretative level), pattern response or meaning in the text to develop a new understanding of the phenomenon under study and to answer the research question [43]. The theoretical framework was grounded in an inductive text-driven search for patterns described by Krippendorf [44]. The approach in the interpretation and theme development was abductive in the form of a hermeneutical spiral [42, 45, 46].

The transcripts from the two focus group interviews with HPs were read independently by all the authors (ES, ALH, GF & BSH). Patterns and themes identified in the data were coded, discussed in group meetings, refined further and organized into themes. A matrix was developed by the first author (ES) and all data were systematically apportioned using Excel and tables. Related text elements were reassembled in a new matrix, abstracted and grouped into themes, which were discussed by all the authors in the context of our aim and research question. Data were analysed within each of the focus groups and across the groups to identify both common and specific themes. The primary analysis, coding (data-reduction relevant for the research question) and categorization of the meaning units and preliminary themes were performed by ES. In addition, the themes were discussed, revised and interpreted into one overall theme by all the authors. Theme development was conducted in an analytic cyclical process (hermeneutic spiral [46], both inductive and abductive [44, 45]). Labelling the themes and overall theme with a phrase or sentence is preferable to a single word label for capturing complete ideas [47] or something important in relation to the overall research question [43]. The selection of quotations to illustrate the data was performed by ES.

Results

Table 3 Overall theme and themes describing how HPs provide SMS and what user involvement implies for HPs in HLCs.

Overall Theme	**A partnership based on ethical awareness, non-judgemental attitude, dialogue and shared responsibility**			
Theme	Supporting self-efficacy, self-worth and dignity through an attitude of respect, acknowledgement and generosity	Promoting self-belief and self-perceived health	Collaborating and sharing responsibility	Being flexible, adjusting and sharing time

The analysis resulted in one overall theme; A partnership based on ethical awareness, non-judgemental attitude, dialogue and shared responsibility, comprising four interrelated themes: 1) Supporting self-efficacy, self-worth and dignity through an attitude of respect, acknowledgement and generosity, 2) Promoting self-belief and self-perceived health, 3) Collaborating and sharing responsibility, and 4) Being flexible, adjusting and sharing time.

A partnership based on ethical awareness, non-judgemental attitude, dialogue and shared responsibility

HPs provide SMS and user involvement in lifestyle interventions in HLCs through ethical awareness, a non-judgemental and open attitude and dialogue. Self-efficacy, self-worth and dignity are supported by a respectful way of being, acknowledging the service users for who they are. HPs aim to prevent new disappointments and promote self-belief and better perceived health to support self-management. User involvement and SMS takes place through shared responsibility in a partnership with the service users. HPs take responsibility for creating a mutual and trustful relationship, emphasizing equality, acknowledgement and generosity in this collaborative partnership. Flexibility and adjustment of the support to the service users' needs and situation are essential, and the temporal nature of the collaborative partnership and follow-up is important.

Supporting self-efficacy, self-worth and dignity through an attitude of respect, acknowledgement and generosity

The first theme described how HPs supported self-efficacy, self-worth and dignity through an open, positive and accepting attitude and professionalism, communicating generosity and acknowledgement to promote self-management. HPs described user involvement as a way of being,

emphasizing human values and generosity, using humour and sharing personal experiences. They wanted to be a helpful partner who is sensitive, attentive, curious and genuinely interested in the participants as persons. It was important for them to meet the service users were they were with friendliness and hospitality, to see, listen and acknowledge the service users for who they are:

> *The most important is to be interested in the person in front of you and to explore: "what is important for you in your life and what would you like me to help you with?"* (10-FG2)

The initial health conversation was important and they described using MI or other health pedagogic conversations tools. HPs underlined the necessity of creating a relationship and employing their communication skills. They described their attempts to create an environment that invited confidential conversations, opened up for questions and enabled the service users to dare to tell their story to someone with time to listen:

> *Caring and communication skills are essential.* (4-FG1)

HPs expressed a perception of service users as experts on themselves, possessing complementary expertise in the change process and the necessity of withholding their own opinion of the service users' needs and what she/he should do. All of them described the importance of meeting the service users with respect, seeing them as valuable persons and addressing their guilt, shame, defeats and relapses by means of normalisation and humanisation, in an attempt to enable them to regain self-belief:

> *We never tell them what to do or not to do (6-FG2). We do not moralize or be condescending* (7-FG2) … *and we ask for permission to give them advice.* (8-FG2)

Several of the HPs gave examples for how they asked for permission to give advice, such as kindly asking:

> *"Would you like me to tell you what has helped others?* or *"Would you like me to tell you what we have experienced as helpful?"* (5-FG2).

HPs noticed the importance of giving feedback to and expressing belief in service users, their capability, strength and power, to support self-efficacy. It was also essential to express an understanding of the challenges of lifestyle change that involves more than "to exercise more and eat less" and to avoid being patronizing so that service users do not have to defend themselves. HPs explained that the concept of HLCs is that HPs respect each service users own reasons for seeking

help there. HPs experienced that service users appreciated their kindness and lack of strictness, their acknowledgement despite failures, their non-judgemental attitude, the absence of condescending behaviour and not making service users feel that they have been given up on managing lifestyle change :

> *We experience the service users' comfort and thankfulness for arriving in an arena where they do not need to explain or justify why they need to change their lifestyle, where there is nobody to arrest or judge them.* (9-FG2)

Promoting self-belief and self-perceived health

The second theme described how HPs aim to guide and promote self-management and user involvement by strengthening service users' belief in themselves and avoiding new disappointments. An important purpose of HLCs is to improve service users' self-perceived health. The initial health conversation lays the foundation for a trustful relationship where the HP becomes a helpful partner. HPs recognized that the service users had complex challenges that made it difficult for them to change their dietary and exercise habits. Some of the most important issues described by HPs were the need to emphasize well-being, help the service users to thrive and make them want to come back and continue to participate in the HLC intervention:

> *Our greatest goal is to keep them, make them thrive and give them a feeling of meaningfulness by participating in the HLC.* (1-FG1)

HPs described that some of the service users had expected to be given a fixed plan and that they had to turn this expectation into an understanding of the importance of service users making the plan themselves. They helped the service users to set realistic goals that were possible to reach, avoid new disappointments, failure and setback and helped them get back on track when they had a relapse. They believed that the service users needed to achieve some goals in order to regain belief in themselves. Several of the HPs recognized getting better at assessing and identifying service users who were not yet ready to start a full lifestyle intervention due to their excessive distress in life, with the intention of avoiding new disappointments:

> *I have become better at questioning the service users who have too much psychological distress and life-challenges if this is the right time to start a lifestyle change.* (4-FG1)

HPs recognized the necessity of adopting a holistic approach and addressing psychological challenges and emotional distress. They described working with “life-self-management” as essential rather than only covering what to eat and the amount of exercise and activity:

> *I believe that this group of people have complex conditions and challenges and need help to manage life, not only advice about what to eat or how much to exercise.* (7-FG2)

HPs also described trying to turn the focus on better perceived health away from weight, BMI, special diets and slimming:

> *Our job is to strengthen the service users to take care of their own health, by explaining and emphasizing that this is not a slimming programme.* (2-FG1)

They noticed that the service users were motivated by experiencing the effects of training. According to the HPs, the service users reported having more energy, finding it easier to perform daily activity, greater well-being, more confidence, increased self-efficacy and motivation after participating in lifestyle interventions in HLCs. For several of the service users this could include better fitness, feeling stronger, lower blood pressure, blood glucose and cholesterol, while some of them also mentioned weight reduction. A number of the HPs stated that the purpose of user involvement is for the service users to discover their own resources, the significance of good health and strength and increase their self-efficacy. HPs emphasized the need to focus on the service users’ resources, give them feedback and help them to see all the small changes they had achieved. Regular follow-up conversations were often necessary to make them aware of what they managed and to increase positive self-talk. They experienced that positive feedback on achievements led to self-belief, pride and motivation:

> *They need feedback on every little achievement so that they don’t give up. They need to be conscious of the small changes they make…* (8-FG). *Much of the purpose of user involvement is to let the service users discover which possibilities and resources they have and raise their belief in self-management.* (3-FG1)

Collaborating and sharing responsibility

The third theme described how HPs emphasized collaboration partnership with the service users as well as the importance of a trustful relationship and shared responsibility to increase user involvement and self-management. HPs outlined how they explored the service users’ needs, set

goals together and sometimes did the problem solving together with the service users. They experienced that it was more helpful to be a partner who listens than an expert who gives advice. HPs emphasized equality and the value of complementary competence. They described a philosophy based on the importance of the service users' experiential knowledge for all parties:

> *They are the ones who know where the shoe pinches, they are the experts on themselves and I think that we have complementary expertise.* (7-FG2)

They stated that service users and HPs had different responsibilities. The users' responsibility was to follow the plan they were involved in making, participate and attend all appointments and intervention sessions, while the HPs were responsible for letting the service users' voices be heard, being available, addressing expectations, helping, being generous, interested and providing follow-up. Written contracts signed by both parties outlined the expectations, responsibilities and commitments. Relational commitments and expectations to participate were important, but there were no commitments or expectations about outcome or weight loss. The relational commitments, meaning that someone is waiting for you (also in groups), are both desirable and important for both parties:

> *We write and sign a contract that we have to adhere to. We make commitments to provide follow-up, while the service users make commitments to follow their plan …and the service users appreciate the commitments and expectations because of the difficulties getting into the activity groups and "getting started" on their own.* (10- FG2)

Being flexible, adjusting and sharing time

The fourth and last theme described the importance of adjusting self-management support to the service users' needs and the significance of time, flexibility and extended support for lifestyle change. HPs described their role as being an available, supportive partner in the process of change, guiding each service user in the best possible way. They stated that sufficient time to get to know the service users and their values in order to identify their needs creates the basis for user involvement, as well as for the possibility to adjust and tailor the person-centred care and individualized support. Giving the service users time to tell their story and exploring their concerns (not the experts' concerns) were essential. They acknowledged that they had more time for exploring the service users' needs and values compared to GPs:

> *It is important to have time to listen and to get to know the person in front of you, who feel the challenges in her/his body* (9-FG2)

HPs described the service users as a very heterogeneous group with different resources, needs and wishes. Several of them had complex challenges and different follow-up needs. HPs recognized the importance of supporting the service users' own choices and goals, not those of the "experts" or professionals:

> *"We let them define their own goals and help them to make a plan"* (7-FG2)

The HPs described that being flexible and adjusting within the limits of what was possible was required. It was necessary to be sensitive, give service users an opportunity for expressing freely and listening to them, even if the HPs could not fulfil all their wishes. It was important to emphasize well-being and offer an intervention with a variation in activities that was meaningful and related to service users' needs and wishes. HPs described their contribution to creating new structures, routines and habits, highlighting the transferability to the service users' situation and everyday life. In this process of adjustment, HPs tried to avoid giving advice too quickly. They attempted to "lay back" and let the service users find the solutions on their own and use their problem-solving skills first, describing this as both time-consuming and crucial. Communication skills were perceived as more important than having the right answer to every question:

> *It is important to learn to lean back and let the service users be in control.* (9-FG2)

Supervised group-sessions and individual health conversations were recognized as helpful for both parties. In activity group-sessions, HPs regularly experienced beneficial contact and an opportunity for follow-up. Individuality was perceived as a possibility, even in group-sessions, by creating a safe environment for the acceptance of diversity and that everyone and everything was "good enough". Flexibility related to the service users' preference for individual counselling and support, which was accepted and possible, although some of the HPs tried to give the service users a friendly push toward group participation. Time was essential in this process of "persuasion" to convince the service users of the advantages of group participation. However, they accepted those who absolutely did not want to "belong" to a group without compromising their healthcare:

> *The great thing is that we have both groups and individual support. Those who do not want to be in a group can have individual follow-up, which is perfectly ok.* (9- FG2)

They described trying to make the service users understand that lifestyle change takes time by communicating a long-term perspective and stressing that change does not occur in two weeks. They tried to confirm the normality of ups and downs, trial and error, and the possibility to get back on track. HPs perceived long-term follow-up as one of the most important conditions for successful lifestyle change. Several service users repeatedly joined a new course. HPs allowed those who needed extended follow-up to continue after the end of an intervention period and "gaming the system" of a maximum of three 3-month interventions. However, this was practised differently in the various HLCs:

> *There is something about recognizing that change takes time and we don't expect the service users to achieve their goals of change by the end of the course.* (4-FG1) *We let them continue with the training sessions after the end of the intervention.* (5-FG2)

Discussion

The aim of this study was to explore how HPs provide SMS and what user involvement implies for the HPs in HLCs. The HPs in this study exhibited a high degree of self-reflection and an in-depth understanding of human needs and behaviour when discussing their role as supervisors responsible for SMS and user involvement for persons afflicted by overweight or obesity. The overall findings suggest that a partnership based on ethical awareness, non-judgemental attitude and dialogue as well as shared responsibility is a description of how HPs provide SMS and involve service users in the lifestyle interventions in the HLC. This discussion will focus on the overall theme*; A partnership based on ethical awareness, non-judgemental attitude and shared responsibility*. We will discussed the elements in this theme in light of previous studies and the literature.

A partnership based on ethical awareness, shows that the SMS in HLCs takes place through a trustful relationship (partnership) with the service users. The HPs described both relational and communicational skills as essential for SMS and user involvement. This is in line with the study by Sagsveen et al.[34], underpinning the importance of participative communication skills among HPs in HLCs to promote involvement. The HPs in our study emphasized human values and generosity as the core relational skills, in addition to the importance of being genuinely interested, curious, sensitive, friendly and helpful. This attitude can be seen as a means to get to know each service user and understand her/his values, needs and interests. This awareness also reflects the ethical

principles of autonomy and beneficence [48]. The importance of a trustful relationship has been highlighted in previous studies [30, 34, 49-51]. Our findings add to the literature by underlining the importance of a respectful way of being for building a trustful relationship with service users that places HPs in a position to help with overweight or obesity. There is a need to strengthen the service users' experience of dignity and self-worth due to their social stigma that goes beyond their self-worth [4]. The service users' shame and search for dignity imply an ethical requirement for HPs in HLCs to meet these service users' existential need for integrity and dignity, and it seems as if the HPs in the present study are doing just that. Our study indicates that HPs are meeting the service users' existential needs with self-worth support, acknowledging them for who they are and being genuinely interested in them. Their descriptions illustrate how the HPs managed to be sensitive and meet their perceived "wrong" lifestyle, vulnerability and shame with respect, acknowledgement and generosity, allowing them to fail and not being condescending about their lifestyle. According to Gjengedal et al. [52], being sensitive to the vulnerability of the other may be a key to acting ethically. The HPs in our study saw "service users as experts on themselves", which may imply safeguarding their autonomy and taking advantage of their own contribution so that they can preserve something of themselves and regain their dignity. In the findings from Salemonsen et al. [31], the service users in HLCs highlighted the professionals' competence, attitude and the feeling of increased self-worth and dignity they obtained through participation in the HLCs. Acceptance and self-worth support may lead to a positive body image and less guilt and shame. According to Tranvåg et al. [53], confirming the person's worthiness and sense of self involves genuine respect for each individual as a unique human being and such confirmation is an essential prerequisite for autonomy and integrity.

Non-judgemental attitude and dialogue, is revealed by the HPs in our study describe using elements of MI in their dialogue with service users. Partnership in MI means an active collaboration between experts, with a view that people are the undisputed experts on themselves. Acceptance in MI includes four aspects of absolute worth, accurate empathy, autonomy support and affirmation [27, 28]. It seems as if the HPs in our study were influenced by MI and made their own dynamic "tool-box" of elements that they experience as beneficial. Their use of elements, adjustment and the adaptive capacity of this communication style shows their competence and that the spirit of MI and humanistic values have become an integrated part of their thinking and way of working. The

adaptive capacity and use of elements may characterize a professional who has integrated these into her/his way of doing, being and meeting the “other”, described by Benner [54] as a theory from novice to expert in nursing practice. In addition, the findings in our study confirm that the HPs emphasize a person-centred approach found in Carl Rogers’ theory of a client centred approach in psychological therapy and Martin Buber’s theory of dialogue. Rogers highlights the importance of genuineness, creating a climate for change through acceptance and caring, emphatic understanding and listening, extending unconditional positive regard [55]. The philosophy of Martin Buber and his theory of dialogue emphasizes an “I and Thou” approach in the conversation as opposed to an “I and It” approach. Buber states that the ontological basis of human existence lies in the dialogue between the self and others and that dialogue is about relationality and meetings between people [56]. In HLCs the non-judgemental attitude and dialogue seem to be an integrated part of the practice and personality of authentic and honest HPs. Their way of seeing and being demonstrate that they are firmly rooted in humanistic values that support existential needs. Consequently, the use of a non-judgemental dialogue and attitude, sensitivity and hospitality may lead to a wish to participate in the lifestyle interventions in HLCs and give service users a sense of worth and motivation for continuing lifestyle changes. Healthcare settings have been reported to be one of the sources of weight-stigma [57, 58]. Several HPs hold strong negative attitudes about people with obesity [5, 59], and this attitude and weight-stigma can reduce the quality of care and weight-management [5, 60] . We believe that HPs in general, in healthcare services, have something to learn from HPs in HLCs and their “MI –spirit”. Negative attitudes affect whether one has a non-judgemental attitude or not, and changing attitudes among HPs may be an important and necessary step to help persons in vulnerable situations.

Shared responsibility, shows how HPs taking responsibility for creating a mutual relationship through interaction and collaboration. They emphasized equality, in addition to the necessity of the service users’ experiential knowledge and complementary competence in this clinical partnership. A collaborative partnership is described in the literature as one of the most important prerequisites in SMS [10]. Additionally, the HPs communicated that the service users have no responsibility for the outcome or for weight loss. They emphasized participation and that the service users perceived better health, well-being and a healthier lifestyle. This shows that HPs are aware of their responsibility as professionals and assign responsibility to the service users for the purpose of

sharing responsibility. Sharing responsibility may also reduce the pressure for weight-loss and the feeling of guilt and shame. In other studies, however, HPs held patients accountable for both their body weight and their attributed lack of responsibility for investment in change [60]. A dominance of a traditional model of care, where HPs remained in a position of authority and limited collaboration was found. The psychosocial and temporal nature of interaction was excluded and the context was characterized by the service users' individual responsibility and accountability for self-management and adherence [61]. Those findings may challenge equality, respect and acknowledgement in the clinical SMS partnership, and are inconsistence with our findings.

The HPs in our study practice SMS through tailored support and counselling, emphasizing flexibility, adjustment and sharing time. The importance of flexibility and adjusting support to service users' needs and context is supported by several previous studies that demonstrated how essential such aspects are for lifestyle change and self-management in chronic conditions [50, 51, 62, 63]. HPs saw the need for frequent support and follow-up over time for several of the service users. Previous studies emphasize follow-up as a prerequisite for maintenance of lifestyle change [50, 63, 64], maybe over several years [31, 65-67]. Establishing a trustful relationship takes time. The HPs are aware of this and take responsibility for prioritizing the allocation of time to get to know the service users and build a relationship. In a study exploring HPs' perceptions of user involvement in HLCs, being present in the situation and devoting sufficient time to the health conversations were also described as essential [34]. HPs in our study made a decision to give those service users who needed extended follow-up more time and counselling than the intervention entailed. While this may be interpreted as a form of "gaming the system", it can also be interpreted as HPs assuming their relational and moral responsibility for the service users' need for extended help and support. So, what do relational and moral responsibility towards the service users imply? The HPs in our study described their responsibility to meet the service users with respect, hospitality and a desire to help the other, often asking them; *"what is important for you in your life"* and *"what would you like me to help you with?"*. They described a practice of moral responsibility and ethical awareness similar to our understanding of Levinas' theory of responsibility. According to Morgan [68], Levinas teaches us to acknowledge what we owe to others, to be kind, caring and generous. Responsibility is about our commitment to take care of or deal with and that moral responsibility arises in the face-to-face interaction with another person. In all relationships, we are

faced with a demand to take responsibility for the other and are thus not free to choose our moral responsibility. This ethical and moral responsibility cannot be shared or given away [68-70]. Being a responsible HP entails facing up to the consequences of our behaviour and actions. By prioritizing time and focusing on the service users' needs and situation, it seems as if the Levinanian responsibility comes into play. In relation to time, continuity and having enough time to get to know the service users and their needs is important and in line with other studies [34, 49]. How HPs in HLCs manage to prioritize time and their challenges and needs related to the organisation of lifestyle interventions in HLCs requires further investigation.

The focus on individual responsibility for health in contemporary society described in earlier studies [71-74] shows that responsibility for behaviour change is often discussed at an individual level and rarely at a professional or societal level. Very few studies focus on shared responsibility between the partners in a clinical partnership in either lifestyle interventions or society in general. Consequently, this may reflect the major attitude towards individual responsibility in society, which may add more blame or shame to people afflicted by overweight or obesity. Our findings add to the literature and illustrate how ethical awareness, a non-judgemental attitude, shared responsibility and avoidance of negotiation of responsibility for outcome and weight management may strengthen the service users' self-efficacy, self-worth and dignity.

Trustworthiness

Trustworthiness in this qualitative study is based on Lincoln and Guba [75] and the aspects of credibility, dependability, confirmability and transferability. Confirmability and dependability of the research was confirmed through the systematic, analysis and discussion of the findings between all the researchers over a period of time [35, 37, 43, 75]. Quotations from the interview data have been included in order to illustrate and ensure the credibility and dependability of the HPs' perspectives and descriptions. Data collection and context are carefully described in order for the reader to decide on the transferability of the findings to similar contexts. The interpretation was influenced by the preunderstanding of the researchers, which must be taken into account [46, 76]. The authors have various clinical experiences and disciplinary backgrounds such as public health nurse (ES & BSH), psychiatric nurse (ALH), patient education (GF) and intensive care (BSH), which enriched the analysis and interpretation, thereby increasing trustworthiness and minimizing

potential bias. The present paper was cross-checked to comply with the consolidated criteria for reporting qualitative studies using the 32-item COREQ checklist [77].

Strengths and limitations

Our study has contributed to a deeper understanding of HPs' practice of SMS and service user involvement. Focus group interviews were a plausible method for discovering this knowledge of HPs' values and reflexivity. HLCs are a relatively new healthcare service in primary care. Due to the sparse knowledge and understanding of the HPs' perspective, this study contributes to deepening the understanding of how to provide a qualitatively good healthcare service. One possible limitation might be the gender balance with only one male participant. However, this reflects the general gender balance in HLCs, which have a majority of female employees. Another limitation that should also be taken into consideration concerns the composition of the focus groups. The participants in one of the groups had experience of inter-municipal collaboration over a period of several years, while the participants in the other group had only met a few times and had less experience of working in a HLC. However, none of the participants appeared to be reticent about expressing their opinions and perceptions. A potential limitation is related to the small number of focus groups, however information power guided the sample size [39].

Conclusion

This study reveals that HPs in HLCs provide SMS and involve service users through extensive tailored support based on the service users' needs and situation. The findings show that the HPs see the service users as equal partners in a collaborative partnership based on shared responsibility, acknowledgement and generosity. To be in a position to help, their practice involves a heightened level of ethical awareness, including a non-judgemental attitude and dialogue. The HPs seems to be dedicated and to take a personal interest in those seeking help through openness, compassion, sensitivity and a positive attitude. HPs in HLCs have something to teach us when it comes to ethical acting and helping persons who are struggling with overweight or obesity to change their lifestyle and regain dignity. They appear to see the service users' existential needs and have learned the art of meeting the "other" in one of her/his most vulnerable situations i.e., seeking help for a "wrong lifestyle". Our findings contribute to a wider understanding of user involvement and SMS in lifestyle change. It may be time to highlight the need for SMS and user involvement to focus on

shared responsibility in partnership rather than personal responsibility. More research is required to explore the conditions for such practice.

Abbreviations

FG (focus group), GPs (general practioners), HLCs (Healthy Life Centres), HPs (health professionals), MI (motivational interview), NCDs (non-communicable diseases), SMS (self-management support)

Ethical approval and consent to participate

The participants in this study received written and oral information about the study and gave their oral consent to participate before the focus group interviews started. The interview setting was well prepared and a respectful, non-judgmental atmosphere was emphasised. Participation in the study was voluntary and the participants were informed about their right to withdraw at any time. The participants are coded by number and focus group number (for example 1-FG1 (participant 1 in focus group 1) or 7-FG2 (participant 7 in focus group 2) for reasons of confidentiality due to the fact that there was only one male participant and most of the participants were physiotherapists. This study was registered at, and approved by the Norwegian Centre for Research Data (NSD) project number 48025. It adheres to the requirements and ethical guidelines contained in the Helsinki Declaration.

Consent for publication

Not applicable

Availability of data and materials

Due to considerations of confidentiality and to ensure the participants' anonymity there are restrictions on the availability of the raw data material.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

ES planned and designed the study and was responsible for the ethical approval application in cooperation with ALH. ES collected the data and performed the focus group interviews with guidance from ALH. ES transcribed the interviews, conducted the analysis and interpretation of the data material with guidance and input from ALH, BSH and GF. ES was the main contributor in writing and revising the manuscript with input from ALH, GF and BSH. All authors participated in the critical revision of the manuscript and approved the final manuscript for submission.

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