

# Master's Thesis

Master's Programme in Health Sciences – specialization in

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## **Experiences of social support by participants with morbid obesity who participate in conservative rehabilitation program for lifestyle change: a qualitative study**

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## Forord

Det er med glede og stolthet at vi presenterer denne masteroppgaven, som representerer avslutningen på vår studiereise og det mest utfordrende og spennende prosjektet vi har arbeidet med så langt.

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Vi har skrevet oppgaven som en artikkel med en ambisjon om å publisere i BMJ Nutrition og har derfor fulgt tidsskriftets retningslinjer (Vedlegg 1). Viktige bidragsyttere vil bli inkludert i revisjon av artikkel før potensiell publisering.

Med denne oppgaven håper vi å bidra til økt forståelse og kunnskap innenfor vårt fagfelt. Vi håper også at våre funn kan inspirere til videre forskning og at våre anbefalinger kan legge grunnlaget for fremtidige intervensjoner og tiltak.

Oslo, 14.06.2023

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## **Sammendrag**

**Bakgrunn:** Fedme er et globalt folkehelseproblem som har betydelige konsekvenser for fysisk helse og livskvalitet. Livsstilsendingsprogrammer kan ha en avgjørende rolle for varige livsstilsendringer, fedme og relaterte helseproblemer. Sosial støtte spiller en viktig rolle i å oppnå vellykkede resultater i slike programmer, men det eksisterer begrenset kvalitativ forskning som undersøker erfaringene til personer med sykkelig fedme som deltar i slike tiltak. Denne studien har som mål å undersøke opplevelsen av sosial støtte hos deltakere med sykkelig overvekt som deltar i et (konservativt) rehabiliteringsopplegg for livsstilsendring.

**Metode:** Fjorten deltakere i et gruppebasert konservativt rehabiliteringsprogram i Norge ble intervjuet ved bruk av semistrukturerte intervjuer. Tematisk analyse ble benyttet som analysemetode.

**Resultater:** Våre funn viser at deltakerne opplevde sosial støtte fra hovedsakelig tre kilder: støtte fra andre deltakere i gruppen, sosial støtte fra familie og venner, og støtte fra det tverrfaglige teamet. Deltakerne understreket betydningen av kontinuerlig sosial støtte gjennom hele livsstilsendingsprogrammet. Resultatene fremhever viktigheten av å fremme en følelse av fellesskap og legge til rette for jevnlig møtepunkter for deltakerne for å opprettholde sosial støtte.

**Konklusjon:** Fremtidige studier bør fokusere på langsiktige tiltak, skreddersydde tilnærminger for ulike behov, involvering av familie og venner, og utforske effekten av forbedret støtte fra jevnaldrende. Ved å forstå rollen sosial støtte spiller i livsstilsendingsprogrammer, kan tiltakene optimaliseres for å bedre støtte personer med sykkelig fedme.

### **Nøkkelord**

Livsstilsendingsprogram, sosial støtte, sykkelig fedme, gruppebasert tiltak og kvalitativ forskning.

## **Abstract**

**Background:** Obesity is a global public health concern with significant implications for physical health and overall well-being. Lifestyle change programs are crucial in addressing obesity and its associated health risks. Social support plays a central role in facilitating successful outcomes in these programs, yet limited qualitative research exists on the experiences of individuals with morbid obesity participating in such interventions. This study aims to explore the social support experiences of participants in a group-based conservative rehabilitation lifestyle change program.

**Methods:** Fourteen participants in a group-based conservative rehabilitation lifestyle change program in Norway, were interviewed using semi-structured interviews. Data were analyzed thematically.

**Results:** Thematic analysis revealed three primary sources of social support: support from other participants in the group, social support from family and friends, and support from the interdisciplinary team. Participants emphasized the significance of ongoing social support throughout their lifestyle change program. Findings highlight the importance of fostering a sense of community and facilitating regular interaction among participants to sustain social support.

**Conclusions:** Future studies should focus on long-term interventions, tailored approaches for diverse needs, involving family and friends and exploring the impact of enhanced peer support. By understanding the role of social support in lifestyle change programs, interventions can be optimized to better support individuals with morbid obesity.

## **Keywords**

Lifestyle change program, social support, morbid obesity, group-based intervention, qualitative.

## **Table of content**

<b>Sammendrag</b> .....	3
<b>Abstract</b> .....	4
<b>Background</b> .....	6
<b>Methods</b> .....	7
<b>Participants</b> .....	8
<b>Data Collection</b> .....	8
<b>Data Analysis</b> .....	8
<b>Results</b> .....	10
<b>General experiences of being part of a lifestyle change program can increase the feeling of social support</b> .....	11
<b>Experienced social support by other participants in the group</b> .....	12
<b>Experienced social support by family and friends</b> .....	13
<b>Experienced social support by the interdisciplinary team</b> .....	14
<b>Discussion</b> .....	15
<b>Conclusions</b> .....	18
<b>Declarations</b> .....	19
<b>References:</b> .....	20

## Background

Obesity is a significant global public health concern, with its prevalence showing a problematic upward trend (1). Obesity is defined as body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup> and is divided into three subgroups: obesity grade 1 (BMI 30-34 kg/m<sup>2</sup>), obesity grade 2 (BMI 35-39 kg/m<sup>2</sup>), and obesity grade 3 (BMI ≥ 40 kg/m<sup>2</sup>) (2). Obesity grades two and three are referred to as morbid obesity (3). Obesity affects morbidity rates, disability, and overall quality of life. Obesity is a major risk factor for a range of noncommunicable diseases, including type 2 diabetes, cardiovascular diseases, various types of cancer, osteoarthritis, and other health problems (2). To address the increasing prevalence of obesity and its associated health risks, it is important to implement effective lifestyle change programs (4).

There are several treatment options for people with obesity, including lifestyle interventions, pharmacotherapy, bariatric surgery, and combined treatment (2). The aim of obesity treatment is not only to achieve weight loss but also to enhance health and reduce associated health risks (2). Non-surgical treatment includes dietary change, physical activity, and or/ behavioral therapy (4). In Norway, people with morbid obesity are offered non-surgical treatment and/or bariatric surgery. The non-surgical treatment includes dietary change, physical activity, and or/ behavioral therapy. This is usually delivered in a group-based lifestyle intervention program developed and implemented by a team of specialists (5). A descriptive systematic review showed that while short-term weight loss is achievable in obesity treatments, maintaining weight loss over the long-term has proven to be a challenge with inconsistent results reported (6). A crucial aspect of all obesity-reducing treatments is permanent changes in lifestyle, which should continue throughout the patient's life to reinforce health related behavioral changes that aid weight loss (2, 5). Several studies provide a comprehensive understanding of the challenges and barriers faced by individuals undergoing non-surgical obesity treatment, as well as the factors that can contribute to successful outcomes (6, 7, 8, 9, 10, 11). The review written by Tay et al. (2023) highlights the role of social support as a facilitator of weight loss and weight loss maintenance, as it can provide encouragement, motivation, and accountability (10).

Verheijden et al. (2005) underscores the importance of social support in health related behavioral change and defines social support as the availability of potential support-givers

(structural support) and the perception of support (functional support). The article further explains that social support can include emotional support, practical assistance, advice, guidance, and companionship. Social support can come from spouses, family members, friends, co-workers, as well as healthcare professionals (9). Social support can have a positive impact on an individual's mental and physical health, as well as their overall well-being (9). Hammarström et al. (2014) found that a supportive and motivating group environment was a key facilitator of weight loss, while lack of social support was a significant barrier to weight loss (11). Taken together, these studies suggest that group treatment and social support are important components of effective lifestyle change interventions and that interventions should aim to promote positive and supportive social environments to facilitate weight loss and weight loss maintenance (9, 10, 11).

Through our research we have found few studies that have investigated experiences of social support in a lifestyle change program for people with obesity (10,11). There are many quantitative studies about the role of social support in weight reduction, but several studies acknowledge the scarcity of qualitative research on the personal experiences of participating in weight loss interventions (9, 10, 11). According to Hammarström et al. (2014), there is a lack of research on the experiences of participants from the general population in dietary interventions, despite some qualitative studies focusing on patients with specific diagnoses (11). In a recent systematic review by Tay et al. (2023), they analysed qualitative data from over 500 participants across different countries between 2011 and 2021. The review identified social support as a crucial facilitator for weight loss and maintenance, both from within and outside the intervention. Additionally, a lack of external support was found to be a significant barrier (10). By exploring how individuals with obesity perceive the significance of social support in initiating and sustaining lifestyle changes, this study can potentially identify areas where future interventions can be improved to better support participants in achieving successful outcomes from lifestyle change programs. This qualitative study aims to explore the experiences of participants with morbid obesity who participated in a group-based conservative rehabilitation program for lifestyle change and how they experience social support within this context.

## **Methods**

This study includes two interview samples of participants enrolled in a group-based conservative rehabilitation lifestyle change program at a rehabilitation facility in Norway.

The program was characterized by an 8-week introductory course, known as the "main stay," where participants met three times a week, the follow-up period lasted up to five years. This treatment consisted of physical activity, dietary counseling, behavioral change and group discussions. The data for this study was collected as part of a larger project which collected substantial data on multiple aspects of the program. The study was conducted in accordance with Coreq guidelines (12).

### **Participants**

The study consisted of 14 participants, 10 women and 4 men aged 29-58 years. Seven participants were about to complete the eight-week introductory course and seven participants were one to two years into the rehabilitation process.

### **Data Collection**

Data for this study was collected through semi-structured interviews by an external researcher, XX. Two different interview guides were used, and these were piloted before the study to ensure consistency. The design of the interview guides was developed prior to the start of the program, with a focus on open-ended questions to allow participants to freely express their experiences and perspectives on the topics raised by the questions. The interviews were conducted at the rehabilitation facility and lasted 30 – 60 minutes. The interviews were audio-recorded and transcribed verbatim by an external researcher. Participants were strategically selected by the external researcher to ensure that the sample included a diverse range of experiences including social support.

### **Data Analysis**

The interviews were analysed thematically using Braun and Clarke's methodology, which involved a systematic approach included the following steps: (i) familiarization, (ii) generating initial codes, (iii) searching for themes, (iiii) involved reviewing themes, (iiiii) defining and naming themes) and (iiiii) producing the report related to our research question. An inductive approach was used to identify themes that emerged from the data rather than applying pre-existing theoretical frameworks (13). Using NVivo software (version 12.0) codes were developed by identifying and labeling meaningful segments of text that pertained to specific themes relevant to the research question. Patterns were then identified by grouping similar codes together and identifying emergent themes across the text. The final step in the analysis involved interpreting the identified themes within the context of the research question. We analysed each interview before engaging in a mutual comparison and reaching



consensus on the coding. To increase the credibility and trustworthiness of our data and subsequent interpretations, any disagreements were resolved by revisiting the original text and engaging in a thorough discussion to ensure the accuracy of the coding.

## Results

The results are presented collectively from both sets of interviews. The identified themes and subthemes are shown in Table 1.

**Table 1: Main themes and sub themes**

<b>Main themes</b>	<b>General experiences of being part of a lifestyle change program can increase the feeling of social support</b>	<b>Experienced social support by other participants in the group</b>	<b>Experienced social support by family and friends</b>	<b>Experienced social support by the interdisciplinary team</b>
Sub themes	Being part of a lifestyle change program could increase self-liability to oneself and others	Similarities between themselves and other participants in the group, and being in the same situation enhanced the feeling of relatedness	Being open with family and friends contributed to the experience of social support in the lifestyle change process	The opportunity to contact the interdisciplinary team is perceived as supportive in a lifestyle change process
	Transition from the main stay to everyday life as challenging without regular guidance and support	Emotional support from peers in the group promoted a sense of belonging and a social connection	Receiving support and feedback from their family and friend	Respect and caring from the interdisciplinary team fostered a sense of trust and security, which the participant found essential in experiencing social support
		Being part of group activities strengthens motivation and enjoyment in lifestyle change		
		Staying connected with the group after the program was perceived as useful to provide a sense of security and support		

## **General experiences of being part of a lifestyle change program can increase the feeling of social support**

The participants highlighted that **being part of a lifestyle change program could increase self-liability to oneself and others**. Knowing that others were also striving towards similar goals and would be checking in on the progress provided additional motivation and commitment to stay on track. The participants reported experiencing a sense of responsibility towards their peers by showing up, actively participating in meetings and exercising together. Further, they valued receiving encouragement and feedback from other participants. This created a positive feedback loop where they felt motivated by their progress and the support of others and were therefore more likely to continue making positive changes. As illustrated in this following statement by a participant who had just completed the main stay: *“When you're being followed up, you're more focused and sharp. It's like you're always trying, always pushing yourself... You don't want to disappoint yourself or those around you”* (Participant 6).

Many of the participants expressed concerns about personal motivation with less intensive follow-up, reduced commitment and implementing lifestyle changes alone. The participants often highlighted the importance of continued support after the main stay, illustrated by the following statement from a participant who was 1-2 years into the program and struggled maintaining new habits: *“(...) I feel that this stay has been a support system or that you are in a position where you get a lot of backup and maybe when you come home to everyday life it's easy to fall back into old habits”* (Participant 12). A participant from the first group described the challenges of implementing lifestyle changes alone like this: *“And I live alone, so that's why I have a little bit of anxiety about not being able to continue with it (...) Because then there's no one to control me anymore, right?”* (Participant 4). Participants highly valued the support and community provided by the group-based rehabilitation program and the interdisciplinary team, including peer support and guidance from healthcare professionals. Many expressed concerns about maintaining progress without ongoing support and transitioning back to a different social environment. This was illustrated by the following statement from a participant in the first group: *“When you don't have the same level of follow-up as you have here, and you don't meet every day, then you don't know how it's going to be. (...) I have received education and that has been a framework, but now I have to try to find other meeting places and try to get into another environment (...)”* (Participant 1).

The majority of the participants mentioned the **transition from the main stay to everyday life as challenging without regular guidance and support**. Participants emphasized the challenge of transitioning from the close social support provided by the group-based rehabilitation program and the interdisciplinary team to a setting with less regular guidance and support. A participant from the second group explained the difficulties like this: *“But then you meet life without necessarily having someone to come to every other day as we did at first.. and then eventually all of these things you struggle with, call them ghosts, all the things that have made you who you are in terms of weight and lifestyle, they come back with full force, without knowing that in two days you’re going back there, and you’ll get support. So there was a difference”* (Participant 9). In this subtheme, there was a notable discrepancy between the two interview groups. Participants who had recently completed the main stay expressed concerns and fears about transitioning to an unstructured daily routine, while those who had already experienced the transition talked about the challenges that arose and their feelings regarding less regular guidance and support after the main stay. Of these, several participants found the change from a structured program to an unstructured routine overwhelming and felt that additional resources and strategies were needed to maintain the progress they had achieved.

### **Experienced social support by other participants in the group**

Many of the participants mentioned that **similarities between themselves and other participants in the group and being in the same situation enhanced the feeling of relatedness**. One participant from the first group illustrated this by saying: *“(…) Even though there are very big differences between us as well, both in terms of size, challenges and health issues there are also similarities (…) I would almost say that having people around you who have exactly the same challenges, or at least many of the same challenges, is the most important thing”* (Participant 3). The feeling of being with like-minded peers, despite being different, was experienced as positive and helped establish a supportive and encouraging atmosphere. A participant from the second group explained the relatedness in this way: *“We can get in touch with each other and ask “How are you doing?” And tell them; “actually, things have been a bit tough for me lately. Can you give me a little boost?” And that’s really great because we are all in the same situation”* (Participant 10).

The participants expressed that **emotional support from peers in the group promoted a sense of belonging and social connection**. One participant stated: *“(…) I think the biggest*

*benefit has been that we can talk to each other. Many have dared to open up and as a result, we have gotten more people to open up*” (Participant 2). The group provided a supportive environment where participants felt safe to exchange tips and receive encouragement from peers. Participants also expressed that **being part of group activities strengthens motivation and enjoyment in lifestyle change** which increased the feeling of social support within the group. One participant described how the group contributed to motivation and support by stating: *“We’ve motivated each other, we have an incredibly good group, and you get caught up, you really do (...) you get support from the group”* (Participant 2). Another participant explained that training in a group leads to a desire to push harder by saying: *“(…) When you have people around you and you perform in a group it’s like you give a little extra. (...) And you push boundaries”* (Participant 6). The participants mentioned the social aspect of group training and explained how this created a sense of belonging and provided opportunities for further social connections.

**Staying connected with the group after the program were perceived as useful to provide a sense of security and support** by the participants. Social media was used as a tool for staying in touch with each other, exchanging updates on their progress and offering support and feedback to one another. They used various platforms such as Snapchat and Facebook to stay connected, provide praise and support when completing a training session or reaching a goal. When someone felt like they were progressing slowly, they were glad to receive feedback from others, knowing that their efforts were still appreciated. Overall, social media played a crucial role in fostering a positive and uplifting atmosphere among the participants. Although social media could serve as an excellent social arena making them feel less isolated and providing support in their efforts to maintain healthy habits, several participants also mentioned that it could be mentally demanding to deal with a Facebook group in the process of lifestyle change. As a result, these participants found it more manageable to communicate and stay in touch with single individuals rather than the entire group.

### **Experienced social support by family and friends**

Most of the participants highlighted that **being open with family and friends contributed to the experience of social support in the lifestyle change process**. Participants emphasized the importance of family members who implemented changes and actively participated in the process alongside them. One participant expressed the great value of support, stating: *“Yes, it has been crucial to have a husband who has been very supportive, always supportive in a*

way, and he was overweight himself" (Participant 8). Another participant explained how they received natural support at home and how this contributed to making the lifestyle change easier by having generally healthy eating habits. The participants explained that if people in their social network were aware of their lifestyle change, this could contribute to and increase the feeling of support because they helped promote and facilitate healthy lifestyle choices.

**Being open with friends and family** could help feel less alone during the process of lifestyle change. One participant explained how openness about participating in a lifestyle change program contributed to friends becoming a greater source of support, with some even joining in on the changes and providing motivation: "*And I think that by aligning with others and being a bit open about this, others can help you reach that goal*" (Participant 8). The participants also mention that being open about their process at their workplace could lead to support and understanding from their leaders and other colleagues. One participant described it like this: "*Uh, my boss at work has been pretty supportive and asked if everything is going okay and sometimes tried to have healthy food at evening meetings and stuff.*" (Participant 11). Conversely, the lack of support from their families was also mentioned by some participants as a difficulty they encountered.

The participants highlighted the importance of **receiving support and feedback from their family and friends**, as it helped them recognize progress that they may have overlooked. They found the validation from an outsider's perspective to be especially valuable even when they didn't feel the change themselves, e.g., comments like "*Now we think you look great*" or "*Wow, you've lost weight*" (Participant 10). These types of encouraging comments regarding the lifestyle change process from friends and family were highlighted by the participants as a feeling of receiving support which helped increase motivation and make it easier to maintain changes and good habits. Opinions and comments from friends and family could also be challenging, such as "*You must not be so hard on yourself or so strict with yourself, you must not condemn yourself for it.*" (Participant 4).

### **Experienced social support by the interdisciplinary team**

The participants appreciated the **opportunity to contact the interdisciplinary team and perceived this as supportive in the lifestyle change process**. The participants valued individual conversations with members of the interdisciplinary team and stated that this made them feel seen as individuals and not just part of a larger group. Further, they described the

availability of the interdisciplinary team and the opportunity to contact a professional if they needed help or guidance as essential for their progress. One participant from the second group described the interdisciplinary team's support as vital in their lifestyle change process and stated “...*So it’s really nice to know that you can just contact a nutritionist or psychologist or whoever it may be, to get back on track again. I’m still in a process where things aren’t going as smoothly as I’d like for my own sake (...) It’s like getting a refresher on what you’ve learned before. With a little bit more input regularly, it’s easier to stay focused on it*” (Participant 10). The participants also emphasized that knowing that the team was available gave a sense of security and support and made them feel comfortable seeking help if they needed it.

**Respect and caring from the interdisciplinary team fostered a sense of trust and security, which the participant found essential in experiencing social support.** Several participants credited their achievements in lifestyle change to the interdisciplinary team's exceptional support. One participant expressed a deep sense of pride in their progress and attributed it to the nutritionist's enthusiastic and charismatic approach. Another participant emphasized the importance of connecting with the psychologist, stating that it was essential to the overall success of the lifestyle change process. The participant explained, “ (...) *And the sessions with the psychologist have been (absolutely) crucial for me and it’s important to emphasize that*” (Participant 8). The participants also highlighted the need for social support through personalized and individual follow-up after the main stay. One participant highlighted the need for different types of support based on each individual's requirements like this: “*Because I see in my group now, we struggle with different things, even though some of it is similar (...) some may need a nutritionist, while others may need more psychological support (...) So I wish there had been a little more follow-up after the eight weeks, not just that you can come and weigh yourself here if you want.*” (Participant 9).

## **Discussion**

The findings of this study support the existing literature on the role of social support in lifestyle change programs (6, 7, 8, 9, 10). The participants in our study reported that being part of a lifestyle change program increased their feeling of social support, which in turn influenced their motivation, commitment, and overall success in making positive changes. Participants experienced social support from three sources: other participants in the lifestyle change program group, family and friends, and the interdisciplinary team.

Our analysis of the interviews indicates a need for social support throughout the entire process of lifestyle change, however, the participants' sources of support changed noticeably over time: The participants who had recently completed the main stay highlighted the significance of both the group and the interdisciplinary team as an important source of social support, whereas those who had been in the program for one to two years placed less emphasis on the group and more on the interdisciplinary team. By providing regular opportunities for interaction, interventions can foster a sense of community and ensure ongoing social support throughout the entirety of the program (10). Swancutt et al. (2019) discuss the role of healthcare professionals in facilitating and managing the group process in ways that encourage patients to form meaningful psychological connections with each other and shared social identity (4)

### **Social support from other participants in the group**

Within the group, participants highlighted the benefits of shared experiences and the feeling of relatedness that emerged from being in a similar situation. The group enhanced their feeling of social support, providing encouragement, motivation, and a sense of belonging. A review by Swancutt et al (2019) on group-based interventions for people with severe obesity supports our findings on the importance of social support from the group. The article highlights the potential advantages of group settings, such as peer support, shared social identity, and a sense of belonging, and points to how this can enhance motivation and adherence to lifestyle changes (4). These findings are further supported by an international systematic review from New Zealand and a conceptual review from Sweden (8, 10) that emphasize the importance of social connection and emotional support. The group activities and training sessions further strengthened their motivation and enjoyment in making positive changes. The positive influence of group-based interventions is in line with findings from Tay et al. (2023) that emphasized the advantages of integrating a group component into the intervention, as it facilitated participants' access to inspiration, a sense of community, and for some participants, a competitive environment (10).

### **Social support by family and friends**

The participants emphasized the importance of social support from family and friends. They specifically found having supportive family members who actively participated in the lifestyle change process alongside them to be particularly valuable. This finding is in line with a qualitative interview study from Denmark which tried to identify drivers of importance



for long term personal lifestyle changes from a patient perspective, where one of the main themes identified was support from family and peers (14). The validation, encouragement, and feedback received from their social network helped participants recognize their progress and stay motivated. This finding is consistent with the study by Verheijden et al. (2005), which highlighted the role of social support from family members in lifestyle-focused weight management interventions (9).

Some participants mentioned challenges owed to family members who did not support their lifestyle change. This made it harder to implement and maintain healthy habits and lifestyle changes. The influence of friends and family on weight loss efforts can be both positive and negative, whereas some friends and family members helped maintain healthy eating habits while others acted as saboteurs (10, 15). These findings underscore the significance of incorporating social support from family and friends into weight management interventions and the need to address both positive and negative aspects of social interactions in supporting individuals' efforts to maintain healthy habits (8, 10, 11).

### **Social support by the interdisciplinary team**

The findings from our study align with previous research on the importance of social support provided by the interdisciplinary team in the lifestyle change process (6, 9, 10). Participants in our study emphasized the value of being able to contact the interdisciplinary team, and the opportunity to seek guidance and help when needed. The availability of the interdisciplinary team was highly appreciated by participants, as it gave them a sense of security and comfort. Tay et al. (2023) found that participants placed significant value on personalized support and accountability, which not only fostered trust in healthcare professionals but also played a crucial role in facilitating successful outcomes (10). Further, our analysis revealed that participants expressed concerns and fears regarding the transition from the structured lifestyle change program to everyday life. They emphasized the difficulties of sustaining progress without regular guidance and support from the interdisciplinary team. According to Tay et al. (2023), the discontinuation of supervision after the intervention was found to be a significant barrier to weight loss maintenance, as participants described feeling unsupported and lacking guidance, leading to a sense of uncertainty and difficulty in sustaining their progress (10).

This study has some limitations due to the small sample size that is often found in qualitative studies (16). Another limitation could be that the data was collected as part of a larger project and did not aim to explore social support as the main theme. Our results could have been

strengthened by observing the same group over time instead of comparing two different groups.

## **Conclusions**

In conclusion, our study underscores the importance of social support in lifestyle change programs. Recognizing various sources of support and implementing strategies that foster relatedness and emotional support was found to be a key factor for the experienced social support by the participants. Our findings support the importance of sustaining a sense of community in the group and suggests that it's important for interventions to promote platforms for facilitating ongoing interactions and support among participants within the group. Future studies should focus on examining long-term lifestyle interventions and developing tailored approaches to meet the diverse needs of individuals with morbid obesity and explore effective strategies for involving family and friends in these programs and examine the impact of enhanced peer support.

## **Declarations**

### **Ethics approval and consent to participate**

Ethical approval was obtained by the Norwegian Center for Data Security. Participants gave their written informed consent to participate.

### **Consent for publication**

Not applicable.

### **Availability of data and materials**

Available on request.

### **Competing interests**

The authors declare no competing interests.

### **Funding**

Not applicable

### **Author contributions**

XX developed interview guide and conducted the interviews. KTJ and LTV contributed equally to the analysis, and interpretation of the study. They were both involved in drafting and revising the manuscript critically for important intellectual content. All authors have given final approval of the final manuscript.

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## **Attachment 1:**

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