Original Article

Exploring Iranian obese women's perceptions of barriers to and facilitators of self-management of obesity: A qualitative study

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Abstract

Background: Despite the clinical importance of self-management for obesity, poor compliance or noncompliance with the treatment regimen is a prevalent and persistent problem concerning people with obesity. **Aims:** The aim of this study was to explore Iranian obese women's perceptions regarding the barriers to and facilitators of self-management of obesity. **Materials and Methods:** In this qualitative study, the participants were selected through purposeful sampling and the data were collected using semistructured interviews and focus groups between July 2017 and September 2018. Nineteen participants between the age range of 28–50 years and mean age of 38.56 years were interviewed. A focus group with seven participants was conducted to reach data saturation. All the interviews and the focus group were transcribed verbatim and the data were analyzed using constant comparative method. **Results:** The perceived barriers to obese women's self-management for obesity were identified and classified into four main categories: (I) restrictions, (II) the pressures of being in the group, (III (temptation, (IV) resonators. In addition, seven main categories emerged as facilitators of obese women's self-management for obesity: (I) achieving self-awareness, (II) positive consequences for weight loss success, (III) positive outcomes of exercise and physical activity, (IV) peers experience, (V) correct and logical program, (VI) autonomy and empowerment, and (VII) having supporting umbrella. **Conclusion:** This qualitative research provided a range of facilitators and barriers to self-management of obesity perceived by an obese woman to improve our understanding of the complex nature of self-management of obesity. Healthcare providers may consider this issue while designing and implementing appropriate interventions to upgrades woman's ability for self-management of obesity.

Keywords: Obesity, obesity self-management, qualitative research, women

Introduction

The increasing trend of obesity is a critical public health problem worldwide. The World Health Organization estimates that in 2014 more than 650 million adults around 18 years and older, were obese.[1] In the United States, the rate of obesity in men and women is almost similar, while in Iran as a developing country, this rate is more frequent in women than in men.[1,2] Obesity is associated with life-threating complications such as heart disease, hypertension, diabetes, and cancer; increased risk of death; and economic burden. Several psychological consequences such as anxiety, depression, and negative body image; reduced quality of life resulting from remarkable limitations in activities of daily living and obesity discrimination, social isolation, and stigma are experienced.[3-6] Although there are many treatment interventions for obesity, maintaining weight loss for the long-term is extremely poor and challenging.[7] It has been shown that 90 to 95% of obese individuals who manage significant weight loss, will regain their weight over 3 to 5-year follow-ups.[8] Prevention and management

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of obesity are now broadly recognized as the main priority for most health care systems, hence, it seems that there is an important process in women's efforts to manage weight loss, which includes a process used to perform this task.[9] Therefore, researchers are not paying attention to the different variables that underlie obesity and are ignoring how people manage their weight. They are struggling to understand the effective factors in the failure of interventions; therefore, the attention of the audiences to the recognition of the facilitators and barriers to the management of obesity are necessary and play a crucial part in designing effective models for prevention and management of obesity. However, there is little knowledge about the perceived experiences, attitudes, and feelings of the woman on their obesity management. The aim of this study was to explore Iranian obese women's perceptions regarding the barriers to and facilitators of self-management of obesity.

Methods

This study was conducted by the grounded theory approach using constant comparative analysis. Using purposive sampling, individuals with obesity were eligible to participate in the study. Maximum variations in sampling in terms of different self-management levels, as well as various socio-demographic, economic, ethnic, and educational statuses, were considered during the recruitment of the participants. The number of interviews and focus groups were guided by reaching data saturation. The study was conducted between December 2016 and September 2018 within general environments such as fitness clubs, parks, and obesity clinics.

Semistructured interviews were conducted by the first author who is a doctoral student trained for and familiar with interview processes and qualitative interview techniques. Participants were informed of the purpose of the study. All the interviews took place face-to-face at the date and time that was most convenient to participants, conducted in Persian and were audiotaped. Interviews lasted between 27 and 56 min (mean 37.93 min) and were guided by open-ended questions such as: "what do you usually do to control your obesity?" "Can you tell me about how you manage your obesity?" "Have you experienced any problems in following up?" Participants were asked to share their experiences regarding the main barriers to and facilitators of self-management for obesity. The interviewer used probing questions to clarify a situation or to provide details to an answer. One focus group was also held to collect data, with seven participants being referred to the obesity clinic.

All the interviews were immediately transcribed verbatim. The transcripts were read by the authors several times to get insight into the participants' experiences. Thereafter, they were analyzed using constant comparative analysis technique. Data were coded, and related codes were finally grouped under certain categories. The MAXQDA (Version 10) was used for data management. Lincoln and Guba's criteria for trustworthiness, was used to ensure the rigor of the study. These criteria were established through a 16-month engagement period in the research setting, providing thick descriptions illustrating the participants' lived experiences, peer debriefing, member checking, recording the decision trail throughout the data analysis process, recording and transcribing the interviews immediately after each interview.

Ethical considerations

Approval of ethics committee is obtained, with the specific code (IR.IUMS.REC.1395.9223493201, Date of approval is: 10-05-2016). Participation in the present study was completely voluntary and informed written consent was obtained from all the participants. All of the interviews were audiotaped with the consent of the participants.

Results

In total, 19 interviews with 13 obese women, 2 husbands, 3 nutritionists, and 1 physician (age range 28–50 years, mean age 38.56 years) were performed. Focus groups with seven participants were conducted to reach data saturation. Of 26 participants, 20 (77%) participants were married. According to the participants' experiences, the major barriers of adherence to self-management emerged in four interrelated categories and main facilitators' emerged in seven categories [Table 1].

Barriers of obesity self-management

The data analysis revealed several barriers, which were organized into four categories.

Restrictions

Challenge of making an arrangement for the treatment plan

The participants stated that daily responsibilities or job made it difficult to have an arrangement for the treatment plan. Daily tasks may interfere with dietary and exercise discipline. One of the participants mentioned "*it happens frequently that you cannot have your meal at the time that you should…. Sometimes there are restrictions and you are so busy that find no time to eat"* (Participant No. 1).

Cultural beliefs

There is a specific belief in Iranian society and mostly among the older relatives that finds obesity a sign of good health. This

Table 1: Barriers to and facilitators of self-management of obesity

Barriers of obesity self-management	Restrictions
	The pressures of being in the group
	Temptation
	Resonators
Facilitators of obesity self-management	Achieving self-awareness
	Positive consequences for weight loss success
	Positive outcomes of exercise and physical activity
	Correct and logical program
	Autonomy and empowerment
	Having a support umbrella
	Peers experiences

old belief is still a challenge in the way of obesity management. A participant commented in this regard: "*I live in an environment that everyone likes obesity. However, I am not concerned about these. Although, from another point view, these unhealthy cultural habits have their effect in some ways" (*Participant No. 12*).*

Activity limitation

The participants highlighted interesting points about the mutual effects and synergy of obesity and physical activity. One of them said: "*Even a simple walking activity causes problem, the heart might stop you or the whole body system might not cooperate (focus group)."*

Financial problems to follow a diet

Many of the participants highlighted the undeniable role of financial matters to stick to their diets. Participant No. 3 said: "*Financial status is a key factor as gyms and nutrition specialists charge you for their services and when these become a regular part of the life, the financial burden becomes a serious problem".*

The pressures of being in the group

Issues like feeling embarrassed, being an insult to the host, others' pressures at parties, the reluctance of the family members to support, and their dissatisfaction with the status quo all take their toll on the energy and motivation to follow a therapeutic diet. One participant said: "*The family might not be completely supportive in some occasions and complain about the diet. Although, this has not happened to me yet, I have concerns about the future"* (Participant No. 1).

Temptation

According to the participant, the main problem was the temptation, which makes people postpone or even stop adherence to a diet. A participant noted: "*the toughest thing that you have to deal with when you are on a diet is the temptation to eat.* (Participant No. 2).

Resonators

Old dietary habits

Iranian families do not have rational nutritional habits. What they do is to satisfy their hunger while their bodies suffer from the lack of micronutrients and main nutrients. In this regard, one of the participants said: "*I did not expect obesity, while I was an overeater. All I wanted to do was to satisfy my hunger regardless of nutritional value of what I was eating. In fact my diet was not healthy"*(Focus group).

Stressors of life and problems at work

The participants mentioned several causes for their failure to follow their therapeutic diets. One noted: "*let's be honest, desire to eat is a natural and pleasant thing especially after a heavy physical or mental activity. This constant desire and rumination takes its toll…"* (Participant No. 5).

Adopting hard and irrational diets

A participant commented about the diets that will end in failure to follow: "*some diets completely cut the carbohydrates and when that are completely removed from the diet, you will become overeager for such foods… it might seem easy during the first days, but from the third or fourth day, you start searching for cookies and carbohydrates everywhere"* (Participant No. 5).

Tiredness

The participants mentioned tiredness as a factor in the failure to follow their diets. "*I am tired of keeping the diet. I do not like being disciplined also the regular visits"* (Focus group).

Facilitators of obesity self-management

Achieving self-awareness

It is easier to keep a diet when an individual learns and understands that losing weight is good for them. A nutritionist said: "*The point is that adherence to a diet depends on how successful we have been to change the individuals' attitudes and lead them towards a better life style"* (Participant No. 16).

The positive outcomes of successful weight loss

"*I felt an interesting motivation to keep the diet when I managed to lose weight and saw the positive physical and spiritual changes" (*participant No. 7).

Physical outcomes

Usually, the first thing people feel along with losing weight is more energy, which is described by most people as feeling "lighter" or "entering a new world." In this regard, one of the participants commented: "*you see, many good things happen when you lose weight. Now that I have done it, I feel less backache or knee pain"* (Participant No. 4).

Psycho spiritual outcomes

A large majority of the participants highlighted the mental outcomes of losing weight, which appears as excitement and energy to start or follow diet therapy. A participant noted: "*The first thing that happened after starting the diet was regaining the lost self-confidence… I felt being younger inside. The next thing I found was that I am able to defeat the negative thoughts rather than being defeated by them. In this way, I became more determined" (*Participant No. 7*).*

Positive outcomes of exercise and physical activity

Regular exercising and physical activity bring in several positive outcomes, which eventually facilitate adherence to a diet. A participant said: "*When done properly, exercising boosts the motivation and for me now it has become a habit just like eating"* (Participant No. 4).

Correct and logical program

Having a reasonable and flexible plan is a strong facilitator for the implementation of therapeutic diets. Without it, frequently failed experiences become a reason for stopping the diet and losing trust in the nutritionist in the next attempts. In this regard, one of the participants said: "*I have seen that the diets proposed by the Nutritionist created stress in some of the women; however, that is not the case for me. Actually I even enjoy adherence to the diet"* (Participant No. 4).

Autonomy and empowerment

Achieving a level of capability that empowers the individual to manage the situation is a critical factor in adherence to a diet. A participant commented: "*Even if I overeat in a party, I will try to compensate the next day by doing more physical activities. On the other hand, I cannot say that being on a diet has not been effective in my mental and spiritual condition (*Participant No. 5*).*

Having a supporting umbrella

Comprehensive continuous support motivates the individual to follow the diet and fight any demotivating and negative thoughts. One of the participants said: "*There are different obstacles mostly negative thoughts and concerns that keep the mind away from the diet. Support and motivation by another person is very effective and helpful in overcoming barriers"* (Participant No. 13).

Family and friends' support

The family's support is a two-edged sword that can lead the individual towards two ends of the spectrum of "management" and "no management." One participant said: "*Some of them did not approve, for example, my mother and mother in law said that I have become too skinny and things like that. However, my husband supported me by saying things like, you used to pant heavily when you climbed up stairs, but now you are much better"(*Participant No. 6).

Motivating supports and feedbacks

The expert's support and cooperation conveys the message to the patient that they are not alone and this facilitates the process of weight control. A participant highlighted: "*The nutritionist acted like a consultant by giving hope to me and motivating me. I kept the contact and this helped me a lot. He was a great support through motivating me"* (Participant No. 10).

Discussion

According to the results of this study, several restrictions like challenges of making arrangements for therapeutic programs, cultural beliefs, financial status to stick to diet, and activity limitations were one of the barriers to obesity self-management. These factors have been highlighted by several similar studies conducted in other countries on different age groups.[10-13] Graney *et al*. reported that time limitation and easy access to processed food, which were categorized as environment restrictions, created troubles for students in managing their weight.[14] In addition, lack of time and ineffective time management were named as serious barriers to doing physical activity.[15-18] Cultural beliefs such as assuming obesity as a sign of good health, cultural norms, and self-acceptance of weight were other factors that limit individuals' capability to follow a therapeutic diet on a regular basis. These findings are consistent with Lagerros *et al*. study.[19] Moreover, unhealthy dietary habits of childhood may lead to unhealthy dietary habits in adulthood.[10,20] In accordance with our findings, Sand *et al*. highlighted the different attitudes in people about health of young women and the elderly. Authors have reported that cultural norms may tackle self-confidence and wellbeing and cause disappointment, pressure, and frustration.[21]

Financial status and income, another finding in this study, are factors that challenged obesity management. Similar findings have been reported by other studies.[15,22] According to the majority of participants, activity limitations were one of the main barriers to doing physical exercises and sport. Similar studies have also emphasized that inability to do physical activity due to excessive overweight, lack of energy, backache, and foot pain were one of the barriers to doing exercises.[23] Pressures of being in a group was another barrier. Issues like feeling embarrassed at parties, feeling that the host is insulted, others' pressure at party, lack of support of friends and family members, and dissatisfaction with the diet in the family all lead to hesitations and doubts about adherence to the therapeutic diet. Studies have highlighted lack of family and social media support, easy access to fast foods, environmental pressures and attending parties, and hanging around with friends. This indicates that situational barriers negatively affect dependence and adherence to the diet and that external factors promote overeating.[10,15,19,24-29] According to the participants, temptation was the first and most important barrier, which is consistent with several other studies. Temptation and lack of discipline (internal personal barriers), the joy of eating or watching others eating, self-control problems, inability to stop eating, personal inability, and lack of responsiveness have been mentioned in other studies.[11,14,22,30,31]

This study showed that individuals who had unhealthy dietary habits in childhood are at higher risk of failure to follow their diet. This has been supported by several studies.[10,20,27,32] Also, adopting hard and irrational diets leads to the side-effects of weight loss diet including side effects on skin, pale look, and lack of nutrients. On the other hand, high expectations from weight management i.e. irrational expectations – intensify the bitterness of failure to achieve weight objectives and dissatisfaction with weight.[19,33-35]

Hamarstromm studied Swedish women who attempted a diet intervention, and consistent with the present study identified two categories of facilitators of weight loss including trying to do self-decision making (having clear objectives by having the motivation and avoiding overeating) and receiving support (from friends, families, and inspiring project).[30] As the results showed, achieving self-awareness and responsiveness towards oneself and others were among the facilitators that prepared individuals for starting the therapy and motivated individuals to continue the therapy.[21,27] Another facilitator was the positive consequences of weight loss success including physical, spiritual, and psychological outcomes that give extra motivation to individuals to stick to self-management process. These are consistent with the results of previous studies.[36,37]

Doing exercise was another facilitator as noted by the participants. The same notion has been highlighted by other studies.[14,29] Another motivating factor was self-motivation, which is also mentioned in Metzgar *et al*. study that people use different approaches to help themselves and keep their spirits high.[29] A supportive environment, social support, and motivating public policies, as external facilitators, to keep the individual motivated, are other facilitators mentioned by the studies.[22,38] Another category of facilitating factors was peers experiences to motivate others to stick to diet and keep doing physical activities. The same result has been mentioned in many other studies where relying on others to engage with and participate in weight loss activities are emphasized.[21,22]

It has been shown that a sympathetic treatment team, who can treat the patient kindly and without judgment or disrespect and improve self-motivation to lose weight, is an essential element for weight loss.[39,40] Since education is mostly done by nurses and as nurses are not that active at obesity clinics, there is a shortage of education services at these clinics and probably it is one of the causes of failure to stick to a diet.[41] Moreover, obesity awareness, understanding the perceived barriers, and facilitators of obesity management by patients are the main step towards better management of obesity in primary care settings by primary care physicians.[42]

Conclusion

This qualitative research provided major and considerable facilitators of and barriers to self-management of obesity in Iranian obese woman to improve our understanding of the complex nature of self-management of obesity. The results of this study can be used in designing and implementing appropriate interventions by primary care providers to enhance obesity self-management.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflict of interest

The authors declare no conflicts of interest.

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