

# Exploring the Experiences of Iranian Women Regarding Obesity Self-Management: A Qualitative Study

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## Abstract

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**BACKGROUND:** Despite the high and growing prevalence of obesity in Iran and a variety of interventions by the healthcare providers control the problem, and it is still a prevalent health problem among Iranian women.

**AIM:** The aim of this study is to explore the perspective of obese Iranian women in the process of self-management regarding the facilitating factor in self-management of obesity.

**METHODS:** In a qualitative study, the participants were selected through purposeful sampling, and the data were collected using semi-structured interviews and focus group (n = 25) between July 2017 and September 2018. All the interviews were transcribed verbatim and the data were analysed using constant comparative method.

**RESULTS:** Supporting the umbrella was the main category found in the present study. The participating obese individuals found "support" as the main factor with an outstanding effect on motivating, incentivising and keeping diet in long-term. This category contains subcategories: self-help; family, friends, and peers' support; and medical team's support.

**CONCLUSION:** The findings suggested the critical role of support in obesity self-management process. This critical factor improves our perception of the multi-aspect and complicated nature of obesity self-management. Moreover, policymakers and providers of health services can utilise this finding in the design of care plans with higher chance of success.

## Introduction

According to the World Health Organization (WHO), chronic and non-communicable diseases will be the cause of 75% of mortalities in the world by 2020 [1], [2]. Obesity is a chronic disease and a major health concern in developing and even developed countries [3], [4], [5]. There is a strong relationship between obesity and type 2 diabetes, cardiovascular diseases, hypertension, liver diseases, gallbladder disease, sleep apneas, higher risk of cancer, and joints disorders. Every year, around 147 billion dollars is spent on health and therapeutic services for obesity [6], [7], [8], [9]. The problems caused by obesity are highly complicated and not limited to physical ones and may affect one's chance to have a dynamic life. The problems also degrade the chance of having an active and fruitful live [10]. According to the WHO,

global prevalence of overweight and obesity in adult women in 2012 were 65-80% and 35-50% respectively; these figures in Iran were 60% and 30% respectively. Moreover, obesity in women is more prevalent than men [11].

Although the aetiology of obesity is not fully determined yet, the interactive effect of genetic, metabolic, psychological, and environmental (social, economic, cultural, physical) factors plays a determinant role [12], [13]. While the majority of obese individuals are aware of the importance of lifestyle modification for the management of their condition, they fail to continue the interventions for different reasons. Also, they might take measures to achieve the ideal weight; however, the therapeutic program they adopt is not effective in long-term, so that the disappointments convince them to stop the program. Studies have shown that only about 20% of overweight and obese individuals manage to lose

weight in long-term [14].

Most of the successful approaches to chronic diseases (including obesity) treatment are patient-centred management programs, which are efficient to achieve weight control and create behavioural changes. Self-management in chronic diseases contains three fields of medical management (adherence to special nutrition and treatment regimen), role management (following and keeping proper behaviors, altering unhealthy behaviors, and altering roles in life), and emotional management as a tool to change attitudes towards future (managing emotions like fear, hopelessness, depression, weight stigma, and shame). These fields were introduced by Corbin and Straus. Nurses play a key role in active engagement of individuals in managing their condition and avoiding progress, recurrence, or side-effects of their medical condition [15], [16], [17], [18].

Since efficient obesity management is a top priority of public health, a deeper insight into the experience and perception of obese individuals of self-management facilitators may lead to a higher quality of life in this group of care seekers. Several quantitative studies in Iran and other countries have surveyed the effects of specific interventions on obesity. Despite the importance of managing obesity and the side-effects (e.g. physical, mental, economic, social and family) [19], [20], [21], the problem has not received enough attention it merits in Iran. The multi-aspect nature of the problem and the side-effects, the fact that it is more prevalent in women than men and the gap is growing, and the high prevalence in young women infertility age and the infertility problems caused by the disorder all highlight the need for studying and surveying the problem. The aim of this study was to explore the experiences of Iranian women regarding their obesity self-management.

## Methods

The study was carried out as a qualitative study based on a grounded theory approach using constant comparative analysis method. The participants were obese individuals who were selected through purposeful sampling. Inclusion criteria were Iranian nationality, being from different cultural and ethnic groups of Iran, Farsi speaker, desire to share information, ability to share an obese life experience, a history of obesity self-management, having enough time to attend interview sessions, and not having specific disease (self-statement). Participants' selection ensured the highest diversity in terms of self-management, social, demographics, economic, ethnic, and education levels. The interviews were continued until data saturation and were completed by focus group. The study was carried out from July 2017 to September 2018 in public spaces like body fitness

clubs, parks, and obesity clinics.

Semi-structured interviews were conducted by a doctoral student in nursing trained in interviewing techniques, including qualitative interviews. The interviews were voice recorded and took between 27 and 56 min (37.93 min on average).

The interviews were handled using open-ended questions like the below one:

- How do you manage your obesity?
- Can you explain about your obesity management?
- What helps you for better obesity control?

Also, the participants were asked to share their experience with the facilitators of obesity self-management. Using probing questions, the interviewer tried to explore deeper into the subject and find more details. Moreover, a focus group was conducted with seven obese individuals visited an obesity clinic.

All interviews were transcribed verbatim immediately, and the transcriptions were read by the authors several times to achieve a common understanding of the participants' experiences. Analyses were conducted using constant comparative analysis to extract the codes and categorise them into specific categories. Data management, encoding and organising, were done in MAXQDA (v.10). Lincoln and Guba's criteria were used to ensure trustworthiness, credibility, transferability, dependability, and confirmability. The criteria were followed and implemented throughout a 15-month interaction period with the participants and attending the research setting, giving thick description of the participants' life experiences, peer debriefing, member checking, auditing data analysis, interview recording, and immediate transcription.

## Ethical Considerations

The study was approved by the Ethics Committee, Iran University of Medical Sciences (IR.IUMS.REC.1395.9223493201). Participation was completely voluntary, and all the participants signed a written letter of consent for interviewing and audio recording.

## Results

In total, 18 interviews and a focus group of seven obese persons visiting obesity clinic (28-50 years old with a mean age of 38.56 years) were performed to achieve data saturation (n = 25) (Table 1 and Table 2).

**Table 1: Demographic characteristics of participants in the interview**

No.	Age	Marital status	Ethnicity (Province)	Previous weight	Current weight	Previous BMI	Current BMI
1	39	Married	Mazandaran	127	112	48	43
2	50	Married	Mazandaran	86	69	34	27
3	40	Married	Mazandaran	90	70	37	28
4	50	Married	Azerbaijan	75	50	30	20
5	35	Unmarried	Azerbaijan	75	59	30	22
6	47	Married	Azerbaijan	75	64	30	24
7	37	Married	Tehran	85	65	32	24
8	35	Unmarried	Tehran	92	70	33	25
9	28	married	Hormozgan	105	80	40	30
10	33	married	Azerbaijan	85	70	33	25
11	40	married	Golestan	93	70	34	26
12	31	married	Mazandaran	97	74	30	26
13	49	married	Tehran	90	74	39	32
14	42	Unmarried	Kurdistan	-	-	-	-
15	30	married	Mazandaran	-	-	-	-
16	31	Unmarried	Mazandaran	-	-	-	-
17	27	married	Mazandaran	-	-	-	-
18	50	married	Tehran	-	-	-	At overweight range

Supporting umbrella (as the main category) was the main facilitator for obesity self-management. The subcategories included self-help, family and significant ones' support, and medical team's support (Table 3).

**Table 2: Demographic characteristics of the participants in the focus group**

No.	Age	Marital status	Ethnicity (Province)	Previous weight	Current weight	Previous BMI	Current BMI
19	32	Married	Gilan	168	134	59	47
20	44	Married	Azerbaijan	135	112	49.7	45.7
21	51	Married	Azerbaijan	102	98	42.3	42.1
22	27	Unmarried	Kurdistan	132	133	49	49.1
23	47	Married	Tehran	93	79	40	37.2
24	31	Married	Azerbaijan	83	85	33	33.2
25	50	Married	Tehran	94	81	38	34

Support was one of the main issues that were frequently mentioned and emphasised by the participants. Obese individuals found it a major factor with extraordinary effects on motivating and incentivising individuals to start or keep a regimen.

**Table 3: Obesity self-management facilitators**

Category	Subcategories
Supporting umbrella	Self-help Family, friends, and peers' support Medical team's support

Comprehensive and continuous supports make people keep their regimen with more energy and motivation so that the chance of keeping the regimen in these individuals is higher. A participant noted: "I think this is a brilliant teamwork that brings people together (nutritionist, sports medicine specialist, psychologist). All of these experts work to help us lose weight without any side effect" (focus group). Subcategories of supporting umbrella, the following will be explained in detail:

### Self-help

One of the participants commented on the necessity of self-help by saying that:

*"If I see an obese person, I will tell him or her to start right now because tomorrow is too late. No*

*one can help you like yourself"* (participant No.11).

A nutritionist said: "My first question of my clients is that 'why they came to me?' and 'what made them to decide to lose weight?' You know, these are important. This is even more important for younger people. The fact that one decides to lose weight based on one's own will and desire or by others' pressure plays a key role in the outcome. Others' pressure works for a while but not too long. However, things are much easier with an internal desire in the patient who has come to realise that losing weight is good. Desire and will are very important" (participant N. 14).

Achieving a level of self-awareness to make the right decision and start a therapeutic regimen was another instance of self-help revealed in the interviews. A participant noted: "an individual starts a diet with a reasonable level of persistence, when they achieve that level of awareness and insight to realise that losing weight is good for them" (participant N.4). It is notable that by looking for help, obese individuals try to help themselves to solve their obesity and the negative consequence.

"Frustration" was the word used by the participants so that they look for help everywhere. A participant said: "I came to the conclusion that I need to help myself... so I asked myself, 'what are you doing with yourself?'" (Participant N.4).

Having great goals was another point that was highlighted by the participants. "When you set a goal for yourself and fight for, you need to remember that all the hardships that you experience will lead to great success. When you accept this, no temptation can misguide you. When frustrated, you should concentrate on your goal and ideal. This surely gives you strength and energy" (Participant N. 8).

Also, the fact that weight management takes too long to achieve the desired result brings in several notable problems, and people may look for help everywhere. The participants noted that they help themselves to keep their regimen by adopting different solutions like making family along with yourself, taking measures to attenuate others' sensitivity, keeping oneself busy by spending time outside the home, rewarding oneself for losing weight, exercising in open space, joining obesity clinics, sharing experience with peers, and compensation in the case of failure to stick to the regimen and punishing oneself for failure.

One of the participants said: "I try not to stay at home and spend more time at work because I tend to eat less when I am outside..." (Participant N.6).

Of other instances of self-help was to observe the positive physical and mental outcomes of losing weight, which was a motivator for continuing obesity management. A participant stated: "When I saw the positive physical and mental outcomes of losing weight, I felt a strong motivation to keep my regimen" (participant N.7).

A huge majority of the participants emphasised the mental outcomes of losing weight and noted that those outcomes were great motivation to keep the therapeutic regimen. A participant mentioned: *“The first thing after starting the regimen was the recovery of the lost self-confidence and I felt being younger. I also felt being a more useful person who can help herself, which was a very valuable achievement for me...”* (Participant N.7).

Achieving a high level of ability and independence was another instance of self-help, which is achieved gradually and through hard work. Gaining the power to control the situation is a critical factor in continuing the regimen. A participant said: *“Even if I am tempted to eat in a party and do so, I will compensate the next day by doing more physical activity...also, keeping the regimen had a negative effect on my mental and spiritual situation in early days...now I know that it was because of the wrong implementation of the regimen; now I am cautious about my blood sugar level, and this is a sort of self-management for me”* (participant No 5).

#### **Family, friends and peers' support**

Family, friends and peers' support was another subcategory of supporting umbrella. This factor is a two-edged blade that may lead the individual towards gaining or losing control. A participant commented in this regard: *“Family's support is very important or it would be great if you could convince them to do group exercises. Some insist on going to gym clubs, but I think you can bring the gym to your house and do the exercising with the family”* (participant N.5).

Helping was another instance of support by others. Using others' experience was one of the items mentioned by participants. One noted: *“Group exercising was very helpful; it was good for motivation knowing that you were doing group work. For one thing, the fee that you have to pay convinces you to continue and for another seeing how others work hard keeps you motivated. Also, watching others' good job and concern about a healthy life makes you think more about your way of life. All these lead you towards your goal”* (participant N.10).

On the other hand, a participant highlighted the undeniable role of using obesity clinics services and the desire to visit such places: *“I like it here as I can see here how others lose weight and that newcomers arrive and ask for comment on how to lose weight and what to eat. Sharing information and knowledge is very good”* (focus group). Indeed, using the experience of successful peers in losing weight through sharing experience is a great help to boost one's motivation to continue their path.

#### **Medical team's support**

Since obesity is a complicated and multifactor phenomenon, its management and treatment need multidisciplinary cooperation. The active support for obesity management by a diverse medical team, including nutritionist, physician, psychologist, psychiatrist, sports specialist, and nurse who work in good harmony guarantees successful management for the patients. A participant commented on the undeniable supportive role of medical team members and nutritionist in particular: *“There are many challenges and most thoughts and worries that keep your mind occupied and distract you from the diet. You cannot deny them; however, and despite all these, an expert's support and motivation can be very effective on outcome”* (Participant N.13).

An active group of experts in the field of obesity management are nutrition and diet therapy experts who are in charge of designing food plans and make obesity management possible through working with other groups of experts as a medical team. Having a reasonable and well-thought plan and persistence are of the strong facilitators of therapeutic regimens so that without them, failed experiences become the main factor in leaving the regimen and losing trust in the nutritionist in next attempts. A participant said: *“Keeping the diet was tough only for the early days because it was not a normal thing for me. However, since the regimen was based on an expert's knowledge, it was easy to adapt to...”* (Participant N.8).

Motivating supports and feedback were of other instances of medical team's support. Supports and empathy of an expert send the signal to the care seeker that they are not alone, and it functions as a notable facilitator in the weight control process. A participant noted: *“my nutritionist was like a consultant and gave me hope and motivation to a great extent...”* (Participant N.10). Positive feedbacks by the gym coach was also highlighted as a motivating factor as one of the participants noted: *“My experienced coach would give me the right instruction and positive feedbacks, which were very helpful and kept me motivated to continue exercising with more energy and vitality”* (Participant N.2).

Financial load of participation in the therapeutic programs was another factor to be taken into account. Many issues that keep the mind busy on one hand and social and economic problems that people are faced with, on the other hand, put more emphasis on the role of support. A participant commented: *“things that keep your mind occupied, stressors, and worries make you distracted from focusing on the diet... however, having someone to keep you company in this path is very helpful. Having someone to motivate and support you makes it easier to overcome challenges in the way”* (Participant N.13).

## Discussion

According to the results of this study, support was the main category with three subcategories, including self-help, family/significant ones/peers' support, and medical team's support. In a study on Swedish women participating in a regimen intervention, two categories of facilitators including attempts to achieve self-decision making (having clear goals with motivation and avoiding food) and receiving support (from friends, family, and the inspiring project) were emerged [22], which is consistent with the results of our study.

Our participants noted that when the supports are continuous, they can overcome the barriers with more energy and motivation. It has been shown that facilitators of obesity self-management were high social status, social support, high self-efficiency, and good mental state [23]. Another study concluded that using the environmental-ecological-social model to induce behavioural changes in individuals and motivate jogging was a facilitator for losing weight. This facilitator consisted of elements including intra-personal (knowledge, skill, attitude, and behaviour), inter-personal (family and friends' effect), and public and organisational policies (national and local plans) [24].

Achieving self-awareness and a sense of responsiveness to oneself and others were instances of self-help; which is an effective facilitator that prepares individuals to start the treatment and keep following it. Shay et al. showed that the lack of awareness about a healthy lifestyle and the social/cultural elements affecting the lifestyle was an undeniable effective factor. People who achieve self-awareness tend to be more persistent in keeping their regimen as keeping it is their own decision as a way to help themselves. According to self-decision-making theory, the choice must fit with the decision maker's interests and purposeful at the same time to make a choice improves motivation, performance, persistence, and productivity. Therefore, to improve weight-loss performance, choosing by the individual seems essential [25].

Health concerns and problems and receiving advice from health professions are among the factors that create motivation [26], make individuals help themselves, and motivate to make every attempt they can to achieve the goal. This was the point mentioned by the participants in this study. Positive outcomes such as successful weight loss was another facilitator for obesity self-management. The participants referred to this concept in different ways and argued that experiencing positive outcomes was a strong facilitator of motivation for self-help. Many studies reported that individuals describe losing weight with terms like being reborn, a chance to start a new life, finding a meaning for life, happiness, lightness, and emotional sooth [27]; transferring from bad habits to

an intentional change [28]; and awareness and clear mentality about choosing food [29]. Thomason maintained that self-management approaches to lose weight rely heavily on a combination of behavioural, mental, anthropometric, and metabolic outcomes [30]. Carrard showed that self-weighing was one of the approaches of controlling weight that led to positive mental outcomes including remaining calm and returning to normal way of life. The behavioural outcomes in return were a life with awareness and compensation in the case of failure to keep the diet [31]. Grave et al. showed that losing weight was related to a decrease in mental stresses and desire to eat. The psychological outcomes of losing weight were better mood, self-acceptance, and self-satisfaction gave that obese individual usually experience a sort of discrimination and less-attractiveness. They tend to blame their behavioural problems like laziness and lust for eating for their overweight and stigmatise themselves [32].

Exercising was another facilitator that was mentioned by the participants and other studies as well [29]. It has been shown that if the college environment supports and promotes physical activity, students will be motivated to do physical activity [33]. Self-motivation is one of the motivating factors highlighted in another study. People tend to use different approaches to motivate and help themselves and keep themselves incentivised [29].

Over the years, people achieve a level of capability that leads to control over one's behaviour in terms of weight-management, role management, and emotional management, which constitute obesity self-management. At this level, people can control their weight without others' help, and it is achievable only when the treatment process is implemented in a rational and reasonable manner. Sand et al. mentioned the facilitating role of prior successful attempts and feeling the ability to manage one's weight [34]. Family support and motivation and continuous supports of this kind are highly important and adopting a new behavioural habit need family support and positive feedback by the therapist, which lead to self-monitoring in turn [35], [36]. These are consistent with the findings of the present study about the necessity of comprehensive support.

Another finding was the peers' experience as a motivation to keep the diet, exercise, and do physical activity by using their valuable experiences. This same idea has been mentioned by different studies that have emphasised on involvement and participation in weight-loss behaviours [34], [37], [38]. Having a supportive environment and social support and implementation of public policies to keep people motivated have been mentioned by several studies as an external facilitator [37], [39], [40], [41]. Being responsiveness towards others and oneself, having a clear plan, and nutritional education based on facts were other facilitators mentioned in other studies consistent with present study [25], [29]. Chugh and

Diaz noted in their study that adopting an empathic and friendly approach to weight loss by the medical team without prejudice and disrespect and promoting self-motivation to lose weight were among the essential factors. The patients emphasized the expected consultation and examination from health care personnel [38], [42]. Healthcare providers play a key role in obesity management by screening, consulting, and supporting individuals to lose weight. Among the key services provided by nurses are motivating interviews, providing information sources, distributing informative brochures, giving recommendations about weight-loss diets with details, measuring waist circumference, implementing continuous supportive programs, and behavioural therapy to create long-lasting changes, all of which are done taking special condition of each patient into account [43]. These findings are consistent with the present study. According to the participants, the mere act of losing weight is not hard, but the hardest part is to remain in shape afterwards. This needs continuous follow-up and motivation.

The present study was not free of limitation; for instance, the responses might be deviated by social acceptance concerns; although, the authors made their best to minimise such concerns throughout the interviews.

The findings suggested the critical importance of support in the process of obesity self-management. This critical factor improves our perception of the multi-aspect and complicated nature of obesity self-management. Moreover, policymakers and providers of health services can utilise this finding in the design of care plans with higher chance of success.

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