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# Unsuccessful Weight-Loss in Adults Admitted to Health Centers, Ahvaz, Khuzestan: A Phenomenological Study

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***ABSTRACT***

**Background:** Nowadays, obesity is one of the most important public health problems worldwide. There are so many various factors interfering with obesity that it is necessary to be studied separately in each population. Although many people can lose weight by observing low-energy diets, they often return to the former weight and even higher. The present study aimed to identify the causes of unsuccessful weight-loss in adults admitted to health centers in Ahvaz.

**Methods:** This was a qualitative phenomenological study carried out in one of the health centers in western Ahvaz, 2017. The data collection tool for this study was semi-structured in-depth interview conducted face-to-face and individually. The interviews were recorded and transferred word-by-word on paper immediately. Then interviews were analyzed using the content analysis method.

**Results:** Seven themes and 11 key concepts were extracted from the contents of the interviews.The following items led to a failure of keeping the diet and achieving the proper weight: Underlying diseases, the effects of drugs on overweightness and obesity, physical characteristics, lifestyle, affecting overweight and obesity behaviors, food habits, and psychological factors.

**Conclusion:** Lifestyle and some diseases and medications can lead to a failure of overweight and obesity confronting programs. Provision of the educational and informational programs to the society with emphasis on the side effects of weight loss medications and lifestyle changes, especially the dietary habits, together with a consideration of the mental health dimension may affect the success of people in controlling obesity.

**Key words**: Obesity, Weight-loss, Diet, Phenomenology

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## Introduction

Obesity is a medical condition in which over normal fatty tissue has been accumulated in the individual's body. The most common way to estimate obesity is to use Body Mass Index (BMI). This indicator is calculated by dividing the person's weight in kilograms by the height in meters squared. According to the definition, when the body mass index is more than 30, the person is considered obese (1).

Obesity is one of the most important public health problems in the world. Expanding urbanization and industrialization in most countries and changes in people's lifestyle and food habits towards excessive consumption of high-fat and energy-rich foods as well as reduced physical activities have all led to an increase in obesity and overweight in both developed and developing countries. In fact, the increased prevalence of obesity is indicative of the epidemic of inertia and overgrowth in the world (2).

According to a study, it is estimated that more than one billion people are suffering from overweight, and300 million are obese clinically. Based on this study, half a million people are losing their lives each year because of obese related diseases, and this trend continues (3). Nowadays, the prevalence of obesity is between 10 to 40 percent in different countries, and Iran shows a high prevalence (4). A survey in Iran estimated the frequency of overweight and obesity 59.3 and 22.7 percent, respectively. Obesity estimated 15.3 % in men and 29.8 % among women (5). According to the latest WHO reports, the prevalence of obesity among men and women is 19 % and 32 %, respectively (6).

Obesity and overweight are the fifth leading cause of preventable mortality in the world, and 2.5 million people die annually due to this disorder. It is, however, the second cause of preventable death in Iran (7). Among the complications of obesity, diabetes 2 type, cardiovascular diseases, hypertension, gallbladder disease, some types of cancer, infertility, joint diseases, and psychological and social abnormalities can be mentioned. On the other hand, the economic losses of this disease are increasing. 44 % of diabetes cases, 23 % of heart diseases, and 7 to 41 % of cancers are attributed to obesity and overweight (8). Low-income and middle-income countries are facing a heavy burden from obesity while they are still suffering from infectious diseases and malnutrition. The risk factors for chronic diseases (e.g., obesity) are also increasing in these countries (7).

The unanimous opinion of experts is that extravagance of in-taking energy from any resource with a sedentary lifestyle leads to overweight and obesity. Therapeutic diets aim to decrease energy intake (9). The primary goal of weight-loss diets is to prevent weight gain and keep body weight balanced. A successful weight loss program is the diet that finally decreases patients' initial weight by about 5 % (9).

Based on research, lack of knowledge about the problems people face when on a diet is one of the issues that leads to problems in weight loss (10). Reports show that obese have records of unsuccessful weight loss measures (11). Since obesity associates with diabetes and metabolic disorders (12) as well as not communicable diseases, it seems valuable to find out what factors influence a successful weight loss diet and what the obstacles are. In addition, there was no prior research to identify obstacles for successful weight control diets in Khuzestan. Therefore, this study aimed to identify the causes of unsuccessful weight loss in obese adults admitted to health centers in Ahvaz, Khuzestan.

## Materials and Methods

This phenomenological case study was conducted in health centers in western Ahvaz in 2017. The population of the study consisted of 40 obese adults who referred to health centers in western Ahvaz. The inclusion criteria were the ability to have conversations and communication, BMI over 30, age of 20-55, and unsuccessful diet (showing no weight loss after three months of underweight diet) (13). The exclusion criterion was having any chronic

disease (diabetes, kidney problems, etc.) and pregnancy. Data were collected through semi-structured in-depth interview that was conducted face-to-face and individually. Before the interview, the aim of the study was explained to the participants, and their written consent was obtained for participation in the study. The participants were selected based on inclusion criteria. We called the participants to set an appointment for an interview, and simultaneously, a nutrition expert visit was coordinated for them in the health center on the same day they were coming for the interview. Each interview took time from 15 to 45 minutes. Data collection continued until data saturation was achieved, and no new concept could be retrieved from the interviews. The interviews were recorded and transcribed according to the permission of participants. Transferring data on paper helped to increase accuracy and authenticity. Data analysis took place at the same time as collecting data. Colaizzi's seven-step method was used to analyze data (14). Researchers read all the manuscripts several times, identified significant statements, formulated relevant meanings, clustered identified meanings, developed an exhaustive description, produced a fundamental structure, and sought verification of the fundamental structure by asking participants about final categorizations. Lincoln and Guba's criteria were used to evaluate the trustworthiness of the data. Analyst triangulation was used for increasing the trustworthiness of the findings (15).

This research was scrutinized and approved by the Research Ethics committee at Jundishpur Ahvaz University of Medical Sciences (Code No.: IR.AJUMS.REC.1396.590).

## Results

In this study, 20 men and 20 women were interviewed. The demographic characteristics of these individuals are presented in Table 1.

Seven themes and 11 key concepts were obtained from the contents of the interviews. Themes and concepts are expressed in Table 2, and the differences between the men and the women in the study are given in brackets.

Participants mentioned multiple reasons for their overweight. One participant pointed out: *" I was a skinny girl when was a kid. Look at me now! I have a lot of appetite. I eat more when I am angry. I like to watch TV all the time while I am eating sweets*" (Participant 1). Even eating makes some other interviewee nervous: *"after delivering a child I was nervous, and it made me eat more. I have a lot of desire to eat food and eating makes me anxious that whether I eat too much or not; I eat more*" (Participant 5). In addition to delivery, some female participants mentioned puberty as the trigger to their overweight. "*I was shy, and puberty made me more sensitive. I started to eat to calm me. When I am upset, I eat more; that moment, it chills me, but then I feel guilty, and all starts again*" (Participant 8). Without a doubt, everybody expects more from diets! "*I come here to get diets, but they are not working. I am torturing myself with these diets, but I see no results, just a few kilograms less. And, as soon as I am off a diet that kilograms come back with extra*" (Participant 24). Some mentioned desk jobs as the most important reason for obesity. "*I cannot move from my desk in the office. It makes me exhausted, and at home, I prefer to lie down in front of the TV*" (participant 27). Watching TV, lying down in front of the TV, and eating while watching were repeated in the interviews frequently.


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**Table 1.** Demographics characteristics of the interviewees

| Variables | Classes | Frequency | Percentage(% ) |
|---|---|---|---|
| Gender | Male | 20 | 50 |
| | Female | 20 | 50 |
| Age | 20-30 | 10 | 25 |
| | 31-40 | 25 | 62.5 |
| | 41-50 | 3 | 7.5 |
| | 50 and above | 2 | 5 |
| Education Degree | High School | 8 | 20 |
| | High School Diploma | 15 | 37.5 |
| | Associate Degree | 1 | 2.5 |
| | Bachelor and higher | 16 | 40 |
| Employment | Employed | 20 | 50 |
| | Unemployed | 20 | 50 |
| Total | | 40 | 100 |

**Table 2.** Causes of unsuccessful weight-loss diets in adults admitted to health centers in Ahvaz

| Key Causes | Groups | Items | Women's response (%) | Men's response (%) |
|---|---|---|---|---|
| Underlying disease | Hypothyroidism | They have hypothyroidism. | 25 | zero |
| Effects of drugs on overweight and obesity | Drug intake | They take antidepressants. | 20 | zero |
| | | They consume Corticosteroids because of allergies. | 35 | zero |
| | | They consume contraceptives. | 35 | zero |
| Physical characteristics | Puberty | They have reached puberty at age 12-13 and have begun to be overweight since then. | 50 | zero |
| | Inheritance | Obesity runs in their families. | 50 | 45 |
| | | Physically, they appear obese. | 50 | 60 |
| Lifestyle | Physical Activity | They have no physical activity. | 100 | 100 |
| | | Their activities are limited to daily routines and chores at home. | 100 | 100 |
| | | Their work at desks in offices (mostly men). | 5 | 100 |
| | Unhealthy use of leisure time | They watch TV in leisure times. | 100 | 100 |
| | | They have junk food while watching TV. | 100 | 100 |
| | | They use fast food for pleasure, celebrate, etc. | 100 | 100 |
| Behaviors affecting overweight | Lack of control on overeating behaviors | They eat with greed and crave for food | 100 | 100 |
| | | They have a strong desire to eat. | 100 | 100 |
| | | They eat fast | 75 | 50 |
| | | Eating makes them relaxed. | 0 | 50 |
| | | When in anger, they like to eat, which makes them relaxed | 75 | 0 |
| | | After overeating, they feel guilty. | 100 | 100 |
| | | They eat even when they are not hungry. | 75 | 50 |
| | | They eat a lot of snacks. | 50 | 50 |
| | | They are worried about their physical appearance. | 100 | 100 |


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| Key Causes | Groups | Items | Women's response (%) | Men's response (%) |
|---|---|---|---|---|
| | Diets | They depend just on one diet. | 100 | 100 |
| | | They mostly skip one meal. | 100 | 100 |
| | | They set unrealistic goals for diet results. They get disappointed soon because they expect to lose weight quickly. | 100 | 100 |
| Food habits | Staple food | They eat rice and bread as the staple food. | 100 | 100 |
| | Unhealthy cooking methods | They mostly eat fried food. | 50 | 50 |
| Psychological factors | Stress and anxiety | They have a lot of stress. | 75 | 25 |
| | Sleep disorders | Mostly, they have sleep disorders. | 45 | 70 |

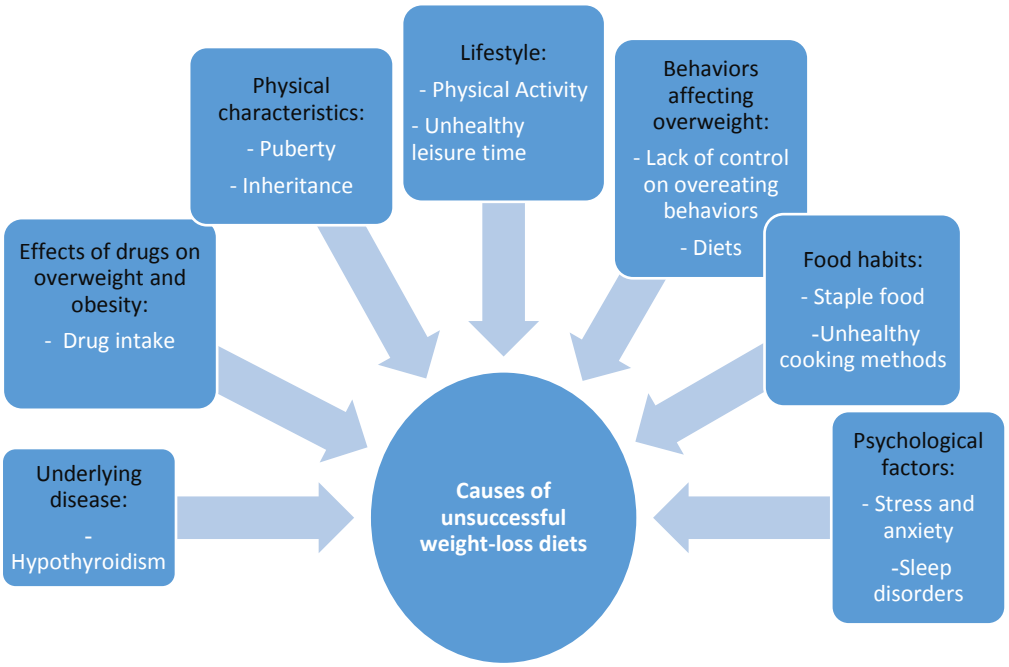


**Figure 1.** The causes of unsuccessful weight-loss diets

## Discussion

Interviews with people who have a BMI ≥ 30 showed that the following items had led to unsuccessful attempts in maintaining a proper diet and reaching the favorable weight: underlying diseases, drugs, physical characteristics, lifestyle, behaviors affecting overweight and obesity, dietary habits, and psychological factors.

Previous studies have confirmed that food habits and imbalanced consumption patterns are the most effective causes of obesity among adults in Iran (16). The imbalance between intake and consuming energy, followed by eating unhealthy food and inappropriate food habits, lead to fat accumulation in different parts of the body and cause obesity as well as other chronic diseases in adulthood. Therefore, it seems necessary to


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develop some public educational programs in order to promote a healthy lifestyle among people. These programs can be provided at all health system levels as well as media.

Physical inactivity, unhealthy dietary habits, watching TV all the time, and high consumption of carbonated beverages are among the causes of obesity reported in various studies (17). Dietary habits and daily physical activities need to be considered as priorities for the health system. These two lifestyle components can affect a range of non-communicable diseases. So, the health system needs to mobilize all available means to show the public what the proper food basket is and how they can practice physical activities as much as it is available. By the way, there is a positive and significant relationship between long-term television watching and BMI (18). Accordingly, it seems necessary to provide solutions for the families on how they can control the time of watching TV and create a safe environment for more physical exercises and activities.

Inadequate and unbalanced diets, as well as the omission of breakfast, can be the critical factors in the incidence of obesity, an issue that has been highlighted in a research conducted in Iran on both genders (19). Considering the prevalence of obesity in various social groups, major forward steps can be taken through nutrition training and raising public awareness about nutritional behaviors for reducing obesity, which is a risk factor for chronic diseases.

Stress might be another affecting factor in obesity and overweight, according to many studies (20). It is recommended that the art and skill of coping with stress in the community must be taught. Educational interventions and some measures such as being realistic, writing own thoughts and feelings besides improving self-stem may reduce the stress level.

Fast eating and a high intake of fatty foods can be effective in the development of obesity and overweight; this has been proven in research conducted on adults in Iran (21). Achieving the necessary strategies and training on these strategies is vital for the public to prevent obesity and overweight throughout life. Also, training the general public with regard to nutritional behaviors can help prevent obesity. In addition, insufficient sleep can be one of the factors that exacerbate overweight and obesity, and research has also shown this (22). By reducing the sleep time, people's desire for high-calorie foods is increased. Proper sleep can be a factor in preventing obesity and overweight, and people who sleep inadequately will experience dietary disorder and a low-quality diet. As a result, they will be more likely to get obese compared to others. Therefore, it is necessary for people to become aware of the importance of adequate sleep and receive training in this regard.

All of the mentioned items represent lifestyle aspects, all of which have been proven by previous research to be effective in the incidence of obesity and overweight (23). Primary prevention of obesity via promoting an active lifestyle and healthy food diets should be a national public health priority. Efforts in combating obesity will be fruitful through education, intervention, and participation of policymakers, health care providers, educators, and parents.

Genetic variables, as well as obesity in parents, can be the factors involved in the incidence of obesity (24). Some claim obesity runs in our family; however, congenital and environmental factors affect the genetic factors and lifestyle. For example, even some tiny muscular-skeleton defect that limits child's motion could lead to overweight and obesity, or living in a flat could result the same. Consequently, it seems useful to consider obesity screening in the health care centers and use the snowball method to find out how much and how it runs in the family. Whatever the answer was, it would be easier to intervene if the family cooperated.

A number of interviewees mentioned their thyroid dysfunction as the reason for their overweight, and some studies have shown that thyroid dysfunction is a risk factor for overweight and obesity. Given the fact that both obesity and thyroid dysfunction are common diseases, the likelihood of thyroid dysfunction should be


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considered in obese patients. Thyroid drugs may prove to be a good means of improving weight loss by increasing energy production in obese people who suffer from hypothyroidism (25).

A large number of female participants believed in-taking some medications -antidepressants, corticosteroids, and contraceptives- prevent them from favorable weight. According to a study at University of Washington, the consumption of antidepressants can affect the patient's BMI. In addition, the probability of getting depressed in obese individuals is twice as much as those with a proper weight (26). Taking antidepressants may aggravate a patient's obesity, and obesity may cause depression. And, this vicious circle goes on; so, physicians and psychologists need to consider patients' weight while prescribing medications.

Finally, half of the female participants indicated that their overweight was triggered by puberty. It seems the physiology of puberty may put teenagers at risk of obesity. Changes in diet, deterioration of dietary habits, the psychosocial factors associated with this period, and a sharp decline in physical activities at this range of age are among the multiple causes of obesity that lasts till adolescence. Therefore, it seems a formal education system and schools can play important roles by developing interventions for attitude and behavioral corrections in the early years of the juvenile. It is also beneficial for teenagers to provide them with counseling about the symptoms associated with this age period (27).

In the end, it seems that one of the most important measures for people to take in keeping weight loss regimens is making long-term changes in their lifestyles and informing them about the barriers and problems they have ahead. Raising public awareness regarding changes in lifestyle, training and promoting healthy eating, eliminating faulty habits, recommending good hygiene habits such as taking adequate rest, doing proper physical activity during the week, and having proper nutritional behaviors are the most important ways to succeed. Moreover, healthy dietary patterns should start from one's childhood and be maintained throughout all lifetime. In the field of health, awareness, emphasis on self-care, people's attention to their health, and attention to the role of intergenerational cooperation should be considered. Having a good life requires one's attention to self-care and taking informed and purposeful actions.

## Conclusion

Lifestyle, as well as some diseases and medications, can lead to failure in programs against overweight and obesity. Obesity should be considered a top priority both in the health care system and in nationwide planning. Recognition of, and following up, the nutritional factors, energy intake and the diet components, nutritional behaviors, and consideration of the effects of non-nutritional factors are all critical in solving the problems and removing the obstacles faced by people. Educating people with regard to proper nutritional behaviors and changes in their lifestyle plays a key role in helping individuals to maintain weight loss diets. Moreover, it seems that the collaboration of mental health units with nutrition improvement units at comprehensive health service centers can help us arrive at more stable results from nutrition counseling at such centers.

One limitation of this study was unwillingness of some patients to participate. They accepted to participate after explanations given to them regarding the benefits of this study by interviewer.

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## Conflict of interests

The authors declared no conflict of interests.

## Authors' contributions

Faraji Khiavi F and Afrash Tabar M designed research; Afrash Tabar M collected data; Faraji Khiavi F and Afrash Tabar M analyzed data. All authors read and approved the final manuscript.

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