

Perception of being Overweight in Iranian Women: A Qualitative Study

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Abstract

Introduction: Overweight is a major public health concern that results in a decreased quality of life. While most of the studies conducted on weight loss strategies have concentrated on issues related to why people gain weight, still little is known about the meaning and the perception of overweight. This study aimed to clarify the perception and experience of women with overweight.

Methods: This qualitative content analysis study was carried out in 2017-2018 in Tehran, Iran. A total of 18 women with overweight and obesity were purposefully chosen. To collect the data, unstructured and semi-structured interviews were conducted. An inductive content analysis approach was used for the data analysis.

Results: The data analysis led to the formation of three categories: obesity concerns, undesirable self-image perception, and psychological pressure and also seven subcategories: inactivity, disorders caused by overweight, body image dissatisfaction, low self-esteem, social stigma, being socially rejected and stressfulness, and sadness. The results showed that overweight and obesity are perceived as a negative experience.

Conclusion: As the present study showed, Iranian women have unpleasant and upsetting experiences of their overweight. The findings reveal the needs to develop strategies for helping women with the problem of overweight to have a better feeling of themselves and society.

Keywords: Qualitative Content Analysis, Overweight, Obesity, Women

Introduction

The worldwide prevalence of obesity has nearly tripled since 1975. In 2016, more than 1.9 billion adults aged 18 years and older were overweight and over 650 million adults of these were obese (1). Drastic changes in lifestyle over the past 30 years have intensified the prevalence of obesity in all parts of the world (2). Obesity has many serious consequences for individuals and governmental health organizations (3, 4). Among women in reproductive age, overweight and obesity are associated with increased risk of delivery complications as well as increased risk of non-communicable disease in their newborn babies (5). Studies have indicated that obesity influences individuals' health and their psychological state. The analysis highlights the role of obesity in depression, anxiety, body dissatisfaction, and low self-esteem. These results are also supported by the study's findings in regards to the effectiveness of obesity treatment like behavioral, medical, and surgical interventions on improvements in psychological areas (6). For these reasons, overweight and obesity have a significant economic impact on health systems. The medical costs associated to overweight and obesity are represented by both direct (i.e., prevention, diagnosis, and treatment) and indirect costs (i.e., decreased productivity, restricted activity, absenteeism, and bed days) (7). Therefore, both the prevention of obesity and efficient programs for weight-loss in various contexts must be considered in health promotion. Yet, although there are many

treatment regimens for obesity, successful weight-loss and maintenance have been shown to be suboptimal (8). Small proportions of individuals can achieve and maintain weight loss because weight-loss is a multifaceted phenomenon that makes it difficult to achieve (9-14)

Beliefs and views regarding obesity need to be understood if health promotion interventions are to be effective. In order to understand why a majority of the intervention programs have shown suboptimal long-term results and to obtain knowledge of how future programs ought to be designed, it is crucial to analyze the experiences of the overweight individuals (12). There are a large number of studies about overweight and obesity predictors and psychosocial consequences with quantitative methods. It is likely, however, that the experience of having overweight is broader and more complex than that accessed by quantitative research methods (15). Such an analysis does not explore the social origins of any psychological consequences. This is notably pertinent to obesity given its status as an extremely stigmatized condition that generates a large number of social reactions. The qualitative analysis suggests that individuals of all ages, sexes, and from various cultures are stigmatized and afterwards discriminated against the obese group. Ogden and Clementi (16) interviewed obese individuals about their experiences, and the participants described the impact of obesity on different aspects of their self-identity. They described how such negative experiences were created out of the dynamic between their obesity and their social context. In Iran, with the purpose of evaluating various aspects of the lived experience and changes in the self for sleeve surgery patients, Sadati et al. (17) concluded that obesity is a continually negative experience with psychological and social pressures characteristics for these patients.

As the results of studies show, community and individual perceptions of overweight can influence the choices about diets and physical inactivity (5), which are the key direct determinants of overweight. Weight bias has been documented in different populations, across education, gender, and income levels, racial/ethnic groups, and among diverse body weights (17). In some cultures, body size and weight may be linked with cultural norms and expectations of appearance as well as risk behaviors (18). For example, Aryeetey showed that in Ghana women did not perceive themselves overweight because in this culture some weight gain is admired but when it is excessive, overweight is stigmatized and it makes the overweight body to decide to lose weight. Hence, culture could be one of the most important determinants for the perception of overweight. There are other studies which have reported the perception and experience of overweight (5, 15, 19). The findings of these studies show the feelings and experiences of overweight in women, men and also adolescent with or without overweight. In addition, these studies had different aims and scopes (20-22). The results of these studies are not always correlated because they have been conducted in different context and groups.

In order to reduce levels of overweight in Iran, it is

important to develop effective preventive interventions among adults, as well as effective weight management strategies. Understanding of how the Iranian overweight women experience obesity, difficulties they encounter, and what makes them motivated for weight loss, are important issues for designing successful weight-loss programs (12). In addition, the qualitative studies that have addressed the problem of overweight are few in Iran; therefore, it is not clear whether there are any responses specific to the Iranian society and Iranian overweight women. It seems that people's attitude towards overweight is different because of its extensive interaction with different variables. The values of a society which a person lives in are fundamental variables. Thus, it was necessary to conduct qualitative research to deeply explore this issue.

The present study was conducted to develop a community-based weight-management program by exploring perspectives on obesity and weight loss among overweight Iranian women with a qualitative approach.

Methods

The aim of this study is to explore the experiences and perception of overweight in overweight women. As mentioned, there is not sufficient knowledge about the experiences of overweight in Iranian women, so inductive content analysis was used for analyzing the data. As mentioned by Elo & Kyngäs, when there is not enough knowledge about a phenomenon or existing knowledge is not integrated, the inductive content analysis approach is the appropriate study method (23). According to Elo & Kyngäs (23), inductive analysis processes are represented as three main phases: preparation, organizing, and reporting. An important feature of all content analysis is that many words of the content are classified into much smaller content categories (24-26).

In the preparation phase, the entire interviews were selected as the unit of analysis in accordance with Elo and Kyngäs' method, and the researcher reviewed the interviews several times to ensure the researcher's in-depth understanding of the data, and tried to make sense from the data and find out what was happening and gain a sense of the whole. In the organizing step, the researcher did actions such as open coding, creating categories, and abstraction. The initial coding of the data was then performed by reviewing the interviews. The codes were categorized based on their similarities. This process continued, each new interview was analyzed, and new categories were added to the list, when necessary. After the open coding, the subcategories were classified under the categories with a higher level of abstraction (27). The subcategories with similar events were classified in the same category and similar categories were merged. The abstraction continued as long as possible (23). An example of the formation of the categories is shown in Table 1.

The study participants consisted of 18 (until saturation was reached) volunteer Iranian women with age range of 18-55, who had the experience of overweight and weight loss in their lifelong. Also, 3 experts were interviewed, who

were specialists in health psychology, nutrition, and physical education. In this study, participants were selected by their overweight and their BMI was between 25 and 41.1.

The eligibility criteria included being 18 years or more, a BMI above 25 kg/m², and losing or trying to lose weight just by psychological, diet, and physical exercises. Potential participants were asked to answer pre-interview screening questions covering age, height, current weight (in order to compute BMI), and lowest and highest adult weights. The purposeful sampling strategy was used to recruit participants. In the beginning, the author carried out 5 deep and unstructured interviews to collect data and then the project went ahead by theoretical sampling.

The researcher conducted face-to-face interviews to permit for open communication between the participants and researcher, with probing as necessary. Digital audio and taping of the interview were accustomed to avoiding the potential loss of data. Transcription from the recorded interview was done. The interviews were held in a gym, university, and participants' house under the condition of silence and no attention disturbance. Each interview lasted 40 to 90 minutes. At the beginning of the interview, participants were informed about their right to leave the study at any time. Participants gave informed consent and were told that the study was about their experiences with overweight. At the end of the interview, the participants were debriefed and were given the opportunity to ask questions about the study. During the interviews, the participants were enthusiastic to give their information and all had their complete cooperation with the study team and they were also eager to know the study results.

Results

The data analysis led to the formation of three categories: obesity concerns, undesirable self-image perception, and psychological pressure and seven subcategories (Table 2).

In obesity concerns, the overweight person has different concerns that occupy her mind with the overweight

consequences. In undesirable self-image perception, the individuals are not satisfied with their bodies, body size, and shape, they feel low self-esteem, and devalue themselves because of overweight. The last category of the analysis shows that overweight and obesity can impose the feeling of psychological pressure on women, they experience social stigma and rejection from the society, and they feel stress and sadness due to overweight that makes them frustrated in some situations.

Obesity concerns

Obesity concerns indicate the diverse model of concerns occupied the overweight individuals' mind, the concern caused by the difficulties, and the problems resulted by overweight. For example, overweight people may concern with obesity diseases such as high blood pressure, heart disease, backache, and knee pain. They also have problems doing sport and physical activities.

Inactivity

Overweighting can make it difficult to do physical activity. For example, the 31-year-old participant said:

"These days walking has become difficult for me, and I have to stop and have a break after a short time of walking, or even breathing becomes it is difficult for me..."

This kind of limitation covers a wide spectrum that affects a person's personal interests and hobbies. For instance, a woman who is a housewife and has some other responsibilities at the same time would have such negative experiences:

"Sometimes, I think it becomes too difficult for me to do chores around the house, I really have problems with doing everyday tasks".

Also, those interested in sports may experience the most negative feelings because obesity consequences inhibit them from sports. The 21-year-old participant said:

"When I was obese, I couldn't do my best in the gym. I was lagging behind the others and after the sports class, I needed a long time to rest. I saw that others could follow the coach, but it was too hard for me to comply with the coach ..."

Table 1.example of the formation of categories

| Text unit | Code | Subcategory | Category |
|---|---|--------------------------------|------------------|
| As I gain weight it became too difficult for me to go on my foot... I prefer to go every way with my car | Problem in walking | inactivity | |
| I afraid of obesity because the last time my blood test showed that the cholesterol level is high... | High level of cholesterol in blood test | Disorders caused by overweight | Obesity concerns |
| I feel that my knees have problem, I think it is happen because of my overweight, I feel pain in my knees | Knee pain caused by overweight | | |

Table 2. The subcategories and categories that emerged from the data analysis

| Category | Subcategory |
|-----------------------------------|--------------------------------|
| Obesity concerns | inactivity |
| | Disorders caused by overweight |
| Undesirable self-image perception | Body image dissatisfaction |
| | Low self esteem |
| | Social stigma |
| Psychological pressure | Being socially rejected |
| | Stressfulness and sadness |

Disorders caused by overweight

The experience of physical problems that agitate the person due to obesity is experienced by most participants. Most of the participants complained of knee pain. Such experiences frustrate the overweight person more than any other experience. Inability to breathe properly while walking, inability to climb the stairs and backache are other physical incapacities. The participants were afraid of other consequences of obesity like heart attack, blood pressure, diabetes, and a high level of blood cholesterol. A 31-year-old woman said:

"I have to lose weight because I am getting old and in upper age, overweight can be dangerous for me; especially because my father has a heart problem, I am more afraid of disorders... and I think my father's problem was the result of his obesity and overeating ..."

Undesirable self-image perception

In the "undesirable self-image perception" category, the individual sees herself worse than reality, blames herself because of overweight, and is not satisfied with her body size, body shape, and the localized body fat.

Body Image Dissatisfaction (BID):

The obese body is unacceptable for the overweight individuals and they are not satisfied with the image of themselves such that they prefer not to see themselves in the mirror or not to wear special clothes that show the whole body and obese parts. A young participant said: *"I don't like to see myself in the mirror and I try to pass the mirror fast. In clothes shops, I really hate to see myself in the fitting room"*. The other participant said: *"I hate myself, and I hate my belly and sides; it would be great if I were thin"*.

Low self-esteem

Overweight patients who hate their biological bodies and its image experience decreased self-esteem, which is an issue associated with all personal experiences (e.g., inability to do personal tasks) and social experiences (e.g., social pressures and stigmas). For instance, some female participants who were married experienced a negative perception and low self-esteem as they felt their body was deformed compared to their husbands. Also, most of the participants complained of having a hanging stomach, *"I don't look at the mirror at all; it really feels bad!"* is the utterance that shows a high degree of body-image dissatisfaction (BID). Thus, the overweight woman tries to escape herself and makes every attempt to deny her identity.

Psychological pressure

Stigmatizing language and behavior is used to characterize overweight and overweight individuals when the person is weighted more than the normal ones. Overweight people believe that others see them abnormal and stigmatize them vocally or by their behavior. It seems that when people are overweight they feel psychological pressure by social behavior. A 26-year-old obese participant said:

"I want to lose weight because I don't like others call me chubby, or when I want to eat I feel that others look at me badly, and sometimes they tell you it a lot."

Or, a 21-year-old participant said *"My mother always tells me*

that I am too fat, and when I get older I will encounter a lot of physical problems, or my mom doesn't let me wear whatever I want. She believes that I am fat and should wear clothes that hides my obesity..."

Social stigma

In this subcategory, individuals think they are stigmatized by the society. As an overweight person enters the society, they face all kinds of pressures and social labels. In such cases, the individual feels like an unwanted object attached to the owner's soul, not leaving her alone. They are seen as lazy, slothful, and weak-willed.

A 32-year-old participant said: *"My friend and my father keep telling me that I cannot lose weight because I am lazy. All of my family members are athletes and they say I must be ashamed of my body size..."*

Being socially rejected

The overweight individual feels that she is not accepted by the others and as a girl or wife her body shape is not accepted by the other sex. The single participants of the study thought that they are not acceptable girls for boys and boys never choose them for marriage or friendship.

A 21-year old participant said: *"I always think that boys never choose me for friendship; and I feel I am not an attractive girl from boy's point of view"*. One of the married women said: *"I want to lose weight because I think my husband doesn't like an obese wife and he teases me for it. I think no men like obese wives"*.

Stressfulness and sadness

The relationship between obesity and health puts pressure on the overweight woman. The 19-year-old woman said: *"I am always concerned about being overweight because my father had high blood pressure and diabetes and had to control his eating behavior. I think I am at the risk of this problem too..."*.

Also, a 55-year-old woman said, *"I have to lose weight because at my age it can result in serious problems"*.

Discussion

The current study explored the perceptions of overweight among overweight women. The results provide a unique insight and elaboration into the topic. Contrary to quantitative analyses of questionnaires, no relevant information is lost because of necessary abstraction and summarization. Thus, it can be considered for conducting a quantitative study on the experience of being overweight.

The results of the present study illustrated that the interviewed overweight people had a continual negative experience that affected the quality of their lives. The negative experiences were the consequences of obesity concerns, undesirable self-image perception, and psychological pressures. The significance of understanding this revealed that the difficulties in daily activities and challenges in doing personal tasks are just small parts of these experiences.

Additional aspects of these experiences are physical pain, loss of social opportunities, and socio-psychological pressures. The experience of overweight has different aspects and complications. The overweight individual is stigmatized and rejected by society's norms. Thus, they

burden psychological pressure, which is reflected as sadness and life dissatisfaction, especially in social presentation. Overweight can intensify physical illnesses and inactivity. Although not all overweight individuals have physical symptoms, most of them are concerned about the obesity subsequences. The psychological pressure decreases the level of wellbeing and quality of life. Numerous studies have provided that overweight people experience significant impairments in quality of life (28, 29).

The sub concepts of the obesity concern in the present study are in line with the subthemes of "Limitations" in the study of Kalateh Sadati et al., that leads to inactivity, incapacity, and painfulness which are all considered as overweight difficulties (15). In another study, Busuttill et al. showed that obesity is related to the development of comorbidities that impair not only the persons' objective health status but also their self-perceived health. In this study, those results are confirmed through different econometric models, which revealed that obesity is a determining factor of worse health-related quality of life (30).

The category "undesirable self-image perception" is in line with the social context concept reported by Ogden et al. This context describes how the social context of overweight individuals influences their perceptions of themselves and influences the way they experienced being obese. Perception of the body and its development has an important role in self-evaluation, mental health, and psychological well-being (31). The results of the present study are correlated with the study of Carr and Jaff, who showed that obese people report significantly more frequent negative mood and unkind treatment of strangers, less frequent good mood, lower levels of self-acceptance, and a lower likelihood of being "very satisfied" with one's self. Carr results are in line with the present study about the psychological pressure in sub concept of stressfulness, sadness, low self-esteem, and body image dissatisfaction.

The evidence in this study shows the enormous health and social effect of overweight on people and social orders (32). As far as the social stigma is concerned, other studies confirm this phenomenon in overweight people (33, 34). Forsberg et al. (35) showed that participants felt inferiority and shamed because of their obesity before removing fat surgery (35). Stigmatization is a general experience in overweight people, especially in women. Besides, weight-related stigmatization and societal pressure on women can cause body image dissatisfaction (36). From a psychological perspective, as mentioned earlier, the participants showed a high rate of self-disregard, especially in body image. This result correlates with the results of other studies on -BID (15, 37). It can be argued that undesirable self-image perception leads to a variety of depressive tendencies in overweight individuals, especially in women and also makes the living situation stressful for the women because they are living in a society in which slim bodies are appealing (15).

The main finding of the current study is that women in Iran recognize the multiple dimensions of the adverse

effects of overweight as it affects social life, physical and mental health, and self-image. indeed, overweight individuals suffer stigmatizing behaviors as has been described before (5). Being thin is greatly valued within societies and a considerable number of women with normal weights are trying to lose weight to achieve the socially endorsed ideal of a beautiful body (38). Obesity consequences for psychological and physical health (39, 40), call for the intervention in health care in Iran and may help people cope with the discrimination and minimize the suffering experiences (41).

The results of the present study can be used by policymakers at all levels to consider the needs of this group. Being sensitive to the suffering of overweight people in clinical practice and considering the inclusion of this issue in the healthcare training allows the healthcare professional to promote interdisciplinary attention to help overweight people to find a better way to deal with the condition of overweight. It seems that in weight loss strategies and programs, we need to consider psychological impairments, body image dissatisfaction, and social isolation. Overweight individuals need to accept themselves before starting other intervention. When an overweight engenders an identity inflicted with self-hatred, it can easily impair overweight's self-esteem; and with low self-esteem, achieving the goals is impossible.

Together with other studies on body image among women, it appears that social expectations of the body style of women play an important role in women's perception of their body weight. Further research to clarify the basis for these expectations is warranted. Indeed, more research is required to understand overweight individuals' coping strategies against the stigmas of being obese. The results can also be applied to improve existing instruments for the measurement of attitudes towards obesity and to study their patterns and prevalence in representative population samples.

The findings of the current study are limited by the inadequate characterization of the women who participated. In particular, information on the educational and socio-economic status of the participants, as well as data on objectively measured overweight status will have permitted a better interpretation of the study. Furthermore, the current study did not differentiate between overweight and obesity. Considering that obesity is more strongly linked with both health and psychosocial factors, future studies will benefit from segregating evidence across overweight and obese subgroups. Nonetheless, the study was able to bring out key perceptions that can inform future studies and program planning and implementation.

Conclusion

Women who have overweight experience have an unpleasant and negative experience of themselves and overweight, which can impose psychological pressures on them. Although the findings of this study were somehow different from the other studies with different purposes and contexts, they confirm and complement the findings

of other studies. Overall, the findings of the present study in addition to being consistent or inconsistent with other studies reveal a variety of negative experiences that increase the burden of obesity and overweight. Therefore, in the first stage, it is necessary for specialists and researchers to be familiar with the experiences of overweight women; because most of them have the feeling of abnormality which causes specialists not to understand their feelings properly. In the second stage, it is necessary for health professionals to design methods or mechanisms that are appropriate to help this group to accept themselves and their differences, and then help them to choose a better lifestyle for more physical and mental health.

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References

- World Health Organization [Internet]. Geneva: World Health Organization (2016). Available from: http://www.who.int/gho/ncd/risk_factors/obesity_text/en/.
- Organization WH. Global Status Report on Noncommunicable Diseases 2014: internet; 2014. Available from: <http://www.who.int/iris/handle/10665/148114>.
- Nguyen DME-S, Hashem B. The Epidemiology of Obesity. *Gastroenterology Clinics*. 2010;39(1):1-7.
- Haslam DWaJ, W.P. Obesity. *Lancet (London, England)*. 2005;366:1197-209.
- Aryeetey RNO. Perceptions and Experiences of Overweight among Women in the Ga East District, Ghana. *Frontiers in Nutrition*. 2016;3(13).
- Ogden J, Clementi C. The Experience of Being Obese and the Many Consequences of Stigma. *Journal of Obesity*. 2010;2010.
- Lazzeretti L, Rotella, F., Pala, L., & Rotella, C. M. . Assessment of psychological predictors of weight loss: How and what for? *World journal of psychiatry*. 2015;5(1):56-67.
- Hammarström A, Wiklund AF, Lindahl B, Larsson C, Ahlgren C. Experiences of barriers and facilitators to weight-loss in a diet intervention - a qualitative study of women in Northern Sweden. *BMC Women's Health*. 2014;14(1):59.
- George DR, Kraschnewski JL, Rovniak LS. Public Health Potential of Farmers' Markets on Medical Center Campuses: A Case Study From Penn State Milton S. Hershey Medical Center. *American Journal of Public Health*. 2011;101(12):2226-32.
- Kristina Elfhag SR. Initial weight loss is the best predictor for success in obesity treatment and sociodemographic liabilities increase risk for drop-out. *Patient Education and Counseling*. 2010;79(3):361-6.
- Collins CE MP, Jones P, Fletcher K, Martin J, Aguiar EJ, et al. Evaluation of a commercial web-based weight loss and weight loss maintenance program in overweight and obese adults: A randomized controlled trial. *BMC Public Health* 2010;10:669.
- Thomas SL, Hyde J, Karunaratne A, Kausman R, Komesaroff PA. "They all work...when you stick to them": A qualitative investigation of dieting, weight loss, and physical exercise, in obese individuals. *Nutrition Journal*. 2008;7(1):34.
- Naomi R. Reyes TLO, Alicia A. Klotz, Caitlin A. LaGrotte, Stephanie S. Vander Veer, Amy Virus, Brooke A. Bailer, Gary D. Foster., Similarities and Differences between Weight Loss Maintainers and Regainers: A Qualitative Analysis. *Journal of the Academy of Nutrition and Dietetics*. 2012;112(4):499-505.
- Elfhag K, Rossner S. Initial weight loss is the best predictor for success in obesity treatment and sociodemographic liabilities increase risk for drop-out. *Patient education and counseling*. 2010;79(3):361-6.
- AK Sadati FR, N Ebrahimzadeh, A Rezaei. . Obesity, Lived Experience, and the Self: A Qualitative Study of Overweight People in Iran. *Women's Health Bulletin*. 2016.
- Ogden JC, Cecelia. The Experience of Being Obese and the Many Consequences of Stigma. *Journal of Obesity* 2010; 2010:1-9.
- Sabin JA, Marini M, Nosek BA. Implicit and explicit anti-fat bias among a large sample of medical doctors by BMI, race/ethnicity and gender. *PLoS one*. 2012;7(11):e48448.
- Davis C LR, Carter J, Kaplan AS, Reid C, Curtis C, et al. Personality and eating behaviors: A case-control study of binge eating disorder. *Int J Eat Disord* 2008;41(3):243-50.
- Bleich SN. Public perception of overweight. *BMJ*. 2008;337:a347.
- Okonkwo O, While A. University students' views of obesity and weight management strategies. *Health Education Journal*. 2010;69(2):192-9.
- Oliver JE, Lee T. Public opinion and the politics of obesity in America. *Journal of health politics, policy and law*. 2005;30(5):923-54.
- Heber D. An integrative view of obesity. *The American journal of clinical nutrition*. 2010;91(1):280s-3s.
- Elo S, Kyngäs H. The qualitative content analysis process. *Journal of advanced nursing*. 2008;62(1):107-15.
- Elo S, Kääriäinen M, Kanste O, Pölkki T, Utriainen K, Kyngäs H. Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open*. 2014;4(1):2158244014522633.
- Weber RP. *Basic Content Analysis*. Newbury Park: CA: Sage Publications; 1990.
- Burnard P. A method of analysing interview transcripts in qualitative research. *Nurse Educ Today* 199.1(11):461-6.
- Elo S, Kyngäs H. The qualitative content analysis process. *Journal of advanced nursing*. 2008;62(1):107-15.
- Yang Y, Herting JR, Choi J. Obesity, metabolic abnormality, and health-related quality of life by gender: a cross-sectional study in Korean adults. *Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation*. 2016;25(6):1537-48.
- Ul-Haq Z, Mackay DF, Fenwick E, Pell JP. Meta-analysis of the association between body mass index and health-related quality of life among adults, assessed by the SF-36. *Obesity (Silver Spring, Md)*. 2013;21(3):E322-7.
- Busutil R, Espallardo O, Torres A, Martinez-Galdeano L, Zozaya N, Hidalgo-Vega A. The impact of obesity on health-related quality of life in Spain. *Health and quality of life outcomes*. 2017;15(1):197.
- Siegel JM YA, Aneshensel CS, and Schuler R. Body image, perceived pubertal timing, and adolescent mental health. *J Adolesc Health*. 1999;25(1):55-65.
- Visscher TL, Seidell JC. The public health impact of obesity. *Annual review of public health*. 2001;22:355-75.
- Lewis S, Thomas SL, Blood RW, Castle DJ, Hyde J, Komesaroff PA. How do obese individuals perceive and respond to the different types of obesity stigma that they encounter in their daily lives? A qualitative study. *Social science & medicine* (1982). 2011;73(9):1349-56.
- De Brun A, McCarthy M, McKenzie K, McGloin A. Weight stigma and narrative resistance evident in online discussions of obesity. *Appetite*. 2014;72:73-81.
- Forsberg A, Engstrom A, Soderberg S. From reaching the end of the road to a new lighter life - people's experiences of undergoing gastric bypass surgery. *Intensive & critical care nursing*. 2014;30(2):93-100.
- McInnes RJ GC. Obesity: A Ticking Time Bomb For reproductive health. *Obese Women and Quality of Life*. In: Mahmood TA AS, editors, editor: Elsevier; 2013. 585-95. p.
- Wilson RE, Latner JD, Hayashi K. More than just body weight: the role of body image in psychological and physical functioning. *Body image*. 2013;10(4):644-7.
- Jolanda S Van Vliet LR, Per A Gustafsson and Nina Nelson. Overweight perception among adolescent girls in relation to appearance of female characteristics. *Paediatrics and Health* 2014;2(1):1-7.
- Avila C HA, Hahn MK, Morrison KM, Restivo M, Anglin R, Taylor VH. An overview of links between obesity and mental health. *Curr Obes Rep* 2015;4:303-10.
- Obesity. EAfSoMDACTAo. A Statement of the Members of the European Association for the Study of Obesity to EXPO 2015. London, UK, 2015. 2015.
- Macedo TTSd, Portela PP, Palamira CS, Mussi FC. Percepção de pessoas obesas sobre seu corpo. *Escola Anna Nery*. 2015;19:505-10.