The Comparison of Quality of Life and Hope in Obese Women with and without Diet Therapy

Negar Behzadipour¹, Sayed Mahdi Hosseinifard², Zeinab Shabouni^{*3}

 Master of General Psychology, Islamic Azad University of Kerman, Kerman, Iran.
PhD in Clinical Psychology, Kerman University of Medical Sciences, Kerman,

3. MS in Medical Education, Kerman University of Medical Sciences, Shahid Bahonar Hospital, Kerman, Iran.

*Correspondence:

Zeinab Shabouni, MS in Medical Education, Kerman University of Medical Sciences, Shahid Bahonar Hospital, Kerman, Iran.

Tel: (98) 913 744 7320 **Email:** zz.shaboni85@gmail.com.

Received: 27 August 2017

Accepted: 01 November 2017

Published in December 2017

Abstract

Objective: The treatment of obesity besides weight loss will have numerous psychological effects. The obese patients have different body image, poor hope and quality of life that influence the process of their treatment. The aim of this study was to compare body image, quality of life and hope in obese women with diet therapy and obese women who are not under diet therapy.

Materials and Methods: The analytical cross-sectional study was carried out on 180 obese women in Kerman during 2016, by convenient sampling. In this study 90 obese women were under obesity treatment regimen in Nutrition centers of Kerman and 90 obese women who were not under obesity treatment regimen. The World Health Organization Quality of Life questionnaire (1991) with a reliability of 86.0 and life expectancy Schneider (1991) with a reliability of 81.0 was used.

Results: The mean score of body image differences between two studied groups were statistically significant (*P*-value:0.001). The value of T differences between the quality of life of two studied groups was 2.25 (*P*-value:0.001) and was significant with 99% confidence interval.

Conclusion: The results showed that there was a significant difference between body image of obese women receiving diet therapy and obese women who did not receive diet therapy. In other words, obese women receiving diet therapy had more positive body image; although body image scores of both groups showed that they are not satisfied with their body image.

Keywords: Quality of life, Hope, Obesity, Diet therapy

Introduction

Century, the prevalence of obesity is growing worldwide and now it is considered as the most common health problem in the most countries. Approximately 1.2 billion people throughout the world are

overweight. It is predicted that by 2020, 3.1 billion people in the world are overweight and 573 million people will be obese (1). By increasing epidemic of overweight and obesity, 100 billion US\$ is annually spent on obesity-related disorders in America and5 to

10% of the country's health budget is allocated to the direct costs associated with obesity. So, the importance and development of programs concerned with prevention and reduction of obesity increases steadily (2).

In Iran, in a nationwide survey on health in 2005, prevalence of overweight along with obesity was obtained 42.8% and 57% for men and women respectively. The previous studies carried out in Tehran showed that the prevalence of obesity and overweight among individuals older than 20 years is 23% and 40% respectively (3). Obesity and overweight is considered as one of the factors affecting health status and quality of life. Obesity is connected with many common (diabetes, hyperlipidemia, hypertension, cardiovascular diseases, respiratory problems, etc.) and psychological (low self-esteem, self-concept change, eating disorders, etc.) diseases (4). So, in order to cope with the large and growing problem of human societies, today that its dimensions are becoming broader day-to-day, reliable and suitable solutions should be found. It seems that lifestyle change along with diet and increased sporting activities is effective in reducing obesity (5). Obesity has a bilateral relationship with a person's emotional pressures, psychological distresses and psychiatric status. Psychiatric disorders, acute mental stresses and more chronic psychological and personality problems can all be causes of obesity and overweight. Many psychological problems as a primary and constant factor can cause the emergence of obesity. In addition, obesity itself leads to many unfavorable psychological consequences and dissatisfaction with life (6). For example, human being is a creature who likes beauty and desire to beauty has long existed in human nature (7). A desirable face makes a person's imagine better towards her. himselfand gives him. Her confidence. As a result, social activities take place in a more acceptable level (8). Body image is one of the psychological structures and is a central concept for health psychologist (9). Mental health professionals have conducted many studies in this regard because of the importance of body image in social interaction and interpersonal relations. Another psychological issue affected by overweight is the quality of life. World Health Organization, as a first pioneer, has a particular attention to the development of evaluation of quality of life and defines quality of life as person's satisfaction with life and environment that encompasses the needs, wants, preferences, lifestyle and other tangible and intangible factors that affect individual's all aspect welfare (10). The hope which has also been defined as a psychological feature, process of thinking about goals, along with the motivation to move towards the goals (factor contemplation) and methods for achieving goals (pathway contemplation) (11) is an important factor in an attempt to lose weight. Based upon the Schneider's viewpoint, people with high hope find more ways to get goals and have more determination to achieve their goals. In contrast, people with low hope have weak determination to keep track of their goals and less impetus to find effective paths in order to achieve the goals (12). With regard to the impact of obesity on eating disorders, individual's adjustment and general health, its treatment is taken into consideration (13). The treatment of obesity besides weight loss will have numerous psychological effects. In the meantime, it is possible that obese people have different body image, little hope and poor quality of life that is effective on the process of their treatment. Therefore, the researcher intends to compare body image, quality of life and hope in obese women receiving diet therapy and obese women not receiving diet therapy and consider whether there is any difference between body image, quality of life and hope in obese women receiving diet therapy and obese women not receiving diet therapy.

Materials and Methods

This was an analytical cross-sectional study. The studied population were obese women of Kerman (BMI>30). The studied sample was selected out of obese women referred to

Nutrition centers in Kerman (9 centers in the city and 3 hospital-based centers) who were under diet therapy for one month. These women (n = 90) were selected by convenient sampling method and 90 obese women (BMI>30) who were not under treatment.

The researcher, after ratification of proposal, tried collect necessary information regarding variables and then starts implement the research. In order to collect information, after determining the sample size and entering into the nutritional centers in Kerman, while explaining the purpose of study, obese women who were treated for at least a month, were asked to answer the intended questionnaires. Coincident with this stage, the researcher, using convenient sampling method in collaboration with the friends out of employed, unemployed women and female students, achieved a sample counterpart with the first sample who were not under regime treatment and they were also asked to answer research questionnaires. The process of completing the questionnaires was individual-based and after collecting entire completed questionnaire and removal of faulty questionnaires data were extracted for analysis. The World Health Organization Quality of Life questionnaire (1991) with a reliability of 0.86 and life expectancy Schneider (1991) with a reliability of 0.81 was used.

Statistical analysis

The data analysis methods used in this study

were descriptive and inferential statistics. In the descriptive statistics, characteristics of the samples were describes using statistical characteristics such as frequency, percentage, mean, standard deviation and the hypotheses were investigated using independent T-test. All statistical analyses were carried out by statistical version of SPSS-21.

Results

The obese women under diet therapy and women without diet therapy were between 15 to 65 years old. The participants' weight range was between 75 kg - 135 kg. According to Tables (1-2), the mean of body image among women receiving diet therapy was equal to 58.55 and among women not receiving diet therapy was 75.34. The mean of quality of life among women receiving diet therapy was equal to 112.78 and among women not receiving diet therapy was 105.56. The mean of hope in the women receiving diet therapy was equal to 53.89 and among women not receiving diet therapy was 35.66. Since the deformation and elongation values of variables were in the range of +2 to -2, and the amount of Kolmogorov-Smirnov test was more than 0.05, distribution of variables was normal, therefore, parametric tests were used to analyze the data. In order to evaluate significance of the difference in body image in obese women receiving diet therapy and women not receiving diet therapy, independent T-test was used. Using independent T-test

Table 1. The summary of descriptive indicators of scores of women receiving diet therapy

Studied variables	Mean	Standard deviation	Minimum	Maximum	Deformation	Elongation	Kolmogorov- Smirnov test
Body image	58.55	4.15	25	80	0.76	0.63	0.053
Quality of life	112.78	3.13	51	132	0.89	0.79	0.052
Норе	53.89	3.76	22	56	1.02	0.63	0.052

Table 2. The summary of descriptive indicators of scores of women not receiving diet therapy

Studied variables	Mean	Standard deviation	Minimum	Maximum	Deformation	Elongation	Kolmogorov- Smirnov test
Body image	75.34	3.88	21	91	0.65	0.95	0.052
Quality of life	105.56	4.75	48	130	0.76	1.04	0.053
Hope	35.66	4.16	18	45	0.97	0.99	0.051

showed that there was a significant difference between the two groups in terms of quality of life (Table 3). Following investigation of the significance of difference in mean of hope of obese women receiving diet therapy and obese women not receiving diet therapy showed, there was a significant difference between the two groups in terms of hope (Table 4).

Discussion

The results showed that there was a significant difference between body image of obese women receiving diet therapy and obese women who did not receive diet therapy. In other words, obese women receiving diet therapy had more positive body image; although body image scores of both groups showed that they are not satisfied with their body image. This finding is consistent with the result of the research by Kashani Assar et al. They showed in their research that obese women have a negative body image of themselves compared to overweight and normal women (14). Khanjani et al (15) and Pasha et al (16), in their studies showed that applicants of cosmetic surgery had a negative body image of themselves compared to those who were not applicant of cosmetic surgery. The research findings are also consistent with the results of research conducted by Sousa and Miguel (13), Haledon et al (17) and Frederick et al (18). They showed in their studies that overweight people who are applicants of cosmetic surgery have a negative body image of themselves. We know that people, who go

under diet therapy, if go ahead by their schedule, gradually achieve to their ideal weight and favorable appearance. Those who once upon were running away from mirror and seeing their appearance now are satisfied through approval by others. So, people who receive diet therapy are feeling more satisfied with their appearance compared to people who are obese but were not treated. The research results also showed that there is a significant difference between the quality of life of obese women receiving diet therapy and those who do not receive diet therapy. In other words, obese women receiving diet therapy had higher quality of life. They obtained higher scores especially in psychological aspects and physical health. This finding is consistent with results of the research conducted by Asgari and (19),Kolodziejczyk Shabaki colleagues (20) Han and colleagues (21), Kolotkin and colleagues (22), Hopman and colleagues (23). There was a significant relationship between obesity and quality of life. They confirmed that obesity is associated with low quality of life. It is also consistent with result of the research by Rodriguez et al (24). He showed in his research that obesity is associated with depression and depression is one of the low quality of life aspects, thus it confirms the impact of obesity on quality of life. In this study, people who were not under diet therapy, their quality of life were lower than the people who were under diet therapy. We know that quality of life includes two aspects of mental and

Table 3. Independent T test results of mean difference of quality of life in obese women receiving diet therapy and obese women not receiving diet therapy

alet therapy and obese women not receiving alet therapy								
Variable	Group	N		t for equality riances	Independent T-test for equality of means			
, 4114010	отощр	-,	F	<i>P</i> -value	t	df	P-value	
Quality of life	With diet therapy Without diet therapy	90 90	0.256	0.607	2.52	178	0.000	

Table 4. the independent T-test results of hope difference in obese women receiving diet therapy and obese women not receiving diet therapy

	Group	N	Levine test	for equality of	Independent T-test for equality of		
Variable			va	riances	means		
			F	P-value	t	df	P-value
Норе	Diet therapy Without diet therapy	90 90	4.31	0.309	3.1	178	0.000

physical health. People who undergo diet therapy, not only are satisfied with themselves by achieving their desired weight and their self-concept and self-esteem grows, they physically fall in a suitable condition. It is here that by improving these two aspects, quality of life will be at a higher level than before. Another finding of this study is the high hope of people receiving diet therapy compared to those who did not receive diet therapy. The result of this research is consistent with findings of Cash and Labarge (25) who demonstrated that people applying for cosmetic surgery have more hope after surgery. Additionally, Valle and colleagues (26) have shown that hopeful people have more self-esteem and mental health. Given that in several studies, low levels of mental health and quality of life of obese people has been approved, it can be inferred that obese people have lower levels of hope. Especially when they are not under treatment, As the obese people, before treatment of overweight, have no hope of recovery, by taking the first step and with decrease of minimum weight, the obese person gains more incentive to lose more weight and receive positive feedback from others. The apparent changes every day make person more hopeful than the previous day for treatment. But an individual who does not take any action for treatment has no hope for treatment from the beginning, so taking the first step will be very hard for him.

Conclusions

The obese women who receive diet therapy are more hopeful and with higher quality of life score and have a better body image from themselves compared to those women who are not under therapeutic regimen. In this regard, they have the higher physical and psychological health.

References

- World Health Organization. Obesity and overweight Available from: URL:http://www.who.int/mediacentre/factsheets/fs 311/en. [Cited 2012 May]
- Jakicic JM. American College of Sports Medicine position stand. Appropriate intervention strategies for weight loss and prevention of weight regain for adults. Med Sci Sports Exerc 2009;33(12):214556.
- 3. Janghorbani M, Amini M, Mahdigooya M, Delavari A, Alikhani S. The first national study of the prevalence of obesity and abdominal obesity in Iranian adults. Obesity2007;15:2797-808.
- Heidari Moghadam R. Obesity and the importance of exercise. Journal of Sport and Health 2011;8:22.
- 5. La Vecchia C, Giordano SH, Hortobagyi GN, Chabner B. Overweight, obesity, diabetes, and risk of breast cancer: interlocking pieces of the puzzle. Oncologist 2011;16(6):726-9.
- Brownell KD. The LearnProgram for wight management. Dallas: American Health PublishingCompany; 2004.
- Wolpe PR . Treatment, enhancement and the ethics of neurotherapeutics. Brain Cogn2002; 50: 382-95.
- 8. Jourabchi K. Plastic surgery of the nose. Yes or no? Tehran, Poursina publication; 2000.
- 9. Gleeson K. Constructing body Image. Journal of Health Psychology; 2006;11(7):79-90.

- Ghaffari. GH, Omidi R. Quality of life of social development index. Tehran: Shirazeh publication and research; 2009.
- 11. Yalom ID. The theory and practice of group psychotherapy. (4th Ed.), New York: Basic Books; 1997.
- Schneider MCC. Castillo-Salgado et al. Summary of indicators most used for the measurement of the health inequalities. Epidemiol Bull 2005;26(3):7-10.
- Sousa P. Miguel L. Body-Image and obesity inadolescence: a comparative study of social demographic,psychological, and behavioral aspects. The Spanish Journal of Psychology 2008;2:551-63.
- Kashaniasar H, Roshan R, Khalaj AR, Mohammadi J. The comparison of alexithymia and body image in obese people, overweight and normal weight. Quarterly Journal of Health Psychology 2012;2:73-80.
- 15. Khanjani Z, Babapour J, Saba G. The study of mental status and body image of applicants and non-applicants of surgery. Journal of Martyr Sadooghi University of Medical Sciences 2012;20(2):84-94.
- 16. Pasha GR, Naderifar F, Akbari SH. The comparison of body image, body mass index, overall health and self-concept among people who have had cosmetic surgery and applicants in the

- city of Behbahan. New findings in psychology 2009;5:21-34.
- 17. Holdun O, Komburoglu MD, Ozgur MD, Postoperative satisfaction and the patient's body image life satisfaction, and self-esteem: A Retrospective study comparing adolescent girls and boysafter cosmetic Surgery. Aesthetic Plastic Surgery2007;31:739-45.
- Fredrick DA, Lever J, Peplau J, Letita A, Intrest in cosmetic Surgery and body image: view of men and womanacross the lifespan. Plastic Reconstr Surg 2007;120(5):1047-415.
- Asgari P, Shabaki R. The role of body image on quality of life, satisfaction with life, gender role and self-esteem attitude. Thought and behavior 2010;V(17):21-32.
- Kolodziejczyk JK, Gutzmer K, Wright SM, Arredondo EM, Hill L, Patrick K, et al. Influence of specific individual and environmental variables on the relationship between body mass index and health-related quality of life in overweight and obese adolescents. Qual Life Res. 2015;24:251-61.

- 21. Han TS, Tijhuis MA, Lean ME, Seidell JC. Quality of life in relation to overweight and body fat distribution. American Journal of Public Health December 2011;88(12):1814-20.
- 22. Kolotkin RL, Williams GR. Quality of life and obesity. Obesity Reviews 2001;2(4):219-29.
- 23. Hopman WM, Berger C, Joseph L, Barr SI, Gao Y, Prior J, et al. The association between body mass index and health-related quality of. Quality of <u>life resea</u>rch. 2007;16:1595-603.
- 24. Rodriguez M, Grima FG, Auba E, Marti A, Larumbe AB. Relation between body mass index and depression in woman: A 7- year prospective cohort study. The APNA study. 2016 European Psychiatry 2014;32:55-60.
- Cash TF. Labarge AS. Development of the appreance schema inventory: a new cognitive body image assessment. Cogn Therap Res 1996;20(1):37-50.
- 26. Valle MF, Huebner ES, Suldo SM, An analysis of hope as a psychological strength. Journal of School Psychology2006; 44(5): 393-406.