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#### **Brief Article**

# Comparison of health-related quality of life between obese women with binge eating disorder and obese women without binge eating disorder

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# Abstract

**Introduction:** Nowadays obesity is an important factor in the onset of disease and early mortality followed by personal and social consequences. One of the effects of obesity is its impact on quality of individual's life while some studies proved that binge eating disorder affects obesity consequences.

**Methods:** In this cross-sectional study, among all the clients of obesity clinic at Sina Hospital with sampling health-related quality of life, 61 obese women with binge eating disorder were compared with those of 74 obese women without binge eating disorder through performing sf-36 questionnaire and the results were analyzed by using independent t-test.

**Results:** Results showed that in six subscales of health-related quality of life, the group of women without binge eating disorder ranked over those women with binge eating disorder.

**Conclusion:** Parallel to weight loss in obese and overweight people and due to its impacts on the consequences over the obese people, it seems necessary to equally focus on the treatment of binge eating disorder simultaneously.

**Declaration of Interest**: None.

**Keywords**: Health-related quality of life, Obese women, Binge eating disorder.

## Introduction

Whether or not we consider obesity a direct or indirect factor affecting health problems; we cannot deny its impacts on many other issues (1). Undoubtedly an obese person's mental and physical health is prone to various risks and frequent cycles of losing and gaining weight somehow amplify these risks (2). Moreover, many recent researches reveal that obesity and psychological disorders such as depression, anxiety and low self-esteem are interrelated (3, 4). Although, there are lots of studies focusing on the effects of obesity on physiological issues such as cardiovascular disease, blood pressure disorders, type-2

disease (5, 6), there are scanty studies about the psychological factors related to obesity (6,7). In addition, the studies conducted in this field have focused on limited psychological and have generally structures contradicted findings (8). Although some studies conclude that obese people experience more psychological issues than people with normal weight (9, 10, 11). On the other hand, other studies do not approve this point (12, 13). According to these contradictory findings some researchers come to this point that obesity by itself is not related to the augmentation of psychological problems (14) and those psychological problems which exist along obesity are most probably due to simultaneous physiological disease (15) and psychological disorders such as binge eating disorder (14, 16). The researchers have found that the binge eating pattern is very common in obese people and 23 to 51.6 percent of them suffer from binge eating disorder.

Different studies have depicted that obese people who suffer from binge eating disorder are significantly different from obese people without binge eating disorder in early onset of obesity, long history of diets and weight fluctuation (16, 17, 18, and 19). Moloudi et al. (2010) surveyed the differences between two groups of obese people with and without binge eating disorder in regard to Young's early maladaptive schemas and concluded that obese people with binge eating disorder score significantly higher than obese people without abandonment/instability, the disorder in emotional deprivation continence/insufficient discipline schemas. There are rare evidences to prove that obesity is prior to this disorder (21). In studies related to life quality, confined conceptualization of psychological problems of people suffering from obesity and binge eating disorder is clearly recognizable (22). The World Health Organization defines life quality "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (23).

There is an interaction between chronic disease and life quality, besides; physical disorders and somatic symptoms have direct impact on all aspects of life quality (24). Fontani and Barofsky (2001) revealed that there is a direct relation between body mass index and damage to health-related quality of life; those with higher weight have reported more problems in different aspects of life quality. Therefore, obesity affects general health more than physical problems (26). During recent years the interest in evaluation and improvement of life quality of patient suffering from chronic diseases has grown drastically and improvement of daily functions and life quality of those with chronic diseases

has turned into an important goal (24, 25). Life quality is studied through different methods. One instance is health-related quality of life that can be used in evaluation of endangerment of health condition in daily life (26). There is a growing general agreement on the fact that health-related quality of life should be one of the main therapeutic and research components (26). In regards to the effects of binge eating disorder on various aspects of obese people's lives and its consequences, and the importance of noticing to different dimensions of obese people's health, and with respect to the fact that there have been little concerns in Iranian society about the concept of life quality and related factors in people suffering from binge eating disorder, the research holds the promise to study the effects of this disorder on healthrelated quality of life in patients with binge eating disorder in comparison to other obese people without the disorder. Discovering this point will help the health care professionals to reorganize their activities in order to promote the health and improve the life quality. In other words, there will be an answer to this question that changes in which therapeutic and psychological characteristics should receive priority parallel to interventional measures for weight loss.

#### Methods

The current research is a descriptive one. The statistical population of this research is all obese people visiting weight loss clinic at Sina hospital in Tehran during 2010. 61 obese women suffering from binge eating disorder and 74 obese women without the disorder were chosen among them through available sampling. They participated based on their agreement and written consent forms and those psychological other physical and disorders were omitted from the research. Criteria required to enter the research were having at least high school diploma in education, being female and having at least 20 years of age. The main axis of the research is quantitative and required data have been gathered using sf-36 questionnaire, which is explained in research materials part.

**Health Survey Questionnaire** (SF-36): Health survey questionnaire includes 36 questions and measures 8 health subscales (somatic function, somatic play, somatic pain, general health, vitality, social function, emotional play and mental health). Montazeri et al., in Iran have localized it in 2006. Reliability of the questionnaire has been assessed through reliability of content and its stability has been assessed by Cronbach's alpha. The results of internal stability demonstrated that except the field of exhilaration  $\alpha$ , 3 all other domains of Persian type have the minimum coefficients range 0.77 to 0.90, which shows the acceptable internal stability of this questionnaire (27). In order to hypothesis study the research about comparison between the life qualities of the two groups, using SPSS software, independent t-test was applied in a significant level p<0.05 to analyse the research findings.

In the present study in overall, 135 women (74 without binge eating disorder and 61 with the binge eating disorder) participated. The mean age of obese women suffering from the disorder was  $36.47,\pm 11.3$  and that of obese women without the disorder was  $37.63\pm 11.41$  and the body mass index in the women was 36.52

#### Results

Descriptive indexes related to life quality variables of both groups have been demonstrated in table 1. The results in the table shows that mean of life quality variables in obese women without binge eating disorder is higher than that of obese women with binge eating disorder. The highest mean in the group of women without the disorder belongs to social function aspect (M= 88.49) and the lowest mean belongs to the energy/fatigue aspect (M= 58.25). In the group of obese women with binge eating disorder the highest mean belongs to social function aspect (M= 58.25) and the lowest mean belongs to functional/emotional role aspect (M= 29.99).

Eight subscales of life quality were studied separately in two groups and the results have been reported in table 1. The result of independent t-test for comparing two groups in functional/somatic role, welfare/emotional and

general health subscales show that the mean of obese women without binge eating disorder is higher than the mean of obese women with the disorder (p<0.01). Moreover, the result of the test in energy/fatigue and functional/emotional subscales indicates that the mean of obese women without binge eating disorder is higher than the group of obese women with binge eating disorder (p<0.001). Therefore, social function subscale was revealed to be significantly higher in the group of obese women without the disorder.

## Discussion

As discussed above, the group of obese women without binge eating disorder receives higher scores in six aspects of health-related quality of life (social function, emotional function, energy level, emotional welfare, somatic function and general health) than the group of obese women with the disorder. Zavan et al., (2002) also reported a remarkable difference in four out of eight scales of life quality dimensions between people suffering from binge eating disorder and people without it with the effect size of 0.44 to 0.75. Marchessini et al., (2002) concluded that the cognitive behavioural therapy effective on health-related quality of life in obese people with binge eating disorder than the obese people without binge eating disorder. Del Ra. E., Nordenbo and Vonfort (2005) compared the life quality of 156 patients suffering from binge eating disorder with that of 148 patients who had previously suffered from the disorder. The findings showed that the life quality of patients previously suffering from the disorder were higher than that of patients currently suffering. Riger et al., (2005) compared the healthrelated quality of life in obese people with and without the disorder and found out that obese people with binge eating disorder are more harmed in psychological-social, self-esteem, and general inability and sex-life dimensions. As mentioned before, it seems that the relation between obesity and psychological consequences are due to prevalence of binge eating disorder among obese people; and obese people suffering from binge eating disorder report lower self-efficacy, which is considered a key factor in losing weight, than obese people without binge eating disorder. Therefore, it seems that although losing weight has an important role in preventing the risky factors of diseases, the various dimensions of life quality such as somatic function, general health, vitality, social function and mental health should also be noticed alongside in obese people. Reaching the life quality information is not only a key to find more effective treatments and future advancements Table.

but also important in promoting supportive programs and rehabilitation proceedings. Nowadays, people demand improvement in their life quality. Thus, governments all over the world are paying more attention to the life quality of their people and try to decrease the rates of death and disease and increase the health services and people's somatic, psychological and social welfare.

Table 1.Independent t-test to compare two groups

Dimensions	Obese women wi	thout binge eating	Obese women	with binge eating
	disorderDf=120		disorderDf=120	
	P	M(SD)	Significant level	M(SD)
Emotional welfare	0.01	(19.46)43.20	0.01	(22.98)55.04
Energy/fatigue	0.001	(19.43)32.87	0.001	(23.31)49.88
Functional/emotional	0.001	(38.33)29.99	0.001	(40.11)57.05
role				
Functional/somatic	0.01	(37.12)36.95	0.01	(39.64)56.59
role				
General health	0.01	(20.68)43.75	0.01	(24.60)55.46
<b>Social function</b>	0.05	(23.81)25.58	0.05	(25.33)69.42

This research will pave the way for a better determination of interventions in order to improve the health dimensions and life quality of obese people. Therefore, according to various consequences of binge eating disorder for obese people such as affecting the healthrelated quality of life, treatment of this disorder is as important as weight loss interventions for most obese people. Among the limitations of this research one can mention the femininity of all participants, which was due to unavailability of male patients and also making the sample selection from just one hospital in Tehran, which happened because of our disability to reach health centres. These limitations problematize the data generalization of this study to the whole population, so performing similar researches on other groups of obese people is suggested.

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