

# Aspects of quality of life affected in morbidly obese patients who decided to undergo bariatric surgery: A qualitative study to design a native questionnaire

Behrouz Keleidari, Samira Davashi Jamalouee<sup>1</sup>, Mohsen Mahmoudieh, Behzad Zolfaghari<sup>2</sup>, Mahsa Gharzi<sup>1</sup>

Department of General Surgery, Saint Alzahra Hospital, <sup>1</sup>Isfahan Medical Students' Research Center, <sup>2</sup>Department of Pharmacognosy, Isfahan University of Medical Sciences, Isfahan, Iran

**Background:** Obesity is a known prevalent major health issue. The aim of this study is to assay Iranian patients' problems with obesity and their expectations of bariatric surgery. **Materials and Methods:** In this study, we included patients who have used different medical noninvasive treatments and were unsuccessful in losing weight from the obesity clinic in Al Zahra Hospital, Isfahan, from 2014 to 2015. Morbidly obese patients were interviewed using some open-ended questions, and then, directional content analysis of data was done. **Results:** Analysis of data showed five main categories including (1) physical health, (2) psychological health, (3) social relationships, (4) environment, and (5) "about the causes of obesity" with some subcategories for each category. **Conclusion:** This study is the first step of designing a quality of life questionnaire while we focused on spiritual and cultural states of Iranian people.

**Keywords:** Bariatric surgery, morbid obesity, qualitative studies, quality of life, questionnaire

**How to cite this article:** Keleidari B, Jamalouee SD, Mahmoudieh M, Zolfaghari B, Gharzi M. Aspects of quality of life affected in morbidly obese patients who decided to undergo bariatric surgery: A qualitative study to design a native questionnaire. *J Res Med Sci* 2017;22:56.

## INTRODUCTION

Obesity is a chronic disease which may have a major negative effect on the people's quality of life (QoL).<sup>[1]</sup> Our country, Iran, is considered as a country in the nutrition transition<sup>[2]</sup> which follows the western lifestyle like the other developing countries.<sup>[3]</sup> On the other hand, Iran had the third position in publication about obesity/overweight among the middle east countries.<sup>[4]</sup>

Bariatric surgery is the most effective treatment for morbid obesity. Few studies have tried to understand and assess the meaning of bariatric surgery for the candidates. Some patients think that the bariatric surgery is a miracle<sup>[5]</sup> and there is no need to participate in the process of long-term medical treatment;<sup>[6]</sup> while others think they can continue life without

interventional treatments and resist this process in spite of high grades of obesity. Hence, it is needed to have enough information about this disease and different ways to change lifestyle. This study aims to clarify different aspects of QoL of the Iranian patients which are affected by obesity and to explore their beliefs and expectations of bariatric surgery. On the other hand, this study is the first step of designing a QoL questionnaire based on our own culture and spiritual states.

## MATERIALS AND METHODS

In our qualitative content analysis research, we chose 38 morbidly obese patients, by purposive sampling and we continued data collection until saturation of data occurred.

In this study, we included patients who have used different medical noninvasive treatments and were

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**Address for correspondence:** Dr. Samira Davashi Jamalouee, Isfahan Medical Students' Research Center, Isfahan University of Medical Sciences, Isfahan, Iran. E-mail: [davashisamira@gmail.com](mailto:davashisamira@gmail.com)

**Received:** 17-11-2016; **Revised:** 19-12-2016; **Accepted:** 31-01-2017

unsuccessful in losing weight from the Obesity Clinic in Al Zahra Hospital, Isfahan, from 2014 to 2015. These face-to-face interviews took place the day before the surgery in a stress-free quiet room. We used some open-ended questions such as "Why did you decide to treat obesity?" and "What are your expectations of surgery?" and we continued based on their responses.

For data analysis in this study, we used Graneheim and Lundman's method.<sup>[7]</sup> We assigned the participants' narrations into some codes, and then, we sorted the similar codes according to the main categories of standard QoL table which is called "The World Health Organization's WHOQOL-BREF QoL assessment,"<sup>[8]</sup> but with some differences in subcategories.

This survey is the first step of designing a native closed QoL questionnaire according to our cultural and spiritual beliefs.

### Rigor

To enhance the credibility of our research, we carried out peer review of narrations, codes, main categories, and related subcategories. To promote transferability of our data, we chose patients with various sociodemographic characteristics and obesity grades. Analysis of data by multiple researchers helped us to increase dependability and conformability.

## RESULTS

Twenty-seven women (71%) and 11 men (29%) participated in our study. The sociodemographic analysis of these 38 morbidly obese patients has been mentioned below: the mean age of this group was 35.29 years (standard deviation [SD] = 11.57), the mean body mass index (BMI) was 42.83 (SD = 6.94), and the mean weight was 117.85 kg (SD = 20.47). About "marital status:" 24 married (63.16%), 13 single (34.2%), and 1 divorced (2.63%). About "education:" 26 under bachelor's degree (68.41%), 7 bachelor's degree (18.42%), and 5 upper than bachelor's degree (13.17%). Moreover, about "professional status:" 9 full-time (23.68%), 13 part-time (34.2%), 15 unemployed (39.47%), and retired 1 (2.63%).

Five major categories were used in our study which four resembled the WHOQOL-BREF and one named as "about the causes of obesity." These five categories are as follows:

1. "Physical health" with four subcategories: "pain and fatigue," "mobility and activities," "medication," and "sleep." The problems related to this category were prominent among participants' problems. One interesting point is that even patients without any comorbidities had a fear of them, which brings this in our mind that they are involved as much as patients with comorbidities

2. "Psychological health" with six subcategories: "medication," "feelings," "self-esteem," "thinking/learning," "body image," and "spirituality." This subcategory was affected in different aspects such as having obsessive behaviors, paranoid and suicidal thoughts, aggression, depression, and self-cutting all in the past
3. "Social relationships" with two subcategories: "practical social support" and "personal relations" (including relations with self, society, family members, and opposite gender). "Relation with opposite gender" was the most frequent part of this category. Although most of the participants avoided to have audiotaped interviews, they told us their related problems in details, which we found that it is an important aspect which is affected in patients
4. "Environment" with five subcategories: "cloth style," "transport," "finance," "leisure," "home and physical environment." Among these subdivisions, "cloth style" and "transport" were mentioned at the most, respectively
5. "About the causes of obesity:" In this category, participants mentioned pregnancy, long-time immobility after trauma, their own eating behaviors, family susceptibility, associated diseases such as diabetes, big psychological events such as death of parents or migration as the causes of obesity. On the other hand, most of these causes are controllable, and it seems that awareness about obesity can prevent us from it.

The details of interviews, narrations, and categories have been sorted in a table which we will provide it for the interested readers through E-mail.

The main results of our article are the results of QoL questionnaire in our sample study.

## DISCUSSION

We reviewed the patients' feelings, beliefs, and expectations of surgery to assess their attitudes regarding obesity definition, their eating behaviors, spiritual, and occupational challenges, and then, we reported their narrations in five main categories: (1) physical health, (2) psychological health, (3) social relationships, (4) environment, and (5) "about the causes of obesity" with some subcategories for each category. Some categories of our table may be applied to other countries in spite of various culture or spiritual beliefs.

By considering the results of other similar studies,<sup>[5]</sup> obese people believe that bariatric surgery changes their lifestyle and has a fundamental influence on their treatment. Understanding of patients' concerns, problems, and expectations is the foundation of the surgical approach and

ignoring them may lead to disaster in contrast to common belief about bariatric surgery. On the other hand, Bocchieri *et al.* stated that being aware of patients' perceptions about eating behavior, obesity and its treatment has a crucial impact on the success of the bariatric surgery<sup>[5,9]</sup> Regarding the spiritual aspects, Nam S has shown in their study that spiritual group of rural African-American women had greater achievement toward maintaining normal BMI and weight loss in comparison to the similar non-spiritual group.<sup>[10]</sup> Reeves RR indicated in their study on African-Americans in the Southeastern United States that they didn't find any significant association between weight and patients' spirituality state. But they observed lower probability of lifetime smoking and less alcohol use and lower energy intake in obese patients with greater spirituality state. Hence, religiosity and spirituality may promote certain health behaviors.<sup>[11]</sup> Our study showed that greater grades of obesity may lead to spiritual problems. In other words, people with lower BMI usually do not have spiritual problems, but larger sample is needed to prove this theory scientifically.

About our study limitations, it is important to mention that most of the patients did not allow us to audiotape the interviews. Furthermore, our results in spiritual and cultural parts can be generalized just to the countries with similar states.

## CONCLUSION

Our study showed that obesity may potentially affect different aspects of patients' QoL. Furthermore, ignoring a patient's various aspects of life disrupts the obesity treatment, especially bariatric surgery.

## Acknowledgments

This study is an MD thesis of Isfahan University of Medical Sciences, Isfahan, Iran; with project number 393,335.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

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