

## Research Article

# Patient Motivation for Seeking Bariatric Surgery, Minia City, Egypt.



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### Abstract

**Background:** Bariatric surgery is becoming a common procedure to control the obesity problem. However, despite the prevalence of the surgery, little is known regarding the motivation of patients who seek out these procedures. The present study aims to identify reported reasons for bariatric surgery and determine if there is a difference between male and female response regarding the motives for seeking bariatric surgery. **Methods:** This cross-sectional study included 182 consecutive obese patients came for bariatric surgery at Minia University hospital from June to November, 2019. Patients asked to fill self-administered questionnaire preoperatively. **Results:** The mean age was 32.6±6 and 52% of the studied participants were males and 48% were females. The most patients seeking surgery are motivated primarily by medical condition (30.2%) and health concerns (20.3%). Females were concerned more by their appearance as a motive for seeking bariatric surgery, 34.5% compared to 0.0% of males. Females were embarrassed socially about themselves, 24.1% compared to 2.1% of males. However, males more likely to choose medical condition (41% vs 18.4 %,  $P=0.02$ ) as their most important factor for seeking surgery. **Conclusions:** The appearance is the most important motive for the females and the physical health is the most important motive for the males.

**Keywords:** Motivation, bariatric surgery, obesity.

### Introduction

Obesity is a chronic disease of metabolic and/or genetic origin related to excess body fat, which can trigger conditions such as diabetes; cardiovascular diseases such as hypertension, myocardial infarction, thrombosis, embolism, arteriosclerosis, orthopedic problems, asthma, sleep apnea, some cancers, hepatic steatosis and psychological disorders<sup>(1)</sup>. Therefore, the increase in body weight is associated with many co morbidities<sup>(2)</sup>.

There is evidence that moderate weight loss (51% of initial weight) with conventional treatment by nutritional and pharmacological approaches plus physical activity, promotes metabolic benefits. However, for

the treatment and management of morbid obesity, the most effective tool is surgical intervention. The surgical procedure results in significant and lasting weight loss, preventing complications that threaten the quality of life, improving comorbidities and increasing longevity<sup>(3)</sup>.

Bariatric surgery is considered the most efficacious intervention for severe obesity<sup>(4)</sup>. It is generally recommended when non-surgical approaches have failed for adults with class 2 obesity and obesity-related comorbidity (e.g. type 2 diabetes mellitus) or class 3 obesity with or without obesity-related comorbidity<sup>(5)</sup>. Different surgical options are available, and they are continuously evolving, influenced by

research results, specific local conditions, and the experience of the surgical staff in each location<sup>(4)</sup>.

As in any surgery, bariatric surgery is not entirely risk-free. Therefore, it is of value to understand the motivation of those who seek surgery. When patients are offered a surgical option for treating their obesity, most of them are reluctant, because of a lack of awareness about bariatric surgery and misconceptions about its complications. In this study, we aimed to examine the motivating factors for patients who choose to undergo surgical procedures for obesity.

### **Subjects and methods**

This cross-sectional study included 189 consecutive obese patients came for bariatric surgery at Minia University hospital from June to November, 2019. Of them, seven patients refused to participate. Accordingly, a total 182 patients were included in the study, with response rate 96.2%.

### **Data collection**

This study used a short validated questionnaire consisting of seven statements. Patients asked to fill the questionnaire preoperatively. Statements described the following motives for seeking bariatric surgery: appearance, medical conditions, physical fitness, health effects, embarrassment, and physical limitations<sup>(5)</sup>.

### **Ethical consideration:**

Data were collected from participants after explaining the nature of the study and taking a written consent from each of them, Confidentiality, privacy and freedom to withdraw from the study on the participant's decision were assured. The

study protocol was approved by the Ethics committee of the Faculty of Medicine Minia University; with approval number 263: 7/2019.

### **Results**

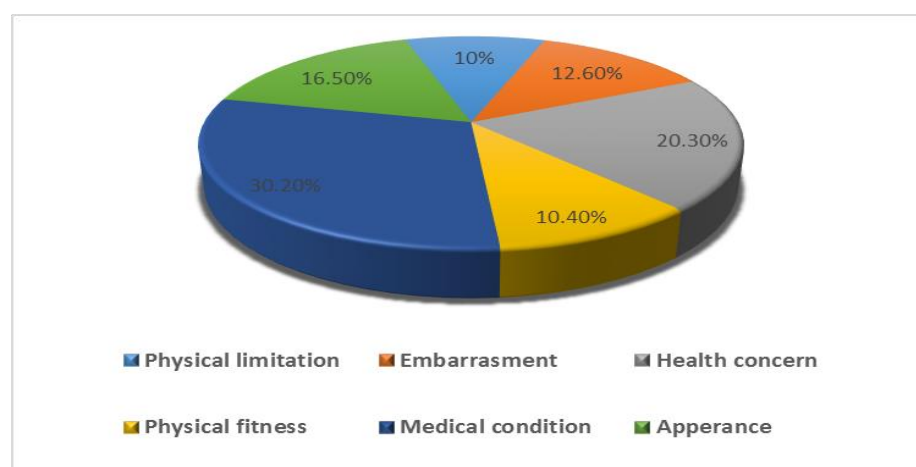
The mean age of participants was  $32.6 \pm 6$ , and 52% of the them were males and 48% were females. More than half of patients (55%) underwent SASI operation, 53% underwent sleeve gastrectomy and 16% underwent gastric bypass (Table 1).

In this study, we categorized motives into six main categories. Overall, the existing medical conditions motivator was the most cited by the largest percentage of participants (30.2%), followed by future health effects (20.3%) and appearance (16.5%), respectively (Figure 1).

Table (2) showed that there were statistically significant differences between males and females regarding their motives for bariatric surgery. Females were concerned more by their appearance as a motive for seeking bariatric surgery, 34.5% compared to 0.0% of males). Females were embarrassed socially about themselves, 24.1% compared to 2.1% of males. However, males more likely to choose medical condition (41% vs 18.4%,  $P=0.02$ ) as their most important factor, 15.3% of them felt that their physical limitation of obesity makes day to day living very difficult 15.8% compared to 3.5% of females. Males lacked physical fitness and wanted to be more active cited by 17.9% of males compared by 2.3% of females. There was no statistically significant difference between men and women response on their concerned that, their health will deteriorate and their life may be shortened (23.2% vs 17.2%,  $p=0.2$ ).

**Table (1): Distribution of the studied cases according to socio-demographic data in Minia City, Egypt, 2020**

Socio-demographic data	Frequency (Total No = 182)	Percent/SD
Age (mean±SD)	32± 6	
<b>Sex</b>		
Males	95	52%
Females	87	48%
<b>Type of operation</b>		
SASI operation	100	55%
sleeve gastrectomy	53	29%
gastric bypass	29	16%

**Figure (1): Distribution of the studied cases according to motivating factor for all patients seeking bariatric surgery in Minia City, Egypt, 2020****Table (2): Comparison between male and female according to motivating factor for seeking bariatric surgery in Minia City, Egypt, 2020**

Motivating factor for seeking bariatric surgery	Gender		X <sup>2</sup>	P value
	Female No= 87	Male No= 95		
Appearance: I am distressed by my physical appearance and need to improve it.	30 (34.5%)	0 (0%)	39.2	0.0001*
Medical Condition: I want to improve medical conditions associated with my obesity	16 (18.4%)	39 (41%)	11	0.02*
Physical Fitness: I lack physical fitness and want to be more active to enjoy life more.	2 (2.3%)	17 (17.9%)	11.8	0.03*
Health Concerns: I am concerned that my health will deteriorate and my life may be shortened.	15 (17.2%)	22 (23.2%)	0.98	0.2
Embarrassment: I am embarrassed socially about my weight.	21 (24.1%)	2 (2.1%)	19.9	0.0001*
Physical Limitation: I feel that my physical limitation of obesity makes day to day living very difficult.	3 (3.5%)	15 (15.8%)	7.7	0.004*

## Discussion

Our finding showed that most patients seeking surgery are motivated primarily by medical condition (30.2%) and health concerns (20.3%). In line with our findings, a survey study of 280 bariatric patients in Australia found that just over half of the patients who underwent surgery reported that medical conditions and health concerns were the primary motivating factor for surgery<sup>(6)</sup>. Our findings that the health issue was the dominant motivation for seeking bariatric surgery also are consistent with the earlier work of Munoz et al.,<sup>(7)</sup>

Consideration of health effects was the second most common motive reported in our study (20.3%), which is a good indicator of awareness about such effects in society. Similarly, Dixon et al.<sup>[8]</sup> asked 204 participants who had undergone a laparoscopic adjustable gastric banding procedure to rate their most important to their least important motives. They found that the desire to improve health was the top motive for seeking bariatric surgery (40% of participants). Physical fitness was ranked third (28.9%), indicating that patients wanted to promote their health and improve their body composition and fitness.

In the current study, females were concerned more by their appearance as a motive for seeking bariatric surgery, 34.5% compared to 0.0% of males and they were embarrassed socially about themselves, 24.1% compared to 2.1% of males.

However, males more likely to choose medical condition Libeton and his colleagues (2004)<sup>(6)</sup>, found that women are more likely to be motivated by concerns regarding their appearance (37.3%), men are more likely to be motivated by concerns about future health and medical problems. On the other hand, Brink and Ferguson<sup>(9)</sup> found that women were more likely to comment on appearance, but appearance appeared to be a strong motivating factor in both males and females.

Many patients have unrealistic expectations after surgery; therefore, accurate

preoperative knowledge of the risks and benefits of bariatric surgery may play a role in motivating patients to choose surgery. Some patients decide on bariatric surgery to improve their physical activity, sexual, romantic life, and relationships<sup>(10)</sup>. However, other patients are unhappy with their body image, have little confidence in their self-appearance, or maybe depressed and thus choose to undergo this surgery<sup>(11)</sup>.

## Conclusion

Existing health conditions represent the main motivations for patients who pursue bariatric surgery, followed by concerns about potential future health issues. Gender contribute to motives for seeking bariatric surgery, the appearance is the most important motive for the females and the physical health is the most important motive for the males. It is recommend that the top motives identified in the present study be taken into consideration when counselling morbidly obese patients to undergo surgical treatment. Also, it is helpful to stress these factors in social and other media when encouraging hesitant patients who need surgical treatment.

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