

Reasons for the Frequent Procedures of Bariatric Surgery

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Abstract:

Background: Obesity is clinically defined as an abnormal increase in weight, which can be determined by the use of body mass index (BMI) and it is necessary to adopt this indicator regularly because obesity is considered a health condition of concern globally due to its increased prevalence day by day and its association with many Life-threatening health risks.

Objectives: The study aims to identify demographic factors that increase the chances of bariatric surgery and the type of surgery most commonly used and the most common reason.

Patients and methods: An analytical cross-sectional study was conducted for non-probability random sample of obese patients who accepted obesity surgery in Baghdad and Diyala city, all of whom underwent these operations after being informed by the surgeon they had obesity and not overweight. A simple questionnaire was distributed to patients after initial approval from them to participate in the research sample, the questionnaire contained general demographic information about the patient in addition to the inclusion of a set of reasons why the patient underwent bariatric surgery. The evidence was introduced into the program of statistical packages of social sciences (SPSS), version (21) to summarize the results of the study. A chi-square test was used for statistical testing and a level below (0.05) for statistical significance.

Results: The current study found that the mean age of patients who underwent a type of bariatric surgery was 37.22 years, most of them were women (63.3%) and employees (60%) respectively. More than half (56.7%) were had university education. The results also showed that 70 percent of respondents said they had Laparoscopic Sleeve Gastrectomy and 50 of them the most common reason for performing bariatric surgery was to improve their external appearance and improve their fitness.

Conclusions: Most of the patients who underwent Laparoscopic Sleeve Gastrectomy to treat obesity were found to be significantly, and the most common reason for performing these surgeries was to improve their external appearance and improve their fitness.

Keywords: Obesity, Bariatric Surgery, Gastrectomy, Demographic reasons.

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I. Introduction:

Obesity is clinically defined as an abnormal weight gain in adults and can be determined using body mass index (BMI) and it is necessary to adopt this indicator regularly to determine any weight gain because obesity is considered a health condition of concern globally due to its increased prevalence day by day. It is associated with many life-threatening health risks (1). In 2016, the World Health Organization reported more than 1.9 billion cases of overweight in adults and more than 650 million of them were obese (2).

Conservative methods used in the treatment of obesity such as exercise, diet and cognitive behavioral therapy of the patient only have a positive effect on patients who are too eager to lose weight and whose weight loss is only 5-10% (3,4). Bariatric surgery can be the best and most effective treatment in such cases because it causes a patient's weight loss of 50-60 kg of total weight (4). It is preferable to use bariatric surgery to obtain faster results and to avoid many obesity-related diseases such as high blood pressure, type 2 diabetes, high blood lipids, metabolic syndrome, sleep disorders and shortness of breath (5,6). Working on bariatric processes continuously increases weight loss while improving their quality of life and survival for longer periods (7).

In general, for surgical treatment of obesity, there are surgical overlaps located in two procedural categories, the first is a restrictive procedure in the stomach and the second is the procedure of absorption of food (8). The purpose of the first procedure is to limit food intake without interfering with the normal digestion of food, while the second procedure leads to weight loss due to poor absorption without the need for dietary adjustments (8).

Although obesity processes are very important for many cases of obesity, many doctors warn of the risk of osteoporosis after they are performed, and stress the need to work some laboratory tests to determine the levels of macro and partial nutrients and speed up their replacement with mineral-based drugs and Vitamins essential for bone health such as zinc, copper, iodine, magnesium, phosphorus, vitamin A, K and C (6).

Morbidity and mortality rates associated with or following bariatric surgery are generally low, and these rates are similar for those who have undergone well-accepted medical procedures such as elective gallbladder surgery or gallstones surgery (9).

Aim of the study

The study aims to identify demographic factors that increase the chances of bariatric surgery and the type of surgery most commonly used and the most common cause.

II. Patients and methods:

A cross-analytical study was conducted for a non-probability random sample of obese patients who were admitted to obesity surgery in Baghdad and Baquba city, which ranged from (60) patients, (30) males and (27) females, all patients who underwent these operations were informed in advance of their obesity and Not overweight by a specialist. All patients were included in the sample study if they were infected or not with a common chronic disease such as high blood pressure and diabetes.

A simple questionnaire was distributed to patients after initial approval from them to participate in the research sample, the questionnaire contained general demographic information about the patient such as age, gender, academic achievement and occupation in addition to the inclusion of a set of reasons why the patient underwent bariatric surgery.

After obtaining all the questionnaires completed by the patients were introduced into the Excel program in the form of numbers to facilitate the process of entering it as digital data, and then these evidences were introduced into the program of statistical packages for social sciences, issue (21) for the purpose of conducting the statistical processes required in the study The percentage numbers and percentages of demographic variables were obtained in general patients who underwent bariatric surgery. The Kai box test was used to compare the demographic variables of patients and to rely on a statistical indication level of less than (0.05).

III. Results:

In Table 1, the mean age of patients who have undergone one type of obesity operation is 37.22 years, most patients (63.3%) They were women and most employees (60%) The highest percentage (56.7%) They were educated in college and as shown in Table 1.

Table 1: Distribution of study patients by demographic characteristics

Variables	Statistics	
mean Age	37.22±9.92	
Gender	No.	%
Men	22	36.7
Women	38	63.3

Total	60	100
Occupational status	No.	%
Employed	36	60
Not employed	24	40
Total	60	100
Educational level	No.	%
Illiterates	2	3.3
Primary education	11	18.3
Secondary education	13	21.7
University education	34	56.7
Total	60	100.0

The results of the current study showed that the vast majority of patients who underwent gastric sleeve surgery (70 percent) With a high statistical correlation, the lowest percentage (5%) They underwent balloon operations as shown in Table 2.

Table 2: Distribution of patients by type of surgery used to treat obesity

Type Bariatric Surgery	Calculations		الاختبار الاحصائي
	No.	%	
Laparoscopic Sleeve Gastrectomy	42	70	Chi-square = 37.900 p-value= (0.000)
Gastric Bypass	13	21.7	
Gastric Balloon	5	8.3	
Total	60	100	

In Table 3, the study shows that the most common cause of obesity operations is to improve the appearance of the patient and raise the patient's fitness by 50%. And with a high-moral statistical correlation. The least common reason is to get rid of laziness and dependency on others in fulfilling some daily requirements.

Table 3: Distribution of patients according to the reason of Bariatric Surgery

The most common reason	Calculations		الاختبار الاحصائي
	No.	%	
Remove sagging from the body	11	18.3	Chi-square= 39.167 P-value=(0.000)
Get rid of fatigue and fatigue	12	20.0	
Getting rid of difficulty breathing during sleep	4	6.7	
Get rid of laziness and dependency on others	3	5.0	
Improve the external appearance and physical fitness	30	50	
Total	60	100	

IV. Discussion:

The results of the current study show that the mean age of patients who underwent bariatric surgery was 37.22 years. In a Western study conducted on a group of obese patients, it's found that the highest rates of choice for bariatric procedures were 37 years (10) and in another study in Iraq, Baghdad the mean age was 38 years (11). The reason for performing these operations at younger ages, i.e. before the age of the 50s, may be to avoid or reduce their exposure to chronic diseases such as hypertension, diabetes, osteoporosis, as well as improved fitness and improved external appearance that may reflect the outlook of parents, partners, and society.

Currently, women accounted for the highest percentage of obesity operations, with a recent study published by a group of researchers at the University of California, San Diego (12) and another study in Iraq (13) revealing a marked disparity between men and women who underwent weight loss surgery where men had fewer numbers. Women seem to be more aware than men of the problems obesity brings to the overall health situation.

Nearly two-thirds of the patients who underwent weight loss operations in this study were employed, which was consistent with the Boston et al, in the Netherlands (14) and this reflects the ability of patients to perform such operations at their costs, which is often expensive.

In the current study, university education was instrumental in guiding patients to perform obesity operations. It was found in another American study that university education was the highest in the incidence of bariatric surgery for Caucasian patients (15).

The laparoscopic Sleeve Gastrectomy was dominant surgery among obese patients in this study, because this surgery is originally considered as a surgical technique to be provided as a first step. However, this may be because the patient will get early results of weight loss and to an excellent degree, as well as being a solution for ill-health patients and this type of bariatric surgery has gained high popularity as a primary choice for both the surgeon and the patient (16). According to the results of the IFSO World Obesity Report in the year 2018, most patients underwent gastric bypass (17).

The current study showed that half of the patients in the sample of the study underwent bariatric surgery to improve their appearance and raise their fitness level, the cause, most of them are under 40 years of age and this may increase the chance of improving body image and improving the level of fitness to reduce the obesity related-diseases. It's proved in Australian study showed that more than a third of young people, their popularity for bariatric surgery, either appearance or prevention of embarrassment, and this was made as to the first choice of all options (18). Another study was conducted to assess 40 cases of women who underwent a gastrectomy within 4 years, where they were questioned about the level of satisfaction before and after the operation and it was found that more than three quarters of them would not be satisfied with their bodies before the operation, but after six to twelve months of weight loss it was found that 90% of them are satisfied with the image of their new bodies (19).

V. Conclusion:

Most of the patients who underwent bariatric surgery were women, their mean age was 37.22 years, and the highest proportion were university-educated. Remarkably, the vast majority of them have had Laparoscopic gastric sleeves. The most common reason to perform the bariatric surgery was to improve the external appearance and raise the patient's fitness level.

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