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Quality of Life for Patients before and after Sleeve Laparoscopic Gastrectomy

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Abstract

Background: Sleeve gastrectomy is the most convenient modality for long-term weight loss and resolution of comorbidities associated with obesity. **Aim:** This study aimed to assess quality of life for patients before and after sleeve laparoscopic gastrectomy. **Setting:** This study was conducted at bariatric surgery outpatient clinic at Ain Shames Hospital and bariatric surgery department in El-Dmerdash Hospital affiliated to Ain Shames University Hospitals. **Design:** A descriptive research design was used in this study. **Sample:** A purposive sample of 70 patients from both gender. **Tools:** Tool I: Structured interview questionnaire which consists of two parts: part 1, patient's personal characteristics, part 2 ,Patient's current and past history. Tool II: Bariatric Quality of Life index (BQL). Tool III: QOL Short form- 36 (SF -36) questionnaire which consist of eight domains. **Results:** more than two thirds of the studied patients had average total quality of life before surgery, while majority of them had good total quality of life after surgery. more than two thirds of the studied patients had average total bariatric quality of life before surgery, while two thirds of them had good total bariatric quality of life after surgery **Conclusion:** The present study showed that, there was a high statistical significant difference in total BQOL before and after surgery. and there was a statistically significant relation between total QOL before surgery and age, marital status, and educational level of the studied patients, while there were no statistically significant relations between QOL before surgery and gender, place of residence, and occupation of the studied patients. **Recommendations:** Developing and implementing health educational program for patients with sleeve gastrectomy to improve their quality of life regarding sleeve gastrectomy

Keywords: Laparoscopic Gastrectomy, Quality of life, Sleeve .

Introduction

The World Health Organization (WHO) defines overweight and obesity as abnormal or excessive fat accumulation that can cause health problems **(WHO ,2022)**Obesity is considered a progressive and chronic pathology that can have biological,psychological and even social effect on the life course of individuals. This disease is associated with an increase in the risk of suffering cardiovascular disorders and also with an increase in mortality and a decrease in the quality of life. There are different factors that have

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been associated with the appearance of obesity, including sedentary lifestyle, poor diet, stress, poor quality or insufficient number of hours of sleep **(Purnell, 2023).**

The sleeve gastrectomy procedures performed worldwide increases every year and has recently exceeded to 685,000. Over 50% of these are laparoscopic sleeve gastrectomy **(Felsenreich et al., 2020).** Sleeve gastrectomy is a surgical weight loss procedure that involves the removal of a large portion of the stomach. During the procedure, the surgeon removes approximately 75-85% of the stomach, reducing its size and capacity. This restrictive procedure helps to limit the amount of food that can be consumed, resulting in a feeling of fullness with smaller portions. Sleeve gastrectomy is considered a valuable option for individuals with severe obesity who have been unsuccessful in achieving sustainable weight loss through non-surgical methods **(Han et al., 2020).**

The goal of sleeve gastrectomy is not only to decrease weight but also to improve overall health and reduce obesity-related comorbidities. By reducing the size of the stomach, the procedure can help control appetite and promote healthier eating habits. It can lead to improvements in conditions such as type 2 diabetes, high blood pressure, high cholesterol, obstructive sleep apnea, and joint pain. Additionally, sleeve gastrectomy can enhance quality of life by increasing mobility, boosting self-esteem, and reducing the psychological burden associated with obesity. It is important to view sleeve gastrectomy as a holistic approach that focuses on long-term health and well-being rather than just a means of weight reduction **(Felsenreich et al., 2020).**

Quality of life refers to the overall wellbeing and satisfaction an individual experiences in various aspects of the life, including physical health, mental and emotional state, social relationships, and general living conditions. It encompasses factors such as access to healthcare, education, employment opportunities, safety, and the ability to engage in meaningful activities and pursue personal goals. A high quality of life is often associated with a sense of fulfillment, happiness, and a positive outlook on life, while a low quality of life may be characterized by various challenges and limitations that affect an individual's daily functioning and overall happiness **(Fiorillo et al., 2020).**

Nurses play a crucial role in supporting individuals who undergo sleeve gastrectomy. nurses provide education and counseling to patients before and after the surgery, helping them understand the procedure, potential risks, and necessary lifestyle changes. nurses assist in developing personalized care plans, including dietary guidelines, physical activity recommendations, and postoperative care instructions. nurses also monitor patients' progress, provide emotional support, and address any concerns or complications that may arise. nurses working closely with patients, families, and healthcare providers, Nurses contribute to the overall success and well-being of individuals undergoing sleeve gastrectomy, promoting a healthier lifestyle and improved quality of life **(Zhu et al.,2022)**

Significance of the study

Obesity is a significant health problem that has been accepted as an epidemic in the world during the last 20 years, and it has initiated organizational and global action collaborations in fighting with epidemics. The statistical data of the World Health Organization (WHO) show that there are 1.9 billion overweight adults, and >650 million adults are obese with body mass index above 40kg/m2, which most of them are females **(WHO, 2019).**

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According to "100 million health" survey, which was conducted in Egypt in 2019 and screened 49.7 million adult Egyptians, and found that; 39.8% of adult Egyptians suffered from obesity in which Body Mass Index was 30 kg/m2. Obesity was more prevalent in adult females than adult males (49.5% of Egyptian adult females suffered obesity compared to 29.5% for males) **(Aboulghate et al., 2021).**

The significance of studying the quality of life for patients before and after sleeve gastrectomy in countries with a high prevalence of obesity like Egypt lies in understanding the impact of this surgical procedure on the well-being and overall health outcomes of individuals. By examining the post-operative quality of life, including physical, mental, and social aspects, the healthcare professionals can gain insights to improve patient care, inform decision-making processes, and develop tailored interventions to enhance the long-term success and satisfaction of patients undergoing sleeve gastrectomy (**Mousa., et al 2024**).

Aim of the study

Assessing quality of life for patients before and after sleeve laparoscopic gastrectomy**.**

Research questions:

What is the quality of life for patients before and after sleeve laparoscopic gastrectomy ?

Subject and methods:

The subject and methods for this study was portrayed under the four main items as follows:

I Technical item. II. Operational item.
III. Administrative item. IV. Statistical item.

I. Technical item:

The technical items included research design, setting, subjects and tools for data collection used in this study.

Research design:

A descriptive research design was used in this study.

Setting:

This study was conducted at bariatric surgery outpatient clinic at Ain Shames Hospital and bariatric surgery department in El-Dmerdash Hospital affiliated to Ain Shames University Hospitals.

Sampling:

Type of the sample: A purposive sample composed of 70 patients from both gender and from total 85 attended in the above mention setting in previous years and has been recruited in this study

according to the following inclusion criteria:

- Body mass index (BMI) above 35 kg/m2.
- Age from 18-60 years**.**

Sample size: The sample size was calculated by adjusting the power of the test to 80% and

the confidence interval to 95% with a margin of error accepted adjusted to5% using the following equation.

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- Type I error (α) = 0.05%.
- Type II error (B) = 0.20%.
- With power of test 0.80%

according to the following equation: -

$n = \frac{N \times P(1\text{-}P)}{\{N\text{-}1 \times (d^2 \div Z^2) + P(1\text{-}P)\}}$
$n = \frac{85\times0.5(1\text{-}0.5)}{85\text{-}1\times(0.0025\div3.8416)+0.5(1\text{-}0.5)}$
$\mathbf{n} = \frac{85\times0.5}{84\times0.00065077051)+0.25}$
$\mathbf{n} = \frac{21.25}{.0546647228+0.25}$
$n = \frac{21.25}{.3046647228}$
n = 69.7 = 70

N= Community size

z= Class standard corresponding to the level of significance equal to 0.95 and 1.96

d= The error rate is equal to 0.05

p= Ratio provides a neutral property = 0.50

Tools for data collection:

Data was collected using the following tool: -

Tool I: Structured interview questionnaire: -

This tool was developed by investigator based on recent review of related literature (**Kamal et al. 2023;Mahmoud et al. 2023)**,It was filled in by the investigator included the following two parts:-

Part 1:Patient's personal charactristics : includes patient's age, gender, marital status, educational level, place of residence and occupatio.)

Part 2 : Patient's current and past history: It was used to assess the patient current history included , body mass index, duration of morbid obesity**,** current medication ,life style practices included smoking , kind of food, practicing any sport. Past medical and surgical history such as the presence of chronic diseases, Type of the chronic disease **,**history of previous hospitalization and its reason,history of previous surgery and allergy).

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Tool II : Bariatric quality of life index (BQOL).

This tool was adopted from **(de Figueiredoet al., 2024)** The BQOL was divided into two subscales. The first one consisting of 16 non-QoL items to assess gastrointestinal symptoms and medication intake. The second one consisting of 14 items to assess QoL factor.

Scoring system of BQOL:-

It consists of 30 questions divided into two parts. The first part consisting of 16 items scored as zero for No and one for Yes . The second part consisting of 14 items scored on a five-point Likert scale ranging from 1 to 5 points. The total score was calculated by adding all the item scores from both parts and ranges from 1 to 86 and were categorized as:

- Poor BQOL if total score < 60%
- Average BQOL if total score 60% - < 80%
- Good BQOL if total score > 80%

Tool III: QOL Short form- 36 (SF -36)

This validated tool was adopted form **(Stephen et al., 2010).** It was used to assess quality of life for patients after sleeve laparoscopic gastrectomy. It consisted of 36 questions categorized under eight domains.

- General health (2 items).
- Physical functioning (10 items).
- Role limitations due to physical health problems (4 items).
- Role limitations due to emotional health problems (3 items).
- Social activities (2 items).
- Bodily pain (BP) (2 items).
- Energy/emotional well-being (9 items).
- General health condition (4 items).

Scoring system of Short form- 36 (SF -36):

The total score for quality of life were = 36 points, equal 100% (each point ranged between 0 points (negative answer) to 1 (positive answer) according to weight of question and equal (100%) and the total score was categorized as following:

- Poor QOL if total score < 60%
- Average QOL if total score from 60% - < 80%
- Good QOL if total score from > 80% ***(Stephen et al., 2010).***

II- Operational Item:

It included preparatory phase, content validity and reliability, pilot study and field work.

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Preparatory phase:

It included reviewing of past, current, national and international related literature and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and magazines to develop tools for data a collection. During this phase, the investigator also visited the selected place to get acquainted with the personnel and the setting. The development of the tools was done under the supervisors' guidance and experts opinions were considered.

Validity:

Face validity aimed to determine whether the tools measure what were supposed to measure **(Mueller and Knapp, 2018)**. Content validity was conducted to determine whether the tools covered the aim, test its appropriateness, comprehensiveness, accuracy, correction, clearance, and relevance through a jury of 5 experts (assistant professors of medical surgical nursing) from the Faculty of Nursing- Helwan University. Their opinions were elicited regarding tools consistency, rephrasing for some statements and scoring system. Ethics, values, culture, and beliefs were respected.

Reliability:

Reliability refers to the stability of the measuring instrument used and its consistency over time. In other words, Reliability is the ability to measure instruments to give similar results when applied at different times. However, a strong positive correlation between the results of the measuring instrument is an indication of reliability **(Sürücü & Maslakçi, 2020)**. Cronbach's Alpha was used to determine the internal reliability of the tools. Reliability of the questionnaire normally ranges between 0 and 1. Higher values of Cronbach's alpha more than 0.7 denote acceptable reliability. The tool showed good reliability, it was (0.738) for patient's structured interview questionnaire,0.846 for BQL and 0.837 for QOL SF-36.

Pilot study:

The pilot study was done on 10% of the sample (7patients) to examine the clarity of questions and time needed to complete the study tools. Subjects included in the pilot study weren't excluded from the study sample because no modification in the tools were done.

Field work included the following:

- An approval was obtained from the Scientific Ethical Committee of Faculty of Nursing- Hellwan University and the study subjects.
- An informed consent was gotten from every patient. They were guaranteed that the data gathered would be dealt with privacy and would be utilized for the research purpose.
- The aim of study was simply explained to the patients who agreed to participate in the study prior to any data collection.
- Data was collected upon six months started at the beginning of February 2024 to the end of July 2024.
- Data was collected before bariatric surgery and after 6 months of sleeve laparoscopic gastrectomy.
- Data was collected by the investigator in day shift two day per week.
- This was done within two day each week on Wednesday and Thursday in the morning and afternoon shift .

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- Each day the investigator interviewed 8 to 10 patients
- The study tools were filled in and completed by investigator . the total time needed for Patient's structured interview questionnaire, Bariatric Quality of Life index (BQL) and QOL Short form- 36 (SF -36) ranged from 30-45minutes to answer all questions.

III- Administrative item:

After explanation of the study aim and objectives, an official permission was obtained from the Dean of faculty of nursing and the general manager of Ain shames hospital asking for cooperation and permission to conduct the study.

Ethical considerations:

An official permission to conduct the proposed study was obtained from the Scientific Research Ethics Committee faculty of nursing , n (640) 31/12/2023 . Participation in the study is voluntary and subjects will be given complete full information about the study and their role before signing the informed consent. The ethical considerations will include explaining the purpose and nature of the study, stating the possibility to withdraw at any time, confidentiality of the information where it was not be accessed by any other party without taking permission of the participants. Ethics, values, culture, and beliefs were respected.

IV-Statistical item:

Upon completion of data collection, data were computed and analyzed using Statistical Package for the Social Science (SPSS), version 24 for analysis. For quantitative data, numbers, percentage, mean and standard deviation (SD) were used to describe the results. For qualitative data, frequency and percentage distribution of each category were calculated. Appropriate inferential statistics such as chi-square was used as well.

Results:

Table (1) indicates that, 74.3 % of the studied patients were in age group 31-50 years, 62.9 % of them were females and 48.6% of them were single. Concerning to educational level; 71.4% of them were university education, while 5.7% had postgraduate studies. 68.6% of the studied patients were live in urban area. Regarding occupation; 71.4% of the studied patients were working, while 28.6% were not working.

Table (2) shows that, 85.7% of the studied patients were obese, while 5.7% were overweight. Concerning to duration of morbid obesity, 91.4% of the studied patients were from 1-5 years, while 8.6% had morbid obesity from 1 year. 51.4% of them were not taking any current medication.

Table (3) reveals that, 51.4% of the studied patients were smokers, 40% were smoking two packets and 28.6% of them smoking from two years. Concerning to eat fatty food, 97.1% of the studied patients were eating fatty food and fast food. 54.3% of them were practicing any kind of sport.

Table (4) demonstrates that, 45.7% of the studied patients were suffering from chronic disease, 37.1% of them had diabetes mellitus and 31.4% had hypertension. Concerning previous hospitalization, 54.3% of

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the studied patients were previously hospitalized and 68.6 % of them had previous surgery and had not any type of allergy

Figure (1) reveals that; 68.6% of the studied patients had average quality of life before surgery, while 80% of them had good quality of life after surgery.

Figure (2) reveals that; 74.2% of the studied patients had average total bariatric quality of life before surgery, while 65.7% of them had good total bariartic quality of life after surgery.

Table (5) shows that, there was a statistically significant difference between total bariatric QOL before surgery and age, educational level, place of residence, and occupation of the studied patients with (P-Value= 0.04, 0.05, 0.001, & 0.001 respectively), while there was no statistically significant difference between total bariatric QOL before surgery gender, and marital status of the studied patients with (P-Value = 0.761, and 0.435).

Table (6) shows that, there was a statistically significant difference between total bariatric QOL after-surgery and age, and educational level of the studied patients with (P-Value= 0.008, & 0.001), while there was no statistically significant difference between total bariatric QOL after-surgery and gender, marital status, place of residence, and occupation with (P-Value = 0.664, 0.569, 0.826 and 0.245 respectively).

Table (1): Frequency and Percentage Distribution of personnel Characteristics of the Studied Patients (n=70).

Personnel characteristics	Studied Patients (n = 70)	
	No	%
Age:		
• 118< 30 years.	18	25.7
• 30< 50 years.	52	**74.3**
• 51≤60	0	0
Mean ± SD	43.73±9.18	
Gender:		
• Male.	26	37.1
• Female.	44	**62.9**
Marital status:		
• Single.	34	48.6
• Married.	32	**45.7**
• Divorced	3	5.7
• Widow	0	0
Educational Level:		
• Don't read and write.	2	2.9
• Primary education	0	0
• Secondary education.	14	20

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• University education.	50	**71.4**
• postgraduate studies	4	5.7
Place of residence:		
• Urban	48	**68.6**
• Rural	22	31.4
Occupation:		
• Working	50	**71.4**
• Not working	20	28.6
• Retired	0	0

Table (2): Frequency and percentage distribution of patients' current history (n=70):-

Current history	Studied Patients (n = 70)	
	N	%
Body mass index:		
• Obesity	66	**94.3**
• Over weight	4	5.7
Mean ± SD	37.54±6.55	
Duration of morbid obesity:		
• less than 1 year	6	8.6
• 1-5 years	64	**91.4**
• More than 5 years	0	0
Take any current medication:		
• Yes	34	48.6
• No	36	**51.4**

Table (3): Frequency and Percentage Distribution of Patients' life style practices (n=70):-

life style practices	Studied Patients (n = 70)	
	N	%
History of smoking :		
• Yes	36	**51.4**
• No	34	48.6
Packets of smoking per day (n=36) :		
• One packet	4	١١,١
• Two packets	28	٧٧,٨
• three packets	4	١١,١
Years of smoking:		
• One year	0	0

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• Two years	20	٥٥,٦
• Three years or more	16	٤٤,٤
eating fatty food		
• Yes	68	**97.1**
• No	2	2.9
eating fast food		
• Yes	68	**97.1**
• No	2	2.9
Times of eating per day		
• One per day	0	0
• two per day	20	28.6
• three or more per day	50	**71.4**
Practicing any kind of sport		
• Yes	38	**54.3**
• No	32	45.7

Table (4): Frequency and percentage distribution of patients' current and past medical and surgical history (n=70):-

Past medical and surgical history	Studied Patients (n = 70)	
	N	%
Suffer from any chronic disease:		
• Yes	32	45.7
• No	38	**54.3**
Type of the chronic disease:		
• Diabetes mellitus	26	37.1
• Hypertension	22	31.4
• Cardiac disease	0	0
• Renal disease	0	0
History of previous hospitalization:		
• Yes	38	**54.3**
• No	32	45.7
The reason of hospitalization		
• Therapeutic intervention	38	54.3
Previous of surgery		
• Yes	48	**68.6**
• No	22	31.4
Have any type of allergy		
• Yes	22	31.4
• No	48	68.6

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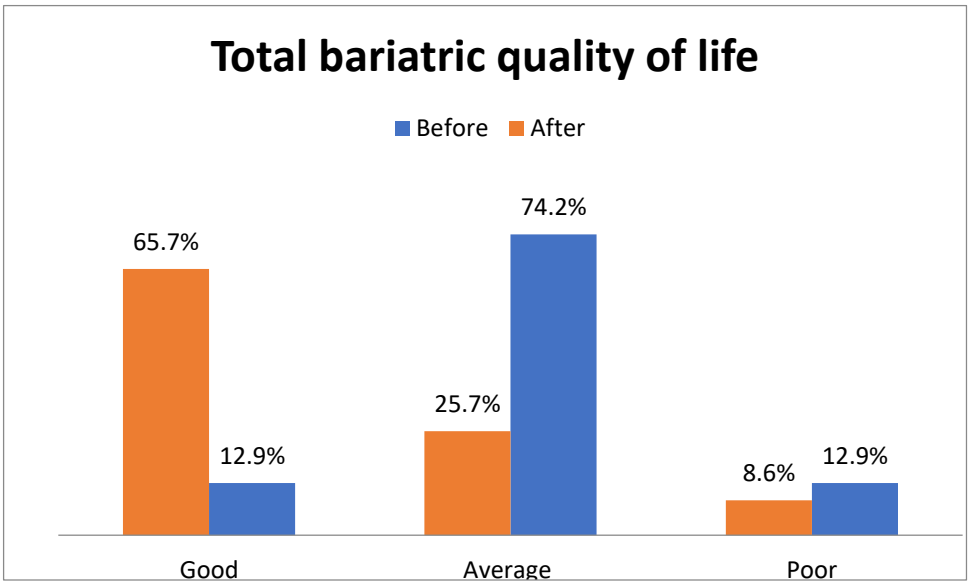

Figure (1): percentage distribution of total quality of life of the studied patients before and after surgery:-

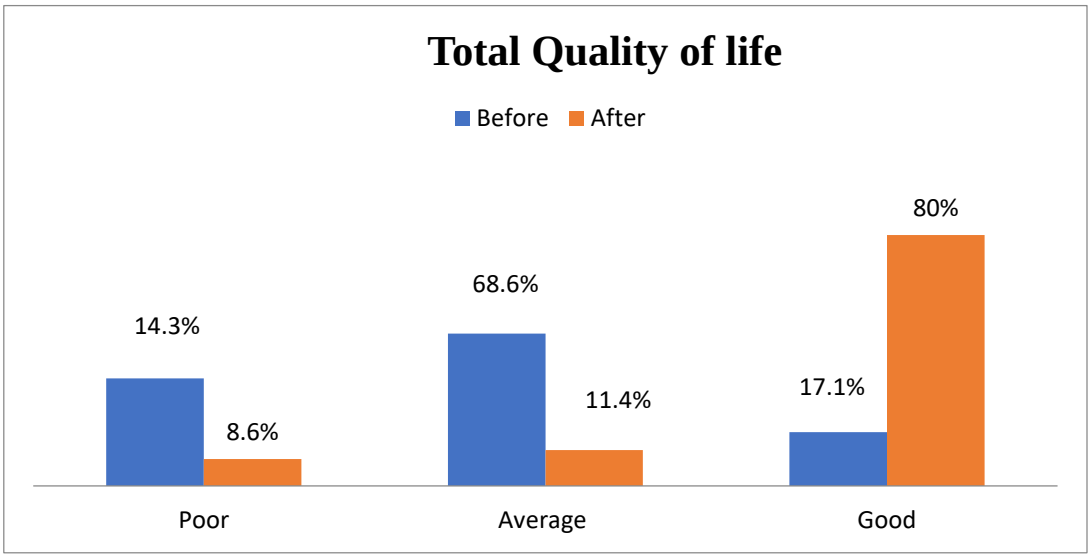

Figure (2): percentage distribution of total bariatric quality of life of the studied patients before and after surgery.

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Table (5): Relation between total bariatric QOL before surgery and personnel characteristics of the studied patients (n=70):

personnel characteristics	Total bariatric QOL before surgery (n=70)						*X2*	*P-value*
	Poor		Average		Good			
	N	%	N	%	N	%		
Age:								
• 118< 30 years	0	0	16	22.8	2	2.9	3.868	0.04*
• 30 <50 years	9	12.9	36	51.4	7	10		
Gender:								
• Male	4	5.7	18	25.7	4	5.7	0.553	0.761
• Female	5	7.1	34	48.7	5	7.1		
Marital status:								
• Single	6	8.6	24	34.3	4	5.7		
• Married	3	4.3	24	34.3	5	7.1	2.580	0.435
• Divorced	0	0	4	5.7	0	0		
Educational Level:								
• Don't read and write	0	0	2	2.9	0	0		
• Secondary Education	1	1.4	12	17.2	1	1.4	4.068	0.05*
• University Education	8	11.4	34	48.6	8	11.4		
• postgraduate studies	0	0	4	5.7	0	0		
Place of residence:								
• Urban	9	12.9	30	42.9	9	12.9	11.106	0.001*
• Rural	0	0	22	31.3	0	0		
Occupation:								
• Working	9	12.9	32	45.6	9	12.9	9.692	0.001*
• Not working	0	0	20	28.6	0	0		

**: Significant at P ≤ 0.05- X2= chi-square, **: Highly significant at P ≤ 0.001*

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Table (6): Relation between total bariatric QOL after-surgery and personnel characteristics of the studied patients (n=70):-

personnel characteristics	Total bariatric QOL after surgery (n=70)						*X2*	*P-value*
	Poor		Average		Good			
	N	%	N	%	N	%		
Age:								
• 18- 30 years	3	4.3	3	4.3	12	17.1	2.627	0.008*
• 31- 50 years	3	4.3	15	21.4	34	48.6		
Gender:								
• Male	2	2.9	6	8.6	18	25.7	0.227	0.664
• Female	4	5.7	12	17.1	28	40		
Marital status:								
• Single	1	1.4	11	15.7	22	31.4		
• Married	5	7.1	5	7.1	22	31.4	6.425	0.569
• Divorced	0	0	2	2.9	2	2.9		
Educational Level:								
• Don't read and write	0	0	1	1.4	1	1.4		
• Secondary education	0	0	3	4.3	11	15.7	3.546	0.001*
• University education	6	8.6	13	18.6	31	44.3		
• postgraduate studies	0	0	1	1.4	4	4.3		
Place of residence:								
• Urban	5	7.1	13	18.6	30	42.9	2.743	0.826
• Rural	1	1.4	5	7.1	16	22.9		
Occupation:								
• Working	5	7.1	7	10	38	54.3	1.779	0.245
• Not working	1	1.4	1	1.4	18	25.7		

**: Significant at P ≤ 0.05- X2= chi-square, **: Highly significant at P ≤ 0.001.*

Discussion

Regarding to personal characteristics of the studied patients; the result of the present study revealed that more than two thirds of the studied patients were in age group 31-50 years old .from investigator point of view This may be due to sleeve gastrectomy surgery is the most effective obesity treatment procedures for adult, which has a better effect on weight loss.this finding agrees with **Mahmoud et al.,(2023)** who studied "Estimation of the impact of sleeve gastrectomy surgery on the morbidity and the effectiveness among Egyptians, in Egypt" and found that; more than two thirds of the studied patients' ages ranged from 31- 40 years-old.

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This study disagrees with **Kamal et al., (2023),** who studied "The impact of laparoscopic sleeve gastrectomy on thyroid functions in Egyptian patients with obesity, in Egypt" and found that majority of the studied patients' ages ranged from 31 to 52 with a mean of 42 ± 6.1 years.

As regards to gender , the` present study clarified that about two thirds of the studied patients were females. From the investigator point of view, females are more likely than men to perceive themselves as obese or overweight and are more worried about their weight, also females are concerned with their appearance as a motive for seeking sleeve gastrectomy surgery. This study result is congruent with **Kassam et al., (2020)** who studied "long- term outcomes in patients with obesity and renal disease after sleeve gastrectomy, in Ohio" and found that more than half of the studied patients were females.

As well as , this finding agrees with the **Emile et al., (2021)** who studied "Single Anastomosis Sleeve Ileal (SASI) bypass versus sleeve gastrectomy: A case-matched multicenter study, in Egypt" and found that majority of the studied patients were females.

concerning to marital status, about half of the studied patients were married, This may be due to that more than two thirds of the studied patients were within 31 – 50 years and usually by this age they are married, according to the Egyptian society culture. this study is in the same line with **Sharma et al., (2021),** who studied "Metabolomic profiling of lipids and fatty acids: 3 years postoperative laparoscopic sleeve gastrectomy, in United Arab Emirates" and found that more than two thirds of the studied patients were married.

Concerning educational level ,this study result revealed that more than two thirds of the studied patients had university education and this may be due to more than two thirds of the studied patients were from urban area. This study matches with **Alayaaf et al.,(2021)** who evaluated "General public awareness of indications and complications of sleeve gastrectomy in Al'qassim region, in Saudi Arabia" and found that more than two thirds of the studied patients were bachelor's degree.

Regarding to patients' residence, the current study result showed that more than two thirds of the studied patients were from urban area.This study finding dissimilar to **Keighley et al., (2022)** who studied "Efficacy and safety of endoscopic sleeve gastroplasty and laparoscopic sleeve gastrectomy with 12 months of adjuvant multidisciplinary support, in Australia" who found that most .of the studied patients had lived in urban regions.

According to the occupation , about more than two thirds of the studied patients were working.from investigator point of view, this is may be due to that more than two thirds were university education which qualified them for working. This finding agrees with **Yildiz et al., (2021)** who studied "Effect of probiotic supplementation after laparoscopic sleeve gastrectomy on constipation and gastrointestinal quality of life, in Turkey" and found that more than two thirds of the studied patients were employed.

On the other hand ,this study finding isn't supported by **Blumenfeld et al., (2023)** who studied "Quality of life, depression, and food tolerance, after primary sleeve gastrectomy among Israeli patients: Across-sectional national study, in Israel" and found that most of the studied patients were employed .

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Regarding to patients' body mass index, this study result showed that most of studied patients were obese .This study result was agree with **Mocian, (2021)** who mentioned on the study about" Quality of life assessment before and after laparoscopic sleeve gastrectomy " that most of the studied patients were obese.

Concerning to duration of morbid obesity,the present study demonstrated that most of the studied patients reported that they were suffered from morbid obesity from 1-5 years,from investigator point of view, this may be due to taking other ways for loosing their weight by pharmacological agents and lifestyle changes like diet and daily exercise . As regard to take any current type of medication, this study found that more than half of the studied patients were not taking any type of medication and this may be due to more than half of the studied patients have not chronic disease .

In relation to life style practices ,this study result revealed that more than half of studied patients were smokers and more than half of them were taking two packet per day for two years . and also most of studied patients were eat fatty ,fast food and more than two thirds of them were eat three or more times per day. This study agrees with **(Chow.,et al (2021)** who mentioned on the study about "smoking on bariatric surgery a systemic review" and found that most of patients were smokers for two years and showed that smoking has been associated with increased risk of marginal ulcer,infectious and respiratory complications.

Regarding to patients suffering from any chronic disease, this study result showed that more than half of studied patients were not suffering from any chronic disease, while, less than half of the studied patients had hypertension and diabetes mellitus which may be contribute to that more than half had previous hospitalization for Therapeutic intervention.

This result is congruent with **Glasheen ., et al (2019)** who mentioned on the study about "comorbidity index with sleeve gastrectomy" that more than half of patients hadn't comorbidity and also the present study demonstrated that more than half of studied patients had history of previous surgery , this may be due to more than half of the studied patients had previous hospitalization for therapeutic intervention. **.**

Concerning total quality of life, the current study illustrated that, about half of the studied patients had average total quality of life and more than one third had poor quality of life .While, minority of them had good quality of life before surgery . On the other hand , majority of the studied patients demonstrated good total quality of life and minority of them had average and poor total quality of life after surgery . From investigator point of view ,this may be due to the sleeve gastrectomy typically leads to pronounced weight loss and it can positively affect the QoL of patients, particularly in terms of physical performance.

This study result is harmony with **Mousa., et al (2024)** in their study entitled " Quality of Life among Patients with Sleeve Gastrectomy " and reported that more than two thirds of studied patients had good total quality of life, while, one fifth of the studied patients had average total quality of life , and only less than tenth of them had poor total quality of life regarding sleeve gastrectomy surgery.

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In addition to, this study finding is similar to **Moustafa et al. (2021),** who studied "Laparoscopic sleeve gastrectomy versus laparoscopic single anastomosis gastric bypass: Short-term outcome, in Egypt" and found that more than two thirds of the studied patients had an excellent of total quality of life after gastrectomy surgery.

As regard to total bariatric quality of life, more than two thirds of the studied patients had average quality of life before surgery, while, two thirds of them had good quality of life after surgery. This study goes in the same line with **Mocian, (2021)**) who mentioned that there was a high statistical significant difference in BQL before and after surgery. And there is an improvement after one year .

As well as , the current study is match with **Robertson et al (2019)** who compared "A prospective study of gastro-esophageal reflux disease symptoms and quality of life 1-year post-laparoscopic sleeve gastrectomy " and showed that after one year,there was a statistical significant difference among the studied patients and an improvement in BQOL total score, .

Regarding to relation between total bariatric QOL before surgery and personnel characteristics of the studied patients, the present study found that there was a statistically significant difference between total bariatric QOL before surgery and age, educational level, place of residence, and occupation of the studied patients , while there was no statistically significant difference between total bariatric QOL before surgery and gender, and marital status of the studied patients.This study results consistent with **Mocian,(2021)** who found that there was a statistically significant difference between total bariatric quality of life before surgery and age, educational level, place of residence, and occupation of the studied patients , while there was no statistically significant difference between total bariatric QOL before surgery and gender.

Regarding to relation between total bariatric QOL after-surgery and personnel characteristics of the studied patients,the present study show that there was a statistically significant difference between total bariatric QOL after-surgery and age, and educational level of the studied patients , while there was no statistically significant difference between QOL after-surgery and gender, marital status, place of residence, and occupation. This study results consistent with **Mocian,(2021)** who found that there was a statistically significant difference between total bariatric quality of life after-surgery and age, and educational level of the studied patients , while there was no statistically significant difference between QOL after-surgery and gender, marital status, place of residence.

Conclusion

Based on the findings of the present study, it can be concluded that:

The present study showed that, more than two thirds of the studied patients had average total bariatric quality of life and minority had good and poor total bariatric quality of life before surgery . while about two thirds of them had good total bariatric quality of life and less than one thirds of them had average total bariatric quality of life after surgery. Additional about two thirds of the studied patients had average total quality of life and also minority of them had good and poor quality of life before surgery.while majority of the studied patients demonstrated good total quality of life and minority had average and poor quality of life after surgery.

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Recommendations

Based on the findings of the study results, the following recommendations

were suggested:

- Regular follow up for patients with sleeve gastrectomy in Outpatient's Clinics by specialized team to prevent complication after sleeve gastrectomy.
- Developing and implementing health educational program for patients with sleeve gastrectomy to improve their quality of life regarding sleeve gastrectomy .

Recommendations for further research:

- Replication of the study on a large probability subjects from different geographical location in Egypt
- Web page for Sleeve laparoscopic gastrectomy to enhance learning for patients .
- Further studies regarding Quality of life among patients with Sleeve Gastrectomy after one years from surgery.

References

Aboulghate M, Elaghoury A, Elebrashy I, Elkafrawy N, Elshishiney G, Abul- Magd E, Bassiouny E, Toaima D, Elezbawy B, Fasseeh A (2021) The Burden of Obesity in Egypt. Front Public Health 9:718978https://doi.org/10.3389/fpubh.2021. 718978

Alayaaf, S., Alsaeed, S., AlSamani, N., Alfadhel, A., Aldhilan,M., & Alswyan, R. (2021). General public awareness of indications and complications of sleeve gastrectomy in Al'qassim region, Saudi Arabia. Int J Adv Med, 8(10), 1 . https://dx.doi.org/10.18203/2349 3933.ijam20213671.

Blumenfeld, O., Rosenberg, A., Friedman, Y., Susmallian, G., KeinanBoker, L., & Goitein, D. (2023). Quality of Life, Depression, and Food Tolerance, After Primary Sleeve Gastrectomy Among Israeli Patients: A Cross-Sectional National Study. Bariatric Surgical Practice and Patient Care https://www.researchgate.net/publication/369 467030

Chow A, Neville A, Kolozsvari N (2021) Smoking in bariatric surgery: a systematic review. Surg Endosc 35(6):3047–3066.

de Figueiredo, I. R., de Carvalho, M. V., Cunha, N., Martins, D., & Silva- Nunes, J. (2024). Cultural Translation and Validation of the Bariatric Quality of Life Index to European Portuguese. Acta Médica Portuguesa, 37(3), 172-176.

Emile, H., Madyan, A., & Mahdy, T. (2021). Single anastomosis sleeve ileal(SASI) bypass versus sleeve gastrectomy: a case-matched multicenter study. Surg Endosc 35, 652–660 (2021). https://doi.org/10.1007/s00464-020-07430-w

Felsenreich, D. M., Bichler, C., Langer, F. B., Gachabayov, M., & Prager, G. (2020). Sleeve Gastrectomy: Surgical Technique, Outcomes, and Complications. Surgical Technology International, 36, 63-69.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 10, Month: June 2025, Available at: https://hijnrp.journals.ekb.eg/

Fiorillo, C., Quero, G., Vix, M., Guerriero, L., Pizzicannella, M., Lapergola, A., ... & Perretta, S. (2020). 6-month gastrointestinal quality of life (QoL) results after endoscopic sleeve gastroplasty and laparoscopic sleeve gastrectomy: a propensity score analysis. Obesity Surgery, 30, 1944-1951.

Glasheen WP, Cordier T, Gumpina R, Haugh G, Davis J, Renda A. Charlson(2019) comorbidity index sleeve gastrectomy : ICD-9 update and ICD-10 translation. Am Health Drug Benefits;12(4):188–97.

Han, Y., Jia, Y., Wang, H., Cao, L., & Zhao, Y. (2020). Comparative analysis of weight loss and resolution of comorbidities between laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass: a systematic review and meta-analysis based on 18 studies. International Journal of Surgery, 76, 101-110.

Kamal, M., Aisha, H, & Fahmy, H. (2023). The Impact of Laparoscopic Sleeve Gastrectomy on Thyroid Functions in Egyptian Patients with Obesity.JGastrointest Surg 27, 1345–1352 (2023). https://doi.org/10.1007/s11605-023-05662-4

Keighley, T., Carr, P., & Petocz, P. (2022). Efficacy and safety of endoscopic sleeve gastroplasty and laparoscopic sleeve gastrectomy with 12+ months of adjuvant Prim. BMC multidisciplinary support. Care(N) 23,p 26 (2022). https://doi.org/10.1186/s12875-022-01629-7

Mahmoud, M., Alhawiti, E., Salamah, M., Abdelaziz, G., & Abdelaziz, G. (2023). Estimation Of The Impact Of Gastric Sleeve Surgery On The Morbidity And The Effectiveness Among Saudis And Egyptians. Journal of Population Therapeutics and Clinical Pharmacology, 30(17), 446-459 . DOI: 10.53555/jptcp.v30i17.1905.

Mocian, (2021). Quality of life assessment before and after laparoscopic sleeve gastrectomy: a prospective study .Eu**r**opean Review for Medical and Pharmacological Sciences :2021; 25: 6934-6940

Mousa, M., Abd-El Azize, M., & Abo Sree, T. (2024). Quality of Life among Patients with Sleeve Gastrectomy. Journal of Nursing Science Benha University, 5(2), 267-282.

Moustafa, F., Mohammed, A., Zeineldin, A., Elgeiedie, A., & Hafez, T. (2021). Laparoscopic sleeve gastrectomy versus laparoscopic single anastomosis gastric bypass: short-term outcome. The Egyptian Journal of Surgery, 40(1), 300- 308 | ..DOI: 10.4103/ejs.ejs_335_20.

Mueller, J., & Knapp, R., (2018). Fundaments of Nursing. 17 ed. Mosby: E.U.A. PP. 75-77.

Purnell JQ (2023). What is Obesity? Definition as a Disease, with Implications for Care. Gastroenterol Clin North Am.;52(2):261-275.

Robertson AGN, Cameron AJ, Joyce B, Le Page F, Tulloh B, de Beaux AC, Lamb PJ 2019. A prospective study of gastro-esophageal reflux disease symptoms and quality of life 1-year post-laparoscopic sleeve gastrectomy. J Minim Access

Sharma, C., Platat, C., Gariballa, S., Muhairi, A., Aidaros, A., Mannaerts, G., Al Afari, S., Yasin, J., Y. Al-Dirbashi, O., & Alkaabi, J. (2021). Metabolomic Profiling of Lipids and Fatty Acids: 3 Years Sleeve Postoperative Laparoscopic Gastrectomy. Biology 2021, 10, 298. https://doi.org/10.3390/ biology10040298

Stephen, J., Abdul-Aziz, S., Jolaine, R., Draugalis, & Ron, D. Hays. A. (2010). Last Modification of Short form-36 (SF -36).Surg ; 15: 229-233.

Sürücü, L., & Maslakçi, A. (2020). Validity and reliability in quantitative research. Business & management studies. An International Journal, 8(3), 2694- 2726

World Health Organization WHO (2022). Obesity and overweight. https://www.who.int/news room/factsheets/detail/obesity-and-overweight.

World Health Organization. Obesity and overweight. Available at (Accessed December 6, 2019): https://www.who.int/news-room/fact-sheets/detail/obesity

Yıldız, N., Baş, M., Coşkun, H., Batar, N., & Yardımcı, E. (2021). Effect of probiotic supplementation after laparoscopic sleeve gastrectomy on constipation and gastrointestinal quality of life. Archives of Clinical and Experimental Medicine, 6(3), 117-122.

Zhu, H., Zhao, K., Ren, Z., Hua, H., Zhang, T., Ding, L., & Xu, Q. (2022) : Determinants of Dietary Adherence Among Chinese Patients After Bariatric Surgery Based on the Attitude -Social Influence - Efficacy Model. Obesity Surgery, 32(9), 3064 -3073.