

ORIGINAL ARTICLE

Assessing Short-Term Quality of Life Changes After Bariatric Surgery: A Longitudinal Study

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Abstract

Introduction: Bariatric surgery effectively reduces body weight and remiss diseases associated with obesity. However, it may cause short- and long-term postoperative complications that can change lifestyle habits.

Objective: To evaluate short-term changes in the quality of life of patients undergoing bariatric surgery.

Methods: This observational prospective cohort study was conducted in three stages: preoperative and two and six postoperative months. It was carried out at the outpatient clinic of a bariatric surgery program of a university hospital in the Brazilian Southeast. The World Health Organization Quality of Life Bref was used. Data analysis: Kruskal-Wallis test; T-test for unpaired samples, $p \leq 0.05$.

Results: The sample consisted of 60 patients, most of whom were women. The postoperative period showed an increase in physical health scores, reduced social relations and environment ones, and unchanged psychological ones. The mean number of diseases associated with obesity and the number of daily medications decreased but the number of patients who used psychotropic drugs after surgery increased, showing less weight loss.

Conclusion: Patients showed improved physical health but reported negative impacts on social relationships and the environment after the bariatric surgery. Comorbidities and medication use decreased but the number of patients using psychotropic drugs increased.

Keywords: Bariatric Surgery. Quality of Life. Social Support. Environment. Weight Loss.

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Authors summary

Why was this study done?

This research describes unprecedented data in Brazil regarding how bariatric surgery affects the domains of quality-of-life assessment according to the WHOQOL-Bref survey up to six months after the procedure. The obesity pandemic and the exponentially growing number of bariatric surgeries makes the theme of this research very current and enriches the discussion on “bariatric surgery” and medium-term “quality of life” in patients in the Brazilian Unified Health System.

What did the researchers do and find?

This observational prospective study investigated the impact of bariatric surgery on the quality of life of patients up to six months after surgery. Analyses showed increased physical health scores, reduced social relations and environment scores, and an unchanged psychological domain. The mean number of diseases associated with obesity and daily number of medications decreased but the number of patients who used psychotropic drugs after surgery increased, showing less weight loss.

What do these findings mean?

The concept that the success of bariatric surgeries is exclusively linked to weight loss and the reduction of physical comorbidities requires reflection and expansion to a holistic and complex view of human beings. This corroborates the importance of health monitoring considering biological, social, psychological, and environmental aspects, ensuring the results of surgeries and the effective improvement of patients' quality of life, especially on approaches related to psychosocial support to thus create strategic public health plans within the Brazilian Unified Health System to expand the social support network that includes patients, family members, and healthcare providers and establish the monitoring and treatment of mental health based on a multidisciplinary approach from the preoperative period to the long-term postoperative period as a routine.

INTRODUCTION

Obesity is a chronic inflammatory disease, showing the excessive accumulation of body fat and offering a risk factor for metabolic diseases that can significantly compromise the quality of life of this population^{1,2}.

Bariatric surgery can effectively treat severe obesity and metabolic syndrome, being indicated when the best clinical treatment alternatives regarding lifestyle modifications being indicated when the best clinical treatment alternatives regarding lifestyle modifications, such as diet, physical activity, and medications, become ineffective. The goals surgery seeks to achieve include the initial loss of excessive weight, long-term weight control, and the remission of diseases associated with obesity³.

However, the short- and long-term postoperative complications of bariatric surgery and changes in lifestyle habits seem to have negative consequences, ranging from complications related to the surgical procedure to nutritional malabsorption and hormonal disorders⁴ and other conditions related to important mental health impairments, such as depression, anxiety, drug use, and suicide attempts⁵⁻⁷.

Studies on the quality of life after bariatric surgery have shown, for the most part, that surgery can benefit people's quality of life by improving physical domains such as locomotion and mobility and the ability to perform common daily activities and reducing pain and discomfort; reversing the physical damage caused by obesity^{3,8-11}. On the other hand, its impact on other aspects of quality-of-life assessment due to the consequences surgery can bring to individuals' psychological, social, and environmental domains still require many explanations and further research (especially based on longitudinal studies) in users of the Brazilian Unified Health System¹²⁻¹⁵.

Thus, this study aimed to evaluate short-term changes in the quality of life of patients who underwent bariatric surgery.

METHODS

Study Design

This prospective longitudinal study was carried out in three stages: 1. preoperative; 2. two postoperative months; 3. six postoperative months.

Study Location and Period

Developed in the outpatient clinic of a Bariatric and Metabolic Surgery Program of a university hospital in Espírito Santo State, Brazil. The investigation period spanned from January 2019 to March 2020.

Study Population and Eligibility Criteria

The sample includes patients who were followed from the preoperative period to six months after undergoing bariatric surgery.

The used convenience sampling recruited patients during their last nursing consultation before the surgical procedure. The following inclusion criteria were used: age over 18 years and acceptance to participate in this research (by signing an informed consent form). The following exclusion criterion were used: previous bariatric surgery. The following discontinuation criteria were used: surgery cancellation and withdrawal from the study.

In compliance with the criteria described above, 98 surgeries were performed during the data collection period, of which 94 were included in this study. However, during this research, 31 patients withdrew from this study for personal reasons and three patients had their surgery definitively canceled, totaling 60 patients in the final sample.

Data collection

Ensuring confidentiality and privacy, patients' data were collected consecutively at three moments in their treatment: at their last visit before their surgery (preoperative), in a consultation two months after their surgery (two postoperative months), and at a consultation six months after surgery (six postoperative months).

Data collection was based on three instruments. It applied a socioepidemiological characterization instrument

on their gender, marital status, age group, and education. A clinical investigation instrument on patients' past and current clinical history, body weight, height, alcoholism, smoking, medications prescribed by the medical team, medical diagnoses; prescribed medications, and suspended medications. Diagnoses were confirmed by patients' medical records in each period of this investigation. The following were considered as comorbidities of obesity: systemic arterial hypertension, type 2 diabetes mellitus, dyslipidemias, and hepatic steatosis. Finally, the World Health Organization Quality of Life (Whoqol-bref) was applied to assess quality of life.

Whoqol-bref consists of 26 questions, the first of which refers to subjects' personal perception of their quality of life and the second of which, to their satisfaction with their health. The other 24 are divided into four areas: 1 - Physical Health, 2 - Psychological, 3 - Social Relationships, and 4 - Environment. Each question of the Whoqol-bref has a Likert-type response scale ranging from one to five in which higher scores indicate a better perception of quality of life. The following are considered to analyze and interpret the answers for each question: must improve (1-2.9); regular (3-3.9); good (4-4.9), and very good (5). The Portuguese version of the instrument has been validated, showing satisfactory psychometric characteristics^{8,9,16}.

Data Analysis

Data were analyzed on the Statistical Package for the Social Sciences, version 20, and Bioestat, version 5.3. The descriptive analysis is shown by its absolute and relative frequencies. The distribution of the metric variables was evaluated by means and their standard errors. The Kruskal-Wallis test, followed by Dunn's post-test, were used to cross-check the data if data normality was rejected by the Shapiro-Wilk test. The t-test for

unpaired samples was used to compare the means of two groups in normal samples. Differences were accepted if $p \leq 0.05$.

Ethical and Legal Aspects of the Research

National and international standards of ethics in research involving human beings were met in accordance with Resolution 466/12. This research was approved by the ethics and research committee, CCAE 98067018.0.0000.5071, dated 10/28/2018.

RESULTS

Most participants were women ($n=54$, 90%) who were married ($n=40$, 66.6%) and had a monthly income of 1.5 minimum wages. In total, 19 patients (31.6%) were aged from 20 to 39 years, 29 (48.3%) from 40 to 59 years, and 12 (20%) from 60 or older. Regarding schooling, 30 (50% participants) had completed primary education; 23 (38.3%), secondary education; six (10%), tertiary education; and one (1.6%) was illiterate. Roux-en-Y (88.3%, $n=53$) and sleeve (11.6%, $n=7$) gastric bypass served as the most common surgical techniques.

The clinical characterization in Table 1 shows that the preoperative period evinced a predominance of patients with grade 3 obesity; that the two-month postoperative period, an equivalence between the number of patients with grade 2 and grade 3 obesity and up to 20% of weight loss; and that the sixth month follow-up, a predominance of grade 1 obesity and up to 30% weight loss.

The two- and six-month postoperative periods showed a lower mean number of diseases associated with obesity and the use of medications in general than the preoperative period. On the other hand, the use of psychotropic medications increased from the pre- and postoperative periods. Alcoholism decreased and the prevalence of smoking remained the same.

Table 1: Degree of obesity and percentage of weight loss, comorbidities, medication use, alcoholism, and smoking in patients before and two and six months after bariatric surgery ($n=60$)

Variables	Preoperative		2 postoperative months		6 postoperative months	
	n	%	n	%	n	%
Degree of obesity – BMI*						
Overweight (25-29.9 kg/m ²)	0	0	5	8.3	17	28.3
Obesity grade 1 (30-34.9 kg/m ²)	3	5	15	20	25	41.6
Obesity grade 2 (35-39.9 kg/m ²)	9	15	20	33.3	10	16.6
Obesity grade 3 (≥ 40 kg/m ²)	48	80	20	33.3	8	13.3
Percentage of weight loss						
5 to 9.9%	-	-	5	8.3	0	0
10 to 14.9%	-	-	25	41.6	0	0
15 to 19.9%	-	-	26	43.3	11	18.3
20 to 24.9%	-	-	3	5	16	26.6
25 to 29.9%	-	-	1	1.6	22	36.6
30 to 34.9%	-	-	0	0	11	18.3
Psychotropic use	12	20	21	35	20	33.3
Alcoholism	20	33.3	9	15	4	6.6
Smoking	1	1.6	3	5	1	1.6
	Mean \pm SD		Mean \pm SD		Mean \pm SD	
Obesity comorbidities	3.16 \pm 0.19		1.71 \pm 0.15		1.05 \pm 0.15	
Overall used medication	4.10 \pm 0.21		1.85 \pm 0.19		1.47 \pm 0.24	

*Body Mass Index (BMI). Source: Own authorship.

Figure 1 indicates an increased self-perception of quality of life scores at two (4.35 ± 0.09) and at six postoperative months (4.33 ± 0.10) than in the preoperative period (3.53 ± 0.10) and increased scores of satisfaction with health at two postoperative (4.25 ± 0.11) and six postoperative months (4.33 ± 0.10) than in the period before surgery (2.70 ± 0.13). Both evaluations showed no statistical differences between two and six postoperative months.

Regarding the evaluation of the physical health domain, patients showed a significant increase in their scores two (3.88 ± 0.79) and six months (3.92 ± 0.72) after they underwent surgery (3.02 ± 0.79). Of all the parameters in the Whoqol-bref to evaluate this domain, the only facet that remained unchanged was sleep and rest (Table 2).

The psychological domain showed no statistically significant changes (preoperative: 3.96 ± 0.66 ; two postoperative months: 4.22 ± 0.07 ; six postoperative months: (4.04 ± 0.58)). The facets of this domain six months after surgery showed no statistical changes. Regarding social relationships, patients showed lower scores in the sixth postoperative months (3.90 ± 0.08) than in the preoperative period (4.22 ± 0.09) but no significant differences in the means two months after surgery (4.17 ± 0.07).

Similarly, the environment domain showed lower scores six months after surgery (3.51 ± 0.07) than before it (3.83 ± 0.07 , but no differences two months after it (3.80 ± 0.07). In this domain, home environment, health and social care, and physical environment significantly decreased six months after surgery.

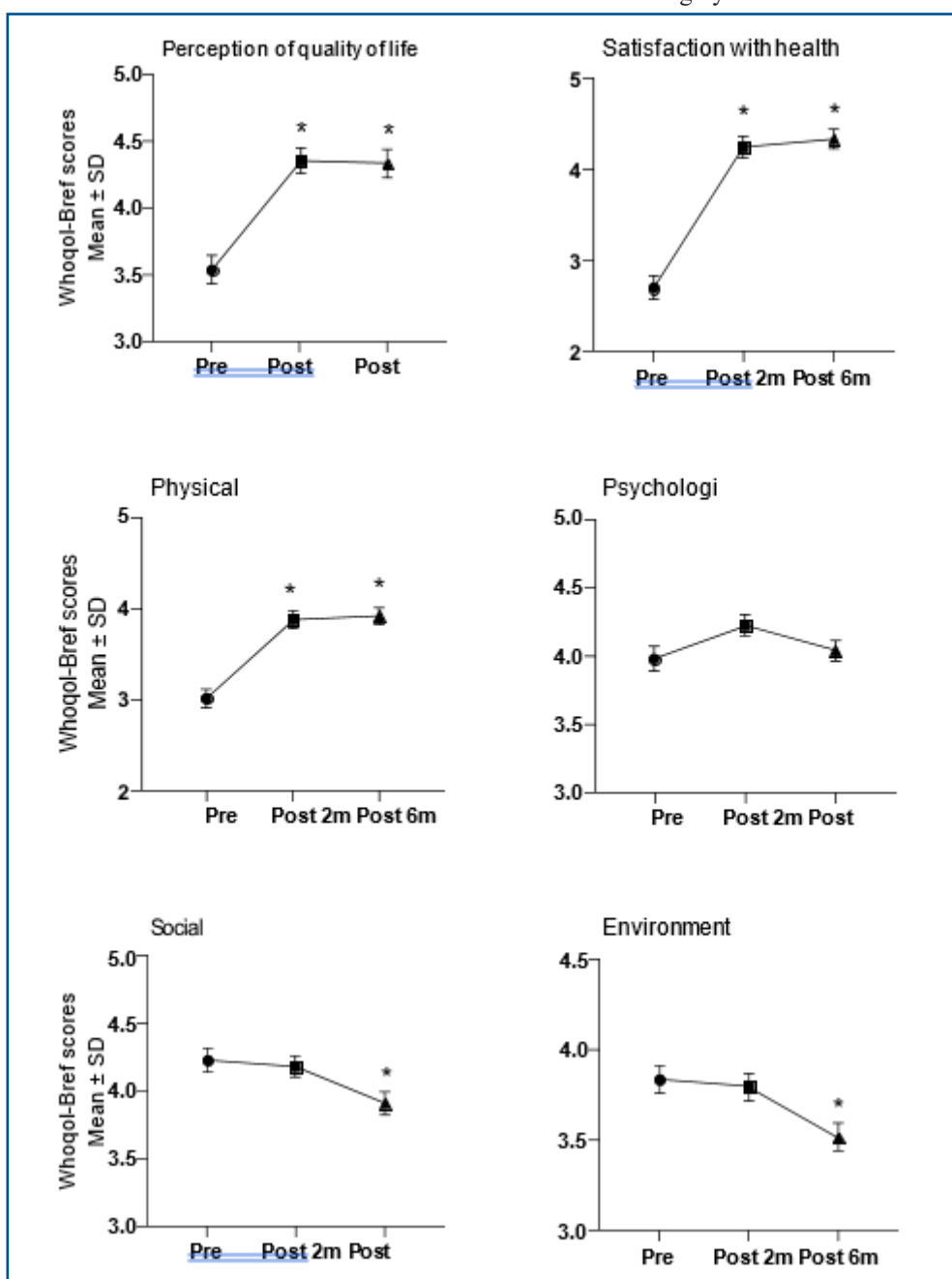


Figure 1: Mean scores for perceived quality of Life, satisfaction with health, and the physical health, psychological, social relationships, and environment domains in the quality-of-life instrument Whoqol-bref of patients before and two and six months after bariatric surgery (n=60). Values expressed as mean \pm standard error of the mean (SD). *P<0.05 for the pre-operative values. Kruskal-Wallis test followed by Dunn's post-test. Pre (preoperative); Post 2m (two postoperative months); Post 6m (six postoperative months).

Source: author

Table 2: Comparison of the mean scores of the facets incorporated into the domains of the quality-of-life Whoqol-bref of patients before and two and six months after bariatric surgery (n=60).

Domains	Preoperative Mean \pm SD	Postoperative 2 month Mean \pm SD	Postoperative 6 month Mean \pm SD
Domain 1 - Physical Health			
Pain and discomfort	2.5 \pm 0.16	4.08 \pm 0.15*	4.42 \pm 0.15*
Dependence on medication or treatments	2.13 \pm 0.13	3.28 \pm 0.17*	3.53 \pm 0.17*
Energy and fatigue	3.18 \pm 0.14	3.80 \pm 0.14*	3.78 \pm 0.12*
Mobility	3.32 \pm 0.13	4.08 \pm 0.11*	4.23 \pm 0.11*
Sleep and rest	3.73 \pm 0.18	4.10 \pm 0.14	3.77 \pm 0.15
Daily life activities	3.35 \pm 0.16	3.98 \pm 0.13*	3.88 \pm 0.13*†
Work capacity	2.93 \pm 0.18	3.82 \pm 0.15*	3.83 \pm 0.15*
Domain 2 - Psychological			
Positive feelings	3.87 \pm 0.15	3.83 \pm 0.14	3.68 \pm 0.14
Spirituality/religion/personal beliefs	4.70 \pm 0.08	4.75 \pm 0.06	4.58 \pm 0.10
Thinking, learning, memory, and concentration	4.03 \pm 0.13	4.17 \pm 0.12	3.80 \pm 0.12
Body image and appearance	3.65 \pm 0.17	4.33 \pm 0.10*	4.07 \pm 0.13
Self-esteem	3.87 \pm 0.13	4.42 \pm 0.08*	4.10 \pm 0.10
Negative feelings, sadness, moodiness, anxiety, depression	3.67 \pm 0.14	3.92 \pm 0.14	3.98 \pm 0.16
Domain 3 - Social Relations			
Personal relationships	4.23 \pm 0.12	4.23 \pm 0.11	4.05 \pm 0.11
Sexual activity	3.82 \pm 0.17	3.80 \pm 0.15	3.75 \pm 0.11
Social support	4.58 \pm 0.09	4.50 \pm 0.09	4.13 \pm 0.10*†
Domain 4 – Environment			
Physical safety and security	3.95 \pm 0.15	4 \pm 0.13	3.57 \pm 0.15
Physical environment	3.87 \pm 0.17	3.77 \pm 0.15	3.27 \pm 0.16*
Financial resources	2.82 \pm 0.14	2.90 \pm 0.14	2.83 \pm 0.12
Opportunities to acquire new information and skills	4.20 \pm 0.13	4.35 \pm 0.09	4.12 \pm 0.08
Participation and recreation/leisure opportunities	3.83 \pm 0.15	3.67 \pm 0.14	3.43 \pm 0.15
Home environment	4.45 \pm 0.11	4.18 \pm 0.12	3.92 \pm 0.13*
Health and social care	3.97 \pm 0.17	3.90 \pm 0.13	3.32 \pm 0.15*†
Transportation	3.60 \pm 0.17	3.63 \pm 0.15	3.64 \pm 0.14

Values expressed as mean \pm standard error of the mean (SD). (n=60). *p<0.05 for pre-operative values; †p<0.05 for the postoperative two months. Kruskal-Wallis test followed by Dunn's post-test.

Source: Own authorship.

Regarding weight loss, patients who used psychotropic medications showed a statistically lower mean percentage (23.8 ± 0.85) than those who abstained from them (26.9 ± 0.72).

This study also investigated the associations between the quality-of-life assessment parameters and the percentage of weight loss, body mass index, and education of patients in the sixth postoperative month, finding no statistically significant differences (Table 3).

Table 3. Associations between the quality-of-life assessment parameters and the percentage of weight loss, body mass index, and education of patients in the sixth postoperative month of bariatric surgery (n=60).

Variables		Percentage of weight loss			
Mean \pm SD		15 to 19.9%	20 to 24.9%	25 to 29.9%	30 to 34.9%
Perception of Quality of Life		4.54 \pm 0.15	4.20 \pm 0.14	4.42 \pm 0.13	4.3 \pm 0.32
Satisfaction with own health		4.45 \pm 0.15	4.13 \pm 0.09	4.52 \pm 0.22	4.38 \pm 0,31
Physical Health Domain		3.85 \pm 0.22	3.65 \pm 0.16	4.08 \pm 0.15	4,05 \pm 0.21
Psychological Domain		4.01 \pm 0.13	4 \pm 0.16	4.01 \pm 0.12	4 \pm 0.16
Social Relations Domain		4 \pm 0.22	4 \pm 0.11	3.8 \pm 0.15	4.15 \pm 0.14
Environment Domain		3.4 \pm 0.17	3.4 \pm 0.15	3.55 \pm 0.13	3.7 \pm 0.14
Variables		Body Mass Index (km/m2)			
Mean \pm SD		25 to 29.9	30 to 34.9	35 to 39.9	≥ 40
Perception of Quality of Life		4.58 \pm 0.24	4.21 \pm 0.14	4.2 \pm 0.2	4.12 \pm 0.35
Satisfaction with own health		4.47 \pm 0.19	4.47 \pm 0.15	4.10 \pm 0.23	3,75 \pm 0,41
Physical Health Domain		4.16 \pm 0.16	4 \pm 0.11	3.70 \pm 0.24	3,59 \pm 0,25
Psychological Domain		4.06 \pm 0.12	4.01 \pm 0.13	4.21 \pm 0.14	3,85 \pm 0,22
Social Relations Domain		4.05 \pm 0.15	4.02 \pm 0.11	4.13 \pm 0.10	3,37 \pm 0,29
Environment Domain		3.54 \pm 0.13	3.59 \pm 0.11	3.50 \pm 0.21	3,28 \pm 0,24
Variables		Education			
Mean \pm SD		Primary Education	Secondary Education	Tertiary Education	
Perception of Quality of Life		4.29 \pm 0.14	4.39 \pm 0.18	4.33 \pm 0.21	
Satisfaction with own health		4.25 \pm 0.15	4.39 \pm 0.18	4.50 \pm 0.22	
Physical Health Domain		3.84 \pm 0.12	4.01 \pm 0.16	3.97 \pm 0.27	
Psychological Domain		3.95 \pm 0.11	4.11 \pm 0.10	4.16 \pm 0.18	
Social Relations Domain		3.89 \pm 0.12	4.07 \pm 0.13	4.05 \pm 0.10	
Environment Domain		3.49 \pm 0.12	3.53 \pm 0.11	3.56 \pm 0.13	

*Values are shown as average \pm standard error of the mean (SD). $p \geq 0.05$.

DISCUSSION

This study shows data on the quality of life of patients with obesity up to six months after bariatric surgery, showing improved physical health and negative impacts on social relationships and the environment. Results suggest that surgery may affect several quality-of-life aspects in the short term, indicating the need for the comprehensive follow-up of patients. The degree of obesity, comorbidities, and the use of medications also decreased despite the increase in the number of patients using psychotropic drugs.

Investigating quality of life in the context of chronic diseases is fundamental to evaluating patients'

therapeutic process given the impact of these diseases on the various dimensions that affect health. Thus, this study contributes to the explanation of the impact of bariatric surgery on the quality of life and clinical parameters of patients from the preoperative period to the sixth month after the procedure.

Corroborating data in the literature, most people who underwent bariatric surgery are married women who are aged from 30 to 59 years and have low education and salary income. Research shows that although men and women showed a similar percentage of obesity, women comprise the majority of patients who undergo bariatric surgery, seeking the procedure ever younger.

This unequal gender distribution seems to occur because women concern themselves more about their health, survival, better self-image perception, and vanity and show greater eligibility for surgery^{17,18}. This highlights the need for health education actions that address the harm of obesity on health aimed at men. Moreover, social, and economic problems, such as low academic performance, unemployment, and ethnic disparities, are directly linked to high obesity rates¹⁷⁻¹⁹.

As expected, the surgery significantly reduced total body weight (mean of 25.7%) and BMI. According to the International Federation for the Surgery of Obesity and Metabolic Disorders (2018), the average percentage of weight loss at one year after surgery totals 28.9%²⁰. Due to excessive weight loss, clinical conditions tend to improve after bariatric surgery, and many patients can stop using antihypertensive and hypoglycemic drugs in less than six months^{5,20}.

The Whoqol-bref showed a significant improvement in self-perception of quality of life and satisfaction with health. Before the surgery, most participants reported considering their quality of life as 'regular,' and the item 'satisfaction with health' obtained even lower scores, such as 'must improve.' However, after the procedure, both were classified as 'good.'

Another perceived benefit was the positive impact on the physical health domain, evinced by improvements in almost all parameters of patients' physical assessment throughout the postoperative period, especially regarding pain and discomfort and physical mobility, except for sleep and rest, which showed no significant changes. Moreover, the comorbidities associated with obesity and the daily use of medications also decreased after the intervention.

Obesity constitutes a risk factor for several inflammatory, cardiac, and metabolic diseases, and the overload due to excess adiposity severely damages bones and joints, and the incidence of arthritis is two to four times higher among people with obesity^{2,11}. However, the weight loss due to bariatric surgery is associated with the remission of these comorbidities, especially systemic arterial hypertension and type 2 diabetes mellitus, and the improvement of gait biomechanics, pain, and joint function, thus promoting less dependence on health treatments, greater mobility, and a sense of physical well-being^{3,10-11}.

On the other hand, the Social Relations domain decreased six months after the surgery, a fact that was mainly linked to the reduction in Social Support. Social relationships have important implications in people's lives, evidence shows that a Network Support brings health benefits, including adherence to healthy lifestyle habits, coping with treatments for chronic diseases, recovery from surgeries, among others²¹⁻²².

Likewise, a positive association between weight loss and social support in the postoperative period of bariatric surgery has been shown, including from family, friends, or support groups²²⁻²³. Thus, the scientific evince the problems related to the predictor of positive postoperative outcomes of this surgery²²⁻²⁴.

Complaints of sexual problems are common among people with severe obesity²⁵. This study classified

sexual activity as 'regular' from the preoperative period, remaining in this same pattern up to the sixth-month follow-up. Some studies point out that the erectile function and sexual desire and satisfaction of obese patients improve after bariatric surgery due to the correction of vascular endothelial dysfunction and hormonal imbalance. However, these studies have limitations, such as few participants, short investigations, and lack of more comprehensive clinical data, indicating the need for further research on the topic²⁵.

Another negatively impacted domain refers to the environment, especially associated with declines in health and social care, home environment, and physical environment. The various postoperative complications and the physiological transformations of the body generated by bariatric surgery accentuate the need for health care and an environment that favors their recovery and adaptation to new life habits. However, the low salary income of participants in this research added to the socioeconomic problems in Brazil bring difficulty in accessing health services for postoperative follow-up, inappropriate housing and lack of social support, reflecting a feeling of worsening of patients' environment²⁶. Moreover, the failure in the counter-referral system and admission of this patient in primary health care can compromise health care throughout the postoperative period in the medium and long term²⁷.

Another important fact in this study refers to the absence of changes in scores of the psychological domain or its integral facets throughout the postoperative period, showing that surgery provided no benefit (from the point of psychological analysis) to patients, despite great loss of body weight and ameliorated physical comorbidities. At the same time, the number of patients who started using psychotropic medications throughout the postoperative period showed a significant increase. Psychotropic drugs act on the central nervous system, changing behavior, mood, and cognition and acting on psychic function and mental state, with antidepressant, hallucinogenic, and/or tranquilizing actions²⁸.

Evidence suggests an association between bariatric surgery and the worsening and/or emergence of psychiatric disorders from the immediate postoperative period to long after surgery. Depression, binge eating, anxiety, suicide rates, and alcohol and other drug abuse tend to increase, especially after two to three years after surgery, leading to greater dependence on health care^{5-7,23,29-30}. Observational studies, which have also found an increase in the postoperative incidence of mental health disorders, consider that surgical complications, dissatisfaction with weight loss achieved, excess skin and/or scars, history of psychiatric disorders, and social factors may justify these findings³⁰.

This study also showed that patients using psychotropic drugs had less body weight loss throughout the postoperative period. Although the theme still requires explanation, psychological factors are pointed out as negative predictors of the results of bariatric surgery. Psychiatric disorders, especially depressive conditions, cause damage to body weight loss after surgery or even have an association with weight regain over a period of three to five years^{23,30}.

In view of the above, the concept that the success of bariatric surgery is exclusively linked to weight loss and reduction of physical comorbidities requires reflection and expansion to a holistic and complex view of human beings. This corroborates the importance of health monitoring considering biological, social, psychological and environmental aspects to ensure the results of the surgery and the effective improvement of patients' quality of life, with important emphasis on approaches related to psychosocial support to thus aim at creating strategic plans to expand the social support network that includes patients, family members, and healthcare providers and establish the multidisciplinary monitoring and treatment of patients' mental health from the preoperative to the long-term postoperative period as a routine.

The limitations of this study are related to the difficulties of a longitudinal study, including participant dropout and cancellations of elective surgeries, which partially contributed to the reduction of the sample.

■ CONCLUSION

The six-month postoperative follow-up showed changes in the assessment of the quality of life of patients with obesity. Perceived quality of life, satisfaction with health, and physical health improved throughout the period, social relationships and environment showed negative impacts, and the psychological domain remained unchanged. Obesity comorbidities and total medication use also occurred at the same time, following an increase in the use of psychotropic medications and a negative association between the use of these medications and body weight loss over the period. This study found no significant associations between quality of life and variables such as weight loss, BMI, and education.

Author Contributions

All authors contributed to the manuscript. Nayara Ariel da Sila Lisboa: Participated in data collection, data analysis, statistical analysis, and writing of the text.

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Walckiria Garcia Romero: Participated in the study design, statistical analysis, discussion of results, and the final version of the text.

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Resumo

Introdução: a cirurgia bariátrica é um método eficaz para redução do peso corporal e remissão das doenças associadas à obesidade, porém não está isenta de complicações pós-operatórias, a curto e longo prazo, que podem acarretar em mudanças dos hábitos de vida.

Objetivo: avaliar as alterações de curto prazo na qualidade de vida de pacientes submetidos à cirurgia bariátrica.

Método: estudo observacional, coorte prospectivo em três ondas: pré-operatório, dois meses e seis meses de pós-operatório. Realizado no ambulatório de um programa de cirurgia bariátrica de um hospital universitário da região Sudeste-Brasil. Utilizou-se o World Health Organization Quality of Life Bref. Análise dos dados: teste Kruskal-Wallis; Teste t para amostras não pareadas, $p < 0,05$.

Resultados: amostra de 60 pacientes, majoritariamente do sexo feminino. No decorrer do pós-operatório houve aumento nos escores do domínio Saúde Física; redução nos domínios das Relações Sociais e Meio Ambiente; o domínio Psicológico permaneceu inalterado. Evidenciou-se redução do número médio de doenças associadas à obesidade e de medicamentos utilizados diariamente, porém houve aumento do número de pacientes que utilizavam psicotrópicos após a cirurgia e estes apresentavam menor perda ponderal.

Conclusão: os pacientes apresentaram melhorias na saúde física, mas relataram impactos negativos nas relações sociais e no ambiente após a cirurgia bariátrica. Observou-se remissão das comorbidades e redução no uso de medicamentos, porém com um aumento no número de pacientes em uso de psicotrópicos.

Palavras-chave: cirurgia bariátrica. qualidade de vida. apoio social. meio ambiente. perda de peso.

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