



Psychological assessment in post-bariatric plastic surgery: A scoping review

Avaliação psicológica em cirurgia plástica pós-bariátrica: Uma revisão de escopo

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■ ABSTRACT

Introduction: Obesity can have physical, psychological, and social consequences. Bariatric surgery has the potential to improve the patient's biopsychosocial condition. However, excess skin after rapid and significant weight loss can cause psychological distress. Plastic surgery, as the only procedure capable of removing excess skin, has the potential to improve self-image. Additionally, it can encourage weight control. This study investigated, through a scoping review, whether the basic psychological assessment, carried out during screening by the plastic surgeon, is capable of identifying psychological distress in patients who wish to undergo plastic surgery after bariatric surgery. **Method:** A bibliographic survey was carried out, covering articles published between 2013 and 2023, in Portuguese, English, and Spanish, in the MEDLINE, Virtual Health Library (VHL), and Embase databases. **Results:** In the search strategy, 48 articles met the inclusion criteria, and 18 articles were mentioned in this study. **Conclusion:** The psychological assessment carried out during plastic surgeon screening allows the identification of suffering resulting from excess skin after bariatric surgery and previous psychological suffering. This facilitates the medical decision about whether or not to refer the patient for specialized psychological evaluation. This approach broadens the patient's understanding of the relationship between body and mind.

Keywords: Psychosocial functioning; Plastic surgery procedures; Bariatric surgery; Body image; Mental disorders; Body contouring.

■ RESUMO

Introdução: A obesidade pode acarretar consequências físicas, psicológicas e sociais. A cirurgia bariátrica tem o potencial de melhorar a condição biopsicossocial do paciente. No entanto, o excesso de pele após uma perda de peso rápida e significativa pode causar sofrimento psicológico. A cirurgia plástica, como o único procedimento capaz de remover o excesso de pele, tem o potencial de aperfeiçoar a autoimagem. Além disso, ela pode incentivar o controle do peso. Este estudo investigou, por meio de uma revisão de escopo, se a avaliação psicológica básica, realizada durante a triagem pelo cirurgião plástico, é capaz de identificar o sofrimento psicológico em pacientes que desejam se submeter a cirurgia plástica após a bariátrica. **Método:** Foi realizado um levantamento bibliográfico, abrangendo artigos publicados entre 2013 e 2023, nos idiomas português, inglês e espanhol, nas Bases de dados MEDLINE, Biblioteca Virtual em Saúde (BVS) e Embase. **Resultados:** Na estratégia de busca, 48 artigos atenderam os critérios de inclusão e 18 artigos foram mencionados neste estudo. **Conclusão:** A avaliação psicológica realizada na triagem do cirurgião plástico permite identificar o sofrimento decorrente do excesso de pele pós-cirurgia bariátrica e o sofrimento psicológico prévio. Isso facilita a decisão médica sobre

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encaminhar ou não o paciente para avaliação psicológica especializada. Essa abordagem amplia a compreensão do paciente sobre a relação entre corpo e mente.

Descritores: Funcionamento psicossocial; Procedimentos de cirurgia plástica; Cirurgia bariátrica; Imagem corporal; Transtornos mentais; Contorno corporal.

INTRODUCTION

The World Health Organization (WHO) classifies obesity as a highly complex Chronic Noncommunicable Disease (NCD) and is considered a challenge of the 21st century, with global repercussions. According to the Atlas of the Food and Nutritional Situation in Brazil, published by the Ministry of Health in 2020, a survey involving 12,776,938 adults revealed that 63% of them are overweight. Obesity is a multifactorial condition, presenting a significant risk due to its comorbidities and psychosocial impacts that worsen with increased weight.

Social stigma is an additional factor that harms the condition of obese people¹. Psychological disorders such as depression, anxiety, binge eating, low self-esteem, and dissatisfaction with body image have been frequently associated with obesity^{2,3}. The importance of a multidisciplinary team in the treatment of obesity is highlighted by some studies, since, in addition to promoting health, these professionals act as support for the patient^{4,5}.

Some authors agree that bariatric surgery is an effective and most common resource worldwide to treat morbid obesity and its results can promote psychological well-being.⁶ However, rapid and significant weight loss can result in the appearance of excess skin, causing sores and bad odors in the skin folds. This condition can be uncomfortable and affect both physical health and self-esteem. Furthermore, the changes that occur in the person's life as a result of the surgery and the difficulty in adapting between the perception of their own thin body and their self-image can lead to psychological problems.⁷

Plastic surgery, being the only procedure that can remove excess skin resulting from major weight loss, has the potential to optimize the results of bariatric surgery. This, in turn, encourages weight control and contributes to improving people's self-esteem and psychological well-being.⁸ However, patients with psychological distress may express dissatisfaction with the outcome of plastic surgery, even when the initially planned goal has been achieved. Patients with Body Dysmorphic Disorder (BDD) who undergo plastic surgery may experience a worsening of their psychological condition, which may compromise satisfaction with the results obtained.⁹

This study aims to alert and raise awareness among plastic surgeons, bariatric surgeons, and the interdisciplinary team about the relevance of the biopsychosocial approach in the preoperative care of patients who wish to undergo plastic surgery after bariatric surgery. During the screening phase carried out by the plastic surgeon, psychological assessment plays two important roles. Firstly, it allows you to explore the patient's desires, expectations, anxieties, and fantasies. Secondly, the assessment process, combined with careful and transparent feedback from the doctor when the patient shows signs of psychological distress, helps the patient to recognize the need and importance of further psychological investigation, conducted by specialists. This initial approach aims to understand the person's emotional and psychological context, promoting the patient's mental health.

OBJECTIVE

The present study, through a scoping review, aimed to determine whether a basic psychological assessment, conducted during plastic surgeon screening, can identify psychological distress in patients seeking post-bariatric plastic surgery.

METHOD

The present study is a scoping review and is part of the project entitled "*Protocolo de Atenção Biopsicossocial em Cirurgia Plástica Pós-bariátrica*" (Biopsychosocial Care Protocol in Post-bariatric Plastic Surgery). This project was conducted during the Professional Master's degree in Sciences, Technology, and Management Applied to Tissue Regeneration at the Universidade Federal de São Paulo (Unifesp). The study was approved by the Unifesp Ethics and Research Committee, with opinion number 5825924. The corresponding proof is 097949/2022, and the Certificate of Presentation of Ethical Appreciation (CAAE) has the number 62914222.2.0000.5505.

Initially, the following research question was formulated using the acronym PICO: Can biopsychosocial care for pre-operative post-bariatric plastic surgery patients identify psychological suffering related to excess skin? Segmented into P =

Pre-operative post-bariatric plastic surgery patient, I = Biopsychosocial care, C = Not applicable, O = Identification of psychological suffering related to excess skin. Next, the acronym FINER was applied to assess whether the question was well formulated.

Articles published between 2013 and 2023 were searched, in Portuguese, English, and Spanish, on the database platforms: MEDLINE, Virtual Health Library (VHL), and Embase, using the Health Sciences Descriptors (DECS/MeSH): psychosocial functioning, plastic surgery, bariatric surgery and body image. The search strategy used was: [(“psychosocial functioning” OR “bariatric surgery”) AND (“plastic surgery” OR body image)]. The inclusion criteria for selecting the studies were research with adults of both sexes and with bariatric surgery and post-bariatric plastic surgery patients. The non-inclusion criteria were studies with adolescents, comments from experts, posters, theses, and incomplete articles. The exclusion criteria were duplicate articles and studies of plastic and bariatric surgeries without focusing on the psychological context. To manage references from the bibliographic survey, including identifying duplicates and applying eligibility criteria, the Rayyan.ai and Zotero.org platforms were used.

Therefore, 48 articles met the inclusion criteria. Of these selected, 18 were cited in this study, as they were directly aligned with the relevance of the topic in the research approach. Additionally, this study adhered to the recommendation of the *Revista Brasileira de Cirurgia Plástica* to use updated references, that is, articles published in the last 5 years. The 18 most recent references satisfactorily fulfilled the purpose established for this study.

RESULTS

The bibliographic survey conducted retrieved a total of 362 studies. Among these, 48 were selected because they met the established inclusion criteria, as illustrated in the flowchart in Figure 1.

Of these selected articles, 18 were cited and discussed in this scoping review, as highlighted in Chart 1.

DISCUSSION

The obesity treatment journey is complex and, throughout this process, the person may face clinical comorbidities, social stigmas, and negative self-judgment, which can affect their psychological state. Although the literature suggests a correlation between obesity and psychiatric disorders, research does not establish a direct connection between obesity,

depression, and anxiety. Considering the controversy, for Casselli et al.³ What can be inferred is that the presence of these disorders can potentially increase the risk of obesity.

As obesity becomes a growing public health concern, bariatric surgery is gaining prominence on a global scale. This procedure provides benefits that go beyond the clinical scope, encompassing significant psychosocial advances, improved well-being, and a more positive view of body image. However, deMeyeres et al.⁶ highlight a concern related to bariatric surgery and mental health, as some preoperative psychological assessments may be incipient. This means that psychological assessment is a complex process that employs a variety of techniques, methods, and instruments to collect information about a person's psychological state. However, if the psychologist does not collect sufficient data or apply appropriate techniques, the depth and effectiveness of the assessment may be compromised.

An important aspect to be considered is that some patients do not follow the recommendation to continue psychotherapy after the procedure, as advised by the psychologist responsible for the psychological report or even by the bariatric surgeon. In addition to the process of adapting to bariatric surgery, interruption of psychological support can worsen the patient's mental state.

Despite its many benefits, some studies, such as those by Poulsen et al.¹⁰ and Natvik et al.⁷ emphasize that the results of bariatric surgery lead to significant weight loss, which can result in an unsatisfactory adaptation to the new, slimmer body and discomfort due to excess skin. Montpellier et al.¹¹ emphasize that plastic surgery is the procedure capable of removing excess skin after massive weight loss and that patients looking for solutions to this problem may experience psychological suffering. Second Silva et al.⁹, research has indicated that 60% of people who seek plastic surgery after bariatric surgery have some psychological condition. Among the most common changes in this group, depression, generalized anxiety disorder, and body dysmorphic disorder stand out.

Considering the challenges faced in the treatment of obesity, as well as the consequences and the adaptation process after bariatric surgery, added to the discomfort caused by excess skin, there may be times when the patient is not ready to undergo plastic surgery. In these cases, it is essential to refer you for specialized mental health evaluation or treatment.

Pre-operative psychological assessment should be a fundamental element in the initial consultation for patients seeking plastic surgery. Silva et al.⁹ and Ferreres-Galán et al.¹² emphasize

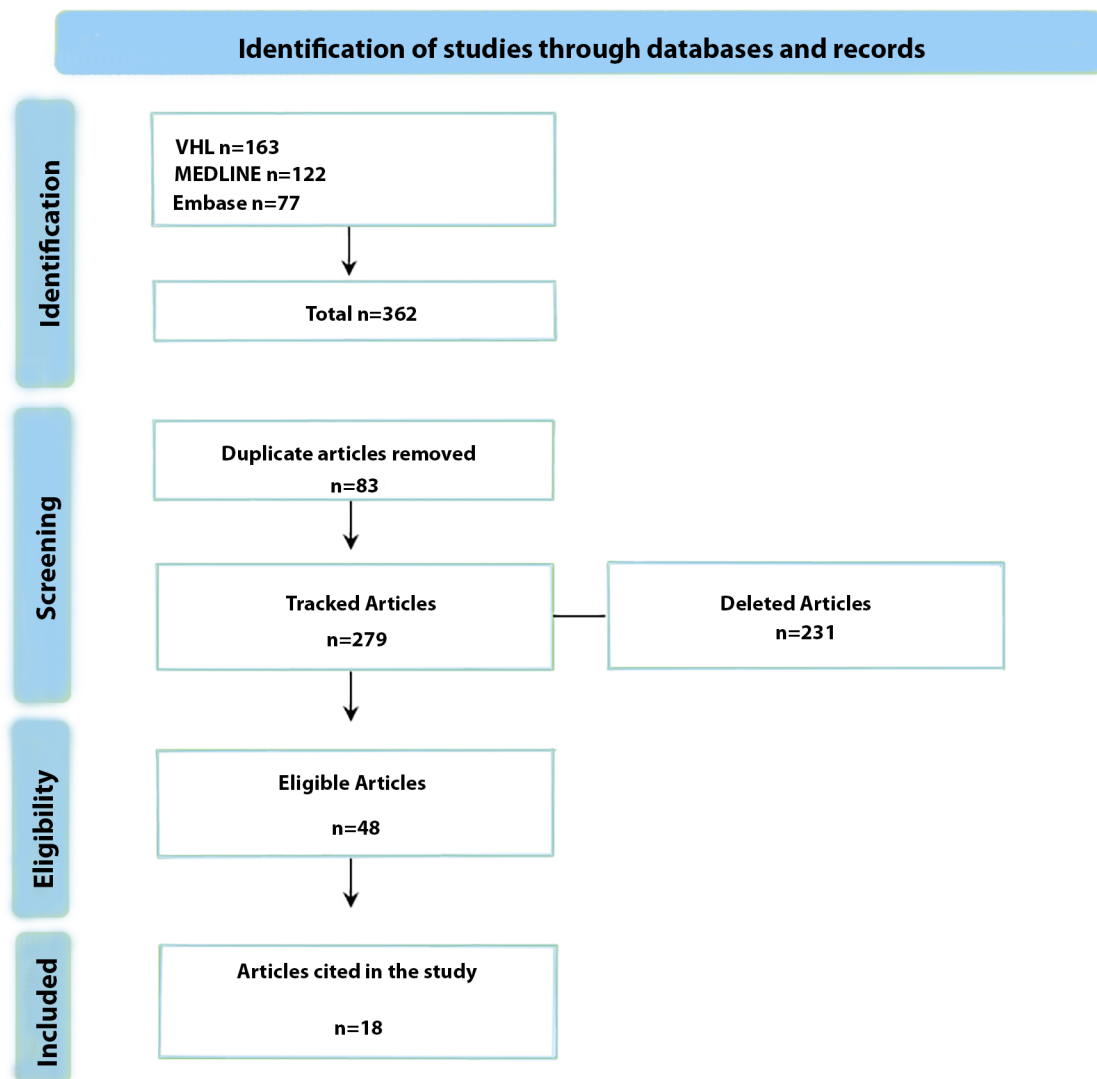


Figure 1. Flowchart of the bibliographic survey.

that the assessment aims to identify psychological disorders, such as depression, anxiety, impulsivity, binge eating, low self-esteem, and dissatisfaction with body image. A careful investigation during medical screening is necessary, as some patients adopt an attractive and seductive posture, influencing the course of the consultation and the development of the surgical plan. It may happen in some cases that the patient hides their complaints and minimizes their expectations to have their surgery approved. Psychological assessment can prevent significant postoperative losses.

The plastic surgeon must be prepared to conduct an initial psychological screening of the patient. To do this, he/she can use validated psychometric instruments

that are widely applicable to health professionals from various areas, in addition to semi-structured interviews. Attentive listening skills are important so that the surgeon can identify signs of distress that the patient may not have expressed explicitly. If the doctor identifies or suspects any sign of mental disorder during the patient's admission consultation, the recommended course of action is to refer the patient for further evaluation with specialists.

In psychological screening, the plastic surgeon can investigate factors that help to understand the patient's motivation for plastic surgery. This is important as it can reveal possible psychological problems, especially when the motivation is predominantly external. Motivation can be divided into intrinsic factors, such

Chart 1. Articles included in the bibliographic survey and mentioned in this article.

N°	Title	Author	Year
1	Gender difference in requesting abdominoplasty, after bariatric surgery: Based on five years of experience in two centers in Sulaimani Governorate	Ahmed HO, Arif SH, Abdulhakim SA, Kakarash A, Ali Omer MA, Nuri AM.	2018
2	Eating attitudes, perceptions of body image, and patient quality of life before and after bariatric surgery	Akkayaoğlu H, Çelik S.	2020
3	Beyond Body Size: Focusing on Body Functionality to Improve Body Image Among Women Who Have Undergone Bariatric Surgery	Alleva JM, Atkinson MJ, Vermeulen W, Montpellier VM, Martijn C.	2023
4	Patient-Reported Satisfaction Following Post-bariatric Surgery: A Systematic Review	Barone M, Cogliandro A, Salzillo R, Tambone V, Persichetti P	2018
5	Body Image Concerns and Associated Impairment Among Adults Seeking Body Contouring Following Bariatric Surgery	Bennett BL, Grilo CM, Alperovich M, Ivezaj V.	2022
6	Insatisfação com a imagem corporal em indivíduos com obesidade que procuram cirurgia bariátrica: explorando a carga de novos fatores mediadores.	Bianciardi, Emanuela; Di Lorenzo, Giorgio; Niolu, Cinzia; Betro, Sophia; Zerbin, Francesca; Gentileschi, Paulo; Siracusano, Alberto.	2019
7	Transtorno Dismórfico Corporal: revisão da literatura	Bonfim GW, Nascimento IPC, Borges NB.	2016
8	Comparing Bariatric Surgery Patients Who Desire, Have Undergone, or Have No Desire for Body Contouring Surgery: a 5-Year Prospective Study of Body Image and Mental Health	Buer L, Kvalem IL, Bårdstu S, Mala T.	2022
9	Atuação da equipe interdisciplinar no pós-operatório de cirurgia bariátrica: uma revisão sistmática	Campos KK, Guckert SB, Gonçalves LF, Paiva KM, Stefani FM, Haas P.	2022
10	Comorbidade entre depressão, ansiedade e obesidade e complicações no tratamento	Casselli DN, Silva ESM, Figueira GM, Demarch ME, Souza JC.	2021
11	Avaliação de imagem corporal em obesos no contexto cirúrgico de redução de peso: revisão sistemática	Castro, Thiago Gomes de; Pinhatti, Marcelle Matiazo; Rodrigues, Rodrigo Machado.	2017
12	Funcionamento interpessoal e insatisfação com a imagem corporal em pacientes encaminhados para cirurgia estética no SNS: Um papel mediador entre a regulação emocional e o perfeccionismo?	Couper, SL; Moulton, SJ; Hogg, FJ.	2021
13	Representações sociais do sobrepeso e da obesidade: Revisão Sistemática	Couss A.	2021
14	Um nuevo instrumento de evaluación de resultados desde la perspectiva del paciente en cirugía del contorno corporal estética y post bariátrica	Danilla E, S., Cuevas T, P, Domínguez C, C., Jara C, R., Ríos V, M., Calderón G, M., Sepúlveda P, S.	2015
15	Body Contouring Surgery Improves Weight Loss after Bariatric Surgery: A Systematic Review and Meta-Analysis	ElAbd R, Samargandi OA, AlGhanim K, Alhamad S, Almazeedi S, Williams J.	2021
16	Quality of Life and Complications in the Morbidly Obese Patient following Post-Bariatric Body Contouring	Elfanagely O, Othman S, Mellia JA, Messa CA, Fischer JP.	2021

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Chart 1. Articles included in the bibliographic survey and mentioned in this article.

Nº	Title	Author	Year
17	Tornando-se ex-obeso: narrações sobre mudanças de identidade antes e depois da experiência da cirurgia bariátrica	Faccio, E., Nardin, A. e Cipolletta, S.	2016
18	O psicólogo com o bisturi na mão: um estudo antropológico da cirurgia plástica	Feriani D.	2014
19	Aplicación del protocolo unificado para el tratamiento transdiagnóstico de los trastornos emocionales en pacientes post-cirugía bariátrica: estudio de efectividad y viabilidad en formato grupal	Ferreres-Galán V, Quilez-Orden AB, Osma J.	2022
20	Psychological distress among bariatric surgery candidates: The roles of body image and emotional eating	Geller S, Levy S, Goldzweig G, Hamdan S, Manor A, Dahan S.	2019
21	Quality of life among adults following bariatric and body contouring surgery: a systematic review	Gilmartin J, Bath-Hextall F, Maclean J, Stanton W, Soldin M.	2016
22	Desaparecimento e novo desaparecimento: conviver com excesso de pele e alterações intestinais após cirurgia para perda de peso	Groven, KS, Råheim, M. e Engelsrud, G.	2013
23	Contorno Corporal Pós-Bariátrico	Herman, CK, Hoschander, AS e Wong, A.	2015
24	The complexity of body image following bariatric surgery: a systematic review of the literature: Bariatric surgery and body image. Obesity Reviews	Ivezaj V, Grilo CM.	2018
25	A systematic review of body contouring surgery in post-bariatric patients to determine its prevalence, effects on quality of life, desire, and barriers	Jiang Z, Zhang G, Huang J, Shen C, Cai Z, Yin X.	2021
26	Psychological Aspects of Bariatric Surgery as a Treatment for Obesity	Jumbe S, Hamlet C, Meyrick J.	2017
27	Avaliando resultados no contorno corporal	Klassen, AF, Cano, SJ, Scott, A., Tsangaris, E., & Pusic, AL.	2014
28	The Impact of Bariatric Surgery on Psychological Health	Kubik JF, Gill RS, Laffin M, Karmali S.	2013
29	A Longitudinal Analysis of Variation in Psychological Well-being and Body Image in Patients Before and After Bariatric Surgery	de Meireles AJ, Carlin AM, Bonham AJ, Cassidy R, Ross R, Stricklen A.	2020
30	Body image dissatisfaction and depression in postbariatric patients is associated with less weight loss and a desire for body contouring surgery	Monpellier VM, Antoniou EE, Mulkens S, Janssen IMC, Van Der Molen ABM, Jansen ATM.	2018
31	Body Contouring Surgery after Massive Weight Loss: Excess Skin, Body Satisfaction, and Qualification for Reimbursement in a Dutch Post-Bariatric Surgery Population	Monpellier VM, Antoniou EE, Mulkens S, Janssen IMC, Jansen ATM, Mink Van Der Molen AB.	2019
32	Preoperative Evaluation of the Body Contouring Patient	Naghshineh N, Rubin JP	2014

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Chart 1. Articles included in the bibliographic survey and mentioned in this article.

33	Space perception, movement, and insight: attuning to the space of everyday life after major weight loss	Natvik E, Groven KS, Råheim M, Gjengedal E, Gallagher S.	2019
34	The long-term effect of body contouring procedures on the quality of life in morbidly obese patients after bariatric surgery	Paul MA, Opyrchał J, Knakiewicz M, Jaremków P, Duda-Barcik Ł, Ibrahim AMS.	2020
N°	Title	Author	Year
35	Depressive disorders in patients who seek cosmetic surgery: a broad and updated view	Paula PRD, Freitas-Júnior R, Prado M, Neves CGL, Arruda FCFD, Vargas VEB	2016
36	Psychological and Psychiatric Traits in Post-bariatric Patients Asking for Body-Contouring Surgery	Pavan C, Marini M, De Antoni E, Scarpa C, Brambullo T, Bassetto F.	2017
37	Patient-Reported Outcome Measures	Poulsen L, McEvenue G, Klassen A, Hoogbergen M, Sorensen JA, Pusic A.	2019
38	Evolution of the body image perception of people with obesity on the pathway from bariatric surgery to body contouring lift surgery	Proczko M, Postrożny D, Szymański M, Pouwels S, Major P, Stepaniak P.	2022
39	Quality of life and predictive factors for complications in patients undergoing abdominoplasty after gastric bypass: A retrospective cohort. Surgery for Obesity and Related Diseases	Rosa SC, Macedo JLSD, Canedo LR, Casulari LA.	2019
40	Anthropometric and clinical profiles of post-bariatric patients submitted to procedures in plastic surgery	Rosa SC, Macedo JLSD, Casulari LA, Canedo LR, Marques JVA.	2018
41	Body Image and Body Contouring Procedures	Sarwer DB, Polonsky HM.	2016
42	Access to reconstructive plastic surgery for patients undergoing bariatric surgery in the unified health system	Secanho Ms, Cintra Jr W, Carneiro Ic, Alves Gff, Gemperli R.	2023
43	O corpo (im)possível através da intervenção cirúrgica: uma revisão sobre imagem corporal, obesidade e cirurgia bariátrica	Schakarowski FB, de Oliveira VZ.	2014
44	Strategies for early detection of psychopathologies in candidates for post-bariatric plastic surgery	Silva DNE, Rosseto M, Vargas KFM, Rezende AABM, Balbino EG, Andrade TRD.	2020
45	Educação em Saúde em Grupo no Tratamento de Obesos Grau III: um Desafio para os Profissionais de Saúde	Soeiro RL, Valente GSC, Cortez EA, Mesquita LM, Xavier SCDM, Lobo BMIDS.	2019
46	Does Body Contouring After Bariatric Weight Loss Enhance Quality of Life? A Systematic Review of QOL Studies	Toma T, Harling L, Athanasiou T, Darzi A, Ashrafian H.	2018
47	Mais do que apenas peso corporal: o papel da imagem corporal no funcionamento psicológico e físico	Wilson, RE, Latner, JD e Hayashi, K.	2013
48	Preditores psicológicos de saúde mental e qualidade de vida relacionada à saúde após cirurgia bariátrica: uma revisão de pesquisas recentes	Wimmelmann, CL, Dela, F, & Mortensen, EL.	2014

as the desire for health, well-being, and resumption of social and work activities, and extrinsic factors, such as pleasing others or obtaining social benefits. Although both factors are important, the intrinsic factors, which are linked to health and quality of life, should be more significant for the patient.

Another aspect to be explored are social beliefs that often lead patients to seek bodily perfection, feeding the idea that a slender body solves all problems. Akkayaoğlu & Çelik² point out that studies on the concept of ego have focused on body image, which represents the physical aspect of the ego. This relationship between the ego and self-image is important for understanding how psychological factors can influence people's health and well-being. In some cases, the idealized body image appears as a way to alleviate anguish and dissatisfaction. Complementing this view, Elfanagely et al.¹³ and Bennett et al.¹⁴ highlighted the importance of investigating patients' expectations before and after surgery, making them aware of the general changes that may occur after surgery.

In this context, it is important to inform the patient about the procedure, establish realistic expectations for the recovery period, and warn about possible complications, according to Bianciardi et al.¹⁵ Such measures can significantly contribute to reducing patient anxiety, in addition to enhancing treatment adherence and optimizing postoperative results. After all, a well-informed and mentally prepared patient becomes a more active patient in their own recovery process.

Emotional support for the patient, both before and after surgery, is also effective in managing the stress and anxiety associated with the procedure. Additionally, collaboration with other healthcare professionals, such as psychologists, nutritionists, and physical therapists, can be effective in addressing all of the patient's concerns. Another important aspect to be discussed with the patient is the clear definition of their goals and priorities, in addition to emphasizing the replacement of sagging skin with scars.

This information can help the patient establish realistic expectations and prepare more effectively for the recovery process after surgery. Psychological screening conducted by the plastic surgeon can help identify people who are less likely to benefit from surgery, as well as those who may need extra attention and guidance, as highlighted by Buer et al.¹⁶ It is worth remembering that patients with body dysmorphia regularly seek aesthetic procedures and, after carrying out these, tend to feel dissatisfied with the results. According to Silva et al.⁹, in some

circumstances, the patient may develop a distorted perception of the outcome of surgery due to mental disorders. This, in turn, can lead to legal action against the plastic surgeon, even when the surgery achieved the planned objective and followed all established technical criteria.

However, this study demonstrated that excess post-bariatric skin can result in psychological distress. However, it is important to highlight that the obese patient's journey to the body contouring procedure is permeated by numerous challenges, which, in a way, can also lead to mental health problems.

Thus, plastic surgery after bariatric surgery can help the patient control their weight. Additionally, surgery has the potential to improve body image, which can, in turn, restore or increase a person's self-esteem and confidence. Jiang et al.¹⁷ point out that in their research, a significant improvement in these aspects was observed in patients who underwent plastic surgery after bariatric surgery, especially when compared to those who did not undergo the procedure.

Therefore, psychological research must be considered relevant and cannot be relegated to a secondary level. Ignoring it would be contradictory to the understanding that obesity is a disease with biopsychosocial causes and impacts. Appropriate treatment must adopt an interdisciplinary approach, considering not only the physical symptoms but also the psychological and social aspects involved. This perspective is supported by studies, such as that of ElAbd et al.¹⁸

This scoping review has a limitation: the lack of assessment of the methodological quality of the selected articles.

CONCLUSION

The findings of this scoping review highlight the importance of incorporating mental health assessment as a routine component in the preoperative assessment in post-bariatric plastic surgery, as basic psychological assessment has the potential to identify signs and symptoms of psychological distress that, if detected early, they can prevent mental health complications, making it easier to refer the patient to specialized mental health treatment. When the patient is in an appropriate psychological state, they are better positioned to fully benefit from the benefits of surgery. Furthermore, it is important that the plastic surgeon, in addition to having extensive clinical-surgical technical knowledge, also has a basic understanding of mental disorders.

COLLABORATIONS

ACM	Analysis and/or data interpretation, Conception and design study, Conceptualization, Formal Analysis, Methodology, Visualization, Writing - Original Draft Preparation, Writing - Review & Editing.
DN	Final manuscript approval, Supervision, Validation.
VYS	Supervision.
SSS	Data Curation.
LMA	Formal Analysis.

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