REVIEW
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Barriers to bariatric surgery completion: A narrative review of preoperative attrition and its determinants

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ABSTRACT

Although bariatric surgery is an effective intervention for morbid obesity, a significant proportion of patients referred for surgery fail to proceed to the operation. This narrative review aims to examine the rates, characteristics, and underlying reasons for preoperative attrition among bariatric surgery candidates. The literature demonstrates variability in defining pre-op attrition, with some studies adopting binary classifications and others focusing on attrition at specific stages of the preparation process. Key factors associated with attrition include socio-demographic variables (e.g., gender, age, and income), clinical and logistical issues (e.g., waiting times, insurance barriers), and psychosocial characteristics (e.g., anxiety, substance use, and motivation). Some qualitative studies have reported that patients' thoughts and feelings about the meaning of surgery—particularly their emotional readiness and identity-related concerns—can substantially influence whether they follow through with the procedure. In Türkiye, where no standardized national guidelines are in place and structured interventions are limited, there is a clear need for broader changes in how the pre-op phase is managed. Addressing this issue will likely require support systems that are flexible, multidisciplinary, and responsive to individual circumstances. This review emphasizes that personal experiences and system-level factors jointly influence whether patients complete the surgical process. Recognizing how these layers interact may help create more effective strategies for supporting those at risk of dropping out before surgery.

Keywords: Bariatric surgery, preoperative preparation process, preoperative attrition, psychosocial factors, demographic factors, logistic factors

INTRODUCTION

Obesity is widely recognized as a complex, chronic disease involving excessive body fat that adversely impacts health. In its latest classification, the World Health Organization (WHO) includes obesity as a disease within the International Classification of Diseases, 11th Revision (ICD-11), underscoring its critical relevance to global public health (1). The most commonly used criterion for diagnosing obesity is the body mass index (BMI), with a BMI of 30 kg/m^2 or higher indicating obesity (1,2). When BMI exceeds 35 kg/m^2 in the presence of comorbid conditions or exceeds 40 kg/m^2 regardless of comorbidities, individuals are categorized as having morbid obesity. This designation reflects a substantially increased risk for severe health issues and elevated mortality rates (3). In addition, obesity, which is strongly associated with serious health problems such as Type 2 diabetes (T2DM), hypertension, cardiovascular diseases, and some types of cancer, is a risk factor for individuals. While it negatively affects life expectancy and quality of life, it also creates a serious economic burden on countries' health systems (4-6).

According to the World Obesity Federation (2024) report, the combined prevalence of overweight (BMI ≥25 kg/m^2) and obesity (BMI ≥30 kg/m^2) among individuals aged 18 years and older worldwide is approximately 42%. The same report predicts that this rate will reach 54% by 2035 (7). Projections from the Global Burden of Diseases, Injuries, and Risk Factors Study (2021) estimate that approximately 3.8 billion adults worldwide will have a BMI over 25 by 2050 (8). This global trend is also observed in Türkiye. According to the Turkish Statistical Institute, the obesity rate among individuals aged 15 and over in Türkiye increased from 15.4% in 2008 to 20.2% in 2022. When stratified by gender, obesity prevalence was 23.6% among women and 16.8% among men (9). Although obesity rates have more than doubled since the beginning of the 1990s, the intervention methods developed have been insufficient

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to control this increase (10). This increase is associated with high-calorie dietary habits, sedentary lifestyles, and other structural changes, especially urbanization and economic growth (11). The rapid increase in the global prevalence of obesity has necessitated the development of various treatment strategies to address this problem. Treatment approaches developed to combat obesity are predominantly multicomponent, consisting of diet, exercise, behavioral interventions, and drug therapy (12,13). However, traditional first-line treatments are limited in their ability to provide permanent weight loss and to improve disease-related complications, especially in cases of morbid obesity (14,15). At this point, bariatric surgery (BS) stands out as an intervention with proven effectiveness in managing obesity-related health problems (16).

BS is the most widely used intervention worldwide because it provides long-term effective treatment for obesity. Laparoscopic gastric bypass (LGB) and sleeve gastrectomy (SG) are the two most commonly performed bariatric procedures (17), which provide significant improvements in both weight loss and obesity-related diseases (18,19). Meta-analyses show that BS provides effective weight loss in individuals with morbid obesity (BMI ≥40 kg/m^2) and complete recovery or improvement of diabetes, hyperlipidemia, and hypertension in most patients (20).

Owing to technological advances, procedures such as LGB and SG, which are now widely performed, are associated with lower complication rates and faster recovery when performed laparoscopically (21). However, these surgical interventions require patients to make radical changes in their lifestyles; compliance with these changes is of great importance not only for long-term success but also for preventing postoperative complications (3). Although LGB and SG procedures are generally considered to be safe, it is known that there are risks of surgical complications, reoperation, and mortality, albeit at low rates (22,23). Therefore, the surgical process requires a multidimensional evaluation of both technical and psychosocial aspects. Accordingly, this review aims to address pre-op surgical evaluations and attrition.

Preparation for BS: Recommendations of Guidelines in the Pre-op Process

The success of BS depends on both the surgical technique used and the preoperative process patients undergo. Indications and contraindications for surgery are evaluated in the pre-op period (24). In BS, the guidelines published by authoritative organizations such as the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO), the WHO, and the American Society for Metabolic and Bariatric Surgery (ASMBS) recommend that evidence-based medical practices be performed by a multidisciplinary team to prepare patients for surgery (3,25). These guidelines indicate that BMI ≥35 kg/m^2 constitutes a direct surgery. In cases where BMI is ≥30 kg/m^2, the presence of a comorbid disease such as T2DM or the patient's inability to lose weight despite trying non-surgical methods is considered an indication for surgery. Although the evaluation of indications and contraindications for surgery is the initial step in determining the person's eligibility for BS, the pre-op period extends beyond this initial evaluation. During pre-op preparation, patients are evaluated holistically with respect to medical, psychological, behavioral, and social aspects (24). The evaluation during the preparation phase and certain changes expected of patients also facilitate adaptation to changes in the post-op process (26).

Psychiatric Suitability, Psychological Support and Behavioral Preparation Processes

Although clinical practice guidelines recommend screening for psychiatric risks before BS and conducting a preliminary assessment of the individual's level of psychological preparation, findings regarding the predictive power of this assessment for surgical outcomes are limited (27). However, these interviews are considered important in clinical practice for assessing the individual's potential to adapt to post-surgical lifestyle changes and for the early detection of psychosocial risks (28). During the interview, the patient's weight and dietary history, current psychiatric or psychological symptoms, social environment, and capacity for behavioral adaptation are addressed (24,29). In addition, the individual's use of cigarettes, alcohol, or other substances is assessed, and a history of active substance use or recent serious addiction may be considered a contraindication to surgery. Since smoking and alcohol use increase the risk of complications during and after surgery, patients are advised to stop both before surgery (24,30).

Differences in Practice Among Guidelines

Although the guidelines provide a general framework, differences in practice can be observed in some areas across countries and centers. For example, IFSO and ASMBS recommend BS only for individuals with a BMI between 30-34.9 kg/m^2 who have serious comorbidities—especially T2DM—and in whom non-surgical methods have failed (31,32). In addition, some guidelines recommend setting BMI thresholds 2.5 kg/m^2 lower for Asian patients to account for ethnic differences. This recommendation is based on evidence that T2DM and cardiovascular diseases are more common at lower BMI values in Asian populations. Indeed, metabolic risks in this population may become evident at BMI levels between 25 and 27.5 kg/m^2. In some cases, limiting access to surgery based solely on traditional BMI thresholds may be inappropriate for high-risk individuals (24).

Similarly, the pre-op psychosocial assessment is recommended, but not mandatory, in most guidelines. For example, while

the ASMBS (2016) recommends that all patients be assessed by a mental health professional (33), the guideline developed by the Canadian Obesity Society and adapted in Ireland states that psychosocial assessment should not only identify contraindications but also identify the patient's strengths (e.g., social support, motivation) and risk factors (e.g., psychiatric symptoms, eating behaviors) (34). In contrast, in countries such as India, these assessments are primarily undertaken by individual institutions, and no standardized protocol exists (35). These situations lead to varied practices in the pre-op assessment.

The content and duration of the preoperative process vary between countries and centers. For example, some countries require participation in non-surgical, insurance-mandated weight-management programs of three-, six-, or nine-month duration (36). Other programs have adopted multistage structures consisting of psychiatric evaluation, nutritional counseling, nursing interview, social service support, and surgeon evaluation (37,38). The duration of these programs may be limited to a few months, whereas other programs require completion of all requirements within 15 months of the initial evaluation (36). Such differences lead not only to variation in practice but also to loss of patients during the preoperative process.

Reasons for Pre-op Attrition from BS: Rates and Risks

The decision to apply for BS is the first and most important step patients take in the surgical process. However, not everyone who applies undergoes surgery. Despite evidence that patients' health status and functionality improve after BS, approximately 1% of those who are clinically suitable for BS undergo surgery (39-41). It has been shown that the proportion of patients who are interested in BS for obesity treatment and who contact bariatric centers can be as high as 60% among those who do not undergo surgery (42,43). This situation gives rise to the concept of "pre-op attrition" in BS. Pre-op attrition is defined as patients who are offered surgical intervention, evaluated, and accepted into the program but who leave the process at any stage before surgery (44). However, the scope and content of this concept vary across the literature. In some studies, pre-op attrition is treated as a binary outcome—that is, whether patients referred for surgery complete it (45). In others, it is defined as attrition occurring at specific stages of the process (e.g., after referral, orientation, or psychiatric evaluation) (38). Pre-op attrition rates among patients undergoing BS worldwide vary widely. The table includes studies reporting the proportion of those undergoing BS.

The findings in Table 1 indicate that the rate of those who have undergone BS varies both between and within countries. In three studies conducted in Canada that implemented a mandatory preoperative program, BS completion rates ranged from approximately 36% to 76%. Similar variability was observed in studies from the United States, with rates ranging from 39% to 70%, even when pre-op programs were in place. Although some research has linked extensive program requirements to higher attrition rates (46), comparisons between studies with and without mandatory programs did not always show substantial differences (42,47). These findings suggest that, although structured programs may help reduce dropout rates, they are not the only factor contributing to dropout. Factors such as patient motivation and the design and implementation of programs also appear to influence program completion. For instance, in a study conducted in Iran (48), in which patients participated in a multidisciplinary program lasting 12-18 months, the clinic still reported a relatively low attrition rate of 12.7%. The researchers pointed out that the presence of comprehensive national health insurance coverage likely contributed to this outcome.

Factors Associated with Pre-op Attrition

Socio-demographic Factors

Gender

The majority of applicants for a BS are women. Although the literature reports that the proportion of female participants typically ranges from 60% to 80% (38,47), some studies include only women (49). It is thought that the higher frequency with which women apply for surgery may be related to their motivation for weight management and their attitudes towards treatment.

While many studies examining the relationship between gender and the completion of surgery report that men are at increased risk of attrition (38,45,50-53), other studies report higher attrition among women (36). On the other hand, it has been found that gender is not associated with pre-op attrition (54). Therefore, to understand the effect of gender on the BS, studies examining variables such as gender roles, social norms, and biological differences are needed.

Age

Another variable whose role in pre-op attrition has been investigated is age. While studies have found advanced age to be a risk factor for attrition (37,45,50,51) there have also been studies reporting that younger patients experience attrition (53). Based on this, it is more appropriate to evaluate age together with other variables, such as motivation, health status, and living conditions, rather than considering it solely as a risk factor.

BMI

Studies have reported that pre-op attrition is more common among those with a lower BMI (35-40 kg/m^2 or BMI <40 kg/m^2) (37,47,55). One study showed that those with a BMI below 40 kg/m^2 had a threefold higher probability of pre-op attrition compared with those with a BMI of 40-50 kg/m^2, and a 4.5-fold

Table 1. Bariatric surgery completion rates			
Authors	**Country**	**Completion rate of BS**	**Duration of pre-op program**
Research with a mandatory pre-operative program			
Pitzul et al. (38)	Canada	36.21% (n=448)	Not reported
Diamant et al. (37)	Canada	45% (n=724)	Not reported
Benediktsdottir et al. (49)	Iceland	27% (n=79)	5 months
Taylor et al. (53)	New Zealand	46% (n=326)	Not reported
Alvarez et al. (42)	USA	70% (n=192)	Maximum 2 years
Doumouras et al. (50)	Canada	75.56% (n=13.581)	8-16 months
Ju et al. (45)	USA	45% (n=498)	Not reported
Richard et al. (52)	Switzerland	55% (n=122)	Average 1 year
Miller-Matero et al. (54)	USA	66.5% (n=208)	Not reported
Hlavin et al. (51)	USA	38.8%	Not reported
Paolino et al. (55)	France	53.2%	Minimum 6-12 months
Eghbali et al. (48)	Iran	91.1%	12-18 months
Research without a mandatory pre-operative program			
Marek et al. (47)	USA	72.8% (n=845)	–
Sala et al. (44)	USA	50.1% (n=397)	–
n: Number of participants who completed surgery, BS: Bariatric surgery.			

higher probability among those with a BMI of 50 kg/m^2 or above (49). The current findings may be related to the perception that surgery is an urgent need for those with a high BMI. However, it is thought that those in the low BMI group are more likely to choose non-surgical weight-loss methods because their health risks are lower. In addition to studies reporting an association between low BMI and pre-op attrition, other studies have reported that high BMI increases the risk of attrition (53,54), while others found no relationship between BMI and attrition (51). In this context, the effect of BMI on pre-op attrition is more complex than that of single determinants of attrition, such as gender and age.

Employment Status and Income Level

While some studies have found unemployment (50,53,55), lower income, or residence in low-income neighborhoods (45,50,51) to be risk factors for pre-op attrition, other studies report that employment status and income level are unrelated to pre-op attrition (52).

Waiting Period with Mandatory Program and Insurance Burden Before BS

Long waiting periods before BS are considered important risk factors for pre-op attrition. Findings indicate long waiting periods are associated with higher pre-op attrition (42,50). In this context, motivation for surgery may decrease, and patients may abandon preoperative preparation during the waiting period. Indeed, a study of reasons for pre-op attrition involving 201 participants reported that the most common reason was long waiting periods (49.1%) (48). This finding indicates that long waiting periods may be a determining factor in ensuring continuity of the surgical process.

In addition to long waiting times, mandatory program and insurance requirements prior to BS are significant barriers to undergoing surgery (55). For example, a study investigating reasons for pre-op attrition among surgical applicants reported that 17% of applicants failed to complete the procedure because they did not meet program requirements. Patients in this group differed from other groups who experienced pre-op attrition with respect to certain psychosocial characteristics, including voluntary withdrawal from the program, insurance denial, and transition to non-surgical weight management. These patients also exhibited significantly higher rates of outpatient behavioral health treatment, psychiatric medication use, and current or past alcohol abuse or dependence (36). These findings suggest that, although mandatory programs aim to prepare patients for surgery, they may pose a risk of preventing some high-risk groups from accessing surgery. Thus, this creates a paradox regarding the application of surgical methods recommended as the gold standard in obesity treatment.

Failure to achieve the weight-loss goal mandated by insurance and/or the program during the pre-op period has also been reported as a barrier to surgery (42,53). In addition to pre-op weight loss, patients face program requirements such as various laboratory tests (e.g., cotinine level and urine drug test), specialist evaluations (e.g., endocrinology and psychiatry), a financial plan, attendance at the clinic with a support person, nutrition education, and substance-use cessation. These

additional requirements have been shown to increase the risk of failure to complete the surgical procedure (42). Consistent with these results, participants in a qualitative study stated that pre-op preparation time and additional requirements constituted major barriers to surgery, and described the time between pre-op preparation appointments and tests as a "burden." In the same study, a female participant residing in the United States of America who underwent a prolonged smoking-cessation process to satisfy insurance requirements reported that the process was meaningless, saying, "I even thought about having surgery in Mexico... I can quit smoking for two weeks and have surgery". This indicates that pre-op program requirements direct some patients to alternatives (56). Similarly, one study indicated that short waiting times and rapid surgical planning made surgery more accessible (51). Some individuals found the pre-op preparation process useful for understanding their health status and increasing their knowledge about the surgical process (56). One study found that the theme "communication" played an important role in facilitating surgery. Participants requested more education about BS and information about surgical options (51). Therefore, enhancing communication and information processes appears important to ensure continuity throughout the surgical pathway. In this context, Merrell et al. (36) recommend that the psychiatric and behavioral health needs of surgical candidates who experience difficulties during the preoperative phase be evaluated individually and that appropriate support be provided.

Psychosocial Factors

Smoking and Substance Use

Active smoking has been consistently shown to be a risk factor for pre-operative attrition in various studies (42,50,51,53,55). Active substance use and diagnosis of a substance use disorder (37,47) also appear to indicate a tendency for pre-op attrition. While smoking and substance use are reported as risks for completing surgery, some patients who apply for surgery are not admitted because of active smoking, alcohol, or other substance use. Therefore, it is difficult to distinguish voluntary attrition from attrition due to surgery. The vagueness of this distinction requires caution in understanding the causes of attrition and interpreting the results.

Psychopathological Symptoms and Psychiatric Diagnoses

High levels of anxiety and depressive symptoms are psychological risk factors for pre-op attrition. Among participants whose anxiety levels were measured using the Minnesota multiphasic personality inventory-2 restructured form, those with high scores (60 T or above) had a 2.5-fold higher risk of pre-op attrition (47). Similarly, pre-op attrition risk is higher among patients with severe depression than among those with mild depression or those who do not meet diagnostic criteria for depression (49). In contrast to these findings, other studies have shown no relationship between the frequency of anxiety or depression and pre-op attrition (51). These contradictory findings indicate that the effect of psychiatric symptoms on completion of surgery may vary according to individual characteristics and contextual factors. Therefore, the psychiatric profile of each patient should be evaluated individually. In addition, one study has shown that a greater number of psychiatric comorbidities and the presence of clusters B and C personality disorders are significant predictors of pre-op attrition (44). Although findings related to personality disorders may seem inconsistent at first, individuals with these disorders may be difficult to manage in clinical settings; for example, they may be very demanding. Specialists may feel a greater sense of obligation to respond to this group and to proceed with their surgical procedures. Therefore, patients' demand may influence specialists' decisions to refer them for treatment (44).

Pre-op attrition has been shown to be common among those who exhibit emotional eating in response to anxiety, who have more food addiction symptoms, and who have binge eating disorder (according to DSM-5 criteria) [(Miller-Matero et al. (54)]. Among women, binge eating disorder and emotional eating have been reported as statistically significant predictors of pre-op attrition. In contrast, these variables were not significant predictors of the risk of pre-op attrition in men (54). Richard et al. (52) reported that the results of the psychological and dietary evaluations of patients participating in the BS process were strongly associated with pre-op attrition. These evaluations are carried out by psychologists and dietitians who serve as part of the multidisciplinary team. Issues such as eating disorder management and realistic weight expectations are addressed during the psychological evaluation, while aspects like weight stability and a balanced relationship with food are assessed as part of the dietary evaluation. In these evaluations, patients who received a negative opinion from the specialist had a higher pre-op attrition risk. Therefore, these findings indicate that addressing patients' psychological state and nutritional habits during the pre-op evaluation is important.

Personal Reflections on Health, Willpower, and Identity

Some of the studies that reveal the reasons for attrition during the surgical process mention factors that they conceptualize as "self-selection factors". Examples of this factor include attrition from the pre-op program (for example, not showing up for more than one appointment), canceling surgery after approval has been given (36), switching to non-surgical weight-loss methods, or attempting weight loss on their own (36,38,45). In a qualitative study involving patients who dropped out of the BS process, it was reported that during the pre-op waiting period, some participants began to reflect on "what it would mean to be a person who has had surgery." For some, their perspective

shifted from viewing surgery to achieve health to perceiving it as a "crutch" used by thin people who fail to take responsibility for their lives (56). These findings suggest that patients' perceptions of surgery may evolve between application and the procedure. Those who associate surgery with weakness or a lack of self-control may be at increased risk for pre-op attrition.

Concerns of Surgery and Post-op Complications

Concerns about the surgical procedure and post-op complications appear to be risk factors for attrition (45,51,56). Concerns have been raised about possible changes in body structure, long-term effects of surgery, and adaptation to post-op lifestyle changes (51). In another qualitative study, these fears were examined under the theme of "anticipated regret: Beliefs related to outcomes." Participants reported that fear of regret after surgery contributed to their pre-op attrition decisions. Patients have expressed concerns about possible weight gain, increased physical deformity, and regret if health problems worsen after BS (56). Therefore, the pre-op and post-op process is thought to require significant effort on the part of patients. Such concerns may negatively affect decisions to proceed with surgery and increase the risk of pre-op attrition.

Weight Loss Expectations

Weight loss expectations are also among the psychosocial factors associated with completion of BS. A systematic review of this issue reports different findings. The review reported that those who did not complete BS experienced a greater decrease in 1-year BMI compared with those who completed BS (57,58). However, some studies have reported no significant relationship between expectations and completing surgery (59), whereas others have reported that realistic expectations are associated with completing surgery (60). These findings indicate that patients' expectations about surgery and their personal goals may be determinants of whether they will continue with the process (61).

Pre-op Process and Clinical Practices in the Context of Türkiye

Although BS practices are increasing in Türkiye, there are no structured, mandatory national guidelines for the pre-op process. In the BS Guideline (62) and the Obesity Diagnosis and Treatment Guideline (63) prepared by the Turkish Endocrinology and Metabolism Association, multidisciplinary evaluation and psychiatric examination are recommended; however, it remains unclear how often and according to which criteria these evaluations are performed in practice. In addition, the Obesity and Metabolic Surgery Clinical Protocol (64), published by the Ministry of Health, recommends standards based on contributions from various disciplines for the pre-op evaluation process. However, this protocol serves more as a guideline than a binding directive.

In this field, the study conducted by Usta and Aygin (65) in Türkiye is one of the few examples in the literature of a structured psychoeducation-based intervention program related to BS. The individual education and counseling program, which began before surgery and continued for six months, led to significant improvements in eating behaviors and physical activity levels. These behavioral changes were also reported to be positively reflected in surgical outcomes. Compared with the control group, the psychoeducation group experienced decreased eating disorder symptoms, increased physical activity, and greater reductions in BMI and excess weight at six months. However, in this study, participation in the pre-op program was not mandatory, and participants self-selected into the intervention and control groups. Therefore, the positive results in the intervention group may be attributable to participants' motivation to undergo the surgical procedure. Supporting this finding, Douglas et al. (46) reported that mandatory pre-op programs may make the process leading to surgery more difficult for patients. In this context, Usta and Aygin's (65) study offers a perspective on the motivation necessary for patients to remain engaged in the surgical process and to adapt to post-op lifestyle changes within a volunteer-based support model.

Conclusion and Recommendations

This narrative review highlights the multidimensional nature of pre-op attrition in BS. The findings show that beyond medical eligibility, a range of psychosocial, demographic, and logistical factors significantly influence patients' ability to proceed with surgery. Psychiatric symptoms, disordered eating behaviors, emotional ambivalence toward surgery, and concerns about postoperative complications emerged as critical psychosocial determinants. Structural barriers such as long waiting periods, insurance-related program requirements, and inconsistencies across centers were also identified as contributing factors to pre-op attrition.

Differences in how pre-op programs are structured, implemented, and required across countries suggest that there is still no widely accepted standard guiding clinical practice or research. In Türkiye, the lack of a nationally enforced protocol—along with the optional nature of existing interventions—indicates the need for a more organized and lasting system to support patients during the preoperative stage.

To reduce attrition and promote equitable access to BS, it is essential to develop flexible, patient-centered programs that accommodate individual motivation levels, psychiatric comorbidities, and health literacy. In everyday practice, pre-op care may benefit from more consistent inclusion of multidisciplinary assessments that bring together psychological, nutritional, and medical evaluations. There is also a growing need for national guidelines that can offer a shared framework—

outlining inclusion criteria, care pathways, and follow-up routines. To deepen our understanding of patient attrition, future studies could focus on long-term patterns and explore underexamined areas such as how identity, gender roles, and cultural beliefs shape attitudes toward surgery. Improving communication and offering clear, accessible psychoeducation could also play a major role in keeping patients engaged throughout the pre-op process.

Footnotes

Author Contributions

Concept - S.C., M.A.Ş.; Design - S.C., M.A.Ş.; Data Collection or Processing - S.C., M.A.Ş.; Analysis or Interpretation - S.C., M.A.Ş.; Literature Search - S.C., M.A.Ş.; Writing - S.C.

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REFERENCES

1. *World Health Organization. International classification of diseases. ICD-11 for mortality and morbidity statistics: 5B81 obesity. [cited 8 March 2025]. Available from: https://icd.who.int/browse/2025-01/mms/en#149403041.*
2. *Ghesmaty Sangachin M, Cavuoto LA, Wang Y. Use of various obesity measurement and classification methods in occupational safety and health research: a systematic review of the literature. BMC Obes. 2018;5:28.*
3. *Mechanick JI, Apovian C, Brethauer S, Garvey WT, Joffe AM, Kim J, et al. Clinical practice guidelines for the perioperative nutrition, metabolic, and nonsurgical support of patients undergoing bariatric procedures – 2019 update: Co-sponsored by American Association of Clinical Endocrinologists/American College of Endocrinology, The Obesity Society, American Society for Metabolic & Bariatric Surgery, Obesity Medicine Association, and American Society of Anesthesiologists – Executive summary. Endocr Pract. 2019;25:1346-1359.*
4. *Abdelaal M, le Roux CW, Docherty NG. Morbidity and mortality associated with obesity. Ann Transl Med. 2017;5:161.*
5. *Lim Y, Haq N, Boster J. Obesity and comorbid conditions. 2024. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025.*
6. *Sung H, Siegel RL, Torre LA, Pearson-Stuttard J, Islami F, Fedewa SA, et al. Global patterns in excess body weight and the associated cancer burden. CA Cancer J Clin. 2019;69:88-112.*
7. *World Health Organization. Obesity and overweight. World Health Organization; 2024 [cited March 1 2024]. Available from: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight#:~:text=In%202022%2C%201%20in%208,million%20were%20living%20with%20obesity.*
8. *GBD 2021 Adult BMI Collaborators. Global, regional, and national prevalence of adult overweight and obesity, 1990-2021, with forecasts to 2050: a forecasting study for the global burden of disease study 2021. Lancet. 2025;405:813-838. Erratum in: Lancet. 2025;406:810.*
9. *TUIK. Türkiye sağlık araştırması 2022 (yayın no. 49747). Türkiye İstatistik Kurumu. [erişim tarihi Mart 13, 2025]. Erişim adresi: https://data.tuik.gov.tr/Bulten/Index?p=Turkiye-Saglik-Arastirmasi-2022-49747.*
10. *Swinburn BA, Kraak VI, Allender S, Atkins VJ, Baker PI, Bogard JR, et al. The global syndemic of obesity, undernutrition, and climate change: the Lancet commission report. Lancet. 2019;393:791-846. Erratum in: Lancet. 2019;393:746.*
11. *Hruby A, Hu FB. The epidemiology of obesity: a big picture. Pharmacoeconomics. 2015;33:673-689.*
12. *Centre for Public Health Excellence at NICE (UK), National Collaborating Centre for Primary Care (UK). Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children. National Institute for Health and Clinical Excellence (UK); 2006.*
13. *SAGES Guidelines Committee. SAGES guideline for clinical application of laparoscopic bariatric surgery. Surg Obes Relat Dis. 2009;5:387-405.*
14. *Look AHEAD Research Group; Wing RR, Bolin P, Brancati FL, Bray GA, Clark JM, et al. Cardiovascular effects of intensive lifestyle intervention in type 2 diabetes. N Engl J Med. 2013;369:145-154. Erratum in: N Engl J Med. 2014;370:1866.*
15. *Müller-Stich BP, Senft JD, Warschkow R, Kenngott HG, Billeter AT, Vit G, et al. Surgical versus medical treatment of type 2 diabetes mellitus in nonseverely obese patients: a systematic review and meta-analysis. Ann Surg. 2015;261:421-429.*
16. *Ram Sohan P, Mahakalkar C, Kshirsagar S, Bikkumalla S, Reddy S, Hatewar A, et al. Long-term effectiveness and outcomes of bariatric surgery: a comprehensive review of current evidence and emerging trends. Cureus. 2024;16:e66500.*
17. *Holmberg D, Lagergren J. What do we know about long-term effects of bariatric surgery? Br J Surg. 2022;110:1-2.*
18. *Arterburn DE, Telem DA, Kushner RF, Courcoulas AP. Benefits and risks of bariatric surgery in adults: a review. JAMA. 2020;324:879-887.*
19. *Schauer PR, Bhatt DL, Kirwan JP, Wolski K, Aminian A, Brethauer SA, et al. Bariatric surgery versus intensive medical therapy for diabetes - 5-year outcomes. N Engl J Med. 2017;376:641-651.*
20. *Buchwald H, Avidor Y, Braunwald E, Jensen MD, Pories W, Fahrbach K, et al. Bariatric surgery: a systematic review and meta-analysis. JAMA. 2004;292:1724-1737. Erratum in: JAMA. 2005;293:1728.*
21. *Salminen P, Helmiö M, Ovaska J, Juuti A, Leivonen M, Peromaa-Haavisto P, et al. Effect of laparoscopic sleeve gastrectomy vs laparoscopic Roux-en-Y gastric bypass on weight loss at 5 years among patients with morbid obesity: the SLEEVEPASS randomized clinical trial. JAMA. 2018;319:241-254.*
22. *Brown WA, Liem R, Al-Sabah S, Anvari M, Boza C, Cohen RV, et al. Metabolic bariatric surgery across the IFSO chapters: key insights on the baseline patient demographics, procedure types, and mortality from the eighth IFSO global registry report. Obes Surg. 2024;34:1764-1777.*
23. *Chang SH, Stoll CR, Song J, Varela JE, Eagon CJ, Colditz GA. The effectiveness and risks of bariatric surgery: an updated systematic review and meta-analysis, 2003-2012. JAMA Surg. 2014;149:275-287.*
24. *Eisenberg D, Shikora SA, Aarts E, Aminian A, Angrisani L, Cohen RV, et al. 2022 American Society for Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO): indications for metabolic and bariatric surgery. Surg Obes Relat Dis. 2022;18:1345-1356.*
25. *De Luca M, Angrisani L, Higa K, Kiyabu M, Kinoshita T, Kroh M, et al. IFSO position statement on indications for surgery for obesity and weight-related diseases: 2022 update. Obes Surg. 2022;32:3724-3736.*
26. *Mechanick JI, Kushner RF, Sugerman HJ, Gonzalez-Campoy JM, Collazo-Clavell ML, Spitz AF, et al. American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery medical guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient. Obesity (Silver Spring). 2009;17(Suppl 1):S1-70, v. Erratum in: Obesity (Silver Spring). 2010;18:649.*
27. *Dawes AJ, Maggard-Gibbons M, Maher AR, Booth MJ, Miake-Lye I, Beroes JM, et al. Mental health conditions among patients seeking and undergoing bariatric surgery: a meta-analysis. JAMA. 2016;315:150-163.*

28. Sarwer DB, Wadden TA, Fabricatore AN. Psychosocial and behavioral aspects of bariatric surgery. Obes Res. 2005;13:639-648.
29. Rueda-Clausen CF, Poddar M, Lear A, Poirier P, Sharma AM. Canadian adult obesity clinical practice guidelines: assessment of people living with obesity. Obesity Canada. 2020. Available from: https://obesitycanada.ca/guidelines/assessment/.
30. Devlin CA, Smeltzer SC. Temporary perioperative tobacco cessation: a literature review. AORN J. 2017;106:415-423.e5.
31. Aminian A, Chang J, Brethauer SA, Kim JJ; American Society for Metabolic and Bariatric Surgery Clinical Issues Committee. ASMBS updated position statement on bariatric surgery in class I obesity (BMI 30-35 kg/m^2). Surg Obes Relat Dis. 2018;14:1071-1087.
32. Busetto L, Dixon J, De Luca M, Shikora S, Pories W, Angrisani L. Bariatric surgery in class I obesity : a Position Statement from the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO). Obes Surg. 2014;24:487-519.
33. Sogg S, Lauretti J, West-Smith L. Recommendations for the presurgical psychosocial evaluation of bariatric surgery patients. Surg Obes Relat Dis. 2016;12:731-749.
34. O'Connell J, Garvey JF, Geoghegan J, Kearney C, Shaamile F. ASOI adult obesity clinical practice guideline adaptation (version 1): bariatric surgery – selection & pre-operative workup. 2022. Adapted from: Canadian adult obesity clinical practice guidelines. Available from: https://asoi.info/wp-content/uploads/2022/10/12-IR-BariatricSurgery PreopWorkup-FINAL.pdf.
35. Vaishnav M, Gupta S, Vaishnav P. Psychiatric intervention pre- and post-bariatric surgery. Indian J Psychiatry. 2022;64(Suppl 2):S473-S483.
36. Merrell J, Ashton K, Windover A, Heinberg L. Psychological risk may influence drop-out prior to bariatric surgery. Surg Obes Relat Dis. 2012;8:463-469.
37. Diamant A, Milner J, Cleghorn M, Sockalingam S, Okrainec A, Jackson TD, et al. Analysis of patient attrition in a publicly funded bariatric surgery program. J Am Coll Surg. 2014;219:1047-1055.
38. Pitzul KB, Jackson T, Crawford S, Kwong JC, Sockalingam S, Hawa R, et al. Understanding disposition after referral for bariatric surgery: when and why patients referred do not undergo surgery. Obes Surg. 2014;24:134-140.
39. Miras AD, Kamocka A, Patel D, Dexter S, Finlay I, Hopkins JC, et al. Obesity surgery makes patients healthier and more functional: real world results from the United Kingdom National Bariatric Surgery Registry. Surg Obes Relat Dis. 2018;14:1033-1040.
40. Ponce J, DeMaria EJ, Nguyen NT, Hutter M, Sudan R, Morton JM. American Society for Metabolic and Bariatric Surgery estimation of bariatric surgery procedures in 2015 and surgeon workforce in the United States. Surg Obes Relat Dis. 2016;12:1637-1639.
41. Welbourn R, le Roux CW, Owen-Smith A, Wordsworth S, Blazeby JM. Why the NHS should do more bariatric surgery; how much should we do? BMJ. 2016;353:i1472.
42. Alvarez R, Matusko N, Stricklen AL, Ross R, Buda CM, Varban OA. Factors associated with bariatric surgery utilization among eligible candidates: who drops out? Surg Obes Relat Dis. 2018;14:1903-1910.
43. Jakobsen GS, Hofsø D, Røislien J, Sandbu R, Hjelmesaeth J. Morbidly obese patients--who undergoes bariatric surgery? Obes Surg. 2010;20:1142-1148.
44. Sala M, Haller DL, Laferrère B, Homel P, McGinty JJ. Predictors of attrition before and after bariatric surgery. Obes Surg. 2017;27:548-551.
45. Ju T, Rivas L, Arnott S, Olafson S, Whitlock A, Sparks A, et al. Barriers to bariatric surgery: factors influencing progression to bariatric surgery in a U.S. metropolitan area. Surg Obes Relat Dis. 2019;15:261-268.
46. Douglas IJ, Bhaskaran K, Batterham RL, Smeeth L. Bariatric surgery in the United Kingdom: a cohort study of weight loss and clinical outcomes in routine clinical care. PLoS Med. 2015;12:e1001925.
47. Marek RJ, Tarescavage AM, Ben-Porath YS, Ashton K, Heinberg LJ, Rish JM. Associations between psychological test results and failure to proceed with bariatric surgery. Surg Obes Relat Dis. 2017;13:507-513.
48. Eghbali F, Jahanshahi F, Garakani K, Ghasemi S, Talebi A, Oshidari B, et al. Reasons for preoperative patient attrition among bariatric surgery candidates: patients' point of view. Obes Surg. 2023;33:492-497.
49. Benediktsdottir A, Halldorsson TI, Bragadottir GJ, Gudmundsson L, Ramel A. Predictors of dropout and bariatric surgery in Icelandic morbidly obese female patients. Obes Res Clin Pract. 2016;10:63-69.
50. Doumouras AG, Lee Y, Babe G, Gmora S, Tarride JE, Hong D, et al. The hidden cost of an extensive preoperative work-up: predictors of attrition after referral for bariatric surgery in a universal healthcare system. Surg Endosc. 2020;34:988-995.
51. Hlavin C, Sebastiani RS, Scherer RJ, Kenkre T, Bernardi K, Reed DA, et al. Barriers to bariatric surgery: a mixed methods study investigating obstacles between clinic contact and surgery. Obes Surg. 2023;33:2874-2883.
52. Richard V, Stähli C, Giudicelli G, Worreth MD, Krähenbühl N, Greiner E, et al. Does the socio-demographic profile of patients limit access to bariatric surgery? Eat Weight Disord. 2022;27:1457-1466.
53. Taylor T, Wang Y, Rogerson W, Bavin L, Sharon C, Beban G, et al. Attrition after acceptance onto a publicly funded bariatric surgery program. Obes Surg. 2018;28:2500-2507. Erratum in: Obes Surg. 2018;28:2508.
54. Miller-Matero LR, Hecht LM, Patel S, Martens KM, Hamann A, Carlin AM. Exploring gender, psychiatric symptoms, and eating behaviors as predictors of attrition to bariatric surgery. Am J Surg. 2022;224:999-1003.
55. Paolino L, Le Fouler A, Epaud S, Bathaei S, Mokhtari N, Lazzati A. Preoperative follow-up in bariatric surgery: why they give up? Rate, causes, and economic impact of dropout. Obes Surg. 2023;33:2652-2657.
56. Chao GF, Lindquist K, Vitous CA, Tolentino DA, Delaney L, Alimi Y, et al. A qualitative analysis describing attrition from bariatric surgery to identify strategies for improving retention in patients who desire treatment. Surg Endosc. 2023;37:6032-6043.
57. Dalle Grave R, Calugi S, Molinari E, Petroni ML, Bondi M, Compare A, et al. Weight loss expectations in obese patients and treatment attrition: an observational multicenter study. Obes Res. 2005;13:1961-1969.
58. Dalle Grave R, Melchionda N, Calugi S, Centis E, Tufano A, Fatati G, et al. Continuous care in the treatment of obesity: an observational multicentre study. J Intern Med. 2005;258:265-273.
59. Fabricatore AN, Wadden TA, Womble LG, Sarwer DB, Berkowitz RI, Foster GD, et al. The role of patients' expectations and goals in the behavioral and pharmacological treatment of obesity. Int J Obes (Lond). 2007;31:1739-1745.
60. Teixeira PJ, Going SB, Houtkooper LB, Cussler EC, Metcalfe LL, Blew RM, et al. Pretreatment predictors of attrition and successful weight management in women. Int J Obes Relat Metab Disord. 2004;28:1124-1133.
61. Crawford R, Glover L. The impact of pre-treatment weight-loss expectations on weight loss, weight regain, and attrition in people who are overweight and obese: a systematic review of the literature. Br J Health Psychol. 2012;17:609-630.
62. Türkiye Endokrinoloji ve Metabolizma Derneği. Bariyatrik cerrahi kılavuzu. 3. baskı. Ankara (Türkiye): Obezite, Lipid Metabolizması ve Hipertansiyon Çalışma Grubu; 2019. ISBN: 978-605-4011-28-5.

63. *Türkiye Endokrinoloji ve Metabolizma Derneği. Obezite tanı ve tedavi kılavuzu. 4. baskı. Ankara (Türkiye): Obezite, Lipid Metabolizması ve Hipertansiyon Çalışma Grubu; 2024. ISBN: 978-605-4011-47-6.*
64. *T.C. Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü. Obezite klinik protokolü. Ankara (Türkiye): T.C. Sağlık Bakanlığı Yayınları; 2021.*
65. *Usta Y, Aygin D. Extensive training and counseling service applied in bariatric surgery: effects on eating characteristics and physical activity levels. J DU Health Sci Inst. 2020;12:681-689.*