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Psychological Evaluation of Bariatric Surgery Applicants: Procedures and Reasons for Delay or Denial of Surgery

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Abstract
Background Psychologists play an important role as members of the bariatric surgery team. The current investigation examined the frequency with which psychologists recommend delay or denial of surgery for psychological reasons, the procedures they use in making their clinical decisions, and the reasons for such conclusions.
Method A sample of 103 psychologists with experience in conducting pre-surgical psychological evaluations responded to a brief survey.
Results There was significant variability in the number of evaluations psychologists complete and the instruments they use to make their clinical decisions. For most candidates, the evaluation results in psychological clearance for surgery. However, approximately 15%, on average, are delayed or denied for psychological reasons. The most common reasons for delaying or denying surgery were significant psychopathology (including psychosis or bipolar disorder), untreated or undertreated depression, and lack of understanding about the risks and postoperative requirements of surgery, which were reported by 51, 39, and 30% of respondents, respectively. Several other reasons were reported less frequently and many appeared to be idiosyncratic.
Conclusion Psychologists differ in their preoperative evaluation practices. Further research is needed to determine the reasons for the variability in clinical decision making and the long-term medical and psychosocial outcomes associated with the recommendation to delay or deny surgery for psychosocial reasons. When patients receive such a recommendation, they can be encouraged to seek a second opinion from a mental health professional with bariatric expertise.

Keywords Bariatric surgery · Psychological assessment · Psychosocial

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Introduction

Mental health professionals are considered an integral part of the multidisciplinary treatment team for bariatric surgery patients. A recent study found that two thirds of surgery applicants had a lifetime history of at least one psychiatric disorder, including approximately 38% who had a current Axis I diagnosis [1]. This replicates previous work which found that a similar percentage of patients received a psychiatric diagnosis, the most common of which was major depressive disorder [2].

Sarwer and Wadden [3] suggested that the psychologist may help to identify patients who have a comorbid mental health condition that merits further evaluation and/or treatment. Others [4, 5] noted the importance of this

evaluation in identifying psychosocial risk factors that may interfere with a patient being successful with sustained weight loss after the surgery. Three studies found a similar distribution of recommendations based on the preoperative evaluation: approximately 65–70% of candidates received an unconditional recommendation to proceed with surgery, 25–30% were encouraged to receive additional intervention (psychological or dietary) before surgery, and the remainder were not recommended for surgery [2, 6, 7].

The focus and methods of evaluation, however, appear to vary widely across practitioners. Two surveys of evaluation practices found that formal psychometric assessment tools were used by a majority of bariatric surgery programs and mental health professionals but that there was no clear and consistent assessment battery [7, 8]. The most commonly used instruments were the Beck Depression Inventory and Minnesota Multiphasic Personality Inventory, with a variety of other symptom inventories, personality tests, quality of life inventories, and cognitive abilities tests also reported [7, 8]. However, a clinical interview was the only assessment tool that was reportedly used by more than half of respondents (99%) [7]. Both survey studies asked respondents to identify potential contraindications to surgery, either in forced-choice [8] or open-ended format [7]. In both investigations, issues related to substance abuse, psychosis, and suicide were among the most commonly reported contraindications along with lack of informed consent. Other important factors appeared to be active eating disorders, severe mood disorders, and history of medical noncompliance.

The purpose of the present investigation was to replicate the findings of the two previous studies examining the pre-surgical mental health evaluation. Specific areas of interest lie in the types of procedures utilized in completing the psychological evaluation, the percentage of patients for whom the recommendation is to delay or deny surgery, and reasons for recommending delay or denial of the surgery.

Method

Participants

The participants in this survey were 103 mental health professionals who indicated that they provided pre-surgical psychological evaluations before gastric bypass surgery.

Potential subjects were identified from a popular web site on obesity surgery (www.obesityhelp.com). On this site, bariatric surgery patients can name their health care providers and rate them along a number of dimensions. The five most frequently rated psychologists in each of the 50 US states plus the District of Columbia were sent a survey and asked to participate in the study. If there were fewer than five psychologists rated in a given state, all of the rated psychologists from that state were invited to participate in the study.

In total, surveys were sent to 178 US psychologists. An initial mailing yielded a return of 84 surveys (47.2%). A reminder letter to those who did not initially reply yielded an additional 19 responses. Thus, the final sample included 103 psychologists, for a final return rate of 58%.

A brief questionnaire was developed which asked five questions of the respondents:

1. Please indicate the approximate number of pre-surgical psychological evaluations that you have completed.
2. What is the approximate percentage of patients that you either recommend a delay in the surgical procedure or that the patient not have the surgery at all?
3. Please choose one of the following:
   (a) In completing these evaluations, I only utilize a clinical interview, or
   (b) In completing these evaluations, I utilize an interview plus psychometric tests.
4. What typical instruments are included in the test battery if you utilize psychometric tests? (a list of 26 tests was provided to check plus space was included to write in any other tests that were utilized).
5. For what reason(s), if any, might you recommend a patient either delay or deny undergoing the surgery? (space was provided to write in answers).

A pre-addressed and stamped envelope was provided to return the survey.

Results

Experience of Respondents

Three participants did not indicate the number of preoperative psychological evaluations that they completed. Among those who responded, the mean±standard deviation was 401±779 evaluations. The range was 1 to 5,000, with 12% of respondents who reported ten or fewer previous evaluations, 10% who reported 11–25, 13% who reported 26–50, 13% who reported 51–100, 34% who reported 101–500, 10% who reported 501–1,000, and 9% who reported more than 1,000 (including three outliers who estimated having completed 2,500, 4,500, and 5,000 previous evaluations). The median and modal responses were 125 and 100 evaluations, respectively.

Table 1 Tests utilized by psychologists in their evaluations

Test	% of Test users
MMPI-2	69
Beck Depression Inventory	36
Millon Behavioral Medicine Diagnostic	25
Personality Assessment Inventory	18
Eating Disorder Inventory–2	17
Millon Clinical Multiaxial Inventory	14
Beck Anxiety Inventory	13
Weight and Lifestyle Inventory	6
Quality of Life Inventory	6
Millon Behavioral Health Inventory	5
Shipley Institute of Living Scale	5
Mini-Mental Status Examination	5

The following tests were reported by less than 5% of test users and are listed in alphabetical order: Beck Hopelessness Scale, Binge Eating Disorder Inventory, BULIT, Burns Depression/Anxiety Inventory, Buss–Derke Hostility Inventory, Coping Skills Inventory, Eating Attitude Test, Holden Psychological Screening, House–Tree–Person Projective Drawings, Rorschach Test, Rotter Incomplete Sentences Blank, SCL-90, State-Trait Anxiety Inventory, Taylor and Johnson Temperament Inventory, Thematic Apperception Test, Trail Making Test, Wechsler Adult Intelligence Scale, Wide Range Achievement Test, Wisconsin Card Sort, and the Zung Depression Scale.

Process of Evaluations

A minority of respondents (14.6%) reported that they used only a clinical interview and did not include formal psychometric tests in their preoperative psychological evaluations of bariatric surgery candidates. Nearly three quarters (74.8%) of respondents utilized between one and four tests in addition to the clinical interview. Only 10.7% of the sample utilized five or more tests. The modal number of tests utilized was two.

The Minnesota Multiphasic Personality Inventory, second edition (MMPI-2) was the most commonly used instrument, which was reported by 69% of those who used tests in their preoperative psychological evaluations. As shown in Table 1, the Beck Depression Inventory and Millon Behavioral Medicine Diagnostic were the only other instruments that were reported by at least 25% of test users.

Outcomes of Evaluations

Respondents estimated that they recommended delaying or outright denying surgery for 14.3±12.9% of candidates. The range was 0–60%, with a median of 10%. The modal response was 5%, which was reported by 17% of evaluators. Six participants did not respond to this item. These data are depicted in Fig. 1.

A Pearson Product Moment correlation revealed no significant association between the number of evaluations respondents completed and the percentage of candidates for whom they recommended delaying or denying surgery (r=0.18, p=0.07). Thus, evaluators' experience was not related to their tendency to recommend that surgery be delayed or denied.

Participants listed their reasons for recommending delay or denial of bariatric surgery, and responses to this open-ended item were categorized by the first author into several content areas. The most common reasons for the recommendation that surgery be delayed or denied were significant psychopathology (psychosis or bipolar disorder), untreated or undertreated depression, lack of understanding about the risks and postoperative requirements of the surgery, active eating disorder, and active substance abuse problem. Each of the former circumstances was mentioned by at least one quarter of respondents. Reasons reported by 10–25% of respondents included personality disorder, questionable ability to comply with a post-surgical regimen, chaotic lifestyle or significant situational stressors, unrealistic expectations about weight loss or postoperative life, unsupportive or conflictual family environment, and cognitive impairment. A variety of other reasons for recommending delay or denial of surgery were mentioned infrequently, and some of these appear to be idiosyncratic.

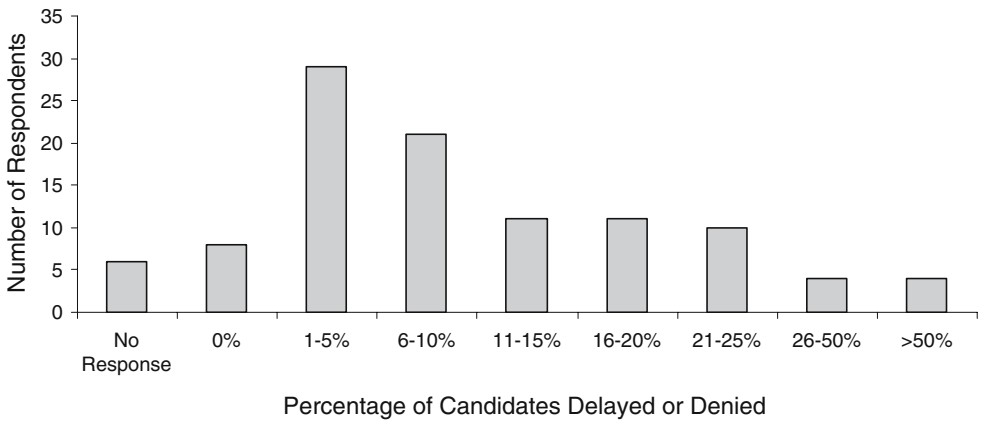


Fig. 1 Percentage of candidates delayed or denied

Table 2 Reasons for delay or denial of surgery by psychologists

Reason for denial	Number of times mentioned
Significant psychopathology including psychosis or bipolar affective disorder	53
Untreated or undertreated depression	40
Lack of understanding of the risks of surgery and expectations preceding and following surgery	31
Active substance abuse	26
Eating disorder (binge eating disorder, anorexia, bulimia, food addiction)	26
Severe personality disorder	24
Concern about ability/willingness to comply with post-surgical regimen	21
Chaotic life circumstances/Situational stressors	20
Unrealistic expectations of amount of weight loss or how life will change due to undergoing surgery	12
Poor family support or large amount of family conflict	11
Intellectual deficits (dementia, mental retardation, memory disorder, head injury, low IQ)	10
History of impulsivity	9
Untreated anxiety disorder	8
Externalized reason for surgery	6
Little or no history of previous weight loss attempts	6
Lack of coping skills other than turning to food	5
Active smoker	4
Ambivalence about undergoing surgery	4
History of poor response to stress and poor coping resources	3
Somatoform or conversion disorder	3
Untreated ADD/ADHD	3
Dishonesty in providing history or other information	2
History of emotional eating	2
Litigation potential	2
Obsessive-Compulsive Disorder	2
Unresolved prior trauma	2
Active gambling problem	1
Addiction to carbohydrates	1
“Blow-outs” with other programs	1
BMI<40	1
Elevated scores on MMPI-2 testing (unspecified)	1
External locus of control	1
GAF score of <63	1
Inability to demonstrate preoperative behavior change with food-related behaviors required by the program	1
Inability to give informed consent for the surgery	1
Lack of primary care physician support	1
Lack of psychiatric support	1
No history of even short-term ability to control food intake	1
No history of exercise behavior	1
Overuse of caffeine	1
Unresolved emotional/psychological issues	1

See Table 2 for a listing of the reasons and the frequency with which they were reported.

Discussion

The results of the current investigation suggest that psychologists completing pre-surgical evaluations are a diverse group in terms of experience, procedures utilized to form their clinical opinions, the frequency with which they recommend delay or denial of surgery, and the patient characteristics on which they base those recommendations. These findings are consistent with previous surveys of bariatric surgery programs and mental health professionals who conduct preoperative psychological evaluations as part of the patient selection process [7, 8]. The range of

experience in conducting these psychological assessments was extraordinary. Clearly, some respondents specialized in conducting pre-surgical evaluations, as 19% of the sample reported having completed more than 500 evaluations (including 9% who had completed more than 1,000!). Although we did not inquire about practice setting, it is possible to speculate that the more experienced respondents work in surgical centers or make bariatric surgery evaluations a key component of their clinical practices. Bauchowitz et al. [8] indicated that 26% of bariatric surgery programs that responded to their survey had a mental health professional on staff and the others primarily refer to a clinician in the community. On the opposite end of the experience range, 12% of respondents had reportedly completed ten or fewer evaluations of bariatric surgery candidates. The amount of experience required to establish competence in this clinical task is unknown. At a minimum, psychologists participating in a multidisciplinary health care team are required to understand factors contributing to the disease process, coping style, and psychological consequences of having the particular condition or disease [9]. As such, it is imperative that psychologists completing these evaluations be well versed in the biopsychosocial aspects of extreme obesity, bariatric surgery, and their respective sequela.

The present findings suggest that respondents unconditionally recommended the vast majority of candidates for bariatric surgery, as the mean percentage of candidates delayed or denied was less than 15%. Previous studies reported rates of deferral or denial that were more than double that found in the present study [2, 6, 7]. This study, however, is consistent with previous investigations in that each observed wide variability among respondents. Most of our participants reportedly recommended delay/denial no more than 10% of the time. On the other hand, 4% of respondents indicated that they recommend delaying or denying surgery for more than half of the candidates they evaluated. Thus, it appears that some evaluators recommend virtually all of the candidates they see for surgery, whereas others have much more stringent criteria that candidates must meet before they receive psychological clearance.

The reasons for this variability are not known. Fabricatore et al. [7] found that evaluators' age and years in practice were negatively related with making the recommendation to postpone surgery such that younger and less experienced practitioners were more conservative in their recommendations. Age and years of experience were not assessed in the present study, but the number of preoperative evaluations completed was unrelated to the percentage of participants delayed or denied surgery.

There also was considerable variability with respect to the methods by which respondents gather their clinical data and the factors on which they base their decisions. As shown in previous studies, there was no "standard of practice" regarding the use of tests and criteria for recommending that surgery be delayed or denied [7, 8]. Most used some psychometric tests (only 15% relied solely on the clinical interview), but only the MMPI-2 was utilized by a majority of respondents. Part of the appeal of the MMPI-2 might be its validity scales, which are able to detect overly defensive or otherwise unreliable response sets. This is important given that patients fearing a delay or denial of surgery may be motivated to minimize any emotional difficulties they may be experiencing in life. Walfish [10] recently used the MMPI-2 to detect unrealistically favorable profiles and found increased reports of depression, somatic concerns, anxiety, and social isolation upon re-administration of the MMPI-2 and other tests. Similarly, Fabricatore et al. [11] recently found that many bariatric surgery candidates reported increased symptoms of depression after they received clearance for surgery and suggested that the observed increase could have been due to underreporting distress in attempt to receive psychological clearance for surgery.

This study suggests that there is still no clear consensus among mental health professionals regarding which patient factors merit recommending delay or denial of bariatric surgery. We suspect that variability exists not just among practitioners but within practitioners as well. That is, recommendations are likely made on a case-by-case basis. Additionally, it is likely that practitioners make their determinations based on a constellation of factors rather than on the presence or absence of any one particular symptom, circumstance, or issue. Until research clearly identifies preoperative psychosocial factors that predict treatment failure, morbidity, or mortality, clinicians will be forced to rely more heavily on judgment than on data.

References

1. Kalarchian MA, Marcus MD, Levine M, et al. Psychiatric disorders among bariatric surgery candidates: relationship to obesity and functional health status. Am J Psychiatry 2007;164:328–34.
2. Sarwer DB, Cohn NI, Gibbons LM, et al. Psychiatric diagnosis and psychiatric treatment among bariatric surgery candidates. Obes Surg 2004;14:1148–56.
3. Sarwer DB, Wadden TA. Behavioral assessment of candidates for bariatric surgery: a patient-oriented approach. Obesity 2006; 14 Suppl 2:53S–62S.
4. Ritz SJ. The bariatric psychological evaluation: a heuristic for determining the suitability of the morbidly obese patient for weight loss surgery. Bariatric Nursing and Patient Care 2006;1: 97–105.
5. LeMont D, Moorehead MK, Parish MS, Reto CS, Ritz SJ. Suggestions for the presurgical psychological assessment of bariatric surgery candidates (http://www.asbs.org/html/pdf/PsychPreSurgicalAssessment.pdf) Retrieved April 4, 2007.

6. Pawlow LA, O'Neil PM, White MA, et al. Findings and outcomes of psychological evaluations of gastric bypass applications. Surg Obes Relat Dis 2005;1:523–9.
7. Fabricatore AN, Crerand CE, Wadden TA, et al. How do mental health professionals evaluate candidates for bariatric surgery? Obes Surg 2006;16:567–73.
8. Bauchowitz AU, Gonderer-Frederick LA, Olsbrich ME, et al. Psychosocial evaluation of bariatric surgery candidates: a survey of present practices. Psychosom Med 2005;67:825–32.
9. Brown RT, Freeman WS, Brown RA, et al. The role of psychology in health care delivery. Prof Psychol Res Pract 2002;33:536–45.
10. Walfish S. Reducing MMPI defensiveness: effect of specialized instructions on retest validity in a sample of preoperative bariatric patients. Surg Obes Relat Diseases 2007;3:184–8.
11. Fabricatore AN, Sarwer DB, Wadden TA, Combs CJ, Krasucki JL. Reports of depressive symptoms before and after the preoperative psychological evaluation for bariatric surgery: impression management or real change? Obes Surg 2007;17:1213–9.