Introduction

Bariatric surgery (BS) is a clinically- and cost-effective procedure for moderate to severe obesity (Picot et al., 2009). Despite strong evidence of favorable outcomes, however, it is estimated that only about 0.6% of those who are medically eligible have undergone BS (Encinosa et al., 2005). Although the literature clearly indicates that most eligible patients do not undergo BS, research is lacking as to why some patients follow-through with BS while others do not. The goal of the current study was to develop models to predict how psychosocial factors influence BS completion using the PsyBari-II (Mahony, 2010).

Method

A sample of 480 bariatric candidates approved for BS completed the PsyBari-II, a psychological test designed for bariatric presurgical screening. The measure covers a host of demographic, psychosocial, weight, medical, and substance use history variables, followed by 115 validated items that cover surgical motivation, emotional eating, anger, binge eating, obesity-related depression, weight-related physical impairment, weight-related social impairment, substance use, and surgical anxiety. In September 2010, medical records and the BOLD database were used to determine which of these patients completed surgery within one year of their approval for BS.

Results

Participants were predominantly female (71.9%) and White (69.9%), with a mean BMI (±SD) of 47.97 (±7.94) and mean age (±SD) of 40.87 (±11.2). Sixty-nine percent actually followed-through with BS, with 63% having gastric bypass, 35.8% having the band procedure, and 1.2% having another form of BS. BS follow-through did not differ by gender or race. Medical/weight history and PsyBari-II items were analyzed separately. At the bivariate level, five factors were significantly associated with BS completion. These five factors were entered into a simultaneous logistic regression model to identify the strongest predictors, which were weight concerns, psychiatric trauma history, post-surgical compliance, and surgical fear. See Figure 1 for a visual depiction of factor means as a function of BS status.

Discussion

Results indicate that almost one third of BS candidates who were approved for surgery did not follow through with having BS. Given the costs, time, and resources associated with BS assessments, future research should explore why some BS candidates do not follow-through with BS, ultimately impacting the cost-effectiveness of pre-bariatric screening.

Childhood obesity onset and increased number of different weight loss programs tried were related to BS completion. Based on the PsyBari-II items, greater weight concerns, less psychiatric trauma history, expected post-surgical compliance, and less surgical fears were also associated with BS completion. Findings suggest that relatively few questions in circumscribed domains predict BS follow-through. In future research, PsyBari-II data may also shed light on which factors best predict post-surgical outcomes.

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References

Picot, E., et al. (2009). Evidence-Based Care in Obesity: A systematic overview of the evidence. Obesity Reviews, 10(S1), 28-44.