

## Psychosocial predictors of weight loss outcomes after bariatric surgery in morbidly obese patients

Qasim, Kashmala<sup>1</sup>, Taylor, Valerie<sup>2</sup>, Milosevic, Irena<sup>3</sup>, Weiss, Carmen<sup>4</sup> & McCabe, Randi<sup>5</sup>

<sup>1</sup>*Graduate Student, McMaster Integrative Neuroscience Discovery & Study (MINDS) Graduate Program, McMaster University, Hamilton, Ontario*

<sup>2</sup>*Women's College Hospital, Department of Psychiatry, Toronto, Ontario*

<sup>3</sup>*Post-Doctoral Fellow in Psychology, St. Joseph's Healthcare Hamilton, Hamilton, Ontario*

<sup>4</sup>*Bariatric Surgery Unit, St. Joseph's Healthcare Hamilton, Hamilton, Ontario*

<sup>5</sup>*Department of Psychiatry, McMaster University, Hamilton, Ontario*

**Introduction:** Bariatric surgery is the most effective treatment available for long-term weight management in patients with obesity. Although the majority of patients achieve greater than 50% excess weight loss, not all patients undergoing bariatric surgery are successful. Based on previous research, we proposed that a higher pre-operative BMI, weight, depression, low self-esteem, and a history of childhood sexual abuse (CSA) would predict poor outcomes one year after Roux-en-y-gastric bypass as evidenced by a BMI > 35 kg/m<sup>2</sup> and a lower percent total weight loss (%TWL). **Methods:** We administered a comprehensive battery of psychological screening tools, including the Beck Depression Inventory, Rosenberg Self-Esteem Scale and a self-report measure assessing CSA, to 262 bariatric surgery candidates at St. Joseph's Healthcare Hamilton. Patients completed the questionnaires prior to surgery and one year post-surgery. **Results:** At follow-up, patients (n = 79) on average achieved a good weight loss outcome (BMI = 32.8 kg/m<sup>2</sup>). Through hierarchical multiple regression analysis we found that pre-operative BMI accounted for a significant proportion of variance in postoperative BMI ( $R^2 = .60$ ,  $F(1, 77) = 114.4$ ,  $p < .001$ ). Weight before surgery, however, did not significantly predict %TWL after surgery. None of the psychosocial variables significantly predicted post-operative BMI or weight loss. **Conclusions:** These findings indicate that pre-operative BMI is a significant predictor of BMI one year after bariatric surgery, suggesting that more attention should be directed toward managing pre-operative BMI for heavier patients. Future studies are needed to determine the influence of psychosocial factors on relative weight loss measures.