

# Prevalence of depression and anxiety symptoms and their impact on health quality of life in bariatric surgery candidates

Avril Gagnon-Chauvin<sup>1,2</sup>, Kim L. Lavoie<sup>1,2</sup>, Cassandre Julien<sup>1,2</sup>, Pierre Garneau<sup>3</sup>, Henri Atlas<sup>3</sup>, Ronald Denis<sup>3</sup>, Radu Pescarus<sup>3</sup>, Sylvia Santosa<sup>4</sup>, Simon L. Bacon<sup>1,4</sup> for the REBORN Investigators

<sup>1</sup> *Montreal Behavioural Medicine Centre, CIUSSS-NIM, Hôpital du Sacré-Coeur de Montreal, Canada*

<sup>2</sup> *Psychology, Université du Québec à Montréal, Canada*

<sup>3</sup> *Department of Surgery, University of Montreal, Montreal, Canada*

<sup>4</sup> *Department of Exercise Science, Concordia University, Montreal, Canada*

Psychological distress has been associated with decreased quality of life (QoL) in obesity. However, few studies to date have examined this relation in patients seeking bariatric surgery, where psychological distress and QoL may impact longer-term outcomes. The objectives of this study were to: (1) assess the prevalence of psychological distress (depressive and anxiety symptoms) among bariatric surgery candidates; and (2) determine the association between preoperative psychological distress and QoL.

A total of 120 pre-bariatric surgery patients (78% women; M[SD] age=48[11] yrs; BMI=49[9] kg/m<sup>2</sup>) were recruited from the REBORN (REsearch on Bariatric care for Obesity tReatmeNt) cohort study. Patients completed the Beck Depression (BDI-II) and Anxiety (BAI) inventories, and the Short-Form Quality of Life questionnaire (SF-12) on the day of their preoperative visit. General Linear Models were performed, adjusting for age, sex and BMI.

Prevalence rates of depression (BDI $\geq$ 14) and anxiety (BAI $\geq$ 8) were 36% and 38%, respectively. Results showed that increases in BDI-II scores were associated with significant decrease in mental health QoL (F=26.9, p<.001) but not in physical health QoL (F=0.72, p=.399). Also, increases in BAI scores were associated with significant decrease in physical health QoL (6.93, p=.002) but not in mental health QoL (F=0.91, p=.343).

Findings suggest that the prevalence of psychological distress is high among bariatric surgery candidates. Moreover, severe depressive symptoms are related to poorer mental health QoL, whereas severe anxiety symptoms are related to worse physical health QoL. Future research should see if addressing psychological distress in these patients leads to enhanced QoL before surgery.

(Funding received from the Hôpital du Sacré-Coeur de Montreal Foundation and the Montreal Behavioural Medicine Centre)