

# Preoperative characteristics of morbidly obese patients who achieved at least fifty percent excess weight loss post-metabolic Surgery

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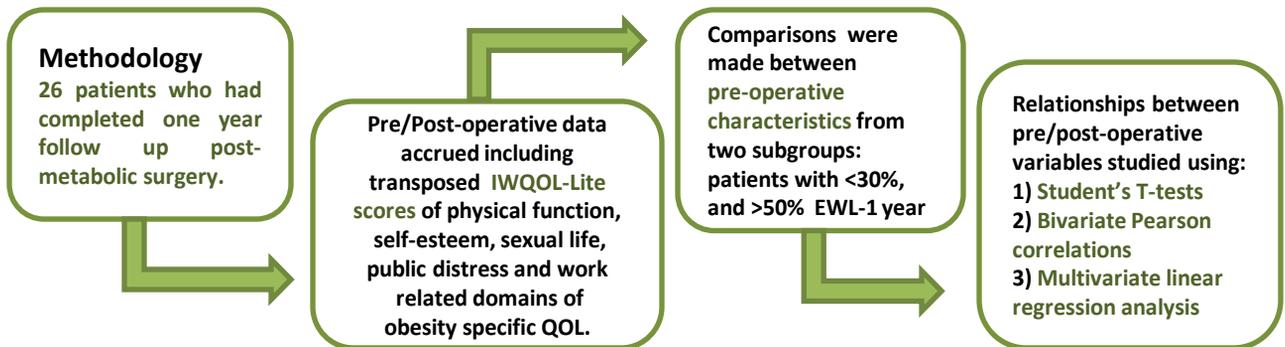
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## Background

With the emergence of **metabolic surgery** as an effective and successful treatment option for obesity, the **selection of obese patients** who would **benefit most** from metabolic procedures is an on-going challenge in Bariatrics. Currently, defining patient characteristics such as health related Quality of Life (HRQOL) that would indicate suitability for metabolic surgery and would serve as outcomes of success, is unclear. **Pre-operative predictive measures** of post-metabolic surgery success would facilitate a more **refined evidence-based selection of patients**.

## Objective

This study aimed at **identifying clinical and psycho-social predictors of success** (defined as excess weight lost 1 year post-operatively (towards an ideal BMI 25kg/m2)[**EWL-1 year**]) following metabolic surgery.



Pre-op HRQOL scores in Lower EWL-1 year group	No significant differences for all domains of HRQOL	Pre-operative BMI and EWL-1 year	r=0.499, p=0.009	Pre-operative (BMI and Public distress HRQOL)	r= - 0.54, p=0.005
Pre-op HRQOL scores in Higher EWL-1 year group		Pre-operative BMI and EWL-1 year	β=0.70, p=0.01	Pre-operative (BMI and Self esteem HRQOL)	r = -0.41, p=0.041

## Conclusions

- 1) We show a significant, independent direct relation between the pre-op BMI and excess weight-loss one year following metabolic surgery,
- 2) Pre-operative QOL measures were not predictive of EWL-1 year.

## Take Home Points

- 1) Excess Weight Loss 1 year post metabolic surgery is determined by variable complex factors. Pre-operative QOL may predict other measures of metabolic surgical success, such as improvements in physical and psycho-social functioning, rather than absolute weight reduction.
- 2) Pre-operative BMI could be considered as one of the factors that predict successful weight loss post metabolic surgery.

## References

- 1) Masha Livhits, Cheryl Mercado, Irina Yermilov et al. (2012) Preoperative Predictors of Weight Loss Following Bariatric Surgery: Systematic Review. *Obes Surg*, 22:70-89
- 2) Herpertz S, Kielmann R, Wolf AM, Hebebrand J, Senf W. Do psychosocial variables predict weight loss or mental health after obesity surgery? A systematic review. *Obes Res*. 2004 Oct;12(10):1554-69