# Pre-operative Counselling may Benefit Patients in their Decision to Proceed with Bariatric Surgery

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# INTRODUCTION

With the increase in the obesity epidemic, Bariatric surgery has become more and more popular. 3 per cent of the Irish population have a body mass index over 40. Many of these have severe and complex obesity, with complications. (1)

Bariatric surgery is undertaken by people who are unable to lose weight by dietary and exercise changes, with a BMI of 40 or higher, or by people with a BMI of 35-39.9 who suffer from life-threatening weight related problems.

Some of the most serious weight-related problems include heart disease, sleep apnoea, type 2 diabetes, hypertension, and non-alcoholic fatty liver disease (NAFLD). (2)

Bariatric surgery not only reduces these co-morbidities, it also improves the quality of life of patients, enabling them to perform routine daily activities. It also improves self-confidence, self-esteem, and sexual function. (3)

This study is a follow-up to the initial pilot study performed by the same investigator between the years of 2017-2019, which guided this study's main outcome question and provided feasibility and rationale.

# **METHODS**

This is a **single centre retrospective** cohort study

Bariatric Unit database: Age, sex, BMI, Smoking, health insurance, diabetes, sleep apnoea, hyperlipidaemia, and psychological assessment tools (Beck Depression Inventory (BDI), Hospital Anxiety and Depression score (HAD), Eating Attitudes Test)

Data were collected on all patients referred for their **first bariatric consultation** between 2019 – 2023.



Results Results						
	Total (n=621)	Surgery (n=439)	Non-surgery (n=182)	Chi square test		
	n (%)	n (%)	n (%)	p-value		
Patient Demographics						
Age (years): median (IQR)	46 (39 to 54)	45.21±9.3	45.9±10.5	0.382		
Gender	(22 22 2 )					
Male	136(22%)	80(59%)	56(41%)	<0.001		
Female	485(78%)	359(74%)	126(26%)	<0.001		
Mean BMI	46.7 ± 7	47.1 ± 6.7	45.7±7.6	0.02		
Insurance	577(93%)	407.9(67%)	160(25.8%)	0.007		
Co-morbidities						
Hiatus Hernia	90(20.2%)	12 (9.1%)	78 (24.9%)	0.005		
GORD	231(57.3%)	170 (65.4%)	61 (42.7%)	0.005		
Diabetes Mellitus	85(15.3%)	61(15.6%)	24 (14.6%)	0.265		
OSA	217(44.6%)	161 (47.1%)	56 (36.8%)	0.086		
Dyslipidaemia	220(44.3%)	159 (46.4%)	61 (39.6%)	0.162		
Hypertension	251(40.4%)	178 (40.5%)	73 (40.1%)	0.166		



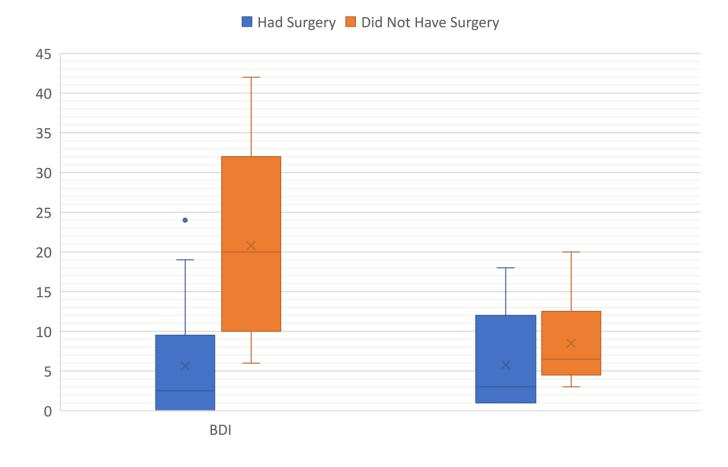
Psychological Questionnaires (mean±SD)				
	Total	Surgery (n=439)	Non-surgery (n=182)	Chi square test
BDI	15.61±9.5 (n=577)	14.6±9.3	17±10.3	<u>0.04</u>
HAD	7.2±4.4 (n=568)	6.9±4.4	7.9±4.4	<u>0.01</u>
QOL	8.1±1.5	8.1±1.5	8±1.5	0.13
Eating attitudes	22.48±10.7	22.6±11.5	22.1±10.2	0.133
Coping	81.59±18.5	58.1±18.4	81.1±17.5	0.001
Profile of Moods	80±32.1	80.4±31.5	76±38.2	0.166
Self Esteem	80.46±17.1	80.1±15.8	75.7±27.31	0.08



	BDI	HAD
Mean	15.61	7.2
N	577	568
SD	9.5	4.4

- The overall BDI and HAD scores for the group were 15.61 and 7.2, respectively, which were in the moderately depressed range.
- ■However, patients not proceeding with surgery had a **significantly higher** BDI [17 (+/-10.3)] and HAD score [7.9 (+/- 4.4)] than those who ultimately proceeded to surgery.

# Distribution of BDI and HAD scores



HAD



# **CONCLUSION**

- This study found that patients who decline subsequent bariatric surgical intervention had statistically significant higher Beck Depression Inventory scores and higher Hospital Anxiety and Depression scores on completing questionnaires prior to their initial consultation.
- Pre-surgical psychological counseling could be beneficial before referring individuals for surgical intervention. Additionally, those who choose not to proceed with surgery may require additional counseling support as they are more vulnerable.
- The possession of insurance was also associated with an increased likelihood of undergoing subsequent surgery. This suggests, unsurprisingly, that financial considerations play a major part in bariatric surgical decision-making.



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