

# BMI reduction after bariatric surgery in patients with and without psychotropic medication: a retrospective study

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## Introduction

Bariatric surgery has emerged as a useful long-term treatment for obesity [1]. Studies have shown a high prevalence of psychotropic medication use among people referred for bariatric surgery. Unlike medications for diabetes, hypertension or hyperlipidaemia, which are generally reduced and at times discontinued, postsurgery antidepressants use is only slightly reduced [2]. Previous studies have found out that antidepressant medication appears to be the main psychotropic utilized postsurgery. However, mood stabilizers and antipsychotics also need to be considered [3]. In discussing the relationship between psychopharmacology and bariatric surgery, the question of whether psychotropic medication might have a significant impact on weight loss arises.

## Aim

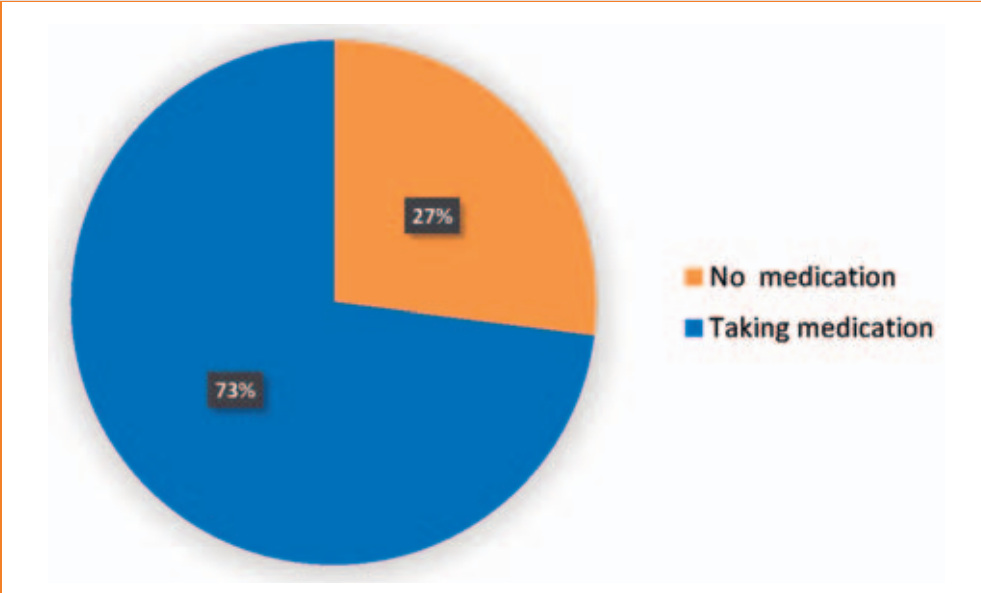
The aim of the present study is to analyse the possible influence of psychotropic drugs in the reduction of Body Mass Index (BMI) six months after bariatric surgery in a group of 292 obese patients.

## Material and Methods

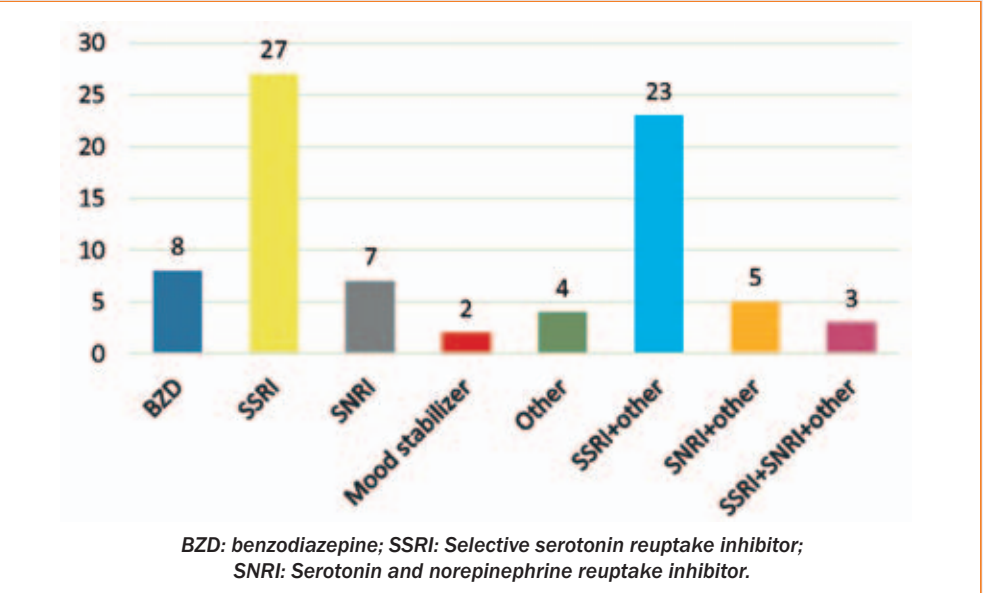
A retrospective study of 292 patients who had undergone bariatric surgery in Hospital del Mar from January 2010 to November 2015 was examined for postoperative changes in BMI at six months after surgery. We compared the difference in BMI between those patients taking psychotropic medication and those without treatment (see [Figures 1 and 2](#)).

Changes in BMI were tested using t-student’s test. Analyses were performed using SPSS Statistics.

**Figure 1. Percentages of patients taking medication after bariatric surgery vs. those under no psychotropic treatment**



**Figure 2. Different medications in those patients taking psychotropic treatment after undergoing bariatric surgery**



## Results

The differences in BMI six months after bariatric surgery between patients taking psychotropic medication (n=79, mean BMI reduction: 12,66 kg/m<sup>2</sup>, SD: 4,67) and those under no psychopharmacologic treatment (mean BMI reduction: 14,26 kg/m<sup>2</sup>, SD: 3,82) were statistically significant (p<0,05) (see [Table 1](#)). This might indicate that those not taking psychotropic medication may benefit from a larger reduction in BMI.

**Table 1. Differences in mean BMI reduction, standard deviation and standard error mean between those patients taking and those not taking psychotropic drugs after bariatric surgery**

	N	Mean BMI reduction (kg/m²)	Standard deviation	Standard error mean
Taking psychotropic medication	79	12,66	3,82	0,27
Not taking psychotropic medication	213	14,26	4,67	0,53

## Conclusion

According to the results, not taking psychotropic medication was associated with a statistically significant benefit in the reduction of BMI. This may be due to weight gain as a secondary effect of psychotropic medication. Given that bariatric surgery has proven to be an effective treatment for obesity, both being able to manage this type of medication and having the knowledge of recognising and changing medications that may be associated with weight gain are required in order to achieve the greatest benefit from this surgical treatment.

\*No conflicts of interest reported.

## Bibliography

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