

ABSTRACT

Introduction: Obesity and mental illness are serious health issues whose worldwide prevalence has been increasing in recent years. In particular, depression and anxiety can impair the capacity of obese patients to reduce weight, which is a necessary step in reducing the risk of life-threatening complications of obesity.

Objectives: The main objective of this study was to investigate the effect of baseline mental illness on weight development. For this purpose, a group of obese patients with either depression or anxious-depressive syndrome was selected. Relative change in weight over a 1-year period was selected as the main variable for comparison. One secondary objective was to compare outcomes in patients with psychiatric comorbidity by diagnosis. The second one was to assess the interaction between mental illness and female sex as predictors of poor weight loss outcomes.

Methods: Data was collected in the Obesitology centre at the III. internal clinic – endocrinology and metabolism, 1st Faculty of Medicine, Charles University and General University Hospital in Prague. The research group (n=27) was selected from patients who underwent reduction hospitalisation between 2014 and 2021. The same was true for the control group (n=27) of obese patients without a psychiatric diagnosis. For all patients, baseline data were obtained from the discharge report and also data about their weight after 1 year. Data were collected retrospectively from medical records. The data was then statistically processed and evaluated to compare the results of the research and control groups.

Results: The mean outcome for the research group was a weight gain of 4.1 % (SD 5.7). The outcome for the control group was a slight reduction of 0.8 % (SD 6.1). The difference in percentage is 4.9 % which proved to be statistically significant ($p < 0.05$). Patients with depression (n=15) gained an average of 3.3 % (SD 6.2) and anxious-depressive patients (n=12) gained an average of 5.2 % (SD 5.1). The difference in percentage is 1.9 % which did not prove to be statistically significant ($p > 0.05$). The mutually enhancing effect of female sex and mental illness also was not confirmed.

Conclusion: In this research, baseline mental illness was found to have a statistically significant negative effect on weight loss in obese patients. For future research, it would be useful to follow a larger sample of population to assess the interaction of other variables such as sex or specific psychiatric diagnoses.

Keywords: obesity, mental illness, depression, anxious-depressive syndrome, weight change