Semaglutide Found To Not Cause Adverse Mental Health Side Effects



By Neela Bandla on February 27th, 2025

Semaglutide is a recent development in weight loss medication, which is injected through shots. It is a type of glucagon-like-peptide 1 receptor antigen (GLP-1), under which many weight loss and anti-obesity medications are under. GLP-1s are also used to treat Type II diabetes, due to their role in producing more insulin.

Through a study conducted by the Perelman School of Medicine at the University of Pennsylvania, it has been proven that this specific weight loss medication does not increase suicidal ideations and depression symptoms. This is significant because numerous other weight loss medications have side effects linked to poorer mental health and an increased level of suicidal ideations. Also, obesity itself is linked to depression, which makes semaglutide more important due to its properties showing improvements in mental health.

The experiment conducted was double-blinded, placebo-controlled, and randomized. Double-blinded means that in the experiment, the physicians and the patients do not know which medication the patient will receive: placebo or the actual medication. Placebo-controlled means

that the experiment has either a placebo or an actual experimental treatment. The patients selected were sampled from a random population. The patients were assessed over a 68-week period. They filled out the Patient Health Questionnaire (PHQ-9) and the Columbia-Suicide Severity Rating Scale (C-SSRS). The forms measure symptoms of depression and suicidal ideation, respectively.

By the end of the trial (Week 68), there was a noticeable difference between patients who received the placebo and patients who received the actual treatment. More specifically, patients with the actual treatment of semaglutide have either no change in their depression symptoms from before the experiment or a slight improvement. In both groups, however, suicidal ideations remained similar throughout the experiment.

These findings are important to understand the side effects better when it comes to weight loss medications, and to also create more improvements in medications when needed. However, in this particular study, patients with pre-existing moderate to severe depression, schizophrenia, and bipolar disorder were not looked at. This leaves a gap in the research conducted, as semaglutide could affect these types of patients very differently. Also, one conclusion that the researchers have come to is that even with these promising results, mental health side effects should still be observed by healthcare providers when weight loss medications are given. It is important to give patients the best treatment for them, and this also includes the side effects that affect depression and suicidal ideations directly.

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