

Letter to the Editor

Misuse of Ozempic as a drug choice for weight loss, a potential threat

Sir,

The 387 million people around the globe are diagnosed with type 2 diabetes mellitus (T2DM).¹ Previously used agents to treat T2DM posed adverse risks of hypoglycaemia and weight gain. Recently, Novo Nordisk, a pharmaceutical company, launched a new drug, Ozempic (Semaglutide), a glucagon-like peptide-1 receptor agonist (GLP-1 RA), which was approved by the US Food and Drug Administration on December 5, 2017.¹ The numerous benefits of Ozempic makes it ideal for treatment of T2DM. Unfortunately, there is now an alarming shortage of Ozempic due to its misuse for weight loss.

Administered subcutaneously, GLP-1 RA works by activating GLP-1 receptors of pancreas resulting in increased production of insulin by beta-cells, and decreased glucagon production by alpha-cells. Additionally, it aids weight loss by slowing gastric emptying and increasing satiety.¹ GLP-1 RA Benefits aren't only limited to glycemic control and weight loss, but also include low risk of hypoglycemia and prevent cardiovascular events such as myocardial infarction stroke and associated mortality as well as renal complications.² Altogether these benefits make GLP-1 RA the gold standard drug to treat T2DM along with lifestyle intervention.

Though the patients of T2DM using Ozempic experience weight loss, it is not FDA-approved for weight management.³ Yet it is reported that Ozempic is being prescribed off-label by some doctors to support weight loss. FDA-approved dosage for Ozempic to treat T2DM is 0.25 mg once weekly, with the dose slowly being increased by your doctor. Its efficacy for weight loss is also largely dependent upon lifestyle management including a healthy diet and exercise.

A recent TikTok wonder weight loss hack has resulted in an alarming increase in the unauthorized purchase and usage of Ozempic for weight loss in lethal doses by the users of this social media app without any prior knowledge of its purpose, usage or side effects.⁴ Seeking rapid weight loss, people are taking self-prescribed high doses of Ozempic without prior consultation with a doctor. The adverse gastrointestinal side effects of Ozempic included

nausea, vomiting and diarrhea, which are exacerbated when taken in high doses.²

In conclusion this new magic weight loss trend has been adopted by well-known personalities and celebrities, resulting in a shortage of Ozempic in the international market. This shortage puts the patients suffering from T2DM at risk, too whom Ozempic is a necessity. Increased awareness amongst health specialists and pharmaceutical companies is necessary to counter Ozempic shortage and prevent its misuse by the general population.

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