STUDENTS' CORNER
LETTER TO THE EDITOR

Prospecting the use of tirzepatide in combating obesity in Pakistan

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Dear Madam, Obesity is a chronic, recurring, and multifactorial disease of increasing global prevalence. It is defined as BMI greater than 30 kg/m^2. According to the World Health Organization, in 2022, 890 million people were affected by obesity worldwide.[1] It is a major risk factor for non-communicable diseases (NCDs) such as metabolic disorders, cardiovascular diseases, and type 2 diabetes Thus, controlling it is a vital public health concern.

Recently, an article by Aronne et al. on the efficacy of Tirzepatide in maintaining weight loss in adults with obesity as part of the SURMOUNT-4 trial was published in JAMA. It illustrates the significant role of pharmacological therapy in long-term obesity management. It highlights Tirzepatide, the first combined glucose dependent insulinotropic polypetide (GIP) and glucagon-like peptide 1 (GLP-1) receptor agonist[2] The findings of this randomized withdrawal trial demonstrate that continuous administration of Tirzepatide leads to sustained weight loss, with a remarkable 25.3% mean reduction from baseline at 88 weeks. These results underscore the chronic nature of obesity and the need for long term pharmacological therapy. However, the considerable weight regain (14%) noted in participants switched to placebo at 14% reflects the difficulty of maintaining weight loss without ongoing intervention.[2]

Obesity is a growing challenge for the public health sector in Pakistan. According to the WHO, the prevalence of obesity among adults in Pakistan is 23% as of 2022, a dramatic 16.4% rise in the preceding 10 years.[3] The increasing prevalence of obesity has also had a significant economic impact on the country. In 2019, healthcare costs related to obesity totaled 3.41 billion USD, equivalent to 1.1% of the country's GDP.[4] Tirzepatide could play a crucial role in combating the rising obesity cases in Pakistan. Besides offering weight control, it is also beneficial in lowering improves HbA1c levels, reduces insulin resistance, and preventing the progress of prediabetic patients to diabetes. Such measures can ultimately help to reduce various co-morbidities like blood pressure and cholesterol, thus reducing the risk of vascular complications including myocardial infarction and stroke.[5]

As obesity rates continue to rise globally, including in Pakistan, there is a dire need for sustainable, long-term weight management strategies. Incorporating innovative therapies such as Tirzepatide into national health strategies could play a pivotal role in achieving Sustainable Development goal 3 (Good Health and Well-being) by reducing the burden of obesity and its related comorbidities on healthcare systems, especially in a developing country like Pakistan.

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