STUDENTS' CORNER
LETTER TO THE EDITOR

Emergent role of Ozempic in treating women with PCOS related fertility issues

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Dear Editor, I am writing to highlight a noteworthy and developing area of research regarding the potential impact of Ozempic or Semaglutide on the reproductive health of women suffering from polycystic ovarian syndrome (PCOS). Known as a chronic condition which causes hormonal imbalances in women of reproductive age, PCOS has a staggering prevalence of 52% amongst Pakistani women.[1] Ozempic, widely recognized for its efficacy in managing type 2 diabetes and promoting weight loss, has recently been observed to potentially influence reproductive health, particularly by enhancing fertility in women. Understanding the potential processes by which Ozempic may improve fertility is critical. PCOS-related insulin resistance and increased androgen secretion lead to obesity and, eventually, Type 2 Diabetes Mellitus, which causes irregular menstruation and infertility.[2] As a GLP-1 receptor agonist, it stimulates glucose-dependent insulin release, resulting in therapeutic advantages such as increased satiety, decreased appetite, and appetite management. This, in turn, leads to weight loss and reduces hyperlipidaemia.[3] The weight reduction is associated with improved insulin resistance, and long-term maintenance, which demonstrates sustained insulin sensitivity.[4] Abdalla et al. also reported additional benefits that GLP-1 RAs like Ozempic decreased menstrual irregularity and increased fertility in obese women with PCOS, resulting in greater ovulation and conception.[5]

This impact of Ozempic on the multifaceted pathophysiology of PCOS and its resulting infertility among women has begun to be researched in developing countries around the world, but in Pakistan, it remains unexplored. It is imperative to priorities research in this area, so that we can better understand the full range of benefits and risks associated with this medication and improve the quality of care for women facing fertility challenges. In addition, GLP-1 RAs should be considered as treatment for diabetic women with PCOS in Pakistan.

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