

## Awareness of use of GLP-1 agonists in the treatment of Diabetes Mellitus in Pakistan

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Madam, Diabetes mellitus (DM) is the most common metabolic disease worldwide. A quarter of Pakistan's adult population is affected by DM. In Pakistan, the popular mono-therapy for treating both pre-diabetic and diabetic patients is metformin. For Metformin is combined with exogenous insulin/sitagliptin/sulphonylureas for dual therapy.<sup>1</sup>

Multiple studies over the past decade have shown encouraging results for GLP-1 analogues, especially semaglutide. The 2022 American Diabetic Association (ADA) and European Association for the Study of Diabetes (EASD) guidelines refer to semaglutide as a highly efficacious drug with minuscule side effects.<sup>2</sup> They are the most efficacious drugs in reducing HBA1c among all the prescribed drugs for DM.<sup>3</sup> In patients already taking metformin, the addition of subcutaneous semaglutide showed almost double the reduction in HBA1c than the addition of any other drug.<sup>3</sup> In obese patients with DM, the weight reduction with semaglutide is significant than all other available medications, followed by its sister drug liraglutide.<sup>4</sup> Recent studies also confirmed the added benefit of this class being cardioprotective and renoprotective, contrary to a belief once held about it.<sup>5</sup> As of the studies done till now, the only majorly reported side effect of this drug is nausea and vomiting.

Internationally, physicians have started to widely prescribe this class of drug after their inclusion as the top recommended drug in ADA and EASD. We suggest that the physicians be educated on the mechanism of this

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drug in conferences and presentations. This will help raise awareness in the doctor's community of Pakistan. This drug can prove fruitful in preventing the progression of DM to diabetic neuropathy and nephropathy, which can save countless lives and millions to our economy in pharmaceutical drugs.

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