Statin prescription among patients with type 2 diabetes in Botswana: findings and implications

Student: Mwita Julius

Supervisor: Tonya Esterhuizen

Background: There is evidence of statin benefit among patients with diabetes regardless of cholesterol levels or prior cardiovascular disease history. Despite the evidence, there is under-prescription of statins in clinical practice. This study aimed to assess statin prescriptions and associated factors among patients with type 2 diabetes in Botswana.

Methods: The study was a secondary data analysis of 500 randomly selected type 2 diabetes patients at a specialised diabetes clinic at Gaborone, Botswana. We assessed the proportion of statin-eligible patients who are prescribed statins and evaluated the adjusted associations between various factors and statin prescriptions.

Results: Overall, 477 (95.4%) participants were eligible for a statin prescription. Clinicians prescribed statins in 217 (45.5%) of eligible participants, and only one (4.4%) ineligible participant. The probability of a statin prescription was higher in participants with high baseline low-density lipoprotein cholesterol (risk ratio [RR]: 1.49; 95%CI: 1.17–1.89), increasing duration of diabetes (RR: 1.01; 95%CI 1.00–1.03) and the presence of chronic kidney disease (RR: 1.35; 95%CI: 1.06–1.74).

Conclusion: A large proportion with type 2 diabetes in Gaborone is not receiving statins. Clinicians did not consider most guideline-recommended indications for statin prescriptions. The findings call for improvement in diabetes quality of care by implementing evidence-based guideline recommendations

.