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Evaluation of therapeutic effectiveness of prescribed medications in patients with type 2 diabetes mellitus: Findings from a tertiary care hospital, Lahore, Pakistan (Article)

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Abstract

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Aim: The present study was aimed to highlight the current prescribing pattern of oral hypoglycemia in type 2 diabetes mellitus and to evaluate the therapeutic effectiveness of these therapeutic categories in achieving target glycemic control. **Methods:** This is a prospective, cross-sectional, observational study of 6 months' duration conducted in a tertiary care hospital of Lahore, Pakistan. **Results:** The current research recruited 145 patients presented in diabetes management center of a tertiary care hospital in Lahore, Pakistan. Mean age of the participants was 50.2 (\pm 8.5) years. Out of the 145 patients, 63% were females and 37% were males. Most patients were diagnosed to have diabetes within the past 5 years. Diabetes-induced neuropathy was the most common complication (71.7%) among the patients. A large proportion of these patients (70.3%) were also suffering from other comorbidities among which the most common one is hypertension. The average number of prescribed medications was 1.31. Metformin was prescribed to a majority of patients (64%) as monotherapy while 28.96% received combination therapy. Mean glycated hemoglobin (HBA1c) before and after 3 months of treatment was 8.5 (\pm 2.3) and 8.04 (\pm 2.1), respectively. Inferential statistics show a strong association between HBA1c and life style modifications and adherence to medication therapy ($P = 0.05$). However, the correlation between HBA1c and Morisky score and duration of disease was inverse and weak ($P = 0.6, 0.4$). The t-test values show a small difference between HBA1c values before and after 3 months ($t = 0.440$ and 0.466 , respectively). **Conclusion:** Optimization of medication regimen and continuous patient education regarding life style modification and adherence to medication therapy are necessitated to bring HBA1c values near to target. © 2017 Journal of Pharmacy and Bioallied Sciences | Published by Wolters Kluwer - Medknow.

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