Validation of the Lebanese Medication Adherence Scale among Lebanese diabetic patients

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Statement of the Problem: Adherence to oral antidiabetics plays a pivotal role in controlling diabetes. Healthcare workers evaluate this adherence when visited by patients. Objectives The primary objective of this study was to validate the existing LMAS-14 (Lebanese Medication Adherence Scale) in Lebanese diabetic adults. The secondary objective was to evaluate factors affecting adherence among this population. Methodology & Theoretical Orientation: This study was conducted between May and September 2019, in the main five Lebanese governorates, and community dwelling adult participants were enrolled using a proportionate random sample. The scale was validated using factor analysis and reliability testing, while bivariate and multivariable analyses assessed correlates of adherence. Main outcomes measures Validity of LMAS-14. Findings: All LMAS-14 items converged over a solution of four factors, explaining a total of 64.39% of the variance ($\alpha = 0.859$). The cutoff point between controlled and uncontrolled patients was set at 11. The sensitivity and specificity were good at this cutoff (71.1% and 94.74%, respectively). Results showed that 167 (57.2%) patients had good medication adherence. Advanced age (Beta = 0.046; p = 0.001) and having medical coverage (Beta = 1.452; p = 0.005) were significantly associated with higher adherence. Furthermore, adherence to oral antidiabetic drugs (Beta = 1.197; p = 0.018), female gender (Beta = 2.695; p = 0.011), and taking dyslipidemia medication (Beta = 3.527; p = 0.005) predicted higher diabetes control. Conclusion & Significance: Conclusion This study validated the LMAS among Lebanese adult diabetic patients taking oral antidiabetic drug. Advanced age and having medical coverage were associated with higher medication adherence. Further national studies are warranted to corroborate our findings.