

Effect of patient characteristics on medication adherence among patients with type 2 diabetes mellitus: a cross-sectional survey

ABSTRACT

Background: The prevalence of diabetes mellitus (DM) is steadily increasing worldwide, with a significant DM population in Asian countries. Adherence to medications is important to achieve good glycaemic control among patients with DM. Thus, patients' adherence to their medication regimen should be determined to optimise DM management. **Aims:** To determine medication adherence and the relationship between patient profile and medication adherence among patients with type 2 DM (T2DM). **Design:** Cross-sectional survey. **Methods:** This study was conducted in a public hospital in Selangor, Malaysia, from December 2016 to June 2017. Data was obtained through administration of the Medication Compliance Questionnaire and an electronic medical records database. Multivariate logistic regression analysis was used to determine the predictors of medication adherence. **Results:** A total of 232 (95.9% response rate) patients participated in this study. The overall percentage of medication adherence among patients with DM was 55.2%. The majority of participants were female (53.4%), Malay (47.0%), aged 41–64 years (55.2%; mean age, 56.69 years), married (84.5%), unemployed (60.8%) and attended secondary school (53.9%). The factors independently associated with adherence were ethnicity (odds ratio [OR], 1.43; 95% confidence interval [CI]: 1.03–1.99) and haemoglobin A1c (HbA1c) level (OR, 2.71; 95% CI: 1.56–4.72). **Conclusions:** The medication adherence among patients with DM in a public hospital in Selangor, Malaysia was low. A health intervention emphasising patient-centred care is warranted to improve DM patients' adherence to prescribed medication. Considering that Malaysia has a multi-ethnic population, the patients' ethnicity and their HbA1c levels need to be considered in the implementation of any intervention to improve medication adherence. **Impact statement:** Medication adherence is influenced by individual patients' characteristics. To improve adherence to the medication regimen, nurses should consider patients' profiles.

Keyword: Adherence; Diabetes; Medication; Patient characteristics; Nursing