Factors associated with refill adherence to antidiabetic medication in patients with type 2 diabetes

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Background: Despite the presence of effective antidiabetic drug therapy, the problem of suboptimal adherence to pharmacotherapy is particularly common among patients with type 2 diabetes mellitus (T2DM). The aim of this study was to evaluate the association of medication refill adherence with socio-demographic and clinical characteristics of patients with T2DM to determine whether such factors could guide intervention strategy.

Methods: We conducted a retrospective chart review of 323 patients T2DM attending the primary health care center of the Foča municipality in eastern Bosnia and Herzegovina and measured adherence to treatment with antidiabetics. Refill adherence was determined from repeat prescriptions. Satisfactory refill adherence was defined as the percentage of the patients with refills covering ≥90% of the prescribed treatment between 1 January 2015 and 31 December 2015.

Results: The majority of patients were treated with oral therapy (84.2%). A total of 282 patients (87.3%) had satisfactory refill adherence. Age (older patients), education level (patients with secondary school), employment (retired patients) and duration of T2DM (patients with longer duration of T2DM) were associated with higher adherence. Gender, marital status, BMI, FBG, smoking, copayment, type of antidiabetic therapy, number of medicines and frequency of dosing were not associated with adherence.

Discussion: In the examined population, medication refill adherence was associated with age, educational level, employment and duration of diabetes, although these factors explained only a small amount of adherence variability. Although ingestion adherence is the goal, refill adherence is a necessary condition for ingestion adherence. To enhance adherence, physicians need better predictors to target their efforts to patients most in need of attention in eastern part of BiH. Prescription claims data could serve this purpose.

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