



## Aspirin Therapy Among Patients with Diabetes at an Urban Community Teaching Hospital

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**Introduction:** Cardiovascular events occur more frequently in patients with diabetes mellitus (DM) than in patients without diabetes. Current American Diabetes Association (ADA) guidelines support the use of low-dose aspirin for primary prevention of atherosclerotic heart disease (ASCVD) in patients ages 40-70 years, with elevated ASCVD risk and no increased risk of bleeding.

**Objectives:** To identify 1) the proportion of patients with DM who are on aspirin therapy for ASCVD prevention; 2) the proportion of patients who are on appropriate aspirin therapy per ADA guidelines; 3) the factors that differentiate patients who are on appropriate aspirin therapy versus no aspirin therapy (when indicated) or inappropriate aspirin therapy.

**Methods:** We performed a retrospective chart review of adult patients with DM who visited the Internal Medicine Specialty Clinic (IMSC) at least twice in 2019. Data were collected on demographics, lab values, clinical characteristics and medications. Data were analyzed using chi-squared analysis, Student's t-test and analysis of variance.

**Results:** Of 264 patients who met inclusion criteria, 159 were appropriate for aspirin therapy. The mean age was  $58.6 \pm 7.6$  years, 57.2% were female and 91.8% were black. Only 47.2% of these patients were prescribed aspirin. Factors associated with aspirin prescription included older age, lower total cholesterol, and lower diastolic blood pressure. There were no statistically significant differences by race, sex, history of hypertension, smoking status or ASCVD risk in patients who received aspirin vs patients who were not prescribed aspirin. Forty-nine patients received aspirin when it was not appropriate and 57.1% of these patients had an increased risk of bleeding.

**Conclusions:** Although 47.2% of patients received aspirin appropriately, of those for whom aspirin was not an appropriate therapy, 46.7% were still prescribed aspirin. Most of these patients had a bleeding contraindication. The study was limited by the small sample size; however, the data suggest that further education of our residents needs to be done regarding current ADA guidelines.