ABSTRACT
CORRELATION BETWEEN PROFILE OF TYPE 2 DIABETES MELLITUS PATIENTS WITH CHRONIC DIABETIC MICROVASCULAR COMPLICATION

A Cross-sectional Study of Inpatient Medical Record at Department of Internal Medicine RSUD Dr. Soetomo Surabaya on September-Desember 2015

Type 2 diabetes mellitus (DM) is associated with the increased risk of microvascular complications which associated with increased mortality in DM. The aim of this study was to determine correlation between profile of type 2 DM patients with diabetic microvascular complications. This research was a cross-sectional observational study. We analyzed medical records of all stay in patient in Department of Internal Medicine RSUD Dr. Soetomo Surabaya during 1st September 2015 – 31th December 2015. Of the 290 subjects enumerated, 92 subjects with type 2 DM were analyzed for the study. The observed variable of patients’ profile includes: sex, age, duration of DM, blood pressure, and HbA1C concentration were assessed. Also, the data of diabetic microvascular complications were obtained. Using the chi-square test and Cochran’s and Mantel-Haenszel test we examined which of the risk factors have the correlation of the development of diabetic microvascular complication.

From 95 subjects included, 72 patients (75.8%) are with DM microvascular complications and 23 patients (24.6%) without complications. Based on correlation test using chi-square, only 2 out of 5 variables showed a significant result: duration of DM (p<0.001) and HbA1C concentration (p: 0.032). Both have the contingency coefficient (c) of 0.329 and 0.215 respectively. Cochran’s and Mantel-Haenszel test showed that only duration of DM (OR: 14.700; 95% CI: 3.202-67.494) and HbA1C concentration (OR: 2.923; 95% CI: 1.074-7.958) showed a significant association with DM microvascular complication.

Keywords: diabetes mellitus, microvascular complication, sex, age, duration, blood pressure, HbA1C