Analysis of Risk Determinants for Diabetic Mellitus (E11) Based On Medical Records Inpatients at Bhayangkara Bondowoso Hospital

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ABSTRACK

Diabetes mellitus (E11) is one of the non-communicable diseases whose prevalence continues to increase and has become a public health problem. Based on preliminary study data, diabetes mellitus is among the top ten inpatient and outpatient diseases at Bhayangkara Hospital Bondowoso. Data from Bhayangkara Hospital Bondowoso also showed an increase in the number of hospitalized patients diagnosed with diabetes mellitus (E11) over the past three years, namely 12 cases in 2023, 45 cases in 2024, and 58 cases in 2025. This study aimed to analyze the factors associated with the incidence of diabetes mellitus (E11), including age, gender, obesity, high blood pressure (hypertension), and dyslipidemia. This study employed an analytical observational design with a cross-sectional approach. Data were collected through observations of inpatient medical records from July to October 2025. The sample consisted of 57 inpatient medical records selected using a simple random sampling technique. Data were analyzed using univarate and bivariate analyses with the Chi-square test. The results showed significant associations between age ≥45 years (p = 0.004, PR = 3.578), female gender (p = 0.027, PR = 3.184), and high blood pressure (hypertension) (p = 0.044, PR = 2.219) and the incidence of diabetes mellitus (E11). In contrast, obesity and dyslipidemia could not be examined in this study. The study concluded that age, gender, and hypertension were the determinant factors associated with diabetes mellitus (E11). It is recommended that hospitals enhance health education and counseling programs for all visitors and patients regarding the risk factors of diabetes mellitus (E11) and emphasize the importance of early health screening to prevent the development of chronic complications.s

Keywords : *Diabetes Mellitus, Age, Sex, Obesity, Hypertension, Dysilipidemia.*