Analysis of Risk Factors for Preeclampsia Based on Inpatients Medical Records at RSUD dr. Haryoto Lumajang in 2024

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ABSTRACT

The incidence of preeclampsia at RSUD dr. Haryoto Lumajang ranks first among the top 10 diseases related to Maternal and Child Health during the period 2020–2024. This study aims to analyze the relationship between preeclampsia risk factors, including age, parity, history of previous preeclampsia, number of fetuses, history of diabetes mellitus, and history of hypertension. The research design used is an analytical observational study with a case-control approach. The study population consisted of 185 medical records of preeclampsia cases and 775 medical records of non-preeclampsia cases. The sample comprised 125 cases and 125 controls selected using simple random sampling. Bivariate analysis was performed using the chi-square test. The results showed a significant association between age (p=0.020; OR=1.900), parity (p=0.003; OR=2.253), history of preeclampsia (p=0.045; OR=2.911), and history of hypertension (p=0.002; OR=14.393) with the incidence of preeclampsia. Meanwhile, the number of fetuses (p=0.056; OR=3.027) and history of diabetes mellitus (p=0.244; OR=1.957) did not show a significant association. The conclusion of this study is that women aged <20 years or >35 years, primiparous or grand multiparous women, those with a history of preeclampsia, and those with a history of hypertension are at higher risk of developing preeclampsia. Therefore, hospitals are expected to increase education about risk factors, encourage at-risk groups to attend antenatal care more regularly, and motivate the community to maintain a healthy lifestyle in order to enable early detection and prevention of preeclampsia.

***Keywords**: bivariate, case-control, risk factors, preeclampsia*