Analysis of Risk Factors for Low Birth Weight (LBW) Based on Medical Records of Inpatients at Dr. Soebandi Hospital Jember

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ABSTRACT

Low birth weight infants are infants born weighing ≤ 2,500 grams. LBW can occur in premature infants as well as full-term infants. The morbidity rate of LBW inpatients at dr. Soebandi General Hospital during the period 2020–2024 shows a fluctuating pattern and consistently ranks among the top 10 diseases. This study aims to analyze the relationship between maternal age, anemia, nutritional status, parity, birth spacing, preterm birth, multiple pregnancy, antepartum hemorrhage, preeclampsia, KPD, hypertension, and congenital defects with LBW based on the medical records of inpatients at Dr. Soebandi Hospital in Jember. The study sample was an observational analytical case-control study. The sample consisted of 134 cases and 134 controls using simple random sampling. Data analysis was performed using univariate and bivariate analysis with the chi-square test using SPSS. The results showed that the variables of anemia (0.000), nutritional status (0.001), premature birth (0.000), multiple pregnancy (0.008), antepartum hemorrhage (0.000), and hypertension (0.000) were associated with LBW. Meanwhile, the variables of maternal age (0.776), parity (0.622), birth interval (0.644), preeclampsia (0.120), KPD (0.343), and congenital defects (1.000) were not associated with LBW. The conclusion of this study is that mothers with anemia, poor nutritional status (<23cm), premature birth, multiple pregnancies, antepartum hemorrhage, and hypertension are at risk of giving birth to low birth weight babies. Pregnant women, especially those in high-risk groups, are advised to maintain their health during pregnancy by undergoing regular antenatal care checkups.

Keywords*: LBW, case control, risk factors*