ABSTRACT

Factors Associated with Low Birth Weight at UPTD Puskesmas Merancang, Indonesia

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Background : Low birth weight (LBW), defined as birth weight <2,500 g, is an important maternal and child health concern associated with neonatal morbidity. LBW is influenced by factors such as maternal nutrition, anemia, pregnancy complications, gestational age, and inadequate antenatal care (ANC). Identifying these factors at the primary healthcare level supports early detection and management of high-risk pregnancies.

Objective : This study aimed to identify factors associated with low birth weight among deliveries recorded at UPTD Puskesmas Merancang.

Research Methods/ Implementation Methods : This analytical observational study used a cross-sectional design involving 75 women who gave birth at UPTD Puskesmas Merancang from January to September 2026. Total sampling was applied, with retrospective data obtained from pregnancy and delivery records. The factors analyzed were maternal CED, anemia, severe preeclampsia, ANC visits, and gestational age, with LBW as the outcome. Associations were tested using the chi-square test or Fisher's exact test when applicable.

Results : evere preeclampsia, gestational age, and ANC visits were significantly associated with LBW (p=0.008, p=0.001, and p<0.001), while maternal anemia and CED were not. Of 75 births, 11 infants (14.7%) had LBW.

Conclusion/Lesson Learned : Severe preeclampsia, gestational age, and ANC visits were significantly associated with LBW, while maternal anemia and CED were not. Strengthening antenatal monitoring may support early identification and prevention of LBW.

Keyword : low birth weight; severe preeclampsia; gestational age; antenatal care; anemia; chronic energy deficiency.