Risk Factors Analysis of Neonatal Asphyxia Based on Medical Records of Inpatients at Citra Husada Hospital, Jember

Veronika Vestine, S.ST. M.Kes (*Thesis Supervisor*)

Desthia Putri Ramadhani

Study Program of Health Information Management
Majoring in Health

ABSTRACT

Neonatal asphyxia is the failure of a newborn to breathe spontaneously and regularly at birth, characterized by hypoxemia and hypercarbia. Data from Citra Husada Hospital show a rising trend over the past three years: 13 cases (2022), 25 cases (2023), and 36 cases (2024). This study aimed to analyze risk factors associated with neonatal asphyxia based on inpatient medical records at Citra Husada Hospital, Jember. This was an analytical observational study with a crosssectional design involving 94 infants and their mothers' records, selected through simple random sampling. Data were analyzed using univariate methods (numbers and percentages) and bivariate chi-square tests. The findings revealed significant associations between neonatal asphyxia and parity (p=0.029, PR=2.024), type of delivery (p=0.048, PR=0.552), prolonged labor (p=0.026, PR=2.103), meconiumstained amniotic fluid (p=0.000, PR=3.621), premature rupture of membranes (p=0.032, PR=1.896), gestational age (p=0.037, PR=2.042), and neonatal sepsis (p=0.000, PR=4.461). Conversely, hypertension, anemia, fetal malpresentation (p=1.000), and birth weight (p=0.224) were not related to the incidence of neonatal asphyxia. In conclusion, the main risk factors identified were primiparity, spontaneous delivery, prolonged labor, meconium-stained amniotic fluid, premature rupture of membranes, abnormal gestational age, and neonatal sepsis. Recommendations include strengthening prenatal education, improving labor monitoring, early detection of complications, and maintaining complete medical records. Pregnant women are advised to increase compliance with antenatal care (ANC) to prevent the risk of neonatal asphyxia.

Keywords: cross-sectional, neonatal asphyxia, risk factors