

ABSTRACT

Background: Premature rupture of membranes (PROM) is a condition in which membranes rupture before any signs of labor (regular uterine contractions accompanied by cervical opening). In Indonesia, KPD occurs in about 6.46-15.6% in term pregnancy. Based on preliminary study at RS PKU Muhammadiyah Surabaya, there are 158 (10%) of PROM in 2014, 243 (15%) in 2015, and 315 (19%) cases in 2016 out of total deliveries, it showed a raising number. The cause of PROM is still unclearly explained, but there are predisposing factors associated with PROM such as infection, cervical incompetent, gemelli, trauma, fetal abnormality, narrow pelvic, history of PROM, anemia, smoking habit, maternal age, and parity. The purpose of this study was to analyze risk factors associated with PROM. **Methods:** This research was observational analytical with case control approach. The total sample was 304 respondents divided into 152 maternal mothers with PROM (case group) and 152 maternity mothers not PROM (control group) chosen using purposive sampling. The independent variables were maternal age, parity, anemia, and history of PROM, while the dependent variable was premature rupture of membranes (PROM). Data analysis using Chi-square test and multivariate analysis (logistic regression) with significance level $\alpha = 0,05$ (95% CI). While parity, anemia, and PROM history resulted in p of 0.000 ($p \leq 0.05$) which showed collective relationship among variables. History of PROM had the greatest risk for PROM incidence KPD (OR:571 CI 95%) **Result:** Chi Square test resulted p value of 0.000 ($p \leq 0.05$) for there is relation of mother age, parity, anemia, history of KPD with KPD incidence, and multivariate analysis result (logistic regression) resulted p of 0.741 ($p \geq 0,05$) for showing no relation between mother age and premature rupture of membranes (PROM). **Conclusion:** There was an association of parity, anemia, and history of PROM with the incidence of premature rupture of membranes.

Keyword: premature rupture of membranes (PROM), history of premature rupture of membranes (PROM), mother's age