

DIFFERENCES AMONG HIV-EXPOSED UNINFECTED AND HIV-UNEXPOSED INFANTS IN DR SOETOMO GENERAL HOSPITAL

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Background: Prevention of mother-to-child HIV transmission programs producing numbers of HIV-exposed uninfected infant. Researches have been done in the field, suggesting that these infants may have increased infectious morbidity and impaired growth compared with HIV-unexposed infants. The objective of this study is to compare infectious morbidity, growth and development, incidence of anemia in HIV-exposed uninfected with HIV-unexposed infants.

Method: This case control study recruited 0-18 months old infants and was classified as case (HIV-exposed uninfected infants at outpatient clinic) and control group (HIV unexposed infants admitted as acute illness) at Dr. Soetomo General Hospital from January to April 2017. Paired data were matched on age and gender. Chi-square test analysis was performed to compare the outcome between two groups.

Results: There were 37 HIV-exposed uninfected infants and 37 HIV-unexposed infants. Female (51.4%) slightly outnumber male. Birthweight ($P=0.425$), immunization ($P=0.451$) were not different between groups. Gestational age over 38 weeks (97.3 vs 81.1, $P=0.025$), spontaneous delivery (29.7 vs 71.1; $P<0.001$), history of breastfeeding (2.7 vs 86.5; $P<0.001$) was significant different between groups. Incidence of anemia ($P=0.816$), WAZ-score ($P=0.580$), LAZ-score ($P=0.081$), WLZ-score ($P=0.522$), and development test using Denver II ($P=1.000$), diarrhea ($P=0.077$), cough ($P=1.000$), and dyspnea ($P=0.152$) were similar between groups while the incidence of fever (16.2 vs 0, $P=0.011$) were significantly different.

Conclusion: The incidence of fever was higher among HIV-exposed uninfected infants while growth and development, incidence of anemia, diarrhea, cough, and dyspnea parameter were similar.

Keywords: *HIV-exposed uninfected infant; HIV-unexposed infant; outcomes.*