

Iron Deficiency Anemia a Risk Factor for Acute Lower Respiratory Tract Infections in Children 6-60 Months of Age.

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ABSTRACT

Background: Acute lower respiratory tract infection is one of a major cause of death in under five years of age. One of the risk factor for it is iron deficiency anemia. Iron deficiency anemia itself has high prevalence on under five years of age in Indonesia.

Method: Case control study on 124 children (62 cases and controls each) was carried out in PKU 1 Muhammadiyah hospital. All patients who fulfilled the inclusion criteria were included as sample. We matched patients based on age and sex. Cases are patients who have acute lower respiratory tract infection, and controls are patients who did not have acute lower respiratory tract infection. We used secondary data from medical record to see the diagnose of acute lower respiratory tract infection and blood test result. Iron deficiency anemia was diagnosed by Mentzer index.

Results: From 124 respondents on cases and control group, we obtained male children were 76 children (61,30%) and female children were 48 children (38,70%). Mentzer index > 13 were diagnosed as iron deficiency anemia. Iron deficiency anemia were found on 7 children (11,2%) in cases group and 1 children (1,61%) in controls group. On this study there is no difference between children with iron deficiency anemia or not with acute lower respiratory tract infection incident. $p\text{-value}=0,062$. (Odd Ratio = 7,764)

Conclusion: On this study iron deficiency anemia were not a risk factor for acute lower respiratory tract infection.