



Correlation Between Soil Transmitted Helminth Infection and Incidence of Anemia at Public Primary School 060925

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Abstract : Soil transmitted helminth infection (STH) is one of most prevalent worldwide infection, especially in environments with poor sanitation. Based on WHO data, more than 1.5 billion, or 24% of the world population infected with soil transmitted helminth. In Indonesia, the prevalence of worm infection is quite high, ranging from 10%-85.9%. The objective of this study was to determine the correlation between soil transmitted helminth infection with hemoglobin status on primary school children, as well as to determine the prevalence of worm infection and anemia, infection intensity and the type of worm that infects the most of them. This study was analytical observational with cross-sectional method. The sampling technique was total sampling; total samples obtained were 72 people. The study took place in Public Primary School 060925, Village Harjosari I, district of Medan Amplas throughout March to December 2015. Statistical analysis was performed bivariate analysis to find the correlation between soil transmitted helminth infection with anemia through Chi-square (χ^2). The results showed that the prevalence of worm infection and anemia were 40.3% and 33.3%. Type of worm that infects most was *Ascaris lumbricoides* (26.5%). Also, there is a significant correlation between soil-transmitted helminth infection and hemoglobin levels with p Value 0.027 and the risk factor of STH infection have positive relationship towards anemia with Odds Ratio (OR) 3.08 (CI 95: 0.026 – 0.041).

Keyword : soil-transmitted helminthiases, anemia, primary students.