

ABSTRACT

Background : Anemia is one of health problems that often found in the world, especially in a developing country. Primary school age children(6-12 years) are vulnerable to iron deficiency anemia due to iron requirements during this period increase along with the rapid growth of the tissue and an increase of red blood cell mass. In Indonesia there are two systems of education for primary school children, the full day and non full day system. Students who stay longer in school can lead to fatigue, which is the cause of anemia. It is necessary for the study to determine differences in hemoglobin levels in primary school students between full day with non full day education.

Method : An observational analytic design with cross sectional approach was used in this study. The sampling technique used was random sampling, by giving informed consent to the parents or guardians of the students. The samples obtained were 60 of primary school students consisting 30 full day and 30 non full day students which were selected in accordance to the inclusion criteria. Blood sampling was performed to both groups, followed by laboratory tests Hematology Analyzer to determine levels of haemoglobin. Analysis data used in this study was compare means that independent t-test.

Result : The results showed that differences in haemoglobin levels in primary school students between full day and non full day education obtained significance value of 0.000 ($p < 0.05$). These results indicate that there are differences in hemoglobin levels.

Conclusion : There are differences in hemoglobin levels in primary school students between full day and non full day education.

Keywords : anemia, iron deficiency anemia, haemoglobin levels, full day school, non full day school