An investigation to reduce the prevalence and severity of anemia among school age children in Southwest Ethiopia

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Background: Anemia is a major health problem worldwide. The magnitude is high in developing countries, because of various health and socioeconomic problems. Children and pregnant women are the most vulnerable groups to be affected by anemia. The aim of the present study is to determine the prevalence and severity of anemia among school age children.

Methods: A cross-sectional household survey was conducted in January 2011 on 423 samples of children, aged 6–14 years, selected by systematic random sampling. A pre-tested structured questioner was adopted and used to collect the data. To measure hemoglobin level HaemoCue digital photometer was used. Anthropometric indicators were measured using WHO’s guideline. Data analysis was made using SPSS Version 16.0 and WHO AnthroPlus version 1.0.2.0. Multivariate analysis was made to identify the predictors of anemia.

Result: The mean hemoglobin level of the study participants was 11.59 with SD±1.97 g/dl. Based on WHO’s cut off values for hemoglobin level, the prevalence of anemia was found to be 152 (37.6%). Regarding severity, 73 (48.0%) of them had mild and 79 (52.0%) had moderate anemia. On multivariate analysis, low family income [OR=4.925, 95% CI (1.063, 22.820)], Mother’s education [OR=4.621, 95% CI (1.383, 15.439)], and intake of plant and animal food less frequently [OR=3.847, 95% CI (2.068, 7.157)]; [OR=2.37, 95% CI (1.040, 5.402)], respectively were significantly and independently associated with anemia.

Conclusion: High prevalence of anemia was recorded, which is a moderate public health problem according to WHO’s definition. Family income, educational status of parents and inadequate intake of plant and animal food are the potential risk factors for anemia. Poverty reduction, women education and health education about balanced animal and plant food consumption and micronutrient supplementation are recommended strategies to reduce the burden of anemia.

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