

Assessment of micronutrient deficiencies among tribal primary school children of Meghalaya, India

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■ **ABSTRACT :** The study was conducted to assess the micronutrient deficiencies among the tribal primary school children aged 8-11 years of the Meghalaya tribes. It was a Cross-sectional study. The duration of study was from 2012 to 2013. Total sample size was 1399 children. All primary children selected for the study were interviewed through school teachers or parents. Clinical examination and Hemoglobin estimation was done using Portable Haemoglobinometer (Hb Haemoglobin testing system, USA). Maximum nutritional deficiency reported by clinical examination in both tribes of primary school children was vitamin C deficiency with the symptoms of spongy and bleeding gums followed by iron deficiency anaemia. However, mean prevalence rate of anaemia in both the tribes of Meghalaya children is not significant with the mean (SD) value of 9.92 (1.71) irrespective of the gender and age with respect to blood haemoglobin concentration. There was also a significant critical difference in the distribution of different grades of anaemia *i.e.* moderate (0.031) and severe (0.127) among the age group of 8-11 years. And the highest prevalence of anemia was reported in the boys (84.65 %) than girls (83.98 %). Clinical examination should be screened periodically and appropriate measures should be taken in order to prevent from other prevailing nutritional related diseases. Further, the high prevalence of mild and moderate anemia demands due emphasis so as to bring down the total prevalence of anemia in primary school children.

■ **KEY WORDS:** Anemia, Clinical, Hemoglobin, Iron, Meghalaya, West Garo, East Khasi

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