

Prevalence of Ferritin, Folate and Vitamin B12 Deficiencies Amongst Children in 5–18 years of Age in Delhi

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To the Editor: National Family Health Survey (NFHS-3) documented the prevalence of anemia as 76.4 % amongst children. Studies have documented iron, folate and vitamin B12 to be the causes of nutritional anemia. However there is limited data on prevalence of iron, folate and vitamin B12 deficiencies amongst children in India. We would like to report results of a sub study undertaken, in a large survey data set, amongst children of 5–18 y in National Capital Territory of Delhi, which has been published earlier.

A total of 1037 children in the age group of 5–18 y were included in the present study. The study was approved by ethical committee of All India Institute of Medical Sciences.

Blood was drawn and transported to the central laboratory at All India Institute of Medical Sciences, New Delhi for separation of serum. Serum ferritin was determined by the enzyme linked immune-sorbent assay (ELISA) method [1]. The levels less than 12 ng/mL were considered as indicative of iron deficiency. Serum folate was determined by the Radio-immuno assay (RIA) method. The levels less than 3 ng/mL were considered as indicative of folic acid deficiency [2]. Serum B12 was estimated utilizing the radio isotopic. The levels less than 200 pg/mL were considered as indicative of cobalamin deficiency [3].

Prevalence of ferritin, folate and B12 deficiencies were observed to be 54.5 %, 42.0 % and 67.2 % for children in

the age group of 5–11 y, and 55.0 %, 30.7 % and 68.3 % for children in the age group of 12–18 y, respectively.

An earlier community based study documented that 88 % of the children below 6 y had low serum ferritin levels [4]. Similarly, the prevalence of folate deficiency as 50 % and cobalamin deficiency as 62 % has been reported earlier [5].

The present study revealed that there was a high prevalence of deficiency of iron, folate and B12 amongst children in the age group of 5–18 y.

References

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