

Prevalence of iron deficiency anemia in pre-pubertal, post pubertal and post menopausal females

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Iron deficiency anemia is a common type of anemia in developing countries especially among females. This research was carried out to find the prevalence of iron deficiency anemia in pre-pubertal, post-pubertal and post-menopausal females. Subjects 100, 175 and 100 were selected randomly from schoolgirls in pre-pubertal and post pubertal categories and in medical wards for post-menopausal category. From these subjects, anemia subjects were selected according their Hemoglobin (Hb) level and anthropometric (height and weight) measurements. Those who were having Hb% below 70% or Hb level below 9g% with abnormal anthropometric measurements were considered as anaemic subjects. Among the randomly selected subjects 30, 32 and 28 subjects were found as anemic in pre-pubertal, post-pubertal and post-menopausal females respectively. Ten normal subjects were also selected from each category having Hb level above 11 g % or Hb % above 80 % with normal height and weight for their age. Blood samples from normal and anemic subjects were analysed for total iron binding capacity (TIBC), bound iron (BI) and total serum protein levels. TIBC saturation % was also calculated. The iron deficiency anemic patients were identified as those having TIBC, BI & TIBC % levels deviating from the two standard deviation of the normal mean values. From the selected anemic patients 10, 19 and 13 were identified as iron deficiency anemic in pre-pubertal, post-pubertal and post-menopausal females respectively. The prevalence of iron deficiency anemia was found to be 10 %, 10.9 % and 13 % for the above categorized groups of females in Jaffna. The mean serum protein levels were 51, 61 and 58g^l in pre-pubertal, after pubertal and post-menopausal females respectively. The serum protein levels correlates with the prevalence of the iron deficiency anemia.