

THE PREVALENCE OF ANAEMIA AMONG ADOLESCENTS GIRLS IN MOROGORO MUNICIPALITY, TANZANIA

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Anaemia is a very common condition in developing countries especially in areas where the level of intake of iron rich foods is low; malaria and other intestinal parasites are common. This study was conducted to determine the prevalence of anaemia and the type of anaemia existing in adolescent girls in Morogoro Municipality, Tanzania. One hundred adolescent girls of age between 11 and 17 years were randomly recruited to participate in the study. The subjects were not taking iron, folate or vitamin B12 supplements at the time of the study. A haematologist collected blood samples from the subjects and a series of measurements was conducted using an Auto-counter haematology analyser (Swelab AC920E:0) to determine haemoglobin concentration (Hb); packed cell volume (PCV); red blood cell count (RBC); mean corpuscular volume (MCV); mean corpuscular haemoglobin (MCH) and mean corpuscular haemoglobin concentration (MCHC). The mean values (\pm SD) of the haematological indices were as follows: Hb 12.3 ± 1.4 g/dl; PCV 45.9 ± 4.9 %; RBC $5.21 \pm 0.6 \times 10^6/l$; MCHC 26.7 ± 1.1 g/dl; MCV 88.7 ± 6.6 fl and MCH 24.0 ± 2.4 pg. The prevalence of anaemia among adolescent girls in Morogoro Municipality was 42%. About 77% of the girls had MCH values below 26%, indicating that the red blood cells were smaller than the normal size, a sign of iron deficiency anaemia. Also indicating that the prevalence of iron deficiency anaemia among adolescent girls in Morogoro municipality is much higher than that predicted by Hb concentration. The MCHC of 99% of the girls was below the normal level, which also is suggestive of iron deficiency anaemia. The RBC was below the minimum cut-off point for 51% of the girls again suggestive of microcytic anaemia. The results have shown that almost all subjects were suffering from iron deficiency anaemia; only 3% had megaloblastic or macrocytic anaemia due to folic and vitamin B₁₂ deficiencies. The study has shown that there is high prevalence of iron deficiency anaemia among adolescent girls in Morogoro municipality. This may have serious consequences in the girls school and reproductive performance.