PREVALENCE OF ANEMIA IN FEMALE UNDERGRADUATES RESIDING IN HOSTELS OF UNIVERSITY OF SRI JAYEWARDENEPURA

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Anemia is a condition where number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status according to the WHO definition. Global prevalence of anemia is 24.8% according to WHO and prevalent is higher in women in reproductive age group, being 30.2% in non-pregnant and 41.8% in pregnant women. Sri Lankan prevalence of anemia is 39% in non-pregnant women. Hostel students may be more prone to anemia due to nutritional deficiency. Objective of this study was to determine the prevalence of anemia in female hostellers of University of Sri Jayewardenepura, in 2014. An analytical cross sectional study was performed among 370 female students who are residing in the hostels located within university premises. They were randomly selected using the hostel registries according to inclusion criteria. 2ml of venous blood was drawn from participants for hemoglobin assay and a pre tested questionnaire administered to obtain demographic data. Hemoglobin concentration was measured by the Cyanmethemoglobin method using a spectrophotometer. When anemia was defined as hemoglobin concentration below 12g/dL 66.4% (245) of study population were non anemic and 33.6% (124) were anemic. In the anemic population 23.8% (88) had mild anemia (hemoglobin 11-11.9 g/dL), 9.5% (35) had moderate anemia (hemoglobin 8.0 -10.9g/dL) and 0.3% (1) had severe anemia (hemoglobin <8g/dL) according to WHO classification of anemia. There was no association between anemia and menstrual bleeding in the study population. The prevalence of anemia in the study population which is 33.6% is less than the prevalence of anemia among the non pregnant females in Sri Lanka (39%). Yet the study shows that 1/3 of the undergraduates are anemic and this may have an effect on their study skills, cognition, as well as day to day activities in the University.

Keywords: Prevalence, Anemia, Female Undergraduates

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