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## **The association between anemia and menstrual bleeding in female undergraduates residing in hostels of University of Sri Jayewardenepura**

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Global prevalence of anemia is 24.8% (WHO) and more prevalent in women in reproductive age (30.2% in non-pregnant, 41.8% in pregnant women) with the Sri Lankan prevalence of 39% in non-pregnant women. Female hostellers are more prone to get anemia due to nutritional deficiency and menstruation.

The objective of the study was to determine the association between anemia and menstruation in female hostellers of University of Sri Jayewardenepura.

An analytical cross sectional study was performed among 370 female hostellers. They were randomly selected using hostel registries. 2ml of venous blood was drawn and a pre-tested questionnaire was administered to obtain the demographic and menstruation data. The hemoglobin concentration was measured by the Cyanmethemoglobin method using a spectrophotometer. Data analysis was performed using SPSS 16 and association was tested by Chi-square analysis.

When anemia was defined as hemoglobin concentration below 12g/dL 66.4% of the total population were non anemic and 33.6% were anemic. In the anemic population 23.8% had mild anemia (Hb 11-11.9 g/dL), 9.5% had moderate anemia (Hb 8.0 -10.9g/dL) and 0.3% had severe anemia (Hb < 8g/dL). There was no significant association found between anemia and menstrual bleeding (p value = 0.825).

The prevalence of anemia in the study population which was 33.6% is less than the prevalence of anemia among non pregnant females in Sri Lanka (39%). Yet the study shows that 1/3 of the population were anemic and this may have an effect on their study skills as well as day to day activities in the University. But study didn't show a significant association between anemia and menstrual bleeding.