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Causes for anaemia among medical students; A cross sectional study among first year medical students of Faculty of Medicine, University of Peradeniya, Sri Lanka

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Background: Anaemia is defined as reduction in the haemoglobin concentration of the blood below normal for age and sex. For the diagnosis of anaemia, typical values would be less than 13g/dL in adult males and less than 12 g/dL in adult non pregnant females. Medical students pose high risk of anaemia because of their poor eating habits, long schedule in college, burden of medical studies and clinical postings.

Objective: This study was conducted to identify the prevalence of anaemia among first year medical students of the Faculty of Medicine, University of Peradeniya, Sri Lanka and to identify the possible causes for anaemia.

Methods & Materials: A descriptive cross sectional study was conducted. Whole batch of first year medical students of the Faculty of Medicine, University of Peradeniya, Sri Lanka who are consented were included. A self-administered questionnaire was used to collect data. A sample of blood was collected for full blood count. A blood picture was examined with the blood of the students with low haemoglobin levels. Haemoglobin capillary electrophoresis was done in students with low red cell indices to confirm thalassaemia trait.

Results: A total of 208 students were recruited. There were 91 (43.8%) male students and 117 (56.3%) female students. Thirty-three students, which is 15% of all students (8/91 of males and 25/117 of females) were found to be anaemic. Of them, seven were having moderate anaemia whereas 26 had mild anaemia. None were found to have severe anaemia. According to the presumptive diagnosis based on the results of the blood picture, the commonest cause for anaemia was identified as iron deficiency accounting for 7.2% (15/208), followed by mixed deficiency anaemia seen in 5.2% (11/208), and thalassaemia trait in 3.3%(7/208) of students.

Conclusion: Fifteen percent of the first year medical students in the Faculty of Medicine, University of Peradeniya, Sri Lanka were anaemic. Most common cause for anaemia was iron deficiency based on blood picture findings.