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Burden of anaemia in teen-aged girls

Anaemia is a common and widespread public health problem in India. All ages are vulnerable for this; however, adolescent girls are at a higher risk due to rapid growth and higher iron needs.¹⁻³ As sparse epidemiological data are available regarding the prevalence of anaemia in teen-aged girls, especially from Andhra Pradesh state in India, the present study was conceived. The study was cleared by the Institutional Ethical Committee.

In this cross-sectional study, we studied 155 girl students aged 17-18 years who underwent haemoglobin testing as a part of their health assessment at the time of admission into the first Bachelor of Medicine, Bachelor of Surgery (MBBS) course. Blood was collected from each subject in ethylene diamine tetraacetic acid (EDTA) vial and was used to estimate haemoglobin by colorimetric method using Mindray-BC-5300 Auto Hematology Analyzer (Mindray Medical India Private Limited, Mumbai). Haemoglobin levels greater than 12 g/dL were considered normal. Anaemia was defined as mild if haemoglobin level was between 11-11.9 g/dL; moderate if haemoglobin level was 8-10.9 g/dL; and severe if haemoglobin level was less than 8 g/dL.⁴

We observed that nearly half the girl students manifested anaemia (n=77; 49.7%). The severity of anaemia is shown in Table 1. Anaemia was mild in 42 (27%), moderate in 34 (21.9%), and severe in 1 of the 155 students. All students found anaemic were given counselling and advised treatment for anaemia.

The prevalence of anaemia (49.1%) in the present study was similar to the observations from National Family Health Survey data⁵ that showed that the prevalence of anemia among women of reproductive age in India is 56.1%. However, while the National Family Health Survey included all women in the reproductive age, it is of interest that all these girl students were educated up to Class XII / Intermediate course who had studied biology (an essential eligibility requirement for appearing in the MBBS course). Our observations indicate that in spite of being taught in schools regarding the basics of nutrition and causation of anaemia from Class X onwards, anaemia remains a common health problem even among well educated teenage girl students. The rising trend of consuming snack and junk food may partly responsible for healthy ones being anaemic. We feel that there is an increased need for reinforcing the importance of nutrition, hygiene and measures to prevent anaemia from high school education level onwards.

Table 1: Severity of anaemia* in 155 medical students at the time of admission

Severity of anaemia	No. (%)
Mild	42 (27)
Moderate	34 (21.9)
Severe	1 (0.6)

* classified as per reference 2

Received: April 29, 2015; Accepted: January 28, 2016.

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Online access

http://svimstpt.ap.nic.in/jcsr/apr-jun16_files/corr16.pdf
DOI: <http://dx.doi.org/10.15380/2277-5706.JCSR.15.057>

REFERENCES

1. Gupta A, Parashar A, Thakur A, Sharma D, Bhardwaj P, Jaswal S. Combating Iron Deficiency anemia among school going adolescent girls in a hilly state of North India: effectiveness of

- intermittent versus daily administration of iron folic acid tablets. *Int J Prev Med* 2014;5:1475-9.
2. Panigrahi A, Sahoo PB. Nutritional anemia and its epidemiological correlates among women of reproductive age in an urban slum of Bhubaneswar, Orissa. *Indian J Public Health* 2011;55:317-20.
 3. Gupta S, Taraphdar P, Roy TG, Haldar D, Dey SK, Purkait B. The silent burden of anemia in school age children: A community based study in West Bengal. *Indian J Med Sci* 2012;66:163-8.
 4. World Health Organization. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. WHO/NMH/NHD/MNM/11.1. Available at URL: <http://www.who.int/vmnis/indicators/haemoglobin.pdf>. Accessed on April 28, 2015.
 5. Family Welfare Statistics in India. Statistics division, Ministry of Health and Family Welfare, New Delhi: Government of India; 2006.p.76.

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Prabath Kumar D, Aruna M, Asha T. Burden of anaemia in teen-aged girls. *J Clin Sci Res* 2016;5:146-7. DOI: <http://dx.doi.org/10.15380/2277-5706.JCSR.15.057>.