Research Article

EVALUATION OF PREVALENCE OF ANAEMIA IN ADOLESCENT FEMALE IN BHILWARA

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A R T I C L E I N F O	A B S T R A C T
	Background- Adolescence is a period of transition from childhood to adulthood. It is characterised by rapid physical, biological and hormonal changes resulting in psycho-social, behavioural and sexual maturation. **Methods-**Present study was carried out in Mahatma Gandhi Hospital, Bhilwara Mainly concentrating on rural population. All the adolescent girls studying in standards 9th - 12th class who were given consent to hemoglobin estimation were included in the study. **Results-** The prevalence of anemia among adolescent girls was found as 76.00%. Out of 76 anemic girls, 58 girls were suffering from mild degree of anemia and 17 girls were having moderate degree of anemia. Only one girl was found severely anemic. **Conclusion-** The prevalence of under nutrition and anemia among adolescent girls is alarmingly high in India.

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood. It is characterised by rapid physical, biological and hormonal changes resulting in psycho-social, behavioural and sexual maturation. Adolescence is a period of rapid growth: up to 45 per cent of skeletal growth and 15 to 25 per cent of adult height is achieved during adolescence. The physical and physiological changes, that occur in adolescence places a great demand on the nutritional requirements and make them more vulnerable to nutritional deficiencies[1].

Anemia is a major public health problem worldwide and is often ignored in both developed and developing countries. Preschool children, pregnant women and adolescents constitute vulnerable group of anemia.

Anemia is one of the most common hematological abnormalities found in children. It can be defined as the reduction in oxygen-carrying capacity or as a reduction in the red cell mass of the body. Which is one of the most wide spread public health problems, especially in developing countries like India and has important health and welfare and social and economic consequences, these includes repaired cognitive development, reduces physical work and in sever causes, increased risk of mortality particularly during the prenatal period. There is also evidence that anemia may result in reduced growth and increased morbidity[2]. As anemia is classified into three degree according to WHO: mild, moderate and severe.

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Hb cut-off values of anemia were 10.0-11.9 g/dl (mild), 7.0-9.9 g/dl (moderate) and <7 g/dl (severe) [2-3].

The main causes are family with limited recourses; the female child is more likely to be neglected and the added burden is menstrual blood last [normal/abnormal] precipitates the crises too. Other associated risk factors for anemia are low intake of meat [fortified food with iron], frequent dieting, vegetarian eating styles, meals skipping, significant weight loss, heavy menstrual period, rapid growth, participation in endurance sports and intensive physical training[4].

MATERIALS AND METHOD

Present study was carried out in Mahatma Gandhi Hospital, Bhilwara Mainly concentrating on rural population. All the adolescent girls studying in standards 9th - 12th class who were given consent to hemoglobin estimation were included in the study. The girls ≥20 years, and those suffering from any chronic disease were not included in the study. A total of 100 girls were interviewed and were investigated for their Hemoglobin concentration. A predesigned and pretested schedule was used to collect the information about the participants.

RESULTS

Table 1 Prevalence of anemia among adolescent girls (N = 100)

Hb level (g/dl)	No. of girls	Percentage
>11	24	24.00
10.0-11.9	58	58.00
7.0-9.9	17	17.00
<7.0	1	1.00
Total	100	100.00

The prevalence of anemia among adolescent girls was found as 76.00%. Out of 76 anemic girls, 58 girls were suffering from mild degree of anemia and 17 girls were having moderate degree of anemia. Only one girl was found severely anemic.

Table 2 Distribution of adolescent girls according to general appearance

General appearance	No. of girls	Percentage
Well nourished	61	61.00
Moderately nourished	27	27.00
Mal nutrition	12	12.00
Total	100	100.00

The above table reveals that out of 100 of the adolescents girls 61(61.00%) adolescents girls were well nurshied, 27[27.00%] were moderately nourished and remaining 12[12.0%] were malnourished.

DISCUSSION

Anemia during adolescence influence women's entire life cycle. It also has negative consequences for survival, growth, development of their children later in life. The Government of India has made the adolescent health as a part of RCH package since 1997.

Later to combat the problem, Government of India started Adolescent Girls anemia Control Program with technical support from UNICEF. The main interventions of this program were later continued under the heads of SABLA and WIFS scheme under Rashtriya Kishor Swasthya Katyakram (RKSK). In the base line survey for the program by UNICEF, 65- 99% of adolescent girls were found anemic, at various states of country. [5]

In this study the prevalence of anemia among adolescent girls was observed as 76.00%, which is very close to the observations taken by Rati *et al*[6] and Patnaik *et al*[7], who found the prevalence as 80% and 78.8% in their studies in rural areas of Karnataka and Odisha respectively. Though Kaur *et al* [8] observed anemia prevalencerate as 59.8% in rural Wardha (Maharashtra). Whereas a very high prevalence of anemia (90.1%) was noted by Kulkarni *et al* [9] in adolescent girls of a urban slum in Nagpur.

CONCLUSION

The prevalence of under nutrition and anemia among adolescent girls is alarmingly high in India.

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