



Menstrual Problems Among Rural Adolescent Girls in Tamilnadu

KEYWORDS

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ABSTRACT *Background:* Adolescent girls up to the age of 19 compromise about ¼ of Indian population. Prevalance of anaemia is high (56%) in this age group and has been identified as an important public health problem. Anaemia in this age group contributes to high maternal mortality rate, high incidence of low birth weight babies, high post neo natal mortality, fetal wastage, and consequently high fertility rates. Though Nutritional Anemia is the commonest cause of anemia, biological transformation of these girls to women of child bearing age – initiation of menstruation and the problems associated with it are unidentified.

AIM : To indentify the menstrual problems among adolescent girls in a health subcentre area of Tirunelveli District. To find out the association of these problems with anaemia among these girls.

METHODOLOGY: Community based cross-sectional study was carried out in Ittamozhi Subcentre of Reddiyarpatti PHC in Tirunelveli district. All adolescent girls(10-19yrs) of the subcentre who were willing to participate were included in the study and were tested for Anemia by Clinical Examination and details regarding their menstrual status were obtained by administering a self structured questionnaire.Data were analysed using SPSS.

RESULTS: Around 411 adolescent girls participated in the study. 62% of them were anemic. Significant association was found between anaemia and menstrual status ($< P 0.002$). 65.9% of the girls who had attained menarche were found to be anaemic.87.5% of the girls who had menstrual problems were anaemic.The common menstrual problems were Menorrhagia, Dysmenorrhoea and irregular bleeding cycles.

INTRODUCTION:

Adolescence is the period of transition between childhood and adulthood. Adolescent is defined by WHO as a person between 10-19 years of age. There are about 1.2 billion adolescents worldwide and one in every five people in the world is an adolescent. Among adolescents, girls contribute a vulnerable group, particularly in developing countries where they are traditionally married at an early age and exposed to a greater risk of morbidity and mortality. Adolescent girls up to the age of 19 compromise about ¼ of Indian population. They are estimated to be around 105 million in India. The adolescent girls constitute an area that is not well researched and there is need to investigate their basic health needs. Adolescent girls are a vulnerable group who are potential mothers and future home makers. Regular menstrual blood loss adds to the increased demand needed during the growth spurt leading to the increased magnitude of anaemia. This study was planned to assess various menstrual problems affecting and the association of it with anaemia.

METHODOLOGY:

A Community based cross-sectional study was planned in the Health subcentre area of Reddiyarpatti PHC in Tirunelveli District which was selected randomly for a period of six months . All adolescent girls of age group 10- 11 years of the area were identified with the Family Register maintained. They were informed of the study and informed verbal consent were obtained. Around 411 girls participated in the study. Their socio-demographic details, literacy, occupation, age of menarche, menstrual problems and hygienic practice during menstruation were obtained using a self structured questionnaire. They were clinically examined for signs of anaemia and those who were anaemic were sent to Primary Health Centre for further management.

RESULTS:

Of 411 adolescent girls, 45% of the girls were in the age

group 13-16 yrs and 133 girls were in the age group 10-12. 188 of the girls had not attained menarche and 223 had attained menarche (54.3%). Mean age of attaining menarche was 13.49yrs (standard deviation-1.36). 17(4.1%) of the girls were married. 7 were married at the age of 18 yrs .10 of them were married at the age of 19. Two of them were in early pregnancy. 64 of the girls (15.6%) had Menstrual problems. 9 of them had dysmenorrhoea, 24 of them had menorrhagia and 31of them had irregular bleeding cycles. 361(87.8%) of the girls were practicing open air defecation. Only 50(12.2%) used constructed latrines. The prevalence of anaemia in this study was 61.6%. Confidence interval (56.91-66.29) Prevalence of severe anaemia was 15.3 %. This study showed a significant association between anaemia and menstrual status. ($< P 0.002$). 65.9% of the girls who had attained menarche were anaemic.87.5% of the girls who had menstrual problems were anaemic. Girls who had menstrual problems had moderate (51.6%) and severe (28.7%) anaemia. Chances of having anaemia is 1.5 times higher for the girls who had attained menarche compared to girls who had not attained [OR 1.49].

Girls who had any menstrual problems had 5 times higher risk of developing anaemia [OR 5.23]. 46% of the girls who had menorrhagia were severely anaemic. 90% of the girls with irregular cycles were anaemic. Girls with menorrhagia had 18.4 times higher risk of developing anaemia compared to girls who had dysmenorrhoea [OR 18.4].Girls with irregular cycles had 7.5 times higher risk of developing anaemia [OR 7.47].

DISCUSSION:

Adolescence is a phase of rapid growth and development during which physical, sexual and emotional changes occur. Adolescents are not homogeneous group and their needs vary with their gender, stage of development,

life circumstances and the socio economic conditions in which they live. During adolescence, the growth spurt increases the need for iron and for girls there is further increase due to regular menstrual blood loss. A multi-centric study by the Indian Council of Medical Research showed that over 90% of adolescent girls throughout the country had some kind of anaemia. With various schemes for the adolescents, the need for the proper counseling of the adolescent girls regarding their menstrual status, hygienic practices, proper treatment of the menstrual problems and extra requirement that is needed for combating the loss are clearly seen in this study.

Tab:1 Distribution of Anaemia by type of Menstrual Problem

Type of problem	No of girls		Chi square	df	p-value	Odds ratio (95% C.I)
	Anaemic	Normal				
a. Dysmenorrhea	5	4	10.95	2	0.006	18.4(1.6-20.8) (a Vs b)
b. Menorrhagia	23	1				
c. Irregular cycles	28	3				

REFERENCES:

1. WHO -1998: Strategies for adolescent health and development in SEAR region: WHO regional office for SE ASIA, New Delhi.
2. United Nations Development Programme – Human Development Report-2005. New Delhi-2005.
3. National Family Health Survey – 2 1998-1999 Mumbai-2000.
4. Adolescents in India – A Profile December 2003 UNFPA
5. DeMayer E and Adiels –Tegman – The prevalence of anemia in World. WH Statistics. Quarterly 1985; 38:302-316.
6. WHO –Programme for Adolescent health and Development. Technical report series no: 886-1999.
7. Adolescent health and Development in India' Facts 2007 -WHO SEAR.
8. C.M.S Rawat, S.K.Garg J.V.Singh "socio demographic correlates of anemia among rural adolescent girls". Indian journal of Community Medicine vol: xxvi no: 4 Oct-Dec 2001.
9. S.Kaur, P.R. Deshmuk, B.S.Garg "Epidemiological correlates of nutritional anemia in adolescent girls of rural Wardha" Indian journal of community Medicine vol: 31 no: 4 Oct-Dec 2006 pg 255-257.
10. Sharma P, Malhotra C, Taneja DK,'Problems related to menstruation among adolescent girls' Indian J Pediatrics 2008 Feb:75(2) 125-9