



## **Knowledge, attitude, and practice regarding menstruation among adolescent girls: A cross-sectional survey.**

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### **ABSTRACT**

**Background-** To study the knowledge, attitude, and practice regarding menstruation among adolescent girls

**Methods-** A cross-sectional study was conducted among the adolescent girls. The study included girls high schools of standard 8th to 12th of Bikaner city. Data were collected with prior informed consent was taken from participants before the questionnaire was administered.

**Results-** A large number of girls 92.00% knew that menstruation is a normal process, 5.00% girls considered it as abnormal process, 1.00% as disease, and 1.00% girls did not know what menstruation.

**Conclusion-** Reproductive health is an important area of concern in adolescent health and is intimately connected with the issues such as RCH. It is also a sensitive area due to socio-cultural taboo of discussion about reproduction in the Indian society.

**Keywords-** RCH, Girls, KAP

### **INTRODUCTION:**

The period of adolescence is a period of transition between childhood and adulthood characterized by physical, physiological and psychological changes. As a result, there is growth spurt, puberty and mental maturity. The period of adolescence is vulnerable to certain health problems including sexual abuse and teenage pregnancies, reproductive tract infections, substance abuse and mental health issues including suicidal tendencies. Although both genders are equally vulnerable to most of the adolescent health problems, it is essential to focus issues pertaining to adolescent girls because they are future mothers and they are responsible for a healthy household and healthy family.<sup>1</sup>

Social economically girls represent a vulnerable group because of various factors. In India girls continue to face the wrath of improper family planning which include care of the younger siblings, early marriages and teenage pregnancies. In addition, lack of accessibility and availability of health information and need based health care makes them increasingly vulnerable to various social issues. Although the mortality rates are lowest in adolescent age group, the vulnerability to health problems remains high in the age groups. The common health problem affecting the adolescent girls include nutritional disorders, mental disorders, and reproductive health problems including menstrual problems.<sup>2</sup>

It is important to note that current social and economic development of the country has witnessed wide range of changes in the mental and emotional constitution in all the age groups, especially among the adolescents. The important reasons for this are change in the cultural value complimented with increasing economic stress and dwindling family support. These changes affect the mental health of the adolescents; more so the girls making them succumb to problems sexual and substance abuse.<sup>3</sup>

### **Materials and Methods**

Type of study- Cross-sectional study

Sample size- 200 girls

Sampling technique- simple random sampling

Data collection- A cross-sectional study was conducted among the adolescent girls. The study included girls high schools of standard 8th to 12th of Bikaner city. Data were collected with prior informed consent was taken from participants before the questionnaire was administered.

Statistical Analysis- Data was recorded as per Performa. The data analysis was computer based; SPSS-22 was used for analysis. For categoric variables chi-square test was used. For continuous variables independent samples's *t*-test was used. *p*-value <0.05 was considered as significant.

### **Results**

**Table 1: Socio-demographic information of participants (N = 200)**

Age in yrs	12.24±2.31
Joint family : Nuclear family	112 : 88
Mother education( House wife : Working)	168 : 32
Mother's literacy status ( Literate : Illiterate )	172 : 28

**Table 2: Distribution of adolescent girls according to their knowledge, attitude, and practice of menstruation**

Characteristics		No of participants	Percentage
What is menstruation	Normal process	184	92.00
	Abnormal process	10	5.00
	Disease	2	1.00
	Do not know	1	1.00
Why menstruation occurs	Cleans body of dirty blood	82	41.00
	Female becomes capable of child bearing	47	23.50
	Sign of attaining physical maturity	25	12.50
	Multiple response	25	12.50
	Do not know	21	10.50
Physical changes during puberty	Breast budding	54	27.00
	Growth of pubic hair	22	11.00
	Voice changes	14	14.00
	Hair in the armpit	50	25.00
	Multiple response	24	12.00
	Do not know	36	18.00
Following of ritual /restriction during menstruation	Yes	92	46.00
	No	108	54.00

This study found that mother was the main source of information regarding different aspects of menstruation with 83.00%. Friends, sister, teachers, and books and magazines are also individual sources with 8.00%, 4.00%, 3.00%, and 2.00%, respectively.

**Discussion**

Reproductive health is an important area of concern in adolescent health and is intimately connected with the issues such as RCH.

In this study, the mean age at menstruation was 12.24±2.31 years and the median age at menstruation was 12 years, which is matching with the study conducted by Deb and Mishra.<sup>4</sup>

Mean age of menarche reported by other studies were; 13.48 years from rural Tamil Nadu,<sup>5</sup> 13.1 years from Rohtak,<sup>6</sup> 13.2 years from Rajasthan<sup>7</sup> 13 years from Tirupati,<sup>8</sup> 12 years from West Bengal,<sup>9</sup> 10.8 years from Mumbai,<sup>9</sup> and 13.6 years from Punchkula, Haryana. The age of menarche is declining by 0.9 years per decade.<sup>11-13</sup>

A large number of girls 92.00% knew that menstruation is a normal process, 5.00% girls considered it as abnormal process, 1.00% as disease, and 1.00% girls did not know what menstruation. Similar studies carried out in Rajasthan revealed that 70% girls thought it to be an unnatural process.<sup>7</sup>

The study by Paul and Shan revealed that 70.6% girls did not know what menstruation is before they started menstruating.<sup>14</sup> However, Kamalam and Rajalakshmi reported that around one-third girls had no knowledge of what menstruation is, whereas 32% knew about menstruation.<sup>15</sup>

This study found that mother was the main source of information regarding different aspects of menstruation with 83.00%. Friends, sister, teachers, and books and magazines are also individual sources with 8.00%, 4.00%, 3.00%, and 2.00%, respectively. In a study by Kamalam and Rajalakshmi, out of 24% who had knowledge, 13% learnt from their friends and 8% from their mother and sisters.<sup>15</sup> Another study carried out in Tirupati had finding that

mother was the first source of information about menses for majority (61.2%) of the adolescent girls, followed by peers (14.7%) of the adolescents<sup>16</sup>

### **Conclusion**

Reproductive health is an important area of concern in adolescent health and is intimately connected with the issues such as RCH. It is also a sensitive area due to socio-cultural taboo of discussion about reproduction in the Indian society.

### **References**

1. Thekkekkara T, Veenu J. Factors associated with teenage pregnancy. *Indian J Community Med* 2006;31(2):83–5.
2. Nandan D, Misra SK, Sharma A, Jain M. Estimation of prevalence of RTIs/STDs among women of reproductive age group in district Agra. *Indian J Community Med.* 2002;27:110.
3. Lal S. Reaching adolescents for health and development (Editorial). *IJCM* 2001;22:167.
4. Deb T, Mishra R. Need assessment of adolescents. *Indian J Population Educ* 2005:3–17.
5. Balasubramanian P. Health needs of poor unmarried adolescent girls – A community-based study in rural Tamil Nadu. *Indian J Popul Educ* 2005:18–33.
6. Goel MK. Knowledge regarding reproductive health among urban adolescent girls of Haryana. *Indian J Community Med* 2008;35:529–30.
7. Khanna A, Goyal SR, Bhawsar R. Menstrual practices and reproductive problems: A study of adolescent girls in Rajasthan. *J Health Manag* 2005;7(1):91–107.
8. Reddy PJ, Usha Rani D, Reddy GB, Reddy KK. Reproductive health constraints of Adolescent school girls. *The Indian Journal of Social Work*, 2005; Vol.66 (4):431-441.
9. Haldar A, Ram R, Chatterjee T, Mishra R, Joardar GK. Study of need of awareness generation regarding component of reproductive and child health programme. *Indian J Community Med* 2004;XXIX(2):96–8.
10. Joshi BN, Chauhan SL, Dande UM, Tryambake VH, Gaitwad NS, Bhadoria V. Reproductive health problems and help seeking behaviour among adolescents in urban India. *Indian J Pediatr* 2006;73(6):509–13.
11. Wilson, Peter W.F. Insulin resistance and pubertal changes. *The Journal of clinical endocrinology and metabolism.* 2008; 93(7): 2472-2473.
12. Anderson SE, Dallal GE, Must A. Relative weight and race influence average age at menarche: results from two nationally representative surveys of US girls studied 25 years apart. *Pediatrics* 2003;111(4 Pt 1):844–50.
13. Anderson SE, Must A. Interpreting the continued decline in the average age at menarche: results from two nationally representative surveys of U.S. girls studied 10 years apart. *J Pediatr* 2005;147:753–60.
14. Dinesh P, Gopalakrishnan S. Knowledge and practices of adolescent girls regarding reproductive health with special emphasis on hygiene during menstruation. *National Institute of Public Cooperation and Child Development*, 2006.
15. Jyothi Kamalam K, Rajalakshmi B. Reproductive Health Awareness among College-Going Girls. *Indian Journal of Social Work.* 2005; 66 (4): 414-430.
16. Reddy PJ, Usha Rani D, Reddy GB, Reddy KK. Reproductive health constraints of adolescent school girls. *Indian J Soc Work* 2005;66(4).