

# Knowledge, attitude and practices of adolescent girls regarding menstruation: A community based cross sectional study

Nehulkar P\*, Holambe V\*\*, Thakur N\*\*\*

\* Resident, \*\* Associate Professor, \*\*\* Epidemiologist-cum-Assistant Professor, Department of Community Medicine, Government Medical College, Latur, Maharashtra, INDIA.

Email: [drnandini\\_dole@rediffmail.com](mailto:drnandini_dole@rediffmail.com)

## Abstract

**Introduction:** Adolescent girls constitute a vulnerable group, particularly in India where female child is neglected one. Menstruation is still regarded as something unclean or dirty in Indian society. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. **Aim and Objectives:** To study knowledge, status of hygiene and practices regarding menstruation among adolescent girls. **Methodology:** A descriptive cross sectional study was conducted among 346 adolescent girls of a secondary school situated in the field practice area of Urban Health Unit and Training Center, Latur. Adolescent girls who had attained menarche were only included in the study. A pre-designed pre-tested questionnaire was prepared for collection of data. Data were then compiled in an Excel sheet and collated and analyzed statistically by simple proportions. **Results:** Mean age of menarche was 12.97 years. 84.97% girls knew about menstrual cycle before their menarche. In most cases their first informant was their mother 214 (61.84%) followed by teacher. It was observed that 153 (44.22%) girls believed menstruation as a physiological process. Cleanliness of external genitalia was unsatisfactory. When mother was informer girl's knowledge about cause of menstruation was correct and it was highly significant. **Conclusion:** Current study has highlighted the need of the adolescent girls to have accurate and adequate information about menstruation and its appropriate management.

**Keywords:** Knowledge, Attitude, Practice.

## \*Address for Correspondence:

Dr. Vimal Holambe, Venkatesh Nagar, Behind Mayurban, Ambajogai Road, Latur-413512, Maharashtra, INDIA.

Email: [drnandini\\_dole@rediffmail.com](mailto:drnandini_dole@rediffmail.com)

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## INTRODUCTION

WHO has defined Adolescence as the period between 10-19 years of life.<sup>1</sup> Adolescent girls constitute about 1/5th total female population in the world.<sup>2</sup> Adolescent girls constitute a vulnerable group, particularly in India where female child is neglected one. Adolescence in girls has been recognized as a special period in their life cycle that requires specific and special attention and it is marked

with onset of menarche. Menstruation is still regarded as something unclean or dirty in Indian society.<sup>3</sup> This makes adolescent girls less confident and less comfortable about their bodies and they are therefore less likely to look after themselves.<sup>4</sup> The reaction to menstruation depends upon awareness and knowledge about the subject. The first menstruation is often horrifying and traumatic to an adolescent girl because it usually occurs without her knowing about it. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche.<sup>5</sup> Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes.<sup>5</sup> Most striking is the restricted control, which many women and girls have over their own mobility and behaviour during menstruation due to their 'impurity' during menstruation, including the myths, misconceptions, superstitions and (cultural and/or religious) taboos concerning menstrual blood and menstrual hygiene<sup>(6)</sup>. Various aspects such as

physiology, pathology and psychology of menstruation have been found to associate with health and wellbeing of women; hence it is an important issue concerning morbidity and mortality of female population.<sup>6</sup> Primarily poor personal hygiene and unsafe sanitary conditions result in gynecological problems. Infections due to lack of hygiene during menstruation are often reported. Repeated use of unclean napkins or the improperly dried cloth napkins before its reuse results in harboring of micro-organisms causing vaginal infections.<sup>7</sup> Women having a better knowledge regarding menstrual hygiene and safe menstrual practices are less vulnerable to reproductive tract infections and its consequences.<sup>5</sup> So the present study was undertaken to study knowledge, status of hygiene and practices regarding menstruation among adolescent girls.

### AIM AND OBJECTIVES

Aim of the study was to study knowledge, status of hygiene and practices regarding menstruation among adolescent girls.

### METHODOLOGY

A descriptive cross sectional study was conducted among 346 adolescent girls of a secondary school situated in the field practice area of Urban Health Unit and Training Center, Latur. Study Participants were girls from the above-mentioned secondary girl's school of class VIII and IX.. Adolescent girls who had attained menarche were only included in the study and constituted the study population. Adolescents who were present in the schools during the days of survey constituted the sample size. The study was approved by the Institutional Ethics Committee of Government Medical College Latur. A pre-designed pre-tested semi-structured questionnaire was prepared for collection of data. The school authority was contacted and the purpose of the study was explained. After obtaining the permission from the school authorities, the school was visited as per pre-planned schedule for getting information from the adolescent girls. Mutually suitable days of the week were fixed when the students had games classes or other non-academic classes. A list of adolescent girls who had attained menarche was prepared beforehand with the help of the school teachers. On the appointed day the eligible students were gathered in a hall. The adolescent girls were explained about the purpose of the study and were assured of confidentiality. A verbal consent was obtained from the girls before administering the questionnaire which included questions regarding the knowledge and awareness about menstruation, the source of information and practices followed to maintain menstrual hygiene. They were instructed on how to fill the questionnaire. Adequate time was given to fill up the

questionnaire. After completing the questionnaire, the students were asked to place their sheets in a box provided at the corner of the hall. Data regarding menstrual hygiene were collected from 346 adolescent girls. Data were then compiled in an Excel sheet and collated and analyzed statistically by simple proportions.

### RESULTS

The study showed that age of the respondents (n=346) varied from 13 – 16 years with mean age 13.98 years and standard deviation 0.98 years. The study population were predominantly Hindu (78.3%) and constituted mostly of nuclear family (72.7%), number of family member being between 5-10, the education of their mothers are mostly below secondary 38.77%, secondary (class X Pass – 29.19%), higher-secondary was 26.1%, graduate and above was 6.06%. We tried to assess the socio-economic status but non-response was for 252.8 (73.6%) students as school students were unable to tell their family income. Out of the students who have answered (n=94), most of them (28.3%) were in class II of Modified Prasad scale Mean age of menarche was 12.97 years with a SD of 1.08, range between 11-14 years. 294 (84.97%) knew about menstrual cycle before their menarche. In most cases their first informant was their mother 214 (61.84%) followed by teacher. As shown in table no.1 it was observed that 153 (44.22%) girls believed it as a physiological process. 6 (1.7%) girls believed it as a curse of God, 15 (4.3%) girls believed that it was a disease and 172(49.7%) girls didn't know the reason for menstruation. Only 15.6% knew bleeding occurs from uterus, while 31.2% of them thought urinary bladder was source of bleeding. Majority of girls 234 (67.7%) used sanitary pad as menstrual absorbent while 91 (26.29%) were using cloth as well as sanitary pad, 43 (12.42%) girls used old cloth pieces and 69 (18.30%) girls used new cloth pieces. Most common difficulty in use of sanitary pad was its high cost which was mentioned by majority of participant (63%) including those who used sanitary pads exclusively. Regarding the method of disposal of the used material 234 girls who used sanitary pads and 69 girls who used new cloth as menstrual absorbent disposed properly, i.e. they wrap the used cloth piece or sanitary pad in a paper bag and disposed in a place used for solid waste disposal. Out of 43 girls who used cloth 24 (55.81%) dried inside the house away from sunlight. Most of the girls changed pad 2-3 times per day. Hand washing with soap and water was present in 83.7%, and cleaning of external genitalia regularly i.e. at least twice a day was present in 256(74.02%) of respondents. Cleanliness of external genitalia was unsatisfactory (frequency of cleaning of external genitalia is 0-1/day) in case of 90 (25.98%) girls. Regarding different types of

restrictions practiced during menstruation [Table 2], only 24 (6.9%) girls did not practice any restriction. 322 (93.1%) girls practiced different restrictions during menstruation. Among them, 244 (70.59%) girls did not attend any religious occasion, 173 (50%) girls did not eat certain foods such as sour foods, banana and papaya. 147 (42.65%) girls did not play, 117 (33.82%) girls did not

perform any household work, 35 (16.18%) girls did not attend school and 33 (10.29%) girls did not attend any marriage ceremony during the menstrual period. It was seen that the when mother was informer girls knowledge about cause of menstruation was correct and it was highly significant.

**Table 1:** Distribution of respondents according to their Knowledge about menstruation

Attributes	Number	Percentage
<b>Knew about menstruation Before menarche</b>		
Yes	294	84.97
NO	52	15.03
<b>Source of knowledge of menstrual cycle</b>		
Mother	214	61.84
Relatives	41	11.8
Friends	7	2.02
Did not know	35	10.11
Teachers	49	14.23
<b>Knowledge of organ from where bleeding occurs</b>		
Uterus	54	15.62
Vagina	69	19.94
Bladder	108	31.22
Did not know	115	33.22
<b>Knowledge of cause of menstruation</b>		
Physiological	153	44.22
God's curse	6	1.74
Disease	15	4.33
Did not know	172	49.71

**Table 2:** Distribution of respondents according to their practice during menstruation

Attribute	Number	Percentage
<b>Type of absorbent</b>		
Sanitary pads	234	67.7
New cloth	14	2.41
Old washed cloth	7	2.02
Pad + old washed cloth	36	10.4
Pad+ new washed colth	55	15.89
<b>Different restriction among adolescent girls during menstruation</b>		
Religious places	244	70.59
Food	173	50
Games	147	42.65
Didn't attend school	35	16.18
Marriages	33	10.29
Didn't do household work	117	33.82
No restrictions	24	6.9

**Table 3:** Distribution of respondents according to their knowledge about cause of menstruation and mother as informer

Informer/cause	Physiological	other	Total
Mother	110	98	208
Sister, teacher, friend, relatives	42	96	138
<b>Total</b>	<b>152</b>	<b>194</b>	<b>346</b>

$$\chi^2 = 16.97 \text{ df} = 1 \text{ p} < 0.005$$

## DISCUSSION

In the present study, the mean age of menarche of the respondents was 12.97 years, similarly in a study conducted in Udupi Karnataka by Public health

department of Manipal University<sup>8</sup> the mean age of menarche in urban girls was 12.39 whereas in study conducted in Rajasthan in 2005 by Khanna *et al*<sup>9</sup> the mean age at menarche was found to be 13.2 years. Only

15% girls were ignorant about menstruation before menarche in this study. Each and every girl child should be aware about menstruation, ideally a mother should be the main informant at this tender age. In 62% of respondents mother was the informant followed by teacher. Similar findings of mother as main source of information were seen in study conducted in Udipi Karnataka by Public health department of Manipal University<sup>8</sup>. Another study conducted by Deo *et al.*<sup>10</sup> reported that 40 (42.5%) urban and 41 (55.4%) rural girls were aware about menstruation prior to attainment of menarche. In urban girls, mother was the main source of information about menstruation (27.5%), whereas it was teacher in the rural counterparts (27.01%). Other sources of information were friends, relatives and books. In a study conducted in West Bengal friends were most common source of information<sup>5</sup>. It was observed in this study that 72.8% girls believed it to be a physiological process, whereas in a similar study conducted in Rajasthan by Khanna *et al.*<sup>9</sup>, nearly 70% believed that menstruation was not a natural process. Similar research done in Andhra Pradesh University by Drakshayani *et al.*<sup>11</sup> detected that around 78.5% knew menstrual bleeding originated from the uterus. In this study it was 15.6%. A study by Dasgupta *et al.*<sup>12</sup> in a rural community showed that majority of the girls preferred cloth pieces rather than sanitary pads as menstrual absorbent. Only 11.25% girls used sanitary pads during menstruation. In a study conducted in Rajasthan by Khanna *et al.*<sup>9</sup> three-fourths of the girls used old cloth during their periods and only one-fifth reported using readymade sanitary pads. In this study majority of girls used sanitary pads of girls (67.7%) used sanitary pad as menstrual absorbent while 26% were using cloth as well as sanitary pad. Regular cleaning (atleast twice a day) of genitalia with water was present in 74.02% of respondents as against 76.9% in the study conducted in West Bengal<sup>5</sup>. Most common difficulty in use of sanitary pad was its high cost which was mentioned by majority of participant (63%) including those who used sanitary pads exclusively whereas study conducted in Udipi Karnataka it was 30.8%<sup>8</sup>.

## CONCLUSION

Majority of the girls knew about menstrual cycle before their menarch. In most cases their first informant was their mother. Knowledge about menstrual physiology was poor. Method of disposal of absorbent used was not satisfactory. Cleanliness of external genitalia was unsatisfactory. Practicing various restrictions during menstruation was still prevalent. It was seen that the when mother was informer, girl's knowledge about cause of menstruation was correct and it was highly significant.

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