



## Original Research Article

# Knowledge and practice regarding menstrual hygiene among urban adolescents- A cross-sectional study

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## ARTICLE INFO

## Article history:

Received 15-06-2021

Accepted 22-06-2021

Available online 12-07-2021

## Keywords:

Adolescent girl

Knowledge

Menstruation

Hygiene

Sanitary pads

## ABSTRACT

**Background:** Adolescence is the significant period in the life of a woman. Menstrual disturbances are the commonest presenting complaint in adolescent age group and unhygienic practices during menstruation can lead to untoward consequences like pelvic inflammatory disease and even infertility.

**Objectives:** To study the knowledge and practice regarding menstrual hygiene among adolescents.

**Materials and Methods:** This is a cross-sectional study conducted from October 2018 to December 2018 among 100 adolescent girls who attended adolescent clinics at Urban Health Training centre of KBNU Medical College, Kalaburagi.

**Results:** The mean age of participants was  $16.2 \pm 2.1$  SD. only 26% of participants were aware about menstruation before menarche. Majority (91%) of participants had knowledge about use of sanitary pads during menstruation but only 78% used them. The most common reason for non usage was the cost of pads (68%). The method of disposal was satisfactory among 62% of participants and 84% of participants change their pads/cloth pieces 2-3 times per day. Restriction of diet during menstruation was seen in 40% and 30% missed school during their periods.

**Conclusion:** Although there was good knowledge regarding menstrual hygiene among adolescent girls, practice needs to improve. Health education sessions at urban health clinics and schools involving mothers of these adolescent girls can aid to overcome socio cultural practices of restricting movement and diet restrictions during menstruation.

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## 1. Introduction

## "Menstruation is not a problem, poor menstrual hygiene is".

Adolescence period is a very crucial period of transition from childhood to adult life during which pubertal development and sexual maturation takes place. Menstrual disturbances are very common in adolescents and unhygienic practices during menstruation can result in various gynaecological problems in later life. Special health care and requirements of woman during monthly cycle of menstruation are collectively given the term MENSTRUAL Hygiene.<sup>1</sup>

There is lack of knowledge regarding reproductive health including menstruation among adolescents which can be due to socio-cultural barriers in which they grow up. The need of hour for girls is to have the information, education and an enabling environment to cope up with menstrual issues. Personal and genital hygiene along with the use of sanitary pads are essential practices to keep the menstrual hygiene. Unhygienic menstrual practices can affect the health of the girls and there is an increased vulnerability to reproductive tract infection, pelvic inflammatory disease, urinary tract infection, fungal infection, cervical cancer etc.<sup>2</sup>

Menstruation is generally considered as unclean in India. certain social prohibitions and strong belief with the taboos and traditional myths during menstruation and

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hesitation of parents not discussing the related issues openly to their daughters has blocked access to right kind of information regarding menstrual hygiene. Because of lack of knowledge, they end-up with repeated use of unclean menstrual absorbent results in harbouring of micro-organisms that increases susceptibility to urinary, vaginal and pelvic infections.<sup>3</sup>

Menstrual hygiene management (MHM) is a problem for adolescent girls in low and middle income countries (LMICs), particularly when attending schools. Poor water, sanitation and hygiene (WASH) facilities in schools, inadequate puberty education and cost of sanitary pads cause girls to experience menstruation as an embarrassment and uncomfortable. Qualitative studies report girls fear and humiliation from stained cloths and bad odour and lead menstruating girls to absent themselves from school, while little quantitative data confirming this cultural taboos add to girls difficulties, preventing them from seeking help, and impose restrictions on their diet and activities when menstruating.<sup>4</sup>

Attitude of parents and society in discussing the related issues are barrier to the right kind of information. There are many cultural taboos surrounding menstruation which is still considered as an embarrassment in most of our cultures. With this background the study was undertaken to elicit the level of knowledge and practice among adolescent girls coming to UHTC Khaja bazaar area, KBNU Medical College, Kalaburagi.

## 2. Objectives

1. To study the knowledge and practice regarding menstrual hygiene among adolescents.
2. To find out the status of menstrual hygiene among adolescent girls.

## 3. Materials and Methods

This is descriptive cross-sectional study conducted from October 2018 to December 2018 among 100 adolescent girls who attended adolescent clinics at Urban Health Training centre, Khaja bazaar area, KBNU Medical College, Kalaburagi. One adolescent health clinic is being held at UHTC every month. A total of 108 adolescents attended this clinic between October-December 2018. This study was conducted after taking informed consent from the girls. A pretested, pre validated, semi structured questionnaire was used to collect the data. Out of 108 participants, 03 participants did not consent for the study and 05 of the questionnaires were incomplete, so after excluding these participants, the final sample size came out to be 100.

The study tool consisted of consent form, a questionnaire with socio-demographic details of participants, knowledge questions like absorbents used, duration of normal menstrual flow, effects of using cloths,. Practice section

included disposal of sanitary pads, pads changed per day, Cleaning of external genitalia and questions of restriction during menstruation.

All the collected data was entered in excel sheet and analyzed using SPSS software version 22. Descriptive statistics like percentages, mean, standard deviation were used to describe the data.

## 4. Results

Total 100 participants were included in the study. The mean age of participants was  $16.2 \pm 2.1$  SD. 23% of participants belong to early adolescent group, 38% belong to middle adolescent group and 39% belong to late adolescent group. Majority (75%) of girls belonged to nuclear family. 74% of participants were in high school, whereas 18% of participants were illiterates. Around 41% of participants belonged to lower middle class according to modified BG Prasad classification. The rate of literacy among mother's of participants was 73% and among fathers was 71%.

Mean age of menarche in the study was  $13.07 \pm 1.5$  SD years. When asked about the knowledge regarding menstruation, only 26% of participants were aware about menstruation before menarche. Majority (91%) of participants had knowledge about absorbents used during menstruation. Around 63% of participants answered duration of normal flow to 4-5 days. 88% of them knew about the harmful effects of using clothes. The common cause of menstruation being physiological process which was answered by majority (91%) of participants and others considered it as curse of God (3%), sin (3%) and disease (2%).

Practice of the participants was assessed and it was observed that majority (78%) of participants use sanitary pads as absorbents and the remaining percentage use clothes (10%), both clothes & sanitary pads (12%).

Among those who were not using sanitary pads, the most common reason was the cost of the pad (68%), around 13% felt it uncomfortable and around 18% thought it may cause infection. 84% of participants change their pads /cloth pieces 2-3 times per day, the method of disposal is satisfactory among 62% of participants and cleaning of external genitalia is satisfactory in majority (72%) of participants.

Restrictions during menstruation revealed that 40% of participants restricted diet during menstruation and among them the most common reason was pain (48%), the other reason were excessive bleeding (25%) and restriction from parents (27%). 82% of the girls were restricted from religious occasions. Missing of school during periods was seen in around 30% of participants and the most common reason being pain (57%) and the other reasons were that they feel uncomfortable (20%), fear of staining clothes (13%) and no place to change pads (10%).

**Table 1:** Sociodemographic profile of the study participants (n=100)

	<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age group</b>	11-14yrs	23	23
	15-17 yrs	38	38
	18-19yrs	39	39
Type of family	Nuclear	75	75
	Joint	25	25
	Illiterate	18	18
Education of participant	Primary school	2	2
	Secondary school	6	6
	High school	74	74
	Upper	4	4
Socioeconomic class	Middle	10	10
	Upper Middle	22	22
	Lower Middle	41	41
	Lower	23	23
Mother's education	Illiterate	27	27
	Literate	73	73
Father's education	Illiterate	29	29
	Literate	71	71

**Table 2:** Knowledge regarding menstrual hygiene (n=100)

<b>Variables</b>		<b>Frequency</b>	<b>Percent</b>
Awareness before menarche	Present	26	26
	Absent	74	74
Knowledge about absorbents used	Present	91	91
	Absent	9	9
Knowledge about effects of using clothes	Present	88	88
	Absent	12	12
Duration of normal flow	2-3days	20	20
	4-5days	63	63
	>5days	17	17
Cause of menstruation	Physiological process	92	92
	Curse of God	3	3
	Sin	3	3
	Disease	2	2

**Table 3:** Practice of menstrual hygiene (n=100)

<b>Variables</b>		<b>Frequency</b>	<b>Percent</b>
Absorbents used	Sanitary pads	78	78
	Clothes	10	10
	Both	12	12
Reason for not using pads (n=22)	expensive	15	68.2
	feel uncomfortable	3	13.6
	may cause infection	4	18.2
No of pads/cloth pieces changed per day	<2	7	7
	2 to 3	84	84
	>3	9	9
Method of disposal	Satisfactory	62	62
	Not satisfactory	38	38
Cleaning of external genitalia	Satisfactory	72	72
	Not satisfactory	28	28

**Table 4:** Restriction during menstruation (n=100)

Variables		Frequency	Percent
Diet restricted	Yes	40	40
	No	60	60
Reason for restriction of diet (n=40)	Excessive bleeding	10	25
	Pain	19	47.5
	Restriction from parents	11	27.5
	Yes	82	82
Restricted for religious occasion	No	18	18
	Yes	30	30
Missing school	No	70	70
	Staining clothes	4	13.3
Reasons for missing school (n=30)	Pain	17	56.7
	Uncomfortable	6	20.0
	No place to change pads	3	10.0

## 5. Discussion

This present study showed that the mean age of participants was 16.26 yrs + 2.1SD. Similar mean age was also seen in a study conducted by Nair AR in Bhopal where the mean age of girls was 15.67+ 1.2.<sup>5</sup> In our study about 73% of participant's mother were literates where as in a study done in Bhopal 53.29% of participant's mother were illiterate.<sup>5</sup> Higher literacy 90% among the mothers was also seen in a study done by Mahajan et al. Himachal Pradesh.<sup>6</sup>

The study revealed that only 26% of the participants had awareness about menstruation before menarche which is very low compared to a study done in Himachal Pradesh where 58.8% of them were aware of menstruation before menarche.<sup>6</sup> The reason may be attributed to higher literacy rate among the mothers in their region. So mothers should be taught about the hygienic practices during menstruation to break their inhibitions about discussing with their daughters about menstruation prior to attainment of menarche.

92% of the girls in our study believed that menstruation to be a physiological process. Similar findings were seen in study conducted by Tiwari A et al. in Murhipar, Rajnandgaon (74.5%),<sup>7</sup> (82.9%).<sup>8</sup> Whereas in a study done in Bhopal only 44.67% girls believed it to be a physiological process. The higher percentage of findings in our study may be due to information provided about menstruation at the adolescent health clinics of UHTC. 78% of girls in present study used sanitary pads. Whereas in study done by Dasgupta et al. only 11.25% of girls used sanitary pads. Although in the present study the knowledge is good but the practice of using sanitary pads is not upto the mark the reasons may be high cost of sanitary pads, poor knowledge of the mothers and low socio economic status.

Method of disposal of sanitary pads was satisfactory among 62% of the girls. Similar findings were seen in various other studies.<sup>6-8</sup> Personal hygienic practices cleaning of genitalia was satisfactory among 72% of participants which were similar to findings seen in study

done in Jammu (66.91%).<sup>7</sup>

In the present study, about 40% of the participants restricted their diet during menstruation and the most common reason was pain (47.5%). In 82% of the girls restrictions were also imposed on religious occasions which is still an existing socio cultural taboo where menstruating girls are not allowed to offer prayers. Similar restrictions were seen in various other studies.<sup>9-12</sup>

## 6. Conclusion

Improper hygiene during menstruation is a very common risk factor for reproductive tract infections. Many schools fail to provide this understanding to the adolescent girls. Therefore strengthening the IEC activities regarding menstrual hygiene at UHTC has to be done. Sneha clinics are being held at various PHCs to address the health issues of adolescents. Even educational televisions programmes are spreading the same message. Such platforms are to be used more to reach wider sections of society. Girls need to be made aware about the government services like the availability of sanitary pads at subsidised rates. Health education sessions involving mothers of adolescent girls to improve their knowledge and awareness so as to break the myths and taboos surrounding menstruation so that they can freely talk to their daughters which will aid them to make proper choices to lead a healthy life.

## 7. Source of Funding

Nil.

## 8. Conflicts of Interest

None declared.

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**Cite this article:** Sajjan SV, Neeta P N, Shingade PP. Knowledge and practice regarding menstrual hygiene among urban adolescents- A cross-sectional study. *Indian J Forensic Community Med* 2021;8(2):120-124.