

Knowledge and practices about menstrual hygiene among higher secondary school girls

Verma P¹, Ahmad S², Srivastava RK³

¹Phd Student, ²Senior Resident, ³ Professor, Department of Community Medicine, IMS, BHU, Varanasi.

Abstract

Introduction: Issues related to menstruation and its practices are still foggy due to taboos and socio-cultural restrictions resulting in adolescent girls remaining uninformed of the technical facts and hygienic practices to keep good health that is why sometimes it results in to adverse health outcomes.

Objectives: (i) To find out the age of menarche. (ii) To elicit the beliefs, perception and source of information regarding menstruation among adolescent girls.

Materials and Methods: A descriptive cross sectional study was conducted among 120 adolescent girls of a higher secondary school situated in Varanasi District. Information was obtained with the help of a predesigned and pretested questionnaire in a local language.

Results: About half of the girls (58.3%) were aware about menstruation prior to attainment of menarche. The mean age of menarche was found to be 12.98yrs (± 0.77). The most common menstrual pattern was 30/3 days. Mother was the first informant regarding menstruation in case of (41.66%) of girls. Most of the girls (85.8%) believed it as a physiological process. Regarding practices, only 61 (50.8%) girls informed about the use of sanitary pads during menstruation. Most of the girls 59 (49.16%) used old plain cloth as menstrual absorbent. About (82.5%) girls practiced different restrictions during menstruation.

Conclusion: Menstrual hygiene is still a very important risk factor for reproductive tract infections and it is a vital component of the health education to the adolescent girls. Educational television programmes, trained school nurses/ health personnel, motivated school teachers, and knowledgeable parents can play a very important role in transmitting the critical messages of correct practices about menstrual hygiene to the adolescent girls of today.

Key-words: Adolescent girls, menarche, menstrual hygiene, menstrual problem.

Introduction:

WHO has defined Adolescence as the period between 10-19 years of life¹. Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. This period is marked with onset of menarche. Adolescent girls constitute about 1/5th of the total female population in the world. These also constitute a vulnerable group particularly in India where female child is neglected one. The first menstruation is often horrifying and traumatic to an adolescent girl because it usually occurs without her knowing about it³. Although menstruation is a normal physiological phenomenon for females indicating her capability for procreation⁴. It is linked with several perceptions and practices, which sometimes result in

adverse health outcomes. Women having a better knowledge regarding menstrual hygiene and safe menstrual practices are less vulnerable to reproductive tract infections and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women.

With the above background, this study was undertaken with the following objectives.

1. To find out the age of menarche among the adolescent girls.
2. To elicit the beliefs, perception and source of information regarding menstruation among Study population.
3. To know the menstrual pattern and menstrual hygiene practice among adolescent girls.

Address for Correspondence:

Shamshad Ahmad, SR, Department of Community Medicine, IMS, BHU, Varanasi-221005.

Email: ahmadinbhu@gmail.com

Study design: A cross sectional study. The present study was carried out in a secondary school in Varanasi district. The Vasant Kanya Inter College was purposively selected for the study. During the period from January 2013 to March 2013 information was gathered. A total of 120 adolescent girls of 9th to 12th standard were included in this study.

Study Period: January 2013 to March 2013.

Study tools and technique: A pre-designed, pretested and structured questionnaire was used in the study. The data collection technique was a personal interview of the study subjects.

Study population: Total One hundred and twenty girls from the above mentioned schools, of the 9th to 12th standards, were interviewed for the study.

Methodology: Permission from the school authorities was taken, the class teachers were explained about the purpose of the study and the nature of the information which had to be furnished by the study subjects. This pre-designed, pretested and structured questionnaire included topics which were related to the awareness about menstruation, the sources of information regarding menstruation, regularity of menstrual period. Duration of menstrual period, facilities available to maintain hygiene & social taboos followed during menstruation. At the end of the data collection through questionnaire, all their queries were answered by the researcher on the same day.

Data analysis: Data obtained were collated and analysed statistically with the help of Microsoft – excel version 2007.

Result:

Table 1: Demographic characteristics of study population

Demographic characteristics of adolescent girls		Number	Proportion (%)
Age (Completed Years)	13-14	30	25.0
	15-16	69	57.5
	17-18	21	17.5
Education	Middle	69	57.5
	High School	27	22.5
	Intermediate	24	20.0
Occupation of father	Farmer	62	51.7
	Business	10	8.3
	Job govt. / private	34	28.3
	Skilled work	14	11.66

Table 1 show that the age of menstruating girls ranged from 13-18 years, maximum (23%) number of girls in the study being between 15-16 years of age group. Among 120 respondents, fathers of the most of the

girls were farmer (51.6%) followed by service holders (28.3%), businessman (8.3%), and skilled workers (11.6%).

Table 2: Menstrual pattern in adolescent girls

Status of menstruation		Number	(%)
Age at menarche(Yrs)	< 11	16	13.3
	11 – 13	54	45.0
	> 13	50	41.7
Duration of blood flow (days)	≤ 3	92	76.6
	> 3	28	23.3
Length of cycle (days)	< 28	24	20.0
	28 – 32	93	77.5
	> 32	3	2.5

Table 2 shows that half of the girls (45%) had attained menarche in the age ranged between 11-13 years, 23.3 % girls had reported blood flow for more than 3 days. While most of the girls (77.5%) the menstrual cycle was of 28-32 days.

Table 3: Awareness regarding menstruation in adolescent girls

Menstruation related information		Number	(%)
Awareness during menarche	Present	70	58.3
	Absent	50	41.7
Source of information	Mother	50	41.7
	Friends	33	27.5
	Sister	12	10.0
	Relatives	12	10.0
	Books	13	10.8
Cause of menstruation	Physiological process	103	85.8
	Curse of God	8	6.7
	Hormonal	9	7.5

Table 3 shows that 58.3% girls were found aware about menstruation even prior to attainment of menarche. Remaining girls were not informed about menses. Among 120 respondents, the main source of information was mother (41.6%). Other source of information was either through their friends or relatives, 27.5% and 10% respectively. Books & other source of knowledge was(10.8% & 10% respectively. Most of the girls (85.8%) believed it as a physiological process. Very few (6.6%) girls believed it as a curse of god and another group of girls (7.5%) believed it due to hormonal change.

Table 4: General practices of menstrual hygiene among adolescent girls

General practices prevailing related to menstrual hygiene		Number	(%)
Prior preparation done	Yes	16	13.3
	No	104	86.6
Types of protections used in first menstruation	Sanitary pads	55	45.8
	Cloths	65	54.16
Protections used in the Previous month	Sanitary pads	61	50.83
	Cloths	59	49.16
Reasons for not Using sanitary pads	High cost	45	71.4
	Unavailability	4	6.3
	Shyness	5	7.9
Willing to use Sanitary pads	Not comfortable	9	14.28
	Yes	111	92.5
Method of disposal of menstrual absorbents.	No	9	7.5
	Rap in paper and throw it in routine waste	80	66.6
	Throw in landfill	8	6.66
	Throw in pond	3	2.5
	Throw in garden	11	9.16
Toilet facilities at home	Throw in dustbin	18	15
	Yes	95	79.16
	No	25	20.83

Table 4 illustrate that more than half of the girls (54.16%) used cloth during menarche and (45.8%) used commercially available sanitary pads. This study showed that 92.5% of the girls want to use sanitary pads as a menstrual absorbent. The apparent reason for not using sanitary pads, observed in this study, were, not felt comfortable 14.28%, high costs 71.8%, unavailability (6.3%) and shyness (7.9%). Regarding the method of disposal of the used material, two third (66.6%) girls informed that they properly disposed the cloth pieces or sanitary pads used i.e. they wrap the used cloth piece or sanitary pad in a paper and disposed in a place identified for solid waste disposal. Most of the girls (79.16%) informed that the toilet facility was available at their home. Half of the girls informed that during their previous menstrual period, they used sanitary pads as absorbent while (49.16%) used any available piece of cloth at their home. Such clothes were not reused but discarded.

Table 5: Type of problems faced during menstruation

Problems faced during menstruation		Number	(%)
Any problem during Menstruation (n=120)	Yes	75	62.5
	No	45	37.5
Types of problem (n = 75)	Abdominal pain	20	25.9
	Waist pain	17	22.1
	Pain in whole body	18	24.0
	Breast tenderness	3	3.9
	Vomiting	5	6.5
	Giddiness	12	15.8
Any menstrual problem faced in the previous menstruation (n=120)	Yes	69	57.5
	No	51	42.5

Table 5 shows that about two third adolescent girls (62.5%) had painful menstrual periods. The pain among 24.0 % girls was in the whole body. However half of the respondents mentioned pain in the lower part of the body. Girl's experienced pain during menses and the

Table 6: Social taboos and restrictions followed during menstruation

Different social taboos & restrictions	Number	(%)
In general some restrictions practiced	99	82.5
Did not allow to do household work	35	29.2
Did not allow to attend school	19	15.8
Did not allow to play	73	63.9
Did not allow to go outside home	36	30.0
Asked to sleep separately	10	8.3

duration following before period, like lower abdominal pain (25.97%), waist pain (22.7%). However 57.5% girls informed that they have faced menstrual problem in their previous menstrual cycle.

Table 6 shows different beliefs and perception about menstruation among the respondents. Majority (82.5%) of the adolescent girls informed that some forms of restrictions are practiced in their family during the period of menstruation. Among them one third girls (30%) were not allowed to go outside home. About two third girls (63.9%) were not allowed playing and one fourth of the girls (29.16%) were not allowed to perform any household work etc

Table 7: Sanitary Pad use according to different demographic parameters

Parameters	Category	Use of Pads		Test of Significance
		Yes	No	
Education	High School	13	14	X ² =1.635 P=0.44
	Intermediate	15	9	
	Middle	33	36	
Occupation of father	Business	5	5	X ² =3.730 P=0.157
	Farmer	26	36	
	Job(Govt./Private)	20	14	
	Skilled Labourer	10	4	
Age (Years)	13-14	11	19	X ² =3.654 P=0.161
	15-16	37	32	
	17-18	13	8	

No statistically significant association was found between use of sanitary pad and age of respondent ($p=0.16$), level of education ($p=0.44$) and father's occupation ($p=0.15$). (Table 7)

Discussion:

In the present study most of the girls have attained menarche between 11-13 years. The mean age of menarche in our study was found to be 12.98 (± 0.77). The results are almost same as reported by Shekhar et al.⁵ In their study, the mean age of menarche was found to be 12.97 (± 0.99). In another study conducted by Singh M.M. et al.⁶ the mean age of menarche was found to be 13.6. Another study conducted in Bhavnagar (Gujarat)⁴ the mean age of menarche was reported a little higher 14 (13.99 ± 1.8) than this study. However, 41.7% adolescent girls in this study also reported age of menarche more than 13 years.

In our study 76.6% girls have reported blood flow less than or equal to 3 days. Similar findings were observed by a study conducted by P.B. et al.⁴ in Gujarat. The most common menstrual pattern was 30/3-5 days. Almost similar finding was also reported by Lawan et al.⁷ Every mature female menstruates on the average 3-5 days (minimum 2 days, maximum 7 days) each month until menopause. Balsubramanian,⁹ also reported that 84% girls had menstrual blood flow of 3-5 days. In the present study only 58.33% girls had prior knowledge about menstruation before menarche which is in contrary to a similar study conducted by Dasgupta et al.⁹ where only one-third respondents (32.5%) had prior knowledge of menstruation. In another study conducted by Deo et al.¹⁵ reported that 42.5% urban

and 55.4% rural girls were aware about menstruation prior to attainment of menarche. However, mother was the first informant only in case of 41.66% girls in the present study which is similar to study conducted by Dasgupta et al.⁹ where 37.5% cases mother was the key informant. In a study conducted among 664 school girls aged 14-18 in Mansour, Egypt by El – Gilany et al.¹⁰ mass media were the main source of information about menstrual hygiene followed by mother. Singh et al. found that in case of 64.9% girls, mother was first source of information.

It was further noted in this study, that 85.83% of the girls believed menstruation to be as a physiological process, this observation was very much similar to a study conducted by Dasgupta et al.⁹ where 86.25% believed it to be a physiological process. However, in another study conducted in Rajasthan by Khanna et al.¹¹ nearly 70% girls believed that menstruation was not a natural process.

"A woman is ritually impure during menstruation and anyone or anything she touches becomes impure as well. It is usually the mothers who enforce these restrictions". In India different restrictions & social taboos are being practiced by most of girls during menstruation, possibly due to different rituals in their communities. Many restrictions imposed on the girls were recorded in the present study, like not allowed to play, not allowed to attend school were most common. This finding was very similar to the study conducted by Dasgupta et al.⁹ where not performing religious rituals during menstruation was the most common restriction observed and 16% of the girls reported school

absenteeism, it was similar to the present study (15.83%). In a study carried out in the Nepal (Water Aid in Nepal 2009a),¹³ 89.0 % of respondents practiced some form of restriction or exclusion during menstruation. This is very similar (82.50 %) to the present findings.

This study showed that half of the girls (54.16%) used cloth during menarche and (45.8%) used commercially available sanitary pads. A study conducted by Jogdand et.al.¹³, reported that 34.63% girls used old clothes during menstruation. Poverty, high cost of sanitary pads and ignorance seemed to be the reasons during the present study. In a study conducted in Kolkata by Sudeshna et.al.¹⁴, reported that majority of the girls preferred cloth pieces rather than sanitary pads as menstrual absorbent. More than half of the girls were ignorant about the use of sanitary pads during menstruation and only 13.2% girls used sanitary pads during menstruation while around 24.2% used both reusable cloth and sanitary pad. In a study conducted in Rajasthan by Khanna et al.¹¹ three fourths of the girls used old cloth during their periods and only one-fifth reported using readymade sanitary pads. In this study the apparent reason for not using sanitary pads was either they did not feel comfortable (14.28%), high costs (71.8%), unavailability (6.3%) and shyness (7.9%). In a study conducted in South Asia¹³ demonstrated the reasons for not using sanitary pads as lack of awareness about them (41 %), high cost (39 %), the fact that they were not easily available (33 %), and lack of disposal facilities (24 %). It is desirable that each and every girl child should be empowered through education about menstruation, which is an important event in the life of adolescence and preferably they should be made informed before the attainment of menarche.

Conclusion and Recommendation:

This study has highlighted the need of adolescent girls to have accurate and adequate information about menstruation and its appropriate management. Girls should be well-versed before the age of menarche about the physiology of menstruation, the process involved and its importance etc. Education regarding reproductive health and hygiene should be included as a part of school curriculum. Menstrual hygiene & social taboos followed during menstruation are issues needs to be addressed at all levels. A variety of factors are known to affect menstrual behaviours, the most influential ones being economic status. It is essential to design a mechanism to address and for the access of healthy

menstrual practices. Formal as well as informal channels of communication such as mothers, sisters and friends, need to be emphasized for the delivery of such information.

Mothers are primarily responsible for the communication of such type of information. This will help the girls to take it positively. Hygiene during menstruation should be maintained, so to avoid any reproductive tract infection. Thus, the above findings reinforce the need to encourage safe and hygienic practices among the adolescent girls and bring them out of traditional beliefs, misconceptions and restrictions regarding menstruation. An educated adolescent girl will take care of her girl child in the future and will maintain the cycle of spread of information to the next generation.

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