



Research Article

# A Cross- sectional Study to Assess the Knowledge and Expressed Practices Regarding Menstrual Hygiene among Adolescents in Selected Community, New Delhi

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## INFO

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## ABSTRACT

**Aim:** The objectives of the study were to assess the knowledge of adolescent girls regarding menstrual hygiene and to assess the expressed practices among adolescent girls regarding menstrual hygiene in the selected community, New Delhi.

**Introduction:** Menstruation starts in adolescence for females. There are serious reproductive diseases that can arise from poor menstrual hygiene. Nonetheless, menstrual hygiene can be enhanced by increasing awareness of menstruation even prior to menarche. A cross-sectional study to assess the knowledge and expressed practices regarding menstrual hygiene was conducted among adolescents in a selected community, New Delhi.

**Methodology:** A quantitative approach with descriptive survey design was employed among 110 adolescent girls in the community at Sangam Vihar. Data was collected in family setting. A semi-structured, self-administering questionnaire was used to collect information on demographic profile, general information regarding menstruation, knowledge about menstruation, and expressed practices regarding menstrual hygiene. The survey was conducted in June 2023.

**Results:** Results showed that in terms of knowledge, 72.7% of adolescent girls fell in the 'above average' category, 15.45% subjects in 'below average' and only 11.8% came in the 'under average' category.

**Conclusion:** The study highlights that the majority of adolescent girls demonstrated above-average knowledge regarding menstrual hygiene, indicating a positive level of awareness within the community.

**Keywords:** Adolescence, menstrual hygiene, expressed practices



## Introduction

Adolescence is considered to be a unique and transitional phase of development of humans. Adolescence, the transition period between childhood and adulthood is considered to begin with puberty. Puberty is special for girls who are about to start or have started menstruating. Like lot of other changes associated with puberty, menstruation can be confusing for girls. Adolescent girls' population is at a higher risk of reproductive tract infections. Therefore, there is a need to bring the adolescent health issue in to focus. It has been observed during clinical experience a large number of girls are been worried about early or late onset of menarche. It was also observed that many girls have registered them in OPDs with perineal infection. There are major repercussions when girls are not made aware of their own physiology and anatomy. The necessity of menstruation education as long term, ongoing process that starts long before menarche is required. Henceforth, the present study is undertaken to identify the expressed practices and knowledge regarding menstrual hygiene among adolescent girls in community.<sup>1,2</sup>

Objectives of the study were to assess the knowledge and expressed practices regarding menstrual hygiene among adolescent girls.

## Methodology

Quantitative approach with descriptive survey approach was used for the study. Population for the study was adolescent girls. Convenient sampling technique was used as sampling technique with sample size as 110 adolescent girls in the age group of 10 to 19 years from the selected community using Cochran formula. Setting of the study was Sangam Vihar, selected community of New Delhi. The data was collected in family setting. The data collection tool was structured questionnaire on knowledge and expressed practice with 10 questions in each. Data Collection Technique used was pen-paper test. Descriptive statistics was used for analysis interpretation of data.<sup>3</sup>

Range of score in knowledge questionnaire was 0 to 10. Categories of the knowledge formed were as follows 0-5 as below average, 6-8 as average and 9-10 as above average.

## Results

The results are analyzed as following:

### Analysis of background data of sample subjects

Table 1 presents demographic data on age, education, mother's education, father's education, religion of sample

subjects. The data showed that out of 110 samples, maximum girls were of age group 16-19. Around 33.65 % were educated upto high school.. 45 % of adolescent girls' mothers are uneducated whereas 45.4% fathers are high school passed. Maximum participants i.e. 59% were Hindu.

Table 2 presents general information regarding age at menarche, duration of menses, pain during menses and regularity of menses. With regard to age at menarche, 13.6% were 10-11 years, 56.3% were 12-13 years, 25.4% were 14-15 years and 4.54% were 16 and above. With regard to duration of menses 68% that is maximum participants had 3-5 days, 2. With regard to pain during menses, 82.7% suffered with pain. 82.7% had regular menses.

### Analysis of Knowledge Score of Sample Subjects regarding Menstrual Hygiene

This section deals with the analysis and interpretation of knowledge of adolescent girls regarding menstrual hygiene through structured knowledge questionnaire from 110 sample subjects.

For purpose of analysis, scoring of knowledge based questions was done. 1 mark was awarded for each correct answer and 0 for wrong answer, the range of marks that could be obtained was 0 to 10.<sup>4</sup>

The data showed (table 3) the maximum number of students 72.7% came under above average category. 15.45% subjects had scored below average, only 11.8% came under average category.

This showed that large portion of student came under above average category for knowledge score.

### Analysis of Expressed Practices of Sample Subjects

According to Table 4 of expressed practices majority of adolescent girls i.e; 62.7% were using sanitary pads as absorbent material whereas usage of cloth material is also remarkably high i.e; 24.6 % and only 14% were using tampon during menses. Majority of adolescent girls 56.54% were using only water to clean their genital area, a remarkably high i.e.; 37% were using soap and water to clean their genital area, whereas 5.45% were using any other solutions like V wash and only 4.54 % don't use any solution to clean their genital area during menses. Maximum adolescent girls throw their absorbent material in dustbin. A good percentage i.e; 40.08% of adolescent girls clean their vaginal area during menstruation.<sup>5</sup>

**Table 1. Frequency and percentages distribution of sample subjects by their demographic data**

N= 110

Demographic Profile	Frequency	Percentage
<b>Age</b>		
10-12 years	12	10.9
13-15 years	45	40.9
16-19 years	53	48.1
<b>Education</b>		
Uneducated	5	4.54
Primary school	25	22.7
High school	37	33.6
Senior secondary	43	39
<b>Mother's education</b>		
Uneducated	50	45
Primary school	28	25
High school	17	15
Senior secondary	15	13
<b>Father's education</b>		
Uneducated	23	20.9
Primary school	20	18.1
High school	50	45.4
Senior secondary and above	17	15.4
<b>Religion</b>		
Hindu	65	59
Islam	43	39
Christian	2	1.81
Other please specify	0	0

**Table 2. Frequency and percentages distribution of sample subject by their general information data**

N=110

General information	Frequency	Percentages
<b>Age at menarche</b>		
10-11 years	15	13.6
12-13 years	62	56.3
14-15 years	28	25.4
16 and above	5	4.54
<b>Duration of menses flow</b>		
Less than 3 days	4	3.0
3-5 days	75	68.0
6-8 days	28	25.4
More than 8 days	3	2.7
<b>Pain during menses</b>		
Yes	91	82.7
No	19	17.2
<b>Regularity of menses</b>		
Regular	91	82.7
Irregular	19	17.2

**Table 3. Frequency and percentages distribution of knowledge score of adolescent girls regarding menstrual hygiene**

Knowledge Category	Frequency	Percentages
Above average	80	72.73%
Average	13	11.82%
Below average	17	15.45%

**Table 4. Frequency and percentage distribution of sample subject related to expressed practices regarding menstrual hygiene**

N-110

	Frequency	Percentages(%)
Q1. What is the absorbent material used by you during menses?		
A. Sanitary pads	69	62.7%
B. Cloth	27	24.6 %
C. Tampon	14	12.7 %
D. Paper/ toilet tissue	0	0%
Q2. What solution is used by you to clean your genital area during menses?		
A. Only water	62	56.4 %
B. Soap and water	37	33.61 %
C. Any other solution e.g.: v wash)	6	5.45%
D. Don't use any	5	4.54%

Q3. How often do you clean your genitalia?			
	A. Daily	79	71.9 %
	B. Only during menses	20	18.1%
	C. Only after menses	8	7.28 %
	D. Both during and after menses	3	2.72%
Q4. How do you dispose off used absorbent Material?			
	A. Burn/ burry	5	4.54%
	B. Throw in dustbin	88	80.0 %
	C. Flushing in toilets and washroom	3	2.76%
	D. Wash cloth and reuse	14	12.7%
Q5. How many times do you clean your vaginal Area during menstruation?			
	A. Every time of pad changing	44	40.08 .0%
	B. Whenever you go to washroom	34	30.9%
	C. Once a day	29	26.3%
	D. Not to be cleaned	3	2.72%
Q6. How do you store unused absorbent?			
	A. Washroom	49	44.5 %
	B. With routine cloth	24	21.8%
	C. In almirah	27	24.61%
D. Any other means, then specify _____		10	9.09%
Q7. What is the frequency of changing Absorbent material during your Menses?			
	A. Once in a day	38	34.54 %
	B. Twice a day	35	31.8%
	C. Thrice a day	33	30.06%
	D. Use single absorbent material in a Day	4	3.6%
Q8. What is your bathing pattern During menses?			
	A. Once a day	64	58.1%
	B. Twice a day	22	20%
	C. Whenever stained	11	10%
	D. Don't take bath during menses	13	11.9%
Q9. How do you wash your undergarment			
	A. With warm water	17	15.4%
	B. With detergent and warm water	34	30.9%
	C. With bathing soap and warm water	15	13.7%
	D. With soap and normal water	44	40%
Q10. Where do you dry your undergarments after wash?			
	A. Inside house	48	43.64 %
	B. Outside house	22	20%
	C. In sunlight	38	34.54%
	D. May use wet undergarments	2	1.82%

## Conclusion and Discussion

In contrast, a study has been conducted by Zelalem Belayneh and Birhanie Mekuriaw<sup>3</sup> among 791 randomly selected adolescent girls in southern Euthopia using a interviewer administered questionnaire. The similar conclusion was made in study that majority of adolescents girls and poor

knowledge regarding menstruation and their expressed practices are incorrect.

A contrary study was conducted by Boruah Beeva, Hakmaosa Annamika and Hajong Sudipta<sup>4</sup> among 170 adolescents aged between 10 and 19 years, using a convenient sampling technique. The study revealed that 91.76% of

the adolescents knew that, menstruation was normal. About 27.65% of the participants did not know the cause of menstruation, and 54.12 % did not know about the source of bleeding. Only 33.53% knew that uterus is the source of bleeding. About 61.76% of the study participants knew about the duration of a normal menstrual period. Regarding practices, 74.12% of the adolescents use sanitary pads during menstruation, 18.82% use cloth, and 7.06% use both cloth and sanitary pads. In about 63.53%, the method of disposal of used absorbent was throwing with domestic waste.

A similar study was conducted by Mahajan P, Sagare SS, Sanikop G, Sah A<sup>5</sup> from June 2019 to November 2019 among 600 adolescent high school girls from 12 different high schools (6 rural and 6 urban) in Belagavi to assess their knowledge, attitude and practices regarding menstrual hygiene. The study showed there was no source of information available for 43.33% (n = 260) of students regarding menstruation before menarche. The overall percentages for knowledge, attitude, and practice about menstrual hygiene were 55.69%, 49.66%, and 47.52% respectively and out of the total, only 38.80% of respondents mentioned that the urination site and menstruation site are different and 22.60% did not know the cause of menstruation. During menstruation, 63.83% of respondents used sanitary pads, whereas 18.50% of girls relied on old clothes as sanitary aid.

## Recommendations

- A comparative study can be done in different states to assess the knowledge and expressed practice of adolescent girls regarding menstrual hygiene.
- A study can be done to find out problems associated with the management of menstrual hygiene.
- Similar study can be conducted on a large sample to ensure the generalisation of findings.
- An experimental study can be conducted to assess the effectiveness of health teaching programs associated with menstrual hygiene for adolescent girls.

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