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Research Article

A Cross Sectional Study to Assess the Knowledge and Expressed Practices Regarding Menstrual Hygiene Among Adolescent in Selected Community, New Delhi

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A B S T R A C T

Introduction: Menstruationis a natural process that begins in adolescence, but poor menstrual hygiene can lead to reproductive health issues. Increasing awareness about menstruation before menarche can significantly improve hygiene practices.

Objectives:

1. To assess the knowledge of adolescent girls regarding menstrual hygiene in New Delhi.
2. To examine the menstrual hygiene practices of adolescent girls in New Delhi.

Materials and Methods: A descriptive study was conducted with 110 adolescent girls in Sangam Vihar, New Delhi. Data was collected through a semi-structured questionnaire covering demographic information, knowledge, and practices related to menstruation. The survey was conducted on June 5, 2023.

Results: Before menarche, 49.6% of the girls were aware of menstruation, with mothers being the primary source (94%). About 68.2% experienced 4-6 days of bleeding, and 42.2% had menstrual cycles of 21-35 days. Knowledge levels were categorized as acceptable (61.7%), good (2.0%), and poor (36.3%). Regarding hygiene, 60.5% exhibited unsatisfactory practices. Additionally, 35.8% missed school for one day due to menstruation, and 47.7% avoided certain foods, particularly soft drinks, during menstruation. Mother's occupation, family income, and prior menstrual knowledge were significantly associated with better menstrual knowledge.

Conclusion: While menstrual knowledge was relatively better than hygiene practices, both remain unsatisfactory. It is crucial to provide comprehensive education on menstruation, hygiene, and proper product usage to improve awareness and practices, ideally through families, teachers, and health educators.

Keywords: Adolescence, Menstruation, Menstrual hygiene, Expressed practices

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Introduction

Adolescence is regarded as a unique and transition phase of human development. 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.

According to Harkness Dincher et.al. (1999), the most critical factor in stressful adaptation to menarche is the adolescent's level of preparedness.

Nursing is a caring profession and thereby nurses are in a position to help adolescent girls in the practice of healthy menstrual hygiene. By provision of adequate knowledge of the changing patterns of menarche, nurses should remain as the first line of defense against the undue fear and anxiety regarding menstruation. They are the key personnel to provide need based knowledge about various health practices.

Need for the Study

Aldolescents are the population at risk and are generally under served. Therefore, there is a need to bring the adolescent health issue in to focus

Mandal, K.et,al. (1995), in her study reported that parents, especially mothers do not educate their daughter about various aspects of menstruation such as age of onset, its duration and healthy practices during menstruation. So, the inadequate knowledge, misconceptions and wrong ideas lead to undue fear, anxiety and undesirable attitude in the mind of the adolescent girls.

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.

Studies show that failure to educate girls about their own anatomy and physiology has serious implications. These responses also support the need for menstrual education as a long term, continuous process beginning well before menarche. Thus, the present study is undertaken to identify the expressed practices and knowledge regarding menstrual hygiene among adolescent girls in community.

Statement of the Problem

A descriptive study to assess the knowledge and expressed practices regarding menstrual hygiene among adolescent girls in a selected community.

Objectives

- To assess the knowledge regarding menstrual hygiene among adolescent girls.
- To assess the expressed practices regarding menstrual hygiene among adolescent girls.

Operational Definitions

- **Adolescent Girls:** Adolescent girl in the age group 10-19 years in the selected community.
- **Assess:** The estimation of knowledge, and express practice regarding menstrual hygiene among adolescent girls based on the structured questionnaire.
- **Knowledge:** It refers to familiarity gained by experience, learning and information regarding menstrual hygiene in adolescent girls as evidenced from knowledge score measured by a knowledge questionnaire and is assessed as above average knowledge, average knowledge and below average knowledge on the basis of responses. Above average knowledge: It refers to the score above 8 for knowledge Items.
- **Average knowledge:** It refers to the score between 6 to 8 for knowledge items.
- **Below average knowledge:** It refers to the score below 5 for knowledge Items
- **Menstrual Hygiene:** Hygiene-related practices of adolescent girls during mensuration.

Assumption

The study assumes that:

- Adolescent school girls generally do not have adequate knowledge regarding healthy menstrual hygiene practices.
- The response to the questionnaire will reflect their knowledge and expressed practices related to menstrual hygiene.

Delimitations of the Study

- Adolescent girls within age group of 10-18years from community area of Sangam Vihar, New Delhi were involved.
- 110 sample were selected for study to asses knowledge of adolescent girl in menstrual hygiene.

The response to questionnaire will reflect their knowledge and expressed practices related to menstrual hygiene.

Methodology

Descriptive survey approach was used with convenient sampling technique. Population for the study was adolescent girls with sample as 110 adolescent girls from the selected community. Setting of the study is Sangam Vihar, New delhi. The data collection tool is structured questionnaire on knowledge and expressed practice. Data Collection Technique used was pen- paper test. Descriptive statistics was used for analysis interpretation of data.

Results

The present study was undertaken to assess the knowledge and expressed practices regarding menstrual hygiene among

adolescent girls in selected community, New Delhi. The data for the study are collected through structured questionnaire and then analysed. The report was organized under the following section.

1. Analysis of background data of the sample subjects.
2. Analysis of knowledge score of the sample subject.
3. Analysis of expressed practices of the sample subject.

Section I: Analysis of background data of sample subjects

Table 1 Frequency and percentages distribution of sample subjects by their background data (age, education, mother's education, father's education, mother's occupation, father's occupation, religion, economic status)

Table 1.Presents demographic data on age, education, mother's education, father's education, religion of sample subjects

N= 110

Demographic Profile	Frequency	Percentage (%)
Age		
Below 10 years	0	0
10-12 years	12	10.9
13-15 years	45	40.9
16-18 years	53	48.1
Education		
Uneducated	5	4.54
Primary school	25	22.7
High school	37	33.6
Senior secondary	43	39
Mother's education		
Uneducated	50	45
Primary school	28	25
High school	17	15
Senior secondary	15	13
Father's education		
Uneducated	23	20.9
Primary school	20	18.1
High school	50	45.4
Senior secondary and above	17	15.4
Religion		
Hindu	65	59
Islam	43	39
Christian	2	1.81
Other please specify	0	0

The data showed that out of 110 samples, 10.9%were in age group of 10-12 years, 40.9% were in age group of 13-15% and 48.1%were in age group of 16-18 years. Among 110 adolescent girls 4.54% were from uneducated, 22.7% were from primary school, 33.65% were from high school and 39% were from senior secondary

With regards to religion, 59% majority of students were Hindu,39% were Muslim and 1.81% were Christian.

20.9% subject father's were uneducated 18.1%were primary school,45.4% were High school and 15.4% were senior secondary and above.

45% subject mother's were uneducated, 25% had primary education, 15% were High school and 13% were senior secondary and above.

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

N=110

General information	Frequency	Percentages (%)
Age at menarche		
10-11 years	15	13.6
12-13 years	62	56.3
14-15 years	28	25.4
16 and above	5	4.54
Duration of menses flow		
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
Pain during menses		
Yes	91	82.7
No	19	17.2
Regularity of menses		
Regular	91	82.7
Irregular	19	17.2

Table II presents general information regarding age at menarche,duration of menses,pain during menses and regularity of menses.

With regard age at menarche, 13.6% were 10-11 years, 56.3% were 12- 13years, 25.4% were 14-15 years and 4.54%were 16 and above.

With regard duration of menses, 3% were less than 3 days, 68% were 3-5 days, 25.4% were 6-8 days and 2.7% were more than 8 days.

With regard pain during menses,82.7% had being suffered and 17.2% were not suffered.

With regard regularity of menses,82.7% had regular interval and 17.2% had irregular.

Section II Analysis of Knowledge Score of Sample Subjects Regarding Menstrual Hygiene.

This section dealt 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 was done from knowledge based questions. 1 mark was given for each correct answer, the maximum marks that could be obtain were 10.

Table 3 revealed that knowledge test, obtained range of score was 0- 10, mean was 58.5, median was 5.5 and SD was 21.84. In practice test, obtained range of score was 3-9, mean was 47.9, median was 5.5, and SD was 23.97.

The data presented in the table show the frequency and percentage distribution of knowledge scores of students. The data showed the maximum number of students 72.7% came under above average category. Their score ranged from 8 and above. 15.45% subjects had scored below average, only 12% came under average category whose score is 6-8 Figure 2.

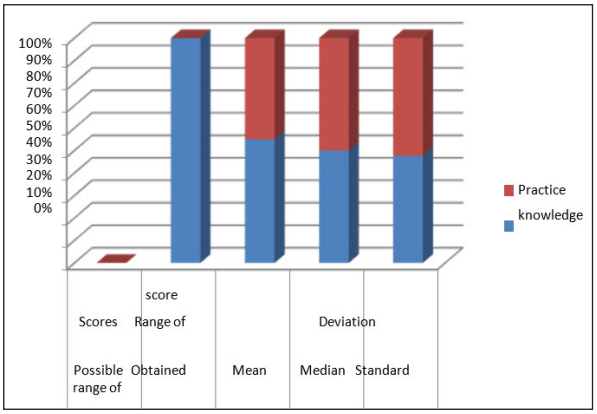


Figure 1.Mean, median and SD of subjects' level of knowledge and expressed practice regarding menstrual hygiene

Table 4.Frequency and percentages distribution of knowledge score of student regarding menstrual hygiene

Knowledge score	Frequency	Percentages (%)
Above average	80	72.7%
Average	30	11.8%
Below average	17	15.45%

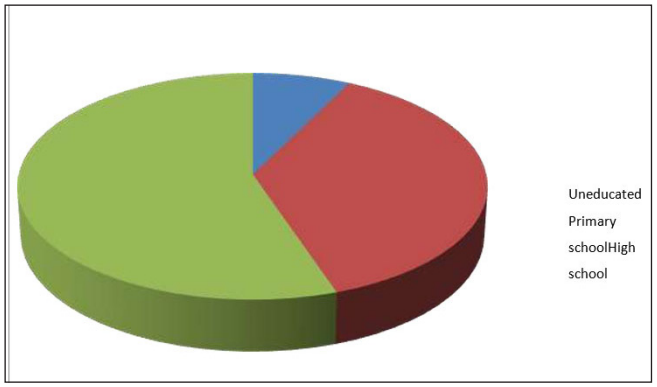


Figure 2.A Pie graph showing percentage distribution of knowledge score

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

Section III Analysis of Expressed Practices of Sample Subjects

This section dealt with the analysis and interpretation of the expressed practices of the sample subjects . Data was collected through structured questionnaire.

There were 10 questions in all. The data were compiled and presented in the form of table 5.

Implications

The findings of the study have implications for nursing practice, nursing research, public education, nursing administration.

Nursing Practice

Adolescents constitute a large section of the population and various studies pointed out that none of the existing health

Table 3.Mean, median and SD of subjects' level of knowledge and expressed practice regarding menstrual hygiene

N=110

	Possible range of Scores	Obtained Range of score	Mean	Median	Standard Deviation
Knowledge	0-10	3-9	58.5	5.5	21.84
Practice	0-10	0-10	47.9	5.5	23.97

programmes, policies are specially targeted for this group. Their health needs and services remain largely ignored. So, it is very important to equip them with knowledge in planning educational programmes in the deficit areas of knowledge, and Expressed practices . Nurses working in community come across adolescents girls and they can impart health education to them regarding menstrual hygiene and expressed practices, myths and facts related to menstrual hygiene.

Nursing Research

There is a need to conduct research on various aspects of menstrual hygiene , such as onset, pattern of menarche, premenstrual syndrome and various other related topics.

Public Education

Health education programme can be implemented to create awareness among the general public regarding menstrual hygiene, as there are myths, unfavorable and unhealthy practices related to menstrual hygiene prevalent in our society, due to improper knowledge. The parents can also be sensitized about the significance of open and frank communication with their daughters regarding menstrual hygiene and expressed practices.

Recommendations

On the basis of the findings of the study, the following recommendations are offered for future research.

- A comparative study can be done in urban set up to assess the knowledge, and Expressed practices of adolescent girls regarding menstrual hygiene 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 related to menstrual hygiene and their management.
- The same study can be replicated on large sample so that the findings could be generalized.

An experimental study can be conducted to assess the effectiveness of health teaching programs to adolescent girls related to menstrual hygiene.

Table 5.Frequency and percentage distribution of sample subject related to expressed practices regarding menstrual hygiene.

	Frequency	Percentages (%)
Q1. What is the Absorbent Material Used by you During Menses?		
A. Sanitary Pads	69	62.7%
B. Cloth	27	24.5%
C. Tampoon	0	0%
D. Paper/ Toilet Tisssue	0	0%
Q2. What Solution is used by you to Clean Your Genital Area During Menses?		
A. Only Water	46	41.8%
B. Soap Annd Water	37	33.6%
C. Any Other Solution (E.g.: V Wash)	6	5.45%
D. Not Use Any	5	4.54%
Q3. How Often Do You Clean Your Genitalia?		
A. Daily	78	70.9%
B. Only During Menses	20	18.1%
C. Only After Menses	8	7.27%
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	86	78.1%
C. Flushing In Toilets And Washroom	3	2.71%
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	43	39.0%
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	47	42.7%
B. With Routine Cloth	24	21.8%
C. In Almirah	27	24.5%
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	37	33.6%
B. Twice A Day	35	31.8%
C. Thrice A Day	33	30%
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	24	30.9%
C. Whenever Stained	11	10%

D. Don't Take Bath During Menses	13	11.8%
09. How Do You Wash Your Undergarment		
A. With Warm Water	17	15.4%
B. With Detergent And Warm Water	36	32.7%
C. With Bathing Soap And Warm Water	15	13.6%
D. With Soap And Normal Water	44	40%
10. Where you Dry your Undergarments After Wash?		
A. Inside House	47	42.7%
B. Outside House	22	20%
C. In Sunlight	38	34.5%
D. May Use Wet Undergarments	2	1.81%

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