



A study on Awareness and Practices of menstrual hygiene among school going adolescent girls of Bhagini Nivedita Girls H.S school, Unakoti, Tripura

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Abstract

Background- The menarche is an important event in a woman's lifecycle (Febuanti, 2020). Menstruation is closely associated with taboos and sociocultural restrictions. Unhygienic practices increase the risk of reproductive tract infections (RTI), which might lead to further complications if not treated at right time. (Beeva Baruah, 2022). Menstruation has deep impact on quality of education as it involves a learning constituent affected by environment and infrastructure of the school (Fehintola, 2017). With this background, the study was planned to assess adolescent school going girls' knowledge of menstruation and menstrual hygiene as well as their practices of menstrual hygiene, Bhagini Nivedita Girls H.S School, Kailashahar, Unakoti Tripura.

Aims- To Assess the awareness level and determined the methods of menstrual hygiene among school going adolescent girls.

Materials and method- A cross-sectional study was conducted between April-May 2023 in Bhagini Nivedita Girls' H.S School, Kailashahar, Unakoti Tripura among 100 of eligible adolescents aged between 10 and 19 years, using a random sampling technique. A predesigned, self-administered structured questionnaire was used to collect the information from the participants. Data analysis was done using excel sheet and the results were expressed in percentages.

Result- 5% of adolescent girls had inadequate knowledge level, 20% of them had moderate knowledge level and 75% of them have adequate level of knowledge. 63% of the adolescent girls were in the category of Good Practice, 37% were in the category of Poor Practice regarding menstrual hygiene.

Conclusion- This study was undertaken to evaluate the knowledge and practice assess on menstruation hygiene among school going adolescent girls, Bhagini Nivedita Girl's H.S School (Kailashahar, Unakoti Tripura). The current study has revealed that menstruation and menstrual hygiene knowledge is poor among adolescent girls and practices regarding menstrual hygiene are not optimal.

Keywords: Menstrual Hygiene, Adolescent girls, School going girls, Hygiene Practices

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Introduction

Menstruation is normal discharge of blood and tissue from the uterine lining through the vagina that occurs as part of a woman's monthly menstrual cycle. Menstruation occurs between menarche, a girl's first period, and menopause, when menstrual cycles end (MG Sweet 2012). The menstrual cycle is characterized by the rise and fall of hormones. Menstruation is a normal part of a woman's monthly cycle. Every month, women body prepares for pregnancy by thickening the lining of the uterus. If no pregnancy occurs, the uterus sheds its lining through the vagina. The menstrual blood is partly blood and partly tissue from inside the uterus. It passes out of the body through a small opening in the cervix and then through the vagina (John A Owen, 1975).

Menstruation can cause some symptoms such as cramps, bloating, mood swings, acne, and headaches. These symptoms are usually mild and can be relieved by over-the-counter medicines, heating pads, or exercise. Some women experience more severe symptoms that interfere with their daily life. This is called premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD). These conditions may require medical treatment or counseling (Indusekhar & O'Brien, 2007). Heavy menstrual bleeding is also associated with Iron deficiency anaemia and fatigue in adolescent girls (Barr, Brabin, Agbaje, Ikimalo, & Briggs, 1998)

Menstrual hygiene is the practice of using clean materials to absorb or collect menstrual blood, and changing them in privacy as often as necessary for the duration of menstruation. Menstrual hygiene also includes using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual products. Menstrual hygiene is vital to the empowerment-being of women, girls, and other menstruators worldwide. It is about more than just access to sanitary pads and appropriate toilets – though those are important. It is also about ensuring that menstruators live in an environment that values and supports their ability to manage their menstruation with dignity (Joshi, Buit, & Botero, 2015)

There are many types of menstrual products to choose from, such as sanitary pads, tampons, menstrual cups, menstrual discs, and period underwear. The choice of product depends on personal preference, availability, affordability, and cultural norms. Some products are disposable, while others are reusable and need to be washed and dried properly. Menstruators should use the product that suits their needs and preferences best.

Menstrual hygiene is a human right and a matter of gender equality. It requires collaborative and multi-sectoral responses from governments, civil society, private sector, media, and communities. Menstrual hygiene interventions can help overcome the barriers that menstruators face and enable them to reach their full potential (Sommer & Murat, 2013)

School-going adolescent girls are girls between the ages of 10 and 19 who attend school regularly. They are in a critical stage of their physical, mental, and social development. They face various challenges and opportunities related to their health, education, and empowerment (Sachan, Idris, Jain, & Singh, 2012)

A key factor that influences the health and well-being of school-going adolescent girls is menstrual hygiene. Menstrual hygiene is the practice of using clean materials to absorb or collect menstrual blood, and changing them in privacy as often as necessary for the Menstrual hygiene also includes using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual products (Lahme, Stern, & Cooper, 2018)

School-going adolescent girls need access to information, education, products, and services that can help them manage their health issues effectively. They also need a supportive environment that respects their needs and choices and empowers them to reach their full potential. School-based interventions can play an important role

in addressing the health needs of adolescent girls by providing them with health education, counselling, screening, treatment, referral, and follow-up services (Thakre, et al., 2011)

Methods

Methodology of Research organized all the components of studying way that is most likely to lead to valid answer to the sub problems that have been posed. Survey research design is used to assess the level of knowledge and practices of menstrual hygiene among school going adolescents' girls

Target population: School going adolescent girls. Sampling Technique: Simple random sampling

Sample size: 100 adolescent girls.

Inclusion Criteria: School going Adolescents girls of Bhagini Nivedita Girl's H.S School (Class VIII, IX, X, XI, XII)

Exclusion criteria: Students who are not under 10-19 years and Boys are excluded from the survey.

Data Analysis and Interpretation

Data analysis is done in three sections described as follows

- **Section A: Demographic variables**

Self-administered structured questionnaire was used to assess the demographic variables such as age (in years), level of education, type of family, living status, family source of income, religion.

- **Section B: Structured knowledge questionnaire**

The purpose of the question is to gather data on knowledge and practices on menstrual hygiene among schoolgoing adolescent girls.

Scoring and interpretations: -

The knowledge questions consisted to assess the overall knowledge among adolescent girls. In this section scoring key was prepared and score 1 is awarded to correct response and 0 for wrong response in all items. Thus a total score of 10 were allotted. To interpret the level of knowledge of adolescent girls on menstrual hygiene the score was distributed as follows:

- a. Inadequate knowledge- <50%
- b. Moderate knowledge- 50 – 75 %
- c. Adequate knowledge- >75 %

Development of the tool:

The tools were prepared based on the objectives of the study after an intense search of related literature and the guidance of the expert. The descriptive study data and questionnaire regarding knowledge and practices to assess Menstrual hygiene among adolescent girls were revised several times by consultation with experts until it reached the final stage. The tools drafted in English and Bengali.

Data collection method:

The main study was done in the Bhagini Nivedita Girls H.S School, Kailashahar, Unakoti Tripura.

Prior permission was obtained from the Head Master in the School. The investigators visited the school and explained to them the purpose of the study. The respondents were assured the anonymity and confidentiality of the informed them. The data was collected by using self-administered structure knowledge and practices questionnaire to assess the knowledge and practices on menstrual hygiene among school going adolescent girls. After obtaining their willingness samples who fulfilled the criteria were selected by simple random sampling. Investigator explained the nature of the study, established rapport, obtained willingness and time availability. The data was collected properly and provided adequate time to receive their responses and to recall their practice during collected and the baseline data.

Data Analysis:

It was planned to prepare a master data sheet with all the responses given by the sample. The data obtained was analyzed by using descriptive and inferential statistics. Frequency and percentage distribution were used to analyse the demographic variables and knowledge and practices of menstrual hygiene among school going adolescent girls.

The analysis and interpretation of the data of this study were based on data collected through structured knowledge questionnaire. The result was computed using descriptive statistics based on the objectives of the study.

Results

Section 1: The demographic characteristics of the adolescents are summarized in **Table 1:** The frequency and percentage distribution of school going adolescent girls related to demographic variable.

Table 1: Demographic profile of the study population		
Demographic variable	Number	Percentage (%)
Age (in Year)		
11-12	18	18
13-14	23	23
15-16	32	32
17-18	27	27
Level of Education		
Class VIII	20	20%
Class XI	20	20%
Class X	20	20%
Class XI	20	20%
Class XII	20	20%
Father's Occupation		
Business	34	34
Service (Private/Govt.)	30	30
Mix/service/business/others	11	11

Pension	1	1
Agriculture	14	14
Others	10	10
Family Arrangements		
a. Nuclear	62	62
b. Joint	31	31
c. extended	7	7

Living area		
Rural	62	62
Semi-urban	31	31
Urban	7	7

In the school age wise distribution maximum number of age group is 32% were in the age group of 15-16 years, 27% of them were in the age group of 17-18 years, 23% of them were in the age group of 13-14 years and 18% of them were in the age group of 11-12 years. 20 students from each class (VIII, IX, X, XI, XII). Among the fathers of the adolescent girls, 34% of fathers had the business, 30 were in doing jobs (private/govt.), 11% were mix/service/business/others, 14% had Agriculture, 10% were daily waged labourer, and 1% was retired. About 66% of them belong to Hindu religion, 30% of them belonged to Muslim religion, 3% of them belong to Christian and 1% of them belong from others i.e., Buddhist. 62% were from the nuclear family, 31% were from the joint family, 7% were in the extend family. In the school 55% of the adolescent girls are belonging from urban area, 20% of them belonging from Semi-urban and 25% of them are belonging from rural area.

Section 2: Assessment of knowledge regarding menstrual hygiene among adolescent girls.

Table 2 shows the distribution of study participants according to their knowledge regarding menstruation and menstrual hygiene. It reveals that 86% of the adolescents knew that menstruation was a normal process. About 14% of the study participants did not have any idea regarding the cause of menstruation. Only 36% knew that the uterus is the source of bleeding.

Table 2: Distribution of study participants according to their knowledge of menstruation and menstrual hygiene

	Number	Percentage
Meaning of “Menstruation”		
It is a normal phenomenon of reproductive health of a female	86	86%
It is a disease/illness of a female	0	0
It is a curse of God	0	0
No idea	14	14%
Had idea of menstruation before menarche		
Yes	32	32%
No		
Source of menstrual bleeding		
Uterus	36	36%
Bladder	10	10%
Vagina	44	44%
Abdomen	10	10%
Knew that poor menstrual hygiene predisposes to infection		
Yes	63	63%
No	37	37%

The table 3 depicts the frequency and percentage distribution of adolescent girl regarding menstrual hygiene. 5% of them have inadequate knowledge level, 20% of them had moderate knowledge level and 75% of them have adequate level of knowledge.

Table 3: Knowledge level of adolescent girls regarding menstrual hygiene

Knowledge Level	Number	Percentage
Inadequate Knowledge <50%	5	5%
Moderate Knowledge 50-75%	20	20%
Adequate >75%	75	75%

Section 3 Assessment of practices regarding menstrual hygiene among adolescent girls

Table 4 shows the menstrual hygiene practices by adolescents. It reveals that 67% of the adolescents used sanitary pads during menstruation, 33% used both cloth and sanitary pads. In about 47%, the method of disposal of used absorbent was throwing them in dustbin along with general waste, while 25.88% reused the cloth after washing.

Table 4: Menstrual hygiene practices

	Number	Percentage
Absorbent used during menstruation		
Only Sanitary pad	67	67%
Only Cloth	0	0%
Both Sanitary pad and cloth	33	33%
Cleaning of external genitalia		
Soap and Water	48	48%
Only water	52	52%
Mode of Disposing the pads		
Dustbin along with general waste	47	47%
Bury/Burn	36	36%
Reuse the cloth piece	17	17%
Frequency of changing pads in a day		
Once	3	3%
2-3 times	85	85%
More than 3 times	12	12%

Discussion

The present study shows that the age at menarche of the participants ranged between 11 and 15 years and the mean age of menarche was 12.5 years which is comparable to the study conducted in Rajasthan by Khanna, et al (2005), who reported the mean age at menarche to be 13.2 years and a study conducted by Kajal Jain (2009) where the mean age at menarche was noted to be 13.16. In the present study, only 32% of the adolescents knew about menstruation before menarche and 68% did not know about it, in a study conducted by Reddy et al (2005), 13.8% of the girls had prior knowledge of menstruation. A study conducted by Bobhate et al. (2011) in an urban slum area of Mumbai found that only 20.3% of the participants were aware of menstruation before menarche. The present study reveals that the first

source of information regarding menstruation in 61% of adolescent girls was the school teachers and in 31% girls received the first information from their mother. Similar findings were found in the study conducted by Kailasraj KH et al. (2020), Thakre SB et al. (2011) AB Mudey et al. (2010). In the present study, 86% of the study participants knew that menstruation is a normal process, which is similar to a study conducted by Dasgupta A and Sarkar M (2008)

where 86.25% believed it to be a physiological process. Only 36% knew that the source of menstrual bleeding is the uterus and 64% did not know the source of menstrual bleeding which is like the study by J. Barathalakshmi et al. (2014) where they found that 30.5% of the girls knew that menstruation is due to cyclical uterine bleeding. In our present study 63% of the adolescents knew that poor menstrual hygiene could predispose them to infection. Similarly, Prateek S. Bobhate et al. (2011) found that 69.3% were aware that poor hygiene predisposes to infection. In terms of practices related to menstrual hygiene, 67% of the adolescents used sanitary pads exclusively, and 33% used both sanitary pads and cloth as absorbent. In the present study, the most common method of disposal of used absorbents was throwing them in dustbin along with domestic waste reported by 47% of the adolescents. In the study conducted by Divya Hagawane. (2021) Whereas J. Barathalakshmi et al. (2014) and Thakre SB, et al. (2011), found that burying was the most common method followed by disposal along with domestic wastes. In this study 48% of girls used soap and water to clean their genitalia while majority of them (52%) used only water which is similar to the study conducted by Patil VV (2016) and Thakre SB et al. (2011) a majority of them used only water for cleaning external genitalia.

Ethical consideration:

Formal permission was obtained from concerned authority, Head master of the school as well as from the respondents. The nature, purpose of the study was explained and obtained the verbal consent from the samples. Privacy and comfort of the samples was maintained throughout the study. The study was conducted at the normal class time. Adequate explanation was given when they asked question. Records were made for each sample.

Conclusion

This study was undertaken to evaluate the knowledge and practice assess on menstruation hygiene among school going adolescent girls, Bhagini Nivedita Girl's H.S School (Kailashahar, Unakoti Tripura).

The current study has revealed that menstruation and menstrual hygiene knowledge is poor among adolescent girls and practices regarding menstrual hygiene are not optimal. Health education regarding the importance of menstrual hygiene to avoid various Reproductive Tract Infections in future is very important. Health camps, awareness programs can be organized by school committees in collaboration with NGOs and Health workers from local hospitals to guide the adolescent girls.

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Conflicts of interest

There are no conflicts of interest.

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