

# A study on menstrual hygiene practices and knowledge among adolescent girls of Barpeta urban, Assam

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## ABSTRACT

**Objective:** The aim of the study was to assess the hygiene practices and knowledge regarding menstruation among adolescent girls and to determine the menstrual related health problems. **Methodology:** This was a cross-sectional study on 110 adolescent girls, who had attained menarche, selected from 10 schools in urban areas of Barpeta district. Data was collected by interview method with the help of pre-designed, pre-tested, structured schedule containing both open and closed questionnaire. **Results:** The study found that 89.1% girls knew menstruation was a normal physiological process whilst among them 89.8% did not know the cause and organ of menstrual bleeding. Absorbent material used by 87.3% was sanitary pad among which 51% disposed it in household burial pit. Both soap and water was used for cleaning genital areas in 87.3% of the girls. The most common complain during menstruation was pain abdomen (66.4%). School absenteeism for variable period was found in 35.4%. **Conclusion:** Menstrual hygiene practices in most of the adolescent girls were found to be nearly satisfactory however knowledge regarding menstruation was found to be inadequate. Various types of health problems were faced during menstruation. Therefore imparting education to the girls in schools and other health and wellness facilities regarding menstruation, menstrual hygiene practice and management of related health problems is highly recommended.

**Keywords:** Menstrual hygiene, adolescent girls, health problems, practice, knowledge.

Menstruation is a normal physiological process in females. It starts with menarche which is the occurrence of first menstrual uterine bleeding indicating the beginning of reproductive life and continues until menopause. Menstrual hygiene practice is an integral part of this process. WHO and UNICEF joint monitoring programme defined menstrual hygiene management (MHM) as “Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear”<sup>1</sup>. According to World Health Organisation an adolescent is any person

between ages of 10 and 19 years. Various difficulties are faced by the adolescent girls due to inadequacy of knowledge, socio-cultural restrictions, unavailable or inaccessible facilities. Poor menstrual hygiene practice can also lead to various types of health issues like reproductive health problem, urinary tract infections. All these factors lead to different setbacks detrimental to the overall wellbeing of the female. The present study was therefore undertaken with the following aim and objective:

1. To assess the hygiene practices and knowledge regarding menstruation among adolescent girls of Barpeta urban, Assam.
2. To determine the menstruation related health problems.

## Materials and methods

This was a cross-sectional study on 110 adolescent girls

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who had attained menarche from 10 schools in urban areas of Barpeta district with 11 girls selected randomly from each school (N= 110, purposive sampling). Study duration was from December 2020 to January 2021.

Ethical clearance for the study was obtained from Institutional Ethics Committee and permission from the inspector of schools, Barpeta was obtained for conducting the study. Informed consents were obtained from all participants. Adolescent girls who had attained menarche were included in the study and adolescent girls who had not attained menarche or those adolescent girls attained menarche but was unwilling to participate was excluded.

Data was collected by interview method with the help of pre-designed pre-tested structured schedule containing both open and closed questionnaire. Data analyzed by using Microsoft Excel software.

### Results

A total number of 110 girls were included in the study. The age ranged from 14-19 years (table1).

**Table 1: Distribution of the respondents as per age**

Age	Number (%)
14 years	7(6.4)
15 years	21(19.1)
16 years	36(32.7)
17 years	29(26.4)
18 years	13(11.8)
19 years	4(3.6)
Total	110(100)

In majority of the girls the source of information was mothers (86, 78.1%) (table 2). Regarding knowledge on menstruation 98 girls (89.1%) knew that menstruation was a normal physiological process. Among them 89.8% i.e 88 girls did not know the cause and organ of menstrual bleeding, 6.1% i.e 6 girls knew about the organ of menstrual bleeding as uterus and 4.1% i.e 4 girls regarded vagina as the organ of menstrual bleeding. 12 girls (10.9%) did not know that menstruation was a normal physiological process.

**Table 2: Source of information (Multiple responses)**

Source of Information	Number (%)
Mother	86(78.1)
Sister	43(39.1)
Friends	39(35.4)
Father	2(1.8)

The absorbents used during menstruation by 96 girls (87.3%) were sanitary pad while 14 girls (12.7%) used cloth. A total number of 53 girls (48.2%) changed absorbent twice a day, 43 girls (39.1%) changed thrice a day while 14 girls (12.7%) changed absorbent more than 3 times a day. Among the 96 girls who used sanitary pads, 49 girls (51%) used household burial pit for its disposal (table 3).

Of the 14 girls using cloth as absorbent, 8 girls (57.1%) washed and reused it while 6 girls (42.9%) disposed it in

household pits. In all the schools there were separate toilets for girls. Out of the 10 schools, 7 schools (70%) had continuous water supply and 3 schools (30%) had intermittent water supply observed during the study. All the 110 girls had the habit of cleaning external genitalia during menstruation either during bathing or every time after using toilet. Majority of the girls (96, 87.3%) cleaned by using both soap and water (table 4).

**Table 3: Showing methods of disposal of sanitary pads**

Methods of disposal	Number (%)
Household burial pit	49(51)
Public disposal places	31(32.3)
Indiscriminate throwing	16(16.7)
Total	96(100)

**Table 4: Showing materials used for washing external genitalia**

Materials used for washing external genitalia	Number (%)
Soap and water	96(87.3)
Only water	9(8.2)
Water with antiseptics	5(4.5)
Total	110(100)

**Table 5: Showing restrictions during menstruation (Multiple responses)**

Restrictions	Number (%)
Avoiding religious places/religious occasion	110(100)
Not allowed to cook	56(50.9)
Avoid going to schools for variable days	39(35.4)
Avoid spicy food	15(13.6)
Not allowed to touch things	10(9)
Avoiding common areas of the house	1(0.9)

Various types of restrictions were observed during menstruation. Avoiding religious places or occasions were found in 100% (110 girls) (table 5).

**Table 6: Showing menstruation related health problems (Multiple responses)**

Symptoms	Number (%)
Pain Abdomen	73(66.4)
Irregular menstrual cycle	19(17.3)
Itching	16(14.5)
Excessive bleeding	7(6.4)
Rashes around genitalia	1(0.9)

Among menstruation related health problems, the most common complaint was pain abdomen (73, 66.4%) (table 6).

### Discussion

In the study the age of the adolescent girls ranged from 14-19 years. The most common source of information regarding menstruation found in the study was from the mothers (86, 78.1%). Study conducted by Bulto GA<sup>2</sup> found mothers as the most common source of information (174, 43.2%).

In the present study 98 girls (89.1%) knew that menstruation was a normal physiological process. Among them 88 girls (89.8%) did not know the cause and organ of menstrual bleeding. Only 6 girls (6.1%) knew that the uterus was the organ of menstrual bleeding. In a study conducted by

Thakre SB<sup>3</sup> et al, it was found that 80.62% of the girls were not aware of the cause of bleeding while only 2.58% were aware of source of menstrual bleeding as the uterus.

Findings from the study revealed that 96 girls (87.3%) used sanitary pad while 14 girls (12.7%) used cloth as absorbent material during menstruation and 14 girls (12.7%) changed absorbent more than three times a day. In study conducted by Patavegar and coworkers<sup>4</sup> it was found that 85.92% girls used sanitary pad as absorbent material.

The study revealed that among the 96 girls who used sanitary pad, 49 girls (51%) used household burial pit for its disposal while 16 girls (16.7%) threw it indiscriminately after use. Among the 14 girls who used cloth, 8 girls (57.1%) washed and reused it while 6 girls (42.9%) disposed it in household pits. Study conducted by Barman and coworkers<sup>5</sup> found that among those who used sanitary pads or homemade disposable pads, majority (59.8%) disposed pads by packing with paper and throwing indiscriminately, 39.1% disposed it in pit and 1.1% in dustbin.

In the present study it was found that all the schools had separate toilets for girls. Out of the 10 schools, 7 schools (70%) had continuous water supply & 3 schools (30%) had intermittent water supply observed during the study. The present study found that all the 110 girls had the habit of cleaning external genitalia during menstruation either during bathing or every time after using toilet. A total number of 96 girls (87.3%) used both soap and water. In study conducted by Bhattacharya M and coworkers<sup>6</sup>, 64.78% of girls were found to clean external genitalia with soap and water regularly during days of menstruation.

In the present study various restrictions were observed during menstruation. All the 110 girls (100%) did not attend any religious places or occasions during menstruation while 39 girls (35.4%) did not go to school for variable days. Study by Barman and coworkers<sup>5</sup> found that 100% of girls faced restrictions during menstruation. In a study by Harshad Thakur<sup>7</sup> et al, 85.4% faced restrictions during menstruation with most of them (97.6%) being religious restrictions.

Among the menstrual related health problems, the most common complaint was pain abdomen (73, 66.4%) followed by irregular menstrual cycles (19, 17.3%). In study by Belayneh Z, Mekuriaw B<sup>8</sup> pain abdomen was most common complain found in 77.7% girls while 59.7% had irregular menstrual cycles.

### Conclusion

In the study it was observed that menstrual hygiene practices in most of the adolescent girls were nearly

satisfactory however knowledge regarding menstruation was found to be inadequate. Various types of health problems were faced during menstruation. Therefore imparting education to the girls in schools and other health and wellness facilities regarding menstruation, menstrual hygiene practice and management of related health problems is highly recommended.

**Conflict of interest:** None. **Disclaimer:** Nil.

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