

# Knowledge and Hygiene Practice during Menstruation in the Adolescents

FAHMIDA SHARMIN JOTY<sup>1</sup>, ASHRAFUR RAHMAN<sup>2</sup>

## Abstract:

**Background:** Adolescent girl requires specific attention as it marks an important milestone-menarchae and hence good hygienic practices during menstruation are crucial to maintain a healthy life.

**Aims and Objectives:** The survey was conducted to assess the knowledge about menstruation and menstrual hygiene.

**Materials and Method:** A cross sectional study was carried out on the adolescent daughters of Aya of Bangladesh Medical College between the age of 11-19 years who resides in slum and semi slum area. Total 56 adolescent girls were interviewed. The data were collected through mobile and in person interview of the adolescent girls with due consent of their mother. Data was collected using pretested proforma. The questionnaire consisted of sociodemographic details, knowledge about menstruation, practices, hygiene followed during menstruation. All the respondents were assured that their information will be kept confidential. At the end of the interview, the girls were educated about the facts of menstruation and explained about the hygiene during menstruation.

**Result:** Among the 56 adolescent girls, 64% were between 11 and 14 years. About 46.4% mothers were illiterate; 67% girls had menarche at 11-12 years and 71% had history of vaginal discharge. About 60% had no knowledge of menses before menarche. The source of information was mother in 57.1%. About 64.3% girls used sanitary pad and the 14.3% used cloth pieces. About 78.6% use razor for hair shaving. 17.9% reuse cloth. Only 17.9% change pad 6 hourly, other keep pads for longer period.

**Conclusion:** This study reported that menstrual hygiene was unsatisfactory among adolescent girls. Therefore, girls should be educated about the facts of menstruation and proper hygienic practices.

**Keywords:** Hygiene, menarche, menstrual, slum

## Introduction

Adolescence is a critical period in women's lives commenced by first menstruation and significant physical, emotional, cognitive, and social changes.<sup>1,2</sup> Despite being an inevitable and natural process, most societies consider menstruation a taboo.<sup>1-6</sup> Many of the norms and stigma associated with the event are based on discriminatory gender roles and cultural restrictions, making it a silent and invisible issue.<sup>1-6</sup>

As a result, it prevents many adolescent girls from receiving proper menstrual health and hygiene-related information and education. At the same time, it affects their maternal and reproductive health through increased risk of RTI, STD, HPV infection, and adverse pregnancy outcomes.<sup>1,2,7</sup> Globally, poor menstrual management affects girls' school attendance and academic progress through psychological and physical factors.<sup>2,7,8</sup> Understanding the menstrual hygiene

1. Dr. Fahmida Sharmin Joty, MBBS, DGO, FCPS (Obstetrics & Gynaecology), Associate Professor, Department of Obstetrics & Gynaecology, Bangladesh Medical College Hospital, Dhanmondi, Dhaka.

2. Dr. Ashrafur Rahman, FCPS (Surgery), MS (Surgical Oncology), Assistant Professor (Surgery), Department of Surgical Oncology, National Institute of Cancer Research and Hospital (NICRH), Mohakhali, Dhaka.

**Address of Correspondence:** Dr. Fahmida Sharmin Joty, MBBS, DGO, FCPS (Obstetrics & Gynaecology), Associate Professor, Department of Obstetrics & Gynaecology, Bangladesh Medical College Hospital, Dhanmondi, Dhaka.

management practices (MHMP) of adolescent girls is therefore crucial for informing strategies to promote equitable education, gender equality, women's empowerment, health and environment in line with the Sustainable Development Goals (SDGs)<sup>9</sup>.

### Material and Method

A cross sectional study was carried out on the adolescent daughters of Aya of Bangladesh Medical College between the age of 11-19 years who resides in slum and semi slum area. Total 56 adolescent girls were interviewed. The data were collected through mobile and in person interview of the adolescent girls with due consent of their mother. Data was collected using pretested proforma. The questionnaire consisted of sociodemographic details, knowledge about menstruation, practices, hygiene followed and any restriction followed during menstruation. All the respondents were assured that their information will be kept confidential. At the end of the interview, the girls were educated about the facts of menstruation and explained about the hygiene during menstruation.

### Result

64% respondents were between 15-19 years (Mean  $13.1 \pm 1.9$ ), among them 92% attained menarche at 11-13 years (Mean  $11.6 \pm 1.3$ ). Most mothers have primary education. 39% of the respondents had knowledge about menstruation before menarche, mostly from their mother.

64% use sanitary pad & rest use old & new cloths, tissue. Sanitary pad buyers were mostly mother.

29% reuse cloths, of them 83% wash cloth with soap before reuse and rest with plain water, mostly dry cloths behind bed and shaded closed place and 75% stored in hidden place inside room and rest keep with other cloths. 38 respondents change absorbent 2-3 times daily. 86% dispose in dustbin with other garbage & rest in open place or buried them in soil.

79% stated that they don't remove pubic hair after each period. 78.6% use razor for removal of hair & rest use cream. 71% had at least one episode of vaginal discharge after menarche. Adolescence having previous knowledge or information about menstruation had slightly better hygienic practice (although it was not statistically significant in all cases).

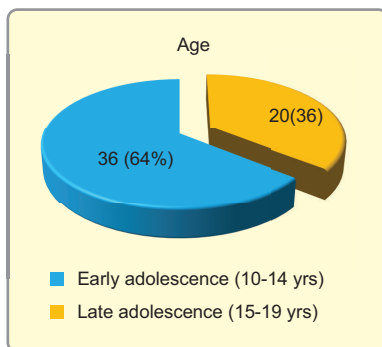


Figure 1

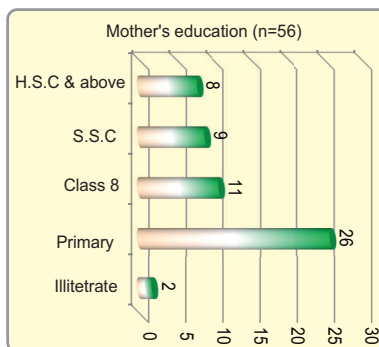


Figure 2

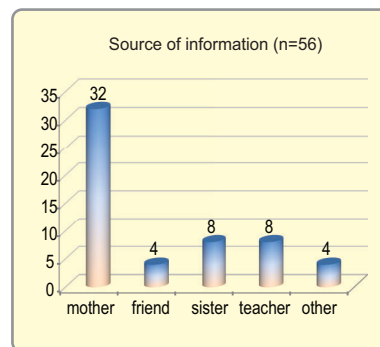


Figure 3

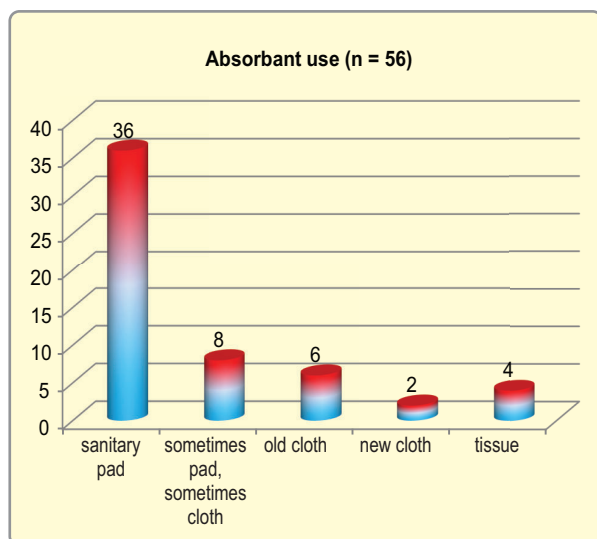


Figure 4

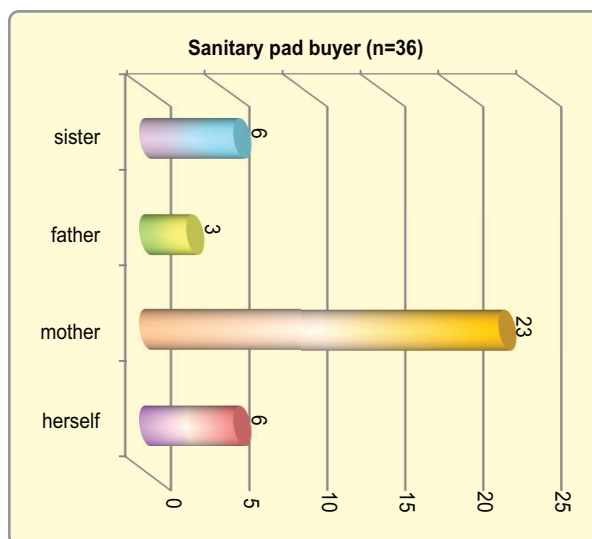


Figure 5

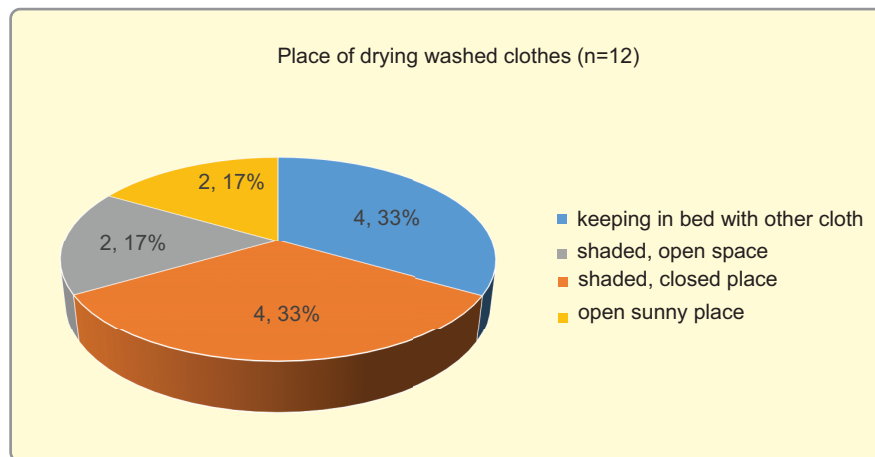


Figure 6

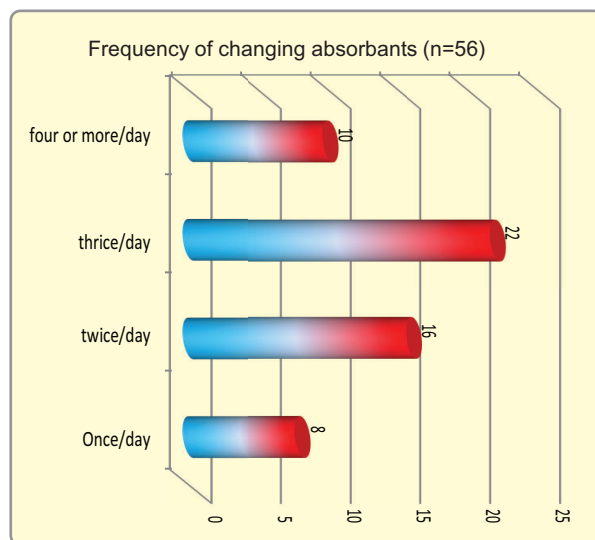


Figure 7

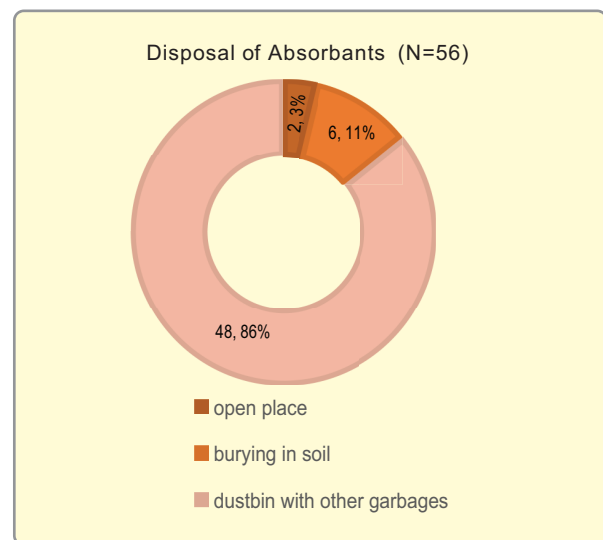


Figure 8

Table-I

|                                         |                         | Previous knowledge about menstruation |      |      |
|-----------------------------------------|-------------------------|---------------------------------------|------|------|
|                                         |                         | Yes                                   | No   |      |
| Use of Sanitary pad                     | Yes                     | 72.7                                  | 58.8 | .394 |
|                                         | No                      | 27.3                                  | 41.2 |      |
| Reuse of cloth                          | Yes                     | 100                                   | 50   | .050 |
|                                         | No                      | 0                                     | 50   |      |
| Washing material                        | Plain water             | 0                                     | 20   | .682 |
|                                         | Soap                    | 100                                   | 80   |      |
| Drying place                            | Open sunny place        | 100                                   | 0    | .007 |
|                                         | Others                  | 0                                     | 100  |      |
|                                         | Separately              | 100                                   | 80   | .682 |
| Place of storing                        | Mixed                   | 0                                     | 20   |      |
|                                         | <3 times per day        | 9.1                                   | 17.6 | .315 |
|                                         | 3 or more times per day | 90.9                                  | 82.4 |      |
| Method of disposal                      | Hygienic                | 90.9                                  | 82.4 | .315 |
|                                         | Non-hygienic            | 9.1                                   | 17.6 |      |
| Hair removal after each menstrual cycle | Yes                     | 40.9                                  | 8.8  | .007 |
|                                         | No                      | 59.1                                  | 91.2 |      |

## Discussion

The main objectives of this study were to explore the knowledge & menstrual hygiene management practices in adolescents. Mean age of respondents was 13.6 (11-17 yrs) and mean age of menarche was 11.61 (9-16 yrs). It was slightly higher in rural (12.9) areas than urban areas (12.6) in Alam et al.<sup>10</sup> Proper education & information on menstruation before reaching menarche are the right of adolescent girls & are crucial for healthy menstrual management. The Bangladesh National Hygiene Baseline Survey (BNHBS) 2014 also described that only 36% were informed about menstruation among the students before reaching menarche.<sup>9</sup> In this study about 61% had some sort of information about menstruation before reaching menarche. Alam et al. (2017) shows that 64% of girls did not know about menstruation before reaching menarche.<sup>7</sup> Like other studies, this study also found that mothers and sisters together were the two primary sources of menstruation-related information.<sup>7,10,11</sup> In this study, most mothers have primary education. Mothers with a lower level of knowledge can transfer very little regarding menstruation & often transfer misconceptions to their girl child.<sup>12</sup> On the other hand, high literacy of mothers sharing their accurate knowledge to their daughters can positively affect adolescent girls' conception and healthy management of menstruation over generations.<sup>13</sup> The absorbent used for managing menstrual blood is a primary health concern. In our study, 64% use sanitary pad & rest use old & new cloths & tissue. It is significantly higher than previous studies conducted in Bangladesh.<sup>14</sup> Similarly, study in Delhi, 63.3% of the girls used sanitary pads whereas cloth was used by 25.3%. In Maharashtra, 70% of the girls reused the same old cloth after washing.<sup>15</sup> In a Kenian study, cotton wool, plastic bags, mattresses, dried leaves, cow dung & paper from school classrooms were used.<sup>16</sup> In this study, sanitary pad buyers were mostly mother. In Alam et al, the unmet need for disposable sanitary pads among non-pad users was 71.8%. In Tanvi et al, despite the high need, they (35.6%) could not use because of the high cost of sanitary pads and the embarrassment of buying pads from male shopkeepers (37.5%). The reuse of cloths without maintaining proper hygiene may increase the risk of RTIs.<sup>13</sup> Many of the girls preferred cloth pieces and the usual practice was washing the cloth pieces and then drying them in the sun in a private area so that nobody can see them.

This study found 29% reuse cloths, of them 83% wash cloth with soap before reuse, mostly dry the cloths behind bed and 75% stored the cloth in hidden place inside room. These findings were consistent with similar studies.<sup>1,7,10</sup> Re-using of clothes may even be better when proper sanitization is maintained as cotton cloths are reusable, readily available and more environment-friendly than commercial sanitary pads.<sup>17</sup> In this study, drying sanitary materials in open and sunny places before re-using (17%) was significantly lower. Moreover, 83% of the respondent stored their dried clothes in hidden places within the room and 17% with other cloths for reuse and these findings differed from other studies.<sup>7</sup> Regular changing sanitary materials at least three –four times a day, is a prerequisite for maintaining good menstrual hygiene management. This study results suggest that about 36 respondents changed their sanitary materials at least three times a day during menstruation and this finding was also consistent with existing similar studies.<sup>7,10</sup> Unhygienic disposal of sanitary materials in rivers, ponds or even under the soil may increase the risk of infection of Hepatitis and HIV as sanitary materials soaked with the blood of an infected girl/ woman may contain these Bacteria and viruses.<sup>18</sup> This study indicates that 86% dispose in dustbin with other garbage & rest in open place or buried them in soil. In Alam et al, 55% disposed used sanitary materials under soil and 20.2% threw in ponds/rivers.

## Limitations of the study

In this study the limitation is small number of participants without any randomization. As same category of people, it may not represent whole population. So, my recommendation is the study should be performed in a larger scale.

## Conclusion

This study reported that menstrual hygiene was unsatisfactory among adolescent girls. Therefore, girls should be educated about the facts of menstruation and proper hygienic practices.

Education of mothers, adolescent girls as well as men about basic needs of women during menstruation will help in contributing towards healthier menstrual practices. Schools, health centers, social welfare foundations and NGOs should stand together to disseminate awareness about menstrual hygiene, pattern and problems. This would help in eliminating age old restrictions, traditional perceptions, false beliefs and wrong attitude towards menstruation

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