

Knowledge and Practice of Menstrual Hygiene Management among Adolescent Girls: A Study in Rural Areas of Khulna District

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Abstract

Menstrual hygiene management is an inadequately addressed issue in Bangladesh. Misconception, lack of knowledge, adverse attitude and specially culture of silence around menstrual hygiene increases the menstrual perception as shameful event. This study was designed to analyze the knowledge and practice of menstrual hygiene management among adolescent girls in three high school of rural areas of Khulna district, Bangladesh. Incorporating survey-based investigation, a total of 300 adolescence school girls were interviewed using simple random sampling from July to October 2019. The key-findings regarding the measurement of knowledge, attitude and activities towards menstrual hygiene management showed that majority (51%) the respondents had medium level of knowledge, 50.3 percent respondents had medium level of attitude and 60 percent respondents practiced medium level of activities regarding menstrual hygiene management. 22.3 and (70%) respondents faced light restrictions during menstruation. 47.7 percent respondents were found to use old cloth instead of sanitary pad. 39.7 percent respondents were found to get standard level of menstrual supports from school. School absenteeism due to menstruation was found in 64% girls. This study, however, also identified that attending religious activities had positive impact on menstrual knowledge ($p < .000$), attitude ($p < .000$) and practice ($p < .000$). On the other hand, respondents household income was found to be significant with respondent knowledge ($p < .000$), attitude ($p < .000$) and practice ($p < .000$) regarding menstrual hygiene management. The study concludes recommending adolescent girls need access to clean and soft, absorbent sanitary products which can in the long run, protect their health and good hygiene, such as use of sanitary pads and adequate care in the genital area.

Keywords: Knowledge, Practice, Menstruation, hygiene management and rural areas.

Date of Submission: 18-08-2022

Date of Acceptance: 28-08-2022

I. Introduction

The World Health Organization (WHO, 2015) defined adolescence period being between ages of 10-19 years, which covers the continuum of transition from childhood to adulthood (Upash, Tekelab & Mekonnen, 2015). Menstruation is a natural process and menstrual problem is not new to women and girls' who experience shedding of blood for 1-7 days every month from the age of maturity until menopause (Sowmya, 2013). But in many parts of the world it is seen as a taboo and rarely talked about (Hossain, Sharma & Sen, 2017). Young girls often grow up with limited knowledge of menstruation because their mothers and other women shy away from discussing the issues with them (Handa & Negi, 2017).

Moreover, it has also been largely neglected by the society and other sectors focusing on sexual and reproductive health and education. Though adolescence is the significant period of life, many adolescents are often less informed, less experienced and less comfortable accessing reproductive health information and services than adults (Omidvar & Begum, 2010). As a result, the practical challenges of menstrual hygiene are made even more difficult by socio-cultural factors (Kamath, Ghosh, Lena & Chandrasekaran, 2013). Most importantly, men and boys typically know even less, but it is important for them to understand menstrual

hygiene so they can support their wives, daughters, mothers, students, sisters, employees and peers (Awasthi, 2016).

Additionally, social prohibitions and the negative attitude of parents in discussing the related issues openly, have blocked the access of adolescent girls to the right kind of information, especially in the rural and tribal communities (Mudey, Kesharwani, Munday & Goyal, 2010). Surprisingly, studies have revealed that most of the adolescent girls had incomplete and inaccurate information about the menstruation and personal hygiene. This may result in incorrect and unhealthy behavior during their menstrual period (Haque, Rahman, Itsuko, Muthara & Sakisaka, 2014). Also, many mothers lack appropriate information and skills to communicate about menstrual hygiene which they pass on to their children, leading to false attitudes, beliefs and practices in this regard. Mothers, television, radio, friends, teachers and relatives are the main sources through which they get information on menstruation to the adolescent girls (Sarkar, Dobe, Dasgupta, Basu & Shahbabu, 2017). The reality is that the lack of knowledge and poor personal hygienic practices during menstruation can lead to various genital problems in the reproductive life of girls (Dube & Sharma, 2012). Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation (Muhit & Chowdhury, 2013). It is an important issue concerning morbidity and mortality of female population (Patavegar, Kapilsharmi, Rasheed & Pathak, 2014).

On the other hand, the interplay of socio-economic status, menstrual hygiene practices and reproductive tract infections are noticeable (Kumar, Gupta, Danish, & Nipun, 2016). In spite of increasing knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women, the social stigma attached to menstruation causes many girls and women to carry out dangerous hygiene practices. Therefore lacking a platform to share menstrual hygiene problems, girls and women often suffer from discomfort and infection. Traditional norms and beliefs, socio-economic conditions, and the physical infrastructure, influence the practices related to menstruation (Vyas, Deepshikha, Mahmood, Sharma, Srivastava & Shrotriya, 2017).

In Bangladesh higher percentage of girls do not have access to sanitary pads although their knowledge regarding menstrual and reproductive health issue is satisfactory. About 52 percent girls are using old cloth and 48.4 percent are using sanitary napkin for menstrual hygiene management. About 35 percent girls do not attend school during first two days of menstruation (Salim & Begum, 2016; Alam, *et.al.*, 2014). Practice of menstrual hygiene management is an issue that is inadequately addressed in Bangladesh. However, studies addressing knowledge, attitude and practice of menstrual hygiene management is limited in Bangladesh. Thus, the objective of this study is to analyze the knowledge, attitude and practice of menstrual hygiene management among adolescent girls in rural areas in Khulna District.

II. Methodology

The study was explanatory in nature. This study was designed to analyze the knowledge and practice regarding menstrual hygiene condition among adolescent school girls in rural area in Bangladesh. This study was conducted by the quantitative research approach and survey method to accomplish the research objective. The three schools were purposively chosen that include Star Jute Mills High School, Chandonimahal; Senhati High School, Senhati and Apex Girls High School, Star Gate in Khulna District, Bangladesh. To achieve the objectives of the study some specifications were made to identify the unit of analysis; (a) age 13 to 16 and (b) class viii-x at high school. As per the aforementioned criteria, population list was identified by a research team from these three schools **where** 600 adolescent girls were identified as a study population. Using simple random sampling technique half of the total population, that is, 300 girls were selected to be interviewed. The survey was carried out from July to October, **2019**. The respondents were interviewed through a semi-structured interview schedule containing both open and close ended questions that revealed detailed information on adolescent girls' socioeconomic status, their knowledge, attitude and practices regarding their menstrual hygiene management. At last, the chi square analysis and Pearson's correlation coefficient were used to assess the bivariate relationships between independent and dependent variables in addition to the extent of relationship among the variables.

III. Results and Discussion

Respondents Socioeconomic Status

Table 1 displayed the result about age, religion, year of schooling and educational institutions of the respondents. The respondents were divided into three age groups. Among them, majority (57%) of the respondents belongs to 14 and 15 years of age group and their mean age was 14.46 years and the Std. Deviation is 1.056. Majority of the respondents (81.3%) were Muslims. And majority of the respondents (34%) were found to be the student of class X. The table also showed that the majority (72.7%) of the respondents attend religious activities occasionally. Family works as a first agent of socialization process towards children. Family environment such as friendly relation with children, financial condition, and educational status of parents can provide appropriate knowledge and support to practice menstruation hygiene management and also can protect

by the risk of reproductive diseases. Family structure has impact on girls physical and psychological health for example in the type of slum family structure, there is a high risk to involve in unhygienic menstrual management (Kamath, Ghosh, Lena & Chandrasekaran, 2013).

Table 1: Respondents Socioeconomic Status

Variables	Number	Percent (%)
Age of the Respondents (In Years)		
<13	67	22.3
14-15	171	57.0
16>	62	20.7
Mean 14.46 and Standard Deviation 1.056		
Religious Identity of the Respondents		
Muslim	244	81.3
Sanatani	49	16.3
Christian	7	2.3
Attending Religious Activities		
Occasionally	218	72.7
Regularly	82	27.3
Respondents' Level of Education		
Class VIII	99	33.00
Class IX	99	33.00
Class X	102	34.00
Type of Family		
Nuclear	252	84.0
Joint	48	16.0
Total Family Members		
≤ 4	210	70.0
5-7	55	18.3
8≥	25	11.7
Mean 5.15 and Standard Deviation 1.66		
Respondents Father's Year of Schooling(In Year)		
Primary (1-5)	20	6.7
Secondary (6-10)	141	47.0
Higher Secondary (11-12)	90	30.0
Tertiary (13 to 16 and above)	49	16.3
Mean year of Schooling 10.81 and Standard Deviation 3.56		
Father's Occupation		
Business	75	25.0
Service	101	30.3
Jute Mills Worker	124	44.7
Mother's Year of Schooling(In Year)		
Primary (1-5)	39	13.0
Secondary (6-10)	177	59.0
Higher Secondary (11-12)	56	18.7
Tertiary (13 to 16 and above)	28	9.3
Mean (In Year) 9.71 and Standard Deviation 3.41		
Mother's Occupation		
Housewife	237	79.0
Teacher	28	9.3
Service	35	11.7
Total Household Income (in BDT)		
≤ 20000	202	67.3
20001-30000	56	18.7
30001≥	42	14.0
Mean 20140 BDT and Standard Deviation 11658.48		
Total Household Expenditure (in BDT)		
≤ 20000	216	72.0
20001-30000	77	25.7

30001≥	7	2.3
Mean 17073.33 BDT and Standard Deviation 7509.73		
Total Household Savings (in BDT)		
≤10000	272	90.7
10001-15000	7	2.3
15001≥	21	7.0
Mean 3533.33 BDT and Standard Deviation 5781.61		

Source:Field Survey,2019

In this study, table 1 demonstrates the household information of the respondents. The data, in the table shows that the significant number(84%) of the respondent’s family **was** nuclear family and notable (70%) number of the respondents reported that their family member were not more than 4. A remarkable number of the respondent’s father (47%) completed their secondary level of education.**Here**, the majority (44.7%) of the respondent’s father’s occupation wasjute mill worker. The study also found that the highest frequency was noted in respondents household income which ranged from 10001-30000 BDT representing (43.3%) of the respondents and mean household income was 20140 takawith Std. deviation 11658.48. **Data on this table represent that**the large number of the respondent’s(81.3%) monthly family savings was less than 10,000 BDT, **and**mean family savings was 3533.33 taka **with** std. deviation 5781.607.

Knowledge,Source, Attitude and Experiences of Menstrual Hygiene

The mostcommon complaint in the adolescent age group are the menstrual disturbances. There are several misconceptions and false practices around menstruation which sometimes result insevere health issues. The unhygienic practices in menstrual hygiene management can lead to pelvic inflammatory diseases and even infertility. An adolescent girl needs special health care in the monthly cycles of menstruation that has been collectively given the term “Menstrual hygiene (Sharma, Wavare, Gautam & Sharma, 2013).

The surveyfound that majority (51%) of the respondents had medium level of knowledge towards menstrual hygiene. It is deemed thatstudents’ level of knowledge toward menstrual hygiene were more likely to practice menstrual hygiene management. However, students received knowledge about menstrual hygiene from various sources but among these significant number (22.3%) of the respondents got their information from their mother.**And in terms of the level of attitude**, majority (50.3%) of the respondents had this towards menstrual hygiene.

Table 2: Knowledge, Source, Attitude and Experiences of Menstrual Hygiene

Variables	Number	Percent (%)
Level of Knowledge toward Menstrual Hygiene		
Low	33	11%
Medium	153	51%
High	114	38%
Source of Information		
Health Worker	28	9.3
Educational Institution	7	2.3
Friends	19	6.3
Relatives	34	11.3
Grandmother	41	13.7
Cousins	13	4.3
Sister	42	14
Television/Newspaper/Magazines	49	16.3
Mother	67	22.3
Level of Attitude		
Low	34	11.3%
Medium	151	50.3%
High	115	38.3%
Knowledge about Menstruation before Experience		
No	205	68.7
Yes	95	31.3
Reaction to First Menstruation		
Disturbance	54	18.0
Discomfortable	55	18.3

Don't Know	135	11.7
Scared	56	52.0
Share of First Menstruation		
Mother	148	49.3
Sister	89	29.7
Grandmother	28	9.3
Peer/Friend	7	2.3
Others	28	9.3
Restrictions during Menstruation at First Time		
Low	131	70.0
Medium	113	18.3
High	56	11.7
Mean 18.35 and Std. Deviation 3.12		
Physical Problems during Menstruation		
Low	35	11.7
Medium	186	62.0
High	79	26.3
Mean 19.39 and Std. Deviation 2.79		
Types of Absorbent Material Used during Menstruation		
Sanitary pad	111	37.0
Old cloth	143	47.7
New cloth	39	13.0
Tissue roll	7	2.3
Numbers of Months Using the Cloth (N=182)		
≤4	108	59.3
5-8	57	31.3
9≥	17	9.3
Mean 4.64 and Std. Deviation 2.85		
Place of Drying Cloth for Using Again		
Inside the room but not in sunlight	73	63.7
Inside the room but in sunlight	16	10.7
Outside the room and in sunlight	20	13.3
Under cloth in bed room	32	17.3
Under cloth in sunlight	41	24.3
Method of Disposing Used Absorbent Material		
Dustbin	78	26.0
Drain	6	2.0
Toilet	58	19.3
Open Space	41	13.7
pond/cannel/any type of water source	83	27.7
Others	34	11.3

Source:Field Survey,2019

The table 2 shows that the majority (68.7%) respondents had no idea about menstruation before they experience it. (52%) of the respondents were found to be scared about their first menstruation. Moreover, the majority of the respondents (49.3%) stated that they shared their feelings with mother. Menstruation is a physiological process and the survey found a great number (70%) of the respondents felt lower level of restrictions when they experience it for the first time. On the other hand, majority of the respondents (62%) had medium level of physical problems during menstruation, such as abdominal pain, breast pain, headache and others physical problems during menstruation. The rural girls hardly use sanitary pad because of unavailability, financial problem, lack of awareness and hesitation to buy pad from shop. In this survey, only 37 percent respondents were found to use sanitary pad as absorbent materials and highest number (47.7%) of the respondents used old cloth as so. The respondents (59.3%) who used cloth were also found to use the same cloth for 1 to 4 months. And their mean was 4.64 month. Regarding the place of drying absorbent material, significant number (24.3%) of the respondents were found to dry this cloth under another cloth. In this study the highest number (27.7%) of the respondents were seen disposing their used absorbent material in pond or so. According to Rizvi and Ali, (2016) Many girls are not even aware of menstruation before their menarche.

The lack of access to reliable sources of information on reproductive health means that girls and even adult women may hold misconceptions about the physiology of menstruation and its management. Poor menstrual management is a major cause of absenteeism from school. When a school girl misses significant days of academic lessons, it affects her performances which in turn may cause her to drop out from school. As a taboo topic in many cultures, the process and management of menstruation is often shrouded in mystery. Cultural restriction and discriminatory gender roles exacerbate women’s difficulties during menstruation.

Menstruation Hygiene Management and Other Related Activities at School

In addition to girls practice of menstrual hygiene management somehow depends on their age, religious attachment and most importantly what type of facilities they get during the menstruation (Mahajan & Kaushal, 2018). In table 3, the majority (57.7 %) of the respondents disposed their used cloth inside the basket of bathroom, (23.7%) respondents threw inside the whole of bathroom and (18.7%) threw this cloth at their convenient places.

Table 3: Menstruation Hygiene Management and Other Related Activities at School

Place of Disposing Used Material at School	Frequency	Percent
Inside the whole of latrine	71	23.7
Inside the basket of bathroom	173	57.7
No definite space	56	18.7
Menstruation Hygiene Management Facilities in School		
Low	106	35.3
Medium	75	25
High	119	39.7
Regular School Attendance during Menstruation		
Yes	109	36
No	191	64
Level of Absenteeism During Menstruation		
Low	49	25
Medium	118	55.3
High	34	11.3
Activities during Menstruation		
Low	44	14.7
Medium	180	60.0
High	76	25.3

Source: Field Survey, 2019

The study showed that majority (39.7%) of the respondents celebrated higher level of facilities towards menstrual hygiene management in school whereas 35.3 percent stated lower level of facilities and only 11.3 percent mentioned medium level of facilities from school. The table 3 showed that the majority (64%) of the respondents did not attend school during their menstrual period whereas only 36 percent respondents attended school during menstrual period.

There were some variable incudes for measuring the respondents activities during menstruation like sleeping in clean bed with others, taking non-vegetarian healthy food, using clean absorbent material, sharing menstrual issues with mother/female members, keeping absorbent material with regular cloths, disclosing absorbent materials self/ other members of family, changing panty at least once per day, using plastic bag/ paper to wrap used absorbent material for disposing, attending educational activities/ school regularly, participating in indoor/outdoor games, buying absorbent materials from shop/ pharmacy without any hesitation and consulting with doctor about menstruation hygiene management. In the study the maximum respondents 60.0 percent practiced medium level of activities for menstrual hygiene management, 25.3 percent respondents practiced high level activities and 14.7 percent respondents practiced low level of activities regarding menstrual hygiene management. **Therefore, it is evident that** most of the respondents didn’t practice the proper hygiene management activities during menstruation.

Relation between Respondent’s Socioeconomic Status and Knowledge of Menstrual Hygiene Management

Pearson’s chi-square test was completed along with Fisher’s exact test to understand the relationship between respondent’s socioeconomic status and knowledge of menstrual hygiene management. **Table-4** representing the age of the respondent (χ^2 3.08, $P>.545$) were statistically insignificant with knowledge regarding menstrual hygiene management. **The test identified that attending religion -activities ($P<.000$) was significant with respondents knowledge regarding menstrual hygiene management.** Respondents knowledge was found to be positively associated with respondents year of schooling ($P<.000$). The test also found that both the fathers year of schooling ($P<.000$), and mother year of schooling ($P<.000$) effected respondents knowledge. Household income also influenced the knowledge of the adolescent girls. **The test also identified that household income of the respondents ($P<.000$) was statistically significant with respondents knowledge.** **It was also seen that household expenditure (χ^2 8.99, $P<.000$) also influenced respondents knowledge regarding MHM.** According to Hossain et al., (2017)MHM is an issue that is inadequately addressed in Bangladesh. Misconceptions, lack of information and adverse attitudes towards menstruation may lead to a negative self-image among girls who are experiencing menstruation for the first time and the culture of silence around menstrual hygiene further increases the perception of menstruation as shameful event that needs to be hidden. Thus, to break the silence of taboo and successfully manage menstrual hygiene, adolescents need to understand the biologic change they are experiencing and be equipped with the skills to cope with it.

Table 4: Relation between respondent’s Socioeconomic Status and knowledge of Menstrual Hygiene Management

Independent variables	Dependent Variable (Knowledge regarding Menstrual Hygiene Management)			χ^2 (df)	Fisher’s Exact Test	P-value
	Low	Medium	High			
Age of the Respondents (In Years)						
≤13	5(1.7)	34(11.3)	28(9.3)	3.08 ₍₄₎	3.21	.545
14-15	20(6.7)	83(27.7)	68(22.7)			
16≥	9(3.0)	34(11.3)	10(6.3)			
Attending Religious Activities						
Occasionally	34(11.3)	97(32.3)	87(29.0)	18.71 ₍₂₎	27.35	.000***
Always	0(0.0)	54(18.0)	28(9.3)			
Year of Schooling (In Years)						
Class VIII	15(5.0)	40(13.3)	44(14.7)	8.41 ₍₄₎	8.533	.078*
Class IX	8(2.7)	51(17.0)	40(13.3)			
Class X	11(3.7)	60(20.0)	31(10.3)			
Type of Family						
Nuclear	34(11.3)	118(39.3)	100(33.3)	11.08 ₍₂₎	16.18	.004**
Extended	0(0.0)	33(11.0)	15(5.0)			
Father’s Year of Schooling						
Primary	0(0.0)	13(4.3)	7(2.3)	24.86 ₍₆₎	32.29	.000***
Secondary	21(7.0)	54(18.0)	66(22.0)			
Higher Secondary	13(4.3)	49(16.3)	28(9.3)			
Tertiary	0(0.0)	35(11.7)	14(4.7)			
Father’s Occupation						
Business	13(4.3)	35(11.7)	27(9.0)	12.51 ₍₆₎	16.11	.052*
Service	7(2.3)	42(14.0)	42(24.0)			
Jute Mills Worker	14(4.7)	74(24.7)	46(15.3)			
Mother’s Year of Schooling						
Primary	0(0.0)	39(13.0)	0(0.0)	61.87 ₍₆₎	80.03	.000***
Secondary	27(9.0)	63(21.0)	87(29.0)			
Higher Secondary	7(2.3)	28(9.3)	21(7.0)			
Tertiary	0(0.0)	21(7.0)	7(2.3)			
Mother’s Occupation						
Housewife	27(9.0)	116(38.7)	94(31.3)	26.82 ₍₆₎	34.05	.000***
Teacher	7(2.3)	21(6.0)	14(4.7)			
Service	0(0.0)	14(4.7)	7(2.3)			
Total Household Income (in BDT)						
≤ 20000	27(9.0)	95(31.7)	80(26.7)			

20001-30000	7(2.3)	21(7.0)	28(9.3)	24.14 ₍₄₎	28.75	.000***
30001≥	0(0.0)	35(11.7)	7(2.3)			
Total Household Expenditure (in BDT)						
≤ 20000	27(9.0)	109(36.3)	80(26.7)			
20001-30000	7(2.3)	35(11.7)	35(11.7)	8.99 ₍₄₎	11.66	.061*
30001≥	0(0.0)	7(2.3)	0(0.0)			
Total Household Savings (in BDT)						
≤10000	34(11.3)	137(45.7)	101(33.7)			
10001-15000	0(0.0)	0(0.0)	7(2.3)	15.32 ₍₄₎	19.76	.004**
15001≥	0(0.0)	14(4.7)	7(2.3)			

*** Significant level 1%; ** Significant level 5%; * Significant level 10% **Source:**Field Survey, 2019

Relation Between Respondents’ Socioeconomic Status and Attitudetowards Menstrual Hygiene Management

Table-5 Showed thatage of the respondent (χ^2 3.08, $P>.717$) were statistically insignificant with attitude towards menstrual hygiene management.**The surveyfound that**attending religion activities ($P<.000$) was significant with respondents attitude regarding menstrual hygiene management. **On the other hand,**respondents attitude was positively associated with respondents year of schooling ($P<.000$), **similarly,** fathers year of schooling ($P<.000$), and mother year of schooling ($P<.000$) both effected respondents attitude regarding MHM because higher the parents education had relation with higher respondents attitude regarding menstrual hygiene management. Household income influenced the attitude of the children. In this study, household income of the respondents ($P<.000$) was statistically significant with respondents attitude regarding menstrual hygiene management. **The survey also found that** household expenditure (χ^2 17.92, $P<.000$) had an influence on respondents attitude regarding MHM.

Table 5: Relation Between Respondent’s Socioeconomic Status and Attitude towards Menstrual Hygiene Management

Independent variables	Dependent Variable (Attitude towards Menstrual Hygiene Management)			χ^2 (df)	Fisher’s Exact Test	P-value
	Low	Medium	High			
Age of the Respondents (in Years)						
≤13	17(5.7)	48(16.0)	2(0.7)			
14-15	51(17.0)	112(37.3)	8(2.7)	2.10 ₍₄₎	2.10	.717
16≥	22(7.3)	38(12.7)	2(0.7)			
Attending Religious Activities						
Occasionally	83(27.7)	129(43.0)	6(2.0)			
Always	7(2.3)	69(23.0)	6(2.0)	26.06 ₍₂₎	30.08	.000***
Year of Schooling						
Class VIII	41(13.7)	58(19.3)	0(0.0)			
Class IX	15(5.0)	80(26.7)	4(1.3)	24.59 ₍₄₎	28.72	.000***
Class X	34(11.3)	60(20.0)	8(2.7)			
Type of Family						
Nuclear	89(29.7)	151(50.3)	12(4.0)	25.95 ₍₂₎	35.79	.000***
Extended	1(0.3)	47(15.7)	0(0.0)			
Father’s Year of Schooling						
Primary	0(0.0)	14(4.7)	6(2.0)			
Secondary	49(16.3)	86(28.7)	6(2.0)	79.39 ₍₆₎	83.52	.000***
Higher Secondary	41(13.7)	49(16.3)	0(0.0)			
Tertiary	0(0.0)	49(16.3)	0(0.0)			
Father’s Occupation						
Business	27(9.0)	48(16.0)	0(0.0)			
Service	21(7.0)	70(23.4)	0(0.0)	34.48 ₍₆₎	48.51	.000***
Jute Mills Worker	42(14.0)	80(26.7)	12(4.0)			
Mother’s Year of Schooling						
Primary	7(2.3)	26(8.7)	6(2.0)			
Secondary	62(20.7)	109(36.3)	6(2.0)	34.53 ₍₆₎	40.45	.000***
Higher Secondary	21(7.0)	35(11.7)	0(0.0)			

Tertiary	0(0.0)	28(9.3)	0(0.0)			
Mother's Occupation						
Housewife	76(25.3)	149(49.7)	12(4.0)	25.33 ₍₆₎	36.92	.000***
Teacher	14(4.7)	35(12.7)	0(0.0)			
Service	0(0.0)	14(4.7)	0(0.0)			
Total Household Income (in BDT)						
≤ 20000	76(25.3)	114(38.0)	12(4.0)	33.65 ₍₄₎	48.75	.000***
20001-30000	14(4.7)	42(14.0)	0(0.0)			
30001≥	0(0.0)	42(14.0)	0(0.0)			
Total Household Expenditure (in BDT)						
≤ 20000	76(25.3)	128(42.7)	12(4.0)	17.92 ₍₄₎	23.40	.001**
20001-30000	14(4.7)	63(21.0)	0(0.0)			
30001≥	0(0.0)	7(2.3)	0(0.0)			
Total Household Savings (in BDT)						
≤10000	90(30.0)	170(56.7)	12(4.0)	15.91 ₍₄₎	24.73	.003**
10001-15000	0(0.0)	7(2.3)	0(0.0)			
15001≥	0(0.0)	21(7.0)	0(0.0)			

*** Significant level 1%; ** Significant level 5%; * Significant level 10% **Source:**Field Survey, 2019

Relation Between Respondent's Socioeconomic Status and practice of Menstrual Hygiene Management
The study found that there was no relationship between age of the respondent and respondents practice of menstrual hygiene management. the age of the respondent (χ^2 3.08, $P > .591$) were found statistically insignificant. **Table-6** illustrates that attending religion activities ($P < .000$) was significant with respondents practice of menstrual hygiene management. **It was also found that** respondents practice of menstrual hygiene management was positively associated with respondents year of schooling ($P < .000$), similarly, fathers year of schooling ($P < .000$), and mother year of schooling ($P < .000$) both influenced respondents practice of menstrual hygiene management. It was noted that household income influenced the practice of menstrual hygiene management of the children and found to be ($P < .000$) statistically significant. And **similarly** household expenditure (χ^2 39.98, $P < .000$) also influenced the respondents practice of menstrual hygiene management.

Table 6: Relation Between Respondent's Socioeconomic Status and practice of Menstrual Hygiene Management

Independent variables	Dependent Variable (Activities regarding Menstrual Hygiene Management)			χ^2 (df)	Fisher's Exact Test	P-value
	Low	Medium	High			
Age of the Respondents (In Years)						
≤13	8(2.7)	38(12.7)	21(7.0)	2.81 ₍₄₎	2.28	.591
14-15	28(9.3)	101(33.7)	42(14.0)			
16≥	8(2.7)	41(13.7)	13(4.3)			
Attending Religious Activities						
Occasionally	38(12.7)	153(51.0)	27(9.0)	70.72 ₍₂₎	65.80	.000***
Always	6(2.0)	27(9.0)	49(16.3)			
Year of Schooling (In Years)						
Class VIII	22(7.3)	64(21.3)	13(4.3)	26.18 ₍₄₎	28.83	.000***
Class IX	17(5.7)	46(15.3)	36(12.0)			
Class X	5(1.7)	70(23.3)	27(9.0)			
Type of Family						
Nuclear	44(14.7)	161(53.7)	47(15.7)	40.11 ₍₂₎	41.38	.000***
Extended	0(0.0)	19(6.3)	29(9.7)			
Father's Year of Schooling						
Primary	0(0.0)	13(4.3)	7(2.3)	24.86 ₍₆₎	32.29	.000***
Secondary	21(7.0)	54(18.0)	66(22.0)			
Higher Secondary	13(4.3)	49(16.3)	28(9.3)			
Tertiary	0(0.0)	35(11.7)	14(4.7)			
Father's Occupation						
Business	13(4.3)	41(13.7)	21(7.0)	43.97 ₍₆₎	63.26	.000*
Service	0(0.0)	71(22.4)	21(7.0)			

Jute Mills Worker	31(10.3)	69(23.0)	34(11.3)			
Mother's Year of Schooling						
Primary	0(0.0)	39(13.0)	0(0.0)	61.87 ₍₆₎	80.03	.000***
Secondary	27(9.0)	63(21.0)	87(29.0)			
Higher Secondary	7(2.3)	28(9.3)	21(7.0)			
Tertiary	0(0.0)	21(7.0)	7(2.3)			
Mother's Occupation						
Housewife	44(14.7)	131(43.7)	62(20.7)	21.67 ₍₆₎	33.52	.001***
Teacher	0(0.0)	21(7.0)	7(2.3)			
Service	0(0.0)	29(9.4)	7(2.3)			
Total Household Income						
≤ 20000	44(14.7)	117(39.0)	41(13.7)	36.40 ₍₄₎	47.65	.000***
20001-30000	0(0.0)	42(14.0)	14(4.7)			
30001≥	0(0.0)	21(7.0)	21(7.0)			
Total Household Expenditure						
≤ 20000	44(14.7)	124(41.3)	48(16.0)	39.98 ₍₄₎	49.24	.000***
20001-30000	0(0.0)	56(18.7)	21(7.0)			
30001≥	0(0.0)	0(0.0)	7(2.3)			
Total Household Savings						
≤10000	44(14.7)	159(53.0)	69(23.0)	35.16 ₍₄₎	41.20	.000**
10001-15000	0(0.0)	0(0.0)	7(2.3)			
15001≥	0(0.0)	21(7.0)	0(0.0)			

*** Significant level 1%; ** Significant level 5%; * Significant level 10% Source: Field Survey, 2019

Correlation Between Respondent's Socio-economic Status and Knowledge, Attitude and Activities regarding Menstrual Hygiene Management

The table 7 showed that the correlation among mother's year of schooling (.227**), mother's occupation (.339**) and restriction during menstruation (-.119*) were statistically significant with respondents knowledge regarding menstrual hygiene management. On the other hand, all the socio-economic status without age of the respondents were statistically significant with respondents attitude towards menstrual hygiene management. Additionally, it is also seen that all the socio-economic status without age of the respondents were statistically significant.

Table 7: Correlation Between Respondent's Socio-economic Status and Knowledge, Attitude and Activities regarding Menstrual Hygiene Management

Socio-economic Status	Knowledge about Menstruation	Sig. (2 tailed)	Attitude towards Menstruation	Sig. (2 tailed)	Activities about Menstruation	Sig. (2 tailed)
Age of the Respondent	-.091	.116	-.061	.289	-.061	.289
Attending Religious Activities	.067	.245	.291**	.000	.291**	.000
Year of Schooling of the Respondent	-.061	.289	.123*	.033	.123*	.003
Father's Year of Schooling	-.057	.335	.262**	.000	.376**	.000
Father's Occupation	-.064	.265	.197**	.001	.429**	.000
Mother's Year of Schooling	.227**	.001	.503**	.000	.108**	.000
Mother's Occupation	.339**	.000	.125*	.031	.228**	.000
Household Income	.025	.672	.197**	.001	.402**	.000
Household Expenditure	.035	.551	.121*	.035	.121*	.035
Restriction during menstruation	-.119*	.040	.260**	.000	.260**	.000

**&* Correlation is significant at the 0.01 and 0.05 level (2- tailed) Source: Field Survey, 2019

IV. Conclusion

Adolescent girls constitute a vulnerable group, particularly in Bangladesh where female child is discriminated in the society. Menstruation is still regarded as something unclean or dirty in Bangladesh and the reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. On the contrary, menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes. Based on the findings of the present study, it can be concluded that use of sanitary products for MHM is related to maternal education and economic conditions. A large scale study including all the variables related to hygienic practices during menstruation is required to obtain further information to find out the real situation.

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Dipika Chandra, et. al. "Knowledge and Practice of Menstrual Hygiene Management among Adolescent Girls: A Study in Rural Areas of Khulna District." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 27(08), 2022, pp. 36-47.