

**Original article:**

**Awareness about Reproductive Health Issues among the Adolescent Girls in a Rural Area of Bangladesh**

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**Abstract:**

**Background:** In Bangladesh there is a scarcity of data on the degree of knowledge among adolescents about reproductive health. **Objective:** To assess the awareness about reproductive health issues among adolescent girls in a rural area of Bangladesh. **Materials and method:** This descriptive type of cross sectional study was conducted among 148 adolescent girls who were selected purposively at Purba Chandara village of Kaliakair thana of Shafipur upazilla of Gazipur district in Bangladesh. A pre-tested semi structured questionnaire was used to collect data by face to face interview. **Results:** Most of the respondents (76.35%) were within the age group of 15-19 years. The average age of their menarche was 14 years. Majority of the respondents 136 (91.89%) had history of menstruation and 97 (65.54%) mentioned the duration of menstrual cycle  $\geq 7$  days. Regarding the hygienic practice during menstruation, majority of them (68.24%) were unhygienic. About knowledge on age at marriage, 131 (88.51%) reportedly mentioned correct answer that marriage age is 18 years or more for girls. Regarding the knowledge on family planning and family planning methods, most of them (41.89%) had no knowledge. About the infection of reproductive tract, 87 (58.78%) had no knowledge and about half of the respondents (92; 56.79%) had no knowledge about symptoms of STDs. **Conclusion:** it is our responsibility to improve the condition of adolescent girls by giving clear and correct knowledge on reproductive health which will help them to maintain a good and sound reproductive health in future.

**Keywords:** Awareness; Reproductive health issues; Adolescent girls; Bangladesh

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**Introduction:**

Adolescent is a cross road in the development of life through which a child gradually walks to reach the maturity of adults.<sup>1</sup> During this period, a child undergoes biological transition, which is

characterized by puberty related changes in physical appearance and the attainment of reproductive capability.<sup>2</sup> Reproductive health includes needs for reproductive health care, family planning, HIV/AIDS information, safer sex, and unwanted

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pregnancy, complication of early pregnancy, sexually transmitted diseases (STDs), safe abortion and safe motherhood.<sup>3</sup> Adolescents face multifarious challenges and risks that produce an impact directly in their physical, emotional and spiritual well-being.<sup>4</sup> Furthermore, lack of access to information and services and societal pressure to perform as adults make the adolescents particularly vulnerable to health risks, especially in the area of reproductive health.<sup>5</sup> Young girls in Bangladesh reach in their adulthood with very little preparation and information about reproductive health, livelihood and life skills, and they are relatively in a disadvantageous position in all respects compared to men.<sup>6</sup>

Socio-economic conditions, urban and rural beliefs and traditions become a barrier between proper information about reproductive health, contraceptives and family planning and the adolescents. This leads to a multitude of issues such as poor hygiene practices, discomfort during menstruation, early pregnancies, unsafe sex practices and other reproductive health issues such as sexually transmitted infections. These problems eventually cause emotional distress as well as physical discomfort.<sup>6</sup> Under the current Health and Population Sector Program (HPSP) of the Government of Bangladesh (GOB), adolescents have been identified as an under-served priority target group.<sup>5</sup>

In some parts of the developing countries, still a culture of silence surrounds the topic of menstruation and related issues; as a result many young girls lack of appropriate and sufficient information regarding menstrual hygiene. This may result in inaccurate and unhealthy behaviour during their menstrual period. Also, many mothers lack of correct 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 and resulting certain diseases like pelvic inflammatory diseases, urinary tract infection etc.<sup>7</sup>

Early marriage is another important issue regarding adolescent health. There are many reasons for early marriage, but most vital reasons among them are poverty, superstition and lack of awareness about safe motherhood and even family planning. With early marriage comes early pregnancy. Marriage and early child birth are linked to high rates of pregnancy related complication and high risk of new born. After marriage, adolescence undergoes many health problems like early pregnancy, child birth. The risks of early pregnancy and child birth are increase risk of maternal mortality especially among 14-19

years of age, low birth weight, premature labor, and complications during delivery and higher chance of new born death.<sup>8</sup>

Availability of relevant disaggregated data & comprehensive analysis of sexual reproductive health situation is necessary for appropriate planning & successful implementation of Age Specific Reproductive Health (ASRH) strategy. Unfortunately, availability of data related to adolescent & young people in Bangladesh is limited, so they reach in adulthood with very little preparation and information about reproductive health. Thus the result of this study could contribute to a girl to be enlightened, a woman to be enriched and a nation to be endowed with prosperity.

#### **Methodology:**

It was a descriptive type of cross-sectional study which was conducted at Purba Chandara village of Kaliakair thana of Shafipur upazilla of Gazipur district in Bangladesh on 23<sup>rd</sup> November, 2013 with a view to assess the awareness about reproductive health issues among adolescent girls in a rural area of Bangladesh. A sample of 148 adolescent girls was selected purposively. A pre-tested semi structured questionnaire was used for collection of data. Data were collected by face to face interview by using the questionnaire. The data were presented in simple frequency distribution tables and graphs.

#### **Ethical Clearance:**

Ethical clearance was obtained from the local authority before the study and the adolescent girls gave their informed consent before taking part in this study. Participation was purely on voluntary basis.

#### **Results:**

Table I shows socio-demographic characteristics of the respondents. Most of the respondents (113; 76.35%) were within the age group of 15-19 years. Mean age of the respondents was 15.82 years. Most of them were Muslim (132; 89.19%). Majority of them were married (86; 58.11%). Most of them (55; 37.16%) had primary level of education followed by (52; 35.13%) had secondary level of education. Regarding occupation, most of them (62; 41.89%) were housewives. The median family income was Tk. 5132. Majority of the respondents (65; 43.92%) had monthly family income ranging from Tk. 5000-10000.

Table II shows that, out of 148 respondents (136; 91.89%) had history of menstruation. Out of 136 respondents, 30.15% started menstruation at age  $\geq$  14 years followed by 12 years (37; 27.2%). Regarding the knowledge on interval of menstruation, maximum of

the respondents (129;87.16%) mentioned  $\geq 28$  days. Most of the respondents (97;65.54%) mentioned the duration of menstrual cycle  $\geq 7$  days. About knowledge on use of hygienic materials during menstruation, majority of them (101; 68.24%) used old torn cloth. Maximum (107; 72.30%) mentioned that they used to wash their menstrual material with water and soap. Most of them believed that the menstrual material should be dried in direct sunlight (54; 36.48%) . In terms of knowledge on preservation of menstrual materials, majority of the respondents (101; 68.24%) mentioned that it should be in clean dry box and packet. Only 54.73% correctly mentioned that menstrual clothes should be used  $< 3$  months. Majority of them (61; 41.22%) had no knowledge on complications due to unhygienic practice. However, only 16.22% correctly mentioned about infection.

Table III shows that regarding knowledge on age at marriage, maximum (131; 88.51%) mentioned the correct answer that marriage age is  $\geq 18$  years. In terms of definition of early marriage, 41.21% gave correct answer. Regarding complications of early marriage, one third of the respondents (51; 28.17%) had no knowledge. Majority of them (62; 41.89%) had no knowledge on importance of family planning. About the knowledge on family planning methods for female, most of them (62; 41.89%) had no knowledge. About 56.08% mentioned about oral contraceptive pill. Regarding the knowledge on family planning methods for male, 58.39% had no knowledge. Others (60; 40.27%) could mentioned about condom. Regarding what should be the ideal number of children in a family, 81.25% could mentioned that two children will be ideal. Most of them (87; 58.78%) had no knowledge on infection of reproductive system. Majority of the respondents (105; 66.46%) had no knowledge on mode of transmission of infection of reproductive system. Some of them (28; 17.72%) were mentioned sexual intercourse followed by syringe and needle sharing (9; 5.70%). Majority of them (92; 56.79%) had no knowledge about symptoms of sexually transmitted disease. Majority of the respondents (104; 66.67%) had no knowledge about the prevention of sexually transmitted disease. Only 40.38% were mentioned about safer sex practice might be the way of prevention of STDs followed by sterilized needle and syringe (7, 13.46 %).

**Table 1: Distribution of the respondents by socio-demographic characteristics (n=148)**

Variables	Frequency	%
<b>Age of the respondents (year)</b>		
10-14	35	23.65
15-19	113	76.35

**Mean age of the respondents was 15.82 year.**

Religion	132	
Muslim	16	89.19
Hindu		10.81
<b>Educational qualification</b>		
Illiterate	14	9.46
Primary	55	37.16
Secondary	52	35.13
SSC	15	10.14
HSC	09	6.08

**Marital status**

Married	86	58.11
Unmarried	60	40.54
Divorce	02	1.35

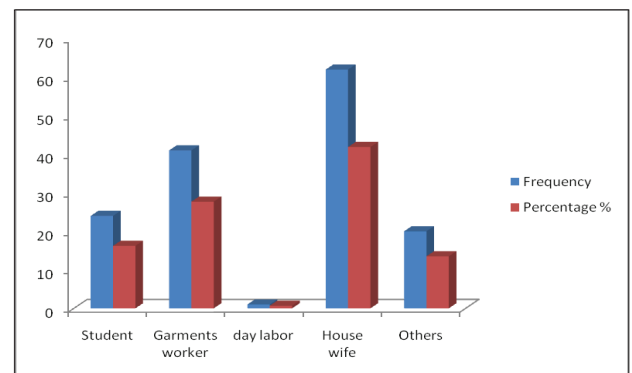
**Monthly Family Income (Tk.)**

$\leq 5000$	16	10.81
5000-10000	65	43.92
$>10000$	58	39.19
Others	09	6.08

**Number of family member**

$<5$	86	58.11
5-10	60	40.54
$>10$	02	1.35

Figure 1 : Distribution of the respondents by their



occupation (n=148)

**Table II: Distribution of the respondents by their knowledge about menstruation and menstrual hygiene (n=148)**

<b>History of menstruation</b>	<b>Frequency</b>	<b>%</b>
<b>Yes</b>	136	91.89
<b>No</b>	12	8.11

<b>Age at menarche (years) n=136</b>	<b>Frequency</b>	<b>%</b>
Up to 11	22	16.18
12	37	27.20
13	34	25.00
≥ 14	41	30.15
Others (Do not know)	2	1.47

<b>Interval of menstruation</b>	<b>Frequency</b>	<b>%</b>
≥ 28 days	129	87.16
< 28 days	5	3.38
No Knowledge	14	9.46

<b>Duration of menstrual cycle</b>	<b>Frequency</b>	<b>%</b>
< 7 days	44	29.73
≥ 7 days	97	65.54
Not known	7	4.73

<b>Hygienic practice during menstruation</b>	<b>Frequency</b>	<b>%</b>
Sanitary napkin	29	19.6
Old torn cloth	101	68.24
Cotton	6	4.05
Not known	12	8.11

<b>Washing of menstrual materials</b>	<b>Frequency</b>	<b>%</b>
With water & Soap	107	72.30
By soap, savlon & water	23	15.54
Only water	1	0.67
No knowledge	17	11.49

<b>Knowledge on drying of menstrual materials</b>	<b>Frequency</b>	<b>%</b>
Direct sunlight		
Corner of room at night	54	36.48
Normal air	51	34.46
Dark and dirty area	24	16.22
Do not know	5	3.38
	14	9.46

<b>Knowledge on preservation of menstrual materials</b>	<b>Frequency</b>	<b>%</b>
Clean dry box and packet	101	68.24
Behind the door	12	8.11

Others (moisturizer place, keep in same place up to next cycle etc.)	21	14.19
Do not know	14	9.45

**Knowledge on repeated use of menstrual materials**

	Frequency	%
< 3 month	81	54.73
< 6 month	12	8.11
< 1 year	12	8.11
Do not know	43	29.05

**Knowledge on Complication due to unhygienic practice during menstrual cycle**

	Frequency	%
No Knowledge	61	41.22
Infection	24	16.22

**Table III: Distribution of the respondents by their knowledge about marriage, family planning and STI (n=148)**

<b>Knowledge on age at marriage</b>	<b>Frequency</b>	<b>%</b>
> 18 years	131	88.51
< 18 years	8	5.41
Not known	9	6.08

**Definition of early marriage**

	Frequency	%
Correctly known	61	41.21
Incorrectly known	54	36.49
Not known	33	22.30

**Complication of early marriage (multiple response)**

	Frequency	%
Maternal death during delivery	24	18.46
Poor health	31	23.84
Became pregnant at early age	28	21.53
Problem of mother and child	27	20.76
Poor knowledge on pregnancy	9	6.92
Others (anaemia, anxiety etc.)	11	8.46
Do not know	51	28.17

**Knowledge on importance of family planning**

	Frequency	%
To reduce family size	32	21.62
To make small family	37	25
Others	17	11.49
Not known	62	41.89

**Knowledge on Family planning methods for female (multiple response)**

	Frequency	%
No knowledge	62	41.89
Oral contraceptive pill	83	56.08
Injectable	43	29.05
Norplant	14	9.46

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<b>Perception of ideal number of children</b>	<b>Frequency</b>	<b>%</b>
1	10	6.94
2	117	81.25
> 2	10	6.94
Do not know	7	4.86

<b>Knowledge on infection of reproductive system</b>	<b>Frequency</b>	<b>%</b>
Yes	61	41.22
No	87	58.78

<b>Knowledge on mode of transmission of reproductive system (multiple response)</b>	<b>Frequency</b>	<b>%</b>
Sexual intercourse	28	17.72
Syringe and needle sharing	09	5.70
Vertical transmission	04	2.53
Others	12	7.59
Not known	105	66.46

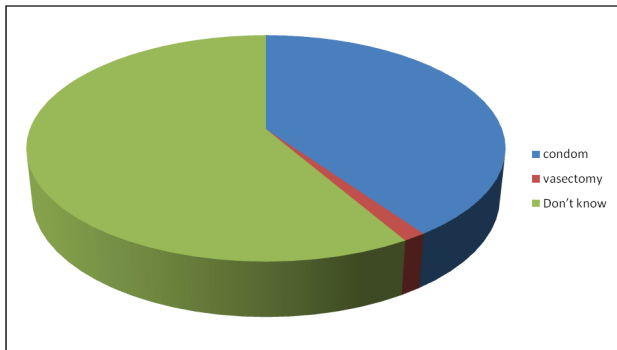
  

<b>Knowledge on symptoms of Sexually transmitted disease (multiple responses)</b>	<b>Frequency</b>	<b>%</b>
Lower abdominal pain	22	31.43
Dyspareunia	03	4.28
Itching	13	18.57
Fever	11	15.71
Leucorrhoea	07	10.00
Dysmenorrhoea	07	10.00
Other	07	10.00
Do not know	92	56.79

<b>Knowledge on prevention of Sexually transmitted disease (multiple responses)</b>	<b>Frequency</b>	<b>%</b>
Safer sex practice	21	40.38
Sterilized needle & syringe	7	13.46
Safe delivery practice	2	3.85
Others	22	42.31
Do not know	104	66.67

Figure 2: Distribution of respondents by knowledge on family planning methods (male)



### Discussion:

This descriptive type of cross sectional study was carried out among 148 adolescent girls to assess the knowledge of adolescent girls about particular aspects of reproductive health by using semi structured questionnaire and conducted in Purba Chandara village of Kaliakair thana of Shafipur upazilla of Gazipur district in Bangladesh. The mean age of our respondents were 15.82 years ranging from 10-19 years. About 76.3% respondents were within the age group of 15-19 years. 89.19% respondents were muslims and 58.11% respondents were married. In Bangladesh, out of 32 million adolescents, 51% are girls and half of them are married aged in between 15-19 years.<sup>9</sup>

Most of the respondents (37.16%) had primary level of education, followed by (35.13%) had secondary level of education. Data from the Bangladesh Demographic Health Survey–2007 shows that the percentage of adolescent women age 15-19 years had completed secondary education has increased from 18% to 59%.<sup>10</sup> More than two fifths(41.89%) were housewife followed by garments worker (27.7%). In Bangladesh, a large number of adolescent and young women migrate from rural areas to participate in wage labour. Most of them live in city slum areas and work in the garment industry. As estimated 80% of all total garments worker are female, of whom 50% are adolescent girls.<sup>11</sup> 43.92% respondents had family income ranges from taka 5000-10000.

Out of 148 respondents, 91.89% had history of menstruation. Highest percentage of the respondents experienced their menarche at age of 14 years (30.15%) followed by at age of 12 years (27.2%). The mean age of menarche was 14 years. It is comparable to a study about “General and Reproductive Health of Adolescent Girls in Rural South India” in which, out of 190 adolescents, 124 girls had attained menarche (65.26%) and the mean age of menarche was 13.9 years.<sup>12</sup> It was revealed in our study, majority of respondents used old torn cloths (68.24%) followed

by sanitary napkin (19.6%) during menstrual period. This findings may comparable to a study conducted in Rajasthan of India in 2006 that 89% of girls use cloths and rags and 11% of girls share used menstrual cloths and rags with others to absorb their menstrual flow.<sup>13</sup> In our study, 41.22% had no knowledge on complications due to unhygienic practice during menstrual cycle. Only 16.22% correctly mentioned infection and the rest were incorrectly mentioned itching and others, compared with the study in rural Bangladesh is that 12% of the study population had the basic understanding of reproductive tract infections.<sup>14</sup>

In the present study about the knowledge on age at marriage, majority of the respondents (88.55%) gave correct answer that marriage age is 18 years. In terms of definition of early marriage, 41.21% gave correct answer that marriage below 18 years and 36.49% gave incorrect answer. According to Rahman M M and Kabir M, majority of the adolescents did not know the legal age at marriage. About 62.4% of adolescents correctly state the legal age at marriage for girls, whereas only 12% knew about legal age at marriage for boys.<sup>15</sup> About the knowledge on importance of family planning, 41.89% had no knowledge. Only 25% of respondents mentioned to make small family. Regarding the knowledge on family planning methods for female, 41.89% had no knowledge. 56.08% could mention about oral pill followed by injectables (29.05%). About male contraceptives, 58.39% had no knowledge and 40.27% mentioned about condom. According to study of the Bangladesh Demographic Health Survey- 2007, among 15-19 years (37.6%) used modern methods (birth control pills, condoms, injectables, IUCDs) while 4.2% used traditional methods ( withdrawal, periodical abstinence).<sup>6</sup>

In our study, most of the respondents (58.78%) had no knowledge on infection of reproductive system and rest (41.22%) had knowledge. Majority of them (66.46%) had no knowledge on mode of transmission of infection of reproductive system. About the knowledge on symptoms of STIs, only 31.43% mentioned lower abdominal pain followed by itching (18.57%), fever (15.71%) and (56.79%) had no knowledge. Only 40.38% reportedly mentioned that safer sex practice might be the way of prevention of STIs followed by sterilized needle and syringe (13.46%) and majority of them (66.67%) had no knowledge. A recent evaluation study of data on 3362 adolescent girls irrespective of their marital status found that more than half (54.8%) of the adolescent

have heard about STIs as well as AIDS. Only few of them had better knowledge on STIs in terms of mode of transmission and prevention.<sup>15</sup> According to our study, the adolescent girls in the rural area of Bangladesh have not sufficient knowledge about reproductive health issues. Today's adolescent girls are the mother of tomorrow and adolescent girls have to experience the reproductive health near future. So, clear and correct knowledge of adolescent girls on reproductive health will help them to maintain a good and sound reproductive health in future.

### **Conclusion:**

Adolescents' population has tremendous demographic significance because at the same time they are the present and the future population of a country. Bangladesh still faces formidable obstacles in the path to the goals of health of reproductive well being due to inadequate knowledge or misconception about reproductive health issues. So, proper knowledge is a pertinent part of life. Girls seemed to be less cognizant about menstruation and its inception, the level of knowledge is not up-to the mark about these matters probably due to the girls' knowledge and information which they received from their text books and different media like TV, radio, newspaper, friends and relatives are incomplete and insufficient.

Thus their understanding for reproductive health reflected a variety of misconceptions or ignorance, incomplete knowledge, unscientific notions and blindfold faith in social customs. The awareness remains dismal among adolescent girls who have very low knowledge on STDs. This may be due to their lack of interest and shyness about this issue. It is our responsibility to improve the condition of reproductive health of adolescent girls by continuous mass campaigning through different medias and also by giving detailed information in our text book about it as well as there is an urgent need to bring out the real capability of the government health facilities.

**Conflict of interest:** The authors declare that they have no conflict of interest.

### **Authors' Contributions:**

Data gathering and idea owner of the study: Akther N

Study design: Akther N.

Data gathering: Akther N

Writing and submitting manuscript: Akther N, Begum M, Tasmin T, Imtiaz KS, Alam AN, Begum A, Begum N.

Editing and approval of final draft: Akther N, Begum M, Tasmin T, Imtiaz KS, Alam AN, Begum A, Begum N.

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