

Knowledge on Reproductive Health Issues Among the Unmarried Adolescent Girls

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Abstract

Objective: To assess the level of knowledge of the adolescent girls regarding reproductive health issues.

Materials and methods: A cross sectional descriptive type of study was carried out among 150 unmarried adolescent girls of Vashantek slum in Dhaka city by face to face interview using a semi-structured questionnaire from January to June 2008.

Results: The mean age of the respondents were 16.4 ± 2.9 years ranging from 10-19 years. Out of 150 respondents, 130 had history of menstruation and their median age of menarche was 13 years. The correct knowledge was high among the adolescent having secondary level of education than the SSC and above or primary level of education and the difference was statistically significant ($p < 0.05$). About three-fourths of the respondents had sufficient knowledge about hygienic menstrual practice. Majority of the girls could mention the legal age of marriage. Regarding the demerits of early marriage, majority mentioned some of the demerits but not all. Three-fifths of the respondents had no knowledge on importance of family planning and regarding the methods of family planning, majority of them had no knowledge. Majority of the respondents heard the disease AIDS but regarding the knowledge on causative agent half of them had no knowledge. More than two-fifths had no knowledge on mode of transmission of AIDS. It was also found that majority of the respondents had no knowledge on symptoms of AIDS and three-fifths had no knowledge on prevention of AIDS.

Conclusion: So formal, informal and special educational program may be taken to educate the adolescent girls on reproductive health issues and government should be more concerned about this.

Keywords: Menstrual Hygiene, Family Planning, and HIV//AIDS

Introduction

Bangladesh's adolescent population (ages 15-24) was

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estimated at about 28 million in 2000. Due to the effect of population momentum through which populations can continue to grow even as the rate of growth is declining and other effects, this age group will contribute significantly to the incremental population size of Bangladesh during the next 20 years, increasing by 21 percent to reach 35 million by 2020 (1). Across the developing world, adolescents only recently have been recognized as a distinct

adults or children. In Bangladesh, like India, the health needs and rights of adolescent girls, particularly those who are unmarried, are inadequately addressed. Social norms and restrictions deprive adolescents of access to information about their rights and their bodies, leaving them unable to make informed reproductive health choices(2). The origins of lifelong poverty and poor reproductive health are found in early adolescence and these issues are exacerbated in urban area. Firstly, they are consolidating their gender norms, including those regarding gender based violence. Secondly, they may be outside the home for the first time, migrating to cities for informal employment in unsafe areas. If they still reside at home, they are likely to have a disproportionate responsibility for child/invalid care or domestic work, and this is augmented in case of marital resolution or illness of a family member. Thirdly, girls and particularly urban girls have a rising needs for independent and disposable income and assets. Financial pressures may force them to leave school, with consequent loss of peer and withdrawal from public space and they may feel it necessary to enter into marriage or liaison as a live hood strategy. In urban areas certain factors contribute heavily to putting girls 10-19 at risk of early pregnancy on HIV/STIs. Although early marriage is a greater problem in rural areas, it still affects many urban youth. Although demand for family planning and reproductive health services is certainly higher on average in urban areas than in rural areas, in terms of felt needs, slum dwellers rarely express a need for reproductive health services as their highest priority (3).

Adolescents appear to be poorly informed with regard to their own sexuality, physical well being, health, and bodies, whatever knowledge they have, moreover, incomplete and confused low rates of educational attainment, limited sex education activities, and inhibited attitudes towards sex contribute to this ignorance. Adolescents and youth in Bangladesh are particularly vulnerable to health risks, especially in the area of reproductive health. The current information and services that are available are not specific to adolescents and the quality of such information and services is often poor or inappropriate for this age group (1).

The present study is designed to assess the level of knowledge of the adolescent girls in a selected slum of Dhaka city regarding different reproductive health issue which will help in need assessment for

reproductive health issue and form the platform for formulating policies and appropriate programs to deal with reproductive health of the adolescents.

Materials and methods

It was a cross sectional study of descriptive type to find out the level of knowledge about the reproductive health among the adolescent girls unmarried adolescent girls of 10-19 years age group whom were selected purposively residing in a Vashantek slum in Dhaka city which was purposively selected. Data were collected within 6 months from January to June, 2008.

Instruments of Data Collection Instruments

A pre-design questionnaire was developed to use as data collection instrument. The questions were a combination of closed ended and open-ended questions.

Data Collection Technique:

Before the start of the actual study pre testing was done on five samples with a prepared questionnaire. After pre testing some changes were made in the questionnaire and then it was finalized for the actual study. Data was collected by direct interviewing and assurance was given to the respondents regarding maintenance of the confidentiality and secrecy of the information's they supplied.

Data Analysis and Management

After filling up of the questionnaire, data entry was done in a computer for analysis. Data were presented by tables, graphs and cross tables and analysis was done under the software program SPSS (Statistical Package for Social Science version 11.5).

Ethical Consideration

Before the start of the study the procedure was elaborately discussed with respondents and only after getting full consent of slum authority, the study was conducted. For smooth conduction of the study, the respondents were informed about the purpose of the study. There was no loss of working hours of the respondents, about 30 minutes time was required for each interview. Before the interview, the respondents were briefed about the objectives of the study and their voluntary participation was sought. Before interviewing, a written informed consent was obtained from the respondents and they were assured that the collect data would be kept confidential. No identification of the respondents was disclosed in the final report. They were also answered that they have

withdraw from the study at any time before or once the interview had been started. They were also verified about the questions and expected outcome before starting the interview.

Results

This was a cross sectional study conducted in selected areas of Dhaka city among the adolescent girls with a view to assess the knowledge and perception about the selected reproductive health issues. A total of 150 adolescent girls were interviewed using semi structured questionnaire.

Socio-demographic characteristics of respondents are showed in table- 1.

Table 1: Distribution of the respondents according to socio-demographic characteristics

Variables (N=150)	Frequency (n)	%	
Age in years	10-11	10	6.7
	12-13	25	16.7
	14-15	19	12.7
	16-17	14	9.3
	18-19	82	54.7
Religion	Islam	146	97.3
	Hinduism	4	2.7
Occupation	Student	31	20.7
	Garment worker	66	44.0
	Labourer	19	12.7
	Do not work	25	16.7
Family size	Other (teacher, service etc)	9	6.0
	2-3	22	14.7
	4-5	54	36.0
	6-7	59	39.3
Monthly family income (Tk.)	≥8	15	10.0
	<5000	37	24.7
	5000-9999	85	56.7
	≥10000	28	18.7

Out of 150 respondents, 130(86.7%) had history of menstruation and 20(13.3%) had no history of menstruation. Median age at menarche was 13 years. Highest percentage started menstruation at age of 12 years 49(37.7%) followed by 14 years and above 34(26.2%), 13 years 33(25.3%) and lowest in the age group less than 11 years 14(10.8%). Highest percentage of the respondents correctly mentioned the interval of menstruation 111(85.4%) and duration of cycle 116(89.2%) as 7 days. Very few of them

incorrectly mentioned the interval and duration of menstruation. Majority of the respondents reportedly mentioned that they had complaints of pain in lower abdomen 88(67.7%) followed by weakness 15(11.5%), pain waist 7(5.4%), anorexia 6(4.6%), vertigo 5(3.8%). However, 29(22.3%) did not know about the complaints. It was revealed that majority of the respondents use old torn cloth during their menstrual period 117(90%). Only 11(8.5%) use sanitary napkin and 2(1.5%) use underwear. Regarding the knowledge on use of hygienic materials during menstruation, one third 43(33.1%) had no knowledge. However, another one third 43(33.1%) reportedly mentioned for sanitary napkin and the rest mentioned for old torn cloth. Regarding the knowledge on washing menstrual materials, majority of the respondents reportedly mentioned that it should be washed with water and soap 123(94.6%) followed by hot water 8(6.2%), water, soap and savlon 3(2.3%), hot water and soap 3(2.3%) and only water 2(1.5%). However, highest percentage of the respondents believed that the menstrual materials should be dried in the corner of the room and at night 60(46.2%) followed by direct sunlight 53(40.8%), normal air 9(6.9%) etc. In terms of preservation of menstrual materials, majority of the respondents mentioned that it should be in dry place 117(90%) followed by behind door 7(5.4%). Only 74(56.9%) correctly mentioned that the menstrual cloths could be used less than 3 months and the rest were incorrectly mentioned that it could be used less than 6 months 37(28.5%), less than one year, more than one year. However, 12(9.2%) did not have any knowledge. Majority of the respondents did not have any knowledge on complications due to unhygienic practice during menstruation 84(64.6%). Only 10(7.7%) correctly mention that unhygienic practice lead to infection and the rest were incorrectly mentioned body ache, bad vision, weakness etc.

In terms of definition of early marriage, 90(60%) respondents gave correct answer that marriage below 18 years and 39(26%) respondents gave incorrect answer and 21(14%) had no knowledge (figure 1). Regarding the complications of early marriage, 70(46.7%) reportedly mentioned that early marriage causes maternal death during delivery followed by poor health of the mother 48(32%), became pregnant at an early age 33(22%), problem of mother and child 33(22%). However, 27(18%) had no knowledge about the effects of early marriage and 16(10.9%) gave different answers such as problem in pregnancy,

problem in sexual intercourse, increase mental anxiety, anaemia etc. Regarding the knowledge on family planning methods, 122(81.3%) had no knowledge on female family planning methods. However, 28(18.7%) reportedly mentioned that oral pill followed by injectables 16(10.7%), Norplant 2(1.3%). For male contraceptives, 129(86%) had no knowledge, 20(13.3%) had knowledge on condom. Regarding what should be the ideal number of children, majority of the respondents reportedly mentioned that two 115(76.7%) children will be ideal followed by one 28(18.7%), 2(1.3%) more than two and 5(3.3%) had no perception about it.

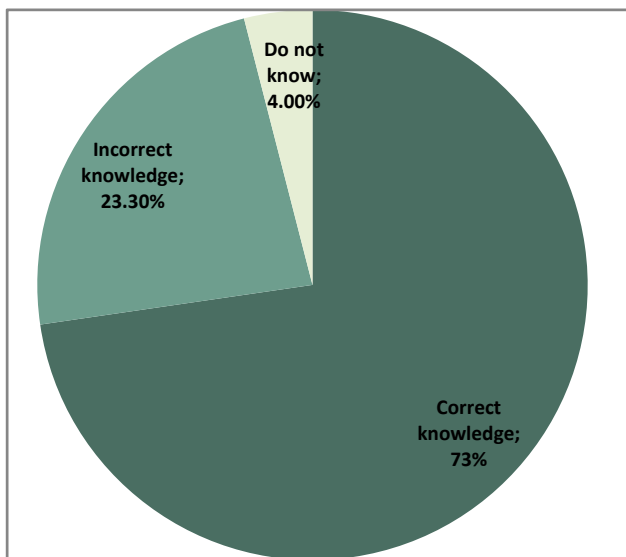


Figure 1: Distribution of the respondents by knowledge on age at marriage (n=150)

Distribution of the respondents according to knowledge on HIV/ AIDS is summarized in table 2.

Data analysis revealed that correct knowledge on menstruation was found to be high among the adolescent having secondary level of education (87.3%) than the SSC and above (57.1%) or primary level of education (68.3%) whereas incorrect knowledge was higher among the respondents having SSC and above knowledge (42.9%) and the difference was statistically significant ($p < 0.05$).

Considering the knowledge on age at marriage, 109(72.7%) reportedly mentioned the correct answer that marriage age is 18 years and 35(23.3%) gave incorrect answer and 21(14%) had no knowledge.

Distribution of the respondents by knowledge on importance of family planning is illustrated in figure 2.

Discussion

This study was carried out among 150 unmarried adolescent girls by using semi structured questionnaire and conducted in Vashantek slum of Dhaka city with a view to assess their knowledge and perception about some selected reproductive health issues. The mean age of the respondents was 16.4 ± 2.9 years ranging from 10-19 years. More than half of the respondents were in the age group 18-19 years (54.7%) followed by 12-13 years (16.7%), 14-15 years (12.7%). Majority of the respondents were Muslim (97.3%) and only 4 were non Muslim (2.7%). In my study, Half of the respondents (51.3%) had primary level of education followed by (44%) had secondary level of education and (4.7%) had SSS and above level of education. According to Bangladesh Bureau of Educational Information and Statistics 2001, for secondary school the net enrolment ratio of girls is 51 percent while it is 49 percent for boys (4).

Due to illiteracy (63percent of men and 35 percent of women are illiterate) poverty and ongoing conflict, there are added risks resulting in a situation, where adolescent are exposed to violence, sexually transmitted infections, HIV/AIDS and trafficking. There has been a growing trend of adolescents and youth suffering from sexual health problems and the proportion of adolescents and youth suffering from such problems is likely to increase further in the absence of proper knowledge and information (5).

More than two fifths (44%) of the respondents were garment workers followed by (20.7%) were students, (12.7%) were labourer and (6%) were engaged in different job such as teaching, service etc. however, (16.7%) do not engaged in any job. This finding were consistent with the findings of the study "Adolescent and Youth Reproductive Health in Bangladesh: Status, Issues, Policies and Programs" 2003, where adolescent reproductive health (ARH) Status in Bangladesh is part of a series of assessments in 13 countries in Asia and Near East. 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 percent of all total garment workers are female, of whom 50 percent are adolescent girls (1).

In the study, Highest percentage of adolescent girls had family size 6-7,(39.3%) followed by 4-5, (36%). More than half of the respondents had monthly family income ranges from taka 5000-9999

Table 2: Distribution of the respondents according to knowledge on HIV/ AIDS (n= 150)

Variables		Frequency	%	
Ever heard of AIDS	Yes	135	90.0	
	No	15	10.0	
Knowledge on HIV	Do not know	73	48.7	
	Agent of AIDS	34	22.7	
	Deadly disease	27	18.0	
	Contagious disease	5	3.3	
	Viral disease	1	.7	
	Disease	10	6.7	
	Do not know	67	44.7	
Knowledge on mode of transmission of AIDS	Correct answer	Through sexual intercourse	60	40.0
		Syringe, needle	44	29.3
		Transmission through mother to child	7	4.7
	Incorrect answer	*Others (drink in same glass, bathing in same pond, through food, respiration, blood, mosquito bite, man sharing of cloth, cough and dust)	22	14.6
		Do not know	125	83.3
Symptoms of AIDS	Correct answer	Fever	16	10.7
		Weight loss	3	2.0
		Anorexia	3	2.0
		Weakness	5	3.3
	*Incorrect answer	Diarrhoea	1	.7
		Ulcer in mouth and body, cough, pain in neck and axilla, unhealthy, blackish below leg, nausea, vertigo, black mark, itching, bleeding through nose, bleeding during menstruation and headache	18	12.3
		Do not know	91	60.7
Knowledge on prevention of AIDS	Correct knowledge	Safer sex practice	44	29.3
		Sterilized needle and syringe	35	23.3
		Create awareness	3	2.0
		Counselling	3	2.0
	*Incorrect answer	Blood test before marriage, using curtain, carefulness, work together, avoid patients, cleanliness, family health, avoid dust, etc.	9	6.3
		Do not know	91	60.7

*Multiple responses

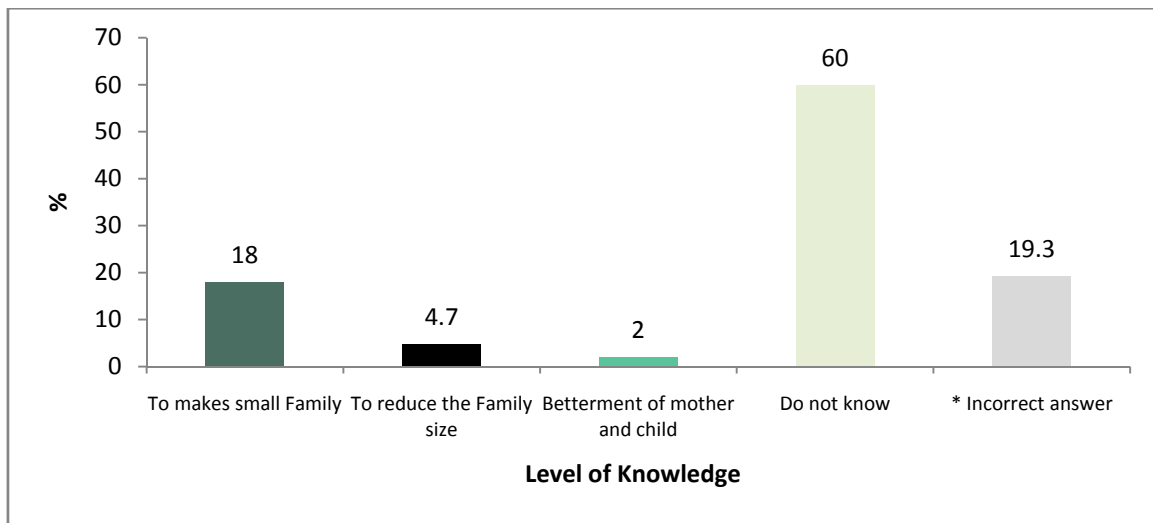


Figure 2 : Distribution of the respondents by knowledge on importance of family planning (n= 150)

*Multiple responses

(56.7%) followed by less than taka 5000 (24.7%) and (18.7%) had monthly family income taka 10,000 and above. The proportion of correct knowledge on menstruation was found to be high among the respondents having monthly family income 10,000 and above (84.6%) where as incorrect knowledge was found to be high among the respondents having monthly income less than taka 5000, but, the difference was not statistically significant ($p>0.05$). about the knowledge on age at marriage, the proportion of correct knowledge was found to be high among the respondents having monthly family income 10,000 and above (78.6%) where as incorrect knowledge was found to be high among the respondents having monthly family income less than taka 5000, but the difference was not statistically significant ($p>0.05$).

Out of 150 respondents, (86.7%) had history of menstruation and (13.3%) had no history of menstruation. Median age at menarche was 13 years. Highest percentage of the respondents experienced their menarche at age of 12 years (37.7%) followed by 14 years and above (26.2%), 13 years (25.4%) and lowest in the age group less than 11 years (10.8%). It is comparable to a study about 'General and Reproductive Health of Adolescent Girls in Rural South India.' Out of 190 adolescents, 124 girls had attained menarche; the mean age of menarche was 13.9 years (6).

Majority of the respondents had correct knowledge about menstrual cycle (85.4%) and period (89.2%). The pilot intervention was launched in 2001 by CARE-India's existing reproductive health programmed for slum dwellers, where large majority of girls (97%) know about menstrual cycle in general (7).

Most of the respondents mentioned about different problems during menstruation, (67.7%) of them had complaints of lower abdominal pain whereas others mentioned about different types of mixed problems like weakness (11.5%), pain waist (5.4%), anorexia (4.6%), vertigo (3.8%). Out of 130, (22.3%) did not know about the complaints during menstruation. These findings were consistent with the findings of the study that was done in the Kaniyambadi Block of North Arcot district of Tamil Nadu, where a total of 190 adolescents were studied, Menstrual irregularities were most prominent while a few complained of white discharge. Dysmenorrhoeal and premenstrual tensions were very common; other menstrual problems also seemed frequent. Nearly one-fifth (19.4%) of all adolescents complained of white

discharge per vaginum. Except for irregular periods, in all other instances, those with higher educational status had lesser complaints.⁶

It was revealed also that majority of the respondents use old torn cloth during their menstrual period (90%), only (8.5%) use sanitary napkin and (1.5%) use underwear. Regarding the knowledge on use of hygienic materials during menstruation, one third (33.1%) had no knowledge. However, another one third (33.1%) reportedly mentioned for sanitary napkin and the rest mentioned for old torn cloth. These findings were consistent with the study which was conducted by University of Medical Sciences, Tehran to test the level of knowledge of girls between 15-18 years regarding dysmenorrhoeal and menstrual hygiene. They found that 76% of the girls had adequate knowledge about dysmenorrhoeal, but only 32% practiced menstrual hygiene such as taking a bath and using hygienic material like sterile pads (8).

About the knowledge on washing menstrual materials, majority of the respondents mentioned that it should be washed with water and soap (94.6%). Highest percentage of the respondents believed that the menstrual materials should be dried in the corner of the room and at night (46.2%) followed by direct sunlight (40.8%) and in normal air (6.9%). 90% of them had correct knowledge about the process of preservation of the menstrual material/used cloths. About two third (56.9%) respondents had adequate knowledge about the time of menstrual materials could be repeatedly used. Majority of the respondents (64.6%) did not have any knowledge on complications due to unhygienic practice during menstruation. Only 7.7% correctly mention that unhygienic practice lead to infection and the rest were incorrectly answered. 80% percent girls in the Bangladesh Rural Advancement Committee (BRAC) study used pieces of old rags (nekra) as pads during menstruation while others did not use anything. 60% of the adolescent girls used rags that were wet or had been dried in a hygienic fashion. 99% of the girls in the urban slum study associated menstruation with being unclean or impure. The consequences of not maintaining hygiene during menstruation (e.g. becoming sick, itching, or ulceration of genitals) were least known among the female adolescents, especially those who were unmarried (1).

Out of 130 respondents, 76.9% of the respondents had correct knowledge on menstruation based on menstrual cycle and menstrual period. Bi-variate analysis with age of the respondents, no statistically

significant association was found between knowledge on menstruation and age of the respondents ($p>0.05$) though the older adolescent had better knowledge on menstruation (78.8%) than the younger adolescent (69.2%). Data analysis revealed that correct knowledge on menstruation was found to be high among the adolescent having secondary level of education (87.3%) than the SSC and above (57.1%) or primary level of education (68.3%) where as incorrect knowledge was higher among the respondents having SSC and above knowledge (42.9%) and the difference was statistically significant ($p>0.05$). Data analysis found that the proportion of correct knowledge was found to be high among the student (83.3%) where as incorrect knowledge was found to be high among the working adolescent, but the difference was not statistically significant ($p>0.05$). For example, a 2005 UNFPA study found that only 17 percent of the young people (13 percent female and 23 percent male) had correct knowledge about sexual and reproductive health (5).

About the knowledge on age at marriage, 72.7% of the adolescents mentioned the correct answer that marriage age is 18 years and 23.3% gave incorrect answer and 4% had no knowledge. In terms of definition of early marriage, 60% gave correct answer that marriage below 18 years and 26% gave incorrect answer and 14% had no knowledge. According to Rahman M M and Kabir M, majority of the adolescents did not know about the legal age at marriage. 62.4% of the adolescents correctly state the legal age at marriage for girls, whereas only 12.0% correctly knew about legal age at marriage for boys. It is to be noted that older married adolescents had better knowledge about legal age at marriage for females than older unmarried adolescents who had better knowledge about the legal age at marriage for male and the difference was statistically significant ($p<0.05$). This indicates that adolescents are more conscious about their own age at marriage, but they were not well aware about the legal age at marriage for boys (9).

Regarding the knowledge of the respondents demerits of early marriage, 46.7% mentioned that early marriage causes maternal death followed by poor health of mother 32%, became pregnant at an early age 22%, problem of mother and child 22%. However, 18% had no knowledge about the effects of early marriage and 10.9% gave different answers. In the study of Rahman M M and Kabir M, where more than three fourths (76.3%) of the

respondents viewed marrying off early is detrimental to maternal health. A girl marrying in adolescence will quickly find herself as a mother. She is often under pressure and obligation to bear a child to prove her fecundity and to please other family members. This leads to maternal health problem during pregnancy and childbirth (37.7%) and other reasons were their physical immaturity to bear a child, and difficulty in rearing an immature child (57.4%). Early marriage leads to marital conflict, Furthermore, marriage during teens puts serious setback on the way of continuing education (8.6%) (9).

Out of 150 respondents, 72.7% of the respondents had correct knowledge on age at marriage. Analysis with age of the respondents indicated that no statistically significant association was found between knowledge on age at marriage and age of the respondents ($p>0.05$) though the older adolescent had better knowledge on age at marriage (75%) than the younger adolescent (67.4%). About the knowledge of the respondents about the family planning, three fourths (60%) of them had no knowledge on importance of family planning. However, 18% mentioned to make small family; to reduce family size (4.7%) and (19.3%) gave different vague answer. Regarding the knowledge on family planning methods, 81.3% had no knowledge on female family planning methods. However, 18.7% mentioned that oral pill followed by injectables (10.7%), norplant (1.3%). For male contraceptives, 86% had no knowledge and only 13.3% had knowledge on condom. The pilot project of the Population Council teamed with CARE-India found that the large majority of respondents knowing at least one contraceptive method (94% of boys and 91% of girls), only about one-third (32%) of girls spontaneously reported knowing about condoms as compared with 82% of boys (7).

Regarding what should be the ideal number of children, 76.7% of the respondents mentioned that two children will be ideal and 18.7% mentioned that one child will be ideal. Out of 150 respondents, 90% of them heard the disease AIDS and 10% never heard. Regarding the knowledge on causative agent, 48.7% did not have knowledge on agent of AIDS, one third (22.7%) mentioned that HIV is the causative agent of AIDS and the rest of the respondents wrongly mentioned as deadly disease, contagious disease, viral disease etc. More than two fifths (44.7%) had no knowledge on mode of transmission of AIDS. Three fourths (40%) correctly

mentioned that it is transmitted through sexual intercourse followed by syringe and needle (29.3%), transmission through mother to child (4.7%) and 14.6% gave incorrect and vague answer. It was found that 83.3% had no knowledge on symptoms of AIDS and 12.3% gave incorrect and vague answer about the symptoms of AIDS. However, very few of them gave correct answer on symptoms of AIDS. Three fifths (60.7%) had no knowledge on prevention of AIDS. Only (29.3%) mentioned that safer sex practice might be the way of prevention of AIDS followed by use of sterilized needle and syringe (23.3%), create awareness 2%, counselling 2% and 6.3% gave incorrect answer. A recent evaluation study of a Family Planning Association of Bangladesh (FPAB) program to reach youth was conducted in 12 of 71 project sites. The results indicated that a substantial proportion of adolescents and youth are not knowledgeable about the following: the underlying cause/mechanism of menstruation, the consequences of unprotected sexual acts, gonorrhoea, syphilis, how a person is infected with HIV/AIDS, menstrual regulation, and the availability of treatment facilities for STIs. Nevertheless, it is encouraging that most of the parents and community leaders do not support marriage of girls younger than 18 years. Most of them think that adolescents should be counselled for family planning and be informed about preventing STIs and HIV/AIDS. They also think that negotiation skills need to be imparted to young people to avoid unexpected sexual advances. Most adolescents, parents, and community leaders in the study consider information on sexual reproductive health as a right for adolescents and young people (1).

Conclusion

Overall, these findings indicate that there is a substantial poor and inadequate level of knowledge of the adolescents' girls regarding reproductive health issues. So formal, informal and special educational program may be taken to educate and address this gap

so that they are fully informed of their rights to improve their status of knowledge on reproductive health issues and to lead a healthy life.

Acknowledgments

There is no conflict of interest to declare.

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