

Adolescent's Knowledge on Reproductive Health Problems in Slum Area of Dhaka City

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ABSTRACT

Background: Adolescents often have serious misconceptions about sexuality and reproduction, and are unprepared to make safe, informed decisions about reproductive health specially in the low and middle income countries. The adolescents have sexual and reproductive rights, just as adults do, but their low social status, poverty, lack of autonomy, and physical vulnerability make it more difficult for them. The objective of the study was to assess the level of knowledge of adolescent people and identifying the factors related to the level of knowledge on reproductive health problems in the slum area of Dhaka city.

Materials and methods: It was a cross sectional study was conducted during the period from October 2015 to March 2016 with 105 adolescents from Vashantek slum area of Dhaka city was selected through purposive sampling. Informed written consent was taken from every participant, and all the participants of the study were interviewed through a preset questionnaire at the household level. Participants were selected randomly according to their availability of convenient time and interest.

Results: A total of 105 adolescent people participated in this survey, which inquired as to their knowledge about reproductive health issues. Majority of the respondent knew about puberty, most of them could identify the major changes during puberty. Adolescent boys (91.2%) had the knowledge about wet dreaming, and 92.9% female adolescent knew about menstruation. Although 31.8% think sanitary napkin should be used during menses and a significant number of adolescent choose cloth and paper to use during menses. Respondents were asked different question to assess their knowledge on different reproductive health issues. In many cases, found to have good knowledge whereas in some cases didn't have satisfactory knowledge. Age, education level, marital status and sex were found to have statistically significant relationship with the adolescent's level of knowledge. Logit model shows age, education and marital status has a positive impact on the adolescent's knowledge level.

Conclusion: This study will help the policy maker in government and non-governmental level to make appropriate strategy to develop the health status of slum adolescent people.

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KEY WORDS

Adolescent; Dhaka City; Knowledge; Reproductive health problem; Slum area.

INTRODUCTION

Adolescents and young people comprise almost half the world's population.¹ They have sexual and reproductive rights, just as adults do, but their low social status, poverty, lack of autonomy, and physical vulnerability make it more difficult for them to exercise such right.^{2,3} For instance, a study by Ogunjuyig be and Adeyemi found that older women in conjugal unions only had control over their sexuality during certain occasions such as menstruation, breastfeeding, pregnancy and when they are sick. Perhaps, this could have been different if they had, in their adolescent years, known and developed their capacity to exercise their sexual and reproductive health rights as individuals.⁴ Knowledge of sexual and reproductive health rights are a major concern of the adolescent period, in part because earlier sexual maturation and later marriage have increased the period of risk for early or non-marital pregnancy and exposure to Sexually Transmitted Infections (STIs).

Sexual relations typically occur before adolescents gain experience and skills in rights protection, self-protection, adequate information about STIs, and before they can get access to health services and supplies such as condoms. By age 18, more than two-fifths of young women (44%) and 26% of young men had sexual intercourse.⁵

In Bangladesh, a large number of adolescent and young women migrate from rural areas to participate in wage labor. Most of them live in city slum areas and work in the garment industry. Nearly 2 million people work in the garment sector. An estimated 80 percent of all total garment workers are female, of whom 50 percent are adolescent girls. However, a nutritional study of adolescent working girls living in the slum revealed low energy and low nutrient intake. Another health-affecting factor is that they work for 12 hours, on average. Their reproductive health is at risk due to poor dietary intake, among other reasons.⁶ The unmet need of adolescents for reproductive health information and services is huge and diverse both in terms of quality as well as quantity. Due to various reasons like lack of Adolescent Reproductive Health (ARH) policy, proper programmatic effort, and inadequate understanding of the gravity of the issues on ARH, it was not previously been possible to meet the growing unmet need for information and services among adolescents. This shortcoming has been clearly recognized in an official document that states, "Lack of effective health program for reaching out to young people was one of the major missing links in the past."⁷ The objective of this study was to assess the level of knowledge of adolescent people and identifying the factors related to the level of knowledge on reproductive health problems in the slum area of Dhaka city.

MATERIALS AND METHODS

A cross-sectional descriptive study was conducted in the largest slum area in Dhaka city from October 2015 to March 2016. The study was conducted in Vashantek slum area of Mirpur, Dhaka with a population of 105. It is situated under Dhaka North City Corporation (DNCC). Around 3600 families live in this slum. All adolescents aged (10-19) who were co-operative and motivated predominantly resides in Vashantek slum, included in the study.

This cross sectional study was conducted via face-to-face interview. Informed written consent was taken from every participant. Instrument for data collection was structured and semi-structured interview questionnaire containing structured questions. In order to obtain relevant information, the questionnaire and other study instruments was carefully designed keeping in mind the

objective of the study. The formal survey of each sample was carried out by using the structured questionnaire. The questions was asked in Bengali language but written in English language. Conceptual framework (Theoretical framework) was used in this study to give coherence to empirical inquiry based on both independent and dependent variables (Figure1).

By using structured questionnaires, data were collected by face to face interview of the adolescent people. At the very beginning of the interview the researcher introduced herself with the parents and explained the aim and objectives of the study to them. Around 10-15 minutes was taken to complete one interview. Questions were asked in local language for easy understanding of the slum adolescent.

Data entry into computer was continued along with data collection. After data compilation, plots from the compilation data sheets were sorted carefully to ensure all data sheets are correct. Once the data having been captured into the SPSS then it was checked again. The surveyed data was converted into frequencies and percentage forms. After collecting information from primary source, data were processed and analyzed by SPSS-20. Following statistical tests was done for analysis (Frequency, Percentage, Mean, Median, Standard deviation, Logistic Regression). Necessary tabulations and cross-tabulations, charts and diagrams were drawn for summarizing and easy visual presentation of data.

The ethical clearance was taken to conduct the study as part of thesis of Masters in Public Health from American International University of Bangladesh (AIUB).

RESULTS

About 85% percent adolescent has some extent of knowledge about puberty and rest of them couldn't tell much about puberty. Among the 34 boys, 31 (91.2%) have the knowledge about wet dreaming while 3 (8.8%) doesn't have much knowledge about it and among the 71 girls, 66 (92.9%) has knowledge about menstruation while other 5 (7.1%) doesn't have much knowledge about it (Table I).

Table I Distribution of the adolescent according to their knowledge about wet dreaming and menstruation

Knowledge on wet dreaming	Frequency	Percentage (%)
Yes	31	91.2
No	3	8.8
Knowledge about menstruation		
Yes	66	92.9
No	5	7.1

About 21(31.8%) girls think that sanitary pad should be used during menstruation, while other 29 (43.9%) think that clean cloth can be used. Another 12 (18.2%) percent think that any cloth may be used during menstruation, 4 (6.1%) percent talked about using other different things like paper, panty, garment, jootsetc (Table II).

Table II Distribution of the adolescent according to their knowledge about the material to use during menstruation

Material to use during Menstruation	Frequency	Percentage (%)
Sanitary Pad	21	31.8
Clean Cloth	29	43.9
Any Cloth	12	18.2
Cotton	0	0
I Don't Know	0	0
Others	4	6.1
Total	66	100

Figure 1 showed, the level of knowledge about pregnancy and menstrual cycle among adolescent, among them 49.5% said pregnancy occurs during the mid-period of the menstrual cycle, another 19% think it occurs just before bleeding period. Few (1.9%) think it occurs during the bleeding period. Rests 29.5% don't know the exact time of pregnancy in a menstrual cycle.

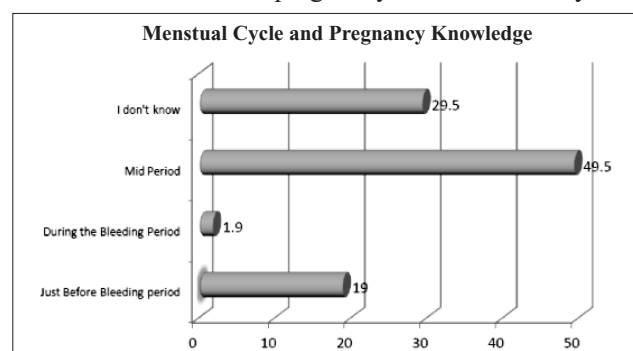


Figure 1 Distribution of the adolescent according to their knowledge about menstrual cycle and pregnancy

Table III showed that 59.4% among above 15 age while 2.8% among the below 15 age had good knowledge about RH issues ($p < 0.05$). Age, education level, marital status and sex were found to have statistically significant relationship with the adolescent's level of knowledge about different reproductive health issues.

The level of knowledge was significantly associated ($p = 0.000$) with age of the respondents were below 15 years had poor knowledge about reproductive health majority which was about 97%, majority of the above 15 years age group (59.4%) were in this group and beside nearly 40% had also poor knowledge.

Table III Relationship between age and knowledge about reproductive health issues

Categories	Knowledge		Total	p Value
	Good	Poor		
Age	Below 15	n 1, 35	36	0.000
		% 2.8%, 97.2%	100%	
15 or above	n 41, 28	69	100.0%	
	% 59.4%, 40.6%	100.0%		
Total	n 42, 63	105	100.0%	
	% 40%, 60%	100.0%		

Table IV shows that, the level of knowledge was significantly associated ($p = 0.000$) with education of the respondents were illiterate had more prone to poor score (86.70%) and literate which is 40%. Similarly, respondent's Marital status ($p = 0.000$) who were married good knowledge score is highest (69.20%) but in not married group poor knowledge was highest (77.30%). The results further demonstrated that respondents of sex ($p = 0.050$) who male highest number poor knowledge score 73.50% in female was 53.50%.

Table IV Relationship between education level, marital status, sex and knowledge about reproductive health issues

Categories	Knowledge		Total	Pearson Chi Square	p Value
	Good	Poor			
Education	Illiterate	n 6, 39	45	23.333	0.000
		% 13.30%, 86.70%	100%		
Literate	n 36, 24	60	100.00%		
	% 60%, 40%	100.00%			
Marital Status	Not Married	n 15, 51	66	22.089	0.000
		% 22.70%, 77.30%	100%		
Married	n 27, 12	39	100.00%		
	% 69.20%, 30.80%	100.00%			
Sex	Female	n 33, 38	71	3.835	0.050
		% 46.50%, 53.50%	100%		
Male	n 9, 25	34	100%		
	% 26.50%, 73.50%	100%			

DISCUSSION

Adolescence is generally accepted as a period of rapid and important change in the transition between childhood and adulthood. Although it is generally accepted that the onset of adolescence is marked by the appearance of secondary sexual characteristics (Which again vary from individual to individual) the termination of adolescence- i.e. the beginning of adulthood is less well marked. It is also a period of rapid development when young people acquire new capacities and are faced with new situations that create not only opportunities for progress but also risks to health and well-being. It is a time when growth is accelerated, major physical changes take place and

differences between boys and girls are accentuated.⁸ Although at the prime of their life, an estimated 1.7 million adolescents die in every year mainly from accidents, violence, pregnancy related problems or illnesses that are either preventable or treatable. Gender discrimination in the form of discrimination against girls has been identified as one of the prime Adolescent Reproductive Health (ARH) issues in Bangladesh.⁹ However, recent government initiatives to encourage girls' education, including universal free primary education and stipends for girl students, have initiated groundbreaking positive trend in girl's enrollment in schools where, at secondary level, they outstrip boys in number (51 percent for girls and 49 percent for boys).¹⁰ While urban adolescents belonging to middle and higher income families enjoy better lifestyle, their counterparts from lower socio-economic situations have to struggle for survival and grow in impoverished, disadvantaged environment where malnutrition, poor health, exposure to antisocial activities and drugs etc. continuously plague them. Families remain the cornerstone of Bangladeshi lives. In rural areas, most families are extended. In urban areas, there is a growing trend of nuclear families. Whether in rural or urban areas, parents and elders in the family exert a profound influence and control on the lives of adolescents. Their accesses to information, freedom of movement, marriage, practice of certain behaviors are closely regulated by parents or by the influencing members of the family. Outside the immediate family, teachers, close relatives and community leaders also influence their lives, more often acting as barriers than as facilitators to adolescents exercising their simple rights.⁹

We may assume from the findings in this article that many adolescents lack a complete understanding of sexual and reproductive health in all of its aspects. We compared knowledge about menstruation, age, sex, marital status, and education in this study. This study found that menstruation females ranged in age from under 15 to over 15 years, with a higher number of girls (n=71). In our research, we found that Approximately 21 (31.8%) of girls believe that sanitary pads must be used during periods, while the remaining 29 (43.9%) believe that a fresh cloth can be used. Another 12 (18.2%) believe that any fabric would be used during menstruation, while 4 (6.1%) suggested utilizing other items such as paper, panty, clothing, joots, and so on but However, when compared to West Bengal, India, only 18 (11.25 percent) of the girls utilized sanitary pads during their menstruation. 156 (97.5 percent) of the girls used both soapy waters to clean. When it came to limitations, 136 (85%) of the girls used restrictions

imposed during menstruation.¹¹ Therefore, in this study, 6% of the girls reused the same old cloth after washing (Other portion) whereas it was 51.3% in one of the study.¹² In a study conducted among girls in Kenya, cotton wool, plastic bags, mattresses, dried leaves, cow dung, and paper from school classrooms were used. As an adsorbent substance, over 31% of our respondents used widely viable sanitary pads or napkins, in compare In the public health care institute of Quetta city, over 70% of our respondents were utilizing commercially available sanitary pads or napkins as an adsorbent material.¹³ As a result, the mother's educational level influenced the teenage girl in the household, and it was discovered that 42.8 % of moms were illiterate, but just 7.49 % of mothers were illiterate in a research done among school-going adolescent girls in Nagpur.¹⁴ This large disparity was due to the fact that the study was conducted in a slum. Because the adolescent girls lived in slums and the majority of them had dropped out of school, their understanding of menstruation was limited. The overwhelming of the females were uninformed of the scientific underpinnings and physiology of the menstrual cycle. According to our study of adolescents without any Adolescent Family Life Education (AFLE) Program understanding of pregnancy and the menstrual cycle (49.5%) believe pregnancy happens in the middle of the menstrual cycle, whereas 19 percent believe it occurs immediately before the bleeding phase. Only (1.9%) of people believe it happens throughout the bleeding phase. Rests (29.5%) of women have no idea when they are pregnant during their menstrual cycle. In comparison to teenagers without AFLE and those who never attended to school, AFLE students showed considerably greater correct knowledge on puberty (95.3 percent), menstruation (98.6%), marriage and pregnancy (99.3%), STD/AIDS (78.4%) and family planning (95.3 percent).⁵ Meanwhile, respondents' Marital Status showed that those who were married had the greatest excellent knowledge score (69.20 %), while those who were not married had the lowest (77.30%). The findings also revealed that respondents of sex had the largest number of low knowledge scores 73.50 % in males and 53.50 % in females, in compare Haryana, in terms of menstruation and reproductive health, mothers were the most significant source of information (47.4%).⁵ In addition, 89.4 % of current research participants said they clean their genitalia using water and soap. On the other hand, according to a research conducted in Andhra Pradesh, just 4.6% of individuals utilized water and soap to wash their genitalia, which is connected to cost and accessibility limitations.¹⁵ A higher proportion of boys and girls could identify

visible external changes in the opposite sex like increase in height, change in voice, breast development, and growth of facial hair. Boys perceived breast growth, gain in height, weight and menstruation as the changes required in the girls to become women. Girls perceived that gain in height, growth of facial hair and becoming muscular (In that order), were the changes that made a boy transit into adulthood.¹¹ It was also seen that as age increases, knowledge about physical changes during adolescence increases. More boys and girls from the older age groups were aware of the less visible changes like erection/ejaculation, hair growth in pubic area and menstruation in the opposite sex.¹⁶ Mahajan and Sharma in a study conducted to assess reproductive awareness among adolescent girls found that urban adolescent girls had better knowledge regarding reproductive issues than rural adolescent girls.¹⁷ One rural study has reported that two third of study subjects had knowledge of menstruation prior to attainment of menarche.¹⁸ This study included adolescents who were found at home during the visits for interview by researcher and those who were not found at home were excluded. Since females are generally found at home more often than males, the numbers of female respondents were higher than males. Those who were not at home may have different knowledge and attitudes about health services for reproductive. Majority of the respondent knew about puberty, most of them could identify the major changes during puberty. It was found that 91.2% of boys had the knowledge about wet dreaming, and 92.9 % of female adolescent knew about menstruation. It was also revealed that many (43.9%) of the respondents think that clean cloth can be used during their menstrual period. About 31.8% of them think sanitary napkin can be the best thing to use during menses & 18.2% think that any cloth can be used whereas (6.1%) recommended use of underwear or tissue paper during menses. Majority of the respondent knew about menstruation before menarche, important sources were sister, relatives or mother. Majority of the respondents (49.5%) had correct knowledge about menstrual cycle and pregnancy. This study includes boys & has difference from female respondents, it was that found girl has more correct knowledge about menstrual cycle and pregnancy than boy's knowledge about their changes in puberty. This finding is consistent to CARE- India's existing reproductive health programmed for slum dwellers, where large majority of girls (97%) know about menstrual cycle in general.¹⁹ Their thinking is consistent to a study conducted by BRAC, their study result also found that adolescent and their parents think that negotiation skills need to be imparted to young people to avoid unexpected sexual advances. Most adolescents, parents, and community

leaders in that study consider information on sexual reproductive health as a right for adolescents and young people.²⁰ Overall, these findings indicate that there is a substantial poor and inadequate level of knowledge of the adolescents' people of slum area regarding reproductive health issues. So formal, informal and special educational program may be taken to educate the people properly.

LIMITATIONS

A limitation This study excludes mothers' occupations, menstrual patterns, family type girls, religious girls, or girls with a high society adolescent, knowledge of the organ from which the bleeding originates, and the source of bleeding. Social appropriateness may have influenced the research participants' information about their knowledge, attitude, and practice of sexual and reproductive health, affecting the validity of the results. This study was unable to gain a deeper clarification and more in-depth understanding into such a controversial issue due to the lack of a qualitative data gathering approach.

CONCLUSIONS

Adolescents need the school system to provide programs that address misconceptions about sexual and reproductive risks, encourage adolescents to make informed choices, emphasize parent-child communication and advocate gender equity in sexual and reproductive attitudes and behaviors. Because of a lack of health-related information, female adolescents in our research had several misconceptions about menstruation.

RECOMMENDATIONS

Reproductive health education by a health professional has become acceptable for adolescent girls in urban areas, however, acceptability in rural and slum areas and among non-school-going adolescents needs to be assessed. The policy makers should take this under consideration to arrange reproductive health awareness campaigns for the adolescents for both urban and rural settings.

DISCLOSURE

All the authors declared no competing interest.

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