

Knowledge of Adolescent Girls on Pregnancy and Antenatal care

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Abstract

Background : Adolescence is particularly a transition period of human development which has profound influence on a person's future. In Bangladesh adolescents usually gather their knowledge about reproductive health from their family and surroundings and therefore their knowledge remains incorrect and insufficient. Government increases the provision of schooling for girls but there is no provision of sex education.

Objective : To assess the knowledge of adolescent girls about pregnancy and antenatal care.

Methods : A cross sectional study was done during the period of January '15 to June '15 among 143 students of class 1X and X of 2 rural private schools of Rugganj and Narayanganj. Simple random sampling method was applied for enrolling the study population and data was collected by interview method using pretested questionnaire. Finally, data was analyzed by SPSS version 17.

Result : Most of the respondents had average knowledge about pregnancy and antenatal care. Nearly three-fourth (61.5%) of the respondents had incorrect knowledge about pregnancy period and majority (76.3%) do not know about the correct mother's organ for developing baby during pregnancy. Maximum respondents (95%) had good knowledge about extra care of a pregnant mother. Although 74.8% mentioned about TT vaccination of a pregnant mother but majority (65%) did not know detail about the vaccines' dose and schedule. Statistically significant difference found in knowledge on pregnancy and antenatal care among married and unmarried girls. ($P = < 0.05$)

Conclusion : Knowledge of adolescent girls about pregnancy and ANC was average in our rural area.

Key words : Adolescent, Pregnancy, Antenatal care, Vaccine.

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Introduction

Adolescence is an important formative period of human life between the age of 10 to 19 years which shapes the future of a person. It is particularly a significant time of human development which profoundly influences person's future.¹ Adolescents are 20% to 25% of total population of the world.² Adolescence is a cross road in the development of life through which a child gradually walks to reach the maturity of adults. The onset of adolescence is associated with the commencement of puberty and appearance of secondary sexual characteristics. During this time, they naturally become curious about their changing anatomy, physiology and psychology.³ But due to traditional culture, customs and believes of our country their curiosities remain unsatisfied. In our country there is no provision of sex

education in schools. They cannot exchange their views about sex and reproductive life among school mates or teachers. Rigid social norms, superstition shame and fright prevent them from gaining proper knowledge about this matter even from their mother. Most of them learn about pregnancy and related issues from inauthentic source as secrete private and forbidden mater.⁴ Therefore, their knowledge remains incorrect.

Adolescent girls are the future mother, therefore they have to experience reproductive life in near future. They should have clear and correct knowledge about reproductive health like pregnancy, antenatal care; postnatal care etc. which will help them to become a healthy mother of a healthy child.⁵

Globally each year about 17 million adolescent girls give birth babies which comprises 11.0% of

all births. Majority of these births (95.0%) occur in low- and middle-income countries. Each year 2.5 million girls under 16 years give birth in the developing regions. Some 3.9 million girls aged 15 to 19 years undergo unsafe abortions every year. Adolescent mothers face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years.⁶

In Bangladesh where Infant mortality rate (IMR) and Maternal mortality rate (MMR) is still high. Adolescent pregnancy remains a major contributor to maternal and child mortality. Globally leading cause of death among 15 to 19 year-old girls are adolescent pregnancy and childbirth complications. In low and middle-income countries accounting for 99% of global maternal deaths of women ages 15 to 49 years.⁷

In Bangladesh estimated adolescent population accounts for 23% of the total population. Bangladesh Govt. has increase the provision of school facilities for adolescent girls but their text books contain no or very little information about pregnancy, antenatal care, lactation, postnatal care etc. Therefore, their knowledge remains inadequate and incorrect.

The present study aimed at assessment of knowledge of adolescent girls about pregnancy and antenatal care.

Materials and Methods

A cross sectional study was carried out during the period of January '15 to June '15 in 2rural private schools of Rupganj, Narayanganj (Kanchon Varot Chandro high school, Rupganj, Narayanganj and Abdul Haq Bhuiyan International high school, Rupganj, Narayanganj). The respondents were selected from class 1X and class X. Sample size was 143 in number.

Sample was collected by applying simple random sampling method. Firstly, a sampling frame was made then according to the roll number of the respondents each sampling unit was selected by using calculator method.

Data was collected by direct interviewing of the students of class 1X and X with pretested questionnaire. The interview was taken by the First author herself at the place of the study. Collected data was edited, consolidated, processed and then analyzed by SPSS version 17. Results were reported as absolute value, mean and standard deviation(SD). Significance was tested by Chi square test. ($p < 0.05$ was statistically significant).

Operational definition of level of knowledge

Each correct answer =1 Each wrong answer=0

Good or adequate knowledge : those who could answer $\geq 70\%$ questions correctly.

Average or inadequate knowledge : those who could answer 50%-70% questions correctly.

Poor or No knowledge : those who could answer $\leq 50\%$ questions correctly

Result

A total number of 143 students of 2 rural schools of Rupganj, Narayanganj were enrolled for the study. Socio demographic characteristics of respondents showed that 72.7% were between >13-15 years and Muslim 94.4%. Respondents from class IX were 50.3% and 49.7% were from class X. Almost all (93.7%) were unmarried and only 6.3% were married. Majority of the respondents (35%) had monthly family income between Tk. 5000/- to Tk.10000/ and only 11.1% had income more than Tk. 15000/-per month (Table I).

Table-I : Socio-demographic characteristics of respondents (no.143)

Age group	no.	percent
13 years	5	3.5
>13-15 years	104	72.7
>15 years	34	23.8
Religion		
Islam	135	94.4
Hinduism	8	5.6
Education		
Class IX	72	50.3
Class X	71	49.7
Marital Status		
Married	9	134
Unmarried	6.3	93.7
Monthly Family income		
Tk. <5000/-	44	30.8
Tk.5000/-10000/-	50	35.0
Tk.10000/15000/-	33	23.1
Tk.>15000/-	16	11.1

Table-II : Knowledge on pregnancy among the respondents (no.=143)

Duration of pregnancy	Frequency	Percent
9 months	26	18.2
10 months 10 days	88	61.5
Don't know	26	18.2
Others	3	2.1
Knowledge about mother's organ for baby's growth		
Uterus	33	23.1
Lower abdomen	48	33.6
Others	1	0.6
Do not know	61	42.7
Knowledge about possible physical changes during pregnancy		
Amenorrhea	4	2.8
Enlargement of abdomen	2	1.4
Nausea, vomiting and vertigo	1	0.7
Answered all of the above	119	83.2
Other than above variables	1	0.7
Mixed answer (any2 of the above variables)	6	4.2
Don't know	10	7.0
Total	143	100.00

About three fourth (61.5%) had wrong knowledge about pregnancy period. Only 18.2% gave the correct answer. Majority (42.7%) respondents did not know about mother's organ for baby's growth. One third (33.6%) answered about lower abdomen. Only 23.1% respondents correctly mentioned the name of uterus. Regarding possible physical changes during pregnancy majority (83.2%) of the respondents gave the correct answers (Table – II).

Regarding necessity of the antenatal visit all most all of the respondents (97.9%) gave positive answer and 27.3% did not know about the time of visit. Only 2.1% gave correct answer on number of visit. Majority of the respondents (78.3%) could able to mention the necessity and types of extra care needed during pregnancy, different types of mixed cares like extra food, consultation of doctors, TT vaccination etc. A very few of the respondents (6.3%) did not know about these care. Regarding use of medicine during pregnancy 42.7% respondents gave the opinion that some medicines should be restricted during pregnancy but 56.6% respondents did not know about restriction of medicine during pregnancy (Table III).

Table-III : Knowledge about antenatal care among the respondents (no.=143)

Is Antenatal Visit (ANC) necessary	Frequency	Percent
Yes	140	97.9
Don't know	3	2.1
Number of ANC visit		
2 times	6	4.2
4times	3	2.1
Once in a month	95	66.4
Don't know	39	27.3
Need of extra care		
Yes	140	97.9
No	1	0.7
Don't know	2	1.4
Types of extra care		
Giving extra food	3	2.1
Visit a doctor when needed	9	6.3
Always under care of a doctor	2	1.4
TT vaccination	3	2.1
All of the above	112	78.3
Mixed answer (any 2 or 3 of the above variables)	5	3.5
Don't know	9	6.3
Use of medicine in pregnancy		
Some medicines should be restricted	61	42.7
All medicines should be stopped	1	0.7
Don't know	81	56.6

Regarding vaccination of pregnant women, the maximum respondents (95.1%) know that vaccination was very much essential for a pregnant woman. A significant portion (74.8%) knew that vaccine should be taken against tetanus and 73.4%

could also mention the name of the vaccine. But regarding dose of vaccine, majority (65.7%) did not know. Most of the respondents (73.4%) did not know the time of vaccination during pregnancy (Table IV).

Table-IV : Respondents' knowledge about vaccination during pregnancy (no.143)

Necessity of vaccination	Frequency	Percent
Yes	136	95.1
No	2	1.4
Do not know	5	3.5
Disease required vaccination		
Tetanus	107	74.8
Others	10	7.0
Do not know	26	18.2
Name of the vaccination		
TT	105	73.4
Others	5	3.5
Do not know	33	23.1
Time of vaccination		
5-6 month	30	21.0
6-7 months	7	4.9
Others	1	0.7
Do not know	105	73.4
Doses of vaccination		
1 dose	6	4.2
2 dose	9	6.3
3 dose	34	23.8
Do not know	94	65.7

If this study be found that among the married girls 44.4% had inadequate knowledge and 55.6% had adequate knowledge regarding antenatal care. Among 134 unmarried, majority 81.3% had inadequate knowledge. Considering the total number of respondents only 30 (21.0%) respondents had good knowledge but majority respondents 113 (79.0%) had inadequate knowledge about antenatal care. Therefore, statistically significant difference of knowledge among married and unmarried girls found. ($p < 0.05$) (Table-V).

Table V : Relationship between marital status and knowledge about antenatal care

Marital status	Knowledge about Antenatal care		Total
	adequate	inadequate	
Married	5	4	9
	55.6%	44.4%	100.0%
	16.7%	3.5%	6.3%
Unmarried	25	109	134
	18.7%	83.3%	81.3%
	96.5%	100.0%	93.7%
Total	30	113	143
	21.0%	100.0%	79.0%
	100.0%	100.0%	100.0%

$\chi^2=5.583$

$df=1, p < 0.05$

Majority of the respondents (62.90%) had average knowledge on different issues of pregnancy and antenatal care, where as 18.90% respondents had good knowledge and almost similar percentage (18.20%) had poor knowledge about these matters.

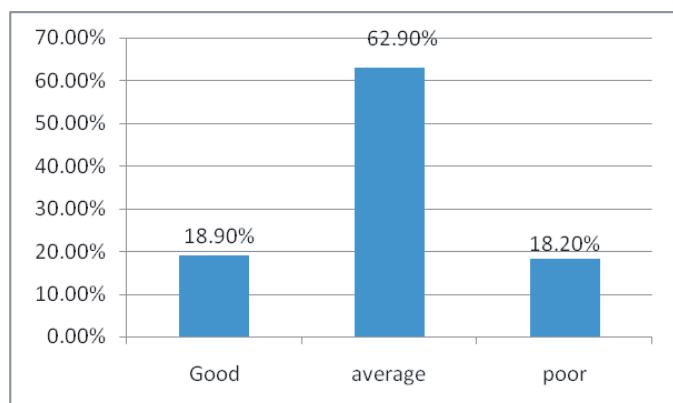


Fig. 1 : Knowledge of the respondents about pregnancy and antenatal care

Discussion

This study was done to assess the knowledge of adolescent girls about pregnancy and antenatal care. In this study we found that majority respondents (72.7%) were within the age range of >13-15 years and most of them were unmarried. Rahim stated that now a days the concept of adolescence has changed to some extent and parents of adolescent girls are becoming conscious for their female child's education rather than giving marriage.⁸ In this study we also found that among total 143 respondents only 9 (6.3%) was married.

Most of the respondents had incorrect knowledge about the duration of pregnancy. Majority (61.5%) of them knew that the pregnancy period was 10 month 10 days. Of the total respondents, only (23.1%) could mention the name of uterus as the normal site of baby during pregnancy but most (83.2%) of the respondents had knowledge about the physiological changes during pregnancy. The scenario is different in developed country; it was observed from the study done in New York that almost all the respondents (92%) were very much familiar with the term pregnancy. There was good knowledge of the girls might be due to the addition of sex education from the very beginning of their high school.⁹

Regarding antenatal care, in our study all most all the respondents (97.9%) knew about the necessity of extra care of a pregnant woman. Majority of them (78.3%) suggested about different types of extra care like TT vaccination, extra food, immediate consultation with a doctor whenever necessary and use of medicine also advised for antenatal visit at least once in a month. This result was consistent with the finding of a report by Nahar Q et al.¹⁰

In our study, a good percentage of the respondents (74.8%) had correct knowledge regarding necessity of vaccination and majority knew the name of the vaccine but about the dose and time of vaccination their knowledge was inadequate, which was similar to the study done by S Akhtar et.al.¹¹ Most of the respondents were unmarried (93.7%) and there was a significant difference of knowledge regarding antenatal care among married and unmarried girls ($p < 0.05$) and most (62.90%) of the respondents had average knowledge on pregnancy and antenatal care Z Mumtaz et.al also found the similar results in their study.¹²

Conclusion

After analyzing the findings of the study in 2 rural schools of Bangladesh it could be concluded that, maximum adolescent girl's knowledge about pregnancy and antenatal care was on average level.

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