

KAP Study of Reproductive Health and Sexually Transmitted Diseases Among High School Girls

¹Dr. Amitesh Kumar, ²Dr. Vikash Chandra, ³Dr. Ratnesh Kumar, ⁴Dr. Hemkant Jha

¹Tutor, Department of community medicine, DMCH, Laheriasarai, Darbhanga, Bihar, India

²Senior Resident, Department of Community Medicine, IGIMS, Patna, Bihar, India

³Tutor, Department of community medicine, JNKTMCH, Madhepura, Bihar, India

⁴Associate Professor and HOD, Department of Community Medicine, DMCH, Laheriasarai, Darbhanga, Bihar, India

Corresponding author

Dr. Ratnesh Kumar

³Tutor, Department of community medicine, JNKTMCH, Madhepura, Bihar, India

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Abstract

Introduction: Enhancing the sexual and reproductive health of adolescent girls is considered to be one of the primary aims of the various development goals. The World Health Organization (WHO) avidly estimated that 20% of persons living with HIV/AIDS are in their 20s and one out of twenty adolescents contract an STI each and every year. The aim of this study was to assess the reproductive health and sexually transmitted diseases among high school girls.

Materials and Methodology: This study is adopted as a cross-sectional study and was conducted among the adolescent girls who were reported to be residing in the urban field practice area of DMCH. Appropriate prior permission was obtained from the district education office for undertaking the study in selected schools. The study included 500 school students by simple random technique. The duration of the study was considered to be around 6 months. Data were collected with earlier permission of respected school authorities and informed consent was obtained from participants before the questionnaire was given.

Results: Most of the participants (86%) belonged to the age group of 14–16 years. Almost 83% of participants came from the Joint family. About 44% of mothers were educated up to secondary school and about 36% of mothers were graduated and only 4% were postgraduate. Considering the knowledge of adolescents regarding STDs and HIV/AIDS, About 96% (480) of the girls had heard about HIV. A total of 32% (160) of girls knew that HIV is incurable. Regarding modes of transmission of HIV/AIDS, majority knew that it is transmitted by sexual contact 340 (68%), followed by infected needles and blades 110 (22%), blood transfusion 40 (8%), and only 10 (2%) knew that it can be transmitted from mother to foetus.

Conclusion: The health concerning the reproductive knowledge is an important virtue that is more concerned among the adolescents and is intimately related with population control, HIV/AIDS protection as well as the prevention of various other sexually transmitted diseases (STDs).

Keywords: Sexual health, Reproductive health, KAP, Adolescent girls, HIV/AIDS.

Introduction

Among the total population numbered in the world, almost around 3 billion are reported to be under the age of 25 years and 1.4 billion are reported to be residing in developing nations and over 500 million are observed to be adolescent females. India which is the second most populous country, one-fifth of the population is observed to be adolescent age group

individuals. One of the studies had eventually estimated that 10.4% of the female population comprised to the age group of 15 – 19 years of age and the primary incidence of teenage pregnancy in the country varies from 3.3% to 18.6%.¹ In some developing countries, many girls attain the onset of puberty which could probably leads to various changes such as child marriage, early pregnancy, heightened vulnerability to school leaving, sexual exploitation, HIV, coercion and violence. When compared to older women, adolescent girls are least likely to assess the sexual and reproductive health care.² Moreover, the improvement of reproductive health education and the social status of women is an important factor for further progress in fertility reduction.³

Younger individuals observed in the age group of 16–24 years are generally considered to be at many risk factors for STIs when compared to older adults. The World Health Organization (WHO) avidly estimated that 20% of persons living with HIV/AIDS are in their 20s and one out of twenty adolescents contract an STI each and each year.⁴ Various young individuals usually abstain from their families for a quite long time when they take up their higher education. They either stay in hostels, in paying guest accommodations or can come in contact with people from different socio cultural background. In order to protect adolescents from these diseases, there is a need to educate them on STD prevention by providing them with relevant information and equipping them with the life skills that will enable them to put knowledge into practice.^{5,6} Many STD-prevention education programmes usually should be implemented by governments and international organizations in developing and developed countries have had many positive impacts on adolescents particularly girls in that desired age groups.⁷

The immense knowledge on STI & their complications and attitude of the young generation towards sexual health are essential virtue in planning preventive and treatment strategies & protocols.⁸ Most of the people should be aware about HIV/AIDs because of the awareness created by social media and government programs and therefore the knowledge about STIs other than HIV/AIDS is reported to be least in the developing countries.⁹ The aim of this study was to assess the reproductive health and sexually transmitted diseases among high school girls.

Materials and methodology

This study is adopted as a cross-sectional study and was conducted among the adolescent girls who were reported to be resident of the urban field practice area of DMCH. Appropriate prior permission was obtained from the district education office for undertaking the study in selected schools. The study included 500 school students by simple random technique. The duration of the study was considered to be around 6 months. The questionnaire that was adopted basically included socio-demographic information about students and their parents; reproductive health-related characteristics of the study participants and their SRH knowledge, attitude and practice-related information. The content validity of the questionnaire was completely reviewed by experts who worked in the SRH field. All items retained in the scale were reviewed by the experts separately.

Data were collected with earlier permission of respected school authorities and informed consent was obtained from participants before the questionnaire was given. The various inclusion criteria that were considered in this research comprised of all adolescents girls who have attended the Outpatient Department in urban field practice area DMCH Hospital for varied problems, school-going adolescent girls from different schools in the city. The exclusion criteria that were majorly followed included those married adolescent girls.

Results

Table 1 showed most of the participants (86%) belonged to the age group of 14–16 years. Almost 83% of participants came from the Joint family. About 44% of mothers were educated up to secondary school and about 36% of mothers were graduated and only 4% were postgraduate. Table 2 tabulated that about 69% of girls were aware of physical signs of adolescence. About 83% had awareness of adolescent health. About 86% had the idea regarding cancer risk and STD association with early sexual activity and multiple sexual partners. About 20 individuals had a recent sexual relationship and 1% (5) of them had relationship with multiple partners. About 87% were aware that there is a risk of abortion with sexual relationship. About 1% of girls admit that they got pregnant. About 29% were aware of emergency contraception. About 3% admit that they have used contraception and 44% knew about condom as a method of contraception.

Table 3 displayed the knowledge of adolescents regarding STDs and HIV/AIDS. About 96% (480) of the girls had heard about HIV. A total of 32% (160) of girls knew that HIV is incurable. Regarding modes of transmission of HIV/AIDS, majority knew that it is transmitted by sexual contact 340 (68%), followed by infected needles and blades 110 (22%), blood transfusion 40 (8%), and only 10 (2%) knew that it can be transmitted from mother to foetus. About 180 (36%) were aware that there are other STDs apart from HIV, but very few knew about its signs and symptoms. Only 70 (14%) knew that the treatment of both the partners is must for treating STDs. Table 4 shortlisted the attitude of adolescents toward sex education. Majority of the girls (82%) were aware of all the aspects of sex education, namely, study of physiology, safe sex, and reproductive health problem. Most of the girls (87%) wanted sex education to be included in the curriculum and majority, i.e., 53% wanted it to be started between 13 and 15 years. Most of girls, 75% had received sex education, Social media being the major source (64%) followed by friends (25%). About 40% think that doctor is the right person to discuss reproductive health problems followed by parents (32%) and friends (26%).

Table - 1: Socio-demographic characteristics of participants

Parameters	N (%)
Age (years)	
11-13	35 (7)
14-16	420 (84)
17-19	45 (9)
Family type	
Joint	415 (83)
Nuclear	85 (17)
Literacy rate of family	
Primary	80 (16)
Secondary	220 (44)
Graduate	180 (36)
Post-graduate	20 (4)

Table - 2: Distribution of participants according to reproductive health awareness

Health risk	N (%)
Awareness on physical signs of their adolescence	345 (69)
Need of adolescent health status (nutrition, exercise, sleep and hygiene)	415 (83)
Early sexual activity and its related risk factors	430 (86)
History of recent sexual relation	20 (4)
History of multiple sexual partners	5 (1)
Knowledge of abortion risk	435 (87)
Ever been pregnancy	5 (1)
Knowledge of emergency contraceptives	145 (29)

History on usage of contraception	15 (3)
Awareness on immediate contraception	220 (44)
Doctor's consultation ever	485 (97)

Table - 3: Distribution of participants according to their knowledge of STDs/HIV

Parameters	N(%)
Idea on HIV/AIDS	
Yes	480 (96)
No	20 (4)
HIV is curable	
Yes	340 (68)
No	160 (32)
Mode of transmission of HIV	
Sexual contact	340 (68)
Infected needles/ blades	110 (22)
Blood transfusion	40 (8)
Mother to foetus (vertical transmission)	10 (2)
STD awareness	
Yes	180 (36)
No	320 (64)
STD indicators include ulcers in genital area	
Yes	90 (18)
No	410 (82)
STD indicators include vaginal discharge	
Yes	185 (37)
No	315 (63)
Treatment of both the partners is needed in STD management	
Yes	70 (14)
No	125 (25)
Did not know	305 (61)

Table – 4: Attitude toward sex education

Variables	N (%)
Sex education awareness	410 (82)
Inclusion of sex education in their curriculum	435 (87)
Have you ever received sex education earlier	375 (75)
Sources of sex education	
Parents	20 (4)
Social media	320 (64)
Friends	125 (25)
Teachers	35 (7)
Ideal age of sex education	
13 – 15 years	265 (53)
16 – 18 years	235 (47)
Ideal person to discuss about the reproductive health	
Parents	160 (32)
Teachers	10 (2)
Friends	130 (26)
Doctors	200 (40)

Discussion

Various concerns regarding the reproductive health is an important thing in adolescent health and is intimately related with the issues such as RCH, population control and HIV/AIDS prevention. In this research study, the mean age was observed at the time of menstruation was 10.9 years and the median age at menstruation was 12 years which is in concordance with the study conducted by *Deb and Mishra*.¹⁰ Mean age of menarche that was observed by other studies were 13.51 years from rural Tamil Nadu,¹¹ 13.1 years from Rohtak,¹² 13.2 years from Rajasthan.¹³ The age of menarche is declining by 0.9 years per decade.¹⁴

Majority of the girls in our study were in the age group of 14–16 years (84%). Many of the girls came from the nuclear family (17%). About 44% of mothers were educated up to secondary school and about 36% of mothers were graduated and only 4% were postgraduate. In this study, 82% of the girls were typically aware of the physical signs of adolescence and 82% were sure about the need for adolescence health and these rates are comparable with the study done by *Agarwal et al*¹⁵ in which 78% of subjects knew about physical signs of adolescence and 88% were aware of the need for adolescent health. About 86% of the subjects in our study had idea regarding risk of cancer and its association with early sexual activity. Similar percentages were observed by *Agarwal et al*¹⁵ in their study (94%). Almost about 4% (20) of girls in our study had premarital sexual relation and 1% (5) had more than one sexual partner. As per the study by *Grunbaum et al*,¹⁶ 47% of high school students had sexual intercourse and 14% of high school students had four or more sex partners, thus displaying the rates are higher in Western countries. Therefore, data from the study done by *Sharma*¹⁷ among the Bangladesh population showed a very high incidence of premarital sex. Many girls knew that pregnancy can be prevented with the use of contraceptives. Condom was most widely known contraception among adolescents (44%) while emergency contraceptives were least known (28%) and these rates are comparable with the study by *Agarwal et al*¹⁵ 80% of the subjects had idea about contraceptives and 19% knew about emergency contraceptives. Similar findings were observed by *Gopal et al*.¹⁸ Sexual exposure among young girls who are unmarried is occasional and unplanned so they are in more need of emergency contraceptives. In our study, majority (96%) of the subjects had heard about HIV/AIDS. In the study carried out by *Ahmed and Kusuma*,¹⁹ 94.06% had heard of HIV/AIDS. In this study, 68% of adolescent girls considered that HIV/AIDS could not be cured and in a study by *Ahmed and Kusuma*,¹⁹ 62.06% knew this. Regarding modes of transmission in our study, majority knew that it is by sexual contact 68%, followed by infected needles and blades 22%, through blood transfusion 8%, and only 2% knew that it can be vertically transmitted from mother to foetus. Similar findings were reported by *Ahmed and Kusuma*¹⁹ and *Lal et al*²⁰ in their study. About 34.6% of girls were aware of STDs in our study while 87% of girls had STD awareness in a study by *Agarwal et al*.¹⁵ About 86% was reported by *Gopal et al*.¹⁸ In another study conducted by *Das and Desai*²¹ they found that 54.9% of girls had heard about STD, but 65.7% did not know about any feature of STD.

Regarding the source of sex education and information about HIV and STDs, it was from mass media mainly 63%, followed by friends 26% and teachers 8% and least was from parents. *Ahmed and Kusuma*¹⁹ and *Lal et al*²⁰ also found the similar findings. This reveals that Information, Education, and Communication activities through mass media are very effective. Girls are getting least information from the teachers who otherwise should play a major role in educating the students. Even parents and siblings are playing a minimal role in providing the information; it means that such types of talks are not encouraged at home. Many (88%) students want sex education to be included in the curriculum.

Conclusion

The health concerning the reproductive knowledge is an important virtue that is more concerned among the adolescents and is intimately related with population control, HIV/AIDS protection as well as the prevention of various other sexually transmitted diseases (STDs). Reproductive and menstrual health and hygiene should be more detailed and comprehensive in the school curriculum. Adolescent girls should receive counselling services at government health facilities and schools. The use of radio, television, and social media could also be an effective strategy for supplying teenagers with information about puberty health, especially those living in remote and rural areas.

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