

Awareness about sexually transmitted diseases among adolescents in urban slums of Jorhat district

Anuja Baruah, Bishnu Ram Das, Abu Hasan Sarkar

Department of Community Medicine, Jorhat Medical College, Jorhat, Assam, India.
Correspondence to: Anuja Baruah, E-mail: dr_abaruah@yahoo.co.in

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Abstract

Background: Adolescence is a vulnerable period for sexually transmitted diseases (STDs) because of curiosity, peer pressure, and lack of awareness.

Objective: To assess the awareness regarding STDs in adolescents of urban slums of Jorhat district.

Material and Methods: Community-based cross sectional study where 261 adolescents were interviewed using a predesigned, pre-tested proforma.

Results: Among 261 adolescents, 74.7% had knowledge about STDs. Maximum awareness was seen in adolescents who were students (84.6%) and also in those belonging to the upper lower socio-economic class (87.5%). Most of the adolescents (48.3%) knew urethral discharge as a symptom of STD. Briefly, 55.17% adolescents felt that STDs can be prevented by the use of condom. Interestingly, 77% of the respondents felt that they should know more about STD and should be taught about STDs in school. Television (66.7%) was the most common source of information on STDs followed by friends (57.5%), newspaper (25.5%), and other means (17%).

Conclusion: Correct scientific information should be disseminated to adolescent in both formal and informal settings so that they do not develop misconceptions. More awareness should be disseminated at schools, through mass media and a more friendly relationship is needed from parents.

KEY WORDS: Sexually transmitted diseases, adolescents, awareness

Introduction

Sexually transmitted diseases (STDs) are a group of communicable diseases that are predominantly transmitted by sexual contact and caused by a wide range of bacterial, viral, protozoa, fungal agents, and ectoparasites.^[1] Sexually transmitted infections (STIs) are among the top five disease categories and about one-third of STIs globally occurs among people younger than 25 years of age.^[2] In India, the second most populous country, the adolescent age group represents about one-fifth of the population. In India, 10.3% women

belongs to the age group of 15–19 years and incidence of teenage pregnancy in the country varies from 3.2% to 18.6%.^[3] Adolescent period is a highly vulnerable period as it involves high risk behaviour.^[4] Adolescent has been defined by World Health Organization (WHO) as the age group of 10–19 years.^[5] Adolescents represent over 1/5th of total population of India and are not a homogeneous group; their situation varies by age, sex, marital status, class, religion, and cultural context.^[6] Poor socioeconomic status and lack of knowledge and awareness further aggravate STDs. All these factors make the adolescents group a vulnerable group for STDs and have serious social, economic, and public health implications. Their problems are many and varied and many times not focused upon by the health system. The health services are not youth friendly, and they may feel an apprehension to approach the health services, particularly in matters related to sexual health.^[7]

The vulnerability of the adolescents calls for interventions that are flexible and responsive to their microenvironment. The urban slums are characterized by poor housing condition, overcrowding, poor sanitation, lack of access to safe drinking water, environmental pollution, group rivalries and clashes,

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and stressful living conditions that are detrimental to the physical and mental health of the people in the slums. In addition, the existing public health-care infrastructure is inadequate to meet the basic health needs of the group.^[8] Urban slums are the places of residence for the migrant populations present in a town. Research from Africa and Asia has demonstrated a link between migration and multi partner sexual networking as well as the prevalence of STI/HIV infection.^[9] It is important to influence the health seeking behavior of the adolescents as their situation will be central in determining India's health, mortality, morbidity and the population growth scenario. Some of the public health challenges for adolescents include unplanned pregnancy, illegal abortions, risk of teenage pregnancy, STIs, RTIs (reproductive tract infections), and the rapidly emerging HIV infections.

Many national and international nongovernmental organizations are putting in efforts to reduce the incidence of sexually transmitted infections but the real decline will be evident if there is adequate use of existing health care services. Further STIs are aggravated by factors such as less knowledge and awareness regarding their mode of transmission and spread. Knowledge of STD and their complications is important for adequate prevention and treatment, as people who do not know the symptoms may fail to recognize their need and so may not seek help.^[10]

Awareness is the concern about and well informed interest in a particular situation or development. Creating awareness about STDs in the adolescent age group is a best way to put a check on the situation. Therefore, an attempt was made to assess the level of awareness regarding STD amongst the adolescents in the age group of 15–19 years in the slums of Jorhat district of Assam.

Material and Methods

A community-based cross-sectional study was conducted from July 2013 to September 2013 in the urban slums of Urban Health Training Centre (UHTC), under department of Community Medicine, Jorhat Medical College, Jorhat. There are seven notified slums in Jorhat Urban area. Of them, three of the slums, namely, Rajamaidam New Colony, Dhakaipatty and Puja Dubi were selected through Simple Random Sampling. The total population of the three slums is 9826. Out of the total population there were 283 adolescents. All adolescents both male and female belonging to registered families of the area were enrolled for study. Out of 283 adolescents, 261 were enrolled as the rest of them were not willing to participate in the study.

The method of data collection was interview method using a pre-designed, pretested, structured proforma. Adequate translation into local language was done to make the proforma comprehensible to the local population. The study subjects participated voluntarily and proper privacy was ensured during the interview. Written informed consent was obtained from the participants above 18 years and from one of the parents in adolescents less than 18 years after explaining the

nature and scope of the study. A second and third attempt was made to minimize the interview drop out. The data was compiled, tabulated and analyzed in percentages, statistical test of significance ($P < 0.05$) was used.

Institutional Ethical Clearance was obtained from Jorhat Medical College prior to the start of the study.

Inclusion Criteria

Adolescent in the age group from 15 to 19 years, belonging to both sexes who gave consent for the study were included.

Exclusion Criteria

Adolescents who were not willing to participate or adolescents whose guardians did not allow were not included in the study. Also, those adolescent who could not be contacted even after three visits were excluded from the study.

Results

General Observations

The slum areas were characterized by inadequate lighting, lack of safe drinking water supply, absence of adequate toilet facilities and non-availability of basic social and health services. The socio-demographic variables relating to knowledge, awareness and practices among the adolescents about STDs residing in slum were studied.

Demography and Socio-economic Status

A total of 261 adolescents aged 15–19 years were enrolled and interviewed in the study. Of the 261 participants, majority belonged to the age group of 15–16 years (60.9%). Female respondents (55.2%) outnumbered males. Majority of the respondents were students (74.7%) and belonged to the lower middle socio-economic group (43.7 %) (Table 1).

Awareness about STD

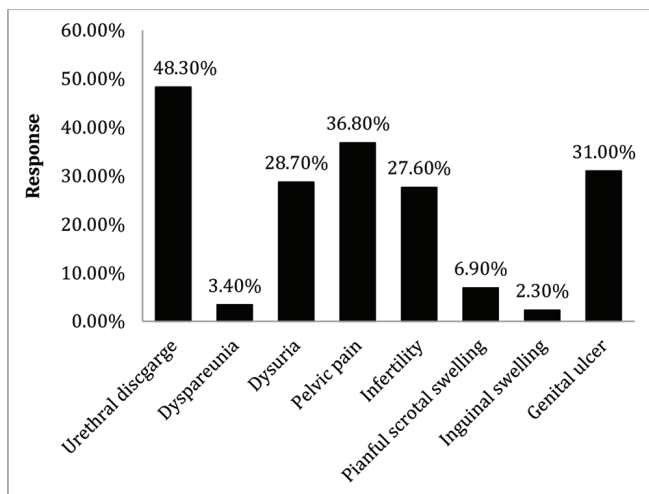
Awareness regarding STD was almost equally distributed throughout both age groups, 74.7% of adolescents had knowledge about STDs. Awareness was found to be high (84.6%) among students, followed by the unemployed adolescent group (57.1%). Awareness pattern was found significant ($P < 0.001$), with respect to occupation of the adolescent. It was observed that the upper lower socioeconomic class had highest percentage of awareness (87.5%); followed by the upper middle group (85.7%) (Table 1).

Awareness about STD Symptoms

Among the different symptoms that occur in STDs, 48.3% of adolescents were found to be aware of urethral discharge, 36.8% of adolescents were aware of pelvic pain, and 31.0% of adolescents were aware of genital ulcer as sufferings of Sexually Transmitted Diseases. Other symptoms mentioned by the adolescents were dysuria (28.7%), infertility (27.6%), painful scrotal swelling (6.9%), dyspareunia (3.4%) and inguinal swelling (2.3%) (Figure 1).

Table 1: Demographic profile, occupation, socio-economic status and awareness about STDs

Particulars	Aware (no.)	Aware (%)	Not aware (no.)	Not aware (%)	Total no., n = 261(%)	P-value
Age group						
15–16	117	73.6	42	26.4	159 (60.9%)	<0.750
17–19	78	76.5	24	23.5	102 (39.1%)	
Sex						
Male	75	64.1	42	35.9	117 (44.8%)	<0.010
Female	120	83.3	24	16.7	144 (55.2%)	
Occupation						
Student	165	84.6	30	15.4	185 (74.7%)	<0.001
Employed	6	25.0	18	75.0	24 (9.2%)	
Unemployed	24	57.1	18	42.9	42 (16.1%)	
Socio-economic status						
Upper	0	0.0	0	0.0	0 (0.0%)	<0.010
Upper middle	72	85.7	12	14.3	84 (32.2%)	
Lower middle	75	65.8	39	34.2	114 (43.7%)	
Upper lower	42	87.5	6	12.5	48 (18.4%)	
Lower	6	40.0	9	60.0	15 (5.7%)	

**Figure 1:** Awareness about symptoms of STDs

Attitude towards Prevention of STD

With regard to attitude of adolescents for prevention of STDs, it was found that the study subjects felt that STDs can be prevented and controlled STDs by use of condoms (55.17%), prompt treatment (26.4%), being in a monogamous relationship (20.7%), avoiding commercial sex worker (14.9%) and treating the partner (11.5%). Another 25.3 % were however found to be unaware of ways to prevent STDs (Table 2).

Attitude towards STD Treatment and Services

It was seen in the study that 77% of the participating adolescents felt that they should know more about STD and 71.3% thought that Reproductive Health should be taught at

Table 2: Attitude of adolescents for prevention of STDs

Methods	Aware (no.)	Aware (%)
Do not know	66	25.3
Using condoms	144	55.2
Monogamous relationship	54	20.7
Prompt treatment	69	26.4
Treating ones partner	30	11.5
Avoiding CSW	39	14.9
Others	15	5.7

school. Briefly, 60% said STD was treatable, and 19.54% said treatment was free of cost. But no one knew about adolescent clinics while 52.87% had knowledge about complications of STD (Table 3).

Source of Information on STD

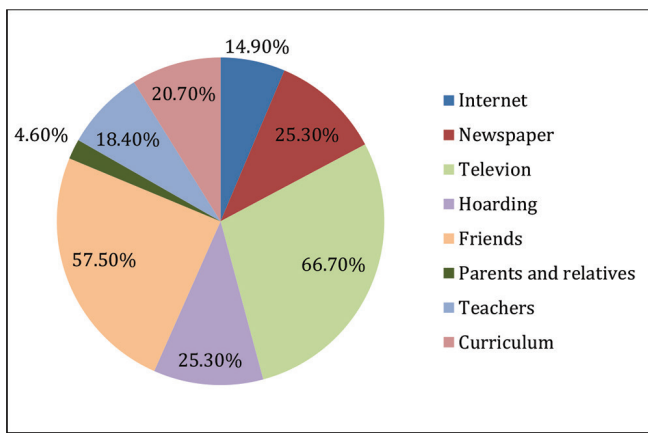
The adolescents were found to be informed about STD through various sources, namely television (66.7%), friends (57.5%), newspaper (25.3%), hoardings (25.3%), educational curriculum (20.7%), teachers (18.4%), Internet (14.9%), and parents and relatives (4.6%). Multiple responses were considered for this response (Figure 2).

Discussion

Awareness regarding STD was fairly evenly distributed through all age groups, with 74.7% of adolescents having knowledge about STDs. Girls (83.8%) were found to be more aware as compared to boys, whose awareness was only 64.1%. Awareness was found to be high among students

Table 3: Attitude of adolescents about services for treatment of STDs

	Aware (no.)	Aware (%)
Treatable	156	60.0
Free of cost	60	19.54
Know about adolescent clinics	0	0.0
Know about complications of STD	138	52.9
Interested to know more about STD	180	69.0
Think it is important for adolescent to know about STD	200	77.0
Think Reproductive Health should be taught in school	186	71.3

**Figure 2:** Source of information about STDs

(84.6%), the upper lower socioeconomic group (87.5%). The adolescents were found to be aware of urethral discharge (48.3%), pelvic pain (36.8%), genital ulcer (31.0%), dysuria (28.7%), and infertility (27.6%) as symptoms of STDs. It was found that 55.17% quoted STDs can be prevented by use of condoms, and 26.4% said prompt treatment. Monogamous relationship was named as a method of prevention of STDs by 20.7% respondents. In total, 25.3% of the adolescents were unaware of ways to prevent STDs. The major source of information was found to be the television (66.7%), while 57.5% heard about STDs from friends. Another 25.3% each were informed from hoardings and newspapers. The educational curriculum acted as the source of information for only 20.7% of the adolescents. It was found that parents and relatives served as a poor source of information contributing for only 4.6%.

Awareness regarding STD found in our study is comparable to the findings of Lal et al^[11] (over 70%) and Raut et al (about 68.7%). The studies by Rai et al^[16] and Aggarwal et al^[18] reported 51.2% awareness. However, Sogarwal et al^[14] had reported awareness to be 3.2%. The greater awareness among the students may be because of the inclusion of reproductive system in academic curriculum of schools. Moreover, easy access to internet in present time may also be a factor. A greater number of student groups who were aware,

belonged to the upper lower socioeconomic class. They are more exposed to mass media like television, newspaper, etc. Yadav et al^[15] had also reported age, education, occupation, and exposure to mass media as factors that influenced awareness among the youths. Sogarwal et al^[14] had reported domicile, education, and household wealth index have role for the level of awareness.

The findings regarding awareness of the adolescents of many of the symptoms of STDs were found to be similar to the findings of Garg et al.^[13] This greater awareness regarding STDs in our study group was probably because of more peer group discussion amongst the adolescents about the probable problems associated with STDs. Also, more of the adolescents in our study group were students who might be informed about the STDs from formal education. Similarly, the influence of the internet, and the different means of social media is undeniable.

The finding of use of condom as the best mode of prevention as found in our study is comparable to findings of other community based studies as well. Rai et al^[16] have reported 72.9% awareness of condom as a preventive measure. Garg et al^[13] reported 39.2% and Sogarwal et al^[14] reported 4.8% awareness for the same. The attitude towards monogamous relationship as a method of prevention of STDs was found to be much less in our study than that found by Garg et al^[13]. Another study by Yadav et al^[15] have reported 90% respondents to be aware of different modes of prevention. Singh et al^[12] have reported 55–65 % awareness about various methods of prevention. One-fourth (~ 25%) of the adolescents in the present study were unaware of the methods of prevention of STDs probably due to the lack of penetration of accurate information through the awareness campaigns on STD and reproductive health in general.

Television as the major source of information as found in our study, is comparable to the findings of the different studies by Lal et al,^[11] Kishore et al,^[19] and Ahmad et al.^[20] While 57.5% of our participants heard about STDs from friends, according to Ahmad, et al^[20] only 16.5% heard about STDs from friends. Hoardings and newspapers were the sources in 25.3% of our participants, whereas Kishore et al^[19] posters in 23% and radio in 14.3% of their participants. Television has universally been found as the most effective source of information about STDs for the adolescents. However the role of parents and relatives is alarmingly inadequate which may be an indirect reflection of their own ignorance and inhibitions regarding STDs.

Strengths

Since only a few studies have been conducted in this region, the findings of the present study can serve as the baseline data with respect to awareness of adolescents about STDs and their determinants. This was a hypothesis-generating study and a larger confirmatory study is needed.

Limitations

Purposive sampling was applied in the present study. All the adolescents in the area of study could not be interviewed even after three consecutive visits. As the subject matter of

the interview was sensitive, adolescents might not have given correct information or withdrawn any true information. We also acknowledge that our study may be susceptible to bias due to misclassification due to recall bias.

Conclusion

In the present times most of the adolescents know about STDs and its main symptoms. Adolescents who have access to formal education, mass media, social media were found to be most aware. It is well felt that correct scientific information should be disseminated to the adolescent in both formal and informal settings so that they do not pick up sexual myths and misconceptions from their peers and elders. Awareness campaign regarding reproductive health may be institutionalised in an organised way and information should be disseminated at school levels. Parents should create a friendly environment at the household level to provide scientific and correct knowledge so that the adolescents can raise their curiosity and rest their doubts.

Since awareness is the main factor in prevention of STD there is an urgent need to increase the awareness about STD especially among low socio-economic, illiterate people of the community using all methods of intensive information, education and communication activity. Adolescents belonging to urban slums form a very important group with respect to sexually transmitted infections due to their being inquisitive about sexuality, their ignorance about the associated dangers, as also their vulnerability of being victims of sex crimes. Prevention of STD by generating awareness of this group would have a multitude of benefits to the society at large.

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