

# Knowledge, Behavior and Attitude towards Sexually Transmitted Infections and Acquired Immunodeficiency Syndrome of Adolescent Students

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## ABSTRACT

**Background:** Adolescence is a period of great physical, mental and emotional turmoil within teenagers. The objective of the study was to assess the knowledge of, attitude to and behaviour towards STI and AIDS among adolescence.

**Methods:** Four randomly selected higher secondary school from students of class XI and XII were included after taking their verbal consent. A pre-designed and pre-tested questionnaire was given to all the participants of the school. In order to get correct answers, specific questions were explained to the students with the help of their class teachers.

**Results:** The results were encouraging with the majority (94.16%) have heard about STIs and HIV/AIDS. Teachers (100%), Newspaper/magazine (90%) and Television (78.33%) were the main informational source about disease. Respondents correctly identified that unsafe sexual contact (86.66%) as major mode of transmission of AIDS and more than 90% of students regarded the use of condoms as the true preventive method for the disease. Among those respondents 6% were sexually active and their partners were either sex worker (71%) or friends (29%).

**Conclusions:** The student's attitude towards disease was positive and most of the adolescent wished inclusion of sex education in their text book from secondary level school's curriculum.

**Keywords:** acquired immunodeficiency syndrome, adolescent, sexually transmitted infection

## INTRODUCTION

Sexually Transmitted Infections (STIs) continue to be a major and growing public health problem in many parts of the world; especially in developing countries with an estimated annual incidence of 340 million curable STIs. The increasing mobility of people across the world, urbanization, poverty, social demographic changes especially in developing countries, sexual exploitation of women and changes in sexual behavior are some of the factors which have placed an ever increasing proportion of population at risks for STIs.<sup>1</sup>

This growing phenomenon often results in increased unsafe commercial sexual activities that help the spread

of STIs including HIV. National STI data are scarce and non specific. As per annual report of Health Management Information System, a total of 0.34% of cases was reported in 1999. A number of cross sectional studies carried out in different parts of the country give some indication of the incidence and prevalence of STIs including HIV infection among different population groups.<sup>2</sup> A prevalence survey conducted by the National Centre for Acquired Immunodeficiency Syndrome (AIDS) and STI control among 1802 pregnant women in urban areas of Nepal revealed that 4.7% of them had STI and HIV prevalence was 0.2%.<sup>3</sup>

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**METHODS**

Across sectional study was conducted in Higher Secondary School of Palpa District from January 2010 to May 2010. Four randomly selected higher secondary school from students of class XI and XII were included after taking their verbal consent. A pre-designed and pre-tested questionnaire was given to all the participants of the school. In order to get correct answers, specific questions were explained to the students with the help of their class teachers. Strict confidentiality was maintained by keeping the questionnaire anonymous. They were asked to fill the questionnaire within the classroom. The data thus collected was compiled, analyzed in Microsoft Excel software.

**RESULTS**

There were total 120 students of class XI and XII. It is encouraging to know that the level of knowledge among adolescent students was adequate. Most of the respondents have heard about STIs and HIV/AIDS (Table 1).

**Table 1. Distribution of respondents by Gender and Knowledge of STIs.**

Knowledge of STIs	Boys	%	Girls	%
HIV/AIDS	58	96.66	52	86.66
Syphilis	38	63.33	32	53.33
Gonorrhoea	34	56.66	36	60
Hepatitis B	32	53.33	36	60
Chlamydia	10	16.66	7	11.66
Trichomoniasis	9	15	5	8.33

The main source of information on STIs and HIV/AIDS was from teachers, Newspaper and Television (Table 2). Teachers are the role model for the students to make impact on them.

**Table 2. Sources of information.**

Sources of information	Number	Percentage (%)
1 Teachers	100	83.33
2 Television	94	78.33
3 Friends	92	76.66
4 Newspaper/ Magazine	90	75
5 Parents	87	72.5
6 Radio	85	70.83
7 Textbooks	84	70

Most students had correct knowledge about the main mode of transmission of HIV/AIDS, but misconception still exist (15.83%), Table 3. On preventive approach use of condoms was known as main mode of prevention of STIs.

**Table 3. Distribution by knowledge of mode of transmission of HIV/AIDS.**

Mode of transmission	Number	Percentage (%)
1 Unsafe sexual contact	104	86.66
2 Blood transfusion	103	85.83
3 Infected mother to baby	96	80
4 Touching an infected person	19	15.83

**Table 4. Distribution by knowledge of prevention of STIs.**

Variable	Number	Percentage
1 Use of condoms	110	91.66
2 Non use of unsterilized surgical instruments	104	86.66
3 Use of safe blood	99	82.5
4 Do not have sex with multiple partners	86	71.66
5 Do not have sex at all	28	23.33

Students correctly identified the vulnerable groups for HIV/AIDS (Table 5), and individuals role as main responsibility to prevent and control HIV/AIDS.

**Table 5. Vulnerable groups for HIV/AIDS.**

Vulnerable groups	Number	Percentage
1 Sex workers	105	87.5
2 Drug users	63	52.5
3 Homosexuals	59	49.16
4 Adolescence	51	42.5
5 Travelers/Tourists	32	26.66

**Table 6. Responsibility to Prevent and Control HIV/AIDS.**

Responsibility	Number	Percentage
1 Individual	80	66.66
2 Government	55	45.83
3 Community	48	40
4 NGO/INGO	19	15.83

**DISCUSSION**

The worldwide spread of sexually transmitted diseases has been a major disappointment for the departments of Public Health for the past two decades. In rural Nepal, STIs are not commonly screened for; the main reason being the lack of proper facilities and patient follow up.<sup>2,4</sup>

The distribution of respondents on knowledge of STIs. Most of the respondents (94.16%) have heard about STIs. The percentage of the boys is slightly higher than that of the girls (91.66%). Only 5.83% are unaware of STIs; this is to be expected as these students are in secondary

school. Among the specific STIs the most heard about disease is HIV/AIDS (91.66%). Syphilis is the second most commonly heard of disease with 58.33% and Hepatitis B (56.66%) is third. The least heard about disease is Trichomoniasis (11.66%). There is a trend throughout the table that shows that boys are more knowledgeable about STIs than girls, although more girls knew about Gonorrhoea and Hepatitis B than boys did. This is not surprising since boys are more open with each other and discuss topics girls would not think of mentioning in polite conversation. These results were similar with a thesis study done on same topic.<sup>5,6</sup>

The greatest source of information about STIs was teachers! This is gratifying to see since teachers provide basic information with no reservations, so students get a proper picture.<sup>7</sup> Television ranks second with 78.33% and friends with 76.66%. All in all, the percentages are quite high for every source of information including parents (72.5%).

Hearing about STIs in passing is one thing; to know the details of STIs particularly about mode of transmission are true knowledge. Most students knew that unsafe sexual contact was a major mode of transmission of HIV/AIDS (86.66%). Also familiar were blood transfusion (85.83) and transplacental modes (80%). Misconceptions still exist as evidenced by 15.83% choosing option 4 (i.e. touching an infected person) as a mode of transmission.

Analysis of the table 4 for true prevention of STIs and HIV/AIDS revealed that more than 90% of students regarded the use of condoms as the true preventive method. The use of safe blood (82.5%) and no sex with multiple people (71.66%) also ranked high. Very few people chose the total abstinence option (23.33%). It is noteworthy that option 5 (i.e. not using unsterilized surgical instruments) also garnered a high vote (86.66%). As per study done in Indian students, their knowledge and preventive aspects were in similar with our study.<sup>8,9</sup>

Students were asked about their current sexual status and their responses were used to calculate the risk for transmission of STI and HIV/AIDS. Among the respondents 6% were sexually active; a relatively low percentage. These 6% were asked about their sexual partners. 29% were involved with their friends, but the shocking news was that 71% of them were involved with sex workers! Both of these groups are high risk groups for the transmission of STIs and AIDS. As with other communicable and even non communicable diseases, STIs and AIDS have higher chances of transmission to certain groups which are known as vulnerable groups. For the prevention and control of STIs and AIDS it is necessary to identify

these vulnerable groups. It is interesting to note that most of the respondents knew that sex workers were a vulnerable group (87.5%). The result was similar with another study done in Kathmandu valley students were 4.2% had previous sexual intercourse among friends and sex workers.<sup>10</sup>

Drug users (52.5%) ranked second and homosexuals ranked third with 49.16%. Adolescence and youth was 42.5% while travelers/tourists got 26.66%. The most important vulnerable groups have been correctly identified; however it is not sufficient for students at this level.

AIDS was first recognized internationally in 1981. In Nepal, it was first identified in 1988 and has been emerging as one of the burning issues globally.<sup>11</sup> In this study data was collected with the objective being to identify the knowledge of AIDS of these adolescent students about the responsibility and prevention of AIDS. The majority of the respondents felt that the onus of preventing and controlling AIDS fell on the individuals themselves. By changing their own perceptions and behaviour, they could contribute to a healthier society. The respondent also assisted the need of government's responsibility and the community should be involved as well. It is clear from these results that the prevention and control of AIDS is a group effort.

## CONCLUSIONS

The respondents were from four different schools spread over the Palpa District, thus we had a large sampling pool. The students spanned a wide range of society such as wealth, domestic situation, culture, religion. The study among the adolescent student highlighted that respondents had adequate knowledge about causative agents of STIs and AIDS, vulnerable group, mode of transmission and preventive aspect of the disease. Their attitude towards disease was positive and correctly identified as individual behavior responsible for prevention and control of AIDS. Sex education should be implemented at the high school level as students need to be well informed to deal with diseases like STIs and AIDS.

## ACKNOWLEDGEMENT

We are highly grateful to the principal and class teachers of the four Higher Secondary School and the students for their active participation and supporting to carry out the study in the school. I also like to extend our gratitude to Dr. Angel Magar and Dr. Kamana Subba for helping to prepare this manuscript.

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