

An awareness study of HIV/AIDS among adolescent students of Chitwan district, Nepal

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A cross sectional study was conducted among the adolescent students of 12 randomly selected higher secondary school of Chitwan district, Nepal with an objective to assess the awareness by studying their knowledge and attitude towards the disease. It is really very gratifying to note that 100.0% of the respondents had heard about the disease and majority of them (95.0%) had correct knowledge about the causative agents. Among the respondents quite large number of students (79.0%) knew about high risk age group and 81.0% were aware about safe sex as one of the major preventive measure. The attitude of respondents towards the AIDS patients was firmly positive. Among them 84.5% had no objection in treating AIDS patients in the general hospital with extra precaution. The main source of their information, education and communication were from electronic media. These observations were indicative of good awareness about the disease which will definitely help in bringing about behavioral change at the individual level and will go in a long way for prevention of transmission amongst the high risk groups and to contain its spread.

Introduction

Nepal ranks second in the SAARC region in terms of HIV prevalence, posing a great threat in the region. There are 4,257 detected cases out of an estimated 60,000 HIV positive cases in Nepal. More than 30 people are getting HIV infection in Nepal everyday. According to national AIDS plan's estimation, more than 1% of adult Nepalese will be living with HIV and there will be 15,000 AIDS related deaths each year by the end of 2006. At least 3500 to 4000 persons were to be undergoing treatment in Nepal by now².

Adolescence is a period of great physical, mental and emotional turmoil with teenagers in search of their identity, very often start experiencing with intravenous drugs or sex, both making them vulnerable to contracting HIV. Many adolescents are less likely to be aware of HIV/AIDS and the modes of its spread. Since prevention is the key to AIDS control, empowerment of youth with knowledge about high risk behaviors and its ominous relation with HIV is a most effective tool to contain the pandemic. Planning an appropriate HIV awareness programme for a specific target group must be relevant to its need and can be designed only after determining the existing knowledge, belief, attitude and practice pattern of that particular group³. Since no such assessment has ever been attempted in this district, the present study was thus undertaken to assess the extent

of knowledge and attitude of adolescent students of senior secondary school towards HIV/AIDS and to help the policy makers and programme managers deciding strategic programme for the target groups.

Material and methods

This study was conducted from December 2004 to January 2005. a total of 1735 students of class XI and XII, from 12 randomly selected higher secondary schools of Chitwan district were included in this study. 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 up the questionnaire within the classroom. The data thus collected was compiled, analyzed and interpreted electronically by using SPSS software.

Observations

It is gratifying to note that the level of awareness among adolescent students was very encouraging. All of the students had heard about HIV/AIDS, however correct full form of the disease was known to 84.2% of the respondents

only. About 95.3% of them were knowledgeable about the viral aetiology of disease. Knowledge about different modes of transmission was also adequate and varying from 91.4% to 77.3% except for homosexuality which was known to only 36.1%. Wrong perceptions about the modes of transmission of disease like mosquito bite, sharing utensils and clothes, swimming pools and public toilets, hugging and kissing and shaking hands with AIDS patients was negligible *Table-1*.

When enquired about high risk groups, the perceptions about the different high risk groups were highly variable. Adults (19-40 years) as a high risk group was considered by 79.9% of the adolescents. 60.2% and 56.0% of the respondents considered prostitutes and drug abusers as high risk groups. 46.8%, 19.9% and 18.8% of the respondents considered truck drivers, professional blood donors and homosexuals as a high risk groups respectively *Table-2*.

Correct awareness about the common symptoms of the AIDS was also variable. Majority (78.2%) expressed weight loss as most common symptom followed by fever (62.0%). Perceptions of enlarged glands as a symptom of AIDS was observed in 19.9% of the students only *Table-2*.

Table 1 Awareness among adolescent students on aetiology of HIV/AIDS and its modes of spread

Correct perception about aetiology	1735(N)
Heard about AIDS	100.0%
Full form of AIDS	84.2%
Causative agent (virus)	95.3%
Correct perception about modes of transmission	
Sexual activities with- same sex	36.1%
Opposite sex	77.6%
Multiple partners	77.3%
Using un-sterilized needles and syringes	81.1%
Receiving/ donating blood	90.2%
Pregnant mother to her baby	91.4%
False perceptions about modes of transmission	
Mosquito bite	4.7%
Sharing utensils and clothes	1.8%
Swimming pools/ public toilets	1.8%
Kissing/ hugging	4.5%
Shaking hands with AIDS patients	4.3%

Table 2 Awareness about high risk groups, symptoms and prevention of HIV/AIDS

1. Correct awareness about high risk groups-1735(N)	High
risk age groups- Adults (19-40)	79.9%
Professional groups- Truck drivers	46.8%
Prostitutes	60.2%
Professional blood donors	19.9%
Homosexuals	18.8%
Drug abusers	56.0%
2. Correct awareness about symptoms of AIDS-	
Fever	62.0%
Diarrhea	42.2%
Weight loss	78.2%
Enlarged glands	19.9%
3. Correct knowledge about prevention-	
Safe sex	4.7%
Safe blood practices	1.8%
Avoid drug abuse	1.8%
Sterilized Syringes and Needles	63.9%

Regarding the knowledge about perception of the disease, it was observed that most of the adolescents (81.2%) believed that safe sex (use of condom) is the safest method of prevention of HIV infection followed by use of sterilized syringes and needles (63.9%), adopting safe blood practices (59.2%) and avoiding intravenous drug abuses (54.9%).

Table 3 Attitude towards the disease and its victims

	Respondent's Attitude	
	Positive	Negative
Wouldn't be ashamed if they have AIDS	64.8%	32.3%
Would like to visit friends or relatives having AIDS	85.2%	13.4%
Would like to have food served by AIDS patients	84.5%	10.2%
Would like them to be employed in factories/restaurants	86.2%	12.4%
Would like to get them treated in the same hospital with extra precautions	81.7%	15.3%

Respondent's attitude towards HIV/AIDS patients was fairly positive. A good number of respondents (64.8%) expressed their feelings that they wouldn't be ashamed if they have HIV/AIDS. Quite a fair percentage (71.4%) refused to have sex with attractive strangers and they were in favor of visiting AIDS patients (85.2%). Majority of the respondents (86.2%) advocated their employment either in factory or a restaurant and (84.5%) were in favor of taking food served by the AIDS patients. Their attitude to treat these patients in the same hospital with extra precautions was really commendable *Table 3*.

Table 4 Sources of information, education and communication about AIDS

Sources of Information	
Radio and TV	85.4%
Magazines and news papers	56.8%
Posters and pamphlets	45.1%
Text books and teachers	21.6%
Parents and friends	9.5%
NGOs	1.4%

The main sources of information, education and communication to the respondents (85.4%) were electronic media. Other sources were magazines and news papers (56.8%), posters and pamphlets (45.1%), text books and teachers (21.6%), parents and friends (9.5%) and NGOs (1.4%) *Table 4*.

Table 5 Sex education preferred by the respondents at different levels

Level	Percentage
Primary	5.8%
Lower secondary	15.8%
Secondary	50.2%
Higher secondary	23.7%
Did not respond	4.5%

Most of the respondents (95.5%) were in favor of inclusion of sex education in their curriculum. 50.2% amongst them

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desired it to be included at secondary level and 23.7% at higher secondary level. Only 5.8% were in favor of introducing it at primary level *Table 5*.

Discussion

In 1991 it was found that 25% of the world's HIV cases were in their 20's indicating the fact that it must have been acquired during their adolescent period⁴. Adolescent age group forms a sizeable proportion approximately consists of 23.6% of the population⁵. Adolescence is the most volatile period of life with the children attempting to shed parental restrictions, seeking new identity and make new contacts. Experimentation with new friends, new behavior, with drugs and even sex pose additional challenges for them. Because of their greater vulnerability, they may fall prey to exploitation during the period which may culminate in to an unwanted pregnancy or a sexually acquired disease including HIV³.

This is the first ever AIDS awareness study performed among the adolescents in Chitwan district of Central Development Region in Nepal. Since most of the secondary schools are situated in urban area, the students were better informed about HIV/AIDS. This finding is consistent with some Indian studies reporting awareness between 63.0% to 87.0% about HIV/AIDS transmission through sexual intercourse, blood transfusion, sharing un-sterilized needles and blades and infected mother to her baby^{5,6,7,8}. In another study, 62.0% of 12th class students from Government and public schools of south Delhi gave correct answers⁹. The predominant route of HIV transmission in India and Nepal is heterosexual with more than 83.0% cases detected^{7,10,11}. According to a recent study, approximately 68.0% of the drug addicts in Kathmandu and 40.0% out side the valley were HIV positive⁷. Awareness to both these at risk groups in our study was 60.2% and 56.0% respectively.

Maximum number of HIV/AIDS cases in Nepal is in 20-40 years of age group and number is further increasing⁷. In present study, 79.9% of the respondents had correct knowledge of the high risk age group. The other at risk groups in Nepal are intra-venous drug users and those who are involved in unfair sexual practices⁷. Fifty six percent and 60.2% of the respondents in our study were aware about both these high risk groups respectively. These findings also corroborates with some studies in India where 54.6%, 51.5% and 84.4% could identify homosexuals, IV drug abusers and persons having sex with multiple partners as a high risk groups respectively^{9,12}.

The respondents had fairly good knowledge about the common symptoms of the disease. Maximum students (78.2%) revealed weight loss as the commonest symptom followed by fever (62.0%). Diarrhea (41.2%) and glandular enlargement (19.9%). The clinical manifestation of the

disease was well known to 40.0% – 60.0% of the surveyed students in India^{13, 14}.

Regarding prevention, 54.9% to 81.2% of students were very well informed about the different preventive measures. In this study most of the adolescents had adequate knowledge about its prevention. It is probably due to their correct awareness and minimum misconception about the different modes of transmission.

It is very satisfactory to note that the adolescents in this study had positive attitude towards AIDS patients. Though quite a fair percentage of students (71.4%) refused to have sex with attractive strangers, few respondents (18.6%) did not care for getting infection by having sex with the strangers. This observation tallies with some studies in India where 12.2% of the students were willing to have sex with strangers without knowing their HIV status^{15, 16}.

The main source of information to most off the adolescent students (54.4%) was the electronic media especially radio and television (though some of the respondents had quoted the internet also as a chief source of knowledge) followed by print media including text books (39.4%). Similar finding is also observed in some of the Indian studies where 71.7% and 84.3% of the respondents got knowledge from TV and Radios respectively^{17, 18}. These findings are suggestive of the facts that incorporation of HIV/AIDS topic in their text book will help the students to make them more knowledgeable about the disease and its prevention in achieving the desired goal.

In 1992 the World Health Organization advocated utilizing young children and adolescents as a potential resource for prevention of HIV transmission. This resulted in inclusion of HIV/AIDS education in school curriculum. Though late yet ultimately in 2004, His Majesty's Government started annual health education programme for adolescent students of class 8-10, with the objective to make them aware about AIDS and STD⁷. In the present study also, (95.5%) were in favor of inclusion of sex education in their curriculum and 50.2% amongst them desired it to be included at secondary level.

Conclusion

From the above study it is clear that most of the adolescent students had adequate knowledge about vulnerable age group, causative agent, high risk group and correct mode of transmission of infection. Most of the preventive measures were known to them. Their attitude towards disease and patients was positive. Most of the adolescent students were in favor of inclusion of sex education in their text book at secondary level. In view of the good awareness and fairly positive attitude towards HIV/AIDS among the adolescent students of secondary level, there should be a special drive for advocacy to school children below the secondary level as well.

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