

Original Research Article

HIV/AIDS knowledge and attitude among adolescents of Kamrup Metro district, Assam

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ABSTRACT

Background: AIDS is a pandemic disease which is threatening the world population. Its prevention largely depends on health education and behavioural changes based on AIDS awareness, particularly among young adults who are prone to risky behaviour. The objectives of the study were to assess the knowledge and attitude about HIV/AIDS among adolescents of Kamrup Metro district, Assam and to study the relevant socio-demographic factors.

Methods: A cross sectional, community based study was conducted for a period of three months. A total of 300 study participants from slum & non slum areas of Kamrup Metro district, Assam were included using two stage random sampling. Interview of adolescents in 15-19 years age group was taken using predesigned and pretested schedule.

Results: It was found that 95.7% of respondents had heard about AIDS. Virus as a causative agent was known to 51.6% while only 59.6% of the study subjects knew regarding asymptomatic nature of the disease. Transmission by infected syringes and needles, from infected mother to her baby & by unscreened blood transfusion was known to 69%, 74.2% and 81.8% of respondents respectively. Some misconceptions about the disease were also present. Knowledge regarding availability of treatment and prevention was found among 54.4% and 86.4% of respondents respectively. 66.5% of respondents felt that a person with HIV/AIDS must be isolated. 44% of study subjects believed that HIV/AIDS is curable.

Conclusions: Though majority of respondents were aware about AIDS but complete knowledge about this disease is still lacking. There is a need for intensified activities regarding information, education and communication for these vulnerable groups.

Keywords: Knowledge, Attitudes, HIV/AIDS, Community-based study

INTRODUCTION

This pandemic disease is a threat to the world population. In present circumstances, AIDS prevention largely depends on health education and behavioural changes based on AIDS awareness, particularly among young adults who are prone to risky behaviour. It is estimated by the Joint United Nations Programme on HIV/AIDS and the World Health Organization (UNAIDS & WHO) that the number of people living with HIV worldwide in

2017 is estimated 36.9 million [31.1 million–43.9 million].¹ Approximately 2.5 million HIV positive cases in India and no part of our country is free of HIV infection. Focus was also given under the sixth Millennium Development Goal (MDG) to stop and reverse the spread of HIV/AIDS.

In India, people in the age group of 15-29 years comprise nearly 25 percent of the country's population but they account for 31 percent of the AIDS burden. This indicates

that young people are at high risk of contracting HIV infection.² Their vulnerability to AIDS might be due to lack of knowledge about this disease including behavioural risk factors and its preventive aspects.

As per NFHS-3 youth profile of India, Only 20 percent of women and 36 percent of men have comprehensive knowledge about HIV/AIDS, i.e., they have correct knowledge of all the ways of transmission and prevention of the infection. In many states, less than half of women had heard of AIDS. Though various studies were conducted at the national and international level, and similar in series by Sarma et al in Guwahati, Nagaon and Silchar of Assam among the student of 16-18 years, found that 55.01% students were aware about AIDS. Male (58.73%) were more aware than females (49.94%), but no clear picture of knowledge & attitude about HIV/AIDS among adolescents could be sorted out. With this background the present study was conducted to assess the knowledge & attitude about HIV/AIDS among adolescents.

Present study aims at-

- To assess the knowledge and attitude about HIV/AIDS among adolescents of Kamrup Metro District, Assam.
- To study the relevant socio-demographic factors.

METHODS

This cross-sectional study was conducted for a period of three months between July to September 2011 in Kamrup Metro District of Assam, India. A total of 300 adolescents of 15-19 years age group were selected from slum and non-slum areas of the district by using two stage random sampling method. For the present study, sample size was calculated based on the prevalence of awareness about HIV/AIDS in 15-19 years age group of 73.4% (as per NFHS-3), relative precision of 7% and 95% confidence interval, the minimum number required to be 298. As the Kamrup Metro district comprises of slum and non-slum areas, equal numbers of study subjects were taken from both the areas for better representation of findings (taken it as first stage sampling). From all the listed areas of slums, two slum areas viz. Hedayatpur Horijon Colony and Natboma mazar bazaar were selected by using simple random sampling technique and in similar manner two non-slum areas viz. Khanapara and Mathgharia were selected from two different zones of Kamrup Metro (Urban). During

the visit if more than one respondent found in a household, only one was selected using random numbers.

Data were collected by interview method using a pre-designed, pre-tested schedule. The questionnaire has three broad sections: socio-demographic characteristics including age, gender, marital status, educational level and employment status. The response categories for the question is mostly with option in the form of 'yes', 'no' and 'don't know'. Ethical permission for the study was obtained prior to collection of data.

To assess the level of comprehensive knowledge and attitude, an index has been self-constructed. A total of 10 important questions pertaining to knowledge and attitude about HIV/AIDS were identified separately to construct this index, each question being awarded 10 marks. Three categories were designed: "not aware", "somewhat aware" and "well aware". Those who have never heard about HIV/AIDS were categorized under "not aware". Adolescents securing 0-50 marks were classified as "somewhat aware" and those securing 60-100 were classified as 'well aware'. Similarly, two categories were designed: "positive attitude" and 'negative attitude'. Adolescents who had secured 0-50 marks were categorized under "negative attitude" and those securing 60-100 were categorized under "positive attitude

The statistical package for social sciences (SPSS) version 21.0 (trial version) was used to enter and analyze the data. Obtained data was evaluated by frequency and percentages ratios, Chi-square (χ^2). The measure for statistical significance was established as $p < 0.05$.

RESULTS

Out of 300 respondents, 53.7% were male and 46.3% female. Majority of the study subjects 287 (95.7%) were aware about HIV/AIDS (Table 1). The rest 13 (4.3%) were unaware and were excluded from further analysis. Out of 287, only half of the respondents (51.6%) had correct knowledge that it is caused by virus, 28.6% thought that it is caused by germ and 18.5% had no idea about its cause. Over 40% of the respondents, thought that a person infected with HIV usually shows symptoms of the disease. Attitude with positive response of study participants is shown in Table 2. Table 3 shows the comprehensive knowledge and attitude regarding HIV/AIDS in relation to various socio demographic factors.

Table 1: Knowledge of adolescents about HIV/AIDS.

Variables	N (%)
1. Total respondents in the present study	300
2. Respondents who had heard about HIV/AIDS	287 (95.7)
3. Knowledge about cause of HIV/AIDS	
a. Virus	148 (51.6)
b. Germ	82 (28.6)
c. No idea/stale food	57 (19.8)

Continued.

Variables	N (%)
4. Knowledge about communicable nature of disease	273 (95.1)
5. Perception about modes of transmission (N=287)	
a. Sexual route	273 (95.1)
b. Use of infected needles	198 (69)
c. Mother to child	213 (74.2)
d. Use of unscreened blood	235 (81.8)
e. Mosquito bites	101 (35.2)
f. Kissing/sharing utensils/coughing & sneezing	131 (45)
6. Knowledge about treatment of HIV/AIDS	156 (54.4)
7. Knowledge about its curability	126 (44)
8. Knowledge regarding asymptomatic manifestation of the disease	171 (59.6)
9. Knowledge about its prevention	248 (86.4)
10. Knowledge of availability of diagnostic test	242 (84.3)
11. Know that a HIV/AIDS infected person can easily get other diseases like TB, diarrhoea etc.	84 (29.3)

Table 2: Attitude (desired response) of adolescents about HIV/AIDS.

Variables	N (%)
1. Ever discussed about HIV/AIDS	185 (64.5)
2. Isolation of positive cases	191 (66.5)
3. Give social support to an infected community member	262 (91.3)
4. Keep secret of positive community member	75 (26.1)
5. Buy things from a HIV/AIDS suspected shopkeeper	205 (71.4)
6. Make names of HIV/AIDS cases public to avoid them	238 (82.9)
7. Feel comfortable in touching/Hugging a HIV/AIDS infected person	186 (64.9)
8. Feel comfortable in sharing public toilet with infected person	173 (60.3)
9. Feel comfortable in sharing meal with infected person	179 (62.4)
10. Legislation need for compulsory testing of HIV/AIDS before marriage	187 (65.2)

Table 3: Analysis of socio demographic factors with comprehensive knowledge and attitude regarding HIV/AIDS.

Factors	Comprehensive knowledge			P value	Attitude		P value
	Not aware N (%)	Somewhat aware N (%)	Well aware N (%)		Positive N (%)	Negative N (%)	
Sex							
Male (N=138)	4 (2.9)	80 (58)	54 (39.1)	<0.05	76 (55.1)	62 (44.9)	>0.05
Female (N=162)	9 (5.6)	68 (42)	85 (52.4)		97 (65.1)	52 (34.9)	
Age group							
15-16	4 (3.5)	59 (51.7)	51 (44.7)	<0.05	57 (51.8)	53 (48.2)	>0.05
16-17	2 (4.2)	37 (77.1)	9 (18.8)		40 (60.6)	26 (39.4)	
17-18	3 (9.7)	16 (51.6)	12 (38.7)		18 (64.3)	10 (35.7)	
18-19	4 (5.3)	36 (47.4)	36 (47.4)		58 (69.9)	25 (30.1)	
Level of education*							
Up to primary school	10 (38.5)	9 (34.6)	7 (26.9)	<0.001	4 (25)	12 (75)	<0.001
Up to high school	3 (2.5)	60 (50.8)	55 (46.6)		63 (54.8)	52 (45.2)	
HSLC Passed	NIL	57 (60)	38 (40)		50 (54.3)	42 (45.7)	
HS & above	NIL	22 (36.1)	39 (63.9)		56 (91.8)	5 (8.2)	
Marital status							
Married (N=37)	8 (21.6)	24 (64.9)	5 (13.5)	<0.001	17 (58.6)	12 (41.4)	>0.05
Unmarried (N=263)	5 (2)	124 (47.1)	134 (50.9)		156 (60.5)	102 (39.5)	
Place of residence*							
Slum	13 (8.7)	81 (54)	56 (37.3)	<0.001	83 (60.6)	54 (39.4)	>0.05
Non slum	Nil	67 (44.7)	83 (55.3)		90 (60)	60 (40)	

*Chi square with Yates correction applied.

DISCUSSION

The study revealed that 97.5% of respondents were aware about HIV/AIDS, but only half of them (51.6%) knew that it is caused by a virus. This finding is quite similar with the study finding of Vaz et al in the state of Goa, who reported 93.3% of awareness about HIV/AIDS among respondents.³ Majority of respondents (95.1%) had knowledge that HIV/AIDS is communicable in nature. Similar findings were reported by Bhosale et al in their behavioural surveillance survey of HIV/AIDS among adolescents students found that communicability was known to more than 90% of respondents.⁴

The present study shows that 95.1% of respondents knew about sexual mode of transmission of HIV/AIDS, 81.8% through unscreened blood transfusion, 74.2% through maternal to child route and 69% through use of infected needles. Misconception present about transmission through mosquito bites (35.2%), coughing & sneezing, kissing an infected person etc. Quite similar findings were reported in the study done by Garg et al in Varanasi, India.⁵ They found that transmission by contaminated needles and syringes, unscreened blood transfusion and from infected mother to her baby was known to be 78.2%, 90.8% and 85.6% respectively. More than half (54.4%) of respondents knew about availability of treatment for HIV/AIDS. In contrast only 28.6% of study subjects had awareness about the availability of treatment in Lal et al study.⁶ In the present study 44% of study subjects believed that HIV/AIDS is curable. This finding corroborates with the observations of Garg et al (2005) who reported that 49.2% of respondents had incorrect belief that complete cure is possible. 86.4% had correct knowledge that it is preventable. This is comparable to the study conducted by Bhosale et al in Maharashtra (2010) and Lal et al in Delhi (2005) which revealed that HIV/AIDS is preventable was known to 71.5% and 72% of respondents respectively.

According to Lal et al study done in Kerala, only 45% of respondents had correct knowledge that AIDS is not curable at present.⁷

In the present study, 59.6% respondents knew that a person infected with HIV does not usually show any symptoms of the disease. As per a study conducted by Sobhan et al in the state of Karnataka among rural students, only 35% had knowledge that a person with HIV infection could be without any symptoms.⁸ In the present study 66.5% had a positive attitude that HIV/AIDS patient should not be isolated. Quite similar study done by Gaash et al, Lal et al and Benara et al in different parts of country reported favourable attitude towards isolation of PLHA in 52%, 77.8% and 59% of responders respectively.^{9,10}

A statistically significant association of level of comprehensive knowledge about HIV/AIDS was found with educational status of respondents ($p < 0.001$).

Similarly, a highly significant difference in attitudes with levels of education had been observed. It gives an idea that raising educational levels is a key tool in fighting the epidemic.

CONCLUSION

The findings from this study provide basic information on AIDS awareness and attitudes among the adolescents of Kamrup District, Assam. Poor knowledge and negative attitude towards AIDS still exists and need to be addressed by health education programs targeting those at higher risk through campaigns involving teachers, community leaders, NGOs and other agencies. Primary prevention among this age group is the greatest hope to change the course of the disease in India. Policy makers & service providers should be aware of community knowledge and attitudes in order to frame better strategies for combating this dreaded disease.

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