

Original article

Knowledge, Attitude and Sources of Information for Increasing Awareness about HIV/AIDS among College Students

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Abstract:

Background: In India people in the age group of 15-29 years account for 31 percent of all Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome cases. This clearly indicates that young people are at high risk of contracting HIV infection. A couple of HIV/AIDS awareness programmes are there in place in India, an analysis of the media used to disseminate information needs to be conducted to determine if new methods of communication can be incorporated to create better awareness and enhance the knowledge of young people.

Aims: The present study was conducted; 1) to determine the level of information that college students have about HIV/AIDS in order to take further steps towards increasing their knowledge base and consequently changing their behaviour vis-à-vis HIV/AIDS, 2) to determine the relationship between level of knowledge about HIV/AIDS and attitude towards people with HIV/AIDS among college students, 3) to determine the types of media used to disseminate information in college students.

Method: This is a cross sectional study. A purposive sample of 100 students, comprising equal number of boys and girls in the age range of 18 to 23 years were selected. They belonged to arts and commerce faculties from English medium of private colleges in the city of Hyderabad.

Results: It was found that the level of knowledge about HIV/AIDS was average and the attitude towards people with HIV / AIDS was positive among the students. There was a significant positive correlation

between level of knowledge and positive attitude. However, most of the students were unable to state the predominant modes of transmission of HIV and had a few misconceptions about HIV transmission indicating lack of comprehensive knowledge. It was also found that students were receptive to increasing their knowledge about the disease. They reported to being comfortable learning more about HIV/AIDS from health professionals, their peers and mass media, due to accessibility, comfortability and anonymity.

Conclusions: Based on the findings of this study, better methods of promoting knowledge about HIV need to be used extensively in addition to the existing ones in order to ensure correct, comprehensive and long lasting information retention.

Key-words: *attitude towards people with HIV/AIDS, HIV/AIDS knowledge, sources of information, college students*

Introduction:

Since the first case of Human Immunodeficiency Virus (HIV) infection was reported in India in 1986 till date, there has been an increased awareness about HIV/AIDS due to the efforts of both the government and various non-governmental organizations¹. Besides identifying the affected individuals and subsequently providing treatment to them, prevention has been one of the focal points as part of addressing the problem in a holistic manner.

Researchers^{2, 3} across the world have found that, though most people have good knowledge of HIV/AIDS, this knowledge appears to be superficial and lacks comprehensive understanding.

Studies^{2, 3} have shown that the level of knowledge among youth, though better than other groups in the population⁴, lacks depth⁵. The youth, despite being aware of the means of HIV transmission, also wrongly believe that mosquito bites^{6, 7}, sharing swimming pools⁶ and casual contact such as handshake can spread HIV. These wrong beliefs could be because the traditional method of disseminating information through schools and colleges among the youth is not adequate. HIV/AIDS programs need to improve the content of messages pertaining to HIV, by providing information not only on how HIV is transmitted, but also as to how it is not transmitted.

The effectiveness of the methods used till date, to spread awareness about HIV can be determined by assessing the level of HIV knowledge among the youth. It is necessary to promote good knowledge about HIV among the youth for various reasons. Firstly, to decrease high risk sexual behaviour and to promote healthy sexual behaviour among young people and secondly, to reduce the stigmatizing behaviour towards HIV positive people that emanates from ignorance and poor knowledge about the disease.

One of the objectives of the present study was to determine the levels of knowledge among college students and their attitude towards people with HIV/AIDS. The second objective was to determine the relationship between level of knowledge about HIV/AIDS and attitude towards people with HIV/AIDS among college students. The last objective was to determine the sources of information that the college students have already been exposed to and ones they would be open to for receiving information about HIV/AIDS. The lacunae of the current methods employed to spread correct knowledge about HIV/AIDS indicates the need to evaluate the sources of information and to explore the possibility of employing newer media.

Materials and Methods:

This is an analytic cross sectional study design. A convenience sampling method was used to recruit 100 participants with equal number of males and females, from three English medium private undergraduate colleges in the city of Hyderabad, India. The sample consisted of students from the stream of arts and commerce who were in the age range of 18 to 23 years. The nature and purpose of the study was explained to the participants and their written informed consent was obtained. Data was collected over a period of three days from December 1st 2010 to December 3rd 2010.

The research instrument measured the level of knowledge about HIV/AIDS⁸; assessed the attitude towards people with HIV/AIDS⁹ and determined the sources of HIV information. The instrument had a total score of 30 for the HIV knowledge segment of the questionnaire. The students were categorized as having poor knowledge about HIV/AIDS if their score was between 0 and 10, average knowledge if their score was between 11 and 20 and good knowledge if their score was 21 and above. For attitude measurement a 15 item, 6-point scale, ranging from strongly agree to strongly disagree was used. The minimum score possible on the scale was 15 and the maximum 90; with a high score indicating a more positive attitude towards people with HIV/AIDS. To determine the sources of information, the participants were asked open ended questions about the media they would be comfortable with discussing about HIV/AIDS and also the media they would consider as credible sources of information. The frequency of the responses was tabulated and percentage of the college students giving a particular response was calculated.

The frequency distribution, percentage, mean and standard deviation were computed to describe demographic variables, sources of HIV information, knowledge and attitudes related to HIV. Pearson product-moment correlation

coefficient was calculated to determine if there was any relationship between level of knowledge and attitude towards people with HIV/AIDS. Independent t-test was used to examine the gender differences in knowledge about HIV/AIDS and attitudes towards people with HIV/AIDS.

Results:

Table 1 shows the demographic profile of the participants. The sample included 50 male and 50 female undergraduate students. The age of participants ranged from 18 to 23 years with mean age of 19.57 years (S.D. = 0.90).

Table 1: Demographic profile of the study participants (N= 100)

Demographic variable	Number (n)	Percentage (%)
<u>Gender</u>		
Male	50	50.0
Female	50	50.0
<u>Age (in years)</u>		
18	5	5.0
19	47	47.0
20	38	38.0
21 -23	10	10.0
<u>Education (year of study)</u>		
2 nd year Undergraduate	36	36.0
3 rd year Undergraduate	64	64.0
<u>Education (stream)</u>		
Arts	17	17.0
Commerce	83	83.0
<u>Native place of living</u>		
Rural	3	3.0
Urban	97	97.0

HIV/AIDS knowledge and attitude towards people with HIV/AIDS

Table 2: Gender differences in HIV/AIDS knowledge and attitude towards people living with HIV/AIDS among college students

Category		Total (N=100)	Males (n=50)	Females (n=50)	t
Knowledge about HIV/AIDS	Minimum	8	8	8	0.84 ^{ns}
	Maximum	26	25	26	
	Mean	18.69	18.34	19.04	
	S.D	3.80	3.73	3.83	
Attitude towards people with HIV/AIDS	Minimum	34	45	34	3.28 ^{ns}
	Maximum	87	87	86	
	Mean	68.66	66.68	70.64	
	S.D	11.01	11.54	10.06	

^{ns} Not significant

Table 2 shows the level of knowledge about HIV/AIDS and attitude

towards people living with HIV/AIDS among college students. The level of knowledge ranged from 8 to 26 with mean 18.69, which was average. There was no significant gender difference in the level of knowledge among college students ($t = 0.84, p < 0.05$).

Among males the attitude score ranged from 45 to 87 and in females the score ranged from 34 to 86. No significant gender difference was found in the attitude towards people with HIV/AIDS ($t = 3.28, p < 0.05$).

The correlation between the knowledge that college students have about HIV/AIDS and their attitude towards people with HIV/AIDS was found to be significant. The correlation coefficient values, as seen in table 3, were higher than the p value at alpha level 0.01 for males ($r = 0.47$), females ($r = 0.38$) and for all the college students ($r = 0.44$).

Table 3: Correlation between HIV/AIDS knowledge and attitude towards people living with HIV/AIDS among college students

	Males	Females	Total
Coefficient of correlation	0.48 **	0.38 **	0.44**

** Significant at 0.01 level

Source of HIV/AIDS information

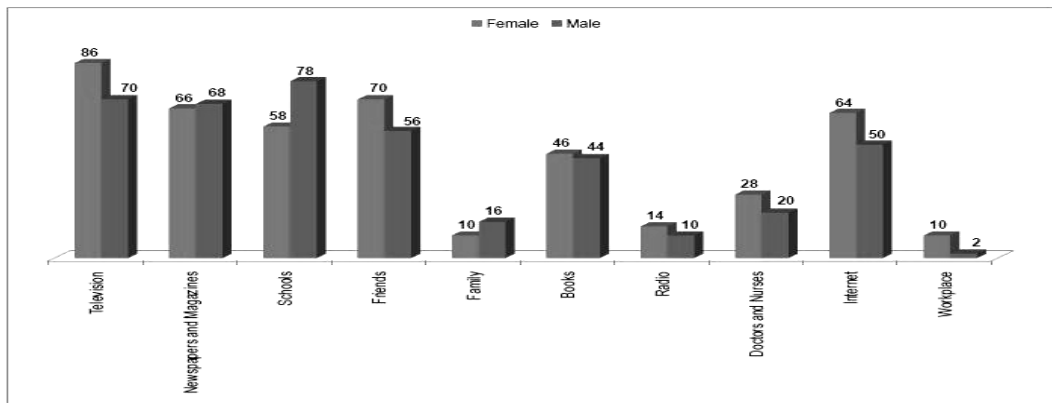
A significant finding of the study was that 96% of the male and 90% of the female college students reported the need to learn more about HIV/AIDS. Also, 86% of the male and 90% of the female students reported that they wished to increase their level of HIV knowledge and learn more about it. This shows that students realize the necessity of increasing their knowledge on HIV/AIDS.

The most common sources reported by the male participants, as seen in figure 1, were schools, television, newspapers and magazines, friends, internet, and books. As seen in the same figure, the common sources of receiving information about HIV/AIDS among the female participants were television,

friends, newspapers and magazines, internet, schools and books. The sources of information about HIV/AIDS among youth seem to be predominantly the mass

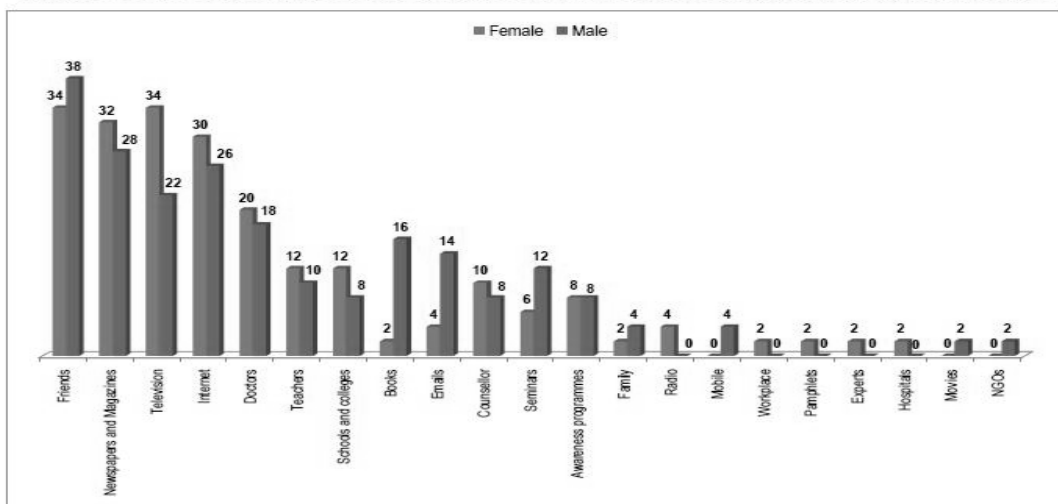
media i.e., television, newspapers; besides schools which often have sex education in their curricula.

Figure 1- Sources from which college students had received information about HIV/AIDS



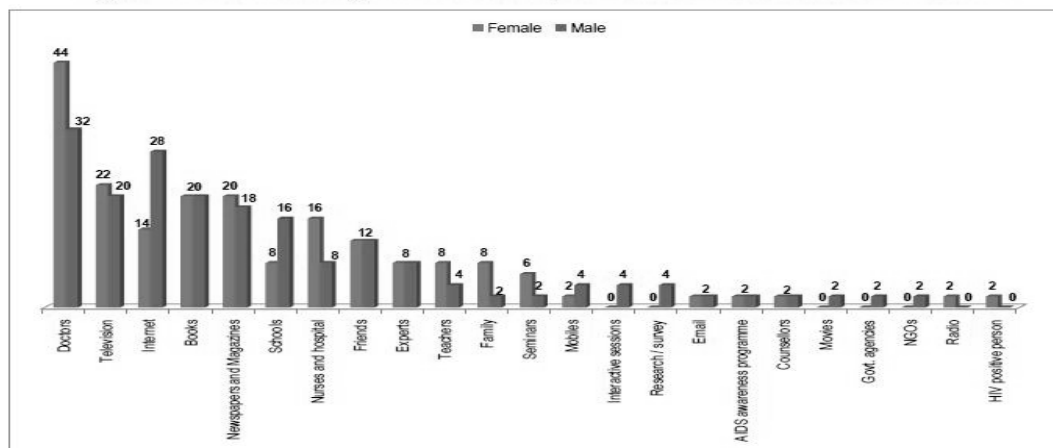
*Figures in Percentages, Multiple responses by participants (Male -50, Female- 50)

Figure 2 - Sources that college students would be comfortable with receiving information about HIV / AIDS



*Figures in Percentages, Multiple responses by participants (Male -50, Female- 50)

Figure 3 - Sources that college students trust to provide authentic information about HIV / AIDS



*Figures in Percentages, Multiple responses by participants (Male -50, Female- 50)

With reference to the sources of information about HIV/AIDS, as seen in figure 2, both male and female participants mentioned that they would be comfortable with friends as a source of information for HIV/AIDS. It was also found that the female participants mentioned being more comfortable with television, newspapers and magazine, internet and doctors as the sources of information about HIV/AIDS.

Figure 3 shows the sources that college students trust to provide them with relevant and authentic information when they wish to know more about HIV/AIDS. It can be observed that greater percentage of female participants than male participants trust doctors as a relevant and authentic source of information. Media in various forms is the next source that male and female participants find trustworthy sources of information about HIV/AIDS as seen by their predominant choices of television, newspapers and magazines and books when asked to state sources that they trusted to provide them with accurate information about HIV.

Discussion

HIV/AIDS knowledge

The level of knowledge about HIV/AIDS in college students was found to be average with ample scope for learning and gaining more knowledge. Studies assessing HIV/AIDS awareness have found mixed results. Some studies have found that knowledge among students was poor and that they continued to have certain misconceptions about the spread of HIV^{2,3,6}. On the other hand, results from a nationwide behaviour surveillance survey¹⁰ conducted by NACO in 2006 showed that across India awareness among youth was good. The findings of the current study were not in line with the above mentioned results showing that knowledge of the college students is average. The reason for low awareness may be attributed to the sources from which they have received their information. The information provided by

the various sources may not have been comprehensive¹¹. The recipients of the information also check the credibility of the sources of information. It is important that comprehensive AIDS awareness programmes be conducted and the information disseminated on a regular basis through credible sources to ensure retention of information.

The knowledge gathered and retained is affected by the media from which they are obtained. In the case of information related to health awareness and practices for communicable/contagious diseases, retention of information is of great importance as this would dictate health behaviour and prevent contracting and spreading of the disease^{12,13}.

A particularly noteworthy finding was that the students consider their knowledge to be average or below average. They believe that they need to have comprehensive knowledge about HIV/AIDS and wish to learn more about HIV/AIDS. It is a relevant finding as people who are open to receiving more information may also take active measures in obtaining this information.

In the quartet of communication-source, channel, message and receiver, the receptivity of the receiver dictates the perception and retention of information. In the present study, majority of the respondents realized the need to learn about HIV/AIDS and also indicated the desire to learn more. This would suggest that the young college students would not be averse to future awareness programmes and may take an active role in increasing their knowledge. One of the possible reasons for the unanimous response of the college students could be that the students were assessed on their knowledge about HIV/AIDS and were also asked to make a self assessment of their knowledge. This may have led them to believing their knowledge to be poorer than what it is and realizing the need for further information or knowledge. Perceived need for gaining

knowledge about HIV/AIDS is negatively associated with self belief about one's knowledge and actual level of knowledge¹⁴.

Attitude towards people with HIV/AIDS

The attitude of college students towards people living with HIV/AIDS was found to be positive with no gender differences. There was also a positive correlation between level of knowledge about HIV/AIDS and the attitude towards people with HIV. In other words, as the awareness about HIV/AIDS increases, the attitude towards HIV positive people tends to be positive. The results of the present study are in line with findings from other studies conducted in India^{15, 16} and different parts of the world^{6,7}.

Stigma and discrimination is a pervasive factor in the management of HIV/AIDS. Changing attitudes of people towards an object by giving information about it is a strategy quite commonly adopted as it is cost and resource effective¹⁷.

Keeping in view the findings that knowledge levels are low among youth and there is a significant correlation between knowledge and attitude with respect to HIV/AIDS, the researchers further explored the various sources of spreading HIV/AIDS information among urban youth.

Source of HIV/AIDS information

Another component of the communication process – the channel or medium also plays a prominent role in public health awareness. Students reported being most comfortable discussing about HIV with their peers^{18, 19} and friends. Mass media seems to be prevalent choice among the college students to obtain knowledge about HIV. This could be due to the fact that Indian society does not encourage open discussions of topics related to sex and hence most youngsters may be uncomfortable raising questions and getting their queries clarified in the

presence of others. They may prefer the anonymity and confidentiality offered by mass media. It is important to keep this in mind when planning future strategies for awareness generation among this group of population¹⁸.

It can be observed from the present study that internet services, which are one of the major means of modern day communication, are increasingly becoming one of the means of gaining information about HIV/AIDS both in males and females.

Another aspect about internet being a prime choice for youth could be that it affords them the freedom to explore and access information that they find relevant and comprehensible. However, in India most of the population in this age group does not have access to internet and so this medium cannot be the primary focus of intervention strategies, though it could be a complementary medium that could be used along with the traditional methods.

Half of the respondents of the study trust the medical fraternity – doctors¹⁸, nurses and hospitals to provide them with correct information and are comfortable discussing HIV with them. This may be because medical professionals would be the first ones who disclose the information about HIV positive status and provide the crucial immediate and subsequent medical services. Awareness programmes conducted by peer educators²⁰ for example, medical students could perhaps serve a dual purpose as college students would trust them and be comfortable in discussing topics related to sex with them. The effectiveness of peer-led education for increasing HIV/AIDS awareness and knowledge and bringing a change in attitude from negative to positive have been seen in several studies^{21,22,23}.

Mass media are also reported to be trusted sources of information for the college students. It is essential that the messages they receive through this mode, be it in the form of public awareness

programmes, movies, or documentaries, be correct and comprehensive in order to avoid development of misconceptions among people.

Use of mobile phones has increased since the last few years in most parts of the world. In India, the number of youngsters with access to a mobile phone is high. Through mobile phones they also have access to radio and internet. This provides increased scope for newer media through which selected segments of the population can be contacted and communicated through tailor made HIV/AIDS awareness programmes. Extra effort has to be put in public health communication interventions and the receivers have to be met at their level of technological use, especially in the context of rapidly changing communication channels²⁴.

Conclusions and recommendations

This study was aimed at exploring the various sources for creating AIDS awareness and determining new media that could aid in future public health awareness campaigns as there have been changes in health communication, particularly in dealing with young people. We found out that the level of knowledge about HIV/AIDS is average among college students and that their attitude towards people with HIV/AIDS is positive. The students are aware that their knowledge is not complete and are also receptive to learning more. It has also been found that the students trust medical professionals as well as mass media to provide them with authentic information. However, the students would be more comfortable with learning about HIV/AIDS from their friends as they constitute the 'comfort zone'. Youngsters are hesitant about discussing issues regarding sexuality with everyone and would prefer mediums that are anonymous and that assure confidentiality. Keeping these factors in mind, tailor made intervention strategies

could be used by mass media, medical personnel, and peer educators.

The data has been collected from a small sample comprising of only three private colleges in Hyderabad. Hence, it is precluded from generalizing the results to all the college students of the city. In future, studies with a more representative and larger sample could be undertaken. Demographic information was also confined to age, gender, education and place of living in this study but further studies could be scaled to include religion, education level of parents, socio economic status as these factors influence the sources of information that the youth have access to, thus affecting their level of health awareness.

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