

ORIGINAL ARTICLE

HIV/AIDS RELATED KAP AMONG HIGH-SCHOOL STUDENTS OF MUNICIPAL CORPORATION SCHOOL IN PUNE. - AN INTERVENTIONAL STUDY

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ABSTRACT

Background: Adolescents form substantial risk group due to situations arising out of their curiosity, haphazard knowledge, and risk-prone behavior. Present study was planned with an objective to assess knowledge, attitude about HIV/AIDS in adolescents.

Methodology: The study was conducted in a school of field practice area of Urban Health Training Center. Pre-designed, pre-tested anonymous, self administered questionnaire was filled by 9th standard students after obtaining necessary permission. A film on HIV/AIDS was shown to them. The same questionnaire was again filled by the students.

Results: Sixty three percent students were aware about HIV/AIDS. TV was the main source of information. A significant decrease in knowledge about misconceptions and significant increase in knowledge occurred about various modes of transmission of disease, prevention of HIV/AIDS in post testing.

Conclusion: Intervention in the form of a film even can make a significant change in knowledge and attitude of adolescents going to school.

Keywords: HIV/AIDS, high school students, knowledge, attitude, practice

INTRODUCTION

HIV/AIDS has emerged as the single most formidable challenge to public health, human rights and development in the new millennium¹. School children of today are exposed to the risk of being victims of HIV/AIDS - which was quite unknown to their predecessors a few decades ago. The epidemic of HIV/AIDS is now progressing at a rapid pace among young people. Studies have reported that young people form a significant segment of those attending sexually transmitted infection (STI) clinics and those infected by HIV. Adolescents comprise about 22% of the population of India². Adolescents are defined by the World Health Organization (WHO) as persons between 10 and 19 years of age (WHO 1998). Many adolescents

around the world are sexually active and because many sexual contacts among them are unprotected, they are at risk of contracting sexually transmitted diseases (STDs) including HIV/AIDS. Another reason for their vulnerability to STDs is the lack of sex education, including education on STD prevention.³ Most parents do not discuss topics related to sexual issues and hence many teens turn to peers and to the media and get inaccurate information. The risk of becoming infected with human immunodeficiency virus (HIV) during unprotected sex is two to four times greater for a woman (even higher in adolescent women) than for a man. According to the United Nations, there are about 4 million HIV infected people in India, and India is

considered a high-risk country⁴. Adolescents and young adults of 15 to 24 years old are the hardest hit by HIV infection worldwide and a significant proportion of them live in India. Despite the high prevalence of HIV/AIDS, it has been reported that many adolescents do not know the modes of transmission of this disease. Programme managers and policy makers have often recommended that schools can act as the center point for disseminating information and education on HIV/AIDS. Hence school education has been described as a 'social vaccine', and it can serve as a powerful preventive tool. In India, there is a wide gap between the inputs in the HIV/AIDS curriculum for schools and the actual education that is imparted⁵. As children are a valuable resource for the future of a country, it is imperative that they be equipped with ample amount of information so as to protect themselves and their counterparts from falling a prey this still-an-incurable killer disease.⁶ Although adequate knowledge does not necessarily alone influence behavior change, there is a consensus that having correct information is fundamental to behavior change⁷.

One way to promote safer choices among adolescents is by having open communication and discussions about sex and condom use. In India, due to the deep-seeded taboo on discussing sexuality adolescents and their parents do not freely discuss sex and HIV related topics.⁸

In the view of facts above the present study was planned with objectives to study HIV/AIDS related knowledge, attitude among school going adolescents in Pune and changed in that after intervention.

MATERIAL AND METHODS

The Urban Health Training center (UHTC) of Department of Community Medicine caters about 60,000 populations which is having 15 schools. The present study was conducted in one of the randomly selected school from the schools under field practice area of UHTC. The selected school is a coeducation government aided school. The necessary permission from school authority was undertaken before the start of the study. All students studying in 9th standard were included in the study. A pre-designed, pre-tested, anonymous, self administered questionnaire in local language

was used for data collection before the intervention. The questions were explained to them, and they were asked to write answers of the questions on their own. Questionnaire includes questions related to modes of transmission of disease, misconceptions regarding the modes of transmission, availability of vaccine and attitude about people living with HIV/AIDS (PLWHA). The intervention was showing an animation film prepared by National AIDS Research Institute (NARI), Pune. After showing the film the same questionnaire was again filled by the students. After the session the queries of the students were asked and solved. The responses collected were analyzed using appropriate statistical methods using Ms. Excel.

RESULTS

In the present study total 102 students participated of which 42 were male and 60 were females. Mean age of students was 13.95 years. Amongst 102 students 65 (63.72%) students heard about HIV/AIDS. Males (83 %) outnumbered in this regards than females (53%).TV was the commonest source of information in both male and female (Table 1).

Table 1: Distribution of children according to their source of information

Source of Information*	Male N=42 (%)	Female N=60 (%)	Total N=102 (%)
TV	27 (64.28)	29 (48.33)	56 (54.90)
Friend	8 (19.07)	7 (11.66)	15 (14.70)
News Paper	6 (14.28)	2 (3.33)	8 (7.84)
Family	4 (9.52)	4 (6.66)	8 (7.84)
Hording	2 (4.76)	3 (5)	5 (4.90)
Radio	4 (9.52)	1 (1.66)	5 (4.90)

*Multiple responses

More than 60% students were aware about the mode of transmission of disease, this percentage increased significantly after viewing the film (Table 2).

More than 50% students were having misconceptions about HIV/AIDS which reduces significantly after viewing the film. The number of correct responses increased significantly after the intervention. The attitude of student about PLWHA was found to be good which again enhanced after intervention (Table 4).

Table 2: Distribution of students according to their change in knowledge about modes of transmission of HIV/AIDS and misconceptions about HIV/AIDS

Question with correct response	Pretest (%)	Posttest (%)	Z value	P value
Transmission by unsafe sex with infected person(Yes)	63 (61.76)	86 (84.31)	3.75	P<0.05
Transmission by receiving blood form infected person(Yes)	68 (66.66)	84 (82.35)	2.61	P<0.05
Transmission by sharing infected needle of an infected person (Yes)	63(61.76)	81(79.41)	2.81	P<0.05
Transmission from infected mother to her baby (Yes)	67(65.68)	82 (80.39)	2.40	P<0.05
Transmission through breastfeeding(Yes)	50(49.01)	74 (72.54)	3.54	P<0.05

Table 3: Distribution of students according to their change in knowledge about misconceptions of HIV/AIDS

Question with correct response	Pretest (%)	Posttest (%)	Z value	P value
Transmission by sharing public toilet & swimming pool(No)	50(49.01)	90(88.23)	6.14	P<0.01
Transmission by using infected person's belongings like comb, towel etc.(No)	49(48.03)	87(85.29)	5.67	P<0.01
Transmission by touching infected person like shaking hands etc.(No)	46(45.09)	82(80.39)	5.08	P<0.01
Transmission by sharing food utensil(No)	22(21.56)	81(79.41)	9.91	P<0.01
Availability of vaccine for prevention of HIV/AIDS(No)	28(27.45)	80(78.43)	9.06	P<0.01

Table 4: Distribution of students according to their change in attitude about PLWHA

Question	Pretest (%)	Posttest (%)	Z value	P value
PLWHA have social right for studying or learning(Yes)	68(66.66)	85(83.33)	2.80	P<0.05
PLWHA should be helped, treated and supported? (yes)	71(69.60)	86(84.31)	2.25	P<0.05

Also number of unanswered questions decreased in post test indicating their unknowingness decreased.

DISCUSSION

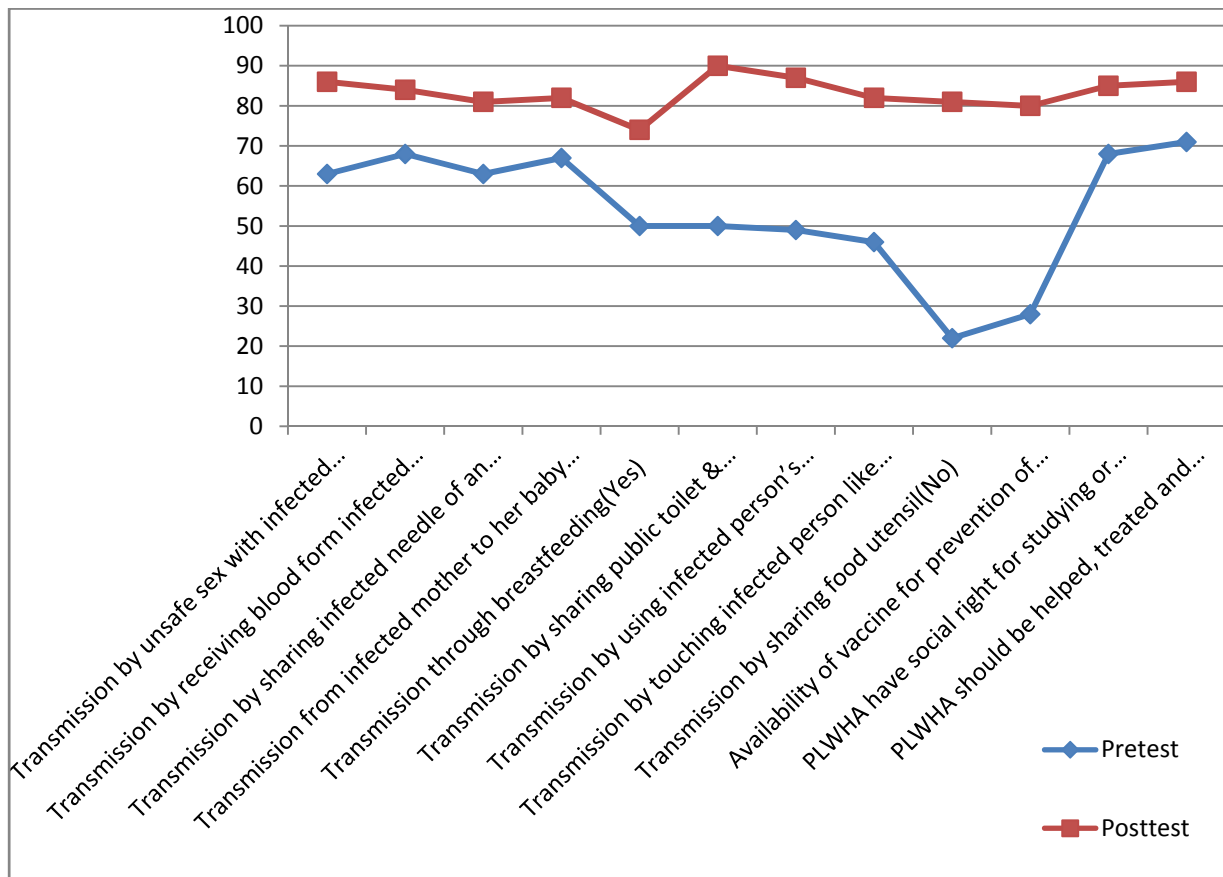
In present study 63.72 % students were aware about HIV/AIDS. While S. Bhalla, H. Chandwani et al noticed 96%⁹. Jaiswal S, Magar B.S., et al. from Kathmandu Nepal, noticed 45.8%¹.

TV (54.9%) was the commonest source of information in the present study followed by friends. Family as a source of information was mentioned by very less students reveling probably less knowledge amongst parents or stigma about the disease to talk with the children about HIV/AIDS. School or teacher as a source of information was not revealed by any student indicating no or very less activity of school AIDS education programme. 62.7% of

senior secondary students belonging to a government school in Chandigarh⁹.

In Kuwait the 69 % participants acquired information about AIDS from the mass media.¹⁰ TV/photographic recording was revealed by 72.1% students in a study by Li S, Huang H, Xu G, Cai Y et al in china.¹¹ Same source of information was revealed by 79.6% in a study by P Lal, Anitha Nath¹².

Regarding various modes of transmission of HIV/AIDS 61.76% students were aware about unsafe sex as a mode of transmission which was significantly increased to 84.31% after viewing film. Similar increase in knowledge was revealed by Sankarnarayan S.& S.Naik¹³from Mumbai& Jaiswal S, Magar BS, et al from Kathmandu Nepal after lecture discussion But in study by Jaiswal S, Magar BS et al knowledge was much higher in pretest (96.4%) than present study.¹

Figure 1: Graphical presentation of upgradation of post test knowledge by intervention after pre test

Infected blood as a mode of transmission of HIV/AIDS was revealed by 66.66% students in pretest which significantly increased to 82.3% in post-test. The increase in knowledge regarding infected blood as mode of transmission was also revealed by Jaiswal S, Magar BS, et al however the pretest knowledge was much higher than present study.¹

Mode of transmission by sharing infected needle of a HIV/AIDS infected person was opined by 61.76 % student in pre-test and was significantly improved to 79.41% after the film. Lower i.e. 35.6% students of Chandigarh were aware about this mode of transmission in pretest and was significantly increased by 51.1% after discussion¹⁰.

One of the various modes of transmission i.e. infected mother to her baby ,65.68% student had knowledge about this mode of transmission before viewing the film and which was further improved to 80.39%. P. Lal and Anita Nath¹³ found only 23.4 % students were aware about this mode of transmission.

Having knowledge about the various modes of transmission is a key factor for prevention of HIV/AIDS. More than half students were aware about modes of transmission in pretest which increased significantly after just viewing film gives film as an important mode for improving knowledge of students.

There are lots of misconceptions about modes of transmission of HIV/AIDS amongst the students.¹ So it is pertinent to study misconceptions about the modes of transmission. If these misconceptions continued it reflect in the behavior of people towards PLWHA leading to stigma about the disease and PLWHA.

Misconception about transmission i.e. by sharing public toilet & swimming pool 50(49.01%) student mentioned correct answer i.e. no. which was significantly improved to 90(88.23%) after seeing the film.

Correct response i.e. No, about transmission of HIV/AIDS by using infected person's belongings like comb, towel etc. was revealed by

48.03 % students which was significantly increased to 85.29 % after viewing film.

During Pre test only 45.09% student opined that HIV/AIDS cannot be transmitted by touching infected person like shaking hands etc. which was improved by 80.39%. While Kathmandu Valley high school student have more correct answer in both pre 93.5% and post education 98.1%.¹

Misconception about transmission by sharing food utensils 22(21.56%) students mentioned correct answer i.e. no which was significantly improved to 81(79.41%) after seeing the film. Jaiswal et al mentioned that 91.2% student opined that it cannot be transmitted by sharing food and food utensil in pre test and improved to 97.8% after the test.¹

Regarding misconception about availability of vaccine for prevention of HIV/AIDS the number of students having correct knowledge improved to 80(78.43%) from 28 (27.45%). Jaiswal et al also reported improvement in knowledge about availability of vaccine to 81.8% from 46.2%.¹ Similar misconceptions have also been reported by other studies¹⁴[15]. Even 2002 UNAIDS report also continues to show such gaps in knowledge.⁸

In the community there is stigma for the PLWHA. So it is pertinent to know the attitude of students towards PLWHA. Students in the present study had a favorable attitude towards PLWHA when asked about the right of PLWHA for studying or learning 66.66% opined yes which further significantly increased to 83.33%. In study by P Lal, Anita Nath et al majority (77.8%) of students had a favorable attitude towards PLWHA, stating that such patients should be allowed to pursue/continue studies or allowed to work in common work places¹³.

PLWHA should be helped, treated & supported 69.60% opined yes in pretest which further significantly increased to 84.31% after viewing film. Having positive /good attitude toward PLWHA IS good sign dealing to decrease stigma and discrimination which is there for HIV/AIDS.

There are various ways of health education starting from lecture to group discussion. The present study used a different approach of showing a film considered to be a one way method of communication but found very useful tool in increasing awareness about HIV/AIDS in adolescents going to school. The

post test was done immediately after the viewing the film so it is needed to study again the knowledge retained by these students regarding HIV/AIDS.

CONCLUSION

Only 63.72% students heard about HIV/AIDS. The common source of information is T.V. then friends but none revealed school. Though more than half student know about mode of transmission after intervention this figure is significantly increased. After viewing film the misconceptions of students decreased significantly. The no. of unanswered questions was also decreased indicating decreased unknowingness. The attitude towards PLWHA is also improved after intervention. So to conclude Intervention in the form of a film even can make a significant change in knowledge and attitude of adolescents going to school.

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