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Knowledge and Attitude Towards HIV/AIDS Among Senior Secondary School Children in Pune

KEYWORDS: HIV, awareness, attitude, school children

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ABSTRACT *Background- Adolescents form a significant risk group due to situations arising out of their curiosity, lack of complete knowledge and experimental behaviour. Present study was planned with an objective to assess knowledge and attitude about the HIV/AIDS in high school students.*

Methodology- The study was conducted in two schools situated in urban locality in Pune. A pre-tested, pre-designed, self-administered questionnaire was filled by students of age group 12 to 16 before and after educational talk with charts and diagrams.

Results - A significant increase in their knowledge occurred regarding HIV/AIDS, its modes of transmission, methods of prevention, availability of treatment and the change in their attitude towards people living with HIV/AIDS was observed following the educational talk.

Conclusion - Intervention in form of educational talk using visual aids can make a considerable change in knowledge and attitude amongst students.

Introduction

Adolescent are defined by the World Health Organization (WHO) as persons between 10 and 19 years of age (WHO 1998)[1].Adolescents comprise about 22% of the population of India[2].

Adolescence is a special period of growth where the individual is learning to outgrow childhood and has to cope with various behavioural and physiological changes. This complicated by their urge for experimentation makes them vulnerable for acquisition of sexually transmitted diseases[1].

Globally, almost of a quarter of people living with human immunodeficiency virus (HIV) are under the age of 25 years[3]. In India, 35% of all reported AIDS cases are among the age group of 15-24 years, indicating the vulnerability of the younger population to the epidemic[4].

Many Adolescents around the world are sexually active and 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.

According to the United Nations, there are about 4 million HIV infected people in India, and India is considered a high risk country[5].

In a conservative society like India, most parents hesitate to discuss topics related to sexual issues and teens turn to peers or cheap media and get inaccurate information. So, educating youth before they become sexually active can lay a foundation for responsible lifestyle, safe sexual habits and healthy relationships[6]. Many studies have reported that education plays a major role in increasing the awareness, behaviour, and attitudes towards HIV/AIDS among schools, colleges and public[7, 8].

With this background, the present study was planned with objectives to assess the awareness and attitude regarding HIV/AIDS among school going adolescents in Pune and change in the same after intervention.

Objectives-

1. To assess Knowledge and attitude towards HIV/AIDS among senior secondary school children in Pune.
2. To assess change in knowledge and attitude towards HIV/AIDS among senior secondary school children in Pune after intervention.

Material and Methods-

A cross sectional study was conducted in two higher secondary schools of Pune city. The selected schools were a co-education schools. The necessary permission from school authorities was taken before the start of the study. The students of age group 12 to 16 were included and there were total of 195 students involved in this study. A pre-tested, self-administered questionnaire 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 included questions related to modes of transmission of disease, misconceptions regarding the modes of transmission, available treatment to delay disease progression and attitude about people living with HIV/AIDS. The intervention was by lecture talk assisted by visual aids such as informative charts and diagrams and blackboard demonstrations. After the intervention 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 analysed using appropriate statistical methods using Ms. Excel.

Results-

In present study, there were a total of 195 participants from 8th to 10th Class. Out of these 195 participants, 100

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were female, while 95 were male. The age bracket of all participants was between 12-16 years. The mean age of the participants was 14.29 years. Amongst the 195 students 141(72.3%) were aware of the fact that HIV/AIDS is caused by a virus. Though an astonishing 87.6% were aware, that HIV/AIDS spreads through sexual intercourse, only 72.3% were aware of the role of condoms in preventing HIV/AIDS. However the awareness increased significantly after the health education intervention using lecture talk assisted by visual aids. Only 50.7% students were aware that kissing is not a mode of HIV/AIDS transmission. This significantly improved to 83.1% after the intervention. (Table 1 mentioned below)

Table 1. Distribution of students according to their basic knowledge about HIV/AIDS and modes of transmission of HIV/AIDS. (N= 195)

Questions with correct response	Pre-test (%)	Post-test (%)	P value
Q1) HIV/AIDS is caused by(virus)	141(72.3)	188(96.4)	<0.001
Q2) HIV/AIDS can spread through(unsafe sexual intercourse)	171(87.6)	182(93.3)	<0.001
Q3) HIV/AIDS can spread through(blood transfusion)	154(78.9)	189(96.2)	<0.001
Q4) HIV/AIDS can spread through(mother to child)	126(64.6)	186(95.3)	<0.001
Q5) HIV/AIDS can spread through(sharing syringes/ needles)	146(74.8)	184(94.3)	<0.001
Q6) Where can you get yourself tested for HIV(ICTC)	85(43.5)	170(87.1)	<0.001
Q7) When does a person with HIV infection have AIDS(When their immune system is severely damaged)	37(18.9)	74(37.9)	<0.001
Q8) Is HIV and AIDS the same(No)	126(64.6)	183(93.8)	<0.001
Q9) HIV transmission can be prevented by using(Condoms)	141(72.3)	171(87.6)	<0.001
Q10) HIV virus attacks and weakens which body system(immune system)	131(67.1)	170(87.1)	<0.001
Q11) In India, does Government provide Free Condoms(Yes)	50(25.6)	167(85.6)	<0.001
Q12) What is the difference between HIV and AIDS(HIV infection leads to AIDS)	126(64.6)	167(85.6)	<0.001
Q13) Screening test for HIV(ELISA)	73(37.4)	145(74.3)	<0.001
Q14) Is there treatment available to delay progression of HIV/AIDS(Yes)	122(62.5)	159(81.5)	<0.001
Q15) Kissing is a mode of spread of HIV(No)	99(50.7)	162(83.1)	<0.001

The attitude towards persons living with HIV/AIDS was good amongst the majority of the students which further enhanced after the intervention. (Table 2 mentioned below)

Table 2. Distribution of students according to their attitude towards HIV/AIDS.

Questions	Pre-test (%)	Post-test (%)
Q16) opinion regarding pre- marital sex		
Ans- A) It is morally incorrect and should not be done in any circumstance.	69(35.38)	60(30.76)
B) It is fine in my opinion, if the 2 partners are in love and both are willing to do so, even without condom.	13(6.66)	11(5.64)
C) It is fine in my opinion, if the 2 partners are in love and both are willing to do so, but with using condom.	87(44.61)	101(51.79)
D) It is fine in my opinion, even if 2 people don't love each other and with use of condoms.	12(6.15)	14(7.17)
E) It is fine in my opinion, even if 2 people don't love each other and without use of condoms.	8(4.10)	4(2.05)
Q17) If you are asked to get an HIV test done, will you be willing to do so?		
Ans- A)Yes	138(70.76)	174(89.23)
B)No	52(26.66)	18(9.23)
C)Blank	5(2.56)	3(1.53)
Q18) If you come across an AIDS patient, what would you do?		
Ans- A) Maintain distance from the person, because you fear you might get it if you talk to them	30(15.38)	17(8.71)
B) Abuse and beat them up for having such a disease.	7(3.58)	5(2.56)
C) Talk to them normally because you are aware of the modes of spread	154(78.97)	170(87.17)
D) Blank	4(2.05)	3(1.53)

Discussion-

Having knowledge about the various modes of transmission is a key factor for prevention of HIV/AIDS. In our study, it was found that 72.3% of children were aware that virus is the causative organism for HIV, which increased substantially to 96.4%. In a research conducted in Andhra Pradesh[9], 78.9% of students knew that a virus is the causative agent. While in the study, carried out in Srinagar [10], only 48.44% was the awareness of the same among the senior secondary students. In Jamnagar, Gujarat[11], 90.5% of students knew about the causative organism is virus. This shows that there are many studies with knowledge of HIV transmission varying in different regions of India.

In this study, 87.6% students were aware that unsafe sexual intercourse is a mode of transmission, which increased to 93.3 % in post testing. Similar increase in knowledge was observed by Sankarnarayan S.&S.Naik[12] from Mumbai and Jaiswal S, Magar BS, et al from Kathmandu, Nepal[13], whereas in a study in Pune by Pankaj Kumar, the knowl-

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edge was less (61.76%) in pre-test as compared to present study.[14]

Awareness that HIV can be transmitted through infected blood transfusion of HIV/AIDS was 78.9% in pre-test which significantly increased to 96.2% in post-test. In a study done by Kamala et al [15]reported 75.5%, RekhaUdgiri et al [16] recorded 58.15%. Similarly in Delhi Lal et al [17] found 31.1% of participants knew that infected blood transfusion will spread HIV virus.

Only 64.6% student had awareness that an infected mother can transfer the infection to her baby during pregnancy and childbirth which improved to 95.3% after educational talk. This showed there was a significant increase in knowledge for this mode of transmission. In the study conducted P. Lal and Anita nath[17] found only 23.4 % students were aware about this.

HIV/AIDS transmission through sharing needles with an infected person was known to 74.8% of the students in pre-test and was improved to 94.3% after the intervention, contradicting to this,only 35.6% students of Chandigarh were aware about this mode of transmission in pre-test which, increased by 51.1% after discussion.[18]

Our study revealed that only a minority 37.4% were aware that ELISA testing (blood test) is the diagnostic test for HIV/AIDS in pre-test, this number however improved dramatically to 74.3% after the intervention. In the study conducted by JannuRajamouli et el,[19]75.43% of secondary school students knew that HIV/AIDS status can be confirmed by blood test, where as in the study of SelcukKoksal et al in Turkey reported that 88% knew the same.[20]

In our study, 64.6% were aware that HIV and AIDS are two different entities which improved to 93.8% after lecture. This is in conformity to findings (35%) reported in a study among school adolescents of Gujarat. [21]

Knowledge regarding prevention HIV/AIDS was tested and 72.3% were found to be aware of the role of condoms in preventing HIV/AIDS transmission which improved to 87.6% after the informative lecture whereas in the study conducted in Delhi by P. Lal and Anita nath17 found only 14.9 % students were aware about this prevention while 89.3 % was observed by Bounbouly Thanavanh22.

The fact that HIV/AIDS damages the body's immune system was known to only 67.1% of students which improved to 87.1% which was less dramatic. Though the students had good awareness level regarding modes of transmission only 43.5% were aware of where the HIV testing is carried out which is at the integrated counselling and testing centre (ICTC). After the intervention, 87.1% students were aware of the same.

Conclusion-

The awareness and knowledge among the students regarding HIV/AIDS, its modes of transmission, prevention and available treatment improved significantly after an educational talk which was supplemented with visual aids such as charts,diagrams and black board demonstrations. Number of unanswered questions and misconceptions also decreased. The attitude towards the AIDS patient also improved after the intervention.

To conclude the intervention in form of education talk with visual aid can make a significant change in knowledge and attitude amongst students

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