

AWARENESS ABOUT HIV/AIDS IN SELECTED PRE UNIVERSITY COLLEGES IN MOODBIDRI: A CROSS-SECTIONAL STUDY

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ABSTRACT

To determine and assess the level of awareness among students of a pre university college regarding HIV/AIDS. A cross-sectional survey of students aged 15-20 years from two colleges selected by convenient sampling method was conducted from August to September 2010 to assess the awareness of randomly selected students on HIV/AIDS. They were asked to fill a pre-tested structured questionnaire. The variables assessed were their knowledge of disease regarding etiology, mode of transmission and prevention. A total of 300 students participated, with 43% students from rural areas, 29% students from urban areas and rest 28% from other places. 91% of the students knew about what AIDS is, and it is transmitted by having sexual intercourse with an infected person. 81% knew that receiving blood from unapproved blood banks can contract AIDS and also knew that children borne to the infected mothers are at risk of developing AIDS. 64% of student knew that AIDS is more among the IV drug abusers and thought that HIV can spread through contact. Only 27% students were aware of the specific blood tests done to diagnose AIDS and thought that AIDS is curable. Most of them were aware of HIV/AIDS. More than half were aware of most common modes of transmission of AIDS. Statistical association was proved between age of students and awareness of AIDS.

Keywords: AIDS/HIV, awareness, prevention.

INTRODUCTION

Infections such as HIV are a major threat to health care workers. Overuse of injections and unsafe injection practices cause an estimated 8-16 thousand cases of HIV infections. Acquired immunodeficiency Syndrome (AIDS) is an important problem for the entire world and especially for the developing countries. According to UNAIDS, most vulnerable age group prone to HIV / AIDS is 15-25 years. As there is no effective treatment or vaccine against HIV / AIDS, awareness can only prevent spread of the disease.

Studies done internationally showed that the highest number of sharps injuries were sustained by health care professionals while they were drawing blood, giving injections or suturing¹⁻². In addition, those not wearing gloves while doing any of these procedures were at greater risk of contracting infection³. Studies conducted in France and Japan have shown that students in these developing countries, have a lot of misconception of these infectious diseases¹⁻⁵. Multiple surveys had been conducted in India concentrating on students' awareness regarding HIV/AIDS at different levels. Most of these studies show that the students do not have adequate knowledge of HIV/AIDS⁶⁻⁸. Medical students are more vulnerable to infectious diseases as they are in direct contact with the patients, they deal with blood transfusions, injections, surgical instruments etc. But little attention has been directed to exposure among medical students⁹. The introduction of training in universal precautions cannot be neglected in countries where safety equipment, safety instructions and staff vaccination programmes are absent.

Preventive medicine is concerned with reducing the incidence of disease by modifying environmental or behavioral factors that are related to illness. It is necessary that the general health practitioners

and family physicians work in close collaboration with the community. It is mandatory to mobilize the community for resolving their health issues and to assess their knowledge about infectious diseases. In order to adopt a healthier lifestyle, increasing the awareness of the community is an important preventive strategy.

This study aims to know about the awareness of HIV/AIDS among the college students at a regional state higher education institution and to compare the AIDS awareness levels amongst them considering their age, sex, place, and education of students.

METHODS

A cross sectional survey was conducted on students aged 15 to 20 years from two pre university colleges i.e. Mahaveer College and Davala College at Moodbidri selected by convenient sampling method. The study period was from August to September 2010 enrolling 300 students. Data was collected through a self-administered questionnaire pertaining to modes of spread of diseases (shown in table 1) and mode of prevention (shown in table 2) i.e. HIV/AIDS. The general information included names of various viruses, the sources of infection, transmission, availability of vaccine, post exposure prophylaxis and preventive measures against the diseases. The students were given the questionnaire in the classroom. All the students enrolled were informed about the study and none refused to fill the questionnaire. Data entry and analysis was done using Microsoft Excel and analysed, Chi square test was used to measure association between variables and knowledge scores among the pre university college students and the results were compared by test of proportions, p-values were calculated. $p < 0.05$ was considered significant.

Table 1: Questions regarding awareness about modes of spread of AIDS

Questions	Yes	No	Don't Know
1. Have you heard of AIDS?	300±1	0±0	0±0
2. Have you heard of HIV?	300±2	0±0	0±0
3. Does sexual intercourse with an infected person transmit HIV?	273±3	21±2	6±1
4. Is incidence of AIDS is more among homosexuals?	135±1	87±3	78±2
5. Is risk of HIV is more among those who have multiple sexual partners?	222±2	24±2	28±1
6. Can HIV be contracted by receiving blood from the unapproved blood banks?	243±2	24±4	33±2
7. Can a person get HIV by donating blood under sterile precautions?	114±1	132±3	54±3
8. Are the children born to infected mothers at risk for getting HIV infection?	246±4	18±2	36±2
9. Can HIV be transmitted through breast milk?	144±2	93±1	63±1
10. Is HIV incidence more among intravenous drug abusers?	195±3	66±2	39±3
11. Can HIV spread through casual contact with an HIV patient?	192±1	69±3	39±2
12. Does HIV spread through air and water?	3±2	279±1	18±1
13. Do mosquitoes and bedbugs transmit HIV?	45±2	231±2	24±2
14. Do public latrines and pools spread HIV?	54±3	207±2	39±1

Table 2: Questions regarding awareness of mode of prevention of AIDS

Questions	Yes	No	Don't Know
Can usage of condoms prevent HIV?	237±2	27±1	36±2
Can HIV be prevented by use of disposable syringes and needles by medical personnel?	222±1	54±2	24±3
Do you know any specific blood test for identifying HIV infected persons?	81±3	219±1	0±0
Is AIDS curable?	111±2	162±3	27±1

RESULTS

A total of 300 students participated, with 43% students from rural areas, 29% students from urban areas and rest 28% from other places. The male female ratio was 1:1, mean age of respondents was 18 + 2.0. 91% of the students knew about what is AIDS and is transmitted by having sexual intercourse with an infected person. Less than half i.e. only 45% of the students thought that HIV/AIDS is more common among the homosexuals results given in table 1 and 2. 74% of the students were aware that individuals with multiple sex partners are more susceptible to get infected. The students received information regarding these infections from books (85%), media / Internet (85%), teachers (84%), friends and relatives (70%).

Majority of the students 84% knew that there is no vaccine for HIV/AIDS. There was no significant difference in the knowledge of rural area and urban area students regarding this. Majority of the students (98%) agreed that an infected person is a major source for transmitting these infections. The other sources of transmission were marked as family members of infected persons (48%), doctors, dentists, surgeons, nurses, lab technicians (60% each) and barbers (88%). Almost all (95%) students knew that blood transfusion was an important source of transmitting these infections. Wearing gloves (87%) and safe disposal of sharp wastes (98%) were known by the students to be the ways to protect against these infections. Only half of the students were aware that needle should not be recapped and 14% did not know about cutting of needle before disposal.

81% knew that receiving blood from unapproved blood banks can contract AIDS and also knew that children borne to the infected mothers are at risk of developing AIDS. 65% of the students were aware that AIDS is more common among intra venous drug abusers. 64% of the students thought that just by casual contact with the HIV infected patient could transmit the virus. 79% of the students are aware that condoms could prevent the spread of disease.

DISCUSSION

The awareness regarding the common diseases has been a matter of research earlier among the different strata of the population. The knowledge of nursing staff about the modes of transmission of common diseases showed results similar to the present study¹⁰. Another study conducted on the fishermen revealed that their awareness about HIV/AIDS was low¹¹. Other studies conducted on young college going students concluded that their awareness regarding common diseases was very low, but knowledge about AIDS was satisfactory^{8, 12-13}. The results of this study are well comparable to other studies where cough, sneeze or a casual contact with the patient was regarded as a mode of transmission of HIV/AIDS¹⁴⁻¹⁵. A study on barbers showed that a small portion of the sample knew these diseases could be transmitted parenterally or by the use of a razor¹⁶. Interestingly, in another study, students believed that HIV/AIDS could not be transmitted from mother to her newborn, whereas more than half of the sample in this study agreed that it could spread from a mother to her baby¹⁵.

Knowledge about HIV/AIDS is crucial for health care professionals because of the increasing prevalence of these infections. Occupational risk of these infections is well known in medical and dental workers especially during the professional training period. This accounts for one of the major reason for delivering knowledge about preventive measures and universal precautions. Students regarded blood transfusion, syringes and needles to be an important factor for transmission of these deadly infections in this study. Studies suggest that accidental needle sticks are associated with the greatest risk for occupational transmission of blood-borne pathogens such as HIV¹⁴.

Medical students frequently sustain needle stick and sharp object injuries during clinical training as is evident from studies from other parts of the world¹⁷. Today's medical students work as colleagues with physicians in caring for patients. They deserve to be trained in an environment where personal safety is stressed.

We found a significant difference between knowledge of rural areas and urban areas students. Similar results were observed among Indian medical students that recommended need for increasing their knowledge and training should be started during the early years. A study done in government medical college in Pakistan laid stress upon campaigns for increasing awareness against AIDS. Data collected from community setting also suggested education of the health workers as well as the common people¹⁸. Continuing education programs emphasizing on prevention procedures were considered to be crucial to make pediatricians more knowledgeable about HIV/AIDS in another international study¹⁹.

In the light of the above studies and our study there is a lack of awareness among the students. It is the need of the hour to emphasize on practicing universal precautions. In addition, some preventive measures should be taken by the management of the universities and medical college students to avoid the occurrence of these problems.

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