

## Research Article

# Study to assess awareness about HIV/AIDS among medical students

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## ABSTRACT

**Background:** The lack of awareness and misconceptions about HIV/AIDS in general population is responsible for rapid spread and social stigma & discrimination in our country. Many studies have revealed that early educational interventions can reduce the Knowledge Attitude Practice (KAP) gap among health professionals. This study was conducted to assess awareness regarding HIV/AIDS in newly admitted medical students.

**Methods:** Cross sectional study was carried out on newly admitted 1st MBBS students. All the students (72) present on the day of data collection were included in the study. Data was collected by pretested questionnaire and analysed using percentages.

**Results:** Awareness among students about HIV was good. All the students (100%) were conscious about HIV/AIDS disease, its causative agent and diagnostics test. Majority of the students were aware about the modes of transmission and preventive approaches. Very few misconceptions were observed like spread by mosquito bite (1.1%).

**Conclusions:** The results of our study are encouraging as most of the students had good awareness regarding HIV/AIDS disease. Role of media & IEC activities are very important to spread the awareness among general population. These measures will help to reduce the misconception and indifferent attitude towards the HIV infected patients.

**Keywords:** Awareness, HIV/AIDS, Medical students

## INTRODUCTION

AIDS, the acquired immunodeficiency syndrome is a fatal illness caused by a retrovirus known as the Human Immunodeficiency Virus (HIV) which breaks down the body's immune system, leaving the victim vulnerable to a host of life-threatening opportunistic infection, neurological disorders, or unusual malignancies.<sup>1</sup> HIV/AIDS within decades of its described existence in 1981, has reached status of one of the most important public health disease. It is now the leading cause of mortality in Africa and the fourth leading cause of death worldwide.<sup>2</sup> The first AIDS case in India was detected in Chennai in 1986. Now India accounts for 10% of worlds infected population and in sheer numbers it is second largest population of HIV infected individuals. According to

National AIDS Control Organization (NACO), the total number of people living with HIV/AIDS (PLHA) in India (2009) was estimated at 24 lakh (19.3 - 30.4). Declining trend is observed from estimated level of 0.41% in 2000 through 0.36% in 2006 to 0.31% in 2009. All the high prevalence states show a clear declining trend in adult HIV prevalence.<sup>3</sup> Young people are vulnerable to HIV infections because of risk-taking behaviour and negligent attitude towards preventive measures.<sup>4</sup> The main mode of HIV transmission in India is heterosexual intercourse with commercial sex workers, long distance truck drivers and migrant labour serving as vehicles of spread except in North Eastern states where Intravenous Venous (IV) drug users are common. Other routes of infection are transfusion of blood and blood products and transplacental.<sup>5</sup> The lack of awareness and

misconceptions about HIV/AIDS in general population is responsible for rapid spread and social stigma & discrimination in our country.<sup>6</sup>

The World Health Organization's in its report on the role of HIV-related medical education in the South Asia region has stressed the importance of including training in sensitivity, communication skills, and the development of compassionate attitudes toward HIV infected patients in the medical curricula.<sup>7</sup> Many studies have revealed that early educational interventions can reduce the Knowledge Attitude Practice (KAP) gap among health professionals.<sup>8,9</sup> Hence the present study was conducted to assess awareness regarding HIV/AIDS in newly admitted medical students. This opportunity was also used to educate and remove misconception about HIV/AIDS.

## METHODS

This was a cross sectional study done on students of ESIC medical college, Gulbarga. The purposive sampling method was used to select newly admitted 1<sup>st</sup> MBBS students (2015 batch) as study subjects. All the students who were willing to participate were included in the study. Those who were not willing to participate were excluded from study. After taking their informed consent total of 72 students present on the day of data collection were included in the study. Data was collected by pretested questionnaire and analysed using percentages.

## RESULTS

It was observed that all the students (100%) were conscious about HIV/AIDS disease and they have correct knowledge of its causative agent. All the students (100%) were aware about availability of diagnostics test. Majority of students (97.2%) agreed that once infected with HIV, there is no cure. But only 69.4% students were having knowledge regarding availability of treatment. Some students (23.6%) were having misconception that there is vaccine available for HIV infection (Table 1).

It was good to observe that very few students had the misconceptions about modes of transmission by mosquito bite (1.1%), kissing and shaking hands (0.5 %), Sharing Cloths (0.4%), Sharing food/utensil (0.1 %) (Table 4).

Majority opined that they should avoid multiple sex partners (100%) and promote use of condoms (98.6%) & safe blood (98.6%) as effective method of halting HIV transmission (Table 5).

Majority (70%) of students had gained information from media (TV, Internet, Radio, Newspaper) followed by other sources like health staff (51.3%), Friends & Family (48.6%), and Others 38.8% ( school curriculum , teachers etc). This study shows that media plays very important role in creating awareness among people (Table 2).

All the students (100%) were aware that HIV is transmitted by having Multiple Sex Partners, Transfusion of unsafe Blood, Sharing of Needles where as 94.4% students were having knowledge about transmission from infected pregnant mother to child (Table 3).

**Table 1: Awareness about HIV/AIDS.**

Awareness	No	%
Heard about HIV/AIDS	72	100
Caused by Virus	72	100
Diagnostic Tests available	72	100
Disease is incurable	70	97.2
Treatment available	50	69.4
Vaccines not available	55	76.4

N=72

**Table 2: Source of information about HIV/AIDS.**

Source of information	No	%
Media	51	70.8
Doctors / Health workers	37	51.3
Friends & Family	35	48.6
Others	28	38.8

N=72

**Table 3: Knowledge about modes of transmission.**

Modes of transmission	No	%
Multiple Sex Partners	72	100
Transfusion of Blood/ its products	72	100
Sharing of Needles / Intravenous drug users	72	100
Mother to Child Transmission	68	94.4

N=72

**Table 4: Misconception about modes of transmission.**

Misconceptions about Modes of transmission	No	%
Mosquito bite	8	1.1
Kissing & Shaking hands	4	0.5
Sharing Cloths	3	0.4
Sharing food/utensil	1	0.1

N=72

**Table 5: Awareness about preventive measures.**

Awareness about Preventive measures	No	%
Avoid Multiple Sex Partners	72	100
Use condoms	71	98.6
Safe Blood/ its products	71	98.6
Avoid Sharing of Needles intravenous drug users	69	95.8

N=72

## DISCUSSION

Overall awareness about HIV knowledge was good in our study. But few students were not aware of treatment facilities and some believed about availability of HIV vaccine. Similar study conducted in Uttarakhand among medical students by Ravi Shankar et al reported that all the students (100%) have heard the name of HIV/AIDS and they have correct knowledge of the causative agent and majority (96%) correctly answered that the infection is incurable.<sup>4</sup> Three-fourth of them had correct knowledge about the availability of test to detect the infection and few students (43%) had knowledge about treatment option. About 88% of them had correct knowledge about unavailability vaccines to prevent infection. Observation of our study and Samant et al showed that knowledge among medical students is better when compared to first year nursing students.<sup>10,11</sup> In a study conducted by Brij Mohan & Vashist among nursing students found that 10% of nursing students reported vaccine availability to prevent HIV.<sup>12</sup>

Knowledge regarding modes of transmission among students are better in our study compared to Ravi Shankar et al where students had correct information about different modes of transmissions viz. sexual route (98%), transmission through infected blood or its products (90%), mother to child transmission (78%), and sharing of needle/syringes (89%).<sup>4</sup> Similar results were observed from other studies conducted in India by Brijmohan S et al and Koksai S et al in Turkey.<sup>12,13</sup>

Misconceptions about modes of spread was less in our study compared to study by Ravi Shankar et al<sup>4</sup> where students believed that the infection was transmitted by sharing of cloths (75%), food or utensils (86%), kissing and shaking hands (89%) and by insect bites (39%). Many other studies have observed similar misconceptions about modes of transmission.<sup>14</sup>

It was observed that majority of students had good knowledge about preventive measures. These findings are comparable to study by Ravi Shankar et al and Kumar A et al.<sup>4,11</sup>

## CONCLUSION

The results of our study are encouraging as most of students had good awareness regarding HIV/AIDS disease. Role of media is very important to spread the awareness among general population. Information Education and Communication (IEC) activities are powerful tool for spreading knowledge especially among rural and illiterates. These measures will help to reduce the misconception and indifferent attitude towards the HIV infected patients.

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