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ORIGINAL ARTICLE

TO FIND OUT CHANGE IN KNOWLEDGE AND ATTITUDE TOWARDS HIV/AIDS OF IST YEAR AND IVTH YEAR MBBS STUDENTS

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ABSTRACT: INTRODUCTION: HIV/AIDS are a major concern of health care professionals all over the world. Adolescent age group remains a focus group for I.E.C. activities regarding HIV/AIDS as they pass through a phase of experimentation and initiation of sexual activities. As new entrant medical students also form a part of this vulnerable section, their knowledge assessment about HIV/AIDS will help us in planning for teaching related to these issues. **OBJECTIVE:** Objectives of this study were to assess the knowledge and attitude of medical students about HIV/AIDS and to compare the knowledge and attitude of MBBS students towards HIV/AIDS with increase years of study. **STUDY DESIGN:** cross-sectional. **SETTING:** MAMC, Agroha. **PARTICIPANTS:** 92 Medical students, of which 47 were from 1st Year and 45 from 4th year. **METHODS:** A pre-tested semi-structured questionnaire was administered to the students after having obtained their informed consent. All the questions were explained and all queries were clarified. **STATISTICAL ANALYSIS:** Simple Percentage and Chi squire. **RESULTS:** All the respondents had heard about HIV/AIDS. There were some misconceptions among the students like; HIV can spread through kissing, polluted air, sharing bed/clothes and mosquito bite. With regards to the attitude of students towards HIV/ AIDS, the percentage of students who believed that they have the right to refuse treatment to a HIV patient was significantly decreased with the increase in the years of study. Percentage of knowledge regarding all the methods of prevention is significantly increases from 74.5% to 95.6% with the increase in the years of study. Most common source of information regarding HIV/AIDS was television followed by textbooks, newspaper, friends/family members, radio, hoardings, and health personnel.
CONCLUSION: The health care sector has generally been the most conspicuous context for HIV/AIDS related discrimination, stigma and denial. So the young doctors need to be adequately trained regarding all issues pertaining to prevention and control of HIV/AIDS.
KEYWORDS: Knowledge, Attitude, Compare, Medical students, HIV/AIDS.

INTRODUCTION: HIV/AIDS is a life threatening disease. The majority of new infections occur in young adults. It affects all body systems as well as the mental health and social relationship of carriers and asymptomatic patients. The best approach to control it remains prevention of this infection.

According to WHO fact sheet, there were approximately 35.0 million people living with HIV at the end of 2013 with 2.1 million people becoming newly infected with HIV in 2013 globally. In 2013, 1.5 million people died from HIV-related causes globally.[1]

Adolescent age group remains a focus group for I.E.C. activities regarding HIV/AIDS as they pass through a phase of experimentation and initiation of sexual activities. As new entrant medical students also form a part of this vulnerable section, their knowledge assessment about HIV/AIDS will help us in planning for teaching related to these issues.

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The doctors would have to play a key role in providing care to HIV positive/AIDS patients. The medical students are the future doctors. Their possible indifferent attitudes, which largely stemmed from adequate knowledge, may in turn educate and provide useful information to all other different kinds of health personnel in their surroundings to provide care to AIDS/HIV positive patients.

Although doctors, nurses and health workers are the major messengers of information between the medical community and general population, medical students also play a major role In both highlighting facts and bringing to rest myths about diseases such as HIV/AIDS.

Most of the students, irrespective of their choice of specialty after graduating, will eventually come in contact with an HIV/AIDS patient. It is then that we feel, there might be a distinct possibility that biases, misconceptions and negative feelings held during the period of clinical rotation or training can result in unwillingness, or even refusal to treat certain patients. It is thus important to know their level of awareness and attitude about this infection so they can disseminate right information and provide appropriate counseling.

OBJECTIVES: Objectives of this study were:

1. To assess the knowledge and attitude of Ist year and IVth year medical students about HIV/AIDS and
2. To compare the knowledge and attitude of Ist year and IVth year MBBS students towards HIV/AIDS.

METHODOLOGY: A Cross sectional questionnaire based study was conducted in a govt. aided medical college in rural Haryana in October 2014. A pre-tested semi-structured questionnaire was administered to the students after having obtained their informed consent. All the questions were explained and all queries were clarified. We selected all the medical students who were present in the class at the time of data collection. There Were 92 Medical students, of which 47 were from 1st Year and 45 from 4th year. Awareness about HIV/AIDS, Knowledge Regarding routes of transmission, high risk groups, Preventive Measured, Misconceptions regarding the mode of spread, attitude towards HIV Infected people and source of information were analyzed. Statistical Analysis was done with epi info. The data is presented in the form of percentages. Association was carried out using Chi Square test. A P value of <0.05 was considered significant.

RESULTS: The study sample included 92 Medical students, of which 47 were from 1st Year and 45 from 4th year.

Table 1: Shows the knowledge among the students. Increase in knowledge in various points is significantly associated with increase in years of study.

Statement	1st year n=47 n (%)	4th year n=45 n (%)	χ^2 value P value
Heard about HIV/AIDS	47(100.0)	45(100)	
Knew that it is a viral disease	43(91.5)	45(100)	4.00 0.045

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Knew that it is reported from India	46(97.9)	45(100)	0.97 0.325
No vaccine available for prevention	35(74.5)	40(88.9)	3.17 0.075
AIDS is a fatal disease	35(74.5)	41(91.1)	4.43 0.035
Females are more likely to be infected with HIV/AIDS than males.	24(51.1)	39(86.7)	13.50 0.000

Table-1: Knowledge about HIV/AIDS*

* Multiple response answers

Table 2: Shows that there is significantly increase in awareness regarding all the modes of transmission, with increase years of study.

Mode of Transmission	**Positive respondents**		χ^2 **value P value**
	1st year n=47 n (%)	**4th year n=45 n(%)**	
Sexual contact	44(93.6)	45(100)	2.97 0.085
Blood/blood products	40(85.1)	43(95.6)	2.84 0.092
Contaminated needles/ syringes	42(89.4)	43(95.6)	1.25 0.263
Mother to child	40(85.1)	42(93.3)	1.61 0.205
All the 4 modes	32(68.1)	39(86.7)	4.51 0.034

Table 2: Awareness about modes of Transmission

* Multiple response answers

Table 3: Shows some misconceptions regarding mode of spread.

Misconception	**Positive respondents**	
	1st year n=47	**4th year n=45**
Superficial Kissing	1	1
Sharing Utensils with patient	1	1
Working in same Environment	2	0
Sharing bed/clothes with Patient	4	2
Sharing toilet with patient	3	2
Mosquito bite	2	1
Polluted air	3	0

Table- 3: Misconceptions regarding the mode of spread*

* Multiple response answers

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Table 4: Shows awareness regarding homosexuals, Truck Drivers, Migrant Labourers and Intra-venous drug user is significantly increases with years of study.

High Risk Groups	Positive Respondents		χ^2 value P value
	1st year n=47 n (%)	4th year n=45 n (%)	
Prostitutes	39(82.9)	42(93.3)	2.34 0.126
Homosexuals	28(59.6)	39(86.7)	8.53 0.004
Truck Drivers	24(51.1)	35(77.8)	7.13 0.008
Migrant Labourers	16(34.1)	27(60)	6.22 0.013
Intra-venous drug user	32(68.1)	40(88.9)	5.85 0.016

Table 4: Awareness about high risk groups for HIV/AIDS*

* Multiple response answers

Table 5: Shows that there is significant increase in knowledge regarding all the methods of prevention, with increase years of study.

Preventive Measure	Positive Respondents		χ^2 value P value
	1st year n=47 n (%)	4th year n=45 n (%)	
Remaining faithful to one's spouse	43(91.5)	45(100)	4.00 0.045
Safe Blood	44(93.6)	45(100)	2.97 0.085
Sterilized/Disposable needles/ syringes	41(87.2)	43(95.6)	2.01 0.157
Condom usage	42(89.4)	44(97.8)	2.67 0.102
All methods	35(74.5)	43(95.6)	7.92 0.005

Table 5: Knowledge about Preventive Measured against HIV/AIDS

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Table 6: Shows the change in attitude between 1st year and 4th year medical students.

Attitude of students	Positive Respondents		χ^2 value P value
	1st year n=47 n (%)	4th year n=45 n (%)	
Every patient should get mandatory HIV testing	38(80.9)	32(71.2)	1.20 0.274
HIV patient admitted can be kept in general ward	27(57.5)	35(77.8)	4.32 0.038
Should be aware of persons HIV status before examining him	36(76.6)	42(93.3)	4.99 0.026
Have the right to refuse surgical treatment to a HIV infected person	38(80.9)	20(44.4)	13.08 0.000
Sexual partner of an HIV patient should be informed against the patient's wishes	42(89.4)	43(95.6)	1.25 0.263
AIDS is a disease of immoral people	12(25.5)	11(24.4)	0.01 0.904
If a health worker is HIV+ he should inform higher officials	38(80.9)	39(86.7)	0.57 0.45

Table 6: Attitude of students towards HIV patients

* Multiple response answers

DISCUSSION: Knowledge levels of medical students about basics of transmission, prevention and diagnosis and their attitude towards HIV positive patients are important. All of them had heard about HIV/AIDS. Similar findings were observed by Singh et al[2] amongst medical students of Delhi and Kalhan et al[3] amongst medical students of Rohtak. Our study shows increase in knowledge with progress of year of study. A similar kind of trend was observed in a study conducted among university students in Xinjiang in China.[4]

In our study there were some misconceptions among the students like; HIV can spread through kissing, polluted air, sharing bed/clothes and mosquito bite. Basavayya et al,[5] observed in their studies that students had misconception that HIV can be spread through kissing and playing together. A study by Benora SK et al[6] among undergraduate students of Delhi university in India revealed that 58% students believed one could get infection by oral route. A study done by Mohsin S et al,[7] showed some myths among medical students like urine can transmit HIV.

With regards to the attitude of students towards HIV/ AIDS in our study, we found that the percentage of students who believed that they have the right to refuse treatment to a HIV patient was significantly decreased with the increase in the years of study. Results of a study done by Paxton S et al[8] showed that about one sixth of HIV positive patients were denied treatment. A study done by Mohsin S et al[7] revealed 15 % of medical students believed that doctors should be allowed to refuse care for HIV-positive patients. A study by Daniel M[9] identified serious gaps in the knowledge about transmission of HIV among health care professionals in government and private hospitals in India leading to refusal of treatment to People Living with HIV/AIDS (PLHIV). In this study mostly students believe that every patient should get mandatory HIV testing but the percentage of belief is decrease with increase years of study. According to study done by Mohsin S et al,[7] a high proportion of

students felt that all surgical and obstetric patients should be routinely tested for HIV infection. In this study we found that the percentage of students who believed that sexual partner of an HIV patient should be informed against the patient's wishes increasing with the increase in the year of study. A study done by Mohsin S et al[7] revealed that 77% of students agreed that they would inform an HIV/AIDS patient's spouse against the patient's wishes.

In this study percentage of knowledge regarding all the methods of prevention is significantly increases from 74.5% to 95.6% with the increase in the year of study. In this study percentage of identification of high risk groups is increases with years of study. The increase is significant in cases of identification of homosexuals, truck drivers, migrant labours and intravenous drug users. Similar finding are there in study done by Sanjay et al[10] in a private medical college in coastal Karnataka. Most common source of information regarding HIV/AIDS was television followed by textbooks, newspaper, friends/family members, radio, hoardings, and health personnel.

CONCLUSION: Though the overall knowledge among the students was good, only few students held some misconceptions. There is a strong need for imparting HIV related education right from the beginning of medical curriculum so as to demystify misconceptions among students. There is a need for medical colleges to foster an environment that is conducive to the development of appropriate student attitude towards HIV. Since textbooks are an important medium of knowledge, sex education should be made an integral part of school/college curriculum. The health care sector has generally been the most conspicuous context for HIV/AIDS related discrimination, stigma and denial. So the young doctors need to be adequately trained regarding all issues pertaining to prevention and control of HIV/AIDS.

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