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Research Paper

Knowledge and Attitudes of Newly Admitted Undergraduate Medical Students Towards HIV/AIDS

Medical Science

KEYWORDS : Knowledge, Attitudes, newly admitted undergraduate Medical students, HIV/AIDS.

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ABSTRACT

The present cross sectional study was conducted on 57 newly admitted undergraduate medical students in a medical college located in Mumbai metropolitan region. The basic knowledge and attitudes of students towards HIV/AIDS were tested by using pre-designed, structured and self-administered proforma. It is observed that the mean knowledge score of students who have studied primary and secondary school level in English or semi-English medium was higher (i.e. 25.14) than those who have studied same classes in Marathi or Hindi medium (i.e.22.23).The difference is statistically significant at 5% level of significance. 84.21% students said, the sources of information about HIV/AIDS to them were Television, Radio, Newspapers, Books, Magazines, Internet and movies. According to 47.37% students, these are the best sources of information. It is observed that the students have positive attitudes towards HIV/AIDS patients. The study recommends the need for development and organization of HIV/AIDS training sessions for students at regular intervals from high school level to inception of medical curriculum.

INTRODUCTION

HIV/AIDS is a life threatening disease. The majority of new infections occur in economically productive young adults. It is estimated that more than 40 million people between the ages of 15-24 years will contract HIV by 2020.1 It affects all body systems as well as the mental health and social relationship of carriers and asymptomatic patients. WHO also reports, more than 45% of all new infections occur in people aged 15-24 years. Developmental characteristics of young populations include a tendency toward risk-taking behavior and indifference to the importance of preventive measures. The total number of people with HIV (Human Immunodeficiency Virus) infection in India is estimated to be 10% of all global cases.

HIV/AIDS are a major concern of health care professionals all over the world. People living with HIV in India often experience discrimination while receiving health care due to inadequate knowledge and fear among health care professionals. Inadequate knowledge and fear of HIV infected people have been identified as a serious problem among health care professionals considering themselves to be at risk of contracting the infection in India. These feelings of anxiety and fear concerning HIV infected people among Indian health care professionals' results in their meting out derogatory behavior towards their HIV infected patients. Health education about HIV/AIDS has important role in the proper care of the people living with HIV/AIDS.2

The Doctors would have to play a key role in providing care to HIV positive /AIDS patients. The medical students are the future Doctors. Therefore, the comprehensive knowledge of the first year students who directly come from the common population is important to decrease fear and increase empathy in the community. The World Health Organization's report on the role of HIV-related medical education in the South Asia region has also underscored the importance of including training in sensitivity, communication skills, and the development of compassionate attitudes toward HIV infected patients in the medical curricula.3 Studies in India concerning HIV-related knowledge and attitudes amongst both health professionals and medical students suggest that early educational intervention has the potential to address the gaps both in knowledge and the negative attitudes directed towards those with HIV infection.4,5

MATERIALS AND METHODS

In this cross-sectional study, all the 57 newly admitted students in a Medical College were enrolled as study subjects. Ethical committee's permission and consent from individual respondent was obtained. A pre-designed, structured Proforma with Thirty statements on basic knowledge of HIV/AIDS with correct, incorrect, don't know and no comment options as well as Five statements related to attitudes towards HIV/AIDS with agree, disagree, don't know and no comment options was distributed to all the participants. The Proforma also included questions related to sources and the best sources of information about HIV/AIDS. One hour was given to solve the questionnaire. Each correct response to the statement related to knowledge of HIV/AIDS was given one mark. Don't Know or No Comment response was considered as incorrect response and given zero mark. Thus each Respondent was given marks out of thirty. The responses were noted and analyzed using Microsoft Excel. Z test was applied and the results were interpreted at 5% level of significance.

RESULTS AND DISCUSSION

All 57(34 Males and 23 Females) newly admitted undergraduate medical students took part in the study. The mean knowledge score of all participants was 24.02 with standard deviation of 3.16.The mean knowledge score of 53 students belonging to 18 to ≤21 years of age group was 23.87 with standard deviation of 3.17. While of 04 students, who are in the age group of > 21 to 24 years, the mean score was 26.00 with standard deviation of 2.45. The mean knowledge score of 34 males and 23 females was 23.91 with standard deviation of 3.18 and 24.17 with same standard deviation respectively. The mean knowledge score of 22 students who have studied primary and secondary school classes in Marathi or Hindi medium was 22.23 with standard deviation of 3.79. While of 35 students, who have studied these classes in English or semi-English medium, the mean knowledge score was 25.14 with standard deviation of 2.04.The difference is statistically significant ($p < 0.05$). The mean knowledge score of 36 students who have studied in schools situated in Municipal Corporation area was 24.28 with standard deviation of 2.59 and of 21 students who have studied in schools located in Municipal Councils or Taluka places was 23.57 with standard deviation of 3.98. The mean knowledge score of 33 students who had computer operating skill, was 24.42 with standard deviation of 2.82.While the mean knowledge score of 24 students who had no such skill was 23.46 with standard deviation of 3.56. (Table – I) 84.21% students said, the sources of information about HIV/AIDS to them were Television, Radio, Newspapers, Books, Magazines and Internet. According to 47.37% students, these are the best sources of information. (Table – II) It is observed that the students have positive attitudes towards HIV/AIDS. The distribution of various attitudes is shown in Table – III.

N.A. Al-Rabeel et al6 observed moderate level of knowledge and a number of misconceptions and negative attitudes towards HIV/AIDS among students in Sana'a Health Institutes. Similar results were also observed in the study conducted by Samant et

al7, Kermode M et al 8 and by Rotimi OO et al. 9

Research has indicated the central role of medical education in improving knowledge of HIV risk, transmission and changing the attitudes of medical students as it is related to care of HIV-infected people.10 The only way to combat a disease that has no effective treatment is by prevention. The best single way to prevent this disease is through education. Prevention of HIV/AIDS infection through continuing education is a key strategy for the control of the HIV/AIDS epidemic at least until vaccines and drugs are available, accessible, and affordable to all the infected persons. Present study is pertinent in the group of respondents, medical undergraduates in the basic medical sciences, who have no contact with patients yet, to view their knowledge towards the global fight against the spread of HIV. Findings of this study suggest that the students had satisfactory levels of knowledge of HIV/AIDS. Study recommends development and organization of HIV/AIDS training sessions at regular intervals from high school level to inception of medical curriculum. This will promote a good delivery of accurate information on HIV/AIDS to the public and health care personnel to provide proper patient care.

Table – I Socio-demographic profile and knowledge score of respondents (n = 57)

Variables		n	Mean score	Standard deviation of score	Z value	P value
Age groups in years	18 to ≤ 21	53	23.87	3.17	1.64	P > 0.05
	>21 to 24	04	26.00	2.45		
Sex	Male	34	23.91	3.18	0.30	P > 0.05
	Female	23	24.17	3.18		
Medium of Education Primary and Secondary School Level	Marathi or Hindi	22	22.23	3.79	3.31	P < 0.05
	English or Semi - English	35	25.14	2.04		
Place of Schooling	Municipal corporation area	36	24.28	2.59	0.73	P > 0.05
	Municipal council or Taluka Place	21	23.57	3.98		
Computer Skill	Yes	33	24.42	2.82	1.09	P > 0.05
	No	24	23.46	3.56		

Table – II Sources and Best Source of information about HIV/AIDS (n = 57)

Variables	Sources of Information N (%)	Best Sources of Information N (%)
Television, Radio, Newspapers, Books, Magazines, Internet	48 (84.21%)	27(47.37%)
Parents, Friends, Relatives, Guardians	27(47.37%)	10(17.54%)
School and / or College Teachers	38(66.66%)	11(19.30%)
Doctors, Nurses, Health Workers	08(14.03%)	07(12.28%)
Posters, Slogans, Banners, Wall Paintings	12(21.05%)	02(03.51%)

Table – III Attitudes of Respondents towards HIV/AIDS (n =57)

Variables	Response	Total N (%)	Male (n=34) N (%)	Female(n=23) N (%)	P value
HIV positive person should not be allowed to work	Agree	04(07.02)	03(08.82)	01(04.35)	P > 0.05
	Disagree	51(89.47)	29(85.29)	22(95.65)	P > 0.05
	Don't know / No comment	02(03.51)	02(05.88)	00(00.00)	---------
Students with HIV positive status should not be allowed to attend classes	Agree	03(05.26)	02(05.88)	01(04.35)	P > 0.05
	Disagree	52(91.23)	30(88.23)	22(95.65)	P > 0.05
	Don't know / No comment	02(03.51)	02(05.88)	00(00.00)	---------
Doctors and Nurses should refuse to treat AIDS cases because they may get infected	Agree	00(00.00)	00(00.00)	00(00.00)	---------
	Disagree	54(94.74)	32(94.12)	22(95.65)	P > 0.05
	Don't know / No comment	03(05.26)	02(05.88)	01(04.35)	P > 0.05
HIV positive person should not be allowed to travel by public transport	Agree	00(00.00)	00(00.00)	00(00.00)	---------
	Disagree	57(100.00)	34(100.00)	23(100.00)	---------
	Don't know / No comment	00(00.00)	00(00.00)	00(00.00)	---------
AIDS patient should be treated with affection	Agree	47(82.46)	27(79.41)	20(86.96)	P > 0.05
	Disagree	06(10.53)	05(14.70)	01(04.35)	P > 0.05
	Don't know / No comment	04(07.02)	02(05.88)	02(08.70)	P > 0.05

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