

Knowledge regarding HIV/ AIDs in medical students

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Abstract *Objective* The study was conducted to check medical students knowledge regarding HIV/AIDS.

Methods A cross-sectional survey was conducted amongst first year MBBS students. Ten multiple choice questions were given pertaining to spread, mode, treatment and prevention of AIDS.

Results Knowledge about mode of spread, transmission, prevention of HIV/AIDS was average among MBBS students, but there were few misconceptions.

Conclusion Awareness standard needs to be raised among the medical students.

Key words

HIV/AIDS, knowledge, medical student.

Introduction

People living with HIV/AIDS is increasing every year and is frequently seen among sexually active young groups. Young medical students are the future of tomorrow. Their existing knowledge about HIV/AIDS is important for the future and misconception if any should be taken care of. This would help in extending further support in spreading awareness to the public later in their life. Very few studies have been conducted on knowledge, attitude, and practice studies conducted in different parts of India and abroad.

Methods

A cross-sectional descriptive study was undertaken among first-year professional (MBBS) students in a tertiary health care center in Eastern India to determine level of HIV/AIDS

awareness. Total thirty-six first year MBBS students participated in the study. Ten multiple choice questions were given pertaining to spread, mode, treatment and prevention of AIDS. There were three options given as yes/no/not sure. The students were given 20 minutes to answer all the questions

Results

Regarding the mode of spread 81.9% on an average were correct. 8.3% had the misconception of spread of HIV through mosquito bites, while 8.3% were not sure and 5.5% did not attempt to answer the above question. 6 (16.7%) had the misconception of kissing as not being a mode of spread and 2 (5.5%) were not sure. Knowledge about HIV infected mother to child transmission was correct in 22 (61.1%) students. There were misconceptions regarding double condom use is more effective than single condom use in preventing spread where only 12 (33.3%) students could answer correctly. Only 18 (50%) students were correct regarding distribution of HIV drug. 86.3% were correct as HIV not being a curable disease.

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Table 1 Response of students to different questions (n=36).

Questions	Correct	Incorrect	Not Sure	No attempt
1. Mode of spread				
Kissing	28	6	2	0
Public swimming pool	30	0	4	2
Mosquito bites	28	3	3	2
Tattoo	27	5	4	0
Hand shaking	35	0	1	0
2. HIV infected mother to child transmission	22	11	0	3
3. Double condom use is more effective than single condom use in preventing spread.	12	11	13	0
4. Is HIV drug given free of cost?	18	12	6	0
5. When to start ART?	16	17	0	3
6. Chances of acquiring HIV are more common in homosexuals or heterosexuals	27	6	3	0
7. Commonest route of transmission	34	2	0	0
8. In the present era which STD is more common	22	14	0	0
9. Coexisting STD increases the chances of HIV spread	26	1	3	6
10. Do all people with HIV have AIDS	33	2	1	0

Regarding starting anti-retroviral therapy only 16 (44.4%) students were correct. 34 (94.4%) students were correct regarding the commonest route of transmission. 24 (75.0%) students knew that chances of acquiring HIV are more common in homosexuals or heterosexuals, while 26 (72.2%) knew that coexisting STD increases the chances of HIV spread (**Table 1**).

Discussion

In a study by Bolla *et al.*¹ 56.4% of participants who knew that hugging and shaking hands with HIV/AIDS infected person will not transmit HIV virus. In a study done by Singh *et al.*² reported 53.9% of participants, Koksai *et al.*³ reported 73.1%, Gaash *et al.*⁴ reported 82.2%, Bhalla *et al.*⁵ reported 90.8% knew that shaking hands with HIV/AIDS infected person will not transmit HIV virus.

In a study by Baria *et al.*⁶ on assessing the knowledge regarding the transmission of HIV/AIDS, 95.7% knew that HIV is transmitted by infected blood transfusion and 92.8% knew it is transmitted by mother to child, (92.8%) sharing infected needles while 88.4% reported to be transmitted by unprotected sex and 6.5% had

misconception of transmission by mosquitoes bite while almost 6% had misconception of transmission by using same toilet, eating in same dish with infected person and by shaking hands.⁶ Singh *et al.*² on an awareness study of HIV/AIDS among adolescent students of Chitwan district, Nepal, in which 91.4% students knew mother to child transmission of HIV/AIDS, 90.2% through receiving or donating blood, 81.1% through unsterilized needles, while 77.6% reported that it could be transmitted by unprotected sex.² Kuruvilla *et al.*⁷ reported that 76.6% knew that it could be transmitted through infected needles, and 89.4% knew that transmission could occur by unprotected sexual activities, 20% believed it could be transmitted by mosquitoes, same misconception was seen in study conducted by Anurag *et al.*⁸ that 20% of students believed the transmission of HIV/AIDS through mosquitoes bites while 18% students thought that it could spread by sharing meals.

In India, overall HIV prevalence among different population groups continues to reflect the concentrated epidemic situation in the country with 2.3 million people living with HIV/AIDS and estimated adult prevalence of 0.34% (0.25-0.43%).⁹ In India, the age group 15-

24 years comprises almost 25% of the country's population; however, they account for 31% of the AIDS burden.¹⁰ HIV, the causative agent of AIDS, is a retrovirus. Venereal transmission of HIV can occur in homosexuals, bisexuals, and sex partners of risk group members. The virus spreads through genital secretions.¹¹ Perinatal transmission of HIV can occur in children born to infected mothers. It is believed to occur transplacentally¹² and/or through breast milk.¹³ If the mother has HIV infection the chances that the baby will get it are 20% to 50%.^{14,15}

Few similar and/or higher level of knowledge with regard to routes of transmission, prevention, and misconception about HIV/AIDS has been conducted in India or at internationally.¹⁶⁻¹⁹

Conclusion

Awareness standard needs to be raised among the medical students. Education programs need to be implemented regarding the disease mainly among the younger generation. Government should regularly set up camps and advertisements through television, radio and various other methods to raise awareness regarding HIV/AIDS.

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