

A study of knowledge of HIV/AIDS among nursing students

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Abstract

Background: Patients with HIV/AIDS have to face discrimination in the society and in health-care system. Knowledge regarding HIV/AIDS determine nurses attitude toward HIV/AIDS patients. It is worthwhile to assess existing knowledge of HIV/AIDS among nursing students to understand the prevailing situation.

Objective: To assess knowledge of HIV/AIDS among nursing students.

Materials and Methods: Prestructured and pretested questionnaire related to HIV knowledge was administered to the first and second year nursing students. Questionnaire included close-ended multiple choice questions. Students' responses were recorded and analyzed in the form of descriptive statistics such as frequency and percentages.

Result: In this study, it was found that the main source of information among nursing students was Internet (61%). About 62% students did not know that a person can be infected with HIV virus while not having the disease AIDS. About 50% students answered incorrectly for statement "A person with HIV can look and feel healthy and well." About 50% students opined that HIV can be transmitted by kissing—with exchange of saliva of a person who has HIV. About 35% students answered incorrectly regarding the availability of the vaccine for HIV.

Conclusion: There is a gap in the existing knowledge of HIV/AIDS regarding vaccine availability, transmission routes, and general appearance of HIV/AIDS infected people. Nursing student's knowledge could be improved by proper dissemination about the facts related to the HIV infection.

KEY WORDS: HIV/AIDS, nursing students, knowledge, mode of transmission

Introduction

According to global epidemic AIDS facts, around 78 million people have become infected with HIV, and 39 million people have died of AIDS-related illnesses. In 2013, 35 million people were living with HIV, 2.1 million people became newly infected with HIV, and 1.5 million people died from AIDS-related causes worldwide.^[1] According to 2013 statistics, India has the third

largest HIV epidemic in the world. HIV prevalence in India was 0.3%, that is, 2.1 million people.^[2]

The people with HIV/AIDS not only have to face health problems but also have to face discrimination in the society. According to Horizons Research and Programs, one of the strategy to reduce this stigma is by creating changes in individual knowledge, attitudes, and behaviors.^[3]

Nurses have to deal with collecting various body fluid samples of patient for investigation, giving medication as per instructions, taking care of patients, and giving injections.^[4] Nurses and nursing students' attitude toward HIV/AIDS patient is determined by their knowledge of the same. It is important to assess the knowledge of nurses regarding the HIV/AIDS to evaluate the prevailing conditions and gap so that policy measures can be taken to improve the knowledge, if there is a gap. At present, there is scarcity of such data for nursing students in India; hence, this study was designed to assess knowledge of HIV/AIDS among nursing students.

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Materials and Methods

The study was done among total 102 nursing students of the first and second year at BIMS, Belgavi, after obtaining institutional ethical clearance. After obtaining consent from student, they were given prestructured and pretested questionnaire. This questionnaire was already used in another study done in similar setting.^[5] Only knowledge part of questionnaire is included. It is a close-ended multiple choice questionnaire. The responses of students were filled in Excel sheet, and data were analyzed and reported in the form of descriptive statistics (i.e., frequency and percentages).

Result

Most students (64%) answered that they have learnt about HIV/AIDS from peers at the university. The results are shown in Table 1.

Many nursing students responded that they got information mainly from Internet (61%), doctors/nurses (46%), and community health education (41%), whereas they got no information from family members (39%), little information from newspaper (33%), radio (44%), and magazine (36%). The results are shown in Table 2.

HIV/AIDS Knowledge Scale

Table 3 shows HIV/AIDS knowledge scale. About 69% students knew that HIV can reduce body's natural protection against disease. To the question "AIDS is an infective disease caused by a virus," 87% students answered correctly. About 52% students knew that there is no cure for AIDS at present, whereas 28% students answered wrong and 17% were uncertain. About 50% students did not know that "A person with HIV can look and feel healthy and well." About 35% students answered incorrectly for "There is a vaccine available to the public that protects a person from getting the HIV." For the statement "A person can be infected with HIV and not have the disease AIDS," 62% students answered incorrectly. About 87% students knew that "Any person with HIV can pass it on to someone else during sexual intercourse." About 69% students knew that "A pregnant woman who has HIV can pass it on to her baby." For the statement "Condom is an effective means of reducing HIV transmission," only 59% students answered correctly. About 71% students answered correctly to the statement "Spermicidal foam, jelly, and cream are effective in reducing HIV transmission." The results are shown in Table 3.

Transmission Routes

Table 4 shows response of students to the HIV/AIDS knowledge scale—transmission routes. About 89% and 86% students, respectively, knew that it is unlikely that a person will get HIV infection from "shaking hands, touching, or kissing on the cheek with someone who has HIV" and "sharing plates, forks, or glass with someone who has HIV." For the statement,

"Eating at a restaurant where the cook has HIV" and "being fed breast milk of mother with HIV/AIDS?," 70% and 75% students, respectively, responded correctly. About 74% students answered that it is likely that a person will get HIV infection from sharing needles for drug use with someone who has HIV, whereas 65% students knew that it is unlikely that HIV infection will be transmitted by using public toilets. A lot of variation is seen in students' response to the statement that a person will get HIV infection by kissing or being coughed or sneezed on by someone who has HIV. The results are shown in Table 4.

Discussion

This study is done to assess the knowledge regarding HIV/AIDS among the first year and second year nursing students. In this study, it was found that main source of information among nursing students was Internet and doctors and nurses, followed by community health education. They got very less information from family members. Large proportion of students had misconception regarding cure for AIDS, availability of vaccine for HIV, general appearance of HIV-infected patients, and transmission routes. Many students thought that kissing—with exchange of saliva—and being coughed or sneezed on by someone who has HIV can spread HIV infection.

Our findings correlate with the knowledge, attitude, and practices study done among nursing students at MIOT College of Nursing in Chennai. This study had shown misconception among nursing students regarding transmission route, curability, vaccine availability for HIV/AIDS, and general appearance of HIV-infected person.^[5] Another study done among the first year nursing students, television was the main source of information. Misconceptions were found to exist regarding modes of transmission, prognosis, and prevention.^[6]

Study done among medical, nursing, and pharmacy students showed low level of knowledge among students regarding noncurability of infection and availability of antiretroviral therapy.^[7]

A study done in Tirupati showed gap in the knowledge with regard to HIV transmission and high-risk groups among nursing students. The main source of information was found to be academic books.^[8] The study done at a tertiary hospital in Nagpur found that 34% of the nursing staff had very low knowledge regarding HIV/AIDS.^[9] According to one more study done in northeastern part of India, the major source of information among care givers and general population was electronic and print media. Misconception regarding transmission by mosquito bite was found among study population.^[10]

Conclusion

There is a gap in the existing knowledge of HIV/AIDS regarding vaccine availability, transmission routes, and general appearance of HIV/AIDS-infected people. Nursing students' knowledge could be improved by proper dissemination about the facts related to the HIV infection.

Table 1: Source of knowledge

Source of knowledge	Yes		No	
	No. of responses	%	No. of responses	%
I have participated in a HIV/AIDS training of trainer's workshop	18	17	74	72
I have participated in a HIV/AIDS youth peer education workshop	30	29	72	70
I have learnt about HIV/AIDS from peers in my university	66	64	29	28

Table 2: How much information about HIV/AIDS do you gain from following sources?

	No		Little		Some		A lot	
	No. of responses	(%)	No. of responses	(%)	No. of responses	(%)	No. of responses	(%)
Family members	40	39	39	38	19	18	5	4
Friends	13	12	38	37	34	33	17	16
Peers	18	17	31	30	31	30	15	14
In the class at school	18	17	28	27	28	27	29	28
Doctors/nurses	11	10	11	10	29	28	47	46
School health education	13	12	25	24	28	27	33	32
Community health education	15	14	13	12	30	29	42	41
Television	5	4	34	33	33	32	30	29
Radio	30	29	45	44	17	16	9	8
Newspaper	6	5	34	33	38	37	22	21
Magazine	18	17	37	36	26	25	18	17
Bulletin of university	38	37	19	18	25	24	15	14
Internet	14	13	14	13	11	10	63	61

Table 3: HIV/AIDS knowledge scale

	True		False		Uncertain	
	No. of responses	%	No. of responses	%	No. of responses	%
HIV can reduce the body's natural protection against disease	71	*69	28	27	3	2
AIDS is an infective disease caused by a virus	89	*87	10	9	3	2
There is no cure for AIDS at present	54	*52	29	28	18	17
A person with HIV can look and feel healthy and well	36	*35	52	50	14	13
There is a vaccine available to the public that protects a person from getting the HIV	36	35	47	*46	14	13
A person can be infected with HIV and not have the disease AIDS	23	*22	64	62	13	12
Any person with HIV can pass it on to someone else during sexual intercourse	89	*87	6	5	5	4
A pregnant woman who has HIV can pass it on to her baby	71	*69	12	11	19	18
Condom is an effective means of reducing HIV transmission	61	*59	18	17	21	20
Spermicidal foam, jelly, and cream are effective in reducing HIV transmission	12	11	73	*71	15	14
A diaphragm is an effective means of reducing HIV transmission	26	25	45	*44	28	27

*Correct answers.

Table 4: HIV/AIDS knowledge scale—transmission routes. How likely do you think it is that a person will get HIV infection from?

	Likely		Unlikely		Uncertain	
	No. of responses	%	No. of responses	%	No. of responses	%
Shaking hands, touching or kissing on the cheek with someone who has HIV?	14	13	91	*89	7	6
Kissing—with exchange of saliva—a person who has HIV?	51	50	44	*43	8	7
Being coughed or sneezed on by someone who has HIV?	29	28	56	*54	17	16
Sharing plates, forks, or glass with someone who has HIV?	10	9	88	*86	5	4
Eating at a restaurant where the cook has HIV?	12	11	72	*70	17	16
Sharing needles for drug use with someone who has HIV?	76	*74	18	17	6	5
Using public toilet?	18	17	67	*65	16	15
Being fed breast milk of mother with HIV/AIDS?	77	*75	15	14	8	7

*Correct answers.

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