

A STUDY ON HIV/AIDS KNOWLEDGE AMONG NURSING STUDENTS OF TERTIARY CARE HOSPITAL, BHOPAL.Leena Balpande¹, M.M. Gupta², Sanjay S. Agarwal³, U.S. Shukla⁴**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: BACKGROUND: The HIV/AIDS pandemic has become a serious public health problem. As the prevalence of the infection rises, healthcare professionals worldwide can expect greater clinical exposure to infected patients. **OBJECTIVES:** 1. To study the source of information about HIV/AIDS among nursing students. 2. To assess the knowledge of nursing students regarding transmission & treatment of HIV/AIDS. 3. To study the attitude of nursing students towards PLWHA. **METHODS:** A cross sectional study has been done on nursing students of tertiary care hospital. Self-administered questionnaire were used to collect data. **RESULTS:** The results were obtained from 205 respondents. Most of the students are from 20-23 of age group. Majority of students (97.1%) heard about HIV/AIDS. 48.8% nursing students attended training programme on HIV/AIDS. About 61.5% nursing student's talk about HIV/AIDS in college. Association between gender & knowledge is significant ($p=0.003$). Knowledge was higher in males. Association between age & knowledge is significant ($p=0.03$). Knowledge increases with age. Based on present study findings students had positive attitude towards PLWHA. Knowledge and attitudes were not associated ($\chi^2 = 1.347$, $p=0.510$). **CONCLUSION:** The overall knowledge about the diseases was considered to be good among the study participants. Based on present study findings students had good level of positive and favorable attitude regarding HIV/AIDS prevention.

KEYWORDS: HIV/AIDS, nursing students, knowledge, attitude, PLWHA.

INTRODUCTION: The HIV/AIDS epidemic represents the most serious public health problem in India¹. Knowledge and specific information has an important role in HIV/AIDS prevention and the health workers have a central responsibility in prevention, care & treatment. A survey carried out on 500 nurses in India showed that the conversion of their theoretical knowledge into safe practices was shockingly poor. High incidence of accidental exposures and complete ignorance of post-exposure prophylaxis guidelines was another highlight of this study². Assessment of awareness level is important because it helps to determine the impact of previous awareness & prevention efforts made by the government¹.

Nurses constitute a vulnerable group because of their job nature. Proper knowledge and attitude will lead to safe practices and there by controlling the spread of disease. A study conducted on student nurses in Nigeria showed an improvement in the knowledge and attitude towards the disease and care for HIV/AIDS patients, as well as their compliance with universal precautions after an education program for the group.³

The present study was conducted to assess the current level of knowledge of nursing students regarding HIV/AIDS. The information/data collected through this study is utilized to prepare teaching and training material for prevention of HIV infection transmission in nursing students and other health care workers.

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MATERIAL & METHODS: A cross sectional study was conducted in Peoples College of Nursing of Bhopal city with prior permission from college authority. The study was conducted during September & October 2012 on 205 nursing college students of tertiary care hospital from different years of their courses. Self-administered questionnaire were used to collect responses. Student's responses were taken for those who were willing and present at the time of study.

The participants were not forced to answer any question & they were free not to respond or partially respond to any question. Questionnaire includes questions related to modes of transmission of disease, availability of treatment and attitude about people living with HIV/AIDS (PLWHA). For knowledge, each right response was given a score of 1 while a wrong or unsure response was scored zero. Attitude towards HIV/AIDS patients was assessed using a 7-item questionnaire, each has maximum score of 5 (questionnaire include attitude towards the PLWHA & their family, reporting needle injury, confidentiality of their name & report, government funds spent on services). Simple statistical analysis was done using Epi-info.

RESULT: The demographic characteristics of the study population are presented in Table 1.

Variable	Category	Number (%)
Age	16-19	90 (43.90%)
	20-23	109 (53.17%)
	24-30	6 (2.92%)
Gender	Male	32 (15.6%)
	Female	173 (84.4%)
Year of 4 years Nursing Programme	1 st yr.	53 (25.9%)
	2 nd yr.	45 (22.0%)
	3 rd yr.	66 (32.2%)
	4 th yr.	41 (20.0%)
Religion	Hindu	148 (72.2%)
	Muslim	7 (3.4%)
	Christian	50 (24.4%)

TABLE 1: SOCIO DEMOGRAPHIC DISTRIBUTION OF RESPONDENT (n=205)

School & college was found to be main sources of information about HIV/AIDS (48.7%) followed by mass media (TV, radio, newspaper etc.) i.e. 45.5%. Most of the students (61%) talks about HIV/AIDS in college, 37% among friends and very few (2%) in their family. About 48.8% students have attended training programmes in HIV/AIDS and 28.8% in sex education. But there is no significant association of their knowledge with their training programmes ($\chi^2 = 7.587$, $p = 0.108$). Majority of students (97.6%) felt the need of training programmes/seminars and other educational programmes regarding HIV/AIDS in educational institution.

Attitude towards HIV/AIDS patients was assessed using a 7-item questionnaire. Based on scoring method, attitude is categorised as very poor (scoring between 0-7), poor (8-14), satisfactory

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(15-21), good (22-28) and excellent (29-35). About 60.49% students have good attitude regarding HIV/AIDS. 27.32% students have excellent attitude.

	Yes (%)	No (%)
Have you heard about HIV/AIDS?	199 (97.1%)	6 (2.9%)
Is there any Difference between HIV infection and AIDS?	125 (61%)	80 (39%)
Is HIV/AIDS is a severe disease?	185 (90.2%)	20 (9.8%)
Can HIV/AIDS detected by blood test?	181 (88.3%)	24 (11.7%)
Whether truck drivers, prostitutes, drug addicts, Homosexual are at high risk?	110 (53.7%)	95 (46.3%)
Is there a treatment for HIV/AIDS	119 (58%)	86 (42%)
Can AIDS cause death	172 (83.9%)	33 (16.1%)

Table 2: KNOWLEDGE REGARDING HIV/AIDS (N=205)

Association between gender & knowledge is significant ($p=0.003$). Knowledge was higher in males. Association between age & knowledge is significant ($p=0.03$). Knowledge increases with age.

74.6% students thought persons with HIV/AIDS cannot feel healthy & look well. 61% students thought that tuberculosis & weakness is the main symptom while 26.8% students consider cough & fever is the main symptom and 12.2% students don't know about any symptom.

73.7% knew about the prevention (condoms, adopt safe practices, not sharing needles, safe blood transfusion etc.) & they can protect themselves from this infection.

Use of infected needle	46	22.43%
By transfusing infected blood	51	24.87%
Unprotected sexual intercourse	63	30.73%
Mother to child	23	11.21%
Didn't response	22	10.73%

TABLE 3: KNOWLEDGE REGARDING MODE OF TRANSMISSION

Regarding knowledge about mode of transmission 183 students responded to these questions (Table 3).

DISCUSSION: The present study aimed to assess knowledge, about HIV/AIDS among undergraduate nursing students. As in this study C. Azodo et al in their survey of HIV/ AIDS related knowledge & attitude among dental nursing students in South Western Nigeria (2007) found the respondents overall mean of HIV/AIDS knowledge score was good (13.2)⁴, while in the study of Chizoma M Ndikom et al in their cross sectional study on nurses/ midwives in Owerri, Nigeria found 51% had moderate level of knowledge & 34.2% had low level of knowledge⁵. But in the study of Namaitijiang Maimaiti done on the students of Xinjiang they found 74.5% students had good level of knowledge⁶.

In present study college/ school was the main source of information while in the study of C.Azodo et al⁴electronic media was identified as the major source of information on HIV. Similar

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findings were found by EmanTaheret all in their interventional study done on two nursing groups in Cairo University (2011)⁷.

In present study students consider unprotected sexual intercourse is the main mode of transmission of disease (Table 3) while in the study of Namaitijiang Maimaiti⁶ 80% of students considered infection transmitted via sharing needles /syringes as well as vertical transmission from mother to child but in present study 11.21% students thought that infection transmitted through mother to child. In the study of C. Azodo⁴ among dental nursing students reported modes of transmission are unprotected sex (97.8%), breastfeeding (97.8%), blood transfusion (95.5%), & sharing of sharp objects (98.9%) but in the study of EmanTaher⁷ et al study they found transmission of infection through infected blood as well as sharing of syringes are the main route and in the study of Helena Nordkvist done among midwifery students of Vietnam⁸ 99% reported infection spread through sexual intercourse.

In present study students knew that HIV/AIDS is a severe disease (Table 2) but the percentage of this is only 7.1% in the study of EmanTaheret⁷ et al while the percentage is high i.e. 98.1% in the minor field study of Helena Nordkvist done among midwifery students of Vietnam⁸.

In our study 74.6% students thought persons with HIV/AIDS cannot feel healthy & look well similar kind of percentage i.e. 68.6% found in the study of Eman Taher⁷ et al in which students thought than an HIV infected person looks tired & ill; but in the study of C. Azodo ⁴et al 48.3% believed that all HIV positive patients look unhealthy.

In present study 42% students don't know about treatment of the disease but the 85.4% respondents were aware that there is no cure yet for HIV/AIDS in the study of C. Azodo ⁴et al. similar finding i.e. 81.4% found in the EmanTaher⁷ et al. study.

In our study most of the students talks about HIV/AIDS in college, 37% among friends & very few in their family similar kind of result found in the study of C. Azodo ⁴et al. but in different categories like in his study 62.9% respondents had discussed HIV-related issues most frequently with classmates/friends, 58.4% with parents/guardian, this percentage is very low in our study.

Knowledge of preventive measures in our study is 73.7% knew about the prevention (condoms, adopt safe practices, not sharing needles, safe blood transfusion etc.) & they can protect themselves from this infection, but 22% don't know about the preventive measures; this is similar to Namaitijiang Maimaiti ⁶study i.e. 65-75% thought condom can prevent HIV transmission during sexual intercourse. The majority of participants (75.8%) in the study of Helena Nordkvist⁸ et al reported that they know how to protect themselves from HIV transmission in their work⁸.

With proper knowledge & health behavior, nurses in general can play an important role in the health education of individuals & groups, & also play a role model role for lay people & the community at large⁹. This study suggests that the education system needs to implement specific & focused educational programs for students & promote health promotion. It is important that students understand HIV prevention & transmission, as well as develop positive attitude & good practice⁶.

LIMITATION: The study had limitations. The small sample size makes it difficult to generalize the study results outside this institution. Type of information and knowledge received from various sources cannot be analyzed fully.

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CONCLUSION: The overall general knowledge about the diseases was considered to be good among the study participants. Based on present study findings students had positive attitude towards PLWHA. Knowledge and attitudes were not associated. It was observed in the study that a good number of students were aware of modes of transmission of HIV/AIDS. Still they need to improve their knowledge on sexual & reproductive health, including HIV/AIDS issues. These students may need more education & training on the subject.

RECOMMENDATION: Nursing curriculum should include & conduct seminars/health talks, training programmes, and educational programmes on HIV/AIDS. Adoption of safe practices & standard precautions. Emphasis must be placed on in depth discussion on HIV/AIDS issue by experienced health workers & lectures with nursing students in order to clarify existing misconceptions & discourage discriminatory behaviour.

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