

A Study of knowledge, attitude and practices (KAP) on HIV/AIDS among final year B.Sc. and GNM nursing students in a tertiary care teaching hospital, South India.

HOSPITAL ADMINISTRATION

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ABSTRACT

Introduction:- AIDS is a global health problem today. Inadequate knowledge, negative attitudes and risky practices are major hindrances in preventing spread of HIV. Nurses and nursing students are an important component of health care delivery system. Nurses are largest deliverer of health care worldwide. The nursing staff plays a major role in looking after the diagnostic needs, therapeutic help and psychological support of the patients' So this descriptive cross sectional study was conducted with an objective to assess the knowledge, attitude and practices (KAP) about HIV/AIDS among final year B.Sc. and GNM nursing Students in College and school of nursing of a tertiary care teaching hospital.

Methodology:- Data was collected using pre-designed and self-administered questionnaire. Questionnaires were distributed to all the students simultaneously during their regular morning classes.

Results:- 75.8% of GNM students were found to have a high level of knowledge regarding HIV/AIDS compared to 75.3% B.Sc. nursing students. 69.3% of B.Sc. nursing students were found to have a positive attitude towards HIV/AIDS compared to 68.8% of GNM students. 61% of GNM students were found to have safe practices related to HIV/AIDS compared to 56.8% B.Sc. nursing students.

Recommendations:- Training programmes for nursing students should be organised intermittently to ensure healthy practices. There is a need to provide essential knowledge about HIV/AIDS to students from early age itself. Implementation of specified, focussed, continued and strengthened Education can improve the knowledge attitudes and bring changes in practices.

KEYWORDS:

HIV/AIDS, Nursing students, Knowledge, attitudes and practices

INTRODUCTION:

Acquired immunodeficiency syndrome (AIDS) is a illness caused by a retrovirus known as Human immunodeficiency virus (HIV) and is a global health problem. Once infected the person remains infected with HIV for life and in course of time it causes AIDS. Being a slow virus, it causes slow progressive damage to the target tissues, namely the immune system and the central nervous system. AIDS is among the leading cause of death globally and remains the primary cause of death in Africa. It is one of the best known chronic diseases that needs daily medications provided by healthcare system of different regions of the world in order to control the associated complication and maintain good health. It is the most serious of the infectious disease challenges to public health. According to WHO, the HIV/AIDS pandemic is growing at alarming phase. Inadequate knowledge, negative attitudes and risky practices are major hindrances in preventing spread of HIV.¹

HIV, the disease whose mode of transmission is known and largely preventable but due to lack of knowledge and practices about HIV/AIDS in general population makes it rapid spread in our country.² Patient safety is central concern of current health care delivery systems. It is an important indicator of health care quality.³ Nurses and nursing students are an important component of health care delivery system.⁴ Nurses are largest deliverer of health care worldwide. The nursing staff plays a major role in looking after the diagnostic needs, therapeutic help and psychological support of the patients'. They are mainly responsible for collection of blood and other laboratory samples, oral and parenteral drug administration, preparing bed, sending laundry, etc. They can be described as heart and soul of every hospital. It is important to assess the knowledge, attitude and practices of nurses regarding the HIV/AIDS to evaluate the prevailing conditions so that policy measures can be taken to improve the knowledge, attitude and safe practices.⁵ The main goal of HIV and AIDS education in nursing training programme is to equip them with the right information needed to provide effective and

culturally appropriate care to their patients and at the same protect themselves against infection.⁶

AIM and OBJECTIVE:

To assess the knowledge, attitudes and practices (KAP) about HIV/AIDS among the final year BSc and GNM nursing students in a tertiary care teaching hospital.

METHODOLOGY:

This cross sectional study was conducted in college of nursing and school of nursing of a tertiary care teaching hospital among 100 final year BSC and GNM nursing students, after obtaining institutional ethical clearance. The purpose of the study was explained to all the students who participated in the study. Informed verbal consent was taken from them. Information was collected on a pre-designed and self-administered questionnaire. Questionnaires were distributed to all the students simultaneously during their regular morning classes. Questionnaire includes demographic details and 30 questions. Responses of the students were filled in Excel sheet, and data were analysed and reported in the form of descriptive statistics (i.e. frequency and percentages) by using Statistical package for social sciences (SPSS) software and chi-square test was used to find the association and 'p' value of <0.05 (with 95% confidence interval) was taken as statistically significant.

Period of the study was from July 2016 to October 2016.

RESULTS:-

Out of 100 students, majority were females, Among 50 BSc nursing students 44 (88%) are females and among 50 GNM students 43 (86%) are females and all students are in the age group of 20-24 years

Gender	BSC (n=50)	GNM (n=50)
Females	44 (88%)	43(86%)
males	6 (12%)	7 (14%)

It was found that 100% of BSc Nursing students know that HIV can be transmitted through sharing needles whereas among GNM group only 92% of them answered correctly so the knowledge regarding spread of HIV/AIDS among intravenous users by sharing needles was satisfactory in the study. Both the groups aware that receiving a blood transfusion that is not screened properly can lead to HIV transmission. 88% of the BSc students know that usage of condom during sexual intercourse reduces the risk of HIV transmission which is low when compared to GNM students, as 96% of the GNM students are aware of that. Majority students among both the groups know that a woman can transmit HIV to her child during pregnancy, but only 60% among BSc and 70% among GNM knew that it can be transmitted during labour and remaining 40% BSc and 30% GNM students answered wrong which is an important area to be noted. If mother is HIV +VE, the baby can be delivered via caesarean section so as to prevent or reduce the transmission to baby, only 20% of the BSc nursing students knew about this and 80% were not aware of the same which is a matter of concern but 72% of the GNM nursing students knew about it. Although the clinical outcomes of HIV infected patients have been improved by ART and Anti-Retroviral therapy can only reduce the HIV virus multiplication but it cannot completely cure the patient and 80% of the BSc nursing students knew this but among GNM only 34% students knew it and 66% of GNM students answered that antiretroviral therapy can actually cure HIV. So over all comparison between BSc and GNM nursing students regarding knowledge of HIV/AIDS showed that both the groups have

almost equal level of knowledge about HIV/AIDS.

54% of BSc students and 46% of GNM students are worried that they may become infected with HIV if they provide care to HIV+VE patients and 10% students of both the groups said that other people thinking they are also infected with HIV worried them most after providing care to HIV +VE patients. But majority of Nursing students of both the groups were ready to provide them with appropriate health care services and also to counsel the HIV +VE patients which is very much appreciable. 88% of the BSc students and 78% of the GNM group said that HIV positive woman has right to become pregnant. Only 46% of them in BSc group and 58% of them in GNM group said that they are comfortable in collecting laboratory samples from HIV+VE patients. So on the whole to compare between attitudes, 69.3% of BSc nursing students were found to have a positive attitude towards HIV/AIDS and among GNM students 68.8% of them have positive attitude. (fig 2). May be due to some misconceptions about the disease there is no complete acceptance of positive cases by the participants

Most young people are infected with HIV via sexual route. 84% of the GNM nursing students and 68% of BSc nursing students answered correctly to it. More than 90% students of both the groups know that severity of the disease can be monitored by CD4 counts estimation. 61% of the GNM nursing students have safe practical knowledge about HIV/AIDS (fig:3).

Table 1: Comparison of Responses to KNOWLEDGE among BSC and GNM nursing students on each question

Knowledge	BSC Students (n=50)		GNM Students(n=50)		P Value
	Yes	No	Yes	No	
1) A person can become infected with HIV by	Num (%)	Num (%)	Num (%)	Num (%)	
a) Having unprotected oral sex	21(42%)	29(58%)	24(48%)	26(52%)	0.546
b) Bathing in same water as an HIV +VE	4(8%)	46(92%)	11(22%)	39(78%)	0.0499
c) Sharing Needles	50(100%)	0	46(92%)	4(8%)	0.125
d) Receiving a blood transfusion that is not screened for HIV	49(98%)	1(2%)	47(94%)	3(6%)	0.6101
e) Through a mosquito bite	2(4%)	48(96%)	13(26%)	37(74%)	0.00206
f) Sharing silverware with an HIV +VE Person	2(4%)	48(96%)	15(30%)	35(70%)	0.00053
2) A person can reduce his/her risk of becoming infected with HIV	Num (%)	Num (%)	Num (%)	Num (%)	
a) Abstains from sexual intercourse	40(80%)	10(20%)	43(86%)	7(14%)	0.4244
b) Maintains a healthy diet	14(28%)	36(72%)	22(44%)	28(56%)	0.0955
c) Use a new unused needle for each injection	49(98%)	1(2%)	45(90%)	5(10%)	0.092
d) Always uses a condom during sex	44(88%)	6(12%)	48(96%)	2(4%)	0.268
3) Having more sexual partners increases the risk of becoming infected with HIV ?	50(100%)	0	49(98%)	1(2%)	-
4) Despite receiving a negative HIV test result, a person could still be infected with HIV ?	33(66%)	17(34%)	29(58%)	21(42%)	0.409
5) A woman can transmit HIV to her child....	Num (%)	Num (%)	Num (%)	Num (%)	
a) During pregnancy	40(80%)	10(20%)	41(82%)	9(18%)	0.798
b) During childbirth	30(60%)	20(40%)	35(70%)	15(30%)	0.294
c) Through breast-feeding	32(64%)	18(36%)	43(86%)	7(14%)	0.011
6) The possibility of mother-to-child transmission of HIV can be reduced if...	Num (%)	Num (%)	Num (%)	Num (%)	
a) The mother receives antiretroviral medication treatment during the pregnancy?	45(90%)	5(10%)	46(92%)	4(8%)	-
b) The baby is delivered via caesarean section.	10(20%)	40(80%)	36(72%)	14(28%)	<0.001
c) The mother is tested for HIV during prenatal care	45(90%)	5(10%)	45(90%)	5(10%)	-
7) Antiretroviral therapy...	Num (%)	Num (%)	Num (%)	Num (%)	
a) Helps people living with HIV live longer.	41(82%)	9(18%)	42(84%)	8(16%)	0.789
b) Can cure an HIV-positive client.	10(20%)	40(80%)	33(66%)	17(34%)	<0.01
c) Can decrease the risk of HIV transmission	41(82%)	9(18%)	48(96%)	2(4%)	0.0252
d) Frequently has side effects that make clients feel physically ill.	23(46%)	27(54%)	38(76%)	12(24%)	0.0021
8) If someone is infected with HIV, he/she has a higher risk of becoming infected with other sexually Transmitted infections ?	43(86%)	7(14%)	45(90%)	5(10%)	0.538
9) If someone is infected with certain sexually transmitted infections, he/she has a higher risk of becoming infected with HIV?	23(46%)	27(54%)	43(86%)	7(14%)	<0.001
10) Do you think that sexually transmitted infection testing for clients should be a part of the HIV prevention programme at your organization?	46(92%)	4(8%)	45(90%)	5(10%)	-

Table 2: Comparison of ATTITUDES among BSC and GNM nursing students on each question.

Attitude	BSC		GNM		P Value
	Notified	Not notified	Notified	Not notified	
11) According to the protocols adopted by your organization, when a client receives a positive HIV test result, which of the following people / places should be notified of the results?	Num (%)	Num (%)	Num(%)	Num (%)	
a) The client	46(92%)	4(8%)	44(88%)	6(12%)	0.505
b)The client's current sexual partner(s)	49(98%)	1(2%)	36(72%)	14(28%)	<0.001
c)The client's past sexual partner(s)	39(78%)	11(22%)	37(74%)	13(26%)	0.639
d)The client's parents if he/she is a youth	38(76%)	12(24%)	39(78%)	11(22%)	0.812
e) The Ministry of Health (notification of client name and status)	27(54%)	23(46%)	37(74%)	13(26%)	0.037
f) The client's employers	20(40%)	30(60%)	20(40%)	30(60%)	-
g) The client's insurance company	12(24%)	38(76%)	21(42%)	29(58%)	0.055
12) Which of the preceding issues worry you the most ?	Num	Percentage	Num	Percentage	0.0448
A) Becoming infected with HIV	27	54%	23	46%	
B)clients would no longer come to you for care	12	24%	7	14%	
C)Other people thinking that you are also infected	5	10%	5	10%	
D) Whether or not you have received enough training on HIV/AIDS	3	6%	1	2%	
E) None of the preceding issues worry you at all	3	6%	14	28%	
13) If your next appointment is with a client who has AIDS, how nervous would you feel?	Num	Percentage	Num	Percentage	0.402
A)Very nervous	2	4%	7	14%	
B)Somewhat nervous	19	38%	17	34%	
C)Not nervous	23	46%	24	48%	
D)Not applicable	6	12%	2	4%	
14) If a client's HIV test results are positive, how prepared do you feel to...	Num(%)	Num%	Num(%)	Num(%)	
A)Provide him/her with appropriate health services?	47(94%)	3(6%)	50(100%)	0	0.240
B) Counsel him/her appropriately?	50(100%)	0	49(98%)	1(2%)	-
C)Refer him/her elsewhere for services you cannot provide?	36(72%)	14(28%)	40(80%)	10(20%)	0.349
	Yes	No	Yes	No	
15) Do you provide services to clients (i.e. healthcare, education, counselling)?	49(98%)	1(2%)	47(94%)	3(6%)	0.610
16) Did you attend any training on HIV Voluntary Counseling and Testing?	16(32%)	34(68%)	14(28%)	36(72%)	0.662
17) An HIV-positive woman has the right to become pregnant?	44(88%)	6(12%)	39(78%)	11(22%)	0.183
18) An HIV-positive teacher should be allowed to teach?	48(96%)	2(4%)	46(92%)	4(8%)	0.673
19) How would you feel taking laboratory samples from a person having with HIV?	Num	Percentage	Num	Percentage	0.295
A)Comfortable	23	46%	29	58%	
B)Not comfortable	18	36%	11	22%	
C)Not sure	9	18%	10	20%	
20) services most frequently provided are?	Num.	percentage	Num	percentage	0.0869
A) Medical/nursing (healthcare)	6	12%	15	30%	
B)Counselling	30	60%	24	48%	
C)Education	14	28%	11	22%	

Table 3: Comparison of the responses to PRACTICES of BSC and GNM nursing students.

Practice	BSC		GNM		P Value
	Yes	No	Yes	No	
	Num(%)	Num(%)	Num(%)	Num(%)	
21) A provider should take the same bio-safety (protective) measures with all clients, regardless of the client's HIV status?	39 (78%)	11(22%)	43(86%)	7(14%)	0.297
22) A client with HIV can get his/her CD4 count to know how advanced his/her HIV infection is ?	47(94%)	3(6%)	49(98%)	1(2%)	0.61
23) Barber shops and Beauty parlors can serve as important means of spread of HIV?	31(62%)	19(38%)	29(58%)	21(42%)	0.682
24) Oral contraceptives can prevent the transmission of HIV?	6(12%)	44(88%)	18(36%)	32(64%)	<0.01
25) Condoms should be widely available and condom vending machines should be installed in public places?	29(58%)	21(42%)	38(76%)	12(24%)	0.055
26) I am comfortable being friends with a HIV positive person?	32(64%)	18(36%)	33(66%)	17(34%)	0.833
22) If you were counselling an HIV-positive woman about her contraceptive options, which of the following best you will recommend ?	Num	Percentage	Num	Percentage	<0.001
A) condoms over all other contraceptive options.	12	24%	28	56%	
B) abstinence over all other contraceptive options.	11	22%	3	6%	
C) sterilization over all other contraceptive options.	7	14%	1	2%	
D) use of condoms and an additional method at the same time.	15	30%	7	14%	
E) I would be unsure which option to recommend.	5	10%	11	22%	

28) What mode of HIV transmission is growing more rapidly than any other?	Num	percentage	Num	Percentage	<0.001
A) Sharing contaminated needles	7	14%	11	22%	
B) Blood transfusions and blood products	15	30%	6	12%	
C) Contact by medical or dental personnel	1	2%	33	66%	
D) Congenital or Neonatal AIDS	27	54%	0	0	
29) How likely is it that a health care provider will become infected with HIV by providing care to an HIV-positive client?	Num	Percentage	Num	Percentage	0.007
A) Very likely	15	30%	14	28%	
B) Not very likely	16	32%	11	22%	
C) Not likely at all	12	24%	4	8%	
D) I'm not sure	7	14%	21	42%	
30) Most young people are infected through?	Num	Percentage	Num	Percentage	0.402
A) Drug abuse	12	24%	5	10%	
B) Sex	34	68%	42	84%	
C) Blood transfusion	3	6%	3	6%	
D) Perinatal transmission	1	2%	0	0%	

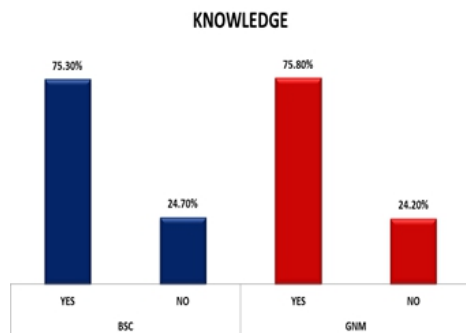


Fig 1:- Comparison of Knowledge between BSC and GNM nursing students.

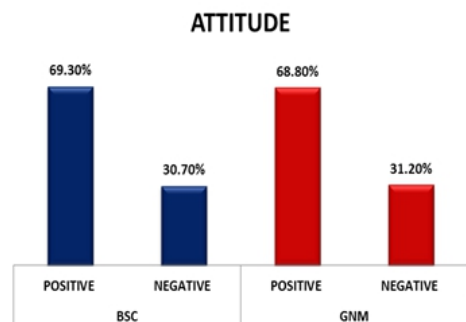


Fig2:- Comparison of Attitudes Between BSC and GNM nursing students.

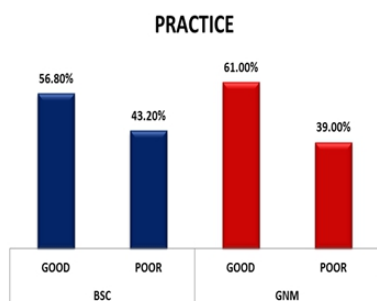


Fig3:- Comparison of Practices between BSC and GNM nursing students.

CONCLUSION:

- Knowledge, attitude and practices are important tools for HIV/AIDS prevention and control.

- The current study sought to explore the knowledge, attitude and practices on HIV/AIDS of final year BSC and GNM nursing students of college and school of nursing in a tertiary care teaching hospital.
- About 24.7% of Bsc and 24.2% of GNM nursing students had low knowledge regarding HIV/AIDS which is a matter of concern. 43.2 % of the Bsc students and 39 % of GNM nursing students had poor practical knowledge
- The gaps in the knowledge needs to be addressed, Efforts has to be put in to convert the theoretical knowledge into safe practices.
- More than 50% of the students of both the groups had a positive attitude towards being friends with HIV +VE individuals

LIMITATION OF THE STUDY

The study included only Final Year Bsc and GNM Nursing students.

RECOMMENDATIONS:

- Training programmes for nursing students should be organised intermittently to ensure healthy practices.
- There is a need to provide essential knowledge about HIV/AIDS to students from first year.
- Implementation of specified, focussed, continued and strengthened Education can improve the knowledge attitudes and bring changes in practices on HIV/AIDS.
- Seminars talks and guest lectures on health issues and focus group discussions can be conducted in college on a regular basis.
- Issues of HIV/AIDS must be kept alive in minds to protect themselves.
- It is important to highlight the potential need to improve the level of knowledge among nursing students towards HIV/AIDS as they have key role in prevention, care and treatment in their future career as nurses.
- To promote students for active participation in AIDS awareness campaigns etc.

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