Journal of Research in Medical and Dental Science
2021, Volume 9, Issue 8, Page No: 111-119

Available Online at: www.jrmds.in
eISSN No.2347-2367: pISSN No.2347-2545

Assessment of Knowledge of GNM Students on STD/Aids in Karnataka

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ABSTRACT

Background: This stigma and discrimination towards people living with HIV/STD it is high among health workers as well as the general population. Knowledge and specific information has an important role in HIV/AIDS prevention and the health workers have a central responsibility in prevention, care and treatment. Therefore it is important to assess knowledge and attitudes towards people living with HIV/AIDS among health professionals. Gained information can be used to direct educational programs.

Objectives: To assess the level of knowledge of GNM students on STD/AIDS.

Methods: A descriptive study approach and Cross sectional Descriptive design was used. Findings: Overall level of Knowledge score among III yr. GNM nursing students. Majority of the subjects had moderate level 545(54.4%). 400 (40.0%) had inadequate knowledge, and (55)5.5% of them were adequate level of knowledge. Study results showed that update and improve the level of the knowledge on STD/ AIDS. The data revealed that commonly found majority of them had moderate level of knowledge; the reason was that they would have got the information about STD/AIDS through curriculum and Media.

Conclusion: Study results showed that update and improve the level of the knowledge on STD/ AIDS. The data revealed that commonly found majority of them had moderate level of knowledge; the reason was that they would have got the information about STD/AIDS through curriculum and Media.

Key words: HIV, STD, Knowledge

HOW TO CITE THIS ARTICLE: AR Bharathi, Assessment of Knowledge of GNM Students on STD/Aids in Karnataka, J Res Med Dent Sci, 2021, 9(8): 111-119

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Received: 19/07/2021
Accepted: 10/08/2021

INTRODUCTION

Since the 1980s, there has been a lot of debate around the origin of HIV. Here we discuss evidence about the origin of HIV, and find out how, when and where HIV first began to cause illness in humans. There are two types of HIV, known as HIV-1 and HIV-2, which have different origins and causes. The first AIDS case in India was detected in 1986and since then HIV infection has been reported in all states and union territories. India has the world's third largest population living with HIV/AIDS, with a prevalence rate of 2.3 million National AIDS Control Organisation / United Nations Program (NACO/ UNAIDS, 2007). This stigma and discrimination towards people living with HIV/STD it is high among health workers as well as the general population. Knowledge and specific information has an important role in HIV/AIDS prevention and the health workers have a central responsibility in prevention, care and treatment. Therefore it is important to assess knowledge and attitudes towards people living with HIV/AIDS among health professionals. Gained information can be used to direct educational programs. These infections may be spread through vaginal, anal and oral sex. There are at least 25 different STIs/STDs with a range of different symptoms. Most STIs or STDs will only affect you if you have sexual contact with someone who has an infection. However, some infections, for example scabies, are generally called STIs or STDs because they are most commonly transmitted sexually, but they can also be passed on in other ways (Figure 1).

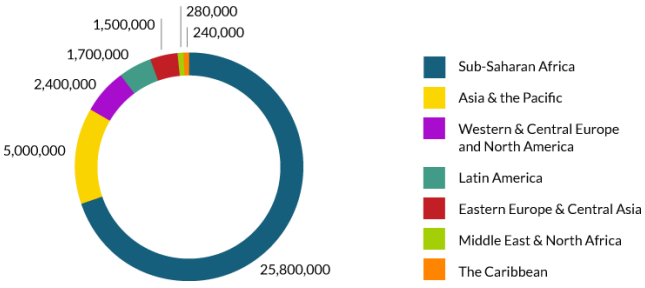

Figure 1: Number of people living with HIV worldwide.

Funding the HIV response in India

Previously, efforts to tackle the HIV epidemic in India relied heavily on international funding. However, India has increasingly taken responsibility for financing its HIV response and in 2012, committed to financing 90% of its HIV and AIDS programmes. The vast majority (67%) of the NACP-III budget was spent on HIV prevention, with 17% going to treatment, care and support.

The future of HIV and AIDS in India

Over the past decade, India has made significant progress in tackling its HIV epidemic, especially in comparison with other countries in the region. For example, while new HIV infections have fallen by more than half since 2001, the number of new HIV cases in neighboring Pakistan has increased eight-fold. A major reason for the country's success has been the sustained commitment of the Indian government through its National AIDS Control Programme, which has been particularly effective at targeting high-risk groups such as MSM, sex workers and PWID. However, better HIV surveillance and targeted. A study in India to reduce HIV stigma among nursing students to assessing the involvement with regard to reduction of STD/AIDS related-stigma and discrimination have been documented. They explored nursing students' perception about caring and communicating with HIV people in Greece and found discriminatory attitude to be prevalent among them. They reported 87% and 95% demonstrating intent to discriminate while dispensing medications and drawing blood, respectively. Furthermore and discriminatory attitude was found to be common among student nurses in Russia. A lack of STD/AIDS-related stigma and discrimination reduction studies in the literature among student nurses in Nigeria has resulted in a knowledge gap. This study, therefore, focused on knowledge, attitude, and practice of HIV/AIDS-related stigma and discrimination reduction among student nurses in southwest Nigeria.

This study was carried out for the assessment of Knowledge, Attitude and Practice of GNM Students on STD/AIDS in Karnataka. So this is an attempt to understand how well our student nurses are prepared to tackle the situations effectively, with Knowledge, Attitude and Practice they are ready to go to clinical and community area. In view of the magnitude of the problem, the investigator felt that it would be more suitable for the diploma nursing students and by improving the level of knowledge and practice, it would be possible to bring about desirable attitudes on STD/AIDS [1-10].

MATERIALS AND METHODS

A descriptive study approach and Cross sectional Descriptive design was used. The study sample size were selected from ten schools of nursing out of 300 schools of nursing available at Karnataka. In that III year diploma student alone consider as a samples based on the inclusion and exclusion criteria. The sample size of the present study compressed of 1000 from ten different schools of nursing. Each of four zones (eg: North, East, West & South) in Bangalore, Karnataka District. All 10 schools of nursing are run by private management Formal permission from the principal/ head of the institution was obtained after proper explanation regarding the study. Each school of nursing had different intakes, but among that only 80-100 students were selected in each school of nursing, meeting inclusion & exclusion criteria

Systematic non probability purposive sampling technique was adopted for the collection of data. Structure questionnaire format having two divisions Such as, section I – Demographic variables, section - ii Knowledge assessment tool, They provided separate room with all the facilities, so study went on comfortably. All ten institutions were well arranged and the schedule could be planned without any interruption. This also gave an opportunity for the investigator to assess the III year GNM student's level of knowledge, on STD/AIDS. The entire programme went on well with good co-operation from students as well as management along with all the nursing and non-nursing faculty members.

Inclusion criteria

Student who were willing to participate at time of study. Students of III Year GNM students at selected school of Nursing in Karnataka.

Exclusion criteria

Who were selected for pilot study not included? The knowledge assessment tool contains section–I, in general information of knowledge aspects. Such as definition, causes, transmission and confirmation test. Section–II treatment includes window period, opportunity infections, symptoms, any vaccination, any treatment, universal precautions and screening of STD/AIDS. Section – III, The knowledge on risk of getting infection coughing, sharing clothes and other personal items, and section–IV, knowledge related to STD/AIDS contains spreading AIDS, HIV testing, anti-retroviral drugs and side effects.

RESULTS

In general the results show the level of knowledge among GNM students on AIDS / STD. I found three aspects of knowledge assessment as follows.

Table 1, reveals the distribution of GNM students' by have you attended the training on AIDS, the results revealed that that majority of subjects 92.0% were attended; lesser numbers only 8.0% were not attended. The reason for more attended is compulsory for the students and not attended was absence on the day.

Table 1: Table-1 Have you attended the training on AIDS N=1000.

S. No	Have you attended the training on AIDS	%
1	Yes	92.00%
2	No	8.00%

The picture exhibits the distribution of GNM students' by where did you burse an AIDS patients, majority 93.5% of them were working at Government hospital, Private and Community hospital were 4.0% and 2.5% respectively. Data revealed that commonly found majority of them were posted at Government Hospital. The reason is STD/AIDS is a developing problem and also communicable disease (Figures 2 and Figure 3).

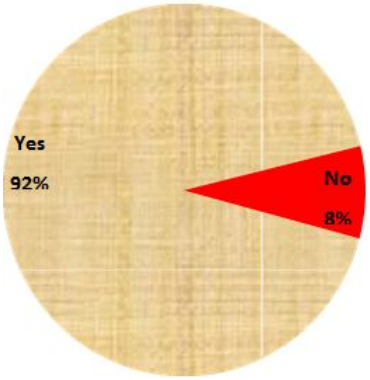

Figure 2: Frequencies and percentage distribution of have you attended the training on AIDS among III yr. GNM students.

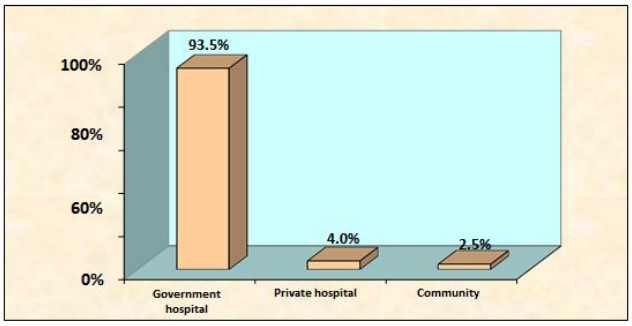

Figure 3: Frequency and percentage distribution of where did you nurse AIDS patients among III yr. GNM Students.

Table 2, shows exhibits domain wise percentage of GNM nursing students' knowledge score distribution on STD/AIDS. General information of STD/AIDS scored high with 583(53.8%). knowledge on clinical materials considers infective on STD/AIDS was least with 446 (44.6%).

Table 2: Each domain wise percentage of knowledge score N=1000.

Domains	No. Of Students	%
General information of STD/HIV/AIDS	538	53.80%
Knowledge on treatment /condom use age of STD/HIV/AIDS	493	49.30%
Knowledge on risk of getting infection	456	45.60%
Knowledge on which of the following clinical materials consider infective	446	44.60%
Knowledge related to STD/AIDS	482	48.20%
Overall Total	483	48.30%

Table 3, shows domain wise percentage of GNM nursing students' level of knowledge score distribution on STD/AIDS. They had adequate knowledge on General information of STD/AIDS were 71, Moderate level of knowledge majority were 598 related to STD/AIDS high level of inadequate knowledge on Risk of getting infection of STD/AIDS. Study results showed that there was a need to update and improve level of the knowledge on STD/AI.

Table 3: Each domain wise level of knowledge score N=1000.

	Level of Knowledge(N=1000)		
Domains	Inadequate	Moderate	Adequate
General information of STD/AIDS	370	559	71
Treatment /condom use age of STD/AIDS	410	530	60

Risk of getting infection	466	494	40
Clinical materials consider infective	408	544	48
Related to STD/AIDS	346	598	56
Overall Total	400	545	55

Table 4, shows overall level of Knowledge score among diploma nursing students. Majority of the subjects had moderate level 545(54.4%). 400 (40.0%) had inadequate knowledge, and (55)5.5% of them there was a need had adequate level of knowledge. Study results showed that update and improve the level of the knowledge on STD/AIDS.

Table 4: Overall level of knowledge on STD/AIDS N=1000.

Level of knowledge	No. of students	%
Inadequate	400	40.00%
Moderate	545	54.50%
Adequate	55	5.50%
Total	1000	100.00%

Table 5, depicts the domain wise mean and Percentage distribution of Knowledge Score. The study result shows that for general information of STD/AIDS having ten questions, the mean value is 5.38 (53.8%). Treatment related questions were twenty one mean values 10.37(49.3%). Fourteen questions from risk of getting infection had the mean values 6.39(45.6%). Eleven questionnaires were affecting with clinical infections showed 4.91 mean values with 44.6%, and related to STD/AIDS contained fifteen questions mean values 7.23(48.2%). The above findings revealed that there were good in general information of STD/AIDS get they had to expand their knowledge on other aspects of STD/AIDS.

Table 5: Each domain wise mean knowledge score and percentage of knowledge score N=1000.

Domains	No. of Questions	Mean Knowledge Score	% of Knowledge Score
General information of STD/AIDS	10	5.38	53.80%
Treatment /condom use age of STD/AIDS	21	10.37	49.30%
Risk of getting infection	14	6.39	45.60%
Clinical materials consider infective	11	4.91	44.60%
Related to STD/AIDS	15	7.23	48.20%
Total	71	34.28	48.30%

Table 6, infers the association between level of knowledge and their demographic variables. Age between 26 -30 yrs. Shows high percentage 68.0% (p=0.001***) Moderate level of knowledge. About sex male were having more Moderate level of knowledge 59.4 %(p=0.01**). Nuclear family shows more 56.6% (p=0.01**). Married people were moderately 61.1% (p=0.001***) in high level. People who are living at remote area have highly adequate level of knowledge 63.3% (p=0.02*).

Table 6: Association between level of knowledge and their demographic variables N=1000.

		level of knowledge						Total	Chi square test
		inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Age	16 -20 yrs	335	39.90%	466	55.50%	39	4.60%	840	x2=20.84 p=0.001***
	21 -25 yrs	55	50.00%	45	40.90%	10	9.10%	110	
	26 -30 yrs	10	20.00%	34	68.00%	6	12.00%	50	

Sex	Male	55	29.70%	110	59.40%	20	10.80%	185	x2=18.65 p=0.01**
	Female	345	42.30%	435	53.40%	35	4.30%	815	
Education	Diploma in nursing	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00 p=1.00
Institution	Private	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00 p=1.00
Category of nurse	Student nurse	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00 p=1.00
Experience	Both	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00 p=1.00
Type of family	Nuclear family	265	37.10%	405	56.60%	45	6.30%	715	x2=10.40 p=0.01**
	Joint family	135	47.40%	140	49.10%	10	3.50%	285	
Religion	Christian	275	41.00%	354	52.80%	41	6.20%	670	x2=10.22 p=0.11
	Hindu	60	32.40%	118	63.80%	7	3.80%	185	
	Muslim	50	45.50%	56	50.90%	4	3.60%	110	
	Others	15	42.90%	17	48.60%	3	8.50%	35	
Marital	Single	378	41.50%	490	53.80%	42	4.70%	910	x2=21.16p=0.001***
	Married	22	24.40%	55	61.10%	13	14.40%	90	
Residential area	Urban	123	24.60%	331	66.20%	46	9.20%	500	x2=11.71p=0.02*
	Rural	220	53.70%	185	45.10%	5	1.20%	410	
	Remote	57	63.30%	29	32.20%	4	4.50%	90	
Dietary pattern	Vegetarian	89	37.10%	131	54.60%	20	8.30%	240	x2=5.28p=0.07
	Non Vegetarian	311	40.90%	414	54.50%	35	4.60%	760	
* Significant at P:50.05									
** highly significant at P:50.01									
*** very high significant at P:50.001									

Table 7, shows the association between level of knowledge and their clinical experience variables. Knows by all modes, training attended students, more than 2 days attended and 2 months before attended are having more knowledge than others. Statistical significance was calculated using chi square test.

Table 7: Association between level of knowledge and their clinical experience variables N=1000.

		Level of knowledge						Total	Chi square test
		inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Hospital Current in training	Private	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00p=1.00
Department current working in	OBG in Nursing	250	40.90%	325	53.30%	35	5.70%	610	x2=1.20p=0.54
	Community health Nursing	150	38.50%	220	56.40%	20	5.20%	390	
Have you hear of the disease AIDS	Yes	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00p=1.00
If yes, where did you come to know of it?	Radio , News Paper, Magazine,	318	37.60%	480	56.80%	47	5.60%	845	x2=13.33p=0.01**

	Films, Friends, Doctors, Pamp								
	Medical Journals Nursing Curriculum	72	72.00%	23	23.00%	5	5.00%	100	
	All	10	18.20%	42	76.40%	3	5.40%	55	
Have you seen on AIDS patient?	Yes	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00p=1.00
If yes, have you nursed an AIDS patient?	Yes	400	40.00%	545	54.50%	55	5.50%	1000	x2=0.00p=1.00
Where did you nurse an AIDS patient?	Government Hospital	378	40.40%	508	54.30%	49	5.30%	935	x2=4.03p=0.41
	Private Hospital	12	30.00%	25	62.50%	3	7.50%	40	
	Community	10	40.00%	12	48.00%	3	12.00%	25	
Have you attended the training on AIDS?	Yes	355	38.60%	512	55.60%	53	5.80%	920	x2=9.21p=0.01**
	No	45	56.30%	33	41.30%	2	2.40%	80	
If Yes where did you attended the training on AIDS?	Govt-Organization	265	42.40%	334	53.40%	26	4.20%	625	x2=17.72p=0.001** *
	Non Govt-Organization	90	30.50%	178	60.30%	27	9.20%	295	
Duration of the programme?	1 day	265	42.40%	334	53.40%	26	4.20%	625	x2=17.72p=0.001 ** *
	More than 2 days	90	30.50%	178	60.30%	27	9.20%	295	
When did you attend the training Programme?	4 month before	265	42.40%	334	53.40%	26	4.20%	625	x2=17.72p=0.001** *

Table 8, exhibits the association between level of knowledge and their demographic variables. Age 26-30 yrs were good knowledge 80.0% (p=0.01**), male sex were 70.3% (p=0.001***), come to know about AIDS through Radio, News Paper, Magazine, Films, Friends, and Doctors, 66.5% (p=0.001***) married people shows 75.6% (p=0.001***), living at urban area 75.4% (p=0.001***), 61.4% (p=0.001***) were attend the training on AIDS programme. Attended the training on AIDS maximum in Non-Government-Organization 69.5% (p=0.001***), more than 2 days training and 2 months before training attended are having more knowledge and equally 69.5% (p=0.001***) than others. The above information shows statistical significance.

Table 8: Association between level of knowledge and odds ratio of demographic /clinical experience variables N=1000.

Demographic variables		Level of knowledge				N	Chi square test	OR with 95% CI
		inadequate		Moderate/good				
		n	%	n	%			
Age	16-25 yrs	390	41.00%	560	59.00%	950	c2=8.77	2.8 (1.3-6.0)
	26-30 yrs	10	20.00%	40	80.00%	50	p=0.01**	
Sex	Male	55	29.70%	135	70.30%	185	c2=11.94	1.8 (1.3 – 2.6)
	Female	345	42.30%	465	57.70%	815	p=0.001***	
Type of family	Nuclear family	265	37.10%	450	62.90%	715	c2=9.02	1.5 (1.2 – 2.1)
	Extended family	135	47.40%	150	52.60%	285	p=0.01**	
Marital status	Single	378	41.50%	532	58.40%	910	c2=9.97	2.2 (1.3 – 3.7)
	Married	22	24.40%	68	75.60%	90	p=0.001***	

Residential area	Urban	123	24.60%	377	75.40%	500	c2=28.88	3.8 (2.9-5.0)
	Rural	277	55.40%	223	44.60%	500	p=0.001***	
If yes, where did you come to know of it?	Radio, News Paper, Magazine, Films, Friends, Doctors, Pamp	318	33.50%	527	66.50%	845	c2=12.73	1.9 (1.3-2.7)
	Medical Journals Nursing Curriculum	82	52.90%	73	47.10%	155	p=0.001***	
Have you attended the training on AIDS?	Yes	355	38.60%	565	61.40%	920	c2=9.57	1.9 (1.3-2.7)
	No	45	56.30%	35	43.70%	80	p=0.001***	
If Yes where did you attend the training on AIDS?	Govt-Organization	265	42.40%	360	57.60%	625	c2=11.96	1.7 (1.2 – 2.3)
	Non Govt-Organization	90	30.50%	205	69.50%	295	p=0.001***	
Duration of the programme?	1 day	265	42.40%	360	57.60%	625	c2=11.96	1.7 (1.2 – 2.3)
	More than 2 days	90	30.50%	205	69.50%	295	p=0.001***	
When did you attend the training Programme?	4 month before	265	42.40%	360	57.60%	625	c2=11.96	1.7 (1.2 – 2.3)
	2 month before	90	30.50%	205	69.50%	295	p=0.001***	
**significant at P≤0.05								
** highly significant at P≤0.01								
*** very high significant at								

Table 9, exhibits the Univar ate analysis Elder, male, nuclear family, married, urban, radio , training on AIDS, non Govt organization, more than 2days training and 2 months before training Multivariate analysis of logistic identifies male, married, urban and training on AIDS are influencing factors for getting more knowledge score than others.

Table 9: Identification of influencing factors for knowledge gain using multivariate logistic regression N=1000.

	Univariate analysis		Multivariate analysis	
	p-value	**Unadjusted OR(95 % CI)**	**p-value**	**Adjusted OR(95%CI)**
Age(26-30Vs 16-25 yrs)	0.01**	2.8(1.3 - 6.0)	0.16	1.7(0.86 – 2.6)
Type of family(Urban vs Rural)	0.01**	1.5(1.2 – 2.1)	0.33	1.2(0.8 -3.3)
Sex(Male Vs Female)	0.001	1.8(1.3 – 2.6)	0.001**	1.7 (1.1 - 7.7)
Maritalstatus(Married Vs	0.001***	2.2(1.3 – 3.7)	0.01**	2.0 (1.2 -10.3)
Residence (Urban Vs< Rural)	0.001***	3.8(2.9 - 5.0)	0.001**	2.7(1.2 – 9.5)
Training on AIDS(Yes Vs No)	0.001***	1.9(1. 3- 2.7)	0.05**	1.6.
If yes, where did you come to know of it? (radio& others Vs journal)	0.001***	1.9(1. 3- 2.7)	0.1	1.4(0.4 – 12.7)
If Yes where did youattend the training on AIDS (NGO Vs GO)?	0.001***	1.7(1.2 – 2.3)	0.2	1.2(0.9 -8.9)
Durationofthe programme (>2 days Vs 1 day)	0.001***	1.7(1.2 – 2.3)	0.2	1.2(0.9 -8.9)
When did you attend the training Programme(2 month before Vs before 4 months)?	0.001***	1.7(1.2 – 2.3)	0.2	1.2(0.9 -8.9)

DISCUSSION

Major findings of the study

Overall level of Knowledge score among III yr. GNM nursing students. Majority of the subjects had moderate level 545(54.4%). 400 (40.0%) had inadequate knowledge, and (55)5.5% of them were adequate level of knowledge. Study results showed that update and improve the level of the knowledge on STD/ AIDS. The data revealed that commonly found majority of them had moderate level of knowledge, the reason was that they would have got the information about STD/AIDS through curriculum and Media. This association is compared to the level of knowledge, adequate knowledge was significantly less, majority of them were moderately significant. Because they are not adequately exposed to clinical field and allow to work with experienced people in field and their knowledge is widely updated due to exposure to mass media, internet and library and interaction with expert from field. The stated research hypotheses (H1) are not accepted.

The above findings were consistent with the study conducted by previous authors; a study was conducted to assess German nursing students' knowledge of and attitudes to HIV and AIDS: The results indicated that the nursing students had a rather high knowledge level concerning AIDS. It was concluded that students having positive attitudes towards people with AIDS had less homophobia compared with those having negative attitudes towards persons suffering from AIDS. The students having a high AIDS knowledge level tended less towards negative attitudes and homophobia than those with a low level of knowledge.

Implication

Nursing practice

Effective clinical management of HIV/AIDS clients/ patients will be achieved when the nursing practice area will provide opportunity for the nurses' knowledge to all aspects regarding HIV/AIDS which reflect the following areas to be clearly understood by the practicing nurses: prevention for contracting HIV infection, natural history of HIV infection, application of the nursing process, counselling skills and confidentiality/stigma.

Nurses can plane for educational program me to create awareness on STD/AIDS to school children, because nurses are more responsibility.

Nursing education

Nursing education training in both nursing schools and on job training opportunities should aim at addressing effectively prevention for contracting HIV infection, natural history of HIV infection, application of the nursing process, counselling skills and confidentiality/ stigma, including provision of adequate information about the available drugs and their mechanism of action, side effects, measures to deal with reactions/ complications related to use of ant-retroviral drugs.

Nursing research

A wider range and extensive research study is needed to signify generalization of the findings which will provide opportunity for establishing appropriate measures aimed to ensure that nurses become equipped with adequate knowledge and skills pertinent for the clinical management of HIV/AIDS clients/patients.

Nursing administration

Administrator can arrange for special funds for this programme.

They can arrange special training programme, visits, seminars, guest lectures and conferences for staff nurses and students [11-14].

LIMITATIONS

- Who is available only included in this study.
- Samples only from final year GNM students, available at the time of study in selected schools of nursing, Karnataka.
- Study was limited to 1000 samples.

RECOMMENDATIONS

- The investigator draws the following recommendations from the research study which would increases the knowledge, practice and attitude among GNM student nurses on STD/AIDS.
- The nurse investigator recommends the effective utilization of the knowledge, practice and attitude towards STD/HIV patients.
- The nurse investigator recommends the comparison of the knowledge, practice and attitude towards STD/HIV patients.

CONCLUSION

The study showed a fair level of knowledge among all health care professionals, with the highest knowledge among the doctors and the lowest among laboratory workers and a significant gender difference in the level of knowledge, though the data suggested that this did not differ by hospital settings. There were generally negative feelings and views about the care of HIV/AIDS patients across all HCP but worst at the CHC and best at the Government Hospital. The greatest source of information for the majority of professionals was health talks/ seminars, and those respondents who got their information from school scored the highest on the items on general knowledge of HIV/AIDS incidence, cause, transmission, and clinical treatment.

FUNDING

No funding sources.

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGMENTS

The encouragement and support from Bharath University, Chennai is gratefully acknowledged. For providing the laboratory facilities to carry out the research work.

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