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Research Article

Knowledge Attitude and Willingness of Nursing Students Regarding HIV/AIDS Patient Care of Selected Nursing College of Banke District

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Abstract. AIDS began with exposure to the HIV virus. A person infected with HIV causes progressive deterioration and dysfunction in cell mediated immunity and its most severestage in the disease called AIDS. HIV related stigma and discrimination may prevent their access to treatment and other rights. This stigmatization and discrimination discourage individuals infected with HIV from contacting health and social services. This descriptive study entitled “Knowledge, Attitude and willingness of nursing students regarding HIV/AIDS patient care” was carried out on PCL nursing student at Nepalgunj Nursing Campus TU IOM, Banke. The main objective of this study was to find the level of knowledge, attitude and willingness regarding HIV/AIDS patient care among PCL nursing Students. Although research setting was selected conveniently, sample selection was done by using simple random sample technique through lottery method and 54 respondents were selected out of 136 students where all respondents were female. Self-administered semi- structured questionnaire

technique was used as instrument for data collection. Collected data was analyzed and interpreted by using descriptive statistics like frequency, percentage, mean and standard deviation. This study shows, majority (63%) of the respondents had good knowledge and only few (18.5%) of the respondents had poor knowledge. majority (85.2%) of the respondents had positive attitude towards caring of HIV/AIDS patient likewise only (14.8%) had negative attitude. This study reveals mostly (88.9%) of the respondents were willing to take care of patient with HIV/AIDS. Similarly, majority (96.3%) of the participants were willing to accept the responsibility of HIV/AIDS patient care whereas 63% of the respondents were still willing to provide care even after exposure to HIV infected body fluids.

Keywords: Nursing Students; HIV/AIDS; Patient Care

INTRODUCTION

AIDS (acquired immune deficiency syndrome) began with exposure to the HIV virus. A person infected with HIV virus can cause progressive deterioration and dysfunction in cell mediated immunity and its most severe stage in the disease called AIDS (Park, 2013).

HIV is a retrovirus that infects the human immune system which can be transmitted through blood, semen, vaginal secretions and breast milk. High-risk activities that allow HIV transmission is unprotected sexual intercourse, transfusion of contaminated blood, sharing of contaminated needles and between a mother and child during pregnancy, childbirth and breastfeeding (Lundgren & Olausson, 2013).

HIV and AIDS are incurable diseases, but there are medical treatments i.e. antiretroviral therapies that can prolong a person's life and even reduce the amount of HIV in the bloodstream and enables the body's immune cells to recover to normal levels (AMFAR, 2018).

HIV/AIDS (Human Immunodeficiency virus/ Acquired Immune Deficiency Syndrome) continues to be a major global public health issue, having claimed that around 36.9 million people were living with HIV whereas only 21.7 million people were accessing antiretroviral therapy globally (WHO, 2018). AIDS is a fatal illness caused by a retro virus known as the HIV that breaks down body's immune system, leaving the person vulnerable to a host of life-threatening opportunistic infections, neurological disorders, and unusual malignancies (Park, 2013).

According to Regional data-2017, the prevalence of people living with HIV was found to be 5.2 million in Asia and Pacific region which contributes about 170000 deaths. However, only 2.7 million people were accessing the treatment (UNAIDS, 2018).

According to National HIV estimates the estimated number of people living with HIV is 31,020 in Nepal. Among them male is found to be (19,020) more than female (12,000) (NCASC, 2017).

One of the studies conducted among 325 nursing students in Turkey showed that nursing students have negative attitudes toward people with HIV/AIDS which concludes that creating awareness for promoting nonjudgmental and compassionate care for patients with HIV/AIDS is necessary (Kok, Guvence, & Kaplan, 2018).

Student nurses are a subgroup of health care provider and they are future

professional nurse. Student nurses take part in the provision of direct bed-side nursing care to patient infected with HIV/AIDS, as a result they are vulnerable to the risk of acquiring blood-borne infection. It is true that negative attitude and fear to care for HIV infected patient are issue of concern among health care givers and student nurse nevertheless, nurses have a significant role to play in the provision of HIV treatment and care (Sehume, Zungu, & Hoque, 2012).

Negative attitudes toward HIV/AIDS patients can interfere with the quality of nursing care and can cause stress to nurses and patients equally. It is believed that nursing education based on the skills and knowledge related to HIV/AIDS can be useful for improving the quality of care for patients and can result in more-positive healthcare outcomes. The objective of this study is to find out attitude and willingness of nursing students as they play a major role in the care for HIV/AIDS patients.

Need for the Study

Globally, HIV related stigma and discrimination may prevent their access to treatment and may affect their employment, housing and other rights. This create vulnerability of patient with HIV/AIDS, since this stigmatization and discrimination discourage individuals infected with HIV from contacting health and social services (United Nation General Assembly Human Right Council, 2011).

A study conducted on knowledge and attitude towards caring of HIV/AIDS among nursing students in Nepal showed that very high proportion of nursing students had negative attitude. Nearly half of the student had good knowledge followed by moderate knowledge (33.0%), Many of them had fear of getting HIV infection due to their day to day clinical practices (56.70%). Many of respondents had prejudices regarding the care for PLWHA (28.40%). Nearly 31.00% of students (29.00% for first year, 31.40% of second year and 32.53% of third year) had moderate attitude towards HIV and AIDS patients. Surprisingly, a very high percentage (29.20%) of nursing students had negative attitudes towards the care of PLWHA. The overall knowledge and attitude of senior class nursing students was better than their junior counterparts (Adhikari, Gupta, Koshya, Ghimire & Paneru 2015).

One of the studies conducted among 325 nursing students in Turkey showed that nursing students have negative attitudes toward people with HIV/AIDS which concludes that creating awareness for promoting nonjudgmental and compassionate care for patients with HIV/AIDS is necessary (Kok, Guvence, & Kaplan, 2018).

However, despite continuous efforts to combat stigma and discrimination, barriers have remained major obstacles to open access to information and services regarding the care of people living with HIV/AIDS. As nursing plays a major role in the care for HIV/AIDS people. Therefore, it is important to assess the knowledge, attitudes and willingness of this group.

Objectives of Study

- to assess knowledge, attitudes and willingness of nursing students towards caring for HIV/AIDS patients,
- to find out the level of knowledge among PCL level nursing students,

- to measure the level of attitudes among nursing students toward caring for HIV/AIDS patients,
- to identify the willingness of nursing students toward caring for HIV/AIDS patients.

Significance of the Study

The study might be helpful to find out the level of knowledge, attitude and willingness regarding HIV/AIDS among PCL level nursing student. The findings of this study might be helpful for upcoming student researcher as a baseline data.

Research Questions

What is the knowledge, attitude and willingness of nursing student towards caring of HIV/AIDS patient?

Variables

a. Dependent Variable

Knowledge, attitude and willingness regarding care of HIV/AIDS patient.

b. Independent Variables

Socio- demographic variables:

Residence: rural, urban, Academic years

Information/Education/Communication related variables:

Friends

Mass media (Television, radio, Internet, Books/Magazines)

Formal course

Literature Review

The aim of the study is to assess the knowledge, attitudes and willingness of nursing student towards caring of HIV/AIDS patients. Several studies have shown that nursing students have a fear of and negative attitudes toward people living with HIV/AIDS. These have been linked to a lack of knowledge about the infection, the stigma attached to the disease, and a fear of possibly becoming infected; therefore, they may hesitate to provide care to HIV/AIDS patients. In nursing schools, it is also important to increase the skills and theoretical courses that aim to provide equal and equitable treatment and health care to individuals who have diseases with high infection and mortality rates, such as HIV/AIDS.

In 2017, 36.9 million people were living with HIV, there were 1.8 million children below the age of 15 and an estimated 18.2 million women were living with HIV, 1.8 million people became newly infected with HIV. In some 50 countries of the world, new HIV infections are increasing. Approximately 47% of new HIV infections globally in 2017 were among key populations (men who have sex with men, people who inject drugs, sex workers, and transgender people) and their sexual partners. AIDS-related illnesses remain the leading cause of death among women of reproductive age (15–49 years) globally (AMFAR, 2018)

A descriptive cross-sectional study conducted to assess attitudes and

willingness towards caring for patient infected with HIV in South Africa among 122 nursing students using self-administered questionnaires showed that about two-third (66.4%) of the participants displayed positive attitudes regarding isolating HIV infected patients, 73.8% showed positive attitude with regards to the item on whether HIV infected patients have to blame themselves for being HIV-infected. The results showed that about two-thirds (65.6%) of the participants showed negative attitudes towards having an institutional policy to enforce HIV testing when patients are admitted to hospitals, and 69.7% indicated negativity on whether nurses should always wear protective gear irrespective of the type of procedure they are doing. Almost all the nursing students (99.2%) showed willingness to nurse a patient who is HIV-positive. However, more than two-thirds (68.1%) of the participants mentioned that they were not comfortable nursing a HIV-infected patient (Sehume, Zungu, & Hoque, 2012).

A cross sectional study on knowledge and attitudes of Jordanian nurses towards patients with HIV/AIDS among 922 nurses using self-administered questionnaire showed that Overall, Jordanian nurses expressed negative attitudes toward patients with HIV/AIDS. More than two-thirds (84%) of nurses refused to provide care to patients who tested positive for HIV/AIDS. The majority (96.2%) of nurses ranked their fear of getting AIDS from their nursing practice as overwhelming. The total attitude (84.3%) of participants towards patients with HIV/AIDS was negative (Hassan & Wahsheh, 2011).

A descriptive study conducted to assess under graduate nursing students' knowledge and attitude toward people living with HIV/AIDS in Bangalore, South India among 186 students using questionnaires showed that more than two-third (66.8%) of the participants disagreed that HIV/AIDS is a threat to health workers. Nursing students had favorable attitudes toward care of PLWAS as a greater number of them agreed that Health workers are duty bound to treat all patients irrespective of their status (62.7%) and patients with AIDS have the right to receive care as other diseases (63.95%). While (56.9%) of the participants, disagreed, that AIDS patients should be isolated from other patients. However, the mean score indicates reasonably fair attitudes toward precautionary measures toward PLWAS. The overall attitudes mean score suggests that nursing students had moderately favorable attitudes toward persons with HIV/AIDS (Dharmalingam, Poreddi, Gandhi, & Chandra, 2015)

A cross sectional study conducted to assess knowledge of HIV/AIDS and attitudes towards people living with HIV among the general staff of a public university in Malaysia among 344 staff using questionnaires showed that respondents had a moderately positive attitude towards PLHIV. Three-quarters (75%) of them felt that PLHIV should be given the same rights as others in their daily lives and should not be isolated in order to stop the spread of the disease (64.3%). They were also supportive of the establishment of voluntary organizations (86.1%), and 66% were of the opinion that given the opportunity they would join these organizations to help PLHIV. Although over 90% felt that PLHIV should be given love and care, and 73% felt sympathetic towards them, 53.5% of respondents were not convinced that they would feel comfortable living with an HIV-infected person. More than a third (37.2%) reported that they were not sure if it was wrong for HIV-positive people not to disclose

their status, and the same proportion were also unsure whether HIV and AIDS was a punishment from God. However, more than half of them did not think that those infected with HIV/AIDS deserved it and were immoral. Meanwhile, attitudes were not as favorable concerning direct contact and interaction with PLHIV. Attitudes towards PLHIV in the workplace were moderately positive, where 62.8% thought that they would hire HIV-positive people and most of them (77.6%) would also lend a helping hand to their HIV-positive colleagues instead of discriminating against them (Tee & Huang, 2012).

A descriptive cross-sectional study conducted to assess HIV / AIDS knowledge, attitudes and behaviors of student nurses in Greece among 279 students revealed that nearly half of the participants (43.7%) were willing to do volunteer work with AIDS patients. Only 3.2% agreed to move out a family member if they were HIV positive. 15.5% agreed that people with HIV should stay home or in hospital. 7.9% participant agreed that people with HIV should be kept out of school, while 5.8% agreed that they would end a friendship if their friend had AIDS. Participants were also asked if in clinical training they knew that a patient was HIV positive would they provide care for them, the majority (76.1%) reported that they would provide care, nearly one fourth (22.80%) of respondents reported that they would avoid the patient and 1.10% stated that they wouldn't provide care for AIDS patient (Ouzouni & Nakakis , 2012).

A descriptive cross-sectional study conducted to assess Turkish nursing student's attitudes about patients living with HIV/AIDS among 311 students showed that 55.6 % of the nursing students said that AIDS makes my job a high-risk occupation. 40.8 % of students thought that even following strict infection control measure, it is likely that I would become infected with HIV, if I were working with AIDS patients over a long period of time. 40.8 % of the students said that they would prefer not to work with AIDS patients if given a choice, and 34.4 % agreed that specialists might be trained to best deal with AIDS patients. Yet only 20.9 % indicated that they would consider switching positions if it became necessary to work with AIDS patient. The younger students were significantly more negative than older students in their total AAS score (Nazik, Arslan, Ozdemir, & Apay, 2012).

A descriptive study conducted to assess nurse's knowledge and attitude to the care of HIV/AIDS patients in South East, Nigeria among 240 nurses showed that (94.6%) of the participants had positive attitude towards the care of PLWHA. Factors that negatively influenced nurses' attitude in caring for PLWHA include fear of contagion (82.4%), social stigma (14.7%), and culture/religion (8.8%). The study suggested the need for more in-service trainings on HIV/AIDS for nurses to improve nurses' knowledge and positive attitude towards the care of PLWHA (Okpala, et al., 2017).

A descriptive cross-sectional study conducted to assess Turkish nursing student's knowledge and of attitudes toward patients with HIV/AIDS at three nursing school among 580 students using questionnaire revealed that they generally had positive attitudes patients with HIV/AIDS. However, they expressed some concerns and were hesitant about working with AIDS and HIV-positive patients. That conclude nursing students need to improve their attitude towards patients with HIV/AIDS (Akin, Mendi, Mendi, & Zehra, 2013).

A cross sectional study conducted to assess Nurses' willingness to care for patients infected with HIV in Vietnam among 400 nurses from two hospital using stratified random sampling and self-administered questionnaire showed that the majority (55.8%) of participants expressed a willingness to care for patients infected with HIV. Willingness to care for HIV-infected patients was positively associated with being 40–49 years of age and confidence in protecting themselves against infection. Around half (46.8%) of participants had cared for patients infected with HIV in the past year, the majority answered “agree” or “somewhat agree” in response to the question of willingness to care for patients infected with HIV (55.8%). Approximately 70% of participants agreed or somewhat agreed that they felt confident to protect themselves from infection while caring for patients infected with HIV. Some agreed or somewhat agreed that they still avoided going near patients infected with HIV (23.3%) (Ishimaru, et al., 2017).

A cross sectional study to assess HIV-related stigma and discrimination amongst healthcare providers in Guangzhou, China among 972 health care provider using questionnaire showed that In total, 33.0% of healthcare workers reported that they were satisfied with the protection system offered by the government for HIV occupational exposure, whereas 57.2% were neutral regarding the system. Approximately 80% of participants indicated that they were worried about work-related HIV transmission. When asked about the willingness to treat HIV-positive patients, 85.2% of participants responded that they would provide general treatment for PLWHA, whereas 78.7% would provide high-risk treatment for PLWHA. Administering HIV antibody tests for patients without his or her consent was the most frequent act of discrimination (65.3%), and other forms of discrimination, including differential treatment (51.0%), disclosed information (46.4%) and refused to treat (38.6%), were also prevalent (Dong, et al., 2018).

A cross sectional study conducted to assess knowledge and attitudes about HIV/AIDS of students in H.P. Government Dental College and Hospital, Shimla, India among 191 dental students using self-administered questionnaire. The study find that overall average attitude score was 65.6 % (negative attitudes). The attitude score was passive for 1.2 %, negative for 93.9 % and positive for 4.8%. In other words, only 4.8% of the subjects had positive or professional attitudes. The positive attitude percentage score was significantly higher in the clinical group compared to the preclinical group (Fotedar, Sharma, Sogi, Fotedar, & Chauhan, 2013).

A cross-sectional study conducted to assess HIV/AIDS knowledge, attitudes, practices and perceptions of rural nurses in South Africa among 140 nurses using a questionnaire, focus groups and in-depth interviews. The study revealed that attitudes towards patients with HIV/AIDS were mainly positive and were statistically significantly correlated with HIV/AIDS knowledge and training. Three out of four nurses reported that they practiced universal precautions (76.1%), but fear of occupational HIV transmission and lack of injection safety was found. Seven in 10 nurses reported previous needle stick injuries, but post exposure prophylaxis was not available in all healthcare facilities. Participants reported a higher workload because of HIV/AIDS, lack of training impacting negatively on their work, and stigma and shared confidentiality affecting them emotionally (Delobella, Rawlinson, Ntuli,

Malasti, Decock, & Depoorter, 2009).

A descriptive correlational study conducted to assess HIV/AIDS: an exploration of the knowledge, attitude, infection risk perceptions, and willingness to care of nurses among 219 nurses, who attended the course series on HIV/AIDS held by the Nurses AIDS Prevention Foundation in 2010. The study showed that Participating nurses with higher knowledge scores held a more positive attitude toward HIV/AIDS, a lower perceived risk of HIV/AIDS infection, and a higher willingness to care for HIV/AIDS-positive patients. In addition, those participants who had received in-service HIV/AIDS education training earned higher willingness-to-care scores (Wu, Ko, Shin, & Feng, 2014).

A study conducted on nursing students' attitudes towards HIV/AIDS patients in Finland, Estonia and Lithuania among 471 nursing students. The aim of the study is to describe and compare nursing students' attitudes in these three countries and to explore how attitudes towards HIV/AIDS correlate with background variables. The study revealed that respondents demonstrated average attitude scores towards patients with HIV/AIDS. Significant country differences were found, with Finnish nursing students showing the most positive attitudes towards HIV/AIDS patients. Nursing students' willingness to provide care for an HIV/AIDS patient was associated with a positive attitude towards these patients. Length of employment experience correlated negatively with general attitude and older nursing students with more work experience showed a more negative attitude (Suominen, et al., 2009).

Different literature related to knowledge, attitudes and willingness of nursing students towards caring for HIV/AIDS patients in different setting and different country were reviewed. From those literatures it was found that negative as well as positive attitudes and willingness to caring for HIV/AIDS patients due to fear of contagion and lack of knowledge and lack of experience. Some reviewed literature revealed that there was association between attitudes score and some demographic variables. From above literature many research studies were conducted in different countries but there is no significant study conducted in Nepal. Hence the study is needed to explore the knowledge, attitudes and willingness of nursing students toward caring HIV/AIDS patients.

RESEARCH METHODOLOGY

Research Design

A descriptive cross-sectional research design based on quantitative approach was used to assess knowledge, Attitudes and Willingness of nursing students towards caring for HIV/AIDS patients.

Research Setting and Population

The area of study was Nepalgunj nursing campus it was established in 2026 B.S. located at Jail road-10 Nepalgunj, Banke. The college of nursing is currently running Proficiency Certificate Level Nursing and Bachelor of Nursing Science Program. The study population was all nursing students of PCL nursing (136).

Sample Procedure:

Although setting was selected conveniently then, probability simple random sampling technique was used through lottery method.

Sample size was 40% of study population i.e. 136 So, sample size is 54.

Inclusion Criteria

Students who had willingness to participate in this study. Students who were available during the period of data collection. Students who were studying in PCL nursing at the Nepalgunj Nursing campus.

Research Instrumentation

The research instrument consists of self-administered semi structured questionnaire which was developed on the basis research objectives and in-depth literature review through guidance of advisor. The research instrument was designed in English version. The tool was divided into four parts:

- Part I** : Includes the questions related to Socio-Demographic information.
- Part II** : This section consists of semi-structured questionnaire to assess the knowledge of HIV/AIDS.
- Part III** : Includes five-point Likert scale to measure attitude of nursing students towards caring for HIV/AIDS patients.
- Part IV** : Include statements related to willingness towards caring for HIV/AIDS patients.

Validity and Reliability

Validity of the instruments will be maintained through consultation and verification with the research guide, subject experts, colleagues and extensive literature review.

Pre-testing the instrument

Pretesting of the instrument was done in the Bheri Nursing Campus. The developed instrument was pretested among 10% of the anticipated sample. That was among 6 respondents. Then necessary change was made according to the findings and responses.

Data Collection Procedure

The formal written approval letter was taken from administration of Nepalgunj Nursing Campus for conducting research and data collection. The purpose of the study was explained to each of the respondents. The Written informed consent was taken from each respondent prior to data collection. Self-administered semi-structured questionnaire was distributed to nursing student at their break time. After completion, collected data was checked for completeness and was filled on the spot immediately. Data was collected within 2 weeks.

Data Analysis Procedure

Collected data was checked, reviewed and organized daily for its completeness

and accuracy. Collected information was edited, coded, categorized and entered into SPSS(Statistical package for social science) version 21. Data was analyzed by using descriptive statistics like frequency, percentage, mean and median & standard deviation. Findings was presented in tabular form.

Findings of the Study

This s deals with the analysis and interpretation of relevant data to answer the specific questions of the study concerning knowledge, attitude and willingness of nursing student regarding HIV/AIDS patient care among PCL nursing student of Nepalgunj Nursig campus, Nepalgunj TU, IOM Banke District. The data were coded-tabulated- organized by using statistical package for social science (SPSS) version 21 using descriptive statistical measures such as number and percent, mean, standard deviation methods.

Table 1. Respondents' Socio-economic Data

n= 54

Variables	Frequency (f)	Percentage (%)
Academic year		
First year	22	40.7
Second year	15	27.8
Third year	17	31.5
Residence		
Urban	51	94.4
Rural	3	5.8

Table 1 illustrates, less than half (40.7%) of respondents were first year PCL nursing students, few (27.8%) of respondents were PCL nursing second year students and nearly one third (31.5%) were PCL nursing 3rd year student was involved. Majority (94.4%) of respondent was belonging to urban area and only few (5.8%) respondents werebelonging to rural area.

Table 2. Respondent's knowledge regarding nursing care of HIV/aids patient

n=54

Variables	Frequency (f)	Percentage (%)
Full form of AIDS		
Correct	52	96.3
Incorrect	2	3.7
AIDS means**		
It is life threatening disease	37	68.5
It is preventable disease	20	37.5
It is contagious disease	29	53.7
It is fatal disease	27	50.0
Risk group **		
Commercial sex worker	46	85.2
Drugs abuser	39	72.2

Multiple sex partner	48	88.9
Homosexual	22	42.7

Multiple response **

Table no 2 shows majority (96.3%) of respondents answered the full form of AIDS, mostly (68.5%) answered that AIDS is life threatening disease, likewise more than one third (37.5%) of respondents answered AIDS as fatal disease, majority (88.9%) of respondents respond that commercial sex worker might be suffering from AIDS and less than half (42.7%) of the respondents answered homosexual might be suffering from AIDS.

Table 3. Respondent’s knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Causes of AIDS		
Retro virus *	51	94.4
Rota virus	3	5.6
Full form of HIV		
Correct	48	88.9
Incorrect	6	11.1
Mode of transmission**		
Unprotected sexual contact	49	90.7
Use of contaminated needle and syringe	45	83.3
Use of contaminated blood and blood product	46	85.2
Infected mother to child	42	77.8

multiple response **correct response*

Table 3 illustrate majority (94.4%) of respondent answered retro virus is cause of AIDS and few (5.6%) respondents answered rota virus is cause of AIDS. majority (90.7%) of the respondent respond full form of HIV, majority (90.7%) respondent answered AIDS transmitted through unprotected sexual contact, Likewise, mostly (77.8%) respondent answered AIDS transmit through infected mother to child

Table 4. Respondent’s knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
AIDS cannot transmit through**		
Hugging	49	90.0
Use of common toilet and swimming pool	47	87.0
Touching	51	94.4
Use of personal belonging like cloths, cups, brush, comb	43	79.6
Bites of mosquito, insect, birds, and animals	37	68.5
Window period means		

Time period between potential exposure to infection and point when the test gives an accurate result *	27	50.0
Period between detection of infection and onset of the symptoms	27	50.0

Multiple response **Correct response *

Table 4 reveals majority (94.4%) of the respondents answered that AIDS cannot transmitted through touching and mostly (68.5%) of the respondents answered AIDS cannot transmit through bits of insect, birds and animal. Similarly, half (50%) of the respondent knew meaning of window period.

Table 5. Respondent’s knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Duration of window period		
2 to 4 weeks	6	11.1
6 to 12 weeks *	27	50.0
12 to 16 weeks	6	11.1
16 to 20 weeks	15	27.8
Does infection transmit during window period		
Yes	28	51.9
No	26	48.1
Symptoms of AIDS**		
Weight loss more than 10% of body weight	43	79.6
Chronic diarrhea more than 1 month	46	85.2
Prolonged fever more than 1 month	36	66.7
Prolonged cough for more than 1 month	28	51.9
Prolonged swelling of the lymph node	28	51.9

Table 5 evaluates half (50%) of respondents answered about duration of window period of HIV/AIDS. more than half (51.9%) of the respondent knew that HIV/AIDS infection transmitted during window period. majority (85.2%) of the respondents knew chronic diarrhea more than 1 month is the symptoms of AIDS, similarly more than half (51.9%) of respondents knew prolonged cough and swelling of lymph node was also symptoms of HIV/AIDS.

Table 6. Respondent’s knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Full form of PMTCT		
Correct	47	87.0
Incorrect	7	13.0
Confirmation test of HIV/AIDS		

ELISA test	42	77.0
Western blot test *	8	14.8
Widle test	4	7.4
ELISA test	42	77.0
Preventive measure of HIV/AIDS**		
Use of condom	50	92.6
Avoid sharing needle or syringe	44	81.5
Avoid mother to child transmission	41	75.9
Use sterilize needle or syringe	41	75.9
Limit sexual partner	39	72.2
Get test and know your partner HIV status	41	75.9
Get test and treat for sexual transmitted disease	34	63.0
Use post exposure prophylaxis	31	57.4

Table 6 shows Majority (87%) of the respondents answered full form of PMTCT. likewise, most of the (77%) of respondents answered ELISA was confirmation test of AIDS. majority (92.6%) of respondents answered use of condom was preventive measure of HIV/AIDS, whereas more than half (57.4%) respondents knew use of post exposure prophylaxis was preventive measures.

Table 7. Respondent’s knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Available of drug for treatment of HIV/AIDS		
Yes	34	63.0
No	20	37.0
Full form of ART		
Correct	39	72.2
Incorrect	15	27.8
Time to start PEEP after possible exposure to HIV		
Within 3 days*	31	57.4
Within 4 days	9	16.7
Within 5 days	12	22.2
Within 6 days	2	3.7
Correct Response*		

Table 7. illustrates nearly two third (63%) of respondents respond that drugs are available for treatment of HIV/AIDS and mostly (72.2%) respondents answered full form of ART. more than half (57.4%) respondents answered post exposure prophylaxis should be start within 3 day of possible exposure and few (3.7%) of the respondent answered PEEP should be start within 6 days.

Table 8. Respondent's knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Counselling to HIV/AIDS infected person includes**		
Explanation of the result and diagnosis	44	81.5
Give time to considered the result and helping his/her to cope with the emotions.	42	77.8
Assessment of the risk of the suicide, depression	35	64.8
Provide clear information about ART	41	75.9
Provide information on how to prevent transmission	43	79.6
Assess the nutritional status and advice to maintain healthy weight	39	72.2
Application of universal precaution while providing nursing care		
yes	54	100

Multiple Response **Correct Response*

Table 8 reveals majority (81.5%) respondents replied explanation of the result and diagnosis should be included while counseling the HIV/AIDS infected person, more than one third (35%) of the respondent answered assessment of risk of suicide, depression should be included. overall (100%) of respondents answered universal precaution should be applied while providing nursing care.

Table 9. Respondent's knowledge regarding nursing care of HIV/AIDS patient

Variables	n=54	
	Frequency (f)	Percentage (%)
Bed side care to HIV/AIDS patient**		
Assess sign of infection	43	79.6
Encourage for high protein and carbohydrate diet	32	59.3
Maintain aseptic technique while performing invasive procedure	50	92.6
Maintain fluid intake at least 3lt/day	29	53.7
Monitor and report promptly side effect of ART	41	75.9

Multiple Response**

Table 9 depicts majority (92.6%) of respondents answered that aseptic technique should be maintain while performing invasive procedure. Whereas more than half (53.7%) respondents answered about maintain fluid intake at least 3lt/day should be considered while providing bed side care.

Table 10. Respondent’s source of information about HIV/AIDS

Variables	n=54	
	Frequency (f)	Percentage (%)
Source of information		
Radio	36	64.8
Television	38	74.6
Books/magazines	46	85.2
Internet	46	85.2
Friends	39	72.2
Formal course	37	68.5

Table 10 depicts majority (85.2%) of respondents got information about HIV/AIDS through internet, books/ magazines. Similarly, nearly two third (64.8%) of respondents got information about HIV/AIDS through radio.

Table 11. Respondent’s attitude towards caring for HIV/AIDS patients

Statements	n=54				
	Strongly agree f (%)	Agree f (%)	Uncertain f (%)	Disagree f (%)	Strongly disagree f (%)
Patients with HIV/AIDS are responsible for illness	4(7.4)	12(22.2)	27(50)	6(11.1)	5(9.3)
Patient with HIV/AIDS Deserve punishment for their risky behaviour**	1(1.9)	1(1.9)	2(3.7)	21(38.9)	29(53.7)
Patient with HIV/AIDS should not be admitted to hospital**	-	-	2(3.7)	9(16.6)	43(79.6)
HIV infected patient should Allow to school or work	31(57.4)	17(31.5)	1(1.9)	1(1.9)	-
Allow to school or work Treating someone with HIV/ AIDS is waste of resource**	2(3.7)	4(7.4)	-	14(25.9)	34(63)

Negative Statement**

Table 11 shows half (50%) respondents uncertain about patient with HIV/AIDS are responsible for their illness whereas few (7.4%) respondents strongly agree with it. More than half (53.7%) respondents strongly disagree with infected patients deserve punishment for their risky behavior. Similarly, most of the (79.6%) respondents strongly disagree that patient with HIV/AIDS should not be admitted to hospital whereas few (3.7%) respondent uncertain about it. More than half (57.4%) respondents strongly agree that HIV infected patient should allow for school or work and few (1.9%) respondent uncertain and disagree with it. Similarly, nearly two third (63%) respondents strongly disagree with that treating someone with HIV/AIDS is a waste of resources whereas few (3.7%) strongly agree with it.

Table 12. Respondent’s attitude towards caring for HIV/AIDS patients

Statements	n=54				
	Strongly agree f (%)	Agree f (%)	Uncertain f (%)	Disagree f (%)	Strongly disagree f (%)
We should have right to refuse to deal with HIV/AIDS patient **	3(5.6)	10(18.5)	7(13)	16(29.6)	18(33.3)
Relatives/sexual partner should be notified about patient status without his/her consent**	3(5.6)	25(56.3)	8(14.8)	15(27.8)	3(5.6)
I am concern about becoming infected with HIV through patient care	11(20.4)	23(46.2)	11(20.4)	5(9.3)	4(7.4)
Caring of HIV/AIDS patient should be done with total precaution	41(75.9)	13(24.1)	-	-	-

Negative Statement**

Table 12 shows more than one third (33.3%) of respondents strongly disagree that we should have right to refuse to deal with patient with HIV/AIDS whereas only few (5.6%) respondents strongly disagree with it. Similarly, more than half (56.3%) of the respondents agree that relatives and sexual partner should notify about patient status without his/her consent, whereas few (5.6%) respondents strongly disagree and agree with it. Similarly, less than half (46.2%) respondents agree that they are concern about becoming infected with HIV through patient care and only few (7.4%) respondent strongly disagree with it. Most of the (75.9%) respondents were strongly agree with caring of HIV/AIDS patient should be done with total precaution whereas few (24.1%)respondent agree with it.

Table 13. Respondent’s attitude towards caring for HIV/AIDS patients

Statements	n=54				
	Strongly agree f (%)	Agree f (%)	Uncertain f (%)	Disagree f (%)	Strongly disagree f (%)
Health care professionals should be notified when a patient has HIV/AIDS	44(81.5)	8(14.8)	1(1.9)	-	1(1.9)
Quality of life of patient can be improved with care and counseling patient with HIV/AIDS	35(64.8)	19(35.2)	-	-	-
should be isolated from family and society	2(3.7)	3(5.6)	3(5.6)	15(27.8)	1(57.4)

Negative Statement**

Table 13 illustrates majority (81.5%) respondents were strongly agree with staff and health care professionals should be notified about patient HIV/AIDS status whereas few (1.9%) uncertain and strongly disagree with it. Nearly two third (64.8%) respondents were strongly agree with quality of patient life can be improved with care and counselling whereas more than one third (35.2%) were agree with it. Similarly,

more than half (57.4%) of respondents were strongly disagree with HIV/AIDS infected patient should be isolated from society and family.

Table 14. Respondent’s level of knowledge regarding HIV/AIDS patient care

Level of Knowledge	n=54	
	Frequency (f)	Percentage (%)
Good knowledge (>75%)	34	63.0
Satisfactory knowledge (50-75%)	10	18.5
Poor knowledge (<50%)	10	18.5
Mean ± SD = 39.22 ± 11.52		

Table 14 depicts scoring level of respondent’s knowledge. Nearly two third (63%) of respondent had good knowledge and only few (18.5%) respondents had satisfactory and poor knowledge as well. The mean score of knowledge level was 39.22 and standard deviation was ±11.52.

Table 15. Respondent’s level of attitude towards caring for HIV/AIDS patient

Level of Attitude	n=54	
	Frequency (f)	Percentage (%)
Positive attitude	46	85.2
Negative attitude	8	14.8
Mean± SD = 3.78 ± .795		

Table 15 reveals level of attitude. majority (85.2%) of respondents had positive attitude towards caring of HIV/AIDS patient and only (14.8%) had negative attitude. the meanscore of attitudes was 3.78 and standard deviation was ±.795.

Table 16. Respondent’s willingness towards caring for HIV/AIDS patient

Statements	n=54	
	Frequency (f)	Percentage (%)
I am willing to take care of patient with HIV/AIDS	48	88.9
I accept the responsibility of caring patient with HIV/AIDS	52	96.3
After accidental exposure, I would still be willing to take care of HIV infected patients	34	63.0

Table 16 reveals majority (88.9%) of respondents were willing to take care of patient with HIV/AIDS. Similarly, majority (96.3%) of the participants were willing to accept the responsibility of HIV/AIDS patient care. likewise, nearly two third (63%)

respondents were still willing to provide care even after exposure to HIV infected body fluids.

DISCUSSION

In this study 54 respondents were selected where less than half (40.7%) of respondents were first year PCL nursing students, (27.8%) of respondents were PCL nursing second year students and one third (31.5%) of respondents were PCL nursing 3rd year student was involved. Similarly the study conducted by Adhikari, Gupta, Koshya, Ghimire, Paneru 2015 shows more than one third (33.63%) of respondents were the students of first year, one third (30.97%) of respondents were of second year and more than one third (35.40%) were of the third year PLC nursing student.

The finding of the study shows that Majority (94.4%) of the respondents were from urban area and only few (5.8%) of respondents were from rural area. In contrast the study conducted by Parajulee & Selvara (2012) revealed majority (89.26%) of respondents belong to rural area. This study revealed that majority (96.3%) of respondents answered the full form of AIDS. Whereas the study conducted by Parajulee & Selvaraj (2012) all of the respondents respond the full form of AIDS.

The findings of this study showed majority (88.9%) of respondents answered commercial sex worker might be suffer from AIDS. Similarly, the study conducted by Jain D et al 2018 majority (97%) of respondent had known that commercial sex worker might be suffer from AIDS. In this study majority (94.4%) of respondent answered retro virus is cause of AIDS. Whereas. The study conducted by Thakuri & Thapa (2018) majority (78.42%) had known the cause of AIDS.

This study revealed that majority (88.9%) of respondents answered full form of HIV. Similarly, the study conducted by Thakuri & Thapa (2018) majority (83.52%) had known the full form of HIV. The findings of study revealed majority (90.7%) of respondent answered AIDS transmitted through unprotected sexual contact. Likewise, the study conducted by Thakuri & Thapa (2018) majority (95.3%) students had knowledge that the unprotected sexual contact is as a mode of HIV transmission.

In this study 68.5% of respondent respond that AIDS cannot transmitted through bites of mosquito, insect, birds and animals. Whereas study conducted by Thakuri & Thapa (2018) about 64% students have knowledge that HIV cannot be transmitted by mosquito bite. This study revealed that majority (92.6%) of respondents answered use of condom is the preventive measures of HIV/AIDS. Similarly, the study conducted by Suominen et al 2015 majority (86%) students have knowledge that consistent use of condoms may reduce transmission of HIV.

In this study majority (85.2%) of respondents got information about HIV/AIDS through books and magazine. In contrast the study conducted by Jain D et al 2018 35% of student got information about AIDS through books and magazine. The findings in this study revealed that mostly (63%) of the respondents had good knowledge regarding caring of HIV/AIDS patient. Only 18.5% of the respondents had satisfactory and poor knowledge as well. Similarly, a study conducted in National Medical College and Teaching Hospital, Birgunj, Nepal revealed nearly half of the nursing students had good knowledge followed by moderate knowledge 33.00%. Whereas 17.00% of the respondents had poor knowledge on caring of HIV/AIDS patient. (Adhikari, Gupta,

Koshya , Ghimire, Paneru 2015)

But the study conducted in capital city of Turkey, Ankara, 2018 revealed that the majority of nursing students have a moderate level of knowledge regarding caring of HIV/AIDS patient. A study conducted in Russian nursing student reveals that 72.4% of the respondents had moderate level of knowledge regarding HIV/AIDS patient care. Suominen et al 2015.

The findings in this study revealed that, majority 85.2% of the respondents had positive attitude towards caring of HIV/AIDS patient and only 14.8% had negative attitude. Similarly, a study conducted in South Africa among 122 nursing students showed that about two-third 66.4% of the participants displayed positive attitudes. Similarly, study conducted in University of Nigeria Teaching Hospital Enugu 2017, 94.6% of the respondents had positive attitude towards the care of PLWHA.

In contrast study conducted in H.P. Government College and Hospital, Shimla, India among 191 nursing students find that 65.6% respondents had negative attitudes towards caring of HIV/AIDS patient. Likewise, a study conducted in National Medical College and Teaching Hospital, Birgunj, shows 59.20% of the respondents had negative attitude towards caring of patient with HIV/AIDS. The findings in this study revealed majority 88.9% of the respondents were willing to take care of patient with HIV/AIDS. Similarly, majority 96.3% of the participants were willing to accept the responsibility of HIV/AIDS patient care likewise 63% respondents were still willing to provide care even after exposure to HIV infected body fluids. According to Sehume, Zungu, & Hoque, 2012 showed almost all the nursing students 99.2% showed willingness to nurse a patient who is HIV-positive, mostly 74.6% of the respondents showed willingness to continue caring for HIV-infected patients despite being accidentally exposed to the HIV-infected body fluids.

Similarly, a study conducted among the students of the University of Pune, Maharashtra, India, 2013. majority 78.89% of the respondents were willing to care of HIV positive person. A study conducted in Greek among 279 students revealed that nearly half 43.7% of the participants were willing to do volunteer work with AIDS patients.

CONCLUSION

It is concluded that nursing students had good knowledge in various aspects of HIV/AIDS. majority of the respondents had good knowledge. Majority of them had positive attitudes towards HIV-infected patients and were willing to take care of HIV/AIDS patient care.

Limitations

This study was limited to PCL nursing student of Nepalgunj Nursing campus only. So, the finding cannot be generalized to other settings and population.

Implication

The finding of this study would provide existing level of knowledge, attitude and willingness regarding HIV/AIDS patient care among PCL level nursing student. The study would provide baseline information and source of references to the future

student researchers related to this topic.

Recommendation

It could be better if study can be conducted in large population so it could be generalized. It would be better in future comparative study can be conducted. The study concludes that most of the respondents had good knowledge. This study also conclude that few respondents still had poor knowledge, somehow negative attitude and some respond as not willing to provide care to HIV/AIDS patient there for health policy makers and authorities of the Nursing Colleges need to pay attention on this. similarly Nursing curriculum programs of nursing schools need to be restructured to ensure that students gain the necessary accurate knowledge and appropriate attitudes about HIV and AIDS.

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