



# Knowledge, attitude, and willingness of nursing students towards HIV/AIDS patient care: a descriptive study

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## Abstract

Human Immunodeficiency Virus (HIV) exposure leads to acquired immunodeficiency syndrome (AIDS), which gradually weakens and dysfunctions cell-mediated immunity. HIV/AIDS stigma and discrimination can make it difficult for patients to get care and other rights, deterring infected people from using medical and social services. The purpose of this study was to evaluate the PCL nursing students' level of knowledge, attitude, and willingness about the treatment of patients with HIV/AIDS. At the Nepalgunj Nursing Campus of the TU IOM, Banke, a descriptive study of female PCL nursing students was undertaken. Out of 136 pupils, 54 responses were chosen using a straightforward random sample procedure. A self-administered semi-structured questionnaire was used to gather the data, and descriptive statistics including frequency, percentage, mean, and standard deviation were used for analysis. According to the survey, 63% of respondents had strong understanding of HIV/AIDS patient care, whereas just 18.5% had inadequate knowledge. Furthermore, just 14.8% of respondents had a negative attitude regarding caring for HIV/AIDS patients, compared to 85.2% who did. 88.9% of respondents said they would be willing to care for people with HIV/AIDS. Similar to this, 96.3% of participants agreed to take on the duty of caring for HIV/AIDS patients, and 63% of respondents said they would continue to do so even after coming into contact with bodily fluids containing the virus. According to the study, PCL nursing students are knowledgeable about HIV/AIDS patient care and have a helpful attitude about it. This result is positive for enhancing patient care and lowering stigma and prejudice against people. However, more efforts are required to increase knowledge and awareness about HIV/AIDS among nursing students to provide quality care for patients.

**Keywords:** HIV, patient, nursing students, knowledge, attitude

## Introduction

HIV infection was the first step in the development of AIDS (acquired immune deficiency syndrome). A person with HIV infection can experience increasing decline and malfunction in cell-mediated immunity, with the disease's most severe stage being AIDS (Park, 2013) [23].

The retrovirus known as HIV infects the human immune system and can be transmitted by blood, semen, vaginal fluids, and breast milk. High-risk activities that might lead to HIV transmission include unprotected sexual contact, contaminated blood transfusions, sharing needles, and contact between a mother and child during pregnancy, delivery, and breastfeeding. (Lundgren & Olausson, 2013) [14].

Although HIV and AIDS are fatal conditions, there are medical interventions, such as antiretroviral medicines, that can extend a person's life, even lower the level of HIV in the blood, and help the immune system return to normal (AMFAR, 2018).

Known also as HIV/AIDS, the human immunodeficiency virus and acquired immune deficiency syndrome continue to pose a severe threat to world public health. While there are an estimated 36.9 million people living with HIV globally, only 21.7 million people have access to antiretroviral treatment, according to the World Health Organization (WHO). According to Park (2013) [23], the HIV retrovirus, which causes AIDS, impairs the body's immune system, leaving the patient more vulnerable to a range of neurologic conditions, atypical malignancies, and other potentially fatal opportunistic

infections.

In the Asia and Pacific area, there are 5.2 million individuals living with HIV, which causes around 170000 deaths each year, per regional data from 2017. However, according to UNAIDS (2018), just 2.7 million individuals have access to the medication. Estimates from the national HIV program place the number of HIV-positive individuals in Nepal at 31,020. Males outnumber females among them (19,020 to 12,000) (NCASC, 2017) [24].

According to one of the studies done among 325 nursing students in Turkey, nursing students have unfavorable attitudes toward people with HIV/AIDS, which leads researchers to draw the conclusion that more education is needed to promote nonjudgmental and compassionate care for patients with HIV/AIDS.

The future licensed nurses are student nurses, a subcategory of healthcare workers. Student nurses are more likely to get a blood-borne infection since they are providing direct bedside nursing care to patients with HIV/AIDS. It is true that health care providers and student nurses have a dread of caring for HIV-positive patients and have a negative attitude about doing so. Nevertheless, nurses are essential in the delivery of HIV care and treatment (Sehume, Zungu, & Hoque, 2012) [18].

The level of nursing care can be compromised by negative views toward patients with HIV/AIDS, which also puts burden on nurses and patients equally. It is thought that focusing nursing education on HIV/AIDS-related skills and knowledge

might help nurses provide better patient care and provide better medical results. Since they are so important to the care of patients with HIV/AIDS, this study aims to learn more about the attitudes and willingness of nursing students.

### Objectives for the study

- To assess nursing students' understanding of HIV/AIDS, their attitudes toward treating patients with the disease, and their readiness to care for those who have it;
- To ascertain nursing students' understanding at the PCL level;
- To determine nursing students' attitudes toward treating patients with the disease; and
- To figure out nursing students' interest in caring for those who have it.

### Research questions

- What are the knowledge and attitude of nursing student towards caring of HIV/AIDS patient?

### Variables

#### Dependent Variable

Attitude, Knowledge and willingness regarding care of HIV/AIDS patient

#### 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 major objective of the research is to assess nursing students' understanding, attitudes, and motivation to provide care for those with HIV/AIDS. Numerous studies have shown that nursing students fear people who are HIV/AIDS positive and have negative perceptions of them. They may be reluctant to provide care to HIV/AIDS patients as a consequence of these factors, which have been linked to a lack of knowledge about the infection, the stigma attached to the illness, and a fear of catching the disease. In order to better educate students to treat and care for patients with diseases like HIV/AIDS, which have high rates of infection and mortality, it is imperative to strengthen the knowledge and theoretical courses taught in nursing schools.

Globally, there were 36.9 million people living with HIV in 2017, including 1.8 million children under the age of 15 and 18.2 million women. Additionally, 1.8 million people contracted the virus for the first time. Nearly 50 countries are experiencing an increase in new HIV infections. Around 47% of new HIV infections globally in 2017 were caused by members of key populations (men who have sex with men, people who inject drugs, sex workers, and transgender people) and their sexual partners. AMFAR (2018) reports that AIDS-related illnesses continue to be the leading cause of death for

women between the ages of 15 and 49 worldwide.

A self-administered questionnaire was utilized in the research of 122 nursing students in South Africa to gauge their attitudes and readiness toward care for HIV-positive patients. The findings revealed that while most people had good opinions concerning keeping HIV-positive patients isolated and abstaining from blaming them for their disease, most had negative attitudes toward requiring HIV testing and wearing protective gear as part of institutional policy. The majority of participants said they would be willing to care for an HIV-positive patient, but a sizable portion said they would not feel comfortable doing so (Sehume, Zungu, & Hoque, 2012) [18].

The study conducted among 922 Jordanian nurses using a self-administered questionnaire, results showed that most nurses expressed negative attitudes towards patients with HIV/AIDS, with a significant majority refusing to provide care to HIV-positive patients. Fear of contracting the disease was also overwhelming among the participants (Hassan & Wahsheh, 2011) [9].

According to a survey of 186 undergraduate nursing students in Bangalore, South India, the majority of respondents expressed positive views regarding helping those who are HIV/AIDS positive. Most participants believed that health professionals had a responsibility to treat all patients, regardless of their condition, and that people with AIDS have the same entitlement to treatment as those with other diseases. The overall views mean score; however, indicated fairly favorable attitudes toward people with HIV/AIDS, and a sizeable number of respondents disagreed with segregating AIDS patients from other patients (Dharmalingam, Poreddi, Gandhi, & Chandra, 2015) [7].

To evaluate the knowledge, attitudes, and actions of healthcare workers toward persons living with HIV/AIDS, three cross-sectional studies were carried out. According to the results of the initial survey carried out in Malaysia, most of the participants had a generally favorable opinion of people living with HIV/AIDS and supported their legal rights and the creation of nonprofit organizations. The opinions for direct contact and involvement with PLHIV, however, were less positive. The second study conducted in Greece showed that a significant proportion of student nurses were willing to provide care for PLHIV, but a minority agreed with discriminatory attitudes such as people with HIV should stay home or in the hospital. The third study conducted in Turkey showed that nursing students had negative attitudes towards PLHIV, with a significant proportion feeling that working with AIDS patients put them at high risk and preferring not to work with them if given a choice. The studies highlight the need for education and training to address negative attitudes towards PLHIV among healthcare professionals.

To evaluate nurses' understanding of, attitudes toward, and behaviors related to HIV/AIDS, three studies were done. In the first study, rural South African nurses were found to have generally positive attitudes toward patients with HIV/AIDS and to practice universal precautions, but they also reported lacking safe injection practices and fear of occupational HIV transmission (Delobella, Rawlinson, Ntuli, Malasti, Decock, &

Depoorter, 2009) [6].

In the following study, it was discovered that nurses with better HIV/AIDS knowledge scores had more optimistic attitudes, a lower perceived risk of contracting the disease, and a greater readiness to provide care for patients who were HIV/AIDS positive (Wu, Ko, Shin, & Feng, 2014) [21].

The more recent study found that views toward patients with HIV/AIDS were generally favorable among nursing students from Finland, Estonia, and Lithuania, with Finnish nursing students displaying the most favorable attitudes. Positive attitudes about HIV/AIDS patients were linked to willingness to give care for these patients (Suominen *et al.*, 2009) [17].

Numerous researches on nursing students' understanding, attitudes, and readiness to provide care for people with HIV/AIDS in diverse contexts and nations were examined. These writings revealed both good and negative views toward treating HIV/AIDS patients, as well as a lack of knowledge and expertise, as well as concerns about the spread of the disease. A study of the literature found a correlation between several demographic factors and attitudes score. According to the aforementioned literature, several research studies have been conducted in a number of countries; Nepal, however, has not produced any remarkable studies. In order to provide care for HIV/AIDS patients, nursing students' knowledge, attitudes, and willingness must be examined.

## Research methodology

### Research design

To evaluate the knowledge, attitudes, and willingness of nursing students to care for HIV/AIDS patients, a descriptive cross-sectional study design based on a quantitative method was utilized.

### 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

Even if the environment was readily chosen at the time, the probability simple random sampling methodology was applied.

### Inclusion requirements

- Those students who agreed to take part in the study.
- Students who were available at the time the data were being collected.
- Participants in the PCL nursing program 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 4 parts:

**Part I:** Socio-Demographic information.

**Part II:** Semi-structured questionnaire to assess the knowledge of HIV/AIDS.

**Part III:** Five-point Likert scale to measure attitude of nursing students of towards caring for HIV/AIDS patients.

**Part IV:** Statements related to willingness towards caring for HIV/AIDS patients.

### 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

For the purpose of conducting research and gathering data, a formal written consent letter was obtained from the Nepalgunj Nursing Campus management. Each responder was informed of the study's objective. Each responder provided written informed consent before the data was collected. Nursing students were given a self-administered semi-structured questionnaire during their break. When everything was finished, the data was reviewed for accuracy and filled out right away. Data was gathered in less than two weeks.

### Data analysis procedure

Every day, the accuracy and completeness of the collected data was evaluated. The data was put into SPSS (Statistical software for social research) version 21 after being edited, coded, and classified. Descriptive statistics including frequency, percentage, mean, median, and standard deviation were used to examine the data. Results were shown in a table format.

### Findings of the study

In order to address the specific questions of the study regarding the knowledge, attitude, and willingness of nursing students regarding HIV/AIDS patient care among PCL nursing students of Nepalgunj Nursig campus, Nepalgunj TU, and IOM Banke District, this study analyzes and interprets pertinent data. The statistical software for social science (SPSS) version 21 was used to code, tabulate, and arrange the data using descriptive statistical measures including percentage, mean, and standard deviation.

**Table 1:** Respondents' socio-demographic 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%) where PCL nursing 3<sup>rd</sup> year student was involved. Majority (94.4%) of respondent was belonging to urban area and only few (5.8%) respondents were belonging to rural area.

**Table 2:** Respondent’s knowledge regarding nursing care of HIV/aids patients Full form of AIDS (N=54)

Variables	Frequency	Percentage
Risk group **		
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
Multiple response **		
Commercial sex worker	46	85.2
Drugs abuser	39	72.2
Multiple sex partner	48	88.9
Homosexual	22	42.7

Table no 2a 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 (N=54)

Variables	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 illustrates 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 (N=54)

Variables	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 patients (N=54)

Variables	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 (N=54)

Variables	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
Wide test	4	7.4
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 Patients (N=54)

Variables	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 (N=54)

Variables	Frequency (f)	Percentage (%)
Counseling 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 source of information about HIV/AIDS (N=54)

Variables	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 9 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 10:** Respondent’s attitude towards caring for HIV/AIDS patients (N=54)

Statements	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)	-
Treating someone with HIV/ AIDS is waste of resource**	2(3.7)	4(7.4)	-	14(25.9)	34(63)

Negative Statement\*\*

Table 10 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%) respondents 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%) respondents 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 11:** Respondent's level of knowledge regarding HIV/AIDS patient care (N=54)

Level of knowledge	Frequency (f)	Percentage (%)
Good knowledge (>75%)	34	63.0
Satisfactory knowledge (50-75%)	10	18.5
Poor knowledge (<50%)	10	18.5

Mean  $\pm$  SD = 39.22  $\pm$  11.52

Table 11 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  $\pm$ 11.52.

**Table 12:** Respondent's level of attitude towards caring for HIV/AIDS patient (N=54)

Level of attitude	Frequency (f)	Percentage (%)
Positive attitude	46	85.2
Negative attitude	8	14.8

Mean  $\pm$  SD = 3.78  $\pm$  .795

Table 12 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 mean score of attitudes was 3.78 and standard deviation was  $\pm$ .795.

**Table 13:** Respondent's willingness towards caring for HIV/AIDS patient (N=54)

Statements	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

The majority of responders (88.9%) are willing to care for patients with HIV/AIDS, according to Table 14. Similar to this, the majority of participants (96.3%) were prepared to take on the duty of caring for HIV/AIDS patients. Similarly, over two thirds (63%) of responders were still eager to offer assistance following contact with bodily fluids containing HIV.

## Discussion and conclusion

### 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 where PCL nursing 3<sup>rd</sup> year student was involved. similarly the study conducted by Adhikari, Gupta, Koshya, Ghimire, Paneru 2015 shows more than one third (33.63%) of respondent 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 findings of the study shows that Majority (94.4%) of the respondent were belong to urban area and only few (5.8%) of respondents were belong to rural area. In contrast the study conducted by Parajulee & Selvara (2012) revealed majority (89.26%) of respondents belongs 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.

It 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.

It shows 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.

It 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.

It 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.

The majority of respondents to this poll (92.6%) indicated that using condoms is a preventative strategy against HIV/AIDS. Similar to this, most students (86%) in the Suominen *et al.* 2015 [19] study were aware that regular condom usage may lessen the spread of HIV.

The majority of respondents (85.2%) in this survey learned about HIV/AIDS via books and magazines. In contrast, according to a 2018 research by Jain D. *et al.*, 35% of students learned about AIDS via books and magazines.

The study's findings showed that most respondents (63%) had enough understanding on how to care for HIV/AIDS patients. Only 18.5% of the respondents possessed knowledge that was both inadequate and satisfactory.

In a similar vein, a survey carried out in Birgunj, Nepal's National Medical College and Teaching Hospital found that nearly half of the nursing students had high knowledge, with 33.00% having moderate understanding. However, only 17.00% of the respondents were knowledgeable on how to care for HIV/AIDS patients. 2015's Adhikari, Gupta, Koshya, Ghimire, and Paneru.

However, a 2018 survey in the Turkish capital city of Ankara found that the majority of nursing students only have a minimal amount of understanding on care for HIV/AIDS patients.

According to a research done among Russian nursing students, 72.4% of the respondents had a moderate level of understanding on treating patients with HIV/AIDS Suominen *et al* 2015 [19].

According to the study's findings, 85.2% of respondents had a favorable attitude toward helping HIV/AIDS patients, while just 14.8% had a negative one. Similar results were found in a study of 122 nursing students in South Africa, which revealed that 66.4% of participants had favorable views.

In a 2017 survey at the University of Nigeria Teaching Hospital in Enugu, 94.6% of the respondents expressed satisfaction with the treatment of PLWHA.

In contrast, a survey of 191 nursing students at H.P. Government College and Hospital in Shimla, India, found that 65.6% of respondents had unfavorable views concerning care for HIV/AIDS patients. Similarly, a survey done at Birgunj's National Medical College and Teaching Hospital revealed that 59.20% of respondents had a bad attitude about treating HIV/AIDS patients.

The majority of responders to this study—88.9%—were willing to care for patients with HIV/AIDS, according to the results. Similarly, 96.3% of participants said they would be prepared to take up the duty of caring for HIV/AIDS patients. Even after coming into contact with bodily fluids containing HIV, 63% of responders were eager to offer care.

In 2012, 99.2% of nursing students demonstrated a willingness to care for an HIV-positive patient, and the majority of respondents—74.6%—demonstrated a willingness to continue doing so even after unintentionally coming into contact with an HIV-positive patient's bodily fluids.

In a similar vein, a 2013 survey carried out among students at the University of Pune in Maharashtra, India. Most responders (78.19%) expressed a desire to care for HIV-positive people. 43.7% of participants in a survey done in Greece with 279 students—nearly half—were open to volunteering their time to help AIDS patients.

### Conclusion

Nursing students had solid awareness of the numerous facets of HIV/AIDS. The majority of responders have solid knowledge. The majority of them were eager to provide care for HIV/AIDS patients and had good views about patients who were HIV positive.

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