



## Research article

### A study to assess the knowledge and attitude towards HIV/AIDS among adolescents studying in higher secondary school in Inaruwa, Sunsari District, Nepal

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## Abstract

The human immunodeficiency virus (HIV) is a retrovirus that infects cells of the human immune system, destroying or impairing their function. HIV/AIDS (Acquired Immune Deficiency Syndrome) is a present public health problem, viewed more optimistically as a communicable disease. **Aim:** To examine the knowledge and attitude toward HIV/AIDS among adolescent studying in higher secondary school. **Method:** A descriptive cross-sectional research design was used to identify the present knowledge and attitude of adolescents studying at higher secondary school Inaruwa, Sunsari district towards HIV/AIDS. A total number of 180 students were selected by probability sampling technique from two school, Nawayug Higher School and Sharada Higher Secondary school. A self administered structured questionnaire was developed to assess the knowledge and attitude toward HIV/AIDS people. Inferential statistics (Chi-square test) was used to examine the relationship between the knowledge and attitude toward HIV/AIDS, relationship between adolescents' background characteristics and knowledge and attitude toward HIV/AIDS, and relationship between selected background characteristics and knowledge about mode of transmission of HIV/AIDS, prevention, prevention of HIV from mother to child and sources that HIV not transmitted. **Result:** This study showed that total knowledge level of 56.2 percent of respondents have average, of 22.5 percent have excellent and 21.3 percent have poor whereas, total attitude level of 52.2 percent have favorable attitude towards HIV/AIDS people and total knowledge level and attitude level was not significantly different among sex and location of residence.

**Keywords:** Human immunodeficiency virus, Acquired Immune Deficiency Syndrome, Adolescents students, Inaruwa, Sunsari District.

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## 1. Introduction

Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) is a severe health issue all over the world. No cure has been found for the disease yet. It is estimated by the Joint United Nations Program on HIV/AIDS and the World Health Organization (WHO) that the number of people living with HIV worldwide is 33.4 million [1].

Globally, it has been found that more people than ever are living with HIV, largely due to greater access to treatment. The number of people dying of AIDS-related causes fell to 1.8 million in 2010 throughout the world, down from 2.2 million in the mid-2000s. A total of 2.5

million deaths have been averted in low- and middle-income countries since 1995 due to antiretroviral therapy. But an estimated 35.3 million people were living with HIV in 2012. An increase from previous years as more people are receiving the life-saving antiretroviral therapy. Knowledge and specific information has an important role in HIV/AIDS prevention and the students have a central responsibility in prevention in the community [2].

HIV/AIDS prevention programs that target the general population promote monogamy and condom use as primary ways of avoiding HIV infection among active male and female i.e. college studying population. Nepal

Demographic and Health Survey (NDHS), 2011 study showed those males are generally much more aware of the various prevention methods than female. While female are more aware that chance of getting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other sex partner. Prevention is the most important approach to control and reduce the HIV/AIDS infection [3]. The treatment can also slow down the course of disease and reduce the mortality and morbidity [4].

South East Asia Region has the second largest number of people living with HIV/AIDS, next only to Sub-Saharan Africa (AIDS Watch 2003). Among the seven Southern African countries 75% of HIV/AIDS infection occurs among women and girls at the age between 15-24 years. Globally, unsafe sex account for nearly one third of the total disease burden among young women [5].

HIV in Nepal is extremely heterogeneous, with respect to the most at risk population (MARPs), geographic distribution, and risk factors in different geographic regions. The epidemic is concentrated in key populations such as in sex workers, injecting drug users (IDUs), men who have sex with men (MSM), and some migrants. Effective prevention interventions need to be scaled up among MARPs and their direct sexual partners [6].

As UNICEF Nepal (2011), population (thousand) under 18 years were 12883, 10-19 years aged population (thousand) were 7043. Thirty three percent male and (25%) female adolescent have comprehensive knowledge about HIV/AIDS. Eighty six percent male and (76%) female adolescent using mass media since 2002 to 2011 [7]. A cross-sectional study of condom use at first sexual intercourse among college students in Kathmandu shows that among the sexually active students, less than half (48%) had used condoms during first sexual intercourse. The results from the logistic regression analysis revealed that age, caste and/or ethnicity, age at first sexual intercourse, types of first sex partner, alcohol consumption and mass media exposure are significant predictors for condom use at first sexual intercourse among the college students. Students in the older age groups who had first sex were about four times (16 to 19 years old) (OR = 3.5) more likely and nine times (20 or older) (OR = 8.9) more likely than the students who had sex before 16 years of age to use condoms at first sexual intercourse [8].

HIV/AIDS is the largest pandemic ever faced by humankind, with over million people living with over 30 million people living with HIV/AIDS worldwide. Over 95% of new infectious since 2003 have been reported in low and middle-income countries. According to UNAIDS "for every two people who start taking antiretroviral, another five became newly infected. Unless we take urgent steps to intensify HIV prevention we will fail to sustain the gains of the past few years and Universal access will simply be noble aspiration [9].

## Need for the study

In Nepal 3,023 male and 2,095 aged 15-24 years estimated HIV/AIDS infection in 2011. Out of total percentage of HIV people about (2.2%) people get HIV through injectable drug users. Knowledge about HIV/AIDS prevention among young people had decreased in 2012 from 2010: male, (33.9%) from (43.6%) and female, (25.8%) from (27.6%). Sex before 15 year of age among male is found to be 3.7 %, in female 7.0% and in multiple sex partners in male was 3.8% [10].

As knowledge about prevention, (26.10%) male adolescent avoid sexual intercourse, (33.25%) have only one sex partner, (62.91%) use condoms, (17.63%) have no sexual intercourse with commercial sex worker, (0.63%); nothing that can protect from the HIV/AIDS, (0.62%) do not use used syringe, (0.04%) use pure blood and (29.09%) told do not know whereas (20.65%) female adolescent avoid sexual intercourse, (32.24%) have only one sex partner, (50.97%) use condoms, (13.44%) had no sexual intercourse with commercial sex worker, (0.62%) do not use used syringe, (0.19%) use pure blood and (36.02%) told do not know [11].

About 2.1 million adolescent living with HIV and about 1/7<sup>th</sup> of all new HIV infection occur during adolescence [12].

Therefore, a study was conducted on knowledge of cause, risk group, mode of transmission, clinical features, diagnosis, prevention, treatment and attitude towards HIV people among adolescent studying in higher secondary school, Sunsari district to enhance the knowledge and attitude toward HIV/AIDS.

## Aim and objectives

- To examine the knowledge and attitude toward HIV/AIDS among adolescent studying in higher secondary school.
- To assess the level of the knowledge on HIV/AIDS among adolescent.
- To find out the level of attitude toward HIV/AIDS among adolescent.
- To find out the relationship between knowledge of the adolescents and their attitude towards HIV/AIDS people.
- To identify the relationship of the knowledge and attitude with selected background characteristics of adolescents.

## 2. Method

A descriptive cross-sectional research design was used to identify the present knowledge and attitude of adolescents studying at higher secondary school Inaruwa, Sunsari district towards HIV/AIDS. Before proceeding data collection, administrative approval was obtained from the research committee of Tribuwan University, Institute of medicine, Pokhara Campus. Both male and female adolescent studying in higher secondary school were used for this study. Nawayug Higer

Secondary school had one commerce faculty which had 60 students in Grade XI, Sharada Higher secondary school had education and commerce faculty having 80 students in Grade XI of commerce and 40 students in Grade XI of education where as in Sunsari multiple college it has commerce, education and arts stream with having total 150 students in Grade XI of three respective faculty. A total number of 180 students was selected Probability sampling technique from two school, Nawayug Higher School and Sharada Higher Secondary school. The selected school was coded as group A for Nawayug Higher School and group B for Sharada Higher Secondary school respectively. Out of 180 students of Grade XI, 178 were participated in the study. The non response rate was only 1.78 percent. A self administered structured questionnaire was developed to assess the knowledge and attitude toward HIV/AIDS people [13]. Each question was scored from 1 to 3 based on response on "disagree", "agree" and "strongly agree" [14]. The reliability of the attitude items was confirmed by Cronbach's Alpha test (0.622) for 14 items.

The filled questionnaire were rechecked, organized, coded and entered in SPSS 16.0 version for the analysis. Descriptive statistics such as frequency, percentage, mean and standard deviation (SD) were used.

The knowledge was categorized as "Poor", "Average" and "Excellent" on the basis of Inter quartile range (IQR) as in the following way: 25<sup>th</sup> percentile of the sample score = 1<sup>st</sup> quartile, i.e Score < 25 percentile = Poor knowledge, Score between 25<sup>th</sup> – 75<sup>th</sup> percentile = Average Knowledge and 75<sup>th</sup> percentile of the sample score = 3<sup>rd</sup> quartile i.e Score < 75 percentile = Excellent knowledge [15].

Similarly, in relation to attitude, for positive statement, the score was given as 3 for strongly agree, 2 for agree and 1 for disagree. This score was reversed for negative statement as 3 for disagree, 2 for agree and 1 for strongly agree. These scores were summed up for a total score that ranged between 14-42. The attitude was categorized as "Unfavorable" and "Favorable" on the basis of mean as in the following way: Score < Mean = Unfavorable Attitude; Score  $\geq$  Mean = Favorable Attitude [16].

### 3. Result

This descriptive study was carried out to investigate the knowledge and attitude toward HIV/AIDS among adolescent studying in Higher Secondary school. The collected data was analyzed and presented considering the objectives and the research questions related to the study. Descriptive statistics such as frequency, percentage, mean, standard deviation and inferential statistics such as Chi-square test were used for data analysis. Statistical significance was considered at p - value < 0.05.

Table 1. Background characteristics information

n=178

Characteristics	Frequency (No.)	(%)
Age		
15	7	3.9
16	34	19.1
17	49	27.5
18	62	34.8
19	26	14.6
Mean $\pm$ SD	=17.37 $\pm$ 1.07232 years	
Sex		
Male	91	51.1
Female	87	48.9
Place of Residence		
Rural	68	38.2
Urban	110	61.8
Faculty		
Commerce	137	77.0
Education	41	23.0
Religion		
Hindu	160	89.9
Muslim	16	9.0
Buddhist	2	1.1
Ethnicity		
Brahmin	38	21.3
Chhetri	14	7.9
Madhesi	83	46.6
Janajati	26	14.6
Dalit	13	7.3
Adibasi	4	2.2

Table 1 shows that Out of 178 respondents, 62 (34.2 %) of the respondents were 18 years of age, 7(3.9%) are with age of 15 years. The mean age was 17.37 years SD $\pm$ 1.07232. The majority 91 (51.1%) were male. A 110 (61.8%) of respondents were from municipality.

n=178

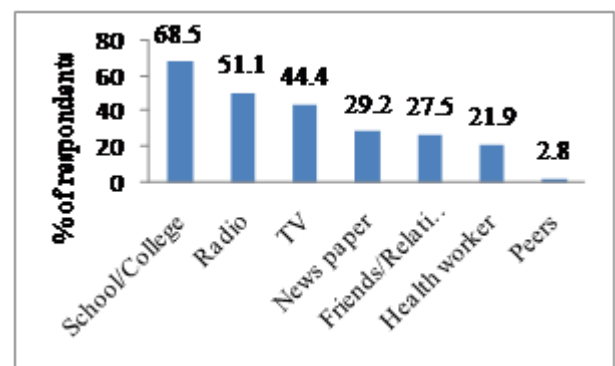


Figure 1. Source of information of HIV/AIDS

Figure 1 revealed that 178(100.0%) respondents heard about the HIV/AIDS. More than half 122 (68.5%) of the respondents said that their most common source of

information was the school/college, followed by the radio 91(51.1%), TV 79 (44.4%), Newspaper 52 (29.2%) and friend/Relatives 49 (27.5%) respectively.

Table 2. Respondent's level of knowledge &amp; attitude on HIV/AIDS

n=178

Level of Knowledge	Frequency No.	%	Mean score	Standard Deviation
Poor	38	21.3	55.5449	8.43859
Average	100	56.2		
Excellent	40	22.5		
Level of Attitude				
Unfavourable	85	47.8	25.1742	3.77892
Favourable	93	52.2		

Table 2 shows that overall respondents had mean ( $\pm$ SD) score of knowledge was  $55.5449 \pm 8.43859$  from 86 knowledge questions and attitude of  $25.1742 \pm 3.77892$  from 14 attitude statements.

Table 3. Relationship between levels of knowledge &amp; attitude of respondents

n=178

Level of Knowledge	Level of Attitude		Total No. (%)	X <sup>2</sup> = d. f= 2	p-value
	Unfavourable No. (%)	Favourable No. (%)			
Poor	22 (57.9)	16 (42.1)	38 (100.0)	1.992	0.369
Average	45 (45.0)	55 (55.0)	100 (100.0)		
Excellent	18 (45.0)	22 (55.0)	40 (100.0)		

(p&lt;0.05)

Table 3 showed that out of 38 respondents with poor knowledge, 16 (42.1%) had favorable attitude, similarly, 100 respondents with average knowledge, 59(55.0%) had favorable attitude, consequently, 40 respondents with excellent knowledge, 22(50.0%) had favorable attitude. towards HIV/AIDS people. Chi square test also reports there was no statistically significant different between level of knowledge and level of attitude.

Table 4. Relationship between selected background characteristics and level of knowledge on HIV/AIDS

n=178

Characteristics	Knowledge level			Total No. (%)	$X^2$ d.f.= 2	p-value
	Poor No. (%)	Average No. (%)	Excellent No. (%)			
Address					2.848	0.241
Rural	19 (27.9)	35 (51.5)	14 (20.6)	68 (100.0)		
Urban	19 (17.3)	65 (59.1)	26 (23.6)	110 (100.0)		
Sex					2.803	0.246
Male	24 (26.4)	48 (52.7)	19 (20.9)	91 (100.0)		
Female	14 (16.1)	52 (59.8)	21 (24.1)	87 (100.0)		
Faculty					0.143	0.931
Commerce	30 (21.9)	76 (55.5)	31 (22.6)	137 (100.0)		
Education	8 (19.5)	24 (58.5)	9 (22.0)	41 (100.0)		

(p &lt;0.05)

Table 4 shows that out of 68 respondents from rural, 35 (51.5%) have average knowledge, and 110 respondents from urban, 65 (59.1%) have average knowledge. Similarly, out of 91 male respondents, 48(52.7%) have average knowledge

and 87 female respondents, 52(59.8%) have average knowledge. Consequently, out of 137 respondents from commerce faculty, 76(55.5%) have average knowledge, whereas, 41 respondents from education faculty, 24(58.5%) have average knowledge, 9(22.0%) have excellent knowledge and 8(19.5%) have poor knowledge. Chi-square test showed that there is no statistically difference between selected background characteristics and level of knowledge.

Table 5. Relationship between selected background characteristics and level of attitude towards HIV/AIDS people

Characteristic	Attitude level		Total No. (%)	X <sup>2</sup> d.f.= 1	p-value
	Unfavourable No. (%)	Favourable No. (%)			
Address				0.223	0.637
Rural	34 (50.0)	34 (50.0)	68 (100.0)		
Urban	51 (46.4)	59 (53.6)	110 (100.0)		
Sex				1.789	0.181
Male	39 (42.9)	52 (57.1)	91 (100.0)		
Female	46 (52.9)	41 (47.1)	87 (100.0)		

Faculty					
Commerce	57 (41.6)	80 (58.4)	137 (100.0)	9.008	0.003
Education	28 (68.3)	13 (31.7)	41 (100.0)		

(p<0.05)

Table 5 shows that out of 68 respondents from rural, half of them have favorable attitude and 59 (53.6%) of respondents from urban have favorable attitude. Similarly, out of 91 male respondents, 52(57.1 %) have favorable attitude whereas, 41(47.1%) female have favorable attitude, 46 (52.9%) have unfavorable attitude. Consequently, out of 137 respondents from commerce, 80(58.4%) have favorable attitude, whereas, form 41 respondents from education, 13(31.7%) have favorable attitude. Chi-square test reports that there is significant difference between faculty of respondents and level of attitude.

Table 6. Relationship between sex and level of knowledge on mode of transmission of HIV/AIDS

Sex of Respondents	Level of Knowledge			Total No. (%)	X <sup>2</sup> d.f.=2	p- value
	Poor No. (%)	Average No. (%)	Excellent No. (%)			
Male	17 (18.7)	4 (52.7)	26 (28.6)	91 (100.0)	6.158	0.046
Female	8 (9.2)	6 (70.1)	18 (20.7)	87 (100.0)		
Total	25 (14.0)	109 (61.2)	44 (27.4)	178 (100)		

(p<0.05)

Table 6 shows that out of 91 male respondents, 48(52.7%) have average knowledge, and out of 87 female respondent, 61(70.1%) have average knowledge, towards mode of transmission of HIV/AIDS. Chi-square test reports that there is statistically significant difference between sex and level of knowledge towards mode of transmission of HIV/AIDS.

Table 7. Relationship between level sex respondents and level of knowledge on prevention of HIV/AIDS

Sex of Respondents	Level of Knowledge			Total No.(%)	X <sup>2</sup> d.f = 2	p-value
	Poor No. (%)	Average No. (%)	Excellent No. (%)			
Male	23 (25.3)	59 (64.8)	9 (9.9)	91 (100.0)	1.748	0.417
Female	18 (20.7)	55 (63.2)	14 (16.1)	87 (100.0)		
Total	41 (23.0)	114 (64.0)	23 (12.3)	178 (100.0)		

(p &lt; 0.05)

Table 7 shows that out of 91 male respondents, 59(64.8%) have average knowledge, 9(9.9%) have excellent knowledge similarly, out of 87 female respondent, 55(63.2%) have average knowledge and 14(16.1%) have excellent knowledge towards prevention of HIV/AIDS. Chi-square test reports that there is no statistically significant difference between sex and level of knowledge towards prevention of HIV/AIDS.

Table 8. Respondent's knowledge about meaning of HIV/AIDS

n=178

Item content with Correct Response	Frequency No.	Percent (%)
HIV is the type of virus	152	85.4
AIDS is the condition where various disease occur due to low immunity	130	73.0
HIV & AIDS is the same thing*	*100	*56.2
AIDS is sexually transmitted disease	173	97.2
AIDS is a disease transmitted from blood	156	87.6
AIDS is a preventable disease	122	68.5
AIDS is a fatal disease	132	74.2
AIDS is not a treatable disease*	*76	*42.7
AIDS is not a curable disease	128	71.9

Yes= Correct Answer No = incorrect Answer \* No= Correct Answer \*\*Multiple Responses

Table 8 showed that 173 (97.2%) of respondents answered correctly about AIDS is sexually transmitted disease. The majority of respondents also answered correctly about transmitted from blood, HIV is the type of virus, AIDS is fatal disease, AIDS is the condition of low immunity, and AIDS is not curable disease, preventable disease. Only 100 (56.2%) and 76 (42.7%) of respondents answered correctly about HIV and AIDS is not the same thing and AIDS is not a treatable disease by giving response "No" respectively.

Table 9. Respondent's knowledge about mode of transmission of HIV/AIDS

n=178

Item content with Correct Response	Frequency No.	Percent (%)
Unprotected sexual contact	161	90.4
Contaminated Blood transfusion	150	84.3
Organ & semen donation	114	64.0
Sharing contaminated needle & syringe	166	93.3
Breast feeding by HIV infected mother to child	121	68.0
Baby delivery from HIV infected mother	140	78.7
Deep tongue kiss to HIV/AIDS infected person	82	46.1

Yes= Correct Answer No = incorrect Answer

\*\*Multiple Responses

Table 9 showed that 166 (93.3%) of respondents knew that HIV can be transmitted through sharing contaminated needle & syringes. The majority of respondents are aware that HIV can be transmitted through unprotected sexual contact, organ & semen donation, contaminated blood transfusion, mother to child transmission. Only 82(46.7%) are aware of HIV transmission through deep tongue kiss to HIV infected person.

Table 10: Respondent's Knowledge about Means through which HIV/AIDS not transmitted

n=178

Item content with Correct Response	Frequency No.	Percent
Mosquito bite	81	45.5
Kissing to HIV infected person	102	57.3
Sharing the same toilet room	147	82.6
Sharing the swimming pool	149	83.7
Insects bite	104	58.4
Hand shaking	155	87.1
Hugging	150	84.3
Sitting together	149	83.7
Sharing meal in one plate	134	75.3

Table 10 shows that 155(87.1%) of respondents are sure HIV is not transmitted by handshaking. The majority of respondents are aware about HIV/AIDS not transmitted by means of hugging, sitting together, sharing swimming pool, sharing toilet room, sharing meal in one plate. Only 81(45.5%) of respondents are aware about HIV/AIDS is not transmitted through means of mosquitoes bite.

Table 11. Respondent's knowledge about preventive measures of HIV/AIDS

Item content with correct response	Frequency No.	Percent (%)
Avoid Multiple sex partner	164	92.1
Having sex with faithful partner	127	71.3
Using Condom safer	169	94.9
Use only screened blood & its product	107	60.1
Not sharing needle & syringe	156	87.6
Not sharing blade & razor	159	89.3
Take ARV therapy during pregnancy by HIV/AIDS infected mother	82	46.1
Prevention of HIV/AIDS from mother to Child		
Taking regular ARV during pregnancy	109	61.2
Avoid breast feeding	101	56.7
Starting ARV therapy to Infant	93	52.2

Yes= Correct Answer No = incorrect Answer

\*\*Multiple Responses

Table 11 shows that the knowledge about prevention of HIV/AIDS, 169(94.9%) of respondents knew that it can be prevented through using of condom safely. The majority of respondents are also knew that HIV can be prevented through avoidance of multiple sex partner, not sharing needles & syringes, not sharing blade & razor, having sex with faithful partner, using only screened blood and its product.

Table 12. Respondent's attitude towards HIV/AIDS people

Statement	Disagree No. (%)	Agree No. (%)	Strongly Agree No. (%)
AIDS is caused by curse of God. *	172 (96.6)	2 (1.1)	4 (2.2)
Most people who have AIDS have only themselves to blame. *	55 (30.9)	104 (58.4)	19 (10.7)
People affected with HIV/AIDS should not be allowed to stay in community. *	147 (82.6)	21 (11.8)	10 (5.6)
If any of friends get HIV/AIDS we will continue our normal social relationship with him or her.	40 (22.5)	101 (56.7)	37 (20.8)
Any people had to have contact with someone with HIV/AIDS; they would worry about putting their family and friends at risk of contracting the disease. *	112 (62.9)	46 (25.8)	20 (11.2)
Women who give birth to babies who are HIV/AIDS positive should be prosecuted for child abuse. *	88 (49.4)	70 (39.3)	20 (11.2)
Sympathy would felt more toward people who get HIV/AIDS from blood transfusions than those who get it from others.	62 (34.8)	91 (51.1)	25 (14.0)
People with AIDS should be treated with the same respect as any other people in hospital.	43 (24.2)	82 (46.1)	53 (29.8)
Like to do something to make life easier for people with HIV/AIDS.	16 (9.0)	81 (45.5)	81 (45.5)
HIV/AIDS infected person should allow participating in social or family function.	23 (12.9)	82 (46.1)	73 (41.0)
Any of family members gets HIV/AIDS we will ready to care him / her.	17 (9.6)	88 (49.4)	73 (41.0)
We should not tell others if one has HIV/AIDS. *	115 (64.6)	41 (23.0)	22 (12.4)
No sympathy for teacher who get HIV/AIDS. *	103 (57.9)	56 (31.5)	78 (43.8)
HIV/AIDS infected person should not keep sexual relationship with normal people.	44 (24.7)	56 (31.5)	78 (43.8)

The categories "disagree", "agree" and "strongly agree" responses. \* Negative statements

Table 12 shows that 101(56.7%) of respondents agreed that if any of friends get HIV/AIDS we will continue our normal social relationship with him or her. In addition to this, 91(51.1%) and 88 (49.4%) of respondents agreed that sympathy would felt more toward people who get HIV/AIDS from blood transfusions than those who get it from others, any of family members gets HIV/AIDS we will ready to care him / her respectively.

#### 4. Discussion

This study showed, more than half of the respondents said that their most common source of information was the school/college, followed by the radio, TV, Newspaper and friend/Relatives respectively. Only 2.8 percent from peer. Likewise, study done by [16] showed that 79.6 percent of participant mentioned that television and radio were the main sources of information. A majority 62.7 percent of senior secondary students belonging to a government school in Chandigarh reported that they derived most of the information from TV and radio. Only 9.5 percent of children had heard about HIV/AIDS through their respective school. It

might be due to use of media and culture differences of people.

This study showed that total knowledge level of 56.2 percent of respondents have average, of 22.5 percent have excellent and 21.3 percent have poor whereas, total attitude level of 52.2 percent have favorable attitude towards HIV/AIDS people and total knowledge level and attitude level was not significantly different among sex and location of residence. However, as study done by [17] in Iran showed that the total knowledge level of 60.2% of students was good, of 34.1% of them was moderate and 5.7% of subjects had poor knowledge level, and total knowledge level was not significantly different among girls and boys. In the present study there were negative attitudes towards AIDS and HIV positive persons. In 68.6% of students the attitude was moderate, in 23.3% the attitude was good and in 8.1% of students the attitude was poor.

This study showed that significant difference between faculty of respondents and attitude towards HIV/AIDS however, a study done by [16] showed the statistically significant difference between level of education of respondents and attitude toward HIV/AIDS.



## Conclusion

It is concluded that the students had heard about HIV/AIDS. Most of respondents knew about meaning of HIV/AIDS, mode of transmission, Prevention. Thus, while mass media approaches could be the most likely strategy for future educational efforts in schools programs.

Respondents have misconception about route of HIV transmission through mosquitoes, insect bites and kissing. It could not demonstrate any statistically significant relationship between knowledge on HIV/AIDS and selected background characteristics whereas; there is statistically significant relation between faculty of respondents and attitude towards HIV/AIDS people.

Majority of respondents have average knowledge with favourable attitude towards HIV/AIDS people but it does not show the statistically significant relationship between level of knowledge and level of attitude.

## References

- [1] World Health Organization, & UNAIDS. AIDS epidemic update Europe: WHO Regional Office; December 2009.
- [2] Joint United Nations Programme on HIV/AIDS (UNAIDS). Global report: UNAIDS report on the global AIDS epidemic 2013. UNAIDS, 2013. According to the UNAIDS estimate the number of new infections in the region increased from. Geneva: 2015.
- [3] Mahat G, Scoloveno MA. HIV/AIDS knowledge, attitudes and beliefs among Nepalese adolescents. *Journal of advanced nursing*. 2006 Mar 1; 53(5):583-90.
- [4] Mondal NI, Takaku H, Ohkusa Y, Sugawara T, Okabe N. HIV/AIDS acquisition and transmission in Bangladesh: turning to the concentrated epidemic. *Jpn J Infect Dis*. 2009 Mar 1; ;( 2):111-9.(62).
- [5] Otolok-Tanga E, Atuyambe L, Murphey CK, Ringheim KE, Woldehanna S. Examining the actions of faith-based organizations and their influence on HIV/AIDS-related stigma: a case study of Uganda. *African health sciences*. 2007 Mar; 7(1).
- [6] Organization WH. [Global update on HIV treatment: results, impact and opportunities.]. 2013.
- [7] UNICEF. Opportunity in crisis: preventing HIV from early adolescence to young adulthood: UNICEF; 2011.
- [8] Adhikari R. Are Nepali students at risk of HIV? A cross-sectional study of condom use at first sexual intercourse among college students in Kathmandu. *Journal of the International AIDS Society*. 2010 Mar 2; 1(13:1).
- [9] Malta M, Magnanini MM, Strathdee SA, Bastos FI. Adherence to antiretroviral therapy among HIV-infected drug users: a meta-analysis. *AIDS and Behavior*. 2010 Aug 1; (4):731-47. (14).
- [10] Khanal V, Adhikari M, Sauer K, and Zhao Y. Factors associated with the introduction of prelacteal feeds in Nepal: findings from the Nepal demographic and health survey 2011. *International breastfeeding journal*. 2013 Aug 8; 8((1):1.).
- [11] Tang J, Gao X, Yu Y, Ahmed NI, Zhu H, Wang J, Du Y. Sexual Knowledge, attitudes and behaviors among unmarried migrant female workers in China: a comparative analysis. *BMC Public Health*. 2011 Dec 12; 11((1):917).
- [12] Organization WH. [Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations]. 2014.
- [13] Latkin CA, Kuramoto SJ, Davey-Rothwell MA, Tobin KE. Social norms, social networks, and HIV risk behavior among injection drug users. *AIDS and Behavior*. 2010 Oct 1; (5):1159-68. (14).
- [14] Lui PS, Sarangapany J, Begley K, Coote K, Kishore K. Medical and nursing students perceived knowledge, attitudes, and practices concerning human immunodeficiency virus. *ISRN Public Health*. 2014 Mar 31.
- [15] Thanavanh B, Harun-Or-Rashid M, Kasuya H, Sakamoto J. Knowledge, attitudes and practices regarding HIV/AIDS among male high school students in Lao People's Democratic Republic. *Journal of the International AIDS society*. 2013 Nov 3; (1). (16).
- [16] Lal P, Nath A, Badhan S, Ingle GK. A study of awareness about HIV/AIDS among senior secondary school children of Delhi. *Indian journal of community medicine. Official publication of Indian Association of Preventive & Social Medicine*. 2008 Jul; 3:190. (33).
- [17] Abdeyazdan Z, Sadeghi N. Knowledge and attitude toward AIDS/HIV among senior school students in Isfahan. *Archives of Clinical Infectious Diseases*. 2008; 2(3).