

# **An Effect of Structured Teaching Programme On HIV/AIDS Among Government Secondary School Adolescents In Ilam District of Eastern Region.**

By

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**Approved by the Research Committee**

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## **LIST OF ACRONYMS**

WHO	World Health Organization
UNICEF	United Nation international Children's Emergency Fund.
VDC	Village development committee
NGO	National Government Organization.
I/NGO	International non-government organization.
AIDS	Acquired Immune Dificiency Syndrome.
HIV	Human Immuno virus.
STD	Sexually Transmitted Disease.
AZT	Azidothymidine or Zidovudine
IVDUS	Intra Venous Drug Users.
IEC	Information Education Communication.
SA	Strongly Agree.
A	Agree
U	Uncertain.
SD	Strongly disagree
D	Disagree
P.S	Positive statement
N.S.	Negative statement.

# ABSTRACT

Although AIDS was first recognized in 1981. In Nepal it was first identified in 1988. It has spread alarmingly since then in resource limited settings accurate information about AIDS and HIV is important for their prevention.

Adolescents are also a group that has risks of STD and HIV infections. To address this issues HIV/AIDS education has been imparted to adolescents. This study is intended to assess the knowledge and attitude of two secondary school adolescents of Ilam district and measure the impact of a structured teaching program on their general knowledge about AIDS, modes of transmission and the degree of misconception about the transmission.

A well-designed interventional health education program was conducted among 170 secondary schools adolescents using personal communication and visual media. Provided handout and Ludo game a playful educative resource for HIV/AIDS prevention after health talk. Pre-test and post test were done to assess their knowledge and attitude before and after structured teaching program. A structured questionnaire consisted 45 questions about HIV/AIDS was administered and to maintain validity and reliability of the tool a pretest was done with 10% of the total sample. The overall knowledge about HIV/AIDS was found to be quite high although misconceptions regarding non sexual transmission routes of HIV still frequent. The mean age group of adolescents was 16.3+/1.59(+SD). The main source of information for AIDS awareness was reported by students radio, television and poster.

## **Conclusion:**

After structured teaching program the significant difference was observed in the mean scores of accurate response on knowledge and attitude between pre and post test.

## **Recommendations:**

Continuous program, time and again revision of course and refresher training to teachers are recommended to make effective teaching leanings.

## **1.2. Introduction Of Study Area:**

Ilam is one of the mid hill districts in east Nepal. Geographic distribution of this district is quite unique ranging from about 250-meter sub-foot hill to 3636 meters high mountainous range which spreads from south to North. Due to the smooth range of sub-foot hills, hills and mountains the climatic condition in this district is also quite pleasant to live in. With several micro climatic zones, Ilam district accommodates all types of flora and fauna that represents all that are found in the rest of the kingdom.

### **Socio-economic condition:**

Ilam is an agricultural district. Almost all people from here are farmers except a few who earn their living through service and trade who are confined in town areas. The farmers are busy from dawn to dusk all the year round. The major crops include- rice, corn, potatoes, mustard, wheat, barley and other cash crops.

Although local people look simple by their way of living and dress up. They are well off in economic condition in the context of Nepal. Their main source of income is agricultural products like cardamom, tea, ginger, Amliso, milk etc. People are modest and helpful and pay high respect to the outsiders. Hinduism, Buddhism and Kiratism are the main religions that are followed by local people. The main ethnic groups who populate this district are Limbu, Rai, Brahmin, Chhetri, Tamang, Sherpa, Magar, Gurung and Newar.

### **Facts and figures: (Source: District Development Committee of Ilam)**

#### 1. Location

- Latitude :36°40' to 27°8'
- Longitude : 87°40' to 88°10'

#### 2. Boundary

East :Darjeeling (India) West: Morang District  
North: Panchthar District South: Jhapa

3. Area: 1,703 Sq. km.

4. Population: 2,29214 (Male: 115377 Female: 113837)

#### 5. Educational Institutions

- Campus:
- Higher secondary Schools:

- Secondary Schools:
- Lower secondary Schools:
- Primary Schools:
- Private Schools:

## 6. Other statistics

- Total House Hold number: 41450
- Average family size: 5.8
- Population growth rate: 2.5%
- Average Literacy rate: Male: 65.9%, Female: 39%
- Occupation: Agriculture: 88.77% and Others:11.13%

### **Infrastructures:**

At present Ilam is connected to east west high way with a metalloid road. Electricity, Telecommunication, hospital, drinking water system etc. are the major facilities available in the district headquarters. However, the rural parts of this district still don't have such modern facilities.

### **1.3. Significance of the Study:**

From substantial point of view, today's youth are under greater peril of HIV/AIDS. About 16,000 people are infected every day among those 7000 are youngsters whose ages range from 10 to 24 years and they came mainly from developing countries. The global population is young and increasingly so between 1960 and 1999, when the world population grew by 75% the proportion of young people increased by 99%. Not only the proportion of young people but also the ratio of HIV/AIDDS among young people are also increasing.

Large number of young people specially girls in HIV prevalent countries are either not clear on how to protect themselves or are unaware of the risk from the dangerous disease. International AIDS conference at Durban in south Africa a UNICEF press release issued in a number of countries where AIDS is an epidemic nearly half of all sexually active girls aged between 15-19 believe that they face no risk of contracting the disease.

Due to the lack of HIV/AIDS awareness and prevention programs young people are infected by HIV/AIDS. In this context more than 50% HIV positive cases in Nepal are under 25 years. A high prevalence of HIV among IVDUS (intra venous Drug users) is emerging as a new social and health problem. In a very short period, the prevalence rate has increased to 49.1 %.

The existing dangers of girls trafficking in our country also accelerate the growth of HIV/AIDS.

Thousands of children travel to India each year and most of them are exploited end up in sex trade. The ages of females forced into prostitution range from 7 to 24. Quick steps are taken and should be continued to control and protect the future generation.



HIV is preventable. The spread of HIV infection can be stopped. It's a question of awareness, education and resources. Due to general awareness and sex education program about HIV/AIDS the rate of this disease is declining in European countries. Of course awareness needs to be increased, education has to be provided and resources must be available its' too late. This is why young people are a priority when it comes to HIV prevention. Young people are much more receptive to new ideas. They learn more quickly and they are at the start of their sexual lives. The young generation plays a vital role in bringing about change in society. They are more likely to adapt safety measures of living in comparison to older generation. Young forces are more effective in preventing and controlling HIV/AIDS with continuous and full support, help and assistance from elders and practical education they themselves act as educators and help their peers.

It has been found that contrary to earlier believe, AIDS education in schools does not increase promiscuity, specially it does not lead to earlier or increased sexual activity in young people even when contraceptive are made available and leads to the delay of the initiation of sexual activities. Those adolescents who are already active it may assist in the reduction of the number of sexual partners and increase the use of safer practices. UNICEF argues that HIV/AIDS education efforts with involvement of young people in their program have shown success, adding that it will focus its resources on strengthening such efforts. HIV rates in the affected countries like Uganda, Malawi, Senegal, Thailand and Zambia have started falling due to such education efforts.

In the context of Nepal students in schools generally have limited access to information about sex, sexuality and human reproduction. HIV/AIDS among adolescents and young adults remain a major challenge needing a comprehensive and broad based response and action. Implementing a large-scale information and education programs is essential for HIV/AIDS prevention. Prevention intervention, programs must be targeted at population with high-risk behavior as a matter of priority.

In the absence of a vaccine or a cure education is the only weapon available to prevent the spread of HIV/AIDS. Each individual especially youngsters should be educated. Such programs should be encourage them to safe guard their rights and protect themselves against HIV/AIDS. HIV/AIDS education and information must also reach various population groups, which includes young people in and out of school, factory workers as well as the general population.

No doubt the nursing student has some responsibility in this regard. Therefore, the proposed study will bring awareness on HIV/AIDS among adolescence through health education. This proposed study would not only assess the level of knowledge and attitude of adolescence but also help to disseminate information on the spread of HIV infection and help to change the attitudes of adolescents. In addition, the findings may help the health managers to plan and intervene an appropriate program to prevent AIDS epidemic in Nepal

#### **1.4 Research Topic:**

An effect of structured teaching program on HIV/AIDS among government secondary school adolescents in Ilam district of eastern region.

## 1.5. Statement of the problem:

Record show HIV/AIDS appeared in Nepal 1988 and has claimed 140 lives since then. According to recent available data the HIV/AIDS situation in Nepal by age groups are as follows.

Cumulative HIV infection by age group. (Oct. 2000)

Age group	Male	Female	Total
0-5 years	10	5	15
6-13 years	3	3	6
14-19 years	63	139	202
20-29 years	694	266	960
30-39 years	355	79	434
40-49 years	70	15	85
50 and above	11	1	12
Total	1206	508	1714

Report of UNICEF shows six young people under the age of 25 become infected every minute with HIV. Nepal is not spared from this global menace. Very little information exists on premarital, marital and extra marital sexual activity among adolescents due to social taboos and inhibitions on sex in Nepal. It appears that unmarried adolescents are becoming sexual active. Plan international Makawanpur study found that 10% of adolescent boys between 15-19 years old sexually active, 54% of these had multiple sex partners. About half of the sexually active adolescent boys did not believe they were at risk of contacting STD or HIV/AIDS. However for purposes of prevention and care, adolescents are a unique and important group to high light adolescents in a time when sexual behavior and drug use patterns are developing in a very short period the prevalence rate has increased to 49.1% in Nepal. Also available data shows that is a growing recognition that adolescents may be a group at considerable risk for HIV information. However information about this group is still limited.

Most government programs relate to the awareness and prevention of STD and HIV/AIDS. No adolescent specific agency exists in the public private or sectors. Since adolescents have the right to seek knowledge and information about HIV/AIDS. Thus research in this field was felt most essential.

## 1.6 General Objective :

To create more awareness among secondary school adolescents towards HIV/AIDS by conducting structured teaching programs on HIV/AIDS.

### **1.7 Specific objectives:**

- To identify the knowledge and attitude among high school adolescents on HIV/AIDS.
- To conduct structured teaching session on HIV/AIDS by applying different teaching methods e.g. Brain storming, group discussion, educational games, and lectures.
- To assess the effect of structured teaching on HIV/AIDS among secondary school adolescents.
- To differentiate the level of knowledge and attitude of adolescents on HIV/AIDS before and after conducting the structured teaching.

### **1.8 Statement of hypothesis.**

School adolescents will increase their level of knowledge after structured classes on HIV/AIDS.

School adolescents will develop positive attitude towards the people with HIV/AIDS.

### **1.9 Operational definitions:**

**Structure:** An organized lesson plan containing general knowledge about HIV/AIDS, ways of transmission and preventive measures.

**Teaching:** Imparting knowledge and guiding students to acquire new knowledge.

**HIV:** It refers knowledge about human immune virus.

**AIDS:** Acquired immune deficiency syndrome caused by human immune virus.

**Adolescent:** In this study adolescent is considered to encompass approximately ages 12 – 22 and students of class 9 and 10.

**Knowledge:** Having understanding about HIV/AIDS.

**Intervention:** Becoming Involved to conduct class regarding HIV/AIDS.

**Attitude:** Behavior towards clients with the ways of thinking on HIV/AIDS.

**Assessment Scale:** It refers to instrument (Questionnaire) for assessing the level of knowledge and attitude of school adolescents which is designed in various dimension,

demographic, general knowledge on HIV/AIDS made of transmission and preventive measure. Likert scale was used for measuring attitude.

**Pretest:** The assessment of the knowledge and attitude by using questionnaire before class teaching starts.

**Posttest:** It denotes the assessment of the adolescence knowledge attitude after educational interventional sessions on HIV/AIDS.

<b><i>Inadequate knowledge:</i></b> (0%-50%)	School adolescents who obtained below 22.5 marks in 45 full marks.
<b><i>Moderate adequate knowledge:</i></b> (51%-75%)	School adolescents who obtained between 22.5 to 33.75 marks in 45 full marks.
<b><i>Adequate knowledge:</i></b> (76% – 100%)	School adolescents who obtained more than 33.75 marks in 45 full marks.

### **1.10 Limitations of the study:**

This study is limited only to 170 secondary school students of Ilam district and data collection is limited to 4 weeks only. So, it can not be representative of all the school students of our country.

The investigator made every possible attempt to reduce bias in data collection and selection of sample subjects.

Collected information are based on student's written response only.

The study was not possible as per plan due to the Maoist's school shutdown campaign for a week.

### **1.11 VARIABLES:**

**Independent variables:** The educational intervention program on HIV/AIDS

**Dependent Variables:** The dependent variables are acquired knowledge and attitude after receiving educational sessions on HIV/AIDS

**Other Variables for study:** sex, ethnicity, location setting of people, education level of

students and their parents, occupation, economic condition, availability of information media, previous attendance of students in any kind of educational sessions.

### **1.12 Conceptual framework:**

This study based on the Newman's general system theory the general system theory is concerned with changes due to interaction between the person and environment changes continuously.

Newman describes exchanging is the interchange of matter and energy between the person and the environment and the transformation of energy from one form to another. This theory provides the way to understand the many influences on the whole persons and the possible impact of change of any part of the whole.

The main concepts of the general system theory are input, through put and out put. In system theory input refers to any form of information, energy or materials that enter into the system through its boundary. Through put refers to the process whereby the system transform creates and organizes the input. The output refers to energy information or matter that is transfer to the environment.

In this study the input refers that conducting structured teaching program on HIV/AIDS. Through put is imparting the knowledge and attitude and the process of understanding. The output is the predicted change in the knowledge and attitude of high school adolescents.

## **REVIEW OF LITERATURE**

Selected research and other works relevant to the study subject were reviewed and also researched in the Internet in computer to gain deeper insight into the problem of the study subject. The purpose of literature review were to find out certain aspects that need to be included in the study of to confirm earlier findings to find certain data that may be applicable in interpreting the conclusion of the study. Reviewed literature has been grouped in the following categories.

### **2.1 Literature related to general information on AIDS:**

Dr. Suvedi B. K. (1994) described that the causative organism of AIDS is called human immune deficiency virus, in short HIV. The virus was detected in 1983 in patients with AIDS by Dr. Luc Montagnier and later confirmed by Dr. Robert Gallo. Initially the name given for the virus was HTLV- III (Human T-cell Lymphotropic virus Type III) ARV (AIDS related virus) and LAV (Lymphadenopathy associated virus) However the scientists later in 1986, agreed to give the virus a globally acceptable name HIV. The HIV falls in the retrovirus group under lentiviruses in the retroviridae family of viruses. The characteristic feature of the retroviruses is that they are capable of transcribing RNA into DNA with the help of an enzyme and remain inside the cell lifelong that is why, once infected the person remains infectious throughout his life.

Sawyer, Kathy, Stein Rob(1999) presented a report published in the March 16 issue of the proceedings of the Academy of sciences which indicates that protein found in urine, tears, saliva and mother's milk appear to neutralize HIV. Researches discovered the proteins called lysozyme and ribonuclease, while analyzing a hormone produce during pregnancy that has an inhibitory effect on HIV. The findings may explain why HIV is not transmitted

through saline. Lead researcher Sylvia Lee Hung of the new york university school of medicine said that the proteins may be useful an anti-AIDS agents and that they will likely be well tolerated by the body.

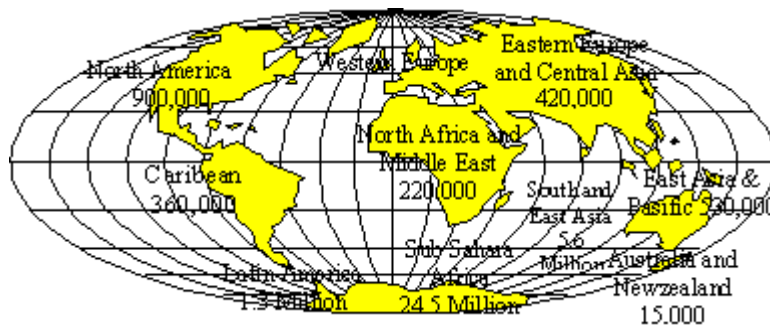
Gree Gayling, Meran Theresa A(1988) stated that HIV antibody and viral culture are the primary means of documenting HIV infection. Antibody testing is the test of choice for rapid and inexpensive confirmation of HIV exposure. Antibody testing alone, however is not diagnostic for AIDS. The most commonly used tests to detect HIV antibody are the enzyme linked immunosorbent assay (Elisa) technique and the western blot technique. The Elisa technique uses spectrophotometry to detect serum antibodies that bind to laboratory grown HIV antigens. the western blot technique uses electrophoresis to separate viral antigens and measures scrum antibody reaction to specific viral proteins.

United press international (1999) presented a research conducted at northwestern university indicated that there are similarities between the Ebola virus, HIV, and the pathogens that cause measles, Mumps and other infections, scientists determined the structure of a protein that the viruses us to enter host cells . The protein called the "fusion protein" Snags the membrane of a host cell, allowing the virus to enter the cell. the discovery, which is documented in today's edition of molecular cell, may help scientists develop antiviral medications.

## 2.2 The current global situation in HIV/AIDS:

In its latest report, UNAIDS says of the world 34.5 million people infected with the virus at the beginning of this year, nearly 90 percent are living in the developing world- mainly in the countries of sub Saher – an Africa, and yes south and southeast Asia. In India alone 3.7 million of its one billion people are carrying the virus. The south Asian giant, which shares a long open border with Nepal, is second to only south Africa- where 4.2 million of its 42 million people are infected in terms of sheer numbers.

Figure - 2



(There are 34.3 million adults and children living with HIV/AIDS in the world today.)

*Source: Himel (Oct. 2000)*

Mertens TE, Low Beer D, has reported, as of the end of 1995, following an extensive country by country review of HIV/AIDS data a cumulative total of 6 million AIDS cases were estimated to have occurred in adults and children world wide and currently 20.1 million adults are estimated to be alive and infected with HIV or have AIDS of the total prevalent HIV infections, the majority remain concentrated in eastern, central and southern Africa, but epidemic is evolving with spread of infection from urban to rural areas, as well as to west and south Africa, India and South east Asia, and to a lesser extent with proportional shifts to heterosexual infections in North America, western Europe and Latrine America. WHO currently projects a cumulative total of close to 40 million HIV infections in men. Women and children by the year 2000. By that time, the male-female ratio of new infection will be close to 1:1.

## 2.3 HIV/AIDS situation in Asia and Nepal :

*AIDS and HIV infection in South-East Asia region, 1, January 2000*

Country	Reported AIDS cases	Date of last report	Estimated HIV infections	Rate per 100,000 population
Bangladesh	12	6/99	21,000	16
Bhutan	1	8/98	< 100	<16
DPR Korea	0	11/96	< 100	< 1
India	8,491	9/99	4,000,000	418
Indonesia	255	9/99	25,000	< 12
Maldives	5	6/99	< 100	< 25
Myanmar	2,854	12/98	440,000	760
Nepal	261	6/99	25,500	66
Sri Lanka	77	6/99	7,500	32
Thailand	123,355	8/99	950,000	1,345
Total	135,311	—	5,468,800	>358

Asia is home to over 60 percent of the world's adult population, Hence what happens in the region will have a major impact on the global pandemic. The general epidemiology and estimated prevalence rates for these countries are extremely diverse, ranging from countries with low prevalence rates (Mongolia, DPR Korea) to countries with higher prevalence (Cambodia, Myanmar and Thailand).

- The epidemic in Thailand is among the best documented in the world, with an estimated three quarter of million people living with HIV, In India alone 3.7 million of the one billion people are carrying the virus merely 12 years after HIV was first detected in that country.
- The Cambodia the HIV/AIDS data indicate that current extensive HIV epidemic started during the late 1990's early 1990 and is predominantly occurring among heterosexuals with multiple sex partners.
- The epidemic in Myanmar is one of the most serious in the region. There are an estimated half a million people with HIV in this country in 1996.
- The rapid growth in prevalence in IVDUs and Sex workers in Malaysia. In Malaysia and Myanmar in the early stages of their epidemics.
- In Vietnam rates in some sex workers populations prevalence increased five folds in the four years to 1998.
- In China almost half a million people in a population over billion are estimated to HIV positive.
- Nepali experts now believe that the disease has progressed from its early "transition phase to silent epidemic and could number will over 50,000 HIV infected cases at this moment.
- In Hongkong, Japan, Mongolia and the Republic of Korea, extensive spreads have not been documented.

## **2.4 Maternal Fetal Transmission:**

According international newspaper report mother to child HIV transmission is also called vertical transmission. Mother can transmit HIV to their children in three ways during pregnancy, during childbirth and through breast-feeding. The risk for vertical transmission ranges from 15 to 25 percent in industrialized countries and 25 to 45 percent in developing countries.

Reader, Martin and Konlak described most women infected with HIV are in the reproductive years. Perinatal transmission is an increasingly important mode of HIV infection and can result in birth of severely ill infants who die early from AIDS. Studies have not demonstrated conclusively that HIV infection adversely affects the cause of pregnancy, although there may be an association with premature rupture of membranous, pre-term birth and low birth weight. Prenatal transmission occurs frequently when the mothers in HIV infected with between 35% and 50% of infants testing positive for HIV antibodies. Because maternal IgG (Anti-HIV antibody) crosses the placenta diagnosis of infant infection is difficult before 15 months of age, unless signs of AIDS are present.

Tropper, P.J. Daniel, S.S, Garland M, Stark, R AND Myers M.M (1997) stated the risk of vertical transmission of HIV from mother to infant without antiviral treatment is variously reported as 14% to 15% for optimal protection of the infant, standard zidovudine (ZDV) treatment is given in three stages to the mother during pregnancy, during labor and to the newborn for six weeks after birth.

Preble Elizabeth A. Piwoz Ellen G (1988) reported that in the mid 1980's human immuno deficiency virus was cultured from breast milk in HIV infected mothers and cases were reported to breast feed infants of HIV infected mothers seroconverting during the post partum period. This threat was particularly grave, since child survival experts have come to mothers and infant alike. In 1977 Labbok stated only one to two percent of all HIV transmission occurs through breast-feeding.

According to Devincenzi (1997) of seven children born to an HIV-sero positive mother, one will be infected through breast-feeding, two to three will be infected through the utero or intra partum transmission and three to four will remain uninfected.

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- In Vietnam rates in some sex workers populations prevalence increased five folds in the four years to 1998.
- In China almost half a million people in a population over billion are estimated to HIV positive.
- Nepali experts now believe that the disease has progressed from its early "transition phase to silent epidemic and could number will over 50,000 HIV infected cases at this moment.
- In Hongkong, Japan, Mongolia and the Republic of Korea, extensive spreads have not been documented.

Kreiss (1997) reported on third to one half of all mothers to child transmission of HIV worldwide is due to breast-feeding.

## 2.6 STUDIES RELATED TO AIDS EDUCATION PROGRAM:

Saleh M.A. (1997) did an exploratory study an impact of health education program on knowledge about AIDS an HIV transmission in students of secondary schools in Buraidah city. This study is intended to assess knowledge on AIDS. A well designed health education program using personal communication and visual media was conducted for 483 secondary school students during the year 1997.

Pre and Post tests were done to examine their knowledge about AIDS. The result of this study pointed out that a health education program on AIDS for students significantly improved their scores on general knowledge on AIDS.

Valente TW, Bharath U evaluated the effectiveness of three drams created to disseminate HIV/AIDS information. Pre- drama and post post-drama interviews were conducted with cohort of randomly selected audience members from ten separate performances in Tamil Nadu state, India. The results showed that a significant increase in HIV/AIDS related knowledge occurred as a result of watching the drama and able to reduce certain misconceptions about HIV/AIDS. This research demonstrates that drama can be an effective medium for communicating HIV/AIDS information and can reduce knowledge gaps associated with low levels of formal education.

Hancock t; Mikhail BI; Santas A; Nguyen A; Nguyen H, Bright D (year) conducted a study on comparison of HIV/AIDS knowledge among high school freshmen and senior students. The purpose of the study was to assess and compare the level of knowledge convincing HIV/AIDS. The findings revealed that both the freshmen and senior students had several misconceptions about HIV/AIDS and mean knowledge scores among freshmen and senior

students indicated there was no significant difference among the two groups. African, American students specially the female students, had significantly lower knowledge scores than other ethnic groups.

Sweat MD ; Nopkesorn T ; Mastro Td ; Sangkaromya S , Macqueen k : (1991) studied AIDS awareness among a cohort of young Thai men. Structured interviews and focus group discussions were conducted among 834 young Thai men drafted into military service by random lottery in northern Thailand. Multivariate path analysis shows that exposure to information about AIDS significantly reduced risk taking from baseline to follow up, but only by first affecting personal risk perception, Focus group discussions revealed that risk perception for acquiring AIDS was low due to never knowing a person with aids, because prostitutes had health certificates for SID, and since many believed that AIDS could be cured or prevented with folk medicines .

Schall VT ; Monteiro S; Rebello Sm ; Torres m conducted study on evaluation of the ZIG-ZAIDS Game ; a playful, educative resource for HIV/AIDS prevention. The study involved evaluation questionnaires sent to a list of schools and institutions using the game, plus interviews. The results showed that the populations level of information is more relevant than age in relation to the game's impact. In summary, ZIG-ZAIDS was found to be an entertaining creative and innovative alternative for providing information on AIDS and sexuality.

Agrawal HK ; Rao Rs, Chandrashekar S; Coulter JB conducted a study on knowledge of the attitudes to HIV/AIDS of senior secondary school pupils and trainee teachers in Udupi district, Karnataka, Pupils in one school were reassessed after a health talk and distribution of a handout . However, there were many misconceptions about transmission and prevention and 16.9% of pupils were found to possess very little knowledge of HIV/AIDS. It was found that 24.3% pupils and 6.3% of trainee teachers thought there was cure and 27.4% of pupils and 14% of trainee teachers thought there was a vaccine to prevent HIV infection. The pupils who were reassessed after receiving a talk and handout showed significant improvement in their knowledge and a change in attitude.

Evans AE ; Edmunds on , Drane Ew ; Harris KK, studied the effectiveness of a computer assisted instruction (CAI) based intervention to a more traditional lecture based intervention for influencing psychosocial correlates of HIV preventive behaviors. Students enrolled in a human sexuality course were randomly assigned to one of three groups CAI, lecture, or no intervention group. Participants in the CAI group reviewed a 1 hour long CAI program participants in the lecture group were presented with a 1 hour long lecture and participants in the no intervention group received no intervention. After completing the respective interventions, the analyses disclosed that, compared to participants in the lecture group, participants in the CAI group scored significantly higher on the scales measuring auto immune deficiency syndrome knowledge. This study conclusions was CAI based programs can be effective for delivering instruction on HIV prevention.

Maswanya E ; Moji K ; Aoyagi K ; Yahata : conducted a study to assess knowledge and attitudes concerning HIV infection and individuals with AIDS among 383 female students attending colleges in Nagasaki Japan . The main source of information for AIDS awareness as reported by the students was the mass media Students demonstrated a high level of knowledge concerning AIDS and HIV , but had considerable misconceptions and prejudices about people having HIV/AIDS.

Robbin I, Cooper A, Bender M.P(1991 ) studied the relationship between knowledge, attitude and the degree of contact with HIV/AIDS infected persons among three groups of people nurses (112) psychology students (63) and design students (26). The study found that there was no relationship between knowledge and attitude for these three groups although contact and knowledge were related for the design students and contact and attitude were related for the psychology students. For all three groups the strongest relationship was between contact and attitude.

Lester and Beards (1985) studied among 177 baccalaureate nursing students and reported that those students with a higher fear score, higher knowledge score and who were more homophobic were less willing to care for patients with AIDS.

Sacts (1996) conducted a baseline study to assess the knowledge and attitudes on STD/AIDS among migrant workers, young travelers and housewife in Kathmandu, Patan Bhaktapur and Chitwan, The findings were 80% of the respondents had the knowledge that AIDS is a fatal disease, 50% thought that there is no treatment for AIDS and

35.6% migrant workers and 20% house wives thought that AIDS is a foreign disease 80% of the respondent knew that AIDS is transmitted through sexual intercourse. Less than half (46%) of the housewives knew that HIV infected mother can transmit the disease to the newborn baby. About 50% of the migrant workers did not know that HIV might be transmitted through use of unsterilised syringes.

Erpelding Anne, Bista KP (1997) conducted a study in Nepalgunj to assess knowledge attitude and behavior concerning STD/HIV in selected population in Urban area of south central Nepal. Three groups in the sexually active age, policemen, antenatal care clients and students from campuses and high schools were included in the study. The overall awareness about STD/HIV/AIDS was found to be Quite high. Although misperceptions regarding non sexual transmission routes of HIV were still frequent for a quarter of policeman, 9.1% of the ANC patients and 18% of male high schools students thought that HIV/AIDS is transmitted through insect bites.

Sharma Mahesh, Poudel. Krishna, Poudel Kalpana (2000) conducted a rapid assessment study on HIV/AIDS among the boatman of Fewa lake. This descriptive study conducted by using structured questionnaire attempts to explain the knowledge and extra marital sexual behavior of selected boatman of the Fewa lake in Pokhara. Almost all the boatman (98%) had heard about HIV/AIDS and the majority of them have had fairly accurate knowledge about its route of transmission except a few, who had some misconceptions about the route of transmission.

About 50% of the respondents practice sex outside their marriage and the majority (71%) of them are between 15-35 years of age. Condom use during such sex activities is not known.

## **2.7 Conclusions of Review Literature :**

AIDS has gripped the world since eighties. There have huge research programs against AIDS awareness campaign, but the AIDS pandemic has not shown any signal to tight grip.

In its latest report UNAIDS says, of the world's 34.3 million people infected with the virus at the beginning of this year nearly 90% are living in the developing world mainly in the countries of sub-saharan Africa and yes South and South east Asia. There is growing gap between the developed and the developing world concerns not only the scale of HIV spread but mortality from AIDS . In North America, Western Europe, Australia and Newzealand, newly available anti-retroviral drugs are reducing the speed at which HIV infected people develops AIDS.

In order to control such a dangerous disease it is very important to enforce preventive measures, educating the public, encouraging behavioural changes combined with access to affordable anti-retroviral drugs such as AZT. DDI and 3TC and expanding health care infrastructure.

The Problem is these drugs are generally out of reach of third world countries. Therefore behavioral changes is till now the best vaccine against AIDS.

## **3.1 Research Design:**

A exploratory health education intervention design was selected for this study. As the intervention structured teaching program on HIV/AIDS was given to the secondary school adolescents. The teaching program consists of introduction of HIV/AIDS, Global situation, situation in Asia and Nepal, body's immune system and pathology, Clinical aspects of HIV/AIDS, major and minor sign/symptoms of HIV/AIDS, route of transmission and preventive measures, diagnostic test and treatment for HIV infection including how to behave with an AIDS patient and how adolescents contribute to prevent AIDS.

## **3.2. Setting of the study**

Two separate schools in Ilam district were selected for this study. One of the two schools is Adarsha secondary school, which is located within municipality. This school was established in 2004 B.S. (1946). This is a co-

education schools situated in Urban area of district. The numbers of students are 150 and 200 in class 10 and 9 respectively. The school has managed class sections for every 40 students. The physical facilities like science lab, library, furniture, toilet, drinking water etc. are available in this school. Further more this school has been running ten plus two classes for science students.

Another school, which was used for this study, was Amar Secondary school, which is situated in rural area at Barbote VDC. The number of students is considerably large. The number of students in class 9 and 10 are 150 and 90 respectively. The school management has not been able to separate the students into sections yet. The school does not have enough rooms to run classes by diving into section. Other physical facilities like toilet, drinking water electricity are available.

### **3.3. Study population**

Secondary school students who were studying in class 9th and 10th of Adarsh and Amar secondary schools in Ilam district.

#### **A. Inclusion Criteria:**

All students studying in grade 9 and 10 of two schools namely Amar and Adarsh were included as a potential subjects for the study.

#### **B. Exclusion criteria:**

- i. Student's who were not willing to participate in the study.
- ii. Students who were absent at the time of pretest.

### **3.4. Sample size :**

The optimum sample size of 86 students was required to verify the hypothesis i.e.  $HQ: P1 - P2$  where  $P1 =$  Pretest and  $P2 =$  Posttest which was calculated by using the following.

#### **Formula and calculation:**

Anyway it was taken 170 of students of 9<sup>th</sup> and 10<sup>th</sup> class as the sample size for the study. In pretest 250 students were present but in posttest day there were only 170 due to student absenteeism. The fresh candidates were not included in the posttest and students present in pretest and absent in post test were also not included in sample size.

### **3.5. Sampling Technique:**

Non probability convenience purposive sampling technique was adopted in this study. The Ilam district had been selected purposefully and two secondary schools in this district were taken as identify by district education office. The total number of students of 9th and 10th classes were use as a sample for this study.

### **3.6. Data collection instrument:**

The tool, which used in study, were self-administered questionnaire and other was intervention package. The tool was based on the objectives and contents of the study with simple and understandable language to assess the knowledge and attitudes of adolescents on HIV/AIDS questionnaire used for data collection consisted three parts:

- Demographic Data
- Questionnaire for assessing knowledge.
- Questionnaire for assessing attitude.

Same questionnaire was used for pre and post intervention.

### **3.7. a. Pretesting/Validity and Reliability:**

To maintain the validity and reliability of the tool related literature were reviewed and content validity of the instrument was assessed by the research committee experts. Other concerned professionals such as faculty members, Statisticians and classmates were also consulted to review the tools and their constructive feedback was incorporated. Reliability and feasibility was checked by a pretest in 10% of the total sample Similarly tools were modified as needed after the pretest.

#### **Pretest of questionnaire:**

The prepared questionnaire was pretested in Tangel government secondary school of Kathmandu among a total of 20 students from class 9th and 10th. After the pretest of questionnaire all necessary changes and modifications were done as required such as changing words setting adding more questions.

#### **3.7.b. Scoring procedure:**

**1. Part I:** The demographic data had 14 items in relation to age. Sex marital status, ethnic group and religion types of family, parent's occupation, educational status and family income per month, residence and information media available and previous attendance of HIV educational program.

**2. Part II:** contained 45 questionnaire for assessing knowledge related to AIDS and each item carries one mark for each correct answers.

These items were subdivided as follows:

1. General concept regarding HIV/AIDS contained 18 items.
2. Spread and transmission of HIV/AIDS had 10 items.
3. Sign and symptoms: It contained 5 items.
4. Treatment had 4 items.
5. Prevention - contained 8 items

Total score for knowledge was 45, overall adequacy of knowledge was graded in the following categories.

0-50% Inadequate knowledge.

51-75% Moderately adequate knowledge.

76-100% Adequate knowledge.

**3. Part III :** Focused on attitude towards HIV/AIDS. There were 12 positive statements and 4 negative statements.

For positive statements the score was given as 5,4,3,2,1 and for negative statements it was 1,2,3,4,5. The total score for attitude was 80. The overall adequacy of the attitude graded as similar as knowledge. To measure the attitude of student Likert scale theory was used.

### 3.8 Data collection procedure and intervention strategy:

Data collection was done with the use of self administered questionnaire regarding HIV/AIDS. Prior to collecting data the whole procedure was divided into 4 stages:

#### a. Preparatory stage:

- After selection of the school written permission was taken from district education office.
- Personally contacted to school administrative authority, explained the purpose and objective of the study .
- Prepared schedule for data collection and class for intervention.
- Developed lesson plan to conduct class.

#### b. Pre intervention stage:

- Obtained consent from teacher and students.
- For pretest self administered questionnaire were distributed to collect the information on socio demographic characteristics knowledge and attitude concerning HIV/AIDS.

#### c. Intervention stage:

A lesson plan was developed to educate adolescents on HIV/AIDS. A handout for educators was designed and prepared based on the lesson plan. HIV/AIDS related and posters were used extensively as teaching learning materials. Lecture was followed by group discussion brain storming and playful educative game which were used extensively to educate the adolescents.

#### d. Post test (After intervention)

After two weeks of educational intervention same students were involved in post test with same questionnaires.

#### Intervention Schedule

Date	Adarsha Secondary School	Amar Secondary School	Remarks
057/8/23			Contacted the district education office for written permission to conduct the study.
057/8/25 to 057/8/30	Closed	Closed	As per plan due to the Maoists school shut down campaign for a week.

057/9/2	Pretest		Time limit 45 min.
057/9/3	Conducted class on HIV/AIDS for both classes separately in same day.		1 hr. for each session.
057/9/4		Pretest	time limit 45min.
057/9/5		Conducted class on HIV/AIDS for both classes separately in same day.	1 hr. for each session.
057/9/18	Post test		Time limit 45
057/9/20		Post test	Time limit 45

### 3.9. Protection of human rights:

- Study was conducted only after the approval of the thesis advisory committee of the campus.
- The required permission was obtained from district education office and schools administrative authority to pursue this study in schools.
- Obtained verbal consent from students and explained the purpose and objective of the study.
- Throughout the study every precaution was maintained to safe guard the right and welfare of all adolescents.
- Collected information was kept confidential and generated information was only used for the study.

### 3.10 Data processing:

After completion of the data collection questionnaire were rechecked for the completeness after editing and coding data were converted into code by a designed code instruction. Data processed using with EPI-INFO-version 6 (Statistical software).

### 3.11 Data Analysis:

Data was entered arranged and tabulated in computer to present the findings of the study. Descriptive statistics such as number and percentages were used to describe demographic data. Chi square test and Z test were used to compare pretest and post test results of structured teaching program. For analysis of the level of knowledge and attitudes towards HIV/AIDS percentage, proportion, mean and standard deviation was used.

## ANALYSIS AND INTERPRETATION OF DATA

An exploratory educational intervention type of study was conducted among high school adolescents in Ilam district to find out the effect of a structured teaching program

This chapter deals with analysis and interpretation of the responses of the questionnaire items and the effect of teaching program on their knowledge and attitude regarding HIV/AIDS. The obtained data were analyzed according to the objective and the hypothesis of the study. Classification of data was done by arranging in a mastersheet at first

and then the tabulation of the data was done. After that the data was analyzed according to numerical order from the master data sheet.

The Data analysis consists of three main items.

**Section I :** Socio demographic details of the high school respondents of class 9, 10 only.

**Section II & III :** Various aspects of knowledge and attitude of high school adolescents towards HIV/AIDS with comparison between Pre and Post responses of the respondents. The qualitative data was expressed in number and percentage form. The results are presented in different tables and graphs.

#### 4.1 Socio-Demographic Characteristics of the respondents:

**Table 4.1.1**

**Distribution of respondents according to socio-demographic characteristics.**

**N = 170**

Variables			Amar Secondary		Adarsh Secondary		Total	
			No	%	No	%	No	%
1		No of respondents	80	47.0	90	53	170	100
2	Sex	Male	35	20.6	40	23.5	75	44.11
		Female	45	26.5	50	29.4	95	55.88
3	Age	13-15	24	14.11	22	12.94	46	27.05
		16-18	50	29.41	64	37.64	114	67.05
		19-21yr	6	3.52	4	2.35	10	5.88
	Mean age	16.36 (? 1.59 )						
4	Ethnic	Bramin	49	28.88	23	13.52	72	42.300
		Chherri	8	4.70	17	10.0	25	14.70
		Newar	4	2.35	6	3.52	10	5.88
		Limbu	5	2.94	10	5.88	15	8.82
		Rai	3	1.76	15	8.82	18	10.58
		Others	11	6.47	19	11.17	30	17.64



5	Religion	Hindu	75	44.11	82	48.23	157	92.35
		Budhist	5	2.94	8	4.70	13	7.64
6	Family	Nuclear	32	18.82	44	25.88	76	44.70
		Joint	48	28.23	46	27.05	94	55.29
7.	Residence	Rural	78	45.88	20	11.76	98	57.64
		Urban	2	1.17	70	41.17	72	42.35

Above table reveals that 55.88% of respondents were female and majority of respondents 67.05% was from age group 16.18 years. The mean age of respondents were 16.36 ± 1.59 year (SD) and most of respondents were female in both schools.

The large member of female respondents in school might be the result of awareness campaign for female education. 42.35% of the respondents from Brahmin ethnic group. The Brahmins who are considered as the class in caste hierarchy seems to have the best access to education regardless of the geographical area they live in.

Majority of respondents were from Hindu religion that area 92.35% and 55.29% of the respondents were from joint family . 57.64% of respondents were from rural area and 42.35% were from urban area.

**Table 4.1.2**

**Distribution of adolescents according to parent's education occupation and family income.**

S.N.	Variables		Amar Secondary		Adarsh Secondary Ilam		Total	
			No	%	No	%	No	%
1	Mother education	Illiterate	33	19.41	41	24.11	74	43.52
		Primary	31	18.23	22	12.94	53	31.17
		Middle	8	4.70	18	10.58	20	15.29
		Secondary	1	0.58	5	2.94	6	3.52
		Campus level	–	–	5	2.94	5	2.94
2	Mother occupation	Agriculture	70	41.17	68	40.0	138	81.17
		Housewife	2	1.17	8	4.70	10	5.88

		Business	1	0.58	11	6.47	12	7.05
		Service	-	-	2	1.17	2	1.17
		No response	-	-	-	-		-
3	Father's education	Illiterate	22	12.94	17	10	39	22.94
		Primary	24	14.11	23	13.52	47	27.64
		Middle	13	7.64	28	16.47	41	24.11
		Secondary	9	5.29	6	3.52	15	8.82
		Campus Level	6	3.52	11	6.47	17	10.0
4	Father's occupation	Agriculture	65	38.23	53	31.17	118	69.41
		Business	7	4.11	9	5.29	16	9.41
		Service	2	1.17	26	15.29	28	16.47
5	Family income	<4000	45	26.47	40	17.05	91	53.52
		4000-7000	19	11.19	22	12.94	41	24.11
		7000-10,000	13	7.64	5	2.94	18	10.58
		>10,000	3	1.76	17	10	20	11.76

Above table reveals that majority of the respondent's mother seemed illiterate 43.52% and 81.17% of the respondents mothers engaged in agriculture. It might be due to low female literacy rate and main occupation of people is subsistence agriculture in Nepal.

Above table also highlights that majority of respondents fathers were completed primary school that was 27.64% and still 22.94% respondents father were illiterate majority of respondents father were engaged in agriculture 69.41% followed by service 16.47 % and business 9.41%.

Majority (53.52%) of the respondents monthly family income was below Rs. 4000/- Very low percentage 11.56 % of the respondents had above Rs. 10,000. Per month.

**Table 4.1.3**

**Distribution of the respondents according to media available for information at home**

Media	No	%
Radio	123	72.35

Television	93	54.70
Magazine	66	38.82
Newspaper	36	21.17

\* Multiple answers

Above table reveals that majority of respondents had radio, that was 72.35% for information followed television 54.70% magazine 38.82% and newspaper 21.17%

#### 4.2 Knowledge on HIV/AIDS:

School adolescents giving specified responses to measures the knowledge of HIV/AIDS and awareness of means of transmission and prevention.

**Table 4.2.1**

**Distribution of the respondents by source of information for HIV/AIDS.**

Variables	No	%
<b>Ever heard of HIV/AIDS</b>		
Yes	170	100
No	–	–
<b>Source of information:</b>		
Radio	101	59.51
Television	71	41.76
Poster	64	37.64
Friends	40	23.52
Newspaper	29	17.05

#### Multiple answer

Above table shows that 100% of the respondents had heard about AIDS. This was possible due to mass media which transmits information on HIV/AIDS to general public. The table further depicts that the main source of information was radio (59.41%) followed by television (41.76) other sources such as poster (37.64%) friends (23.52) and Newspaper are also showed up as a good source of information. This indicates the school adolescents can be approached through varieties of means media for HIV/AIDS education.

**Table 4.2.2**

**Distribution of the respondent's perception verses correct general knowledge on HIV/AIDS in pretest and posttest.**

No = 170

Variables	Pretest		Posttest		P.value
	No.	%	No.	%	
Full form of AIDS					
Known	43	25.3	150	88.2	0.00000
Unknown	127	77.7	20	11.7	
Full form of HIV					
Known	45	26.47	165	97.05	0.00000
Unknown	125	73.52	5	2.94	
AIDS means	46	27.65	26	15.29	0.00000
Life threatening diseases	42	24.70	15	8.82	
Preventable disease	41	24.1	4	2.35	
contagious disease	33	19.4	125	73.52	
All of them	8	4.7			
Don't know					
First reported data of AIDS case in world					
Known	67	39.4	161	94.7	0.00000
Unknown	103	60.58	9	5.29	
First reported data of AIDS case in Nepal					
Known	25	14.70	155	91.17	0.00000
Unknown	145	85.29	15	8.82	

Above table reveals that in pretest only 25.3% of the respondents stated the full form of AIDS and in post test it is increased up to 88.2%. Similarly in pretest only 26.47% of the respondents knew the full form of HIV but in post test it is increased up to 97.05%. The table also depicts the means of AIDS expressed by respondents. In pretest 27.65% of the respondents expressed it is life threatening disease followed by preventable disease, 24.70% contagious

disease 24.1% and only 19.4% respondents were able to mention all of three. But in the post test maximum numbers 73.52% of the respondents mentioned all of them after receiving a health talk and handout.

This table also demonstrates the knowledge of respondents about the first reported date of AIDS case in world and Nepal. In pretest only 39.4% respondents stated the right date of first reported case in world and similarly 14.70% of the respondents knew the right date of first reported AIDS case in Nepal. These knowledge were increased in post test.

Chi-square test result showed that there was strong association between structured teaching and post test result mentioned in above table. P-value was found highly significant.

**Table 4.2.3**

**Distribution of the respondents by knowledge on mode of transmission of HIV/AIDS.**

Variable	Pre tests		Post test		P_ value
	No	%	No	%	
Spread and transmission					
Deep Kissing with HIV infected person	29	17.05	156	91.76	0.000000
Unsafe sex	139	81.76	165	97.05	0.000004
Common use of syringe by drug abuser	144	84.70	169	99.41	0.00000005
Transmitted through breast feeding by HIV infected mother	110	64.70	157	92.23	0.000000
HIV infected mother can transmit the infection to unborn foetus during pregnancy.	145	85.25	170	100	0.00000002

Most of the respondents were reasonable well informed about the spread and transmission of HIV. About table reveals that in pretest most of the respondent (85.25%) stated that HIV infected mother can transmit infection to unborn foetus during pregnancy followed by common use of syringe by drug abuser was 84.70% unsafe sex 81.76%. Transmission through breast feeding by HIV infected mother and very low percentage 17.05% of the respondents stated that HIV could be transmitted by deep kissing with HIV infected person. These knowledge had been significantly increased in post test after receiving health talk on HIV/AIDS in all the after stated areas.

**Table 4.2.4**

**Distribution of the respondents according to misconception regarding transmission of HIV/AIDS.**

Misconceptions regarding	Pretest		Post test		P_ value
	No.	%	No.	%	
<b>HIV/AIDS transmission</b>					

Touching AIDS patient	14	8.23	2	1.17	0.00211
Hugging with AIDS patient	30	17.64	3	1.76	0.00000
Sitting together using common toilets and swimming pool.	19	11.17	2	1.17	0.01432
Bites of insects	54	31.76	7	4.1	0.00000

Most of the respondents demonstrated reasonably well informed on HIV/AIDS transmission but they had considerable misconceptions about HIV/AIDS transmission. About table shows that in pretest 31.76% of the respondents stated that HIV/AIDS could be transmitted by bites of insects followed by hugging with AIDS patient was 17.64% sitting together, using common toilets and swimming pool and touching AIDS patient was 8.23% but in post test these misconceptions had decreased respectively after receiving health education on HIV/AIDS which are significantly high.

**Table 4.2.5**

**Distribution of respondents according to knowledge about the high risk groups for transmission HIV/AIDS in pretest and posttest.**

High risk group for HIV transmission	Pretest		Posttest		P_value
	No	%	No	%	
Sex workers	41	24.1	19	11.17	0.00000
Drug abuser	4	2.35	8	4.70	
Multiple partner	108	63.52	6	3.52	
All of above	17	10.00	137	80.58	
Total	170	100	170	100	

Above table shows that on the description of high risk groups known for HIV/AIDS.

In pretest 63.52% of the respondents expressed that high risk groups for HIV/AIDS were multiple sex partners followed by sex workers 24.1% , drug abuser 2.35% and 10% of the respondents mentioned all of these groups were know as high risk for HIV/AIDS. But in the post test 80.58% respondents mentioned all of these groups as a high for HIV/AIDS. This results showed that a significant increase in HIV/AIDS related knowledge occurred as an effect of structured teaching program.

**Table 4.2.6**

**Distribution of the respondents according to the knowledge about the function of condom in pretest and posttest.**

**N = 170**

Measures	Pre test		Post test		P_value
	No.	%	No.	%	
Had heard about condom					
Yes	154	90.58	170		0.0000
No	16	9.41			
Knows condom are effective for Temporary devices for family planning and controls unwanted pregnancy.	42	24.70	20	11.76	
Effective against HIV/AIDS	50	29.41	27	15.88	
Both of them	62	36.47	123	72.35	0.00000
No response	16	9.41			

Above table reveals that in pretest majority of respondents had heard (90.58%) about condom but still 9.41% respondents have not heard about it. Likewise 36.47% of respondents stated that condom were effective for family planning and effective against HIV/AIDS transmission whereas 29.41% respondents stated that it was effective against HIV/AIDS and 24.70% respondents stated that it was effective for family planning purpose which only controls unwanted pregnancy. In posttest their knowledge about condom was increased dramatically i.e. seventy two point thirty five percent (72.35%) respondents stated that it was effective against family planning purpose and also effective against preventing HIV/AIDS transmission. This finding demonstrates that teaching can be an effective medium for communicating HIV/AIDS information and for controlling its transmission.

**Table 4.2.7**

**Distribution of the respondents by correct knowledge on sign/symptoms of HIV/AIDS in pretest and post test.**

Knowledge factor	Pretest		Post test		P_value
	No	%	No	%	
Major sign/symptoms					
Loss of weight	65	38.23	16.47		
Diarrhea > 1 month	26	15.29	1.17		

Fever > 1 month	30	17.88	5.88		
All of them	44	25.88	76.47		0.00000
No response	5	2.94			
Correct meaning of window period					
Infected but negative in blood					
Known	38	22.55	155	91.17	0.00000
Unknown	132	77.64	15	8.82	
Correct Knowledge on the duration of asymptomatic state					
Known	69	40.58	145	85.29	0.000000
Unknown	95	55.88	25	14.70	
No response	6	3.52			
Causative organism of HIV/AIDS					
HIV virus	140	82.35	164	96.47	0.0000233
Bacteria	20	11.76	6	3.52	
Mosquito	10	5.88			
Need of Isolation of AIDS patient					
Yes	40	23.52			
No	130	76.47	170	100	

Above table illustrates the knowledge about sign/symptoms of HIV/AIDS. In pretest 38.23% of the adolescents believed that weight loss is the main sign/symptoms of AIDS. 25.88% of the respondent described that loss of weight, chronic diarrhea and prolonged fever are the major sign/symptom of AIDS where as very low percentage 17.64% of respondents stated that prolonged fever followed by chronic diarrhoea 15.29%. But in post test 76.47 of the respondents were able to describe all of three major sign and symptoms of AIDS which is highly significant shown by P- value 0.000000. Many of them (76.64%) did not know about the correct meaning of window period only 22.35% stated the correct meaning of window period. In post test almost 91.17% of the respondents come to know about window period. In pretest 55.88% of the respondents were unknown about the duration of asymptomatic state.

In post test 85.29% majority of them knew about the duration of asymptomatic state.



The table further depicts that the causative organism of HIV/AIDS is HIV virus 82.35% where as 11.76% of the respondents expressed bacteria could cause HIV/AIDS followed by 5.88 of the respondents stated mosquito could cause HIV/AIDS. In posttest 96.47% of the respondents stated AIDS is caused by HIV virus which is significant change in knowledge. Similarly in pre test 76.47% of the respondents expressed AIDS patients don't need isolation where as 23.52% expressed there is need of isolation for AIDS patients. But during post test 100% of the respondents stated no need of isolation for AIDS patients.

This finding reflects the impact of health education using personal communication and use of visual media.

**Table 4.2.8**

**Distribution of the respondents by knowledge on treatment of HIV/AIDS in pretest and post test.**

	Pretest		Post test		P_value
Variables	No	%	No	%	
AIDS is a curable disease					
Yes	43	25.29	10	5.88	
No	127	74.70	160	94.11	
AZT is the drug used in the treatment of HIV/AIDS	30	17.88	5.88		
Known	51	30	142	85.52	0.00000
Unknown	119	70	28	16.42	
Treating a new baby within 48 hrs with AZT reduces the risk of transmission of HIV/AIDS from HIV infected mother.					
Known	47	27.64	144	84.70	
Unknown	103	60.58	26	15.29	0.00000
No response	20	11.76			
Name of Confirmatory test for HIV/AIDS					
Elisa	15	8.82	53	31.17	0.000003
Western blot	11	6.42	29	17.05	0.00244

Both of them	1	0.58	88	51.76	0.000000
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Above table demonstrates the knowledge on treatment of HIV/AIDS among adolescents. In pretest 25.29% of the respondents stated AIDS is curable disease in post test this misconceptions was reduced in 5.88% due to the effect of structured teaching on HIV/AIDS.

The table also depicts that 70% of respondents were unknown about the name of drug AZT for the treatment of HIV/AIDS only 30% of the respondents were familiar with the name of drug AZT is the treatments of HIV/AIDS but in post test 83.52% of the respondents were known about AZT is the drug used to treat HIV/AIDS. Above table further depicts that 60.58% of the respondents were unknown about the effects of treatment to a new born baby with AZT within 48 hrs. In post test 84.70% of the respondents were known about the effects of AZT treatment to new born baby. In pre test only 8.82% of the respondents were able to state the Elisa test is confirmatory test and 6.47% of respondents stated western blot and only 0.58% of the respondent described the name of both tests. In post test 51.76% of respondents able to describe western blot and Elisa test where as 31.17% of respondents come to know Elisa test and 17.05% of the respondents able to state western blot is the confirmatory test for HIV/AIDS.

As a result of post test the knowledge is significantly increased which reflects the impact of planned teaching program on HIV/AIDS.

**Table 4.2.9**

**Distribution of the respondents by knowledge on preventive measures of HIV/AIDS in pretest and post test.**

Preventive measures	Pretest		Post test		P_values
	No	%	No	%	
Using condom during sex.	143	84.11	170	100	0.00000001
Avoid multiple sex partner	144	84.70	170	100	0.000000
Transfusion of tested blood.	71	41.76	155	91.17	0.00000000
Faithful partner	150	88.23	170	100	0.0000040.
Using only sterilized equipment	136	80	163	35.88	0.0000069
Avoid taking drug through contaminated syringe.	126	74.11	164	96.47	0.000000
Avoid homosexual activities	59	34.70	154	90.58	0.000000

Above table reveals that in pretest 88.23% of the respondents said that the partner should be faithful. About 84.70% of the respondents thought that avoidance of multiple sex partner is important. 84.11% of the respondents stated that safe sex (by using condom ) is the best preventive measures to avoid the HIV infection . Eighty percents (80%) of the respondents stated that the use of sterilized equipment is important and 74.11% of the respondent thought that avoidance of taking drug through contaminated syringe. On other hand very little percentage 41.76% of respondents stated that the importance of testing blood before transfusion and 34.70% of the respondents said that avoidance of homosexual activities.

This shows that there is prior knowledge on the topic of preventive measures among high school adolescent. The knowledge has been significantly increased in posttest which shows by P\_value mentioned in above table

**Table 4.2.10**

**Distribution of the respondents by knowledge who were previously exposed in HIV/AIDS program.**

Level of knowledge	Pretest		Post test		P_value
	No.	%	No.	%	
Inadequate	2	5.71			
Moderately adequate	29	82.85	2	5.71	0.00000000
Adequate	4	11.42	33	94.24	

Above table highlights that in pretest 82.85% of the respondents had moderately adequate knowledge on HIV/AIDS who were previously exposed in HIV/AIDS program 11.42% of the respondents had adequate knowledge and 5.71% of the respondents had still inadequate knowledge . It shows that seminar, workshop and rally play an important role in the general increase of awareness towards HIV/AIDS.

But in post test 94.24% of the respondents acquired highly significant knowledge.

**Table 4.2.11**

**Distribution of the respondents according to their level of knowledge regarding HIV/AIDS before and after structured teaching program.**

Level of knowledge	Pretest		Post test		Z_value
	No	%	No	%	
Inadequate knowledge (0%-50%)	28	16.47			
Moderately adequate (50%-75%)	137	80.58	7	4.11	<b>15.84</b>
Adequate knowledge (75%-100%)	5	2.94	163	95.88	

Above table reveals that in pretest 80.58% of respondents had moderately adequate knowledge and 16.47% of the respondents had inadequate knowledge. On other hand very small percentage 2.94% of the respondents had adequate knowledge.

The mean score of knowledge during pretest was mean ( $x_1$ ) = 27.73 but in post test the overall level of knowledge is increased, 95.88% of the respondents had acquired adequate knowledge which is highly significant as shown by Z value (Z) 15.84% which is greater than tabulated value of  $Z_{\alpha} = 0.05 = 1.96$ . In post test the mean score of knowledge is mean ( $X_2$ ) = 40.78.

**Table 4.2.12**

**Distribution of the respondents according to their level of attitude regarding HIV/AIDS before and after structured teaching program.**

Level of attitude	Pretest		Post test		Z_value
Inadequate positive attitude (0%-50%)	13	7.6%	4	2.35	
Moderately positive attitude 51%-75%	54	31.76	28	16.47	4.337
Adequate positive attitude 76%-100%	103	60.58	138	81.17	

The table reveals that in pretest 60.58% of the respondents had adequate positive attitude regarding HIV/AIDS where as 31.17% of the respondents had moderately positive attitude 8.82% of the respondents had inadequate positive attitude.

The mean score of attitude during pretest was 60.53.

In post test the overall level of attitude is increased 81.17% of the respondents had acquired adequate positive attitude.

Which is significant as shown by Z value. Z value 4.337% is greater than tabulated value  $Z_{\alpha} = 0.05 = 1.96$ .

The mean score of attitude during posttest was 67.13.

**Table 4.2.13**

**Comparison of knowledge between pretest and post test of Adarsh Secondary School adolescent and Amar Secondary School adolescent.**

Level of knowledge	Adarsh Secondary School				P value	Amar Secondary School				P value
	Pre test		Post test			Pre test		Posttest		
	No	%	No	%		No	%	No	%	
Inadequate knowledge (0-50)%	10	11.11				18	22.5			
Moderately adequate (50-75)%	78	86.66	2	2.22	0.000000	59	73.75	5	6.25	0.0000000

Adequate knowledge (76-100)%	2	2.22	88	97.77		3	2.5	75	93.75	
Total	90					80				

Above table reveals that in pretest 86.66% of the respondents had moderately adequate knowledge, 11.11% of the respondents had inadequate knowledge and very small percentage 2.22% of the respondents had adequate knowledge but in post test the knowledge of Adarsha Secondary School adolescent has been significantly increased, 97.77% of the respondents acquired adequate knowledge.

This table reveals that in pretest 73.75% of the Amar Secondary School respondents had moderately adequate knowledge, 22.5% of the respondents had inadequate knowledge whereas 2.5% of the respondent had adequate knowledge. In post test 93.75% of the respondents had acquired adequate knowledge which is highly significant. It shows that the impact of health education remained effective.

**Table 4.2.14**

**Comparison of attitude between pretest and post test of Adarsh secondary School adolescent and Amar Secondary School adolescent.**

Level of attitude	Adarsh Secondary School				P value	Amar Secondary School				P value
	Pre test		Post test			Pre test		Posttest		
	No	%	No	%		No	%	No	%	
Inadequate positive attitude (0-50)%	7	7.77	2	2.22	0.000344	6	7.5	2	2.5	0.0305
Moderately Positive attitude ( 50-75)%	28	31.11	13	14.44		26	32.5	15	18.75	
Adequate positive attitude (76-100)	55	61.11	75	83.33		48	60	63	78.75	
Total	90		90	100		80		80	93.75	
						0.00344				

Above table shows that in pretest 61.11% of the respondents from Adarsh secondary school had adequate positive attitude 31.11% of the respondents had moderately positive attitude where as 7.77% of the respondents had inadequate positive attitude.

In post test 83.33% of the respondents acquired adequate positive attitude.

This table also shows that in pretest 60% of the respondents had adequate positive attitude of Amar secondary school respondents followed by moderately positive attitude(32.5%) and inadequate positive attitude was 7.5%. In the post test 78.75% of the respondents gained adequate positive attitude after intervention of educational class which is significant as shows by P\_value mentioned in above table.

**Table 4.2.15**

**Comparison of knowledge among male and female respondents regarding HIV/AIDS before and after structural teaching program.**

Level of knowledge	Adarsh Secondary School				P value	Amar Secondary School				P value
	Pre test		Post test			Pre test		Posttest		
	No	%	No	%		No	%	No	%	
Inadequate knowledge (0-50)%	16	16.84	2	2.22	0.000000	12	16	2	2.5	0.00000
Moderately adequate (50-75)%	77	81.05	4	4.21		60	80	3	4.0	
Adequate knowledge (76-100)	2	2.10	91	95.78		3	4.0	72	96.0	
Total	95		95	100		75		75		

This above table reveals that the overall level of knowledge of male students was higher than female students during pretest.

The difference among groups with the same educational background suggest that knowledge concerning HIV/AIDS is also influence by gender. In post test overall both groups acquired adequate knowledge towards HIV/AIDS which shows by p\_value mentioned in above table.

**Table 4.2.16**

**Comparison of attitude among male/female respondents regarding HIV/AIDS before and after structural teaching programme.**

Level of Attitude	Adarsh Secondary School				P value	Amar Secondary School				P value
	Pre test		Post test			Pre test		Posttest		
	No	%	No	%		No	%	No	%	
Inadequate positive attitude (0-50)%	0	9.47	2	2.10	0.000000	6	8	2	2.66	0.000000
Moderately positive attitude ( 50-75)%	27	28.42	17	17.89		26	34.66	11	14.66	
Adequate positive attitude (76-100)	59	62.10	76	80.0		43	57.33	62	82.66	
Total	95		95	100		75		75		

Above table reveals that male's attitude towards HIV/AIDS seemed more positive than female both in pretest and post test period. It was found that the male respondents expressed their clear opinions clearly while some of female students did not respond to the statements.

### 4.3 Attitude towards HIV/AIDS

**Table 4.3.1**

**Distribution of the respondents response to positive attitude statement before and after structured teaching on HIV/AIDS.**

**Key-** SA – Strongly agree U – Uncertain D – Disagree

A – Agree SD– Strongly disagree

Statement	Scale	Pretest				Post test			
		No.	%	No.	%	No.	%	No.	%
It is not reasonable for men and women to have extra marital sexual relationship	SA	75	44.11	98	57.64	113	66.47	159	
	A	23	13.52			46	27.05		
	U	12	7.05	60	29.41	5	2.94	6	3.52
	D	23	13.52			4	2.35		
	SD	27	15.88			2	1.76		
	No response	10	5.88						
AIDS awareness in one the important advices of parents	SA	88	51.76	130	76.47	161	94.70	170	100%
	A	42	24.70		11.76	9	5.29		
	U	12	7.05	20					
	D	11	6.47						
	SD	9	5.29						
	No response	8	4.70						
AIDS patients need love, support and affection	SA	77	45.292	115	67.64	154	90.58	168	98.82
	A	38	22.35			14	8.23		
	U	8	4.70	36					
	D	16	9.41		21.17	2	1.17	2	1.17
	SD	20	11.76						
	No response	11	6.47						
Suggest AIDS suspected friends for testing his or her blood	SA	70	41.1	111	65.29	149	87.64	170	100
	A	41	24.1			21	12.35		
	U	3	1.7	20					
	D	9	5.2		11.76				
	SD	11	6.2						
	No response	36	21.17						

Above table highlights about the description of positive attitude towards HIV/AIDS.



- In pretest only 57.64% of the respondents were against extra marital sexual relation whereas 29.41% of the respondents supported extra marital sexual relation. But after the health education class majority (93.53%) of respondents were against extra marital sexual relation
- In pretest 76.47% of the respondents strongly agreed with AIDS awareness advises by their parents but very low percentage 11.76% of the respondents were disagree about this statements.
- In pretest 67.64% of the respondents were in support with the statements that AIDS patients need love, support and affection whereas 21.76 % of respondents disagreed. In post test 98.82% of the respondents agreed with this statement.
- About 65.29% of the respondents in pretest agreed to suggest AIDS suspected friends for testing his/her blood. But low percentage (11.76%) of the respondents was disagreed to this statement.

But in posttest it was found that uncertainly, disagrees and strongly disagreed were reduced due to the effect of teaching about attitude towards HIV/AIDS.

**Table 4.3.2**

**Distribution of the respondents response to positive attitude statement before and after structured teaching on HIV/AIDS.**

N=170

Statement	Scale	Pretest				Post test			
		No.	%	No.	%	No.	%	No.	%
All the young people/students should know about HIV/AIDS infection.	SA	92	54.11	122	71.76	108	63.52	143	84.11
	A	30	17.64			35	20.58		
	U	5	2.94	25	14.70	4	2.35	8.23	
	D	10	5.88			8	5.70		
	SD	15	8.82			6	3.52		
	No response	18	10.58			9	5.29		
AIDS is real threat of human population	SA	93	54.70	121	71.17	152	89.4	160	94.11
	A	28	16.47			8	4.70		
	U	3	1.76	21	13.52	4	2.35	6	3.52
	D	10	5.88			6	3.52		
	SD	23	13.52						
	No response	13	7.64						
If one of my friends gets AIDS. I shall continue my social relationship with him or her	SA	50	29.41	108	63.52	130	76.47	168	98.82
	A	58	34.11			38	22.35		
				38	22.35	2	1.17		



Peer group discussion about HIV/AIDS is more effective for its prevention.	SA	57	33.52	104	61.17	164	96.70	170	100
	A	47	27.64			6	3.52		
	U	16	9.41	20	11.76				
	D	11	6.47						
	SD	9	5.29						
	No response	30	17.64						
Open discussion about HIV/AIDS prevention can be done among siblings	SA	72	42.35	118	69.41	158	92.94	168	98.82
	A	46	27.05			10	5.88		
	U	8	4.70	19	11.17	2	1.17		
	D	8	4.70						
	SD	11	6.47						
	No response	25	14.70						
Major responsibility of adolescents is to participate in HIV/AIDS prevention program to bring community awareness to control HIV/AIDS	SA	84	49.41	122	71.76	145	85.29	170	100
	A	38	22.35			25	14.70		
	U	15	8.82	13	7.64				
	D	3	1.76						
	SD	10	5.88						
	No response	20	11.76						
If one of my family members get AIDS I will be ready to care him/her	SA	75	44.11	105	61.76	157	92.35	166	97.64
	A	30	17.64			9	5.29		
	U	10	5.88	35	20.58	4	2.35	4	2.35
	D	15	8.82						
	SD	20	11.76						
	No response	20	11.76						

Above table reveals that the description of positive attitude towards HIV/AIDS:

About 61.17% of the respondents in pretest agreed to the statements that peer group discussion about HIV/AIDS prevention where as 11.76% of the respondents strongly disagreed to this statement. 17.64% of the respondents did not response this statements. In post test 100% of respondents agreed to this statement.

In pretest 69.41% of the respondents agreed to open discussion about HIV/AIDS with their siblings but 11.17% of the respondents disagree to this statement. In post test 98.82% of the respondents agreed to this statement.

In pretest 71.76% of the respondents agreed to participate in HIV/AIDS prevention program where as 7.64% of the respondents were disagreed to participate in HIV/AIDS prevention program to bring community awareness.

In post test 100% of the respondents strongly agreed to this statement.

About 61.76% of the respondents were ready to provide care to person if someone got AIDS in family but 20.58% of the respondents were disagreed to do so.

In the post test 97.64% of the respondents were agreed to this statement.

In post test it was found that uncertain, disagree and strongly disagree to the positive statement were reduced. This result showed that overall attitude of school adolescent became adequate positive, which is significantly changed.

**Table 4.3.4**

**Distribution of respondents response to negative attitude statements before and after structural teaching on HIV/AIDS.**

Statement	Scale	Pretest				Post test			
		No.	%	No.	%	No.	%	No.	%
AIDS is caused by cursed of God.	SA	8	4.70	13	7.64				
	A	5	2.94						
	U	6	3.52	139	81.76	36	21.17		100
	D	35	20.58			134	78.82	170	
	SD	104	61.17						
	No response	12	7.05						
Person affected shouldn't be allowed to stay in community	SA	35	20.58	50	29.41	2	1.17	3	1.76
	A	15	8.82			1	0.58		
	U	10	5.88	110	64.70	85	50.0	167	98.23
	D	36	21.17			48.23	48.23		
	SD	74	43.52						
	No response								
It is alright for male/female adolescents to have pre marital sexual relation.	SA	46	27.05	74	43.52	6	3.52	10	5.88
	A	28	16.47			4	2.35		
				78	45.88				91.76

	U	3	1.76			1	0.58	156	
	D	34	20.0			59	34.70		
	SD	44	25.88			97	57.05		
	No response	15	8.82			3	1.76		
Knowing there is no cure for AIDS there is no point in curing for AIDS patient.	SA	40	23.52	53	31.17	2	1.71	2	1.71
	A	13	7.64						
	U	16	9.41	101	59.41	81	47.64	168	98.82
	D	49	28.82			87	51.17		
	SD	52	33.52						
	No response								

Above table reveals that in pretest 81.76% of the respondents disagreed to the statements that AIDS was caused due to curse of God whereas 7.64% agree that AIDS is caused by curse of God and 7.05% of the respondents had no response.

In pretest 64.70% of the respondents disagreed to the statements that person affected with HIV/AIDS should not be allowed to stay in community. 29.41% of the respondents agreed to this statement. In the post test 98.23% of the respondents disagreed to this statement.

In pretest 45.88% of the respondents were disagreed to this statement that it is alright for male/female adolescents to have premarital sexual relation. 43.53% of the respondents were agreed to this statement.

This result shows that there is a great need of education about safe sex practice for adolescents. In the post test 91.76% of the respondents were disagreed to this statement.

In pretest 59.41% of the respondents disagreed with the statements that there is no cure for AIDS. There is no point in curing for AIDS patients. 31.17% of the respondents agreed to this statement because respondents had the knowledge that AIDS is a fatal disease.

In post test 98.82% of the respondents disagreed to this statement.

In post test strongly agree and uncertain percent of negative statements were reduced because of effects of structural teaching on HIV/AIDS.

In overall attitude is significantly changed towards HIV/AIDS affected clients which was due to structured teaching activities.

## 5.2 Conclusion and Recommendations:

During pretest the students demonstrated a moderate level of knowledge concerning HIV/AIDS, but they had misconceptions of considerable level and also prejudices about people having HIV/AIDS. This result still shows

there is still need for information programs to address common misconceptions. In such a way, it could be easily understood and transfers the convincing messages.

The second conclusion from this study is that medicine AZT available for curing HIV/AIDS makes students to perceive AIDS is a curable disease. For that reason, education programs must stress, unlike many other sexually transmitted disease, AIDS can not be treated successfully, Just to live a little bit longer.

The third conclusions that still adolescents were unaware about homosexual activities which are also the causes of HIV/AIDS. Therefore the education program should emphasize in this aspect also, so that the young adolescents become conscious not having homosexual activities.

The fourth conclusion drawn from this study is in pretest only 2.35% of the students were aware that the drug abuser are also high risk group for contracting HIV virus however this is clearly an important risk factors. In Nepal majority of the intravenous drug abusers are adolescents that is why the adolescents are to be well informed on time not to abuse drugs, which ultimately contribute HIV/AIDS.

The fifth conclusion drawn from this study shows that students were found well informed in compare to female students during pretest. Gender specific education program on HIV/AIDS addressing the need of adolescents have to be developed and departed.

The sixth conclusion of this study is that the 43.52% of the adolescents were in favor of pre marital sexual relation, it is urgent need of education program on safe sex practice to stop step increasing the number of HIV infections. Because adolescence is a time when sexual behavior is developing clearly it is critical time to have an impact on those behavior pattern.

The last conclusion of this study is that nevertheless HIV/AIDS has been introduced in secondary school course that there are still deficiencies in specific knowledge so that it is recommended, time and again revision of course and refresher training to teachers are required to make and effective teaching and learning.

### **5.3 Recommendations for Application:**

Based on research findings as mentioned in the previous chapters (analysis, discussion and conclusions) this part of the paper points to recommendations which could be applied by the policy maker and health workers in curriculum designing as well as IEC material preparation. This findings also helpful to concern teachers to prepare the lesson plan on HIV/AIDS.

### **5.4 Recommendation for further study:**

A similar study is recommended on the same line and pattern to find out level of knowledge, attitude and practice towards HIV/AIDS among secondary school teachers at district and national level to make effective teaching learning on this issues.

- It is also recommended that this research methodology could be used to compare the knowledge and attitude towards HIV/AIDS between school going and not going adolescents.
- Likewise a further researcher could be conducted along this line to identify the level of the awareness of woman whose husband are migrated seasonally for out country jobs (India and abroad).

## 5.5 Plan for dissemination of Research Report:

- **Planned to give three copies of research report to NUFU.**
- **Planned to give one copy of research report to master's in nursing faculty of nursing campus Maharajgunj and one copy to Library of Nursing campus Maharajgunj.**
- **Planned to keep in popline and midline internet.**
- **Planned to publish this research report in journals.**
- **Planned to present research report as a paper in seminar.**
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**Tribhuvan university  
Institute of Medicine  
Nurshing campus Maharajgunj**

**MASTER OF NURSHING IN WOMAN HEALTH DEVELOPMENT**

(Second year 2057 )

**Interview schedule**

**Topic:** A study on effect of structured teaching programme on HIV/AIDS among government secondary school adolescent in Ilam district of eastern region.

**Note:** Please ticks the best answer and fill the necessary items as questionnaire requires. We assume you to maintain the confidentiality of your answer. Thank you .

1. Respondent's personal statement

1. Name ..... 2. Class ..... 3. Roll No.....

4. Sex male/ Female 5. Age.....

6. Marital status married / unmarried .



7. Cast:

(a) Brahmin (b) Chhetri

(c) Newar (d) Limbu

(e) Rai (f) Others

8. Religion

(a) Hindu (b) Boudhist

(c) Muslim (d) Christian

2. Respondents family status:

Type of family:

a. Nuclear

(b) Joint

2. a. No of family members:

b. No of brother :

c. No of sister :

**3. Parents status :**

Description	Mother	Father	Remarks
Age			
Occupation			
Education			

**4. 1. Family economic condition:**

a. (a) Just enough to eat

b. (b)Do not have enough to eat

(c) Have more than enough to eat

2. Family income per month

3. Address

Zone ..... VDC/Municipality .....

District ..... Ward No.....

School .....

**5. Previous exposure to any special health education programs or AIDS.**

(a) Yes (b) No

**6. Media available for HIV/AIDS information:**

(a) Radio (b) T.V.

(c) Magazine (d) Newspaper

c. (e)Other

## II. Knowledge

**For each item tick (4) that best represent your opinion:**

### A. General concept on AIDS:

#### 1. Have you even heard about AIDS? Pretest Post test

- a. yes
- b. No

#### 2. If yes through whom ?

- a. Friends
- b. Radio
- c. Poster
- d. Television
- e. Newspaper
- f. Others

#### 3. What is the full form of AIDS?

.....

#### 4. What is meant by AIDS ?

- a. It is a life threatening disease
- b. It is a preventable disease
- c. It is a contagious disease
- d. I don't know

#### 5. When was for the first time AIDS Pretest Post test

was reported in the world ?

- a. 1970
- b. 1975
- c. 1981
- d. I don't know

6. Is AIDS prevalent in Nepal?

- a. yes
- b. No
- c. I don't know

**7. In your opinion who might suffer from**

**AIDS?**

- a. Commercial sex workers
- b. Drug abusers
- c. Multiple partners
- d. Others

**8. Have you ever heard about condom ?**

- a. Yes
- b. No
- c. I don't know

**9. If you have heard about it what is use of it ?**

- a. It is a temporary devices  
for family planning which  
control pregnancy.  
(b) It prevents from STD/HIV.  
(c) Others

10. Do you think AIDS patients has to be isolated ?

- a. yes
- b. No
- c. I don't know

11. Do you think new born baby acquire AIDS from HIV/infected mother ?

- d. yes
- e. No

f. I don't know

12. When was AIDS reported out for the first time in Nepal ?

(a) 1984

(b) 1986

(c) 1988

g. I don't know

13. What is the cause of AIDS ?

a. Bacteria

b. HIV virus

c. Mosquito

d. I don't know

14. What is the full form of HIV ?

.....

15. How many percentage of people

under the age of 25 years are affected by HIV ?

a. 30%

b. 50%

c. 50%

d. I don't know

16. The main reasons for increasing

number of AIDS in Nepal are

Illiteracy, ignorance, unemployment

and girl trafficking

a. Yes

b. No

c. I don't know

17. What percentage of people is HIV affected in total population ?

a. 0.1 to 0.2

b. 0.2 to 0.4

c. I don't know

18. Which blood cells are damaged by HIV virus ?

- a. Basonophil
- b. Esonophil
- c. T. Lyphocyte
- d. I don't know

**Spread and transmission Pretest Post test**

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Y N DK Y N DK

1. spread and transmission :

one can get AIDS by touching

AIDS patients . 0 1 0 0 1 0

2. One can get AIDS by hugging 0 1 0 0 1 0

3. AIDS can be transmitted deep 1 0 0 1 0 0

kissing with HIV infected person .

4. AIDS can be acquired Via 1 0 0 1 0 0

5. Common use of syringe by 1 0 0 1 0 0

drug abuser HIV/AIDS from

one to Another

6. An infected mother can transmit 1 0 0 1 0 0

It virus to her body during

pregnancy

7. AIDS can be transmitted through 1 0 0 1 0 0

8. AIDS can be transmitted by

sitting to father being the common

toilet and common swimming pool. 0 1 0 0 1 0

9. Using un-sterilized skin piecing

needles can transmit HIV/AIDS 1 0 0 1 0 0

10. HIV/AIDS transmits from bites of

Score: Pre test. Note: Y - Yes

Past test . N - No

DK - Don't know

**(c) Sign and Symptoms:**

Pre test Post test

1. How many years a HIV

Unfitted person can live healthy ?

- a. one
- b. 2-3 year
- c. 5-10 year
- d. Don't

1. How long is the window period of AIDS ?

- a. 2-4 weeks.
- b. 6-12 weeks .
- c. 12-16 weeks .
- d. Don't know

1. Do you think HIV Virus can be detected in blood within window period ?

- a. Yes
- b. No
- c. I don't know

1. What are the major sing / symbol of AIDS ?

- a. Loss of weight more than 10% .
- b. Chronic diarrhea more than 1 month
- c. Prolonged fever more than 1 month
- d. Don't know

5. What is the test to confirm the AIDS?

- a. Elisa
- b. Western blot
- c. Widal test
- d. Don't know

**D. Treatment:**

Pre test Post test

1. Is AIDS casual disease

- a. yes
- b. No
- c. Don't know

1. Are there any drugs available to treat AIDS ?

- a. Yes
- b. No
- c. Don't know

1. the drug AZT is used in the treatment of AIDS ?

- a. Yes
- b. No
- c. I don't know

1. Treating an new born boby within

48 hours with AZT reduces the

risk of transmission

- a. Yes
- b. No
- c. Don't know

**E. Prevention:**

AIDS can be prevented by :

Pre test Post test

**Y N DK Y N DK**

1. Using condon during sex. 1 0 0 1 0 0

2. Having no sexual relationship 1 0 0 1 0 0

with multiple partners.

3. Having sex with single

faithful husband and wife 1 0 0 1 0 0

4. Avoiding homosexual

Activities 1 0 0 1 0 0

5. Not having sex with

Commercial sex workers 1 0 0 1 0 0

6. Receiving safe blood

Transfusion. 1 0 0 1 0 0

7. Using of disposable or

sterilized syringe only 1 0 0 1 0 0

8. Avoid to use common syringe

by Intravenous drug abuser.

Score – Pretest

Posttest

### **ATTITUDE TOWARDS HIV/AIDS**

Key : SA – Strongly agree

A – Agree.

U – Uncertain

D – Disagree

SD – Strongly Disagree

Statements SA A U D SD

1. AIDS is caused by curse of god (N) 1 2 3 4 5

2. Person affected should not be

Allowed to stay in community (N) 1 2 3 4 5

3. All the young people/ students should

know about HIV/AIDS infection (P) 5 4 3 2 1

4. It is alright for women and men to



have premarital sexual relation (N) 1 2 3 4 5

5. If one of my friends get AIDS I shall

continue my normal social relationship

with here or her (P) 5 4 3 2 1

6. Health education is necessary for

woman and men to have safe sex. (P) 5 4 3 2 1

7. AIDS is real treat of human

population (P) 5 4 3 2 1

8. Knowing there is no cure for

AIDS these is no point in curing

for AIDS patients (N) 1 2 3 4 5

9. It is not good for married men

and woman to have extra

marital sexual relationship (P) 5 4 3 2 1

Statements SA A U D SD

10. AIDS awareness is one of the important

advice of parents for their children (P) 5 4 3 2 1

11. AIDS patient need live,

support and affection (P) 5 4 3 2 1

12. Suggest AIDS suspected

friends for testing his or her blood (P) 5 4 3 2 1

13. Peer group discussion about

HIV/AIDS is more effective for

its prevention (P) 5 4 3 2 1

14. Open discussion about

HIV/AIDS prevention can be

done among siblings (P) 5 4 3 2 1

15. Major responsibility of adolescents

is to participate in HIV/AIDS

Prevention programme to being

Community awareness to control

HIV/AIDS (P) 5 4 3 2 1

16. If one of my family members

get AIDS I will be ready to

Care him /her 5 4 3 2 1

Total Score - 80

Pretest

Posttest