

# CHAPTER - I

## INTRODUCTION

### 1.1 General Background

Acquired Immuno Deficiency Syndrome (AIDS) is the late stage of infection with HIV. It is caused by retrovirus known as human immunodeficiency virus (HIV) which breaks the bodies' immune system leading the victim vulnerable to rest of life.

The world population in this century is facing a serious problem created by pandemic called Acquired Immunodeficiency Syndrome (AIDS). AIDS has been emerging a burning issue all over the world and much more efforts have been made to control the disease.

AIDS was first recognized internationally in 1981. As of 2006 estimated 40 million adults and children around the world were living with HIV/AIDS (Lamptyeetal, 2006). HIV/AIDS pandemic is one of the most serious health concerns in the world today because of its high case fatality rate and lack of curative treatment or vaccines.

Epidemiological studies have identified sexual intercourse intravenous injections, blood transfusion and fetal transmission from mother as the main routes of transmission of HIV.

Sexual transmitted disease and Human Immunodeficiency virus (HIV) Acquired immunodeficiency syndrome are emerging health issues threatening the world in 21st century HIV/AIDS is now leading cause of death in Africa and the fourth most common cause of death world wide. Efforts for the control have been made continuously. United Nations organization (UNO), world health organization (WHO) Governments National and international, non governmental organizational (NGOS and INGOS) to minimize the spread of HIV/ infection the disease that are transmitted mainly through sexual contact during the unprotected intercourse are called sexually transmitted disease (STDs). The prevalence of sexually transmitted disease (STDs) in the world is not a new one but during the post few decades, there has been a wide spread of STDs and became a major component of health hazards. The term STDs is used to describe dozens of clinical syndromes and more than 30

bacterial and viral organisms (Northridge, 1999). There are at least 27 kinds of different disease caused by different viruses' bacteria and other micro-organisms of the common STDs are chancroids, Trichomoniasis, Chlamydia, syphilis, Gonorrhoea, Genital herpes, and Genital warts (Saifur Rhamanetal, 1999:2-3).

There is a strong link between sexually transmission disease (STDs) and the sexual transmission of HIV infection. The presence often untreated STD such as Gonorrhoea, Chlamydia syphilis Genital warts can enhance both the acquisition and transmission of HIV by a *factor up to 10* thus STDs treatment is an important HIV prevention strategy in a general population. (UNAIDS, 1995).

STDs are every where being major public health problem in developed and developing countries. The prevalence rate are higher in developing countries, where knowledge of STDs and treatment is accessible, The world wide prevalence of sexually transmitted disease in high and increasing day by day with the emergency of HIV/AIDS, the awareness of STDs become a great importance too (Northridge, 1999).

Adolescent especially those aged 15 to 19 are believed to engage in high level of unprotected sexual activity both within and out side marriage leaving them exposed to risk of unplanned and unwanted pregnancy and contracting sexually transmitted disease (STDs) including HIV/AIDs. Such behavior often resulting in early out of wedlock pregnancy constitutes a major threat to health of these adolescents as well as retarding their potential education, career and economic development (William and Nasirv, 1999). "The word adolescent has been defined by the world health organization as the period of life spanning the ages between to 10 to 19 years."

Adolescence is a period of transition from childhood to adulthood. This period can be taken as a milestone for everyone. It is important as a time of preparation for understanding greater responsibilities, time of exploration and widening horizons and a time to ensure healthy all round development. The health of adolescent is the outcome of the several factors such as socio-economic status environment in when they live and grow, good guidance from families and communities and opportunities for education and employment.

(ICPD) held in Cairo in (1994) also emphasized the special need of adolescents and youth. In the SAARC region, adolescents (10-19 years) account for at

least one fifth of the total population of each of the SAARC countries. The percentage of adolescents ranges from highest 26% in Bangladesh 24% in Maldives 23% in Nepal 22% in Bhutan and Pakistan 21% in Srilanka and India.

International conference for population and development (ICPD) has recognized the special needs of adolescents and recommended formulation of policies and programmers addressing their needs following the ICPD recommendation, various governments have formulated policies and programmers. The world population day 2003 was celebrated all over the world by a slogan: one Billion adolescent: Right to health information and services.

In Nepal the first case of AIDS was in 1988. The national centre for AIDS and STDs central (NCASC) of the ministry of health and population has estimated an average of 70,000 adult NIV positive in Nepal (NCASC, 2006a). As of September 2006 a total of 1,171 AIDS cases among the 7,894 cases of NIV infection were reported to NCASC.

The 2006 NDHS included a series of questions on knowledge of HIV/AIDS and attitudes to words AIDS, all women ages 15-49 and men age 15-59 were first asked they had ever heard of AIDS. Those who had heard of AIDS were questioned on their knowledge of HIV transmission and prevention. To avoid getting infected with HIV additional questions death with migration status, destination of migration, common total misconception regarding the mode of transmission of HIV.

By seeing the result of national centre for AIDS and STDs central year wise detection of HIV/AIDS in Nepal (1988-2007)d the total sample 250398 among them number of male HIV positive 7238 and no of female HIV positive 3308 total number was 10546, AIDS infected number of male 1158, female 452 and total AIDS infected people are 1610.

This chapter provides current level of HIV/AIDS knowledge attitude and related behaviors in the general adult population. The chapter also focuses on HIV/AIDs knowledge and patterns of sexual activity among youth as youth are the main target of many HIV prevention efforts. This study is focused on the knowledge of adolescents studying in a secondary level.

## 1.2 Statement of the Problem

Youth and adolescent are among the groups most unalterable to HIV infection according to recent estimates by UN AIDS and WHO (HIV/AIDS : The Global Pandemic), the epidemic continued to expand in 1997, with an estimated 5-8 million new HIV infections approximately 1600 a day over 40 percent of the new infections among adults accrued in women. The majority of newly infected adults are under age 25 years old (UNFPA, 1997: 15) low level of standard of living educational status and employment condition may be the major component of transmission of STDs. Throughout the nation. The AIDS pandemic is causing untold suffering in individuals, families and societies.

HIV/AIDS is growing problem in Nepal with poor socio economic status. Most of the people are illiterate so they get married at early age. They start sexual activities without basic sex education. Most of them do not use contraceptives during sexual activities. Such type of activity is the main cause of spreading SITS and HIV/AIDS. Some of factors are considered for rapid transmission of HIV inside the country (Aryal, 2001).

HIV/ AIDS problem have been deeply riddled mostly in developing countries 95 percent of the total infected population resides in these countries. It is affecting mostly the productive age group between 18-30 years. The following factors are considered for rapid transmission of HIV inside the country.

- a) Trafficking of young village girl for prostitution outside the country.
- b) Seasonal migration and mobility of young search of job.
- c) Low level of awareness of STDs and HIV/AIDS.
- d) Low coverage of mass media on STDs and AIDS prevention.
- e) Poor health infrastructure.

The people residing in the village hardly get the opportunities to educate their children. (As their children reach 14-19) Families suffer from poverty; they seek means of earning money to fill their stomach.

Mostly in the border area the problem of girl trafficking intense. The trafficking agents convince the poor and illiterate families to get good jobs to their children in outside countries and finally sell them in big cities.

A number of socio-cultural factors and traditional beliefs operating in Nepalese societies have contributed to high level of illiteracy, early age at marriage, early and frequent child bearing and their associated, complication unwanted pregnancies and unsafe abortions related health risks for adolescents (Tamang, 1998). In addition and apparent trend to a lowering of the age of menarche, an increasing in age at marriage, changes in values brought about by increasing urbanization (CREHPA, 1996).

The first HIV positive case in Nepal was diagnosed in July 1988. By the end of 1997 the number had reached cases ranged from 15000 to 25000 for that period homosexual transmission is still. The major cause for all infection and more than 50 percent of such cases occur in age group 15 to 24 year. By the end of April 1998, the number of HIV positive cases had reached 1070 out of those number 205 people developed AIDS and about 102 of them died. There were 148 HIV cases among injecting drug users (IPUS) (Karki, 1998).

In Nepal adolescent comprise in more than often one fifth of the (23.62%) of the total population (CBS, 2001) as a result of population momentum the adolescent population will continue to grow for at least twenty years old adolescents girls and fifth of the adolescent (23.62%) of the adolescents boys aged (15-19) are married (CBS, 1991/2001), 15-19, 63 adolescents and youth who are the high risk groups among the population from the point of view of SITS but at present, we don't know their level of knowledge regarding the various SITS including HIV/AIDS and how they can be transmitted, most importantly how they can be prevented HIV/AIDS evidences are increasing among the adolescent in Nepal.

Research from different places help to know the knowledge attitude and behavior regarding STDs and HIV/AIDS with various background characteristics of the study area.

The analysis of secondary school adolescent's knowledge and behavior on STDs and HIV/AIDS is essential to fill the research gap in this field.

### **1.3 Objective of the Study**

The overall objective of the study is to assess the knowledge, attitude and behavior on STDs and HIV/AIDS of secondary level school adolescents. The specific objectives areas follow:

- To examine the socio-economic and demographic backgrounds of the students.
- To examine the knowledge and attitude, on STDs and HIV/AIDS.
- To identify the various source of information on STDs and HIV/AIDS.

### **1.4 Significance of the Study**

The adolescents especially are increasingly at high risk of contraction and transmitting sexually transmitted disease including HIV/AIDS. The diseases that are predominantly transmitted through sexual contact seem to adolescent everywhere. The more is to in developing countries like Nepal where adolescents are growing with lack of education health services and knowledge of STDs and HIV/AIDS.

In Nepal adolescents constitute one fifth of the total population. They are the backbone of the society and parents of tomorrow. They have great responsibility to make the society developed in future. Adolescents population has less access to information regarding, puberty, physical change reproductive health, contraceptives, STDs and HIV infection. If the adolescent boy and girls are supported with proper information knowledge creates positive attitudes and helps to maintain public health.

The finding of this study may help the policy makers and persons working in the field of STDs and AIDS prevention and central science it attempt to provide the level of knowledge about the passion of STDs and HIV/AIDS and are prevention in a cited group. That is the student in secondary level. This study tries to assess the level of misconception persisting among students. Students being the future foundation of the nation should essentially possess the basic knowledge about public health and killer disease such as STDs and HIV/AIDS.

### **1.5 Limitation of the Study**

This study is limited only among students of secondary school from two schools of Kathmandu. Therefore the findings of the study may or may not be

generalized in other group of population and places. The study is taken among number of respondents and is only respondents from the two schools.

### **1.6 Organization of the Study**

This study is organized into six chapters. The first chapter is introduction which includes background of the study, statement of the problem objectives, significance, limitation and organization of the study.

In the second chapter literature review and conceptual framework are presented.

The third chapter deals with methodology of the study, which includes selection of the study area sample selection, sources of data, questionnaire design method of data analysis and interpretation: procedure. Fourth chapter deals the background characteristics of study population which includes demographic and socio-economic characteristics of the respondents.

Fifth chapter provides knowledge and attitude to wards STDs and HIV/AIDS of the respondents. At last Sixth Chapter covers the summary conclusion and recommendation.

### **1.7 Operational Definition of the Terms Used**

**Knowledge:** meaning of knowledge is the information understanding and skills that we gain through education or experiences. In this study knowledge refers to the understanding of causes and modes of transmission, sign and system prevention and control measures of STDs and HIV/AIDS.

**Attitude:** According to oxford advanced dictionary meaning of attitude is ways of feeling, thinking of behaving." An attitude is a dispositional readiness to respond to certain situation persons or objectives in a consistent manner, which have been learnt and become one's typical mode of response (Franks, 1978). An attitude has affective cognitive and action components (Certain, 1993). In this study attitude refers to the favorable or unfavorable reactions to statement in the attitude scale provided by the researcher.

**Behavior:** The meaning of behavior is the way that some body behaves; especially towards other people: good/bad behavior. In this study behavior refers to the utilization of knowledge on STDs and HIV/AIDS.

**Adolescence:** Defined as the stage of life during which individuals reach sexual maturity. It is period of transition from purity of maturity (UN, 2001-2003). The WHO defines adolescent as the period of life spanning the ages between 10 and 19 years. In this period (transition period) adolescents go through some of the greatest psychological or physical changes in their lives. This research work represents the students of 9 and 18 which belong to adolescent.

**STDs:** The disease transmitted from one individual through sexual contact is called sexually transmitted disease or venereal disease. STDs are transmitted through sexual contact during unprotected intercourse.

**HIV:** Human Immune deficiency Virus is a virus that causes AIDS (Acquired immune deficiency syndrome) is a health condition in which a person is affected by a series of disease because of poor immunity.

**AIDS:** Acquired immune deficiency syndrome is a combination of disease caused by HIV virus, which affects the immune system of body with the result the body becomes unable to fight against diseases or infection.

**Epidemic:** Appearance of an infections disease or condition that attacks many people at the time in the same geographical area. (Park and Park, 1998: 168).

**Pandemic:** Epidemic which spreads from country to country or over the whole words as for e.g. The recent epidemics of AIDS, other notable disease which have occurred in pandemic in the post are influenza, cholera and plague (Park and Park 1998, 1980)



## **CHAPTER - II**

### **LITERATURE REVIEW**

#### **2.1 General Situation of HIV /AIDS in World**

Acquired immune deficiency syndrome (AIDS) was first recognized internationally in Los Angeles in June 5, 1981. This is a pandemic disease. The causative organism of AIDS i.e. HIV was identified in 1983. The HIV virus was diagnosed by Dr. Robert Gallo (USA). Initially the name given for the virus was HIV-III (Human T - cell Lymphotropic virus type - III) ARV (AIDS Redacted virus) and LAV (Lymphadenopathy Associated Virus). However the scientist later in 1986 agreed to give the virus globally acceptable name HIV (Dahal, 2005).

Acquired immunodeficiency syndrome (AIDS) has killed more than 25 million people since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history. Despite recent, improved access to antiretroviral treatment and care in many regions of the world, the AIDS epidemic claimed 3.1 million lives in 2005, more than half a million (570000) were children (UNAIDS, 2005).

The pandemic nature and the magnitude of the public health problems associated with HIV infection were recognized much late. When the proportion of persons infected with HIV rose very rapidly. However considerable efforts are being made to contain the spread of HIV, as the impact of HIV/AIDs seems to be very serious in a long term aspect. The HIV virus doesn't respect geographical boundaries so no country of the Globe is immune to HIV/AIDS. This is why this issue needs an issue of Global thinking and interventions (Aryal, 2000).

The total number of united nations programme on HIV/AIDS (UNAIDS) and the world health organization (WHO) estimate that 40 million people are living with HIV/ AIDS infection at the end of 2001. Among 40 million, 2.7 million are children under the age of 15. The overwhelming majority of people with HIV, some 95 percent of the globe lives in developing world. About 5 million people are believed to have acquired HIV infecting in 2001 alone; of them some 800,000 are children under age 15. This means that there are nearly 14,000 new infections every day according to the 2001 figure (UNAIDS and WHO, 2001).

In terms of global health problem 2003 was the year when the world finally decided to concentrate on HIV/AIDs and other broader health problems affecting the poorer countries of the south. We are all were of the pain and problem resulting from HIV/AIDS epidemic. A report posted on the development Gateway website says "By 2010 in some countries two third of school instruments will be replacements for teachers who have died of AIDS. The human toll of the disease has already the skilled workforce in other sectors.

Contributing to the loss of business revenues and impending governments efforts to improve life chances. As a result, some countries hardest hit by HIV/AIDS could experience more than (20%) loss in GDP by 2000. "The HIV/AIDs pandemic is wiping out societies in countries in Africa and is also making inroads in Asia (Afful, 2004).

In sub-Saharan Africa remains by for the worst affected region, with 25.4 million people living with HIV at the end of 2004, compared to 24.4 million in 2002 just under two thirds (64%) of all people living with HIV are in sub-Saharan Africa, as are more than three quarters (76%) of all women living with HIV (UNAID, 2004).

Unlike women in other regions in the world, African women are considerably more likely at least 1.2 times to be infected with HIV than men. Among young people aged 15-24 this ratio is highest women were found to be two and half times as likely to be HIV- infected as their male Counter Parts (UNAIDS and WHO, 2004).

UNAIDS and the world health organization estimate that 39.5 million people are living with HIV among 39.5 million adults are 37.2 million, women are 17.7 million and children under 15 years of age occupy 23 million, (UNAIDS and WHO, 2006). Studies have found connection between higher AIDS incidence and lower income, for instance a study of African women in North Carolina found that those with HIV infection were more likely than non infected women to be employed receive public assistance; have had 20 or more lifetime sexual partner; have a lifetime history of genital organ infection; have used cracks or cocaine; or have traded sex for drugs money or shelter (CBS, 2005).

The world wide incidence of STDs is high and increasing. The situation was worsened considerable with the emergence of HIV epidemic. Although the incidence

of some STDs has established in parts of the world, there have been increasing cases in many regions (UNFPA, 1994).

The AIDS handbook written by S. John Nubley 1995 states the accuracy of reporting can vary from nation to nation. It is not easy to estimate the number of people with AIDS and infected with the AIDS virus, not all cases are reported people living in remote and rural areas may die without diagnosis by health workers. Many symptoms of AIDS such as diarrhea, weight loss and enlarged lymph nodes are also found with other disease. So cases of AIDS may not be recognized WHO estimates that 500000 cases of AIDS among children have occurred worldwide from mother to child.

Studies have found a connection between higher AIDS incidence and lower income. For instance, a study of African, American, women in North Carolina found that those with HIV infection were more likely than non infected women to be employed; receive public assistance; have had 20 or more life time sexual partners; have a life time history of genital herpes infection has used crack or cocaine; or have traded sex for drugs, money or shelter (CDC 2005).

Researchers and analysis also pointed out that to be effective prevention efforts must address the contextual factors of people's real life such as poverty, discrimination, illicit drug use in community, the ratio of men to women in a given population in concentration rates, and racial segregation and their influences on sexual behaviour (Adimora, 2005). The conference named "Access for All", focus on the topics of community science and leadership. The focus on leadership, a new initiative, reflects plans to bring public officials as well as other leaders to this stage to share their commitments to fight the epidemic the world over.

Fighting HIV is always gain to need Global backing and we are delighted to bring leaders from all walks of life to raise the debate and get commitment in the managing battle against HIV/AIDS commented Range, the president of the international AIDS society IAS, the key conference organizer.

Organizer every two years such conference are coordinated between IAS, local hosts (in this case that ministry of public health) and key organizations including the joint united nations programme on HIV/AIDS (UNAIDS), the international council of AIDS service organizations (ICASO), the international community of

women living with HIV/AIDS (ICW) as well as the global Network of people living with HIV (GNPT). This year, the Thai NGO coalition on AIDS (TNCA) will also be among the co-organizers.

In another development Thailand is expected to officially announce at the conference its plan to provide enough cheap AIDS drugs treat 30,000 patients in Cambodia, Laos and Myanmar. As reported in UN wire (26 May), this would free of charge to other poorer countries, a move which is expected will be emulated by other countries (UNESCAP, 2004).

UN AIDs has released new estimates of the prevalence of the global HIV/AIDS epidemic in 2007; 32.2 million people are estimated to be infected with HIV. This represents a significant decrease from the estimate made in 2006 of 36.5million. much of the impetus for the lowered estimates stems from the results of HIV lasting conducted as a part of the Demographic and health survey (UNAIDS, 2007) ([http; www.prborg.com](http://www.prborg.com)).

## **2.2 World Situation of HIV/AIDS**

For the past two decade, HIV/AIDS has become on increasing global phenomena it has also become the most devastating and treating disease of the human beings more than 60 million people are already infected and 40 million people are estimated to be living with HIV among which 1/3 are age between 15-24 years (Oli, 2005).

The HIV epidemic has left an estimated 8.2 million children orphaned and 1.1 million children living with HIV in the world. In 1997 alone UNAIDs (Joint, United nations Programme on HIV/AIDS) estimated that 5.8 million persons become infected with HIV and 2.8 million persons become infected with HIV and 2.8 million persons died with AIDS, with more than 90 percent of new infections and 89 percent of deaths occurring in substance African and south East Asian (Ibid) of the estimated 16,000 persons are becoming newly infected with HIV each day. More than 40 percent are women; more than 50 percent are children aged 14 years or younger.

### **2.3 HIV/AIDS in Asia**

Asia is not just vast but diverse and HIV epidemics in the regions share that diversity with the nature, pace and severity of epidemics across the region overall, Asian countries can be divided into several categories according of the epidemics they are experiencing while some countries were hit early (for example, Cambodia, Myanmar and Thailand. Others are only how starting to experiences rapidly expanding epidemics and need to mouth Swift, effective responses. They include Indonesia, Nepal, Vietnam and Several provenances in China. In Myanmar and in part of India and China, HIV has become well entranced in some section of society, despite modest are still seeing extremely low levels of HIV prevalence, even among people at high risk of exposure to HIV.

National HIV infection levels in Asia are low compared with some other countries, notable Africa. But the population of many Asian counties is large that even low national HIV prevalence means large no. of people is living with HIV. Latest estimate show some 8.3 million people newly infected in the past year. AIDS claimed some 540000 lives in 2004. among young people 15-24 years of age 0.3 percent of women and 0.4 years of age 0.3 percent of women and 0.4 percent of men were living with HIV by end of 2004 (Devkota, 2005).

### **2.4 HIV/ AIDS in South Asia**

The first HIV infection in South Asian region was reported in India in May 1986 in Srilanka 1987 Pakistan 1686 Nepal 1988; Bangladesh 1989 and in Maldives 1991. It is estimated that there are about 35 million people infected by HIV/AIDS. This means that the Pandemic was introduced in the region some what later than other parts of the world. The infection rates in South Asia are fewer and many countries are yet to develop a proper monitoring system. For this reason the estimates of HIV in South Asia are often made on the basis of inadequate information (Aryal, 2000).

The latest estimates show that about 5.1 million people were living with HIV in India in 2003. Serious epidemics are underway in several states. In Tamilnadu HIV prevalence of 50 percent has been found among sex workers while in each of Andra Pradesh Karnataka, Maharastra and Nagaland, HIV prevalence measured at antenatal clinic in Manipur cities of Imphal and Churachan has risen form below 1 percent with many of the women resting positive appearing to be sex partners of male drug

injections. Several factors look set to sustain Manipuri's epidemic, including the large proportion about 20 percent of female sex workers who inject drug and the young ages of many injectors (UNAIDS, 2004).

In South East Asia AIDS was first reported in Thailand in 1984. The first AIDS infection in South Asian region was reported in India in 1988. Rapid spread of HIV however began during late 1980 in many countries of the region. WHO estimate that in South East Asia more than .5 million people have been infected with HIV by the year 2000, Asia with account for over 25 percent of all people with HIV infection? The association between HIV and Tuberculosis is well established (WHO, 1999).

Sexually transmitted diseases are a major health problem among youth in much of Asia according to studies commissioned by UNESCO. For example in Bangladesh two thirds of all reported STDs occur among people under 25 years of age and the incidence is much higher among aged 15-19 than among men of the same age.

China although moving a varied pace HIV has spread to all of china's 31 provinces autonomous regions and municipalities. In some parts such as Menan Anhui and Shandang HIV was already spreading a decade ago among rural people who sold blood plasma to supplement their incomes. Much of the current spread of HIV in China is also attribute to injecting drug use and paid sex. HIV prevalence among drug injectors was mean sured at between 18 percent and 56 percent in Yunan province.

The centre of gravity of AIDS epidemic is shifting from Africa to Asia yet HIV/AIDS has already emerged as a serious public health and development problem in the region. UNAIDS estimated that about 6 million south and south east Asia have HIV, as the end of 2000. The major transmission routes are multipartner sexual contact and injecting drug use. Thailand, India, Philippines and Myanmar are main countries affecting by the HIV epidemic (Pandey, 2004)

## **2.5 HIV/AIDS in Nepal**

Since the detection of the first case in 1988, the HIV epidemic in Nepal has evolved from a low prevalence to concentrated epidemic. As of 2007, national estimates indicate that approximately 70,000 adults and children are infected with the HIV virus in Nepal, with an estimated prevalence of about 0.49 percent in the adult

population. As of Ashad 2064 a total of 9,756 cases of HIV, 1454 AIDS cases and 423 AIDS deaths had been reported to the National Centre for AIDS and STD central (NCASC). The sex ratio among HIV positive cases is 2:1.

Nepal is categorized as a "Concentrated" epidemic country as some of the sub population groups (IDUs, migrants) are having more than (5%) of prevalence.

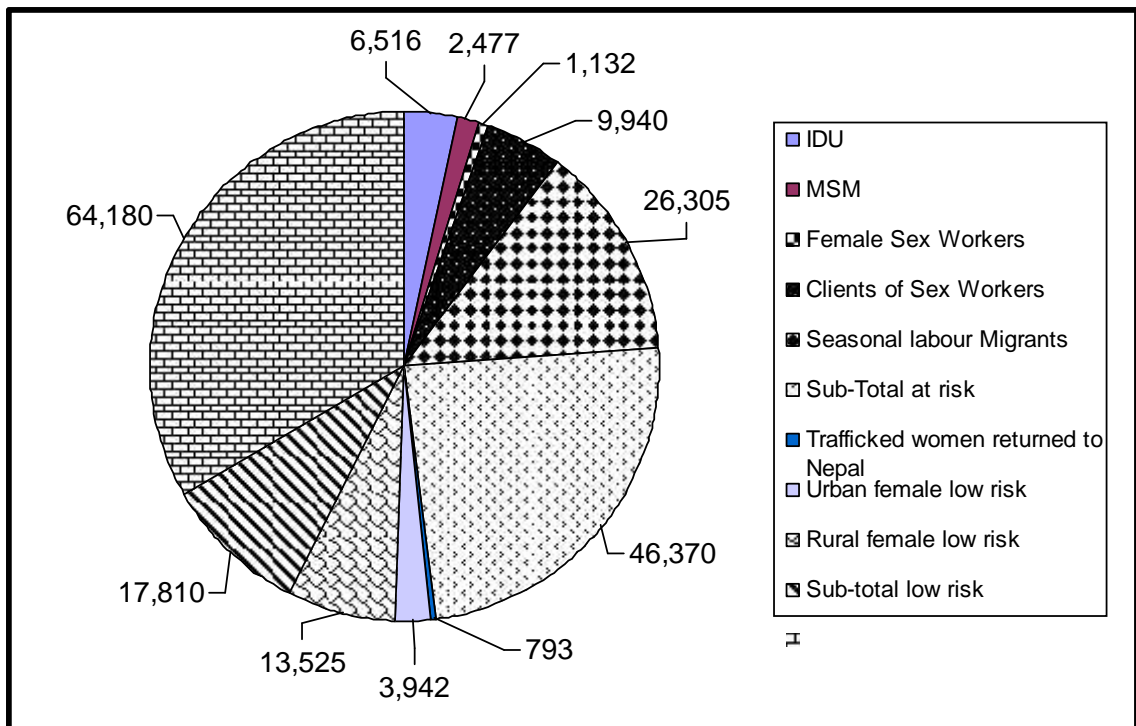
As in other countries in the region, IDUs, MSM and FSW are the groups most at risk with highest HIV prevalence. Most cases of HIV occur among labor migrants (46%) and increasing number occur among their wives (a combined (21%) of HIV cases in low - risk women in rural and urban areas). Of all adults estimated to be living with HIV, a major proportion of HIV infections have consistently been among migrant workers travelling to India for work. In 2005, (46%) of estimated HIV infections in Nepal were among seasonal labour migrants and similar pattern is found in 2007. clients of sex workers account for (19%) of HIV infections in 2005 and (16%) in 2007. Spouses or female partners of migrant workers and clients of sex workers, now account for (21%) of all adult infections. A 2006 study among Nepali migrants traveling to Indian cities for work found that (27%) of men engaged in high risk sexual behaviours while in India and frequent sex workers.

**Table 2.1: Estimation of HIV Infections (2007)**

Population groups	Adults living with HIV
IDU	6,516
MSM	2,477
Female Sex Workers	1,132
Clients of Sex Workers	9,940
Seasonal labour Migrants	26,305
Sub-Total at risk	46,370
Trafficked women returned to Nepal	793
Urban female low risk	3,942
Rural female low risk	13,525
Sub-total low risk	17,810
Grand total	64,180

Source: DOHS, Annual Report (2006, 2007)

**Figure: 2.1 Distribution of Estimated HIV Infection 2007**



Source: NCASC.DAHS

### 2.5.1 National policy HIV/AIDS of Nepal

The history of Nepal's response against HIV/AIDS begin with the launching of first national AIDS prevention and control programme

In 1988. Several organization including government NGOS and INGOS are currently working for the prevention and control of HIV/AIDS in Nepal. The activities among others include out reach communication and advocacy programmes to people in general and the vulnerable groups in particular, cross border initiatives targeted at the migrant workers making condoms accessible through retails and others outlets promoting their use. Providing rehabilitation and counseling to the sex workers, capacity building of health for STD and HIV/AIDS care, conducting regular sentinel surveillance, providing clinical services and programmes aimed at raising the quality of and increasing accessibility of STDS treatment and HIV care services (New era, 2003 and MOH, 2002).



### **2.5.2 HIV Surveillance Activities in Nepal 2009**

- Nepal's priority in HIV surveillance is strengthening of the second generation surveillance system.
- National centre for AIDS and STD control (NCASC) receives HIV/AIDS and STI case report from HIV testing and counseling site.
- Regular integrated biological and behavioural survey (IBBS) among high risk groups.
- Routine programme data special studies such as Nepal demographic health surveys
- Researchers (including operational researchers)
- Size estimation of most at risk population (MARPs)
- HIV infections estimations and projections are being done in every two year.
- Producing impact data from modeling (spectrum).
- NCASC is leading the HIV surveillance activities in Nepal, in technical collaboration with family health international (FHI) and World Health Organization (WHO).

### **2.6 Global Situation of STIS**

There are a number of sexually related public health and social policy issues facing countries around the world today. According to united states centers of disease control and prevention in the limited states a teen becomes pregnant every 30 seconds, and every 35 seconds a teen contract as IT for most people in the united states, engaging in heterosexual intercourse without the use of condom is behaviour that puts them at greatest risk for infection with HIV, which can lead to AIDS and it often ultimately fatal. Although there is currently no cure for AIDS, there are medications that can help delay the onset of symptoms. Another serious STIs is syphilis, which is left in treated for many years, can lead to paralysis, psychiatric illness, and A sexually Transmitted (STI) is a disease caused by pathogen (e.g. virus, bacterium, parasite fungus) that is spread from person to person primarily through sexual contact. STIs can be painful, debilitating and life threatening more than twenty sexually transmitted diseases have been identified among the world.

According to U.S. department of health and human services, in the united states more than 13 million people are infected each year and more than 65 million

have an incurable STDs. Generally STDs incidence has declined in the united states over the past 15 years. Although the rate among carton populations, including men who have sex with men, have increased ([www.worldsituationfstis.com](http://www.worldsituationfstis.com)).

Individuals can reduce their exposure to such sexual risk by practicing abstinence, using appropriate method of contraception to avoid unwanted pregnancies, and using of safer sex practice. Such practices include using condoms to avoid exchanging body fluids, limiting the number of sexual partners, and restricting sexual behaviors to those with less risk such as manual stimulate and massage.

## **2.7 Empirical Literature Review of HIV/AIDS**

### **2.7.1 Knowledge on STDs and HIV/AIDS**

World wide about half of the people who become infected with HIV acquired the infection before age 25 and they especially die of opportunistic of factions associated with AIDS before their 35th birthday. For this reason, AIDS is uniquely threatening to both young people who are at risk for infection and children who are orphaned by HIV/AIDS. According to UNAIDS the joining united Nations programme on AIDS, by the end of 1999, the AIDS epidemic had left behind a cumulative total of 11.2 millions orphans, defined as children having lost their mother before reaching the age of 15 (UNAIDS, 1999).

A total of 5.3 million people are newly infected with HIV in 2000. Among them 4.7 million are adults, 2.2 million women and 6,00,000 are children under 15 years. About 36 million people are living with HIV/AIDS in 2000. Among them, 34.7 million are adults, 16.4 million are women and 1.4 million are children under 15 years. 3 million people died by causes of AIDS. Among them 2.5 million adults, 1.3 million are women and 500,000 are children under 15 years. Similarly 21.8 million total number of AIDS death since the beginning of epidemic among them 17.5 million are adults, 9 million are women and 4.3 million are under 15 years (UNAIDS, 2000).

Almost 6 million people world wide contracted in 1997, according to previous record 5.6 million and more than 30 million people are now living with HIV/AIDS. Approximately 40 million and more than 30 million people are now living with HIV/AIDS. Approximately 40 million people world wide have been infected with HIV since the beginning of the HIV/AIDS epidemic in the late 1970s, of which about

15 million have developed full boom AIDS. HIV infections still mean gradual wasting and death with two thirds of the people world wide, infected with HIV. Africa remains the most seriously effected region, 7.4 percent of adults in Africa are infected with HIV while high HIV prevalence in China and India a currently remains limited to high risk of population (Maxwell, 1998).

According to Nepal living standard survey report 66 questions were asked to all person aged 10 years and above and at the interview they were whether they had heard about HIV/AIDS. In response to this, 10 years of population and older reported yes about 65 percent of males reported of have heard of HIV/AIDS compared to 5.1 percent of females. As expected this percent is higher in urban (73%) compared to rural areas (53%) (NLSS, 2003/2004).

Gauli (2005) studied on "Knowledge, attitude and behaviour towards STIs and HIV/AIDS among youth in Darai community Salyantar VDC Dhading. The selected 130 youth (15-24) by purposive sampling with objectives of to examine the socio-economic and demographic background of respondent and to identify their level of knowledge of mode of transmission and preventive measure of STIS and HIV/AIDS and their attitude and behaviour on STI/HIV/AIDS. He concluded that most of respondents (76%) have heard about STDs from the Radio (98%) and HIV/AIDS (82.7%) 64 percent get information from friends on STIs and 56.7 percent on HIV/AIDS (Gouli 2005).

A KAP survey among 1400 young people in 7 districts in Nepal shows that Nepalese teenagers are highly awareness of HIV risk but that is awareness does not necessity translate into safe sexual behaviour. Although an overwhelming majority (92%) of teenagers had heard of HIV/AIDS, only 74 percent of teenagers know that they should use condom when having sex with commercial sex workers. The study also shows that almost 20 percent of teenagers considered premarital sex as proper one in five boys and really one in ten girls interviewed had a sexual experience. 65 percent of boys said that they had used condom whiled 74 percent girls said that their partners used a condom during sexual intercourse, unprotected sex lead to a 14 percent pregnancy rate and a 22 percent STI infection rate are in bays and 13 percent rate in girls (UNICEF, 2001).

NDHS 2006 shows that many Nepalese adult lack accurate knowledge about the way in which the AIDS virus can active. This survey also found that premarital sex was 19 percent. The use of contraception was low but knowledge about contraception use was found higher (UNFPA 2006) in Nepal. The use of contraceptive before marriage is not acceptable seen to be shy to ask about contraceptives that result unsafe sex and higher chances of acquiring STDs and HIV/AIDS (UNFPA, 2006). 60 percent of boys accepted that they use condom while 74 percent of girls asked their partner to use condom (FPAN, 2006: 39).

### **2.7.2 Situation of HIV/AIDS in Nepal**

The first HIV infection in Nepal was identified in 1988. The potential for the spread of HIV in Nepal is large because of extensive use of commercial sex workers, high rates of sexually transmitted diseases, low level of condom used and pockets of intravenous drug users.

In the context of Nepal, the increase Rte of HIV positive was low by late 1996. In 1996, this number reached to 135. After one year, in 1997 this number rapidly rose to 489. In year 2004, 1282 people were infected by HIV positive, more than 950 cases of AIDS and over 5,800 cases of HIV infection rose to 1293. Out of 9043 number of people living with HIV around the country (NCASC, 2006).

A total of 10,369 HIV positive cases had been reported to the National Centre for AIDS and STD control (NCASC) as of November, 2007. While data reported to the NCASC offers some perspectives on HIV cases, recent estimates show that 41 percent of all HIV cases in Nepal are among seasonal labour migrants, 16 percent among clients of sex workers and 21 percent are wives or partners of HIV positive men (preliminary data NCASC: 2007).

A total of 11,835 HIV positive has been reported to the National Centre for AIDS and STD Control (NCASC) as of Jestha 2065 (June 2008). Similarly, according to ministry of Health and Population, National Center for AIDS and STD Control (NCASC), cumulative HIV/AIDS situation of Nepal as Ashwin 2066 (17 October 2009) shows the following table.

**Table 2.2: Situation of HIV and AIDS Cases**

Condition	Male	Female	Total
HIV positives (Including AIDS)	9,701	5,086	14,787
AIDS (Out of the total HIV)	1,850	777	2,627

Source: NCASC, 2008

**Table: 2.3 Cumulative HIV infections by Sub-group and Sex**

Sub Groups	Male	Female	Total
Sex workers (SW)	6	830	836
Clients of SWs/STD	6,463	104	6,567
Housewives	NA	3,699	3,699
Male partners	10	NA	10**
Blood or organ recipients	29	13	42
Injecting drug users	2,472	49	2,521
Men having sex with men (MSM)	111	NA	111
Children	556	363	919
Sub-group not identified	54	28	82
Total	9,691	4,982	14,804

Source: NCASC, 2009

NA = Not Applicable

\*\* = Indicates only males

Table 1.3 shows the rate of infection among males in comparison to females is high. Among males, very high infection has been reported among the clients of SWS/STD (6,463) whereas the least among them are male sex workers (6). Similarly, among females, very high infection has been reported among housewives (3,699) whereas the least among them are blood or organ recipients (13).

**Table 2.4: Mode of Transmission-IDU or Sexual Cumulative HIV Infection by Age Group and Sex**

Age groups (Year)	Male	Female	Source: Total
0-4	221	128	349
5-9	225	178	433
10-14	91	61	152
15-19	25	262	513
20-24	1,217	850	2,067
25-29	2,163	1,184	3,347
30-39	3,965	1,752	5,717
40-49	1,224	528	1,752
50+above	314	143	457
Total	9,701	5,086	14,787

Source: NCASC, 2009

Table 1.4 shows that as per group, 30-39 age group males and females are highly infected by 3,965 and 1,752 respectively than other age groups.

## **2.8 Situation of STDs and STIS in Nepal**

In Nepal prevalence among STDs clinic patients increase from 1 percent in 1992 to 5 percent in 1998. In February 2000 a study on the behavioural surveillance survey on the high way Routes of Nepal conducted by New Era with support from FHI (Family Health International) and UNAIDS (United States assistance for international development). The findings of the study show along the countries longer high way routes have sexual intercourse with the commercial sex workers.

Nepal being landlocked and one of the least developed countries in the world with immense problems such as poverty, illiteracy, ignorance and youth unemployment, has all the pre-dispersing factors for the spread of STIs including.

According to the annual report of HMIS, a total 9928 of RTIs/STIs/HIV were reported out of 56,673,376 OPD cases which was 0.19 percent of the total OPD cases in 1995-1996. The percentage of RTIs/STIs/HIV cases of total of OPD Cases were 0.22% in 1996/97, 0.22% in 1997-98 and 0.34% in 1998/99.

Syphilis prevalence was 1.2% among sentinel surveillance. STI patients in six surveillance sites (Mahendra Nagar, Nepalgunj, Pokhara, Birgung, Kathmandu Maternity Hospital and AMDA Hospital Damak) HIV prevalence among STI patients was 2.4 percent in the year 2000. STI prevalence among female sex workers (FSWs) is notably higher. Data from Pokhara, Kathmandu and Terai revealed that syphilis prevalence among SWs was 18.8 percent in the Terai, 19 percent in Kathmandu and 13.8 percent in Pokhara. Clients of sex workers (truckers) were found to have syphilis prevalence of 5.3 percent. Among other STIs/RTIs bacterial vaginosis was found in 21.6 percent, trichomoniasis in 21.1 percent, Chlamydia in 2.8 percent, Gonorrhoea in 0.8 percent, and HIV in 0.8 percent among FSWs, in Pokhara (NCASC, 1999). Trichomonal infection in females varied from 6 percent in family planning (FP) clinic attendees; 9.3 percent in female STIs patients; 9 percent in FSWs in the Terai; and 21 percent in FSWs of Pokhara.

According to the data given by different national hospitals where curing service is available, 2118 were cured in the year 1997. In the same way, in 1998 the number of sexual problematic patients becomes 3250. On the next year i.e. 1999 the number increased to 5202 and in 2000 the numbers become 5547. That was 4%, 2.3% and 3.02% respectively of the patients who were registered in general section of those hospitals (MOH, 2004:4).

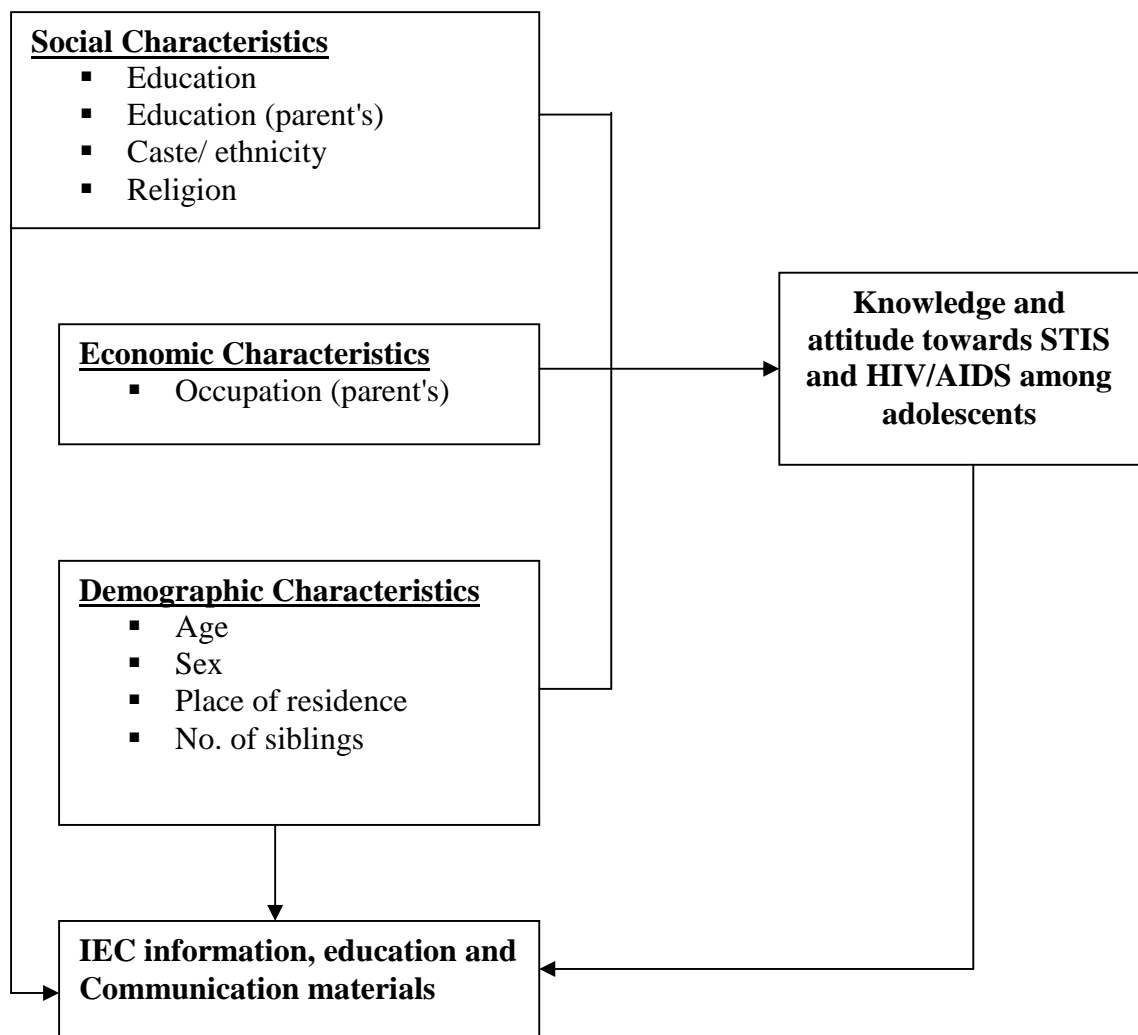
## **2.9 Conceptual Framework of Study**

In this research, the conceptual framework as women to explain the socio economic as well as demographic variables with knowledge and attitude of the adolescents towards STDs and HIV/AIDS. So as to make a concept if there is any impact and relation to adolescent's prevalent knowledge and attitude on STDs and HIV/AIDS. Also the respondents own age sex and education may affect the knowledge and attitude towards STDs and HIV/AIDS.

The conceptual framework attempted to show that parental background characteristics such as education caste/ ethnicity, occupation income, determine the knowledge and attitudes towards STDs and HIV/AIDS of the adolescent children.

Government policy adolescents to bring changes on them regarding their sexually and alerting them on STDs and HIV/AIDS through IEC Material and orientation also plays a vital role in deterring knowledge and attitude on STDs and

HIV/AIDS of the adolescent. Based on the objectives of the study and available literature. This study has purposed the following conceptual framework.





## CHAPTER III

### METHODOLOGY

This chapter provides a set of methods which are employed in the research study to achieve the research objectives. This study is based on primary data as a main source of information. Data are collected from field survey. Besides primary data secondary data information related to this aspect such as different books journals, educational report, publication, documents, international conference reports, census reports and theses are used.

#### 3.1 Study Area

Kathmandu valley is located between north  $27^{\circ}$  and east  $85^{\circ}$  with the elevation of 4390 feet above sea level. Kathmandu, the capital of Nepal is the most populated place. Here the people from all the castes, religions, and cultures live. The researcher is selected Kathmandu district as study area since it is representation of various classes and groups of people.

Two schools are selected and both them lie in the centre part of the Kathmandu. Among them one school belongs to the community based and another one is government school. These are Kuleshwor Awas Secondary School and Amar Jyoti Higher School.

#### 3.2 Sample Size

Altogether 110 respondents were selected of age group 14-19 years. Among them from Amarjyoti there were 61 students, out of which 29 were males and 32 females. Similarly, in Kuleshwor Awas Secondary school there were 49 students among them 19 were males and 30 were females.

**Table 3.1: Distribution of Respondents by School and Sex**

Name of School	Male	Female	Total
Amarjyoti Sec. School	29	32	61
Kuleshwor Awas Sec. English School	19	30	49
Total	48	62	110

Source: Field Survey, 2008

### **3.3 Questionnaire Design**

Questionnaire is the main tool for the research study which is designed to meet the requirement of the objectives. Semi-structured questionnaire was used for the quantitative data collection. This questionnaire included questionnaire related to the socio-economic and demographic characteristics of respondent's family.

The major part of the questionnaire was emphasized upon students' knowledge, attitude and behavior about STDs and HIV/AIDS, its transmission roots and sources of information.

### **3.4 Method of Data Collection**

The data was collected on the basis of primary method. During the process of data collection respondents were made seated in their classroom as usual to make them easy and regular. Then the questionnaire were distributed to them and explained about the subject matter after that they were requested to fill up the questionnaire transparently without any hesitation according to their own knowledge. In this very procedure, the whole class was evaluated and every one was encouraged to give their own view individually. The data was collected by census method.

### **3.5 Analysis of Data**

The collected data from the field survey were processed and analyzed to interpret the implication with the help of micro computer using SPSS/PIC programme.

According to nature of data they are further split into separate section as well as simple frequency tables, cross tabulation and percentage have been utilized for data analysis and interpretation.

## CHAPTER IV

### BACKGROUND CHARACTERISTICS OF THE RESPONDENTS

This chapter presents the socioeconomic and demographic characteristics of the respondents. Socio economic background provide information about caste ethnicity, religion, education, occupation, residence, incomes and demographic characteristics provide information about sex, age and marital of the respondents.

#### 4.1 Individual Characteristics

This part deals with the information on the different characteristics of individual respondents including social as well as demographic characteristics of the adolescents such as level of education religion caste age sex and marital status.

##### 4.1.1 Level of Education

This study has collected data for altogether 110 respondents including 65 (59.1%) respondents from grade IX and 45 (40.9%) students from grade X. Among them male students and female students were 48 and 62 respectively.

**Table 4.1: Distribution of Respondents by Class**

Class	Male		Female		Total	
	No.	%	No.	%	No.	%
IX	31	47.7	34	52.3	65	60
X	17	37.8	28	62.2	45	40
Total	48	43.6	62	56.4	110	100

Source: Field Survey, 2008.

##### 4.1.2 Age and Sex Composition

The respondents of age group 14-19 were selected. In demographic analysis age and sex both are pillar of demographic study although sex is personal characteristics of person, information on sex can be normally be obtained without difficulty. The age sex composition of population has significant implication for the field of demographic analysis.

**Table 4.2: Distribution of Respondents by Age and Sex**

Age group	Male		Female		Total	
	No	%	No	%	No	%
14-15	10	20.8	15	24.2	25	22.7
15	12	25.0	21	33.9	33	30.0
16	13	27.1	25	40.3	38	34.5
17-18	13	27.1	1	1.6	14	12.7
Total	48	100.00	62	100.00	110	100.00

Source: Field Survey, 2008.

Table 4.2 shows that the majority of respondents are of age group 16 years i.e. 34.5 percent followed by 30 percent respondents of age 15 years and 22.7 percent of age group <15 years. The lower percentage of respondents (12.7%) belongs to 17.-18 years.

Among them 27.1 percent male respondents belong to age 16 and 17 -18 whereas 25.0 percent and 20.8 percent belong to 15 and <15 years respectively.

In case of females majority of respondents (40.3%) are of age 16 years followed by 33.9 and 24.2 percent of age group 15 and <15 years respectively. The lowest percent of respondents (1.6%) belongs to age group 17-18 years.

#### 4.1.3 Caste / Ethnicity

Caste / Ethnicity may be one of factors to determine the knowledge and attitude on STDs and HIV/AIDS because in certain caste ethnic group, there may be different norms culture, value and reception to see about sexually transmitted disease.

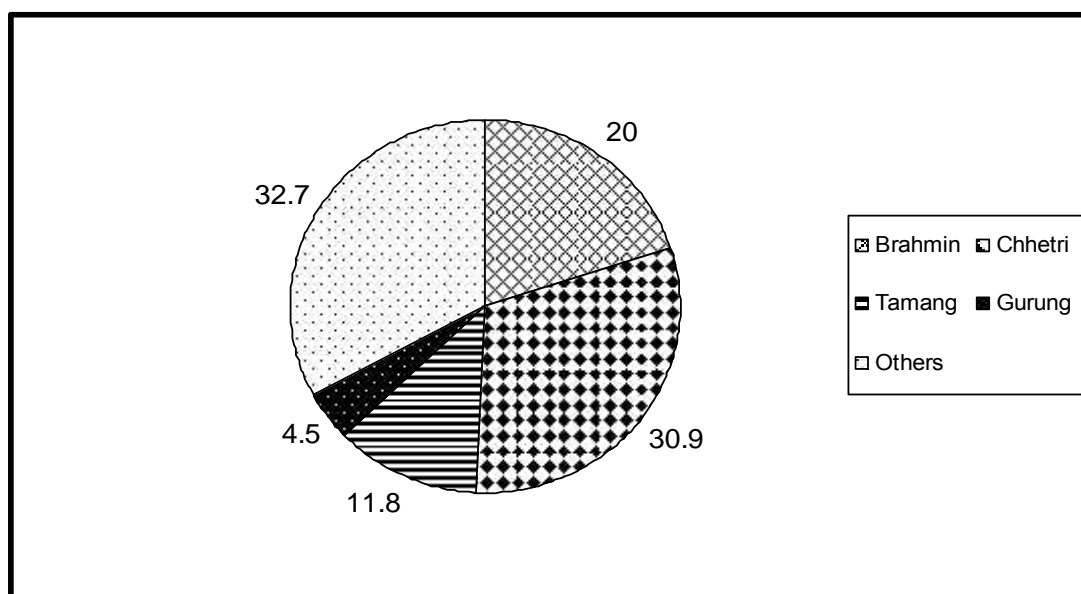
**Table 4.3 Distribution of Respondents by Caste / Ethnicity**

Caste / ethnicity	Number	Percent
Brahmin	22	20.0
Chhetri	34	30.9
Tamang	13	11.8
Gurung	5	4.5
Others	36	32.7
Total	110	100.00

Note: others include Rai, Nepali, Giri, Maghi, Miya, Ali, Newar, Waiba, Pariyar etc.  
Source: Field Survey, 2008.

Table 4.3 shows that majority of the respondents are from Chhetri (30.9%) which is followed by Brahmin (20.0%) Tamang (11.8%) Gurung (4.5%) and others Rai, Nepali, Giri, Maghi, Miya, Ali, Newar, Waiba, Pariyar (32.7%).

**Figure 4.1: Distribution of Respondents by Caste/ Ethnicity**



#### 4.1.4 Religious Composition

Nepal is a multilingual, multi-religious and multicultural country. Religion of the respondents is also one factor that may influence the knowledge about STDs and HIV/AIDS. In Hindu religion sex before marriage is not allowed and is seen as social taboo but values of every religion are not same. So it influences the human behaviour.

Table 4.4 shows that the majority of respondents are from Hindu (82.7%) which is followed by Buddhist (10.0%) others (5.5%) and Kirat (1.8%) respectively.

**Table 4.4 Distribution of Respondents by Religion**

Religion	No	Percent
Hindu	91	82.7
Buddhist	11	10.0
Kirat	2	1.8
Others	6	5.5
Total	110	100.00

Note: Others include Christian, Muslim etc.

Source: Field Survey, 2008.

#### 4.1.5 Place of Residence

Place of respondents can also play the vital role on the level of knowledge and attitude towards STDs and HIV/AIDS. Table 4 shows the place of residence of the respondents

**Table 4.5: Distribution of Respondents by Place of Residence**

Place of residence	Sex				Total	
	Male		Female			
	No	%	No	%	No	%
Rural	27	56.2	38	61.3	65	59.1
Urban	21	43.8	24	38.7	45	40.9
Total	48	100.00	62	100.00	110	100.00

Source: Field Survey, 2008.

Majority of respondents were living in rural area than in urban as 59.1 percent were found from rural areas. Similarly 40.9 percent were from urban areas. Out of total females 61.3 percent were from rural area and 38.7 percent from urban area. Where as among males 56.2 percent were from rural area and 43.8 percent from urban area.

#### 4.2 Households Characteristics

This section includes the parents' education, and household facilities or availability of physical facilities.

##### 4.2.1 Educational Level of Parents

Educational attainment of the parents in one of the important socio economic factors which can play vital role for the level of knowledge of their children on STIs/HIV/AIDS.

**Table 4.6 Distribution of Respondents by Parent's Education**

Level of education	Father		Mother	
	Number	%	Number	%
Illiterate	10	9.1	49	44.5
Non-formal	7	6.4	-	-
Primary	32	29.1	31	28.2
L. Secondary	19	17.2	10	9.1
SLC	22	20.0	13	11.8
SLC and above	20	18.2	7	6.4
Total	110	100	110	100

Source: Field Survey, 2008.

Table 4.6 shows that 44.5 percents of respondent's mothers are illiterate and 55.5 percent literate. Similarly the case of respondent's fathers 9.1 percent illiterate and 90.9 percent of literate.

The highest percentage of respondents' parents has primary level of education (28.2 %) mother and (29.1%) fathers.

Majority of the respondent's father's level of education is higher in comparison to mothers. Among fathers, level of education in primary (29.1%) followed by SLC (20%), Lower Secondary (17.2%) and Non formal (6.4%) respectively. Among mothers, level of education in primary (28.2%), SLC (11.8%) Lower secondary (9.1%), S.L.C. and above (6.4%) and no one of mothers' have achieved non-formal education.

#### **4.2.2 Parent's Occupational Status**

Occupation of parents can also be taken as an important variable that determines the social economic status of the household and also affects the knowledge and attitude of their children on STIs and HIV/AIDS. Table 4.7 below shows the distribution of respondents according to occupation of parents.

**Table 4.7 Distribution of Respondents by Parents Occupation**

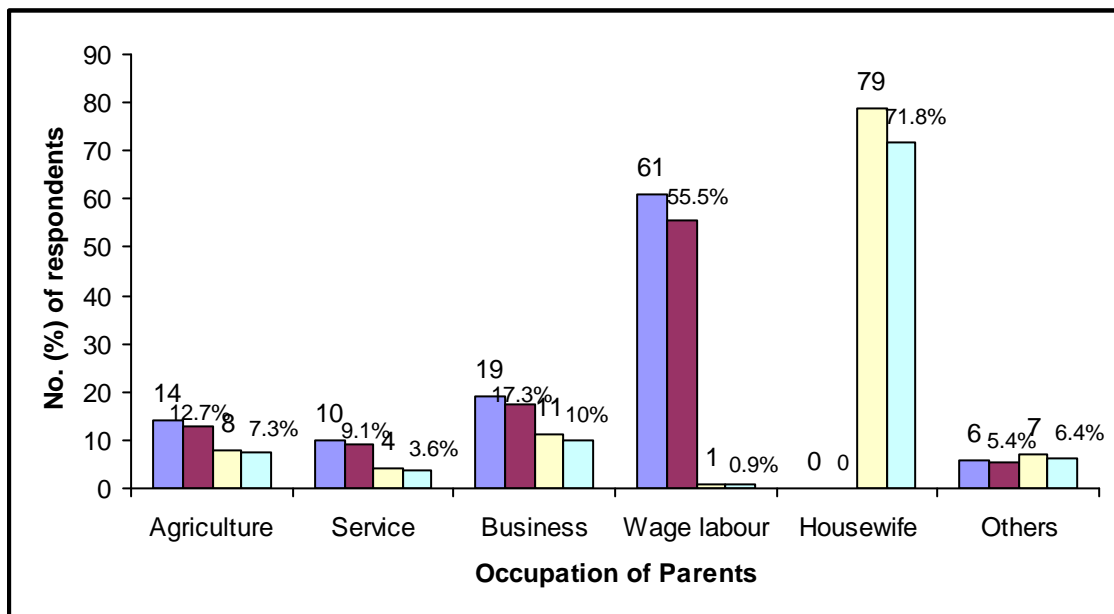
Parent's occupation	Sex			
	Father		Mother	
	Number	%	Number	%
Agriculture	14	12.7	8	7.3
Service	10	9.1	4	3.6
Business	19	17.3	11	10.0
Wage labour	61	55.5	1	0.9
Housewife	-	-	79	71.8
Others	6	5.4	7	6.4
Total	110	100.00	110	100.00

Note: Other include (not specify job which is related to above categories), or foreign employee.

Source: Field Survey, 2008.

Majority of the respondents fathers were engaged in wage labour (55.5%). Business (17.3%) followed by agriculture (12.7%), and the least percent were in service (9.1%).

**Figure 4.2 Distributions of Respondents by Parents Occupation**



Similarly most of respondent's mother (71.8%) is housewives. But 10 percent of them were engaged in business (7.3%) followed by agriculture, (6.4%), service (3.6%) and wages labour (0.9%). About 60 percent of them have other' occupation with includes not specify job which is related to above categories.



### 4.2.3 Land Ownership

Ownership of land is one of the economic factors which may determine the overall status of people. Basic needs of people can be fulfilled by the sufficient land, such as education, physical facility and other source of income. The information collected on household on land ownership is presented in Table 4.8.

**Table 4.8: Percentage Distribution of Respondents by household Land Ownership**

Agriculture land ownership	Number	Percentage
Yes	77	70.0
No	33	30.0
Total	110	100.00

Source: Field Survey, 2008.

Majority of the respondents (70%) have owned agricultural land of household. But some 30 percent of them have no own land.

### 4.2.4 Number of Siblings

Table 4.9 shows the number brothers and sisters in the family. The family size also plays a vital role in the living status of the family which may determine the knowledge attitude and behaviour of the respondents.

**Table 4.9: Distribution of Respondents by Number of Siblings**

No. of brother and sister		
	Number	Percent
None	5	4.5
1-2	69	62.7
3-5	32	29.1
>5	4	3.6
Total	110	100.0

The table shows that most of the respondents i.e. 62.7 percent have 1-2 brothers and sisters followed by 29.1 percent who have 3-5 and 3.6 percent more than 5 siblings. The rest 4.5 percent have no siblings.

#### 4.2.5 Place of Birth

Majority of respondents (59.1%) reported their birth place as village and 40.9 percent reported town or urban area as their birth place.

**Table 4.10 Distribution of Respondents by Place of Birth**

Place of Birth	No. of Respondent	Percentage
Town	45	40.9
Village	65	59.1
Total	110	100.00

Source: Field Survey, 2008.

#### 4.2.6 Household Facility

Household facility can also play a vital role for increasing the knowledge and attitudes towards STDs and HIV/AIDS. Distribution of respondents by availability of the household facilities such as electricity, radio, television is presented in table 4.11.

**Table 4.11: Distribution of Respondents by House holds Facilities**

Facility	Number	Percentage
Electricity	104	94.5
Radio	103	93.6
Television	104	94.5

Source: Field Survey, 2008.

Table 4.11 shows that most of the respondents' houses (94.5%) are equipped with electricity and television and 93.6 percent of them have radio in their house.

## CHAPTER - V

### KNOWLEDGE AND ATTITUDE TOWARDS STDs AND HIV/AIDS

#### 5.1 HIV/AIDS

This chapter examines the extent of knowledge about STDs and HIV/AIDS among adolescents and also discusses their attitude regarding STDs and HIV/AIDS. Knowledge on sexually transmitted infection is measured in terms of several variables. In the context of knowledge heard of STDs HIV/AIDS, modes of transmission, knowledge on preventive measures have been examined.

#### 5.2 Heard of STDs

Hearing about any thing is a basis for knowledge; however, only hearing about a topic would not change the behaviour of a person on that issue. Respondents were asked whether they had heard about HIV/AIDS or not. Only two females are unknown about it.

**Table 5.1: According to Sex**

Heard / Knowledge of STDs	Male		Female		Total	
	No.	%	No.	%	No.	%
Yes	48	100	60	-	108	98.2
No	-	-	2	-	2	1.8
Total	48	100	62		110	100

Source: Field Survey, 2008.

Table 5.1 shows that 108 respondents have heard about sexually transmitted disease. The respondents who have heard about sexually transmitted disease were further asked to state which STD they have heard. The 5.2 table depicts the percentage of respondents who know the different types of STDs.

**Table 5.2 Knowledge of STDs by Background Characterizes**

Background Characteristics	Syphilis	Gonorrhoea	Genital warts	AIDS	Hepatitis	Others	N	%
<b>Class</b>								
9	17.5	24.6	6.2	89.1	52.3	12.3	63	100.0
10	82.2	73.3	24.4	97.8	80.0	28.9	45	100.0
<15	20.0	24.0		92.0	56.0	8.0	25	100.0
15	40.6	36.4	9.1	90.9	42.4	18.2	32	100.0
16	56.8	50.0	28.9	94.7	76.3	23.7	37	100.0
17-18	64.3	85.7	7.1	92.9	92.9	28.6	14	100.0
<b>Sex</b>								
Male	43.8	47.9	18.8	87.5	70.8	25.0	48	100.0
Female	43.5	41.9	9.7	96.8	58.1	14.5	60	100.0
Brahmin	54.5	63.6	9.1	90.9	68.2	27.3	22	100.0
Chhetri	41.2	38.2	20.6	91.2	58.8	23.5	33	100.0
Tamang	46.2	38.5	7.7	92.3	92.3	15.4	12	100.0
Gurung	40.0	60.0	20.0	80.0	80.0	20.0	5	100.0
<b>Religion</b>								
Hindu	40.7	44.0	14.3	92.3	59.3	19.8	89	100.0
Buddhist	63.6	63.6		90.9	100.0	18.2	11	100.0
Kirat	50.0	50.0	50.0	100.0	100.0		2	100.0
Others	50.0	16.7	16.7	100.0	50.0	16.7	6	100.0
<b>Education</b>								
illiterate	37.3	35.8	16.4	91.0	62.7	19.4	66	100.0
Only literate	54.2	54.2	12.5	94.7	95.8	62.5	23	20.8
SLC and Above	52.6	63.2	5.3	94.7	68.4	15.8	19	100.0
<b>Occupation</b>								
Agriculture	42.7	43.8	14.6	91.0	64.0	20.2	87	100.0
Non agriculture	47.6	47.6	9.5	100.0	61.9	14.3	21	100.0
Total	43.6	44.5	13.6	92.7	63.6	19.1	108	100.

Note: Others not specify

The sum of percentage may exceed hundred to multiple responses.

Source: Field Survey, 2008.

In class 9, 89.1 percent respondents have heard about AIDS, 54 percent have heard about hepatitis followed by 25.4 percent Gonorrhoea (24.6%), syphilis (17.5%) and genital warts (6.3%). Some 12.7 percent have heard about other STIs. But about 3 percent of them have not heard about STDs.

Among the respondents of class 10, majority of the students (97.8%) have heard about AIDS followed by syphilis (82.2%), Hepatitis (80.0%), Gonorrhoea (73.3%) others (28.9%) and Genital warts (24.4%).

According to age group 92 percent respondents of less than 15 years of age have heard about AIDS followed by Hepatitis (56.0) Gonorrhoea (24.0%), Syphilis (20.0%) and 8 percent have heard about other diseases. Among the all age groups higher percentage of students of age group 17-18 heard of about the Hepatitis (92.9%) and least percent of the same age group (7.1%) Genital warts. Higher proportion of female respondents has knowledge than male respondents. Because majority of the females face different types of STIs.

According to Table 5.1, higher percent of male respondents have heard about the Hepatitis (70.8%) and Gonorrhoea (47.9%) as compared to female respondents (58.1% and 41.9%) Only 3.2 percent female respondents have not heard about the STDs.

According to caste, all the respondents among the Brahmin, (90.9%) Gurung (80%) and others (36%) have heard about STDs some 2.9 percent Chhetri and 7.7% Tamang.

There are (21.2%) Chhetri who heard have about genital warts followed 8.3 percent Tamang and 11.1 percent others.

As per religion, all the respondents except Hindu (2.2%) has heard about the STDs. All the respondents from Kirat and other groups have heard about AIDS (100%) likewise Buddhist have and Kirat heard (100%) about Hepatitis.

As per parent education 60 percent of respondents whose mothers were illiterate (1.8%) have not heard about STDs 6.4 percent of respondents whose mother have SLC and above level of education have heard about all the STDs. Majority of the respondents whose

As per occupational status out of 108 respondents (80.5%) respondents whose father's occupation is agriculture have no knowledge about STDs. Majority of the respondents (21.1%) whose father's occupation is non agriculture have heard about the AIDS followed by (19.44%).

### 5.3 Source of Knowledge about STIS/HIV/AIDS

Sources of information many have important role to achieve knowledge about STDs and HIV/IDS for the adolescents. Various sources were used by the respondent's information.

It shows that the television comes in first radio second of the books in third as a source of knowledge. As per the data it is found that kirat and Buddhist are more conscious than Hindus and other.

**Table 5.3 Distribution of Respondents by Source of Information**

Source of information	Yes	No	Total
Radio	86	79.6	108
Television	92	85.2	108
Magazine	71	65.7	108
Doctors	69	63.9	108
Text books	91	84.3	108
Parents	12	11.1	108
Others	5	4.6	108

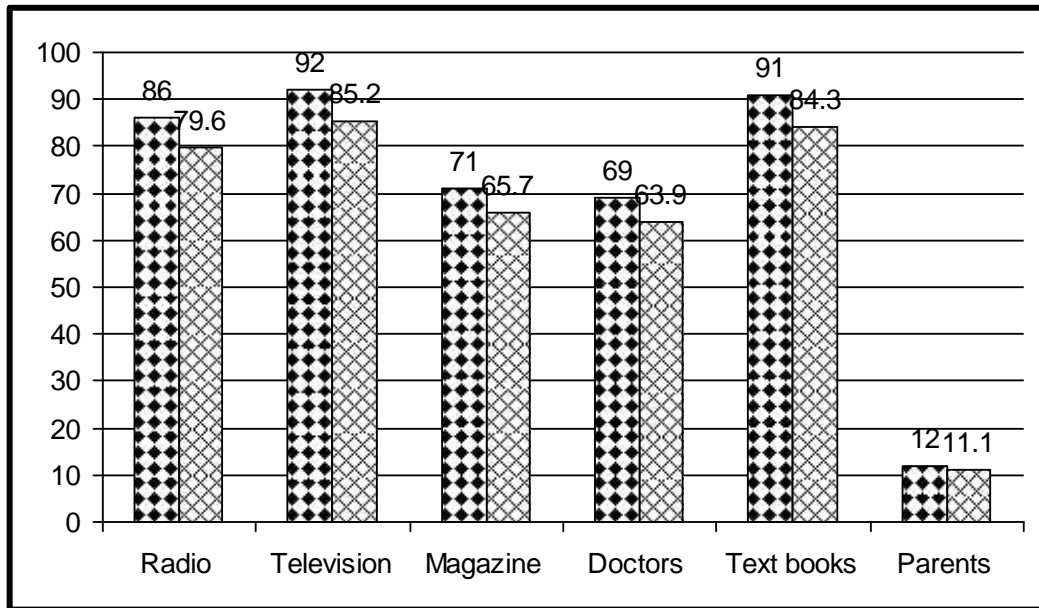
Source: Field Survey, 2008.

Multiple Responses tables.

Table 5.3 shows that majority of the respondents (85.2 percent) have got information from television, followed by test book (84.3%), radio (79.6%) doctors (63.9%) and some (4.6%) from their parents.

Radio, television, magazine, doctors, test books and parents are the main source of information about STDS. Television is the main source of information as (85.2%) followed by (84.3%) test books. This shows the nearly equal position like wise from Radio (79.6%) magazine (65.7%), doctors (64%) and others (11.1%) respectively.

**Figure 5.1: Distribution of Respondents on Source of Knowledge on STDs and HIV/AIDS**



#### **5.4 Knowledge on Modes of Transmission of HIV/AIDS**

Knowledge about the ways of transmission of HIV/AIDS shows the further clarity about the knowledge on HIV/AIDS. The adolescents must have the knowledge about modes of transmission so that they can prevent from STDs.

Respondents having heard of HIV/AIDS were also asked about the knowledge on ways of transmission of HIV/AIDS. This is rather a good indicator of knowledge than only hearing about the disease. When one knows about the cause and ways of ingesting a disease he may adopt precaution. The respondents having knowledge on ways of transmission of HIV /AIDS are presented in Table 5.4

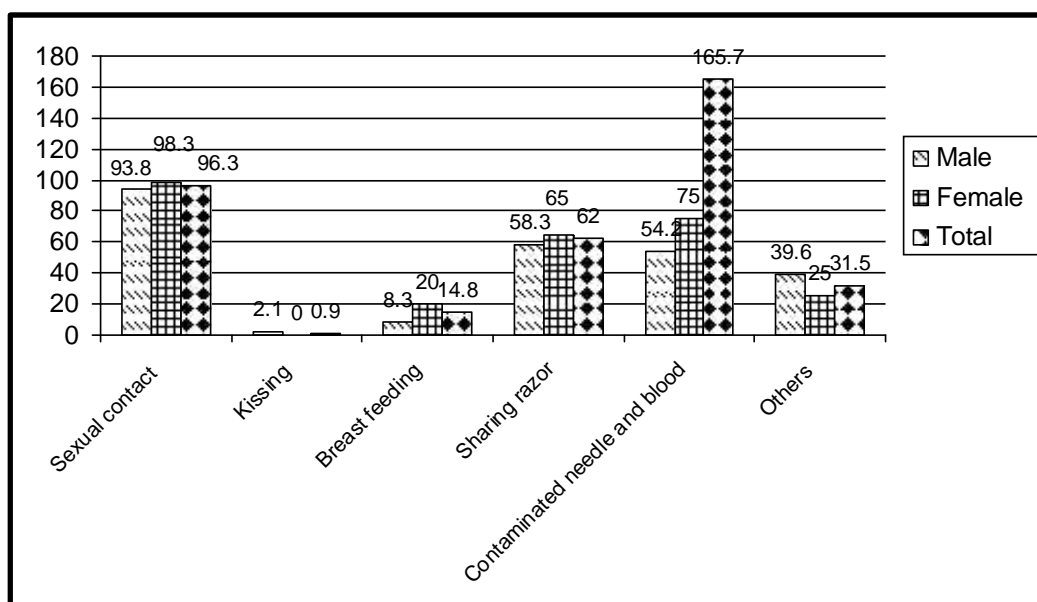
**Table 5.4 Distribution of Respondents by Knowledge on Modes of Transmission of HIV/AIDS**

Modes of transmission of HIV/AIDS	Respondents					
	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Sexual contact	45	93.8	59	98.3	104	96.3
Kissing	1	2.1	-	-	1	0.9
Breast feeding	4	8.3	12	20.0	16	14.8
Sharing razor	30	58.3	39	65.0	67	62.0
Contaminated needle and blood	26	54.2	45	75.0	71	165.7
Others	19	39.6	15	25.0	34	31.5
Total						

Source: Field Survey, 2008.

Multiple responses table.

**Figure 5.2 Distributions of Respondents by Knowledge on Modes of Transmission of HIV/AIDS**



The females seem have more knowledge on mode of transmission as compared to males. This may be due to their eagerness on STDS and be frank to give their views, what the society cares about.



Table 5.4 shows that majority of the respondents (96.3%) reported sexual contact as mode of transmission of HIV/AIDS. Similarly 65.7 percent respondents (54.2% males and 75 percent) (65.7%) reported that contaminated needle and blood are also the way of transmission of HIV. Sharing razor is also the way of transmission of HIV which is reported by 62.0 percent respondents (58.3% males and 65% females). About 31.5 percent respondents also reported that there are other causes which transmit the disease. Likewise 14.8 percent respondents reported breast feeding and the least percentage of respondents (0.9%) reported kissing as the ways of transmission of HIV/AIDS.

### 5.5 Knowledge on Preventive Measures of STDs.

To inspect whether the students have knowledge on preventive measures of STDs or not the question was included in questionnaire. There are many ways for prevention of STDs, HIV/AIDS. Use of sterilized surgical instruments, avoiding sex with multiple partners and others are some of them.

**Table 5.5 Distribution of Respondents according to knowledge of prevention from STDs/HIV/AIDS by Grade and Sex**

Characteristics	Avoid sex with multiple partners	Use condom during sexual intercourse	Use sterilized surgical instruments	Others
Class				
IX	68.3	87.3	42.9	4.8
X	88.9	97.8	73.3	6.7
Sex				
Male	79.2	93.8	52.1	4.2
Female	75.0	90.0	58.3	6.7

Source: Field Survey, 2008.

Note: Multiple response table

Table 5.5 shows that among respondents of grade X, 97.8 percent said that STDs can be prevented by use of condom during sexual intercourse'. This is followed by 88.9 percent who said avoiding sex with multiple partner as preventive measure and 73.3 percent said that use of sterilized surgical instruments can also prevent

STIS/HIV/AIDS. In comparison 87.3 percent respondents of class IX, reported use of condom, 68.3 percent avoiding suggested fro sex with multiple partner, and 42.9 percent said use of sterilized surgical instruments as preventive measures. About 94 percent male respondents have knowledge about use of condom during sexual intercourse as preventive method of STD or HIV/ AIDS which is 90.0 percent among females, a lower by 5 percentage points. Similarly 79.2 percent males and 75.0 percent female's respondents have knowledge about avoiding sex with multiple partner as preventive measure of STIS/ HIV/AIDS. Thus higher percentage males have knowledge than females about preventive methods of HIV/AIDS.

To prevent from STDs/HIV/AIDs most of the respondents gave their priority to use condoms about (90%) more than 80 percent of the respondents viewed to avoid sex with multiple partners. The reason my be the effect of advertisement of condoms in various media.

In comparison class X students have more idea about prevention than class IX students from table 5.5.

In case of preventive measures males seemed to have more knowledge than females, Which may be due to traditional male dominance in the society which allows male to lead in terms of knowledge and education.

### **5.6 Knowledge on Type of Vulnerable People**

The question was included also to access the knowledge on type of people who are most vulnerable for HIV/AIDS transmission. The result is presented in Table 5.6.

**Table 5.6 Distribution of Respondents on Knowledge Type of Vulnerable Group**

Vulnerable group	Number	Percentage
Youth or adolescents	64	59.3
Drug addicts	72	66.7
Drivers	22	20.4
Commercial sex	77	71.3
Workers	14	13.0
Others	108	100.00

Source: Field Survey, 2008.

Table 5.6 shows that majority of the respondents 71.3 percent reported that the commercial sex workers are vulnerable for the transmission of HIV virus. Similarly, 59.8 percent respondents reported youth or adolescent's people 20 percent said drivers and only 13.0 percent reported others as vulnerable people for HIV transmission.

The respondents viewed that commercial sex workers are the highly vulnerable by (71.3%) and drug addicts comes in second position.

### 5.7 Perception towards Infected Person

Respondents were asked about the perception towards HIV/AIDS infected person. Table 5.7 gives the opinion of them.

**Table 5.7 Distribution of Respondents by Perception towards HIV/AIDS Infected Person**

Opinion	Male		Female		Total	
	No	%	No	%	No	%
All of them die	21	43.8	17	28.3	38	35.2
Some of them die	19	39.6	37	61.7	56	51.9
No body dies	5	10.4	4	6.7	9	8.3
Don't know	3	6.3	2	3.3	5	4.6
Total	48	100.0	60	100.0	108	100.0

Source: Field Survey, 2008.

Majority of the students 51.9 percent reported that some of HIV/AIDS infected persons die followed by, 35.2 percent who reported all of them die 8.3 percent said no one dies and the least percent 4.6 have no idea about it. The reasons behind the result as don't know may be the lack of knowledge on HIV/AIDS.

### 5.8 Attitude towards Curative Measures of HIV/AIDS

The question among the respondents on the curative measure was can HIV/AIDS be cured? The table 5.7 below shows their attitudes towards the curative measure of HIV/AIDS.

**Table 5.8 Distribution of Respondents by Attitude on Curative Measure**

Attitude	Male		Female		Total	
	No	%	No	%	No	%
Curable (yes)	11	22.9	17	28.3	28	25.9
Not curable (No)	32	66.7	36	60.0	68	63.0
Don't know	5	10.4	7	11.7	12	11.1
Total	48	100.0	60	100.0	108	100.0

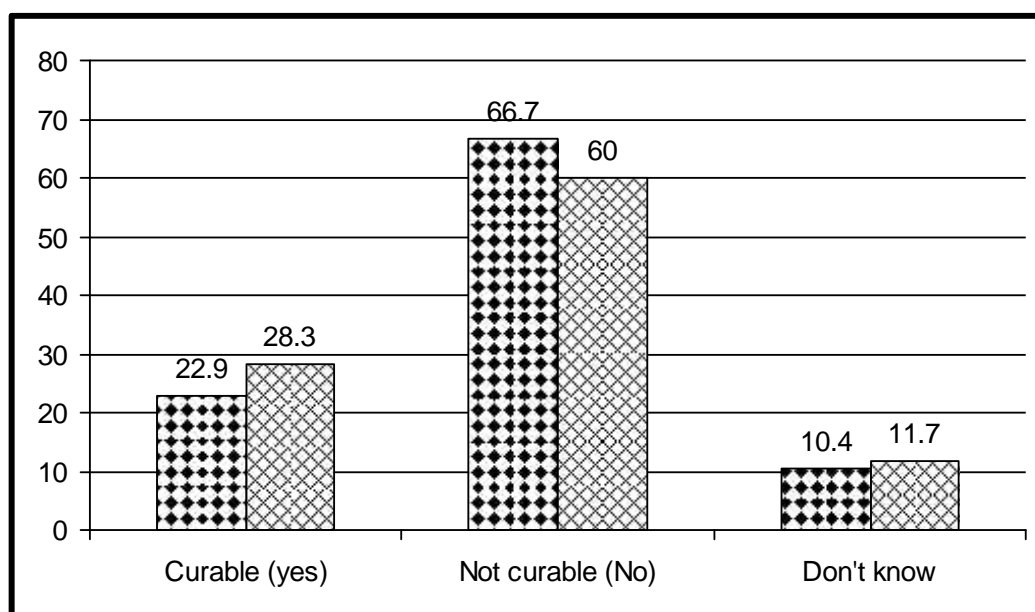
Source: Field Survey, 2008.

The data indicate that among the total respondents, most of them (63.07%) reported that HIV/AIDS is not curable. however, some (25.9%) curable and 11.1percent have no idea about it.

The about table shows that most of the respondents viewed this disease is not curable and only few of them answered they don't know. This may be due to their lack of proper knowledge about HIV/AIDS.

In comparison with males and females, more females are positive to the subject matter, while less numbers of males are positive. Whereas the females are more to say don't know about the subject matter and less males are to say so.

**Figure 5.3 Distributions of Respondents by Attitude on Curative Measure**



According to sex a slight difference was found 66.7 percent girls reported it as not curable, which is 60 percent for males. Similarly, 28.3 percent females and 22.9 percent boys said HIV/AIDS is curable while 11.7 percent females and 10.4 percent males reported they don't know whether HIV/AIDS is curable or not.

### **5.9 Behavior of Respondents with HIV Infected Person**

Educated adolescents being an elite group of society it is worth to assess their behavior towards the infected person. The additional question was asked to the respondents about the behavior with HIV infected person. The responses are tabulated in Table 5.9.

**Table 5.9 Distribution of Respondent by behavior towards Infected Person**

Behavior	Male		Female		Total	
	No	%	No	%	No	%
Positive	37	77.1	52	86.7	89	82.4
Negative	11	22.9	8	13.3	19	17.6
Total	48	100.0	60	100.0	108	100.0

Source: Field Survey, 2008.

According to table majority of the respondents 82.4 percent answered they should behave positively towards infected person. But 17.6 reported that they should behave negatively. This shows that even now some students are far from the correct knowledge about HIV/AIDS. Higher proportion of girls (87%) responded positively then boys (77.1%).

Conclusions of this table with negative and positive responses so that girls behave positively towards them. In comparison to the boys.

### **5.10 Confidence to Council/Guide Others Regarding HIV/AIDS Awareness**

Respondents were asked about their opinion towards the disease and their confidence towards its remedies and awareness. Their responses towards the inquiries are presented in table 5.10.

**Table 5.10 Distribution of Respondent Regarding HIV/AIDS Awareness**

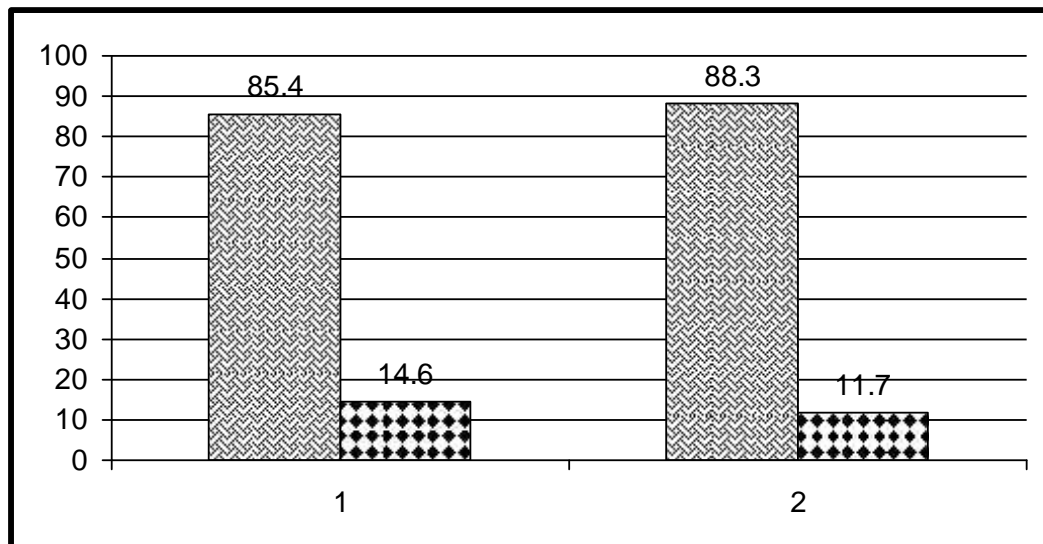
Response	Male		Female		Total	
	No	%	No	%	No	%
Yes	41	85.4	53	88.3	94	87.0
No	7	14.6	7	11.7	14	13.0
Total	48	100.0	60	100.0	108	100.0

Source: Field Survey, 2008.

About (87%) respondents responded positively to guide others while (13.0%) answered negatively on the awareness about AIDS.

Most of the respondents (87.0%) reported that they are well awarded about HIV/AIDS and can council and guide confidently. Only few (13.0%) are no table to do so. From the above table if can be seen that wide range of respondents agree with their confidence level to council others and awareness. It is due to their knowledge and attitude to wards SITs and HIV/AIDS know how.

**Figure 5.4 Distributions of Respondents to Council about STDs and HIV/AIDS**



## CHAPTER-VI

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Summary

The study analyzed the knowledge attitude and behavior on STDs and HIV/AIDS among secondary level school students of Kathmandu metropolitan city and V.D.C. This study is fully based on primary data, 110 respondent were selected from selected secondary schools. Among them 65 were from class IX and 45 from class X with the age group of 15 to 19 years. The findings of the research are as follow.

##### 6.1.1 Individual Characteristics

- Higher percentage of respondent was from class IX (52.3%) and the remaining was from X.
- The highest proportion of respondents (34.5%) is of 16 years old.
- Majority of respondent (56.4%) are females.
- The highest number of respondents is Chhetri (30.0%) followed by Brahmin, (20.0%) Tamang, (11.8%), Gurung, (4.5%), and other (32.7%).
- Majority of respondents are Hindu (82.7%) and followed by Buddhist (10.0%), other (5.5%) and Kirat (1.8%) respectively.
- Among the total respondents (59.1%) live in rural area.

##### 6.1.2 Household Characteristics

- Most of the respondent parents are literate among them fathers are more literate than mothers. Most of the respondent's father's education level is Primary (29.1%) which is followed by S.L.C. (20%), S.L.C. and above (18.2%), Lower Secondary (17.2%) and Non-formal (6.4%).
- Whereas most of the respondent's mother's education level is Primary (28.2%) which is followed by S.L.C. (11.8%), Lower Secondary (9.1%), and S.L.C. and above (6.4%) and no one of mothers' have achieved non-formal education.

- Most of the respondent's father found to be engaged in other like wage labour (55.5%) while 71.8% respondent's mothers are housewives.
- Most of the respondents (77%) have their own land.
- Majority of the respondents (46.4%) are found to be residing in rent only 48% of respondents have own residence.
- Majority of the respondents (62.7%) have only 1-2 these and sisters in the family.
- About (59.1%) respondents are from rural and (45%) from urban area.
- Majority of the respondents (59.1%) live in (urban) town.
- Most of the respondents house is equipped with electricity (94.5%) and (93.6%) radio.

### **6.1.3 Knowledge Attitude and Behavior on STD/HIV/AIDS**

- Majority of respondent (98.2%) have heard about STD/HIV/AIDS this can be the increasing assess of information, education and communication materials. This is inclusion of STD and HIV/AIDS chapter in secondary level. Even though 2 respondents have not heard about STDs.
- The majority of the respondents have got information (85.2%) from television followed by text books (84.3%), radio (79.6%) magazine (65.7%) Doctor (63.9%) and parents (11.1%) respectively only (4.6%) got from other sources.
- Among the (98%) respondents believe that STDs is transmitted through sexual contact (98%) contaminated needle (72.5%) sharing razor and (51.1%) mother to fetus respectively.
- Majority of the respondents reported itching around genital organs (35.2%), feeling weakness and fatigue (24.1%), headache (12.4%), feeling of weakness (20.4%) and only few of them (1.9%) reported other for the symptom of STDs.

The preventive knowledge on HIV/AIDS among respondents is true method for preventing AIDS transmission, (94.4%) respondents reported use of condom during sexual inter course as preventive method (69.4%) respondents viewed said sex



with only one partner, (55.6%) avoiding contact with contaminated syringe and blood and (35.2%) reported the other methods for preventing HIV/AIDS and STDs.

Majority of the respondents (71.3%) reported commercial sex workers are vulnerable group in society who are responsible for transmitting HIV/AIDS followed by drug addicts (66.7%), youth or adolescents (59.3%) drivers (20.4%) and others (13.0%) respectively.

Most of the respondents reported some of them die (51.9%) followed by all of them die (32.2%), No body dies (8.3%), only 4.6 percent have no knowledge.

Majority of the respondents reported that the HIV/AIDSs are not curable (63.0%) and followed by curable (25.9%), only 11.1 percent said don't know.

Majority of the respondents viewed that they should behave positively (82.4%) where as 17.6 percent said to be have negatively.

## **6.2 Conclusion**

After analyzing the data obtained from the field study it is found that the no. of adolescents in secondary level from the rural and urban is (51.9%) and (40.1%) respectively. According to the result the level of literacy rate among the parents is not satisfactory.

When literate compared with illiteracy respondents fathers are is more literate than their mothers.

Because of the various sources of information it is found that all the respondents (11.1%) have heard about HIV/AIDS. 79.6 percent of the respondents got information from the Radio. About 94.4percent have knowledge about the mode of transmission but only 5.6 percent don't have knowledge that may be because of lack of knowledge as well as obstacle in their economic problem.

Majority of the adolescents have knowledge about the preventing measure of STDs. Among them, 98.3 percent respondents have the knowledge about means of transmission through the sexual contact.

Public awareness is the best measure and counseling service in the second appropriate measure to tackle the problem of HIV infected people. However sound knowledge and respective are found in the study area and their status of looking AIDS

infected person is also positive attitude, behaviour and knowledge among the adolescents is satisfactory.

### **6.3 Recommendations**

The students in secondary level have good knowledge about STDs and HIV/AIDS.

This study is based on the relatively small sample size of one particular group (adolescent of the age group 14 to 19 years) and its findings cannot be generalized on other groups. From the findings of the study and conclusion made for the findings, following recommendation are thought to be valuable to improve the prevalent situation regarding the STDs and HIV/AIDS issues among adolescent.

Parents overall socioeconomic status is found to be determining the knowledge and attitude of their children. In the study area parent's educational level particularly matches 'education is found to be lower to bring the change in behavior. Therefore there should be special programme to sensitize and orient the parents. A further focus should be implemented to raise the overall status of parents.

Today adolescents are the parents of future generations and back bone of the society and nation therefore adequate services, efforts and interjections must be focused on item from every side for development.

) Education plays the vital role to determine every change in society. The sex education existing in school curriculum is not effectively implemented. The teachers also should be provided on interior and trainings regarding the subject matter.

Education about sexual health and sexuality programme should be launched in community level because it would be beneficial for those who are out of school.

) The IEC play a vital role in the increased awareness and prevention of STDS and HIV/AIDS. Therefore this programme should be provided more in matter regularly.

) Social cultural norms are obstacles in the society to discuss about STDs and HIV/AIDS. Therefore AIDS education should be provided according to the cultural and social background of study.

) The environment should be created in such a way that everybody knows AIDS day or December 1<sup>st</sup>.

The study has found some common points for example generation of skillful training and employment opportunities, awareness about STDS and HIV/AIDS, love and encourage to the infected people are to be performed by the various sectors such as government NGO/ INGOs, community and individual as well. Thus the perception perceived by the respondents can be considered as the entry point for the planners and policy makers relating to these matters.

#### **6.4 Further Research Issue**

This study is only based in knowledge and attitude in higher secondary school adolescents there may be gap in knowledge and attitude in intermediate adolescents either secondary school in higher secondary can be conclude for further study

Like this study, similar type of study can be carried by using other approaches like human sexually of STDS and HIV/AIDS etc.

Out of school it should be more effective if the subject research will target on the drivers, conductors and other vulnerable groups of the society as well as on foreign employees and frequent travelers outside their home country or place.

## BIBLIOGRAPHY

- Aryal, R.H. 2001, "HIV/AIDS: An Emerging Issue in the Health Sector with Special Reference to Nepal," in Bal Kumar K.C. (Ed), *Population and Development in Nepal*, Vol. 7, (Kathmandu: CDPS), pp. 89.110.
- Bhande, A. and T. Kanitkar, 2001, *Principles of Population Studies* (Bombay: Himalaya Publishing House).
- Central Bureau of Statistics (CBS), *2001 Census National Report* (Kathmandu: CBS).
- CREHPA, 2004, *Male Sexual Health Problems and Treatment Seeking in Urban Areas of Nepal*, An Unpublished Research Report (Kathmandu: Centre for Research on Environment Health and Population Activities).
- Dahal, D.P., 2005, *Knowledge of STIs-HIV/AIDS and Sexual Behaviours among Higher Secondary Adolescent*, An Unpublished M. A. Dissertation Submitted to the Central Department of Population Studies (Kathmandu CDPS).
- Devkota, B., 2005, *Knowledge of STIs-HIV/AIDS and Sexual Behaviour Among Higher Secondary School Adolescent*, An Unpublished M.A. Dissertation Submitted to the Central Department of Population Studies (Kathmandu: CDPS).
- DOHS, *Annual Report 2006/2007*.
- Gouli, K.P., 2005, *A Study of Knowledge, Attitudes and Behaviours Towards STIs and HIV/AIDS, Among Youths in Darai Community, Salyantar VDC Dhading*, An Unpublished M.A., Dissertation Submitted to the Central Department of Population Studies (Kathmandu: CDPS).
- Karki, B.B., 1998, *Abstract of AIDS, A Problem on Global and National Level*, Second National conference on AIDS (Kathmandu: WCASC).
- MOHP, 2007, *Nepal Demographic and Health Survey 2006*.
- MOHP, *Nepal Population Report 2007*. (Kathmandu: MOPH)
- NCASC, 2008, *Cumulative HIV/AIDS Situation of Nepal* (Kathmandu: NCASC).

- NEW ERA, 1995, *A Baseline Study on Commercial Sex Workers and Sex Clients on Transportation Route from Naubise to Janakpur and Birgunj* (Kathmandu: Family Health International National).
- Northridge, M.E., 1999, "Prevention of Sexually Transmitted Disease: The need for Social and Behaviourial Science Expertise in Public Health Department," *American Journal of Public Health*, Vol. 89, No. 6, pp 815-817.
- Oli, Pushpa, 2005, "Prospectus on HIV/AIDS" population magazine vol.3 PP 158-59.
- Phokrel, Umaknta, 2004. *Knowledge Attitude, and Behaviour on STDs and HIV/AIDS Among Youth Adolescents*, An Unpublished M.A. Dissertation Submitted to Central Department of Population Studies (Kathmandu: CDPS)
- Population Reference Bureau (PRB) 2005, *World Population Data Sheet* (Washington DC: PRB).
- PRB, 2005, *World Population Data Sheet, 2005* (Washington, DC: PRB).
- Subedi, P.K., 1999, "*Trend of HIV/AIDS, in Nepal*" Journal of Reproductive Health, Lalitpur: FPAN.
- UNAIDS 2004. *UNAIDS Fact Sheet: Asia and Pacific* Available an <http://www.unaids.org>.
- UNAIDS and WHO, *2001 AIDS Epidemic Update* (Geneva: UNAIDS and WHO).
- UNAIDS and WHO, 2003, *AIDS Epidemic Update December 2003* (Geneva: Geneva: UNAIDS/WHO).
- UNAIDS and WHO, 2006, *AIDS Epidemic Update 2006* (Geneva: Geneva: UNAIDS/WHO).
- UNAIDS, 1999, *Information for United Nations Employees and Their Families*, (UNAIDS) and HIV Infection.
- United Nations Population Fund (UNFPA), 1998, *Situation of Adolescents in South Asia Conference on Adolescents* (New York: UNFPA).
- WHO, 1991, *AIDS and HIV Infection* (Geneva: WHO).

WHO, 1995, *Situation in South East Asia*, Report of the Technical Consultation on Information Regarding Population Movements and HIV/AIDS (Bangkok: Chulangkorn University).

WHO, 1999, *AIDS in South East Asia: At a Glance* (Delhi: WHO).

WOREC, 2004, *HIV/AIDS Information Package: An Overview of the Issues, Challenges, and Reponses Case studies in the Context of Nepal* (Kathmandu: Women's Rehabilitation Center).

## QUESTIONNAIRE

### Knowledge Attitude and Behavior on STDs and HIV/AIDS among Secondary School Adolescents

#### A. Individual Characteristics:

1. Name of School: .....
2. Name of Students: .....
3. Class: .....
4. Age: .....
5. Sex:        Male                       Female
6. Caste:
  - a. Brahmin
  - b. Chhetri
  - c. Dalit
  - e. Tamang
  - f. Gurung
  - g. Others
7. Marital Status:
  - a. Married
  - b. Unmarried
8. If married, age at the time of marriage ..... years.
9. Religion:
  - a. Hindu
  - b. Buddhist
  - c. Kirat
  - d. Others (Specific)

#### B. Household Characteristics

10. Can your father read and write?
  - a. Yes
  - b. No
11. If yes, what is your father's educational level?
  - a. Primary (1-5)
  - b. L. Secondary (9-10)
  - c. SLC
  - d. SLC and Above
  - e. Non formal
12. Can your mother read and write?
  - a. Yes
  - b. No
13. If yes, what is your mother's educational level?
  - a. Primary
  - b. L. Secondary
  - c. SLC
  - d. SLC and above
14. What is your mother's occupation?
  - a. Agriculture
  - b. Service
  - c. Business
  - d. Daily wage
  - e. House wife
  - f. Other (specify)

15. What is your father's occupation?
- |                |                          |                    |                          |
|----------------|--------------------------|--------------------|--------------------------|
| a. Agriculture | <input type="checkbox"/> | b. Service         | <input type="checkbox"/> |
| c. Business    | <input type="checkbox"/> | d. Daily wage      | <input type="checkbox"/> |
| e. House wife  | <input type="checkbox"/> | f. Other (specify) | <input type="checkbox"/> |
16. Agriculture land ownership
- |        |                          |       |                          |
|--------|--------------------------|-------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|
17. Are you living in your own home?
- |        |                          |       |                          |
|--------|--------------------------|-------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|
18. How many brother's and sister's do you have?
- |             |                          |            |                          |
|-------------|--------------------------|------------|--------------------------|
| a. Brothers | <input type="checkbox"/> | b. Sisters | <input type="checkbox"/> |
|-------------|--------------------------|------------|--------------------------|
19. Where is your permanent residence?
- |         |                          |            |                          |
|---------|--------------------------|------------|--------------------------|
| a. Town | <input type="checkbox"/> | b. Village | <input type="checkbox"/> |
|---------|--------------------------|------------|--------------------------|
20. Do you have the following facilities at home?
- |                |                          |          |                          |               |                          |
|----------------|--------------------------|----------|--------------------------|---------------|--------------------------|
| a. Electricity | <input type="checkbox"/> | b. Radio | <input type="checkbox"/> | c. Television | <input type="checkbox"/> |
|----------------|--------------------------|----------|--------------------------|---------------|--------------------------|

**Group – C**

**Knowledge, Attitude and Behavior on STDs and HIV/AIDS**

21. Have you heard about STDs?
- |        |                          |       |                          |
|--------|--------------------------|-------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|
22. If yes, which STDs have you heard?
- |                  |                          |                     |                          |
|------------------|--------------------------|---------------------|--------------------------|
| a. Syphilis      | <input type="checkbox"/> | b. Gonorrhoea       | <input type="checkbox"/> |
| c. Genital Worst | <input type="checkbox"/> | d. AIDS             | <input type="checkbox"/> |
| e. Hepatitis     | <input type="checkbox"/> | f. Others (Specify) | <input type="checkbox"/> |
23. If yes, from which source have you heard about STDs?
- |                    |                          |                  |                          |
|--------------------|--------------------------|------------------|--------------------------|
| a. Radio           | <input type="checkbox"/> | b. Television    | <input type="checkbox"/> |
| c. Newspaper       | <input type="checkbox"/> | d. Health Worker | <input type="checkbox"/> |
| e. Parents         | <input type="checkbox"/> | f. Text Books    | <input type="checkbox"/> |
| a. Other (Specify) | <input type="checkbox"/> |                  |                          |
24. Do you know about the modes of transmission of STDs?
- |        |                          |       |                          |
|--------|--------------------------|-------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|
25. If yes, how are STDs transmitted?
- |  |                          |                    |                          |
|--|--------------------------|--------------------|--------------------------|
| a. Sexual contact with infected persons. | <input type="checkbox"/> | b. Mother to fetus | <input type="checkbox"/> |
| c. Contaminated needles and blood.       | <input type="checkbox"/> | d. Sharing razor.  | <input type="checkbox"/> |



26. What are the main symptoms of STDs?

- a. Itching around genital organs.
- b. Headache
- c. Yellowish pus like discharge from genital organs.
- d. Feeling of weakness and fatigue.
- e. Others (Specify)

27. What are the methods of preventing STDs?

- a. Using condoms.
- b. Sex with only one partner.
- c. Avoiding contact with contaminated syringe and blood.
- d. Others (Specify)

28. Have you heard about HIV/AIDS?

- a. Yes
- b. No

29. If yes, write down the full form of AIDS?  
.....

30. If yes, what is the source of information for HIV/AIDS?

- a. Radio
- b. Television
- c. Magazine
- d. Doctors
- e. Text Books
- f. Parents
- g. Others

31. How is HIV/AIDS transmitted?

- a. Sexual contact
- b. Kissing
- c. Breast feeding
- d. Sharing razor.
- e. Contaminated needle and blood.
- f. Others

32. What are the major symptoms of HIV/AIDS?

- a. Loss of weight.
- b. Diarrhea for more than one month.
- c. Fever for more than one month.

33. What are the preventive measures of HIV/AIDS?

- a. Avoid sex with multiple partners.
- b. Use condom during sexual intercourse.
- c. Use sterilized surgical instruments.
- d. Others.

34. In your opinion, who are the most vulnerable group in our society from HIV/AIDS?

- a. Youth/adolescents.       b. Drug addicts.   
c. Drivers.       d. Commercial sex workers.   
e. Others.

35. What is your perception about on HIV/AIDS infected person?

- a. All of them die.       b. Some of them die.   
b. Nobody dies at all.       c. Don't know.

36. Do you know how this disease can be identified?

- a. By checking the blood.       b. By looking for symptom.   
c. Others.

37. Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?

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

38. Do you know of a place where people can go to get tested for HIV?

- a. Yes       b. No

39. If a member of your family got infected with the HIV virus, would you want it to remain a secret or not?

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

40. If a member of your family got infected with HIV would you be willing to care for him or her in your own household?

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

41. In your opinion, if a female teacher has the HIV virus but is not sick, should she be allowed to continue teaching in the school?

- a. Should be allowed.       b. Should not be allowed.   
c. Don't know

42. In your opinion can HIV/AIDS be cured?

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

43. Do you agree that the expansion of STDs and HIV/AIDS is becoming a social problem?

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

44. How do you behave with an HIV infected person?

- a. Positive       b. Negative

45. In Negative, why do you do so?

a. Fatal disease.

b. Transmitted disease.

c. Trend of Society

d. Other's (Specify)

46. What are the major causes of increase in the number of STDs and HIV/AIDS infected people?

a. Lack of knowledge and literacy.

b. Modernization and westernization.

c. Influence of Media.

d. Others (Specify)

47. Do you feel confident to guide others regarding HIV/STD awareness?

a. Yes

b. No

