

# CHAPTER - ONE

## INTRODUCTION

### 1.1 General Introduction

#### 1.1.1 General Introduction of STIs

##### A. Sexual Transmitted Infections (STIs)

Sexual transmitted infections are the diseases, which are transmitted through sexual contact during the carelessness intercourse. Sometimes these are also transmitted from mother to their child and through infected blood transfusion. There are numbers of STIs; each caused by a specific organism. They are most commonly passed through: vaginal and anal intercourse, mouth contact with the genitals, oral intercourse or the infected areas on the skin of infected person.

Sexually transmitted infections (STIs), formerly known as venereal diseases, more than 25 infections passed from one person to another primarily during sexual contact. STIs are among the most common infections known-more than 15 million people in the highest STIs before the age of 35 (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS)" Despite the prevalence of STIs, studies show that many people are unaware of their risks for contracting STIs or the serious, and sometimes deadly, health consequences that may result from an untreated infection.

Some STIs, such as gonorrhea or Chlamydia, may cause no symptoms. People who do not know they are infected risk infecting their sexual partners and, in some cases, their unborn children. If left untreated, these diseases may cause debilitating pain or may destroy a woman's ability to have children. Some STIs can be cured with a single dose of antibiotics, but many, such as acquired immunodeficiency syndrome (AIDS), are incurable. People with these diseases remain infectious to others for their entire lives.

Those most at risk contracting STIs are people who have unprotected sex-

that is. Sex without using a latex or polyurethane condom; those who have multiple partners; and those whose sex partners include intravenous drug users who share needles. Studies show that Americans between the ages of 16 and 24 are at greater risk for acquiring STIs than are older adults because younger people are more likely to have multiple sexual partners rather than a single, long-term relationship (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS"). Additionally, young people may be more likely to have unprotected sex and they may find it difficult to tell their sexual partners they are infected with STIs. Young people may also be embarrassed or unable to seek treatment for STIs. This means that they are not only more likely to pass the diseases to other young people; they also have a greater risk of suffering the long-term consequences of untreated STI.

## **B. How STIs Are Transmitted**

STIs are transmitted by infectious agents—microscopic bacteria, viruses, parasites, fungi, and single-celled organisms called protozoa—that thrive in warm, moist environments in the body, such as the genital area, mouth, and throat. Most STIs spread during sexual intercourse (vaginal or anal), but other forms of sexual contact, such as oral sex, can also spread diseases (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

Some STIs are transmitted in ways other than by sexual contact. Certain viral STIs such as AIDS and some types of hepatitis may be transmitted by contact with infected blood. For instance, viral STIs may pass between people who share infected needles, and a person can become infected from a transfusion of infected blood. Some STIs may pass from an infected mother to her child, from a transfusion of infected blood. Some STIs may pass from an infected mother to her child. Infection may occur before birth, when the infectious agent crosses the placenta (organ in a pregnant woman's uterus that links the blood supplies of mother and baby) and enters the baby's bloodstream. Infection also may occur during childbirth, as the baby passes through the birth canal, or after birth, when the baby consumes infected breast milk. STIs cannot be transmitted through

shaking hands or other casual contact, or through contact with inanimate objects such as clothing or toilet seats.

### **C. Common STIs**

The most common STIs in the United States include Chlamydia, gonorrhea, syphilis, herpes, AIDS, hepatitis, genital warts and trichomoniasis.

#### **(i) CHLAMYDIA**

According to the Centers for Disease Control and Prevention (CDC), Chlamydia is the frequently reported infectious disease in the United States. Caused by the Chlamydia trachomatis bacterium, the disease does not produce noticeable symptoms in 75 percent of women and 50 percent of men, so an infection often goes undiagnosed. Experts estimate that 3 million people become infected with Chlamydia each year, but according to the CDC, only about 660,000 of these infections are reported each year. People who do not know they are infected with Chlamydia may not seek medical care and they may continue to have sex, unknowingly spreading the disease. When symptoms do develop, men may experience painful or burning urination, vaginal discharge, or mild lower abdominal pain. If left untreated in women, Chlamydia can cause severe health problems. Chlamydia damages female reproductive organs causing pelvic inflammatory disease (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

PID can cause chronic, debilitating pelvic pain, infertility, and fatal pregnancy complications. Babies born to mothers infected with Chlamydia are at risk of developing eye and lung infections.

Diagnosing Chlamydia infections requires a physical examination in which a health-care provider performs a pelvic examination to collect a small amount of vaginal or penile discharge which is then tested for the presence of Chlamydia trachomatis. New diagnostic tests that use urine samples to identify the presence of Chlamydia bacteria have become available, providing a noninvasive way to diagnose people who show no symptoms for the disease. Chlamydia is treatable with antibiotics.

## **(ii) GONORRHEA**

Gonorrhea, caused by the bacterium *Neisseria gonorrhoeae*, infects the membranes lining certain genital organs. Although roughly 360,000 gonorrhea infections are reported each year in the United States, experts estimate that closer to 650,000 people are infected annually. Like Chlamydia, gonorrhea is often symptomless. When present; symptoms may be similar to those of Chlamydia and include burning urination and penile or vaginal discharge. Untreated gonorrhea can cause PID in woman. Babies born to mothers with gonorrhea are at risk of infection during childbirth; such infections can cause eye disease in the newborn. Physicians diagnose gonorrhea by testing penile or vaginal discharge or urine specimens for the presence of *Neisseria gonorrhoeae*. Gonorrhea is treated with several antibiotics, although the infection has become resistance to treatment with some drugs in past several decades.

## **(iii) SYPHILIS**

Syphilis, potentially life-threatening STIs, is caused by bacterium *Treponema pallidum*. According to the CDC, there are an estimated 36,000 new cases of syphilis in United States each year. IN the early stage of syphilis, a genital sore, called a chancre, develops shortly after infection and eventually disappears on its own. If the disease is not treated, the infection can progress over years, affecting the vertebrae, brain, and heart, and resulting in such varied disorders as lack of co-ordination, meningitis, and stroke. Syphilis during pregnancy can be devastating to the fetus, causing deformity and death, and most pregnant women in the United States receive screening for the disease in the first weeks of pregnancy so that the disease can be treated before the fetus is harmed. Syphilis is easily treated with penicillin, by the late 1990s, however many urban communities experienced resurgence in syphilis cases among men who have sex with men (Source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

**(iv) GENITAL HERPES**

Genital herpes is caused by infection with the herpes simplex virus (HSB). Most cases of genital herpes are due to SHB type 2. Some cases, however, result from infections with HSV type 1, a common cause of cold sores. Genital herpes caused recurrent outbreaks of painful sores on the genitals, although the disease often remains dormant with no symptoms for long periods. IN the United States, one in five individuals over the age of 12 is infected with HSV type 2, and the vast majority of those infected-about 90 percent - do not know they have the disease. Blood tests can detect HSV infection, even if a person has no symptoms. The symptoms of HSV can be treated with antiviral drugs, such as acyclovir, but HSV cannot be eradicated from the body-it is incurable (source: Acharya L.B., 1999, "Knowledge on HIV|AIDS").

**(v) AIDS**

AIDS, the result of infection with human immunodeficiency (HIV), is an incurable and dead STI. AIDS attacks the body's immune system, leaving victim's unable to fight off even mildest infections. While HIV can be transmitted by other means, sexual contact is the most common means of transmission. Women who are infected with HIV can pass the virus to the infant during pregnancy, childbirth or, less frequently, in breast milk. Treatment options for people infected with HIV include protease inhibitors, which can markedly increase survival. Spite of widespread educational and prevention programs, the CDC estimates that there 40,000 new cases of HIV each year in the United States and that 800,000 American overall have HIV infections (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

**(vi) HEPATITIS B**

One hundred times more contagious than HIV, hepatitis b passes from person to person through the unprotect sexual intercourse with an infected person or through the sharing of infected needles or others sharp instruments that break the skin. Hepatitis b can also spread during child birth: between 90 and 95 percent for all babies born to infected mothers get the disease during birth. The CDC

estimates that 120,000 new hepatitis b infections occur each year. Hepatitis attacks liver cells, sometimes leading to cirrhosis and cancer of the liver. IN most cases hepatitis b is incurable, but arduous chemotherapy can eliminate the virus in some patients. There is safe, effective vaccination for hepatitis B, and most states are developing or already have public school immunization programs (source: Acharya L.B.,1999, "Knowledge on HIV/AIDS")

#### **(vii) GENITAL WARTS**

Genital warts grow on the penis and in and around the entrance to the vagina and anus. They are caused by a family of viruses known as human papilloma virus (HPV) that is transmitted during sexual intercourse. The CDC estimates that there are 5.5 million new cases of genital warts in the United States each year. Genital warts are treatable with topical medications and can be removed with minor surgical procedures. Certain types of HPV that caused genital infections can also cause cervical cancer. Regular pap smear screenings can detect cervical cancer in early stage, when the disease is easier to treat (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

#### **(vii) TRICHOMONIASIS**

Trichomoniasis caused by infection with the protozoan trichomonas vaginalis, caused burning, itching, and discomfort in the vagina in women and the urethra in men. Trichomoniasis is easily treated with a single dose of antibiotics. The CDC estimates that 5 million Americans become infected with trichomoniasis each year (source: Acharya L.B., 1999, "Knowledge on HIV/AIDS").

### **Prevention and Control**

Unlike much serious disease, simple measures can prevent STIs. The most effective prevention method is abstinence-that is refraining from sex completely. No sexual contact means any risk of developing an STI. Practicing monogamy, in which two partners do not have sexual relations with anyone but each other, also greatly reduces the risk of spreading and contracting STIs.

Latex condoms are an effective, although not perfect, form of protection from STIs. These plastic sheath, worn over the penis or inserted into vagina, act as a physical barrier to organisms that cause STIs. However, condoms do not cover all of the genital surfaces that may come into contact during sex, and the possibility of transmission of some STIs, especially genital herpes and warts, still exists.

Early diagnosis and thorough treatment prevent the more serious consequences of STIs infection, while halting the spread of STIs from person to person. This is most critical in STIs that do not cause symptoms, because those infected often do not know they risk infecting their sexual partners. The complete dosage of drug treatment must be completed, even if early doses of drugs appear to alleviate symptoms entirely. The infection may still persist in the absence of symptoms, leading infected individuals to unknowingly spread the disease.

Public clinics screen at risk for STIs in order to diagnose and treat diseases in the rarely stages. Clinics the incidence of STIs in particular areas and contact the sexual partners of infected individuals. By identifying and treating these potential carriers, clinics are able to break the chain of STI infection. Several organizations, such as the CDC and the world health organization monitor and research the prevalence and transmission of STIs on an international level in an effort to prevent local outbreaks from reaching global, epidemic proportions (source: Acharya L.B.,1999, "Knowledge on HIV/AIDS") .

### **Trends in STIs**

At any time in history, the prevalence and significance of different STIs mirror changes in science and society. For example, in many countries of the world, the incidence of STIs increased during and immediately after World War II (1939-1945), when soldiers spending extended periods of time away from home engaged in unprotected sexual relations with different partners, many of whom carried STIs. When the antibiotics penicillin became widely available in

the following years, the same countries experienced dramatic reductions in STIs incidence. Beginning in the 1950s, however, the incidence of gonorrhoea began to rise as American sexual mores changed. Strains of the disease developed resistance to penicillin, and by the 1970s and 1980s the disease reached epidemic proportions in young adult's populations. Introduction of HIV into the human population led to an international AIDS crisis that began in the 1980s and continues to this day (Source: WHO, 2002).

Cases of STIs are increasing, even though the use of condoms has increased since the onset of the AIDS epidemic. Public health officials that many factors are probably responsible for increase in STIs, among them trends in sexual behavior. In the last several decades, the age at which people have sex for the first time has shifted downward, while the average number of partners a person has sex with during his or her lifetime has increased. Together, these trends increase the risk of exposure to an STI.

The HIV/AIDS epidemic is spread through the world with ferocious speed. HIV has infected more than 60 million people worldwide. More than 20 million have died from AIDS, 3 million dying in 2000 alone. There were around 40 million people living with HIV/AIDS at the end of 2002. Approximately 14000 new infections occur each day. More than half are among those below age 25 years. Over 95% of people living with HIV/AIDS are in low and middle-income countries. In sub-Saharan Africa HIV/AIDS now the leading cause of death and it is the fourth biggest killer globally. In second nations, life expectancy has been cut by more than 10 years (World Bank, 2003.)

Nepal is not far from this problem. This history of HIV/AIDS pandemic in Nepal is now more than 21 years old. The first AIDS case was detected in 1988 in Nepal. Since then the infection is increasing in such a rapid rate that up to 29 February 2004, 3432 infected cases have been reported to national center for AIDS and STI control. The government body is responsible for STD and HIV/AIDS activities in Nepal. The detected figure is only the tip of iceberg as WHO estimated the HIV prevalence in Nepal by the December 2001 was 37000.



Now it is approximately 60000 HIV/AIDS infected cases are reported. An estimate shows that 800000 person travel across the border each year. There are also a large no of Nepali girl and women working in Mumbai alone are more than 56000. If these women return to Nepal they stand a high chance of being infected with HIV and consequently unwillingly transmit the AIDS virus to other (DNASC, 1999)

**There are generally three periods when HIV enters into human body:**

1. Window period: in this period when HIV virus enters into human body, generally cold cough may appear and disappear after sometimes. The virus safely settles in cell whereas man looks healthy, at this moment; it is so much risky period because it is possible for transformation of HIV virus by involving in sexual intercourse.
2. Carrier stage: Although man is seen to be healthy in this period HIV virus replicate inside human body. It takes 5 to 10 years for adult and takes 1 to 2 years for child. If we check the blood, there would be presence of the HIV virus.
3. Aids: After six month to 10 years period, sign and symptoms are seen. Person looks healthy until the sign and symptoms are seen physically and after checking the blood if it shows the HIV positive, then this situation is called aids.

**Minor Sign of AIDS**

- 1 Persistence coughs for more than one month.
- 2 Generalized purities dermatitis.
- 3 History of herpes zoster.
- 4 Or pharyngeal candidacies.
- 5 Generalized lymphadenopathy (UN, 1997).

## **Major Sign of AIDS**

- 1 Weight loss of 10% or more of body weight.
- 2 Chronic diarrhea for more than 1 month
- 3 Prolonged fever for more than 1 month.
- 4 More sweating (UN, 1997)

### **1.1.2 Introductions of Drugs**

The history of the human race is also a history of drug use. Since, earliest drug users have been used to relief pain and control diseases. In and of itself, the use of drug does not constitute of evil. Drugs properly administered are a medical blessing. Unfortunately, certain drugs also initially penance entitling side effects, such as a felling of euphoria a sense of felling good elation, serenity and power. The abuse of drug is an international problem, which affects almost every country in the world both developed and developing. The problems of drug abuse involve not only illicit but also licit and prescribed substances. Current evidence from around the world trend is the misuse of psychoactive drugs (Maskey, 2002). Drug may be defined as substance which acts on a person's nervous system to produce changes in sensation, mood and perception. There is much different kind of drugs; some are legal and other like ecstasy and cannabis are not different drugs have different effects on people, some of these effects are more dangerous that others, injecting drugs is more dangerous than sniffing or smoking them (Maskey, 2002).

Societies in all parts of the world have used substances that suppress pain and sorrow and also provide pleasurable sensations when consumed. People take drug in different ways in different societies. Drug users frequently abuse several different type of substance. Nepal is not an exception to this phenomenon. Now heroin (brown sugar, smack), codeine, morphine and number of natural and synthetics mind altering drugs or psychotropic substances are found it common use among both young and adult Nepalese people. It is believed that Ganja,

Bhang and Chores are found in religious usage in Nepalese society. People have been using these since very beginning. It has been clearly mentioned in the Hindu's religions books that the God Shiva used to smoke such drug for the meditation. These are different types of drugs, which have different influential effects. The drugs affect the central nervous system of human body when consumed. The drugs both illicit and licit or prescribed belong to narcotic or psychotropic. Drug abuse administrates the drugs through smoking, smelling, inhaling, swallowing chasing and injecting (Dhital, 1999)

## **1.2 Statement of the Problem**

HIV/AIDS is today most burning issue in the world and it has no any cure, preventions are the only remedied aspect of the disease. Therefore, public awareness is the most essential thing to protect from this disease. The pandemic of sexually transmitted diseases in developing region is characterized by thing incidence and prevalence of high rate of complication and alarming problem of anti-microbial resistance and interaction with HIV infection. It is estimated that 333 million curable cases of STIs worldwide are occurring in developing countries.

The secondary level students are vulnerable to drug abuse and STIs as they have the curiosity to test and pretend themselves matures in the society. Prevention is the better way than have a cure. The boys and girls in their teen age might ruin their life on first testing which forms habitual in.

Since first HIV positive case in Nepal was detected in July 1988, HIV/AIDS is spreading rapidly in Nepal. In 1998, the number of HIV infected was only four. The ration increased during the 10 years and reached 220 infected people in 1998. At present time, HIV infected persons are 2432 among them 2498 Boys and 938 Girls (NCASC, 2004). Over 13 million children currently fewer than 15 have lost one or both parents because of AIDS. The total number of children orphaned by the pandemic is forecasted to more than double by 2010 (WHO, 2002). Nepal is a multi-ethnic, multi-lingual and multi-cultural country with

poor socioeconomic status. These characteristics are also found in Chitwan district. Brahman, Chhetry, and Tharu are main caste/ethnic groups in this district. Young people go to foreign countries (India, Singapore and Arabian countries) for the percent and temporary employment. Girl's trafficking and prostitution is also found in this region. When people return to own places they bring STD and HIV/AIDS. This phenomenon is extant in Bharatpur, Municipality. Boys and Girls students of age 10 to 19 years in higher secondary level of education belong to adolescents. Adolescents can be divided into two groups early (10-14 years) and late adolescents (15-19 years). Adolescence is the transitional phase change during the period (Acharya 1999). Adolescents are at high risk from the point of view of the transmission of STIs and fall in drugs abuse.

But at present, we don't know their level of knowledge regarding the STI's HIV/AIDS and drug use, knowledge on modes of transmission and most importantly ways of prevention. Therefore, it is necessary to conduct a research to find out their knowledge and behavior regarding STIs, HIV/AIDS and drug use.

Drugs abuse have become one of the major problems in the world, virtually no nation, state or social class remain untouched by this problem. Since it has spread over the entire planet, the problem of such drug abuse has caused millions of people to bear immeasurable costs associated with health hazards, human suffering loss of life, hindrance to the place of economic development, disruption of the social order, antisocial behavior, insecurity, violence, crime and numerous other drug related problems. Like other developed and underdeveloped countries.

Nepal is experiencing tremendous problems of drug addiction and drug offences. Drugs are taken for relief of pain for the treatment of disease, to change mood to soporific euphoria or to find or to lose identify, to escape, to forget and to explore. In fact the abuser of licit or illicit substance is rooted deeply in every society in the world. The consequences of drug abuse have

advanced the society in crucial situation. It has created many critical problems in the society and adverse consequences in public health as well as social system of the society.

Use of illicit drugs continues to expand in many countries. Propelled by a powerful economic underworld, countries in all regions of the world have experienced rapid increasing in drug use, drug injecting and subsequent HIV pandemic, which began among indicative drug user (IDUs) and moved to their sexual partners and onwards to the general community.

At mid of 70's there were only 50 drug users in Nepal (Bhandari, 1998) whereas at the end of 2000. It is estimated that there were about 50000 drug addicts in Nepal, out of which 20000 use injection and possibly about 50 percent of them are already HIV positive. AT the beginning of 90s, the prevalence of HIV infection in IDUs population was only one percent, whereas in 1991, the prevalence of HIV infection in IDUs population was about 40 percent (G. Makery, 2002).

Adolescents are most vulnerable group for STIs and HIV/AIDS. A large proportion of adolescents in Nepal join school. The school curriculum also contains information on STIs, HIV/AIDS since some year before. But there are still many obstacles hindering the full information to adolescents. Our country, where sex education is considered as the taboo, the society and the families are not free on it. Only the school curriculum may not be sufficient condition for providing information to them. The social system and family background are most important aspects influencing the level of knowledge to adolescents. Therefore, it is necessary to investigate relationship between family background and adolescent's knowledge on STIs and HIV/AIDS.

Not all adolescents are equally at risk for HIV infections. Teens are not a homogenous group, and various subgroups of teens participate in higher rates of unprotected sexual activity and substance use, making them especially vulnerable to I-IIV and other STIs. These include teens that are gay/exploring

same-sex relationship, drug users, juvenile offenders, school dropouts, runaways, and homeless of migrant youth. These youth are often hard to reach for prevention and education efforts since they may not attend school on a regular basis, and have limited access to health care and service-delivery systems.

A lot of international and national agencies have made attempts for understanding the sensitiveness of the problem. Since the identification of the HIV/AIDS, the governments are using the maximum strength to avoid and control the problem. But still comprehensive studies are not available that deal with problem of adolescent. This study will try incorporating the issues why the adolescents are not contributing to identify the nature of problem and to what extent they are aware of the problem and what measures do they apply for preventing themselves from the HIV/AIDS infection. This study also incorporates one more variable what the adolescent population do to prevent the society from the evil death AIDS. In Nepal, issue of reproductive health was included in secondary school curriculum from the academic year 1998/99.

In recent year HIV/AIDS has spread from urban to rural areas and a study indicate 85 percent of this infection occur through the sexual route, 4 percent through blood transfusions and another 7 percent through drug abuse (The Rising Nepal, December, 2003)

### **1.3 Objectives of the Study**

1. To indentify that social-economic status of secondary level students of Bishnumati, V.D.C., Budhanilkantha, Kathmandu.
2. To find out the level of knowledge on STIs and HIV/AIDS in secondary level students.
3. To identify that knowledge of drug and drug abuse.

#### **1.4 Limitations of the Study**

This study attempts to analyze the knowledge and behavior on STIs, HIV/AIDS and Drug use among secondary level students in Kathmandu. However it has certain limitations, which are listed below.

1. This study is limited only to the secondary level students of Valley Public Higher Secondary School and Budhanilkantha School. Therefore, the finding obtained from this study cannot be generalized for whole nation.
2. The information for the study is obtained from the participant of that, secondary level students, which do not represent the people of all districts of Nepal.

#### **1.5 Significance of the Study**

The finding of this study may help the policy makers and persons working in the field of STIs, HIV/AIDS and drug prevention and control, since it attempts to provide the level of knowledge about the transmission of STIs and HIV/AIDS prevention in secondary level students, this may help for course design.

As this study also attempts to identify the source of information of AIDS, drug and STIs, the study is of equal importance to improve the effectiveness of the media. This study tries to assess the misconception persisting among peoples. The finding of this study may also help to adopt strategies to root out the existing wrong concepts and to disseminate necessary message through the mass media. A person of the community is the important part of the nation should essentially possess the basic knowledge about public Health, drugs abuse and killer disease such as: STIs and HIV/AIDS. What extent of the existing perception is true and what amount of the knowledge is false must be assessed. The statistic provided by this study may be representative of the other part of country having similar environment.

## **1.6 Organization of the Study**

Whole study has been summarized into seven chapters. Chapters one deals with the introduction statements of the problem, objective and significance of the study. Review of literature is in chapter two. Third chapter deals with the methodology of the study. Chapter four deals background characteristics of the respondents. Chapter five deals the knowledge of HIV/AIDS, drug use and use of condom. The following chapter six includes group discussion and public communication. The final chapter seven has been used to state finding, conclusion and recommendations.



# CHAPTER - TWO

## LITERATURE REVIEW

### 2.1 The Global situation on HIV/AIDS and STI control

#### 2.1.1 Background

The first AIDS case was detected in 1988. HIV epidemic in Nepal has evolved from a low prevalence to concentrated epidemic. The 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 Ashadh 2065 (2008 June), a total of 12,004 cases of HIV, 1945 cases of AIDS and 495 AIDS deaths had been reported to the National Centre for AIDS and STD control (NCASC). The sex ratio among HIV positive cases is 2:1.

**Table - 2.1 Estimation of HIV Infections**

Population groups	Adults living with HIV
IDU	10%
MSM	4%
Female Sex Workers	2%
Clients of Sex workers	15%
Seasonal labor migrants	42%
Trafficked women returned to Nepal	1%
<b>Sub-total at risk</b>	74%
Urban female low risk	5%
Rural female low risk	21%
<b>Sub-total low risk</b>	26%
<b>Grand total</b>	100%

*(Source: NCASC)*

As in other countries in the region, IDUs, MSM and FSW are the groups most at risk with highest HIV prevalence. Majority of HIV cases have been reported from labour migrants (42%) and increasing numbers of HIV are occurring among their wives (a combined 26 percent 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 were found among migrant workers travelling to India for work. Count for 19 percent of HIV infections in 2005 and reduced to 15 percent in 2007. Spouses or female partners of migrant workers and clients of sex workers, now account for 26 percent of all adult infections.

## **2.2 National Response**

The history of Nepal's response against HIV/AIDS begun with the launching of first National AIDS Prevention and Control Program in 1988. In 1995, a National HIV/AIDS Policy with 12 key policy statements and supportive structures like National AIDS Coordination Committee (NACC) and District AIDS coordination Committee (DACC) to guide and coordinate the response at central and district level was endorsed.

As directed by the National HIV/AIDS Policy a multi-sector National AIDS Coordinating Committee (NACC) chaired by the Minister of Health, with representation from different ministries, civil society, and private sector was established at centre to build the coordination mechanism to support and monitor the activities implemented through NCASC. Similarly, DACC was also established to coordinate and monitor the activities at district level.

In 2002 a National AIDS Council (NAC) was established which is chaired by the Prime Minister intend to set overall policy, lead highest level advocacy, and provide overall guidance and direction to the national HIV/AIDS program.

Important milestones in the response to HIV/AIDS in the country are as below:

1988	Launched the first National AIDS Prevention and Control Program (short term)
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1990-1992	First Medium Term Plan
1993-1997	Second Medium Term Plan
1993	National Policy on Blood safety
1995	National Policy on HIV/AIDS
1997–2001	Strategic Plans for HIV/AIDS Prevention
2000	Situation Analysis of HIV/AIDS - Nepal
2002–2006	National HIV/AIDS Strategic Plan
2003-2007	National HIV/AIDS Operational Plan
2006-2011	New National HIV/AIDS Strategic Plan
2006-2008	National HIV/AIDS Action Plan
2007	National HIV/AIDS and STD Control Board established

(Source: NAO-2002)

### **2.3 National HIV/AIDS Strategic Plan (2006-2011)**

The National HIV/AIDS Strategic Plan (2006-2011) and National HIV/AIDS Action Plan (2006-2008) are an essential component of current national response in the country. The *National HIV/AIDS Strategy, 2006-2011* will guide the future HIV and AIDS response in Nepal. Consistent with the goals of Universal Access, the overall goals of the national strategy are;

#### ***By 2011***

- 1 Ensure coverage of 70-80% of most at risk populations (injecting drug users, sex workers, men who have sex with men, migrants and STI patients) with prevention programs and reduce the number of new HIV infections occurring among the general population,
- 2 Ensure universal access to quality treatment, diagnostics, care and support services for infected, affected and vulnerable groups in Nepal within a context of a comprehensive response to HIV and AIDS,

- 3 Implement a comprehensive legal framework on HIV/AIDS to promote human rights and establish HIV/AIDS as a development agenda,
- 4 Enhance leadership and management at national and local levels for an effective response to HIV and AIDS,
- 5 Improve the collection and use of strategic information for planning and implementation to guide an effective response,
- 6 Increase sustainable financing and effective utilization of funds.

Six key programs areas and strategic outcomes have been identified within the strategy as follows:

### **2.3.1 Prevention**

- 1 Improved knowledge and safe behavioral practices of all target groups (safer sex and injecting practices),
- 2 Increased availability and access to appropriate and differentiated prevention services,
- 3 Increased acceptance of HIV/AIDS and enhance non-discriminatory practices affecting marginalized and most at risk populations,
- 4 Reduced risk and vulnerability to HIV infection of all target populations.

### **2.3.2 Treatment Care and Support**

- 1 Increased national capacity to provide quality diagnostic, treatment and care services,
- 2 Increased availability of appropriate and differentiated care and support services to infected, affected and vulnerable populations,
- 3 Increased involvement of private sectors, civil societies, communities and family for treatment, care and support to infected, affected and vulnerable groups,
- 4 Increased importance of the role of support groups of infected, affected and vulnerable people in treatment, care and support,

- 5 Established and monitored continuum of prevention to treatment, care and support,
- 6 Standardized clinical care, art, Oise and pep services both in the public and the private sectors,
- 7 Impact mitigation strategies and programs in place, adequately resourced and accessed equitably by the infected, affected and vulnerable groups.

### **2.3.3 Advocacy, Policy and Legal Reform**

- 1 HIV/AIDS prioritized as national development agenda and included in development plans as program under the social sector,
- 2 Rights of infected, affected and vulnerable groups insured through an effective legislative framework,
- 3 Networks of PLHA and most at risk populations operational,
- 4 HIV/AIDS response decentralized and coordinated,
- 5 Multi-secoral response to HIV/AIDS strengthened and expanded.

### **2.3.4 Leadership and Management**

- 1 Operationalized national strategy through the national action plan,
- 2 Active champions and leaders at the societal, institutional and individual levels for the HIV/AIDS response,
- 3 Mainstreamed HIV/AIDS programs in all development sectors,
- 4 Enhanced social inclusion, equitable access and gender equality to aids services,
- 5 Co-ordinated and decentralized response to HIV/AIDS.

### **2.3.5 Strategic Information**

- 1 Trends and changes in HIV prevalence and HIV and STI related risk behaviours among different risk groups tracked over time and across regions in Nepal;
- 2 Effectiveness of HIV prevention and care interventions and activities

monitored and evaluated;

- 3 All aspects of key programme service delivery areas effectively monitored and evaluated;
- 4 Programme coverage and service delivery assessed by target group;
- 5 Resources inputs and outputs contributing to the programme monitored.

### **2.3.6 Finance and Resource Mobilisation**

- 1 100% of funding mobilized for the implementation of the multi-year national action plan from the government, development partners, NGOS and private sector organizations,
- 2 By 2009, government investment in aids activities be at least 5% of the total HIV/AIDS program budget, and by 2011, at least 10%,
- 3 Appropriate multi-sectoral hundred times more contagious than HIV, hepatitis b passes from person to person through the unprotect sexual intercourse with an infected person or through the sharing of infected needles or others sharp instruments that break the skin. Hepatitis B can also spread during child birth: between 90 and 95 percent for all babies born to infected mothers get the disease during birth. The CDC estimates that 120,000 new hepatitis b infections occur each year. Hepatitis attacks liver cells, sometimes leading to cirrhosis and cancer of the liver. IN most cases Hepatitis B is incurable, but arduous chemotherapy can eliminate the virus in some patients. There is safe, effective vaccination for hepatitis B, and most states are developing or already have public school immunization programs resource allocation under the relevant line ministries,
- 4 An efficient and coordinated financial management system operationalized ,
- 5 Timely and improved resource flow,

6 Improved accountability at all levels.

#### **2.4 National Action Plan (2006-2008)**

In order to implement the national strategy the *National Consolidated HIV/AIDS Work plan, 2006 to 2008* was produced by the NCASC in consultation with key stakeholders.

Prevention programmes are implemented in 36 districts showing mostly a pattern of the epidemic dominated by HIV infection among IDUs, MSMs, FSWs and their clients. The implementation of the second round GFATM's programme has played a major role in accelerating responses that address the needs among migrants, and consequences of disease burden for their spouses and descendents.

#### **2.5 Commitments**

The government placed the HIV epidemic as a high priority program in the health sector. The plan focused on the need for prevention programs, within a broader program that addresses the needs for the treatment, care and support of PLHA. The Government has also committed to various global initiatives such as the UNGASS Declaration, the Millennium Development Goals, the Universal Access initiative and the Three Ones principles. The National HIV/AIDS Strategy, 2006-2011 aims at achieving all HIV and AIDS commitments and targets included within these initiatives.

#### **2.6 Epidemic Analysis**

The National Estimates of Adult HIV Infections in Nepal 2007, registered little change from a similar report prepared in 2005. The HIV epidemic continues to be characterized by high prevalence among various sub-groups such as IDUs, female sex workers (FSWs) and their clients, MSMs and returning migrants than the general population. In addition, many of Nepal's AIDS cases occur among young adults between the ages of 20 and 34 (source: The National HIV/AIDS Strategy, 2006-2011)

Sex work and HIV infection tend to be more prevalent in plains and regions bordering to India. In 2006, HIV prevalence among FSWs in the 16 terai highway districts sample was found at 1.5 Percent, a rate significantly less than previously estimated in 2003 (3%) and 1999 (3.9%) indicating significant reduction among FSW in the Eastern Terai highway districts. Syphilis and gonorrhea have also decreased over time but the prevalence of Chlamydia has gone up in those districts. HIV in the 6 western terai highway districts was also found at about 1.5 percent in 2006 (source: The National HIV/AIDS Strategy, 2006-2011)

Other factors that shape the dynamics of the epidemic include; Increasing numbers of women are trafficked to India to work in the sex industry. Some 100,000 Nepalese women continue to engage in sex work in Mumbai, India and about 50 Percent of Nepalese FSWs have previously worked there. It is estimated that 50 Percent of Nepalese FSWs in Mumbai brothels are HIV positive (source: The National HIV/AIDS Strategy, 2006-2011).

Vulnerability of women to HIV/AIDS is increasing. This is supported by estimated HIV cases among low-risk women in rural and urban areas which now comprise 26% of all infections (source: The National HIV/AIDS Strategy, 2006-2011).

## **2.7 Analysis of Achievements by Major Activities**

### **2.7.1 Activities Carried Out In FY 2064/65**

Prevention efforts targeted at most-at-risk populations (MARPs) have begun to stabilize HIV infection rate in Nepal, as of recent bio-behavioral surveillance surveys (IBBS) of sex workers and drug users.



**Table - 2.2: Recent IBBS Data, Especially those of Kathmandu Valley, shows Reduction of HIV Prevalence among MARPs in the Table below.**

<b>Most at risk populations who are HIV infected (<i>main sites</i>) (<i>Indicator 23</i>)</b>					
	2001	2004	2005	2006	2007
FSW (Kathmandu)	NA	2	NA	1.4	NA
MSW (Kathmandu)	NA	4.8	NA	NA	2.9
IDUs (Kathmandu)	68.0	NA	51.6	NA	34.0
MSM	NA	3.9	NA	NA	3.3
Clients of sex workers (Terai Highway)	NA	1.7	NA	1	NA
Returned migrants (West and Mid to West Nepal)	NA	NA	NA	1.9	NA

*Source : IBBS (2001-2007)*

Note: NA= Not available

The most dramatic change is for IDUs, there is a significant drop in HIV prevalence from 68percent to 34 percent over a six-year period. Moreover, IBBS data shows that prevalence rates for FSW have decreased significantly in the 16 eastern Terai highway districts. Commercial sex work along the trucking routes are characteristic feature of HIV infection in these plains regions bordering India. In 2006, HIV prevalence among FSW in Kathmandu was 1.4 percent down from 2 percent in 2004. A similar fall in prevalence was observed in the Terai highway districts from 3 percent in 2003, 2 percent in 2004 to 1.5 percent in 2006.

### **2.7.2 Impact of the Response: Antiretroviral Therapy Treatment Outcomes**

The national antiretroviral treatment programme was started in late 2004 in the public sector in Kathmandu. By July 2008, 1992 patients with advanced HIV infection were on treatment in 23 sites across the country

**Table - 2.3: ART Centre in Nepal (till 30 June 2008)**

SN	Art Centre	District	Established Year
1	TekuHospital, Teku	Kathmandu	2004
2	Bheri Zonal Hospital, Nepalgunj	Banke	2004
3	Sparsha Nepal, Sanepa	Kathmandu	2005
4	TUTH, Maharajgunj	Kathmandu	2006
5	BPKIHS, Dharan	Sunsari	2006
6	Western Regional Hospital, Pokhara	Kaski	2006
7	Narayani Sub-Regional Hospital, Birgunj	Parsa	2006
8	Mahakali Zonal Hospital, Mahendranagar	Kanchanpur	2006
9	Seti Zonal Hospital, Dhangadi	Kailali	2006
10	Doti District hospital, Silgudhi	Doti	2007
11	Lumbini Zonal hospital, Butwal	Rupandehi	2007
12	Achham District hospital, Achham	Achham	2007
13	Baglung District Hospital, Baglung	Baglung	2007
14	Koshi Zonal Hospital, Biratnagar	Morang	2007
15	Bharatpur Hospital, Chitwan	Chitawan	2007
16	Mechi Zonal Hospital, Jhapa	Jhapa	2007
17	Kanti Children's Hospital, Maharajgunj	Kathmandu	2007
18	Janakpur Zonal Hospital, Janakpur	Dhanusha	2008
19	PalpaMision Hospital, Palpa	Palpa	2008
20	Mid West Regional Hospital, Surketh	Surketh	2008
21	Mahendra Hospital, dang	Dang	2008
22	Maiti Nepal, Kathmandu	Kathmandu	2065
23	Sagarmatha Zonal Hospital	Saptari	2008

*(Source: NCASC, DoHS)*

### **2.7.3 Impact of the Response: Percentage of Infants Born to HIV Infected Mothers who are Infected**

Prevention of mother to child transmission was started in two capital city sites in 2005 and had expanded to 15 sites across Nepal. From Shrawan 2064 to Ashad 2065, the total number of pregnant women came for ANC service was 52,190 out of them 42,304 (81%) were provided pretest counseling, 40,871(96%) were tested for HIV and 31,403(76%) were received post test counseling. 68 pregnant women were identified having HIV positive in ANC and during labor. 50, HIV positive women delivered during this period at health facilities, among them 39 pregnant mothers and 49 HIV-exposed infant(s) received NVP. Delivery by HIV positive women were higher than NVP prophylaxis receiving mothers, because sometimes pregnant women arrive too late for dosing; intra uterine fetal death and HIV positive women do not expose her HIV test result. From June 2005 to July, 2007, 55 babies born to HIV positive mother were expected to be tested for HIV status. But in this period only 22 babies came for HIV testing, among them 19 babies were found HIV negative and 3 were found HIV positive. Out of remaining 33 HIV-exposed infant(s) 18 were died and 15 were lost to follow up.

**Table - 2.4: PMTCT Centre in Nepal (Till 30 June 2008)**

<b>S.N</b>	<b>PMTCT Centre</b>	<b>District</b>	<b>Established Year</b>
1	Maternity Hospital, Thapathali	Kathmandu	2005
2	Bheri Zonal Hospital, Nepalgung	Banke	2005
3	BPKIHS, Dharan	Sunsari	2005
4	TUTH, Maharajgunj	Kathmandu	2006
5	NarayaniSubRegional Hospital, Birgunj	Parsa	2006
6	Western Regional Hospital, Pokhara	Kaski	2006
7	Mahakali Zonal Hospital, Mahendranagar	Kanchanpur	2006
8	Achham District hospital, Achham	Achham	2007
9	Koshi Zonal Hospital, Biratnagar	Morang	2007
10	Bharatpur Hospital, Chitwan	Chitawan	2007
11	Mechi Zonal Hospital, Jhapa	Jhapa	2007
12	Janakpur Zonal Hospital, Janakpur	Dhanusha	2008
13	Palpa District Hospital, Tansen	Palpa	2008
14	Baglung District Hospital, Baglung	Baglung	2008
15	Mid West Regional Hospital, Surkhet	Surkhet	2008

**2.8: Table - 2.5: Target Vs. Achievement FY 2064/65**

SN	Activities 'A'	Unit	Target	Achievement	Target vs. Achievement (%)
1	Development and printing of advocacy materials	Times	51000	51000	100
2	Advertisement printing, broadcasting and Airing	Times	225	225	100
3	Procurement and distribution of medicine and Test Kits	Times	85	85	100
4	Other Medicine Procurement & Distribution	Times	50000	50000	100
6	STI drugs procurement and distribution	Times	50000	50000	100
7	Regular monitoring of District level programmes	Times	12	12	100
8	Provision of VAT and Other Govt. taxes for GATM and DFID program.	Times	12	12	100

**District Level Program of Government of Nepal**

9	Orientation, Street drama and audio visual program for awareness raising of HIV/AIDS	Times	75	75	100
10	Job orientated and other training on HIV/AIDS	Persons	175	175	100

	for PLWHAs				
11	School Level Health Education Program at 75 districts (in 50 community schools of each districts)	Classes	3750	3750	100
12	DACC Office and meeting expenses (at least 2 meeting in a year)	Times	150	150	100
13	District level WAD Day Celebration in 75 districts	Times	1	1	100

### Activities 'B'

1	Number of health facilities providing the minimum package of PMTCT	Sites	5	6	100
2	Number (& Percent) of HIV +ve mothers receiving a complete course of ARV prophylaxis in accordance with nationally approved treatment protocol.	Persons	65	85	100
3	Number of health care providers trained in the provision of PMTCT	Persons	25	0	0
4	Number of VCT centers established	Sites	5	14	100
5	Number of people receiving testing and counseling for HIV	Persons	21000	36282	100

6	Number of Health workers and pharmacists received training on STI Case Management	Persons	600	529	88
7	Number of STI diagnosed, treated and counseled	Persons	2000	22866	100
8	Number of health facilities with capacity & conditions to provide advanced HIV/AIDS clinical care and psychosocial support, including providing and monitoring ARV combination therapy	Sites	6	9	100
9	Percentage (& Number) of people with advanced HIV infection receiving antiretroviral combination therapy	Persons	900	989	100
10	Number of cases of OIs treated among PLWHAs	Persons	1800	9432	100
11	No. of care providers (community members, PLWHAs, and health staff) trained on home based care for PLWHA	Persons	275	389	100
12	Number of staff from central to district level trained on M&E	Persons	82	0	0

### Activities 'C'

1	Establishment of VCT & STI Centre at 15 DFID funded districts	Districts	15		
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2	Review of National AIDS Policy & DACC Structure	Districts	15		
3	Mobilization of DACC in 15 DFID funded districts	Districts	15	15	100
4	Strengthen and incorporate HIV/AIDS program in 3 Ministries	Ministry	3		
5	Strengthening Management Services from Central Level	Centre	3		

*(Source: NCASC, DoHS)*

## 9 Problem/Constraints and Action to be taken

<b>Problems/Constraints</b>	<b>Actions to be taken</b>	<b>Responsibility</b>
HIV/AIDS and STD programs at district level is still not effectively implemented	Activities and budget already allocated in 75 district	MoHP/ Ministry of Finance and NCASC
No proper co-ordination and co-operation mechanism among Donor, INGO	Organize regular meeting with stakeholders	Director NCASC/DACC
human resources in NCASC at central level not adequate	Already been requested to higher level	MoHP/ DoHS
Budget release from Donor side not timely	Already requested to relative donor agencies	MoHP/ DoHS and NCASC

*(Source: NCASC, MoHP)*

## Challenges

Despite many efforts by the Ministry of Health and population, equitable access to services provision remains a challenge. Curative Services are still



unevenly distributed between regions .Hospitals has critical gaps in their ability to provide quality services for common health problems due to staff problem. Laboratory systems are weak, and not able to fully support the scale-up of Anti-Retroviral Treatment (ART). Access to services is further constrained by a difficult and mountainous geography and social and economic factors.

### **Future priorities**

- 1 Increase coverage for targeted intervention (UA target)
- 2 Scaling up of PMTCT, ART services
- 3 At least one VCT centre in each PHC
- 4 Incorporating HIV activities with ANC and DOTS
- 5 Expand community Home Base Care in a phase wise manner in all 75 Districts
- 6 Strengthening Sentinel Surveillance System
- 7 Cross boarder interventions
- 8 Enhance quality assurance system for HIV related tests
- 9 Strengthening LMD capacity for procurement and supply management
- 10 Enhance the coordination and oversight role of the NCASC with regards to strategic information for HIV; including surveillance, monitoring and evaluation, and special studies;
- 11 Strengthen health facility and district reporting systems;

**2.10: Table - 2.6: Target for FY 2065/66 (2008/2009)**

<b>SN</b>	<b>Central Level Activities</b>	<b>Unit</b>	<b>Target</b>
1	Development and printing of advocacy materials	Times	70000

2	Advertisement printing (Newspapers, Magazine)	Times	150
3	Advertisement broadcasting and Airing( Radio, TV)	Times	800
4	Purchase and distribute medicine ( OI & Test Kit)	Person	5600
5	Purchase and distribute medicine for STI treatment	Person	50000
6	Regular monitoring of District level programme	Times	12
7	Central level WAD Day Celebration	Times	1
8	Purchase and distribute Kit Chemical and X-Ray Examination Materials for district level ART Lab	District	22
	<b>District Level Activities</b>		
9	Orientation, Street drama and audio visual program for awareness raising	District	75
10	School Level Health Education Program at 75 districts (in community schools of each districts)	Classes	3750
11	Operational of DACC offices and meetings	Times	225
12	District level WAD Day Celebration in 75 districts	Times	75
	<b>GFATM Supported Remaining Activities</b>		
13	Medicine distribution and logistics management	Times	6
14	Final Evaluation of GFATM round II Programme	Times	1
15	Number of Health workers and pharmacists received training on STI Case Management	Persons	25
16	No. of care providers (community members, PLWHAs, and health staff) trained on home based care for PLWHA	Persons	25
17	Operational of Comprehensive HIV Care sites in 20 places	Organization/Institution	20
18	DACC Operational and management	Times	10
19	Monitoring and evaluation	times	2
	<b>DFID Supported Activities</b>		

20	Establishment of VCT & STI Centers at 15 DFID funded districts	Districts	15
21	Review of National AIDS Policy & DACC Structure	Districts	15
22	Mobilization of DACC in 15 DFID funded districts	Districts	15
23	Strengthen and incorporate HIV/AIDS program in Ministries	Ministry	2

*(Source: NCASC, DoHS)*

## **2.11 Cases in Nepal**

Although AIDS was first recognized in 1981, in Nepal it was first identified in 1988. At present the HIV/AIDS epidemic in Nepal is believed to be at a relatively yearly state as compared to many other countries since 1991. The National center for AIDS and STIs control (NCASC) has implemented sentinel HIV surveillance in high-risk group. In 1986, the prevalence of HIV among blood donors was found to be one in 100, which is three times the rate of 1995, at the end of 1996, a total of 82 cases of AIDS and nearly 500 HIV cases were reported by ministry of health (Mahat, 2002).

Hundreds of thousands of Nepalese men seek work in India as migrant laborers, while up to 100000 Nepalese women work in India as prostitutes engaging unprotected sexual intercourse, where the prevalence of HIV infection among the general population is comparatively high (Roka, 2002).

The HIV/AIDS epidemic represents the most serious public health concern in Nepal. The data clearly indicates that HIV is prevalent in almost all parts of the country. In recent years, it has spread from urban to rural areas and as studies indicate 85 percent of this infection occur through the sexual route whereas 4 percent through drug abuse.

A large majority of cases (81%) occur in sexual active and economically productive age group of 18-19 years and one in every 4 cases reported is a woman. It is estimated that HIV infection rate among STIs infected has significantly increased. Almost 58 thousand people are infected by HIV/AIDS in

the present time (The Rising Nepal, 1 December 2003).

In Nepal, 4 people infected by HIV were identified in 1988. The number rapidly increased and reached 1199 at the end of 1998. At the end of 2003, persons were infected by HIV (NCASC, 2004). In Nepal, one-third of reported HIV positive cases are women of whom 33 percent are adolescents (UNSG, 2000). According to NCASC latest report, cumulative HIV/AIDS situation of Nepal as of February 29, 2004 are listed below.

**Table - 2.7: Cumulative HIV Infection by Sub Group and Sex, Nepal, 29 February 2004.**

<b>Sub-group</b>	<b>Boys (N)</b>	<b>Girls (N)</b>	<b>Total (N)</b>	<b>New cases in February 2004(N)</b>
Sex workers	-	512	512	1
Clients of sex/STD	1984	61	2045	14
House wives	-	336	336	9
Blood or organ recipients	5	2	7	-
Injecting Drug use	469	3	472	19
Children	36	29	60	1
Total	2494	938	3432	44

*(Source: NCASE, 2004.)*

### **Mode of transmission IDU or Sexual**

**Table - 2.8: cumulative HIV Infection by Age Group, Nepal, 29 February 2004**

Age Group	Boys (N)	Girls (N)	Total (N)	New cases in February 2004
0-4	20	17	37	
5-9	16	8	27	1
10-14	9	6	15	
15-20	142	161	303	2
20-24	518	258	776	9
25-29	667	236	903	8
30-39	885	206	1091	19
40-49	202	40	242	3
50 above	35	6	41	2
Total	2434	938	3432	44

*(Source: NCASC, 2004)*

The actual number of HIV infections is higher than the report of National Center for AIDS and STIs control. The number HIV/AIDS infected people in Nepal have exceeded 58 thousand (The Rising Nepal, 1, December 2003).

## **2.12 Drug Abuse**

### **2.12.1 Concepts and Definition of Drug**

The definition of the word drug proposed by the WHO refers to all psychoactive substances, i.e. “organism, may modify its perception, mood, cognition behavior or motor function. This distinction includes alcohol tobacco and solvents and excludes medicinal non-psychoactive substances (World Drug Report, 1997). WI-10 has considered alcohol and tobacco as substances rather than drugs. Drug means any chemical plant-derived substance, which can cause any person using it to experience mental, emotional or physical change (Gosden, 1987.)

Drug is a substance, which by its chemical nature alters the existing nature of a person. A drug is any chemical substance that alters mood perception or consciousness and is issued to the apparent injury of the individual or society.

### **2.12.2 Classification of Drugs**

Some socially deviant drugs abused in Nepalese society are as:

1. Opium: Used principally by older people in rural society but also as a second choice by urban drug abusers.
2. Morphine: Derived from opium: Principally intended as a painkiller used when available by urban youth, occasionally available as liquid in medicine vials.
3. Pethidine: A synthesize (Man-made) opiate locally available only to the medical profession.
4. Heroin: Distilled from opium, which is 2 times more powerful. It is very expensive and available in urban areas. It is the principal hard drug abused in Nepal, mostly used by young people.
5. Barbiturates: Sedative like sleeping pills, which can lead to physical and psychological dependence.
6. Amnophetamines: Stimulant drugs like Benzedrine and Dexedrine used for increasing energy and post poniard fatigue. It can lead to psychotic reaction.
7. VII. Minor Tranquilizer: Like Valium and Librium give short-term relief of anxiety can lead to physical dependence.

**Bhandari has classified Drug in to four groups, as.**

- |                 |                   |
|-----------------|-------------------|
| I. Stimulant    | II. Hallucinogens |
| III. Depressant | IV. Narcotics     |

Depending upon strengths to intoxicate a user, the aforementioned drugs can be categorized into two groups.

### **I. Hard Drugs:**

These are strong drugs in nature and produce physical dependency in addicts and one or two doses of hard drugs make its user an addict. Its examples are morphine, and heroin (Popularly known as brown sugar, smack, white powder and golden sugar).

### **II. SOFT Drugs:**

These are mild in nature in comparison to hard drugs. They produce only psychological dependence in an addict. Their example includes Ganja, Charesh, and Maryuana etc.

The history of humankind is also a history of man's desire in eating or drinking things that make them feel euphoric/ By the time of the reign of King Hammurabi of Babylonian (2067-2025 BC) the sale and consumption of alcohol was evidently well known as he tried to regulate drinking houses in Babylon (Gosden, 1987).

Archaeological evidences indicate that cultivation of drug dates back to 6000 BC. Religious and mythical use of cannabis in Indian societies was reported from about the 7<sup>th</sup> century. A.D. By the end of the 19<sup>th</sup> century, drug abuse and addiction were being seen in many countries and were beginning to receive the attention of national government as a part of social responsibilities.

In Nepalese context, it is believed that Ganja, Bhang and Chares are important in religious context. People have been using these drugs since very beginning. It is clearly mentioned in the Hindu's religious book that God Shiva used to smoke such drugs for meditation. Though the use of opium in the form of smoke and poppy seeds in the form of food had been quite common in the past, in Nepal. It is believed that the problem of drug abuse entered into Nepal when Hippies came in Nepal at mid 60s. Brown sugar Morphine and other hard drugs

entered into Nepal in early 80s. These drugs were in the form of smoking and chasing when enforcement low started cubing drugs like psychoactive substances which were comparatively easier to be underfunded by the enforcement authorities. During early 90s, tidigistic too place of these drugs in Nepal. It is easily available and comparatively cheap. On the other side, most of drug users are shifting their drug using modes from chasing, smoking to ineptly that possible result the transmission of HIV and other viral insertion among and from IDUs (Maskey, 2002).

### **2.13 Drug and HIV/AIDS**

Unsafe drug injecting practices and sharing of needles/syringes and other injecting equipment lead to many young people being either infected or at risk of becoming infected with blood, borne viruses such as HIV and hepatitis B and C. High risk sexual behaviors often accompanying with his risk drug use further increase the chances of HIV transmission, injecting drugs can also cause many other illness among injecting drug users (IDUs)

The shift to production and distribution of high-grade heroin has resulted from the tradition of ingesting and or inhalation of opium to injecting drugs. Moreover, when drugs become scarcer and uneconomical as a result of drug control efforts, injecting drugs ensures that the drug is used entirely. It can further spread to the sexual partners and children of the IDUs and eventually to the community. HIV is prevalent among IDUs of 119 counties around the world. IN Nepal, the HIV prevalence among IDUs has risen from 1 Percent in 1999 to over 50 percent in 2002.

### **2.14 Adolescents and HIV/AIDS**

Early adolescence from the age of 10 to 14 is a time, when enduring pattern of healthy behavior can be established, including postponing the onset of sexual activity, which can quell the spread of HIV/AIDS (WHO, 2002). Today youths have inherited a lethal legacy that is killing them and their friend, their brothers and sisters, parents, teachers and whole models. An estimated 11.8



million young people aged 15 to 24 are living with HIV/AIDS. Each day nearly 6000 young people between the age of 15 and 24 become infected with HIV. Yet only a fraction of them know they are infected (WHO, 2002).

Adolescents, who become sexually active early and change partners frequently, are at greater risk (UNES, 1998). The HIV pandemic, which began in the late 1970s, has now affected every continent. At the end of 2003 almost 40 million world people are infected by HIV/AIDS among them 25 million people were aged less than 15 years. The main cause of transmission is unsafe sexual intercourse. Almost 80-90 percent source of transmission is unsafe intercourse (NCASC, 2003)

In a study conducted in 2000, it was found that almost all (99%) peoples have heard about HIV/AIDS and the average knowledge among students is high. Some misconceptions are also reported specially about the transmission routes of AIDS. But STIs knowledge level is less among the students compared to AIDS and condom (Roka, 2001).

A study on AIDS related knowledge in Nepal specially based on high school students was undertaken by Rayamajhi undertook the AIDS related knowledge study in Nepal specially based on high school students. He studied knowledge and attitude of HIV/AIDS among 1144 students (630 Boys, 514) studying in class ten of different government and private schools. According to the study, ninety-nine percent of the students had heard about school. According to the study, ninety-nine percent of the students had heard about AIDS. Similarly, another KAP study among the general rural population conducted in Nuwakot district, central region of Nepal, indicated that 71 percent of those with SLC and higher education were aware about AIDS (Dahal, Y.B., 2003).

In another study, students expressed rather negative attitude towards HIV infected people, which seemed surprising considering the good level of information about HIV/AIDS. The analysis of attitude toward premarital sexual relations indicated that Boys were associated with a more liberal attitude and that

students who considered their religion as important were less likely to have a liberal attitude towards.

Students in schools generally have a limited access to information about sex, sexuality and human reproduction. Incidental information that they get from their friends, magazines and mass media may even be misleading. Integrating information regarding sexuality, STIs and AIDS into the family life education course designed for school students can, therefore, be considered as a necessity. AIDS is fundamentally a development challenging issues of poverty, inequality, culture and sexuality in complex way (UNICEF, 2002).

# CHAPTER – THREE

## METHODOLOGY

This study has been conducted within area of two VDC of Kathmandu district. This area has been selected keeping diversities of students of different social-economic background in mind. There are two VDC in Kathmandu consists of immigrants from different districts of Nepal, indigenous ethnic fries like Tamang, Lama and chhetries and Brahmins. Data for this study has been collected through field visits from 158 respondents of ferreted age group.

### 3.1 Features of Study Area

Bishnumati and Chanderwari VDC of Kathmandu district has been selected study area. This area lies on the lab of Shivapuri national park, Northern part of Kathmandu district, capital city of Nepal in the central Development region of Nepal. This area is unique in geographic landscape in Kathmandu comprising of several streams, small hills and a national park on its northern border. There are inhabitants on steep parts of Shivapuri hill near the demarcation of National park. This national park is guarded by Nepal Army and has been an attraction for tourist for bird watching. As the climate in this region is almost pleasant, enough sunlight and rain, is derisory populated with different flora and fauna. Though human encroachment has been very strictly prohibited and monitored by Nepal Army, Local and immigrants settlement has constantly been putting there at to the natural state of habitat of hundred of birds and animals.

Within last 5 to 6 years, population in this area is rapidly increasing. Main attraction of this area for internal migration is enough drinking water resources, cold climate all around the year and greenery of national park. This area is also famous nationally and internationally for two more reason, one is, it is sacred place of Hindu and Buddhist pilgrimage. There are four bid Buddhist monastery

and two Hindu temples. Name of Bishnumati VDC is after the name of Bishnumati River nadChandeswori is after the name of Chandeswori VDC are developing very rapidly in the same place of Population growth in this area. Most of the roads are black topped and there is one road which is considered shortest motorable, route to Nuwakot district. Through there are very few Carpet factory, mineral water factory and shoe factory, area is considered best for residential purpose (field survey, 2010).

### **3.2 Research Design**

This study has been conducted to identify the level of knowledge of secondary level students on SITs, HIV/AIDS and drug use with respect to their Social-economic and demographic background. Therefore, it is descriptive type of study. This study has also included in the participation of whole members of community awareness as well as frequent discussion with friends and family members.

### **3.3 Sample Size**

The study area Bishnumati and Chandeswori VDC has more than 20 secondary level schools. The research carried out in two schools, purposively in the academic year 2009-2010. One hundred fifty eight students were selected using systematic random sampling. The complete sampling frame was constructed from the total students of secondary level of these two schools. Students were first alphabetically arranged and then systematic random sampling was used. Two schools taken for study are valley public higher school, Sundarbasti and Budhanilkantha School.

### **Distribution of Sampling Frame.**

**Table - 3.1: Distribution of Sampling Frame.**

<b>Name of School</b>	<b>Total of Student</b>	<b>Selected students</b>
Valley Public Higher Secondary School	298	102
Budhanilkantha School	192	56
Total	490	158

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

This study was based on the primary data. Therefore, the selected 158 respondents were the main source of information for the study. Semi-structured questionnaire was used to collect information. The questionnaires after selecting the particular respondents were distributed to completion of filling the questionnaires; they were collected on the spot.

### **3.5 Questionnaire Design**

Questionnaire was constructed so as collect the individual as well as family information. Following information was included in the questionnaire. Individual and household information knowledge on STIs, HIV/AIDS and drugs use knowledge on use of condom and other methods of family planning information on drug, group discussion and public communication.

### **3.6 Data Management**

The questionnaires, after collection has checked thoroughly and the coding were done. Then information was entered in computer using software package. Frequency, cross and mean tables and other appropriate tables were generated depending on the nature of data for the analysis. Interpretations of tables were done boredom percentage and number of cases.

# **CHAPTER - FOUR**

## **Characteristics of Respondents**

### **Background Characteristics**

Background characteristics include the social and demographic characteristics. The socio-economic and demographic characteristics include the age and sex of the respondent's caste/ethnicity religion, family size migration states of agriculture land educational and occupational status of parents. This chapter deals with the socio economic and demographic information of the respondents.

### **4.1 Socio-demographic Backgrounds of Respondents**

Socio-demographic backgrounds influence the concept of the respondents. Person form different social-demographic characteristics have different level of knowledge. Social –demographic information includes age and sex of the respondents, caste/ethnicity religion, family size, migration, and status of agriculture land, education status of parents and occupation of parents.

#### **4.1.1 Age and sex Structure**

Age is considered as the major demographic component. This has relationship with other aspects of respondents (36.08%) and aged 16 followed by age and sex of the respondents.

**Table 4.1: Distribution of Respondents by Age and Sex**

Age of Respondents	Sex of Respondents				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
14 years	5	5.43	12	18.18	17	10.76
15	27	29.35	25	37.88	52	32.91
16	37	40.22	20	30.30	57	36.08
17	23	25	9	13.64	32	20.25
Total	92	100	66	100	158	100
Average age	15.85		13.39		15.66	

*(Source: Field survey, 2010)*

Table 4.1 shows the ranges from 14 to 17 years. Nearly half the respondents (36.08%) and aged 16 followed by aged 15 (32.91%) and the lowest percent of respondents are aged 14 (10.76%) are girls. The aged of respondents is dispersed. Through the average age of respond is 15.66 years, the average age of girls is slightly lower (19 years) than for Boys students (15.85 years).

#### **4.1.2 Family Size**

Quality of the life depends on size the family. In large family it is difficult to fulfill all the needs of the members. The basic need such as education health and other physical facility are fulfilled if the size of family is smaller. For this study, family size has been defined as the number of persons living together and sharing the common food provision.

Table 4.2 shows that the highest percent of respondents (33.54%) have a family size for 4 members followed by respondents with 5 members (27.85%) and 6 members (15.82%). About 10 percent of respondents have families with 3 members and about 5 percent of respondents have families with 7 and above 7 members. The medium family size of study population is 4.99. Girls are from slightly smaller family size (3.91) compared to boys (4.95)

**Table 4.2: Distribution of Respondents by Family size.**

Family size	Sex of the respondents				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
3	10	10.87	6	9.09	16	10.13
4	34	36.96	19	28.79	53	33.54
5	23	25	21	31.82	44	82
6	14	15.22	11	16.67	25	15.82
7	5	5.43	3	4.55	8	5.06
8	2	2.17	6	6.52	8	5.06
9	1	1.09	0	0	1	.006
And above	3	30.26	0	0	3	.019
Total	92	3.26	66	100	3	100

(Source: Field Survey 2010)

#### 4.1.3 Caste/Ethnic

Table12 shows the distribution of responded by caste/ethnicity. Tharu constitutes the lowest percent of respondents (0.63%) followed by magar (0.379%) and Gurung Chettri constitutes the highest percent of respondents (34.81%), followed by Brahmins (22.78%). A total of more than 7 caste/ethnic groups are enumerated in this study.

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

Caste/Ethnicity	Sex of the Respondents				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
Tharu	01	1.09	0	0	01	0.63
Chettri	31	33.69	24	3636	55	34.8
Brahmin	21	22.38	15	22.73	36	22.7
Magar	02	02.17	04	06.06	06	03.7
Newar	11	11.96	06	09.09	17	10.17
Gurung	10	1.87	8	12.12	18	11.3
Others	16	17.39	9	13.64	25	15.8



Total	92	10	66	100	158	100
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(Source: Field Survey 2010)

#### 4.1.4 Religion

The study indicates that almost all respondents (98%) are Hindus and only 2 percent is Buddhists. Among Hindu 57 percent are boys and 40 percentage are Girls. In Nepalese context religion is influenced by caste system (KC, 1995). The impact of religion on the characteristics of a person is greater respondents were asked about their religion which follows the parental religion. The response collected among the study population is from table 4.3.

#### 4.1.5 Type of Family

Generally, families are divided in two groups i.e. (I) Nuclear and (II) Extended.

Nuclear family is divided as the family where parents and their unmarried offspring live whereas in extended family more than two generations live together. Family size and type of family have close relationship. Generally, extended families are urbanization quality of life is possible family because if the family size is smaller it is easier to manage it.

**Table - 4.4: Distribution of Respondents by Type of Family**

Type of Family	Sex of the respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Nuclear	71	77.017	5	75.76	121	76.5
Extended	21	22.83	16	24.24	37	23.4
Total	92	100	66	100	158	100

(Source: Field Survey 2010)

More than half of the respondents 76.58 percent are nuclear families whereas 23.42 percent respondents are from extended families. This shows the breaking of traditional family systems into new nuclear family. This is result of

modernization.

By gender, 77.17 percent boys are from nuclear family whereas it is 75.76 percent for girls. But opposite to it 22.83 percent boys are from extended family whereas it is 24.24 percent for girls.

#### 4.1.6 Family Education Background

Family education level also affects the perception of individual. Generally, individual with literate is more likely to have knowledge about different matter including STIs and HIV/AIDS compared to those with illiterate family. Table 4.5 shows the educational status of family. Majority of respondents (53.80%) reported that all of their members are not literate who 10 years of age and are above.

**Table - 4.5: Distribution of Respondents by Educational Status Members.**

All family members	Sex of the responds				Total	
	Boys		Girls		(N)	%
Literate	(N)	%	(N)	%		
Yes	43	46.74	30	45.45	73	46.20
No	49	53.26	36	54.55	85	53.80
Total	92	100	66	100	158	100

*(Source: Field Survey 2010)*

Only 46.20 percent respondent's father has completed primary level of education followed by secondary level of education (24.05%). Majority of respondents father have completed SLC and above level of education.

#### 4.2 Economic Characteristics

Economic characteristic include family occupation of father and status of agriculture land. This can be taken as an important variable that plays a vital role in determining the respondent's level of knowledge on STIs, HIV and AIDS as their parent's occupational status may affect on gaining the emerging information

to their children.

#### 4.2.1 Family Occupation

The study area is semi urban in nature almost urban characteristics are found here. Family occupation determines the status of family. Table 15 shows that an overwhelmingly majority of respondents (62.66%) is from business background and only other 29.75 percent reported during the study are government/private sector service. About 07.59 percent reported that their major family occupation is agriculture.

**Table - 4.6: Distribution of Respondents by Family Occupation.**

Occupation	(N)	%
Agriculture	12	07.59
Service	47	29.75
Business	99	62.66
Total	158	100

*(Source: - Field Survey 2010)*

#### 4.2.2 Parents Occupation

Family occupation of father therefore, has been tried to explore separately because of identifying contribution of father occupation in family income. Difference has been observed between father's occupation and family occupation. Nearly 7.59 percent respondents reported agriculture as the major family occupation whereas slightly more proportion of respondents (8.86%) reported their fathers engaging in respondents reported government/private sector service as their father's occupation.

Table 4.6 and table 4.7 shows that there is contribution of other family members also in every sector

**Table - 4.7: Distribution of Respondent by Occupation of their Father.**

Occupation of the Father	Sex of the responds				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
Agriculture	06	6.52	08	12.12	14	8.86
Government private service	4	43.48	18	27.27	58	36.71
Business	39	42.48	18	27.27	58	36.71
Business	39	42039	35	58.03	74	46.86
Other	07	7.61	05	07.58	12	07.59
Total	92	10	66	100	158	100

(Source: - Field Survey 2010)

#### 4.2.3 Status of Agricultural Land

Respondents were also asked whether they have agricultural land. Almost 76.58 percent respondent reported having agricultural land and 23.42 percent respondents reported not having it, table 4.8 shows distribution of respondents by status of agricultural land. A follow up question asked those respondents who reported having agricultural land, whether the land is sufficient for their survival. In this regard, only 30.38 percent respondents reported not sufficiency of land.

**Table - 4.8: Distribution of Respondents by Status of Agricultural Land.**

Own Agriculture	Respondents	
	(N)	%
Yes	121	76.58
No	37	23.42
Total	158	100
Land & food sufficiency	(N)	%
Yes	110	69.62
No	48	30.38
Total	158	100

(Source: - Field Survey 2010)

### 4.3 Living Arrangement

Table 4.9 shows that, more than half of respondents (50.9%) were living in their own house at the time of interview. About 4 percent respondents were living with relative about 14 percent in hostel. Compared to girls (1.52%) higher percent of boys (6.52%) were living with relatives. About 24 percent respondents were living in rented room. This is higher among boys compared to girls.

**Table - 4.9: Distribution of Respondents by Living Arrangement.**

Living Arrangement	Sex of the responds				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
Own house	47	51.09	43	65.15	90	56.96
Rented room	25	27.17	13	19.69	38	24.05
Relatives house	06	06.52	01	01.52	07	04.43
Hostel	14	15.22	09	13.64	23	14.56
Total	92	100	66	100	158	100

*(Source: - Field Survey 2010)*

# CHAPTER - FIVE

## KNOWLEDGE ON STDS, HIV/AIDS, DRUG

### 5.1 Level of Knowledge on STIs

Knowledge of STIs, HIV/AIDS and drug use is common in school adolescents. But this study aims identifying whether they have correct knowledge young people can be exposed to wide range of attitudes and beliefs in relation to sex and sexuality. There some times appears contradictors and confusing. For example, some health messages emphasize the risks and danger associated with sexual activity and some media coverage promote the idea that being sexually active. Because of sex and sexuality being sensitive subjects. Young people and sex educator can have strong views on what attitudes people should hold and what frame work should govern people's behavior there too can sometimes seem to be at odd young people are very interested in moral and cultural frame work that binds sex and sexuality. They often welcome opportunities to talk about issues where people have strong views, like abortion, sex before marriage, lesbian and gay issues and contraception and birth control. It is important to remember that talking in balanced way about different in opinion does not promote one set of views over another or mean that one agrees with particular views. Educational interventions have been managed so to provide basic information to adolescents. After ICPD (1992) each nation is giving attention to protect reproductive health of adolescents and so in our country.

Education status is important social factors which plays vital role to determine the level of knowledge on STIs. In the field study, respondents were asked whether they have heard about STIs or not? Furthermore those who have heard about STIs were asked to name different types of STIs. result shows that 88.61 percent students have heard about STIs and only 11.39 percent students have not heard about it among 158 students compare to boys (88.04%) slightly

higher percent of girls (89.39%), have to boys (88.04%) slightly higher percent of girls (89.39) gave heard about STIs.

**Table - 5.1: Distribution of Respondents by Knowledge on STIs**

Knowledge on STIs	Sex of the respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Yes	81	88.04	59	89.39	140	88.61
No	11	11.96	6	10.61	18	11.39
Total	92	100	66	100	158	100
Name of the heard of STIs						
Syphilis	42	51.85	18	60	60	42.86
Gonorrhoea	34	41.98	37	71	71	50.71
Others	05	06.17	04	09	9	06.43
Total	81	100	59	140	140	100

*(Source: Field survey, 2010)*

Students are found having heard about common STIs like syphilis and gonorrhoea but they were not familiar with other STIs like Chlamydia, trichomonosis, genital warts and cancrroids. According to the study among the 140 students who have heard about STIs, 42.86 percent of students have knowledge of syphilis. Similarly 50.71 percent of students were able to name gonorrhoea. The level of knowledge of SITs is slightly higher among girl's students than boy's students.

### **5.1.1 Source of Knowledge for STIs.**

Source of knowledge can be based on the socio-cultural aspects of individual. Different common options were given to respondents to choice. Among the 140 students in this study who have heard about STIs 42.86 percent reported that television was the source for knowledge of STIs which is highest among proportions of respondents reporting various sources. This is followed by (19.29), friends (12.14%), newspaper and teacher (08.57%).

**Table - 5.2: Distributions of Respondents According to Sources of Knowledge for STIs by Sex.**

Sources of information	Sex of respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Radio	15	18.52	12	20.34	27	19.29
Television	38	46.91	22	37.29	60	42.86
Newspaper	06	07.41	06	10.17	12	08.57
Friends	07	08.64	11	18.64	17	12.14
Parents	05	06.17	03	05.08	08	05.71
Teachers	08	09.88	04	06.78	12	08.57
Others	02	02.47	01	01.69	03	02.14
Total	81	100	59	10	140	100

*(Source: Field survey, 2010)*

### **5.1.2 Knowledge on Transmission of STIs by Modes**

Among the 140 students in study who had heard about STIs, knowledge on modes of transmission of STIs is found high because more than 97 percent students believed that STD is transmitted through unsafe sexual contact (Table 21). Similarly more than 98 percent students know that it is not transmitted from eating together or living together. Only a few students didn't respond about the modes of transmission of STIs.

STIs are the communicable diseases which are transmitted through various sexual behaviors and other activities. STIs are transmitted through direct unsafe sexual intercourse, mouth contact to genitals and areas, exchange of syringes, transfusion of infected blood etc.

The transmission knowledge on STIs is slightly higher among girls students know that STIs are transmitted through unsafe sexual contact.



**Table - 5.3: Distribution of Respondents According to Mode of Transmission of STIs by Sex.**

Knowledge of Transmission of STIs	Sex of respondent			
	Boys		Girls	
	No.	%	No.	%
Yes	79	97.53	58	98.31
No	02	2.47	01	1.69
Total	81	100	59	100
Mode of transmission of STIs				
Unsafe sexual contact	80	98.07	58	98.31
Sharing infected blood/syringe	50	61.73	45	76.27
Blood transfusion	55	67.90	50	84.75

*(Source: Field survey, 2010)*

Result so that more than 97 percent respondents have knowledge on mode of transmission of STIs and very few students have not knowledge about it among 140 students. Among 137 students in the study who had knowledge on mode of transmission of STIs, all students believed that STD transmitted through unsafe sexual contact. Similarly 75 percent students know that it is transmitted through blood transfusion and more than 50 percent students know that it is transmitted through sharing infected bladed syringe or/and birth from infected mother. The transmitted knowledge on STIs is almost equal between both sexes.

Knowledge on STIs transmission is found high among Brahman and Chhetri students have knowledge about it.

## **5.2 Level of Knowledge of HIV/AIDS**

HIV/AIDS is total untreated disease, it was diagnose in 1953. for the first time it has caused lot of casualties worldwide. Developing countries are more affected because of it. The productive manpower especially the youths is being affected because of it. The cause HIV/AIDS is not so much higher in Nepal but the place of growth is alarming, if not checked surely will invade disaster in the country's economic development. Respondents were asked they have known about HIV/AIDS. Knowledge on HIV/AIDS is common among adolescents. The national regional and grassroots to level campaigns have been launched to

provide information to them. Recently, the school level camping has been launched to provide information to them. Recently the school level curriculum has been rearranged including information on reproductive health especially about STIs and HIV/AIDS.

**Table - 5.4: Show that More than 98 Percent Respondent has heard about HIV/AIDS.**

Knowledge of HIV/AIDS	Sex of the respondents			
	Boys		Girls	
	(N)	%	(N)	%
Yes	90	97.83	65	98.48
No	02	2.17	1	1.52
Total	92	100	66	100

*(Source: Field survey, 2010)*

### 5.2.1 Source of Information

As in the source of STIs, the sources for information on HIV/AIDS are also classified onto six different options i.e.(1) radio, (2)television, (3)newspaper, (4)friends, (5)parents and (6)teacher.

**Table - 5.5: Distribution of Respondent by Source of Knowledge of HIV/AIDS.**

Knowledge of HIV/AIDS	Sex of the respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Radio	30	32.61	35	53.3	65	41.14
Television	50	54.35	48	72.72	98	62.03
Newspaper	25	27.17	32	48.48	57	36.08
Friends	7	7.61	9	13.64	16	1.13
Parents	10	10.86	12	18.18	22	13.92
Teacher	15	16.30	11	16.67	26	16.46

*(Source: Field survey, 2010)*

**Note: Only those who have heard HIV/AIDS.**

Curriculum,media have positive role in enhancing the information in HIV/AIDS,

and communication media have also positive role on HIV/AIDS. The development of mass media has increased the level of awareness among adolescents.

Table 5.5 shows that majority of respondent's television followed by newspaper. Respondent were asked to tell the source which was first heard / usually heard so there percentages were less.

### 5.2.2 Knowledge on Modes of HIV/AIDS Transmission by Sex.

Most of the respondents reports that they have right knowledge about the modes of transmission of HIV/AIDS except infected mother to new born child. The knowledge on modes of HIV/AIDS transmission is high among girl students. More than 99 percent respondents believed that HIV/AIDS is transmitted through unsafe sexual contact. There is not vast difference between boy's respondent and girl respondents. Almost, they are able to give the right answer.

**Table - 5.6: Distribution of Respondents According To Knowledge on Modes of HIV/AIDS Transmission by Sex.**

Transmission Variables (Right answers)	Sex of the respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Unsafe sexual contact	90	10	64	98.46	154	99.35
Blood transfusion	84	93.33	62	95.38	146	94.19
Mosquito bite	9	1	65	100	155	1
Spilt(salvia)	80	88.89	60	92.31	140	90.32
Infected mother to child	70	77.78	58	89.23	128	82.58
Share cloths/beds	90	10	65	100	155	10
Use same latrine	86	95.56	63	96.92	149	96.13
Hand shake	90	100	65	100	155	100
Sharing blade/syringe	90	10	65	10	155	10
Breast feeding	88	97.78	61	93.85	149	96.13
Kissing	72	8000	59	90.77	131	84.52

(Source: Field survey, 2010)

In the case of unsafe sexual contact, mosquito bite, share cloths/beds, and

handshake and sharing blades/syringes ,they are capable to give right answer in the case of blood transfusion, spilt, kissing, using same latrine, infected mother to child, they are quite confused. Respondents could not give right answer. Table 5.6 shows the percentage of right answer given by respondent to transfusion variables of HIV/AIDS.

### 5.2.3 Knowledge on Prevention of HIV/AIDS

For the analysis of preventive knowledge o HIV/AIDS four variables were included in the questionnaire. This study reveals that among the total respondents of 158, more than 95 percent students know about preventive knowledge and very less respondents are not aware about it, which is comparatively lower level of knowledge than that of HIV/AIDS transmission.

This study shows that among who had heard of HIV/AIDS , 18 percent said avoid from sexual contact is a way of HIV/AIDS prevention similarly 15 percent respondents believed that HIV/AIDS can be prevented through checking blood before transfusion. More than 98 percent mentioned that condom plays significance role to prevent from HIV/AIDS and more than 17 percent said it can be prevented by not sharing syringe/blade.

**Table - 5.7: Distribution of Respondents According to Knowledge on HIV/AIDS**

Knowledge on HIV/AIDS prevention	Know		Don't know	
	(N)	%	(N)	%
No sexual contact	26	16.77	129	83.23
Use condoms	23	14.084	132	85.023
Check blood before transfusion	153	98.71	2	1.29
Don't share syringe/blood	27	17.42	128	82.58

*(Source: Field survey, 2010)*

### 5.2.4 Preventive Knowledge of HIV/AIDS by Sex.

This study indicates that among those who have knowledge of HIV/AIDS prevention 16.67, 11.11, 13.33 percent reported no sexual contact or with only one partner, use condom, checking blood before transfusion, and not to share syringe/blade respectively are method of HIV/AIDS prevention. But among girls students have knowledge on HIV/AIDS preventions 16.92 percent believed that no sexual contact is the way of prevention from HIV/AIDS, 96.92 percent said that it can be prevented using condom, 20 percent said blood should be checked before transfusion and 23.08 percent reported not to share syringe/blade.

**Table - 5.8: Distribution of Respondents According to Knowledge of HIV/AIDS Prevention.**

HIV/AIDS Prevention	Sex of respondents			
	Boys		Girls	
	(N)	%	(N)	%
No sexual contact	15	16.67	11	16.92
Use condoms	9	10	63	96.95
Check blood before transfusion	10	11.11	13	2.00
Don't share syringe/blood	12	13.33	15	23.08

*(Source: Field survey, 2010)*

**Note: only those who have knowledge of HIV/AIDS prevention.**

This study further reveals that boys and girl have equals knowledge about various way of HIV/AIDS prevention. The major reason behind it might be that different awareness programmed and women's education.

### 5.2.5 Behavior toward HIV/AIDS Patients.

After finding out the knowledge on transmission and prevention of HIV/AIDS, the study concerned about the behavior of the student on HIV/AIDS patients. Behavior was analyzed including four variables. The study reveals that 94.19 percent students are not feeling risk handshake with HIV/AIDS infected person. Similarly 80.65, 53.55, 52.26 percent students not feel risky to hand shake with HIV/AIDS infected people while eating together, sleeping in the

same room and using same clothes respectively. However 5.81 percent students feel risky in sleeping in the same room with them tend 47.74 percent feels risky using same clothes. It is found that more students are not feeling risky handshake with HIV/AIDS infected person then doing other activities with them.

**Table - 5.9: Distribution of Respondents According to their Perceived Behavior with HIV/AIDS Patients.**

Behavior Variables	Respondents			
	Not risky		Risky	
	(N)	%	(N)	%
Handshake	146	94.19	9	5.81
Eat together	125	80.65	3	19.35
Sleep in room	83	53.55	72	46.45
Use same cloth	81	52.26	74	47.74

*(Source: Field survey, 2010)*

This study reveals that more boy students than girls are not feeling risky as 95.56 percent of them said they can shake hand with HIV/AIDS infected people. Similarly 83.33, 53.33, 55.56 percent boys students said they do not feel risky eating together sleeping in same room and using same clothes respectively with them.

**Table - 5.10: Distribution of Respondents According to their Perceived Behavior with HIV/AIDS Patients by Sex**

Behavior variables	Sex of respondents							
	Boys				Girls			
	Not Risky		Risky		Not Risky		Risky	
	(N)	%	(N)	%	(N)	%	(N)	%
Handshake	86	95.56	4	4.44	60	92.31	5	7.69
Eat together	75	83.33	15	16.67	50	76.92	15	23.08
Sleep in room	48	53.33	42	46.67	35	53.85	30	46.15
Use same cloth	50	55.56	40	44.44	31	47.69	34	52

*(Source: Field survey, 2010)*

But 92.31 percent girls said they will shake hands with HIV/AIDS infected person. The difference between proportions of boys and girls is approximately 3.23 percent in this regard. Nearly 77 percent girl students did not feel risky sleeping in the same cloth with them.

### 5.2.6 Concept of Family

To understand the concept of parents a hypothetical question "would your family accept you in case of HIV/AIDS infection?" was asked. This question keeps value because many adolescents hide the disease because of fear from the family, which ultimately helps to spread the disease. Therefore, co-operation of family is necessary.

More than half of respondents (57.42%) reported that they would be accepts even if they were infected by HIV/AIDS, whereas 42.58 percent respondents report negative respond. Compared to girls (46.15%) higher percent of boys (65.56%) reported their family would accept them. Furthermore, when they were asked about not accepting them most of the respondents gave the reason of communicable disease (93.94%) followed by social prestige (92.42%) and family reputation (60.61%)

**Table - 5.11: Distributions of Respondents According to their Perceived Attitude of Family.**

Knowledge of HIV/AIDS	Sex of the respondents				Total	
	Boys		Girls			
	No.	%	No.	%	No.	%
Yes	59	65.56	30	46.15	89	57.24
No	31	34.44	35	53.85	66	42.58
Total	90	100	65	100	155	100

*(Source: Field survey, 2010)*

### 5.3 Level of Knowledge on Drugs

In the field study respondents were asked whatever they heard about drugs or not? They are also asked to name of drugs. The study reveals that 97.47 percent students have hears about drugs among the 158 respondents and it is 97.83 percent among boys and percentage is 96.9 among girls. More boy students have knowledge about drugs than girl students.

**Table - 5.12: Distribution of Respondents who have heard about Drugs by Sex**

Heard of Drug	Sex of respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Yes	90	97.83	6	96.97	154	97.47
No	2	2.17	2	3.03	4	2.53
Total	92	100	66	100	158	100

(Source: Field survey, 2010)

#### 5.3.1 Source of Knowledge for Drugs

**Table - 5.13: Distribution of Respondents According to sources of Knowledge for Drugs by Sex**

Source of Information	Sex of the respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Radio	26	28.89	19	29.69	45	29.22
Television	57	63.33	42	65.63	99	64.29
Newspaper	33	36.67	18	28.13	51	33.31
Friends	31	34.04	28	43.75	59	38.31
Parents	36	40.00	29	43.75	65	42.21
Teacher	48	53.33	36	56.25	84	54.55

(Source: Field survey, 2010)



Among the 154 students in this study who had heard about drugs, 64.29 percent reported television as the main source of knowledge for drugs. Similarly, the study reveals that teacher was the sources for drugs here, television are the main sources for drug here television, newspaper, radio and teacher are the main source of knowledge for drugs because of these facilities are available now a days.

### 5.3.2 Knowledge on Type of Drugs

Among 154 students who had heard about drugs, more than 90 percent said drug is a chemical substance, which in toxicants the users. Similarly which give relief to the users and 1.94 percent said it is a chemical substance that can be taken by all. Likewise 3.23 percent respondents did not stage their perceived opinion about drugs. This proportion is not so different for girls and boys separately.

**Table - 5.14: Distribution of Respondents by Knowledge on Type of Drugs**

Name of Drug	Sex of respondents				Total	
	Boys		Girls		(N)	%
	(N)	%	(N)	%		
Cannabis	68	75.56	41	63.08	109	70.32
Heroin	71	78.89	39	60.00	110	70.97
Chemical substance which intoxicate the verse	57	63.33	50	80.23	107	69.12
Sleeping tablets	48	53.33	34	52.31	82	52.90
A chemical substance which give relief to all	10	11.11	6	11.23	16	10.33
A chemical substance can be taken by all	1	1.11	2	3.08	3	1.94
No stated	3	3.33	2	3.08	5	3.23

*(Source: Field survey, 2010)*

Table 5.14 shows that highest percent of respondents (70.97%) have knowledge about heroin followed by cannabis (70.32%) and then opium (56.13%) and then sleeping tablets (52.90%) compared to girls higher percent to boys have heard about cannabis and heroin.

### 5.3.3 Relationship between HIV/AIDS and Drugs.

Almost 90 percent respondents said there is relationship between HIV/AIDS and drug. But 10 percent respondents reported they have no idea about is compared to girls (87.88%) higher proportion of boys (90.22%) reported having knowledge about it.

**Table - 5.15: Distribution of Respondents by Knowledge on Relation between HIV/AIDS and Drug by Sex.**

Knowledge on relation between HIV/AIDS and Drug	Sex of respondents				Total	
	Boys		Girls			
	(N)	%	(N)	%	(N)	%
Yes	83	90.22	58	87.88	141	89.24
No	9	9.78	8	12.12	17	10
Total	92	100	66	100	158	100

(Source: Field survey, 2010)

### 5.4 Knowledge of Condom

**Table - 5.16: Distribution of Respondents in Knowledge on Condom.**

Heard of Condom	Boys		Girl		Total	
	(N)	%	(N)	%	(N)	%
Yes	91	98.91	64	96.97	155	98.10
No	1	1.09	2	3.03	3	1.89
Total	92	100	66	100	158	100

(Source: Field survey, 2010)

For prevention of STIs and HIV/AIDS knowledge on condom is essential. As sex is basic need for human being, for prevention from AIDS use of condoms is most important methods. This topic carries information about knowledge of condoms and its use.

This study reveals that out of 158 students 98.10 percent students have heard about condom, which is 98.91 percent among boys and 96.97 percent among girl students.

#### **5.4.1 Knowledge of use of Condom.**

Among 154 respondents who had about drugs, 88.39 percent students know that condom prevent STI and HIV/AIDS and conception respectively. The corresponding figures, for girls are 85.94 percent and 13.85 percent respectively.

**Table - 5.17: Distributions of Respondents According to Knowledge on Use of Condom by Sex.**

Variables	Boys		Girls		Total	
	(N)	%	(N)	%	(N)	%
Prevention of STI and HIV/AIDS	81	90.00	55	85.94	136	88.39
Prevent conception	9	10.00	9	13.85	18	11.61

*(Source: Field survey, 2010)*

### **5.5 Group Discussion and Public Communities**

#### **5.5.1 Public Participant**

Discussion is an important factor in factor in which study which plays the vital role to determine the level of knowledge and behavior on STIs, HIV/AIDS and drugs. Involvement of adolescents, communications among friends use of communication media and participation in awareness programmed.

### 5.5.2 Discussion with Friends

In this study, whether respondents have ever discussed about HIB/AIDS, SITs and Drug abuse with their friends were also enquired. Discussion with friends helps to exchange the knowledge. Table 36 shows that majority of the respondent (65.19%) reported they used to discuss with friends. While nearly 35 percent reported they do not discuss. Compared to girls (62.12%) higher proportion of boys (67.39%) reported having discussion with friends.

**Table - 5.18: Distribution of Respondents According to Discussion with Friend about SITs HIV/AIDS and Drug use.**

Discussion with Friends about STIs, HIV/AIDS and Drug use	Boys		Girls		Total	
	(N)	%	(N)	%	(N)	%
Yes	41	62.12	62	67.39	103	65.19
No	25	37.88	30	32.61	55	34.81
Total	66	100	92	100	158	100

*(Source: Field survey, 2010)*

This may be because boys are comparatively frank than girls. This may be because boys are comparatively frank than girls. Girls hesitate to discuss about these matter. A follow-up question was discussion with friends. Majority of respondents have discussed sometimes followed by discussing frequently.

### 5.5.3 Use of Communication Media

Role of communication media in this time has been highly evaluated. Communication media are playing positive role in enhancing the knowledge among adolescents. The current and important message is transferred to readers through media. If the development of media is utilized with the motive of developing health sex habits among adolescents, it will surely bring greater change among them. But nowadays unhealthy use of media has brought a lot of problems.

Respondents were asked whether they have habit of using different

communication media. Questions were asked relating to three major source of media i.e. radio, newspapers and television. Highest percent of respondents reported that they use to listen/watch program related to reproductive health from television followed by radio and newspapers. Television is the major source of information for adolescents as well as radio.

#### 5.5.4 Awareness Program

Awareness program in the community has greater role for promoting reproductive health status of adolescents. Different INGOs are involved in community awareness program. These agencies have various program to address the needs of adolescents but a directive motive of implementation of such program in grassroots level is needed whether they know about such programs were conducted in their locality.

**Table - 5.19: Distribution of Respondents According to Knowledge of Awareness program Conducted in locality.**

Any awareness program conducted in locality	Boys		Girls		Total	
	(N)	%	(N)	%	(N)	%
Yes	51	55.43	34	51.52	85	53.79
No	41	44.56	32	48.48	73	46.20
Total	92	100	66	100	158	100

*(Source: Field survey, 2010)*

#### 5.5.5 Discussion in Family

Discussion on family reproductive health matter is not common in Nepal because of various social and culture barriers. In our society, discussion with in family on reproductive health in no encouraged but due to change in the status of people and other development activates.

**Table - 5.20: Distribution of Respondents According to Discussion about SITIs, HIV/AIDS and Drug use in their family.**

Discussion in the Family	Boys		Girls		Total	
	(N)	%	(N)	%	(N)	%
Yes	41	44.56	24	36.36	65	41.14
No	51	55.43	42	63.63	93	58.86
Total	92	100	66	100	158	100

*(Source: Field survey, 2010)*

The trend had been changing and discussion has started within the family. The result of this study also proves it. More than one third of respondents reported that they use to discuss with family members.

### **5.5.6 Role of Government**

The government should play important role for protecting the reproductive health of the adolescents. As Nepal has already ratified the ICPD 1994, the state is urged to implement all of the possible ways to promote the reproductive health of adolescents. On this awareness program should be conducted to increase information on adolescents. About 74 percent respondents reported that curriculum should improve

**Table - 5.21: Distribution of Respondents According to their Perceived Opinion about Role the State.**

Role of state	Boys		Girls		Total	
	(N)	%	(N)	%	(N)	%
Conduct awareness	86	93.48	59	89.39	145	91.77
Improve Curriculums	42	45.65	32	48.49	74	46.84

*(Source: Field survey, 2010)*

In fact, the course content of secondary level is not sufficient for providing information and the course need to be updated timely so that new information can be include.

# CHAPTER - SIX

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study focuses on the causes and prevents common and fatal disease, Common incense of spreading everywhere rapidly all over the world, fatal incense of not curing yet all. It can't be cure but can be decrease the ratio of transmission by the proper knowledge and awareness.

This study also describes the harms of use of drugs and due to the drug abusers the most of cause to transmit of HIV/AIDS and sexual disease. We have the following major findings and conclusion.

### 6.1 Summary

Following are the major findings of this study.

#### I. Background characteristic of Respondents

1. The age of the respondents ranged from 14 to 18 years, the highest percent of respondents (36.08%) were 16 years and the lowest (10.76%) in the age 14.
2. The mean family size of the respondents is found to be 4.99 chhetri constitutes the highest percent of respondents (34.81%) and lowest percent are from tharu (0.63%). Hindu is the major caste with more than 98 percent respondents.
3. Less than one-third (23.42% respondents were from extended family. This shows that the family breakdown is rapid.
4. More than 46 percent reported that all members of their family are literate whereas almost all respondent's have literate father. Highest percent of respondents' father have completed S.L.C. and higher level.

5. Business is the major source of income for major than 62 percent of respondents followed by government/private sector service (29.75%) whereas only 8.86 percent respondents father were engaged in agriculture.
6. More than 76 percent respondents reported that they have agricultural land. Of those who have agricultural land 69.62 percent reported food sufficiency.

II. Knowledge of STIs, HIV/AIDS, DRUGS and use of condom.

1. More than 85 percent respondents have knowledge about SITs and Syphilis and Gonorrhoea were the most commonly heard STIs.
2. Highest percent of respondents got information about STIs from Television Radio and teacher/school curriculum.
3. Highest percent respondents reported that STIs are not transferred through living together and eating together. More than 98 percent respondent higher percent of Girls have heard about AIDS. Majority of respondents heard about AIDS through television followed by radio and newspaper.
4. All most all respondents said that AIDS is transmitted from unsafe sex followed by infected syringe/bleed and blood transfusion.
5. Nearly all respondents have knowledge that AIDS is not transmitted from mosquito bites, spit (saliva) sharing clothes/blades, using same latrine and handshake.
6. About 98 percent respondents have heard about drugs.
7. Highest percent of the respondents (68.39%) got information about drugs from Television followed by teacher and through radio.
8. About 90 percent respondents said that drug is a chemical substance which is toxic to the users, whereas the lowest percent of the respondents (1.94%) reported drug is chemical substance that can be taken by all.



Cannabis and heroin were the most commonly heard drugs.

9. All most all respondents agreed that is necessary to prevent for drug abuse and more than 90 percent focused on public awareness for prevention.
10. More than 90 percent respondents have knowledge that there is relationship between HIV/AIDS and drug.
11. Highest percent of the respondents (88.39%) know that use condom during sexual intercourse can prevent AIDS and STIs.
12. Majority of respondents reported that their family would accept them if they were STIs and HIV/AIDS infected. Those who reported negatively reported communicable diseases and social prestige as the major reasons.
13. Majority of the respondents have information that condom is used for both purpose. i.e. to avoid conception and prevent STIs and HIV/AIDS.

## **6.2 Conclusions**

All most all students have heard about HIV/AIDS and the average knowledge among students is high some misconception is also reported specially about the transmission routes if AIDS but level of knowledge of STIs is found less among students compare to that of AIDS and condom.

The result of this study show that, girl students are not so back than boys students because of educated parents girls are becoming very component. Even if somewhere because of shyness and hesitation girls students could not talk openly but it is improving now a days. The level of knowledge of respondents about STIs and HIV/AIDS shows that higher that age, higher the proportion of respondents having knowledge that condom can prevent the transmission. Of STIs and HIV/AIDS, they emphasized that in the present pandemic situation of AIDS, people should use condom to prevent the STIs and HIV/AIDS and to control the birth.

One of the major sources of information about STIs, HIV/AIDS and drug

is television and school curriculum among the respondents. Less than 30 percent students have received information about STIs and HIV/AIDS from parents and friends because they have also lack of knowledge about it. About 98 percent students have heard about drug and boy's students have no vast difference of knowledge.

### **6.3 Recommendations**

- 1 This section presents some specific recommendation for the policy implication.
- 2 Adolescents are more vulnerable to HIV/AIDS because of their instable behavior. They should be provided consistent information about reproductive health emphasizing on STIs and HIV/AIDS.
- 3 Education plays the vital role to determination every, change in the society. This study recommends that detail education about reproductive health must include in the school curriculum.
- 4 Social and cultural norms are obstacles in the society to discuss about STIs and HIV/AIDS. Therefore AIDS education should be provided regularly with more information through television, radio and school curriculum should be improved on timely to prevent from STIs, HIV/AIDS and drug abuse.
- 5 The environment should be created between Boys and Girls students and teachers to discuss about the DIT, and HIV/AIDS, which is helpful to share knowledge among the student.
- 6 The video program should be promoted to knowledge on SITs, HIV/AIDS and Drug abuse among student.

### **6.4 Further Research Issues**

School children, especially adolescents are vulnerable group for SITs, HIV/AIDS and Drug abuse. A large proportion of adolescents are involved in the school. The national curriculum in the school has tried to give information about sexual discuss and drugs but information are not adequate. Still there are many obstacles hindering the full information to adolescent. In our country,

where sex education is still remained back and the societies as well as families are not free of it, only the school curriculum is not sufficient for providing information to them. The social system, education planning and family background are most important aspects influencing the level of knowledge to adolescents. Therefore, it is necessary to investigate the relationship between family background, curriculum and adolescent's knowledge on SITs, HIV/AIDS and drug abuse.

**Appendix - I**  
**Recommendation from School**



*Budhanilkantha School*  
(Higher Secondary)  
P.O. Box 1018, Kathmandu, Nepal

TO WHOM IT MAY CONCERN

This is to certify that Mrs. Devi Koirala (Khatri), had conducted attitude survey of Secondary Level students of this school towards STIS, HIV/AIDS and Drug Abuse on 14<sup>th</sup> Falgun, 2066 B.S. Budhanilkantha School is a national school of Nepal where students from all over the country study. Thus, the information obtained from this school could be more representative to the national context. I would like to thank Mrs. Koirala for choosing this school for her study and making her research qualitatively more stronger.

I would like to wish best of luck to Mrs. Koirala for her future endeavours.

(Ramesh Nath Dawadi)  
Vice Principal, Higher Secondary Level



15<sup>th</sup> Falgun, 2066

Regd. No. 3660

*"Let the Light of Education be Spread"*



Estd. 2050

## VALLEY PUBLIC HIGHER SECONDARY SCHOOL

P.O. Box: No. 6820, Bhangal, Sundarbasti, Kathmandu

Phone: 4370987, 4376672, 4650439, 4376215

E-mail: vpbhskri@hotmail.com


URL: www.valleypublic.com

Date: 16<sup>th</sup> June, 2010

### TO WHOM IT MAY CONCERN

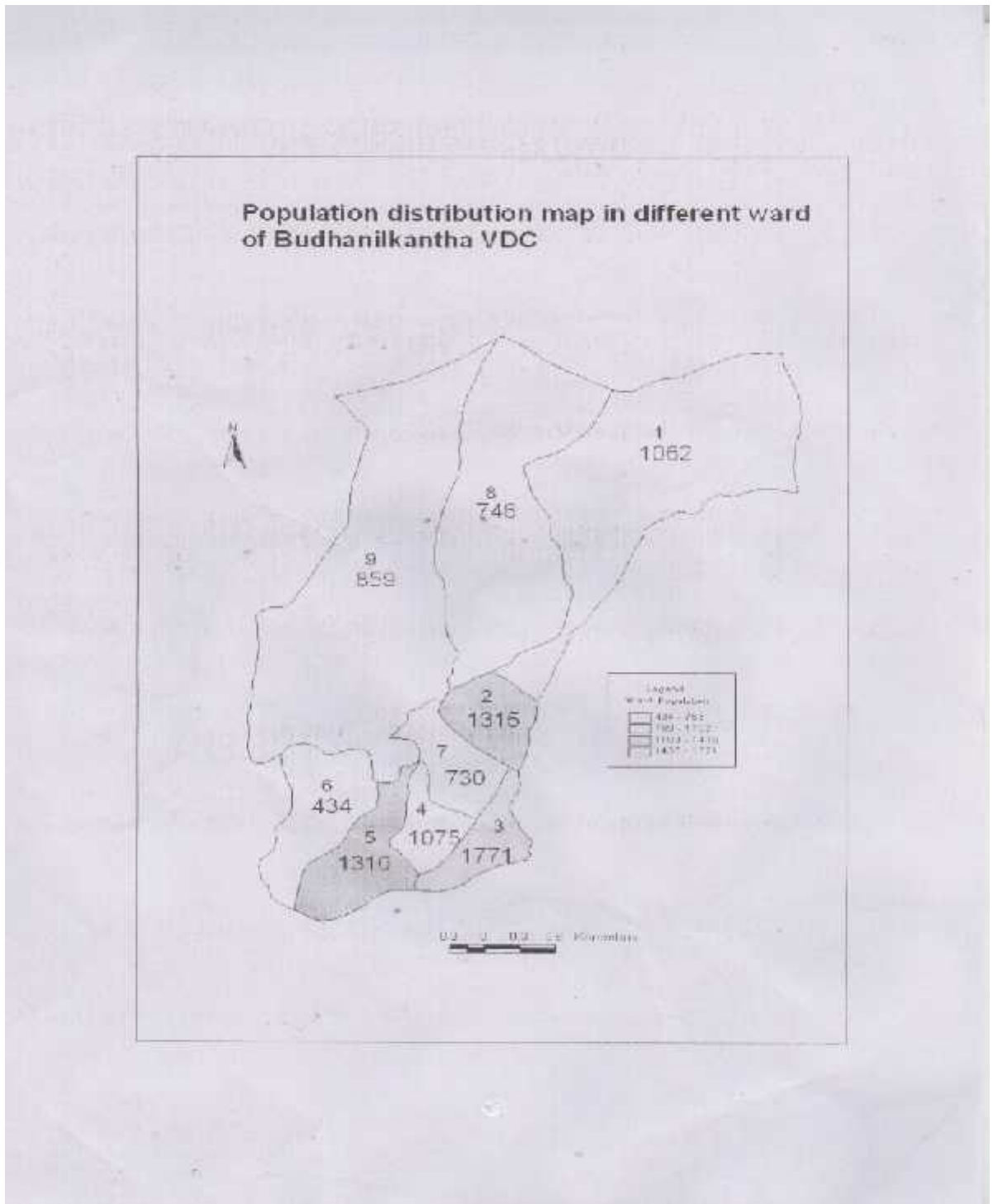
This is to verify that Mrs. DEVI KOIRALA (KHATRI), has received approval to conduct a research to find the knowledge and attitude of secondary level students towards STIS, HIV/AIDS and Drug Abuse on 13<sup>th</sup> Falgun 2066. I felt delighted to know that she made a first choice for this school considering social-economic and ethnic variation of our students and also impressed by the standard questionnaire the students are asked to respond for her research.

I will all the best for the success of thesis and her research.

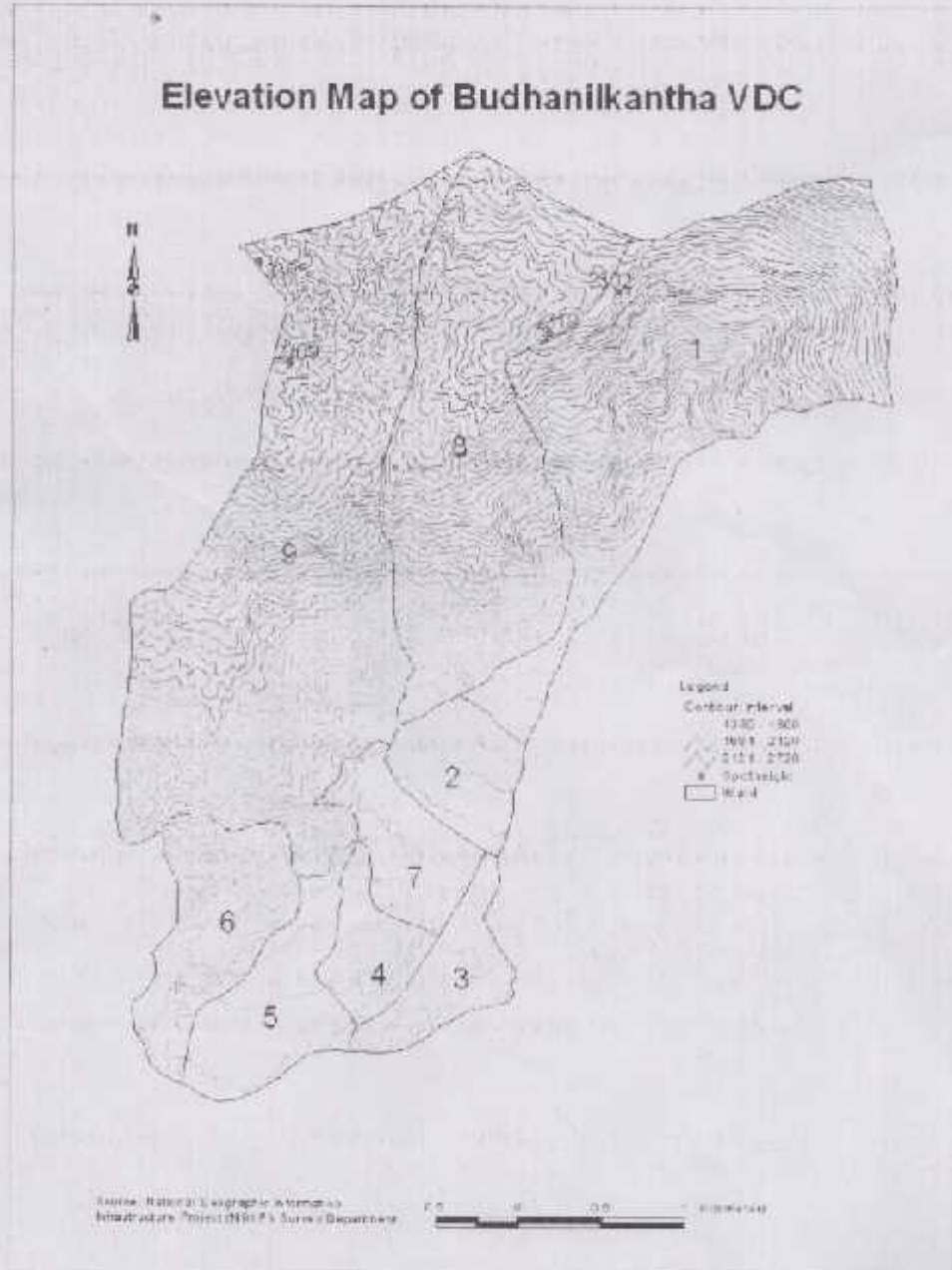
  
V. Principal

## Appendix- II

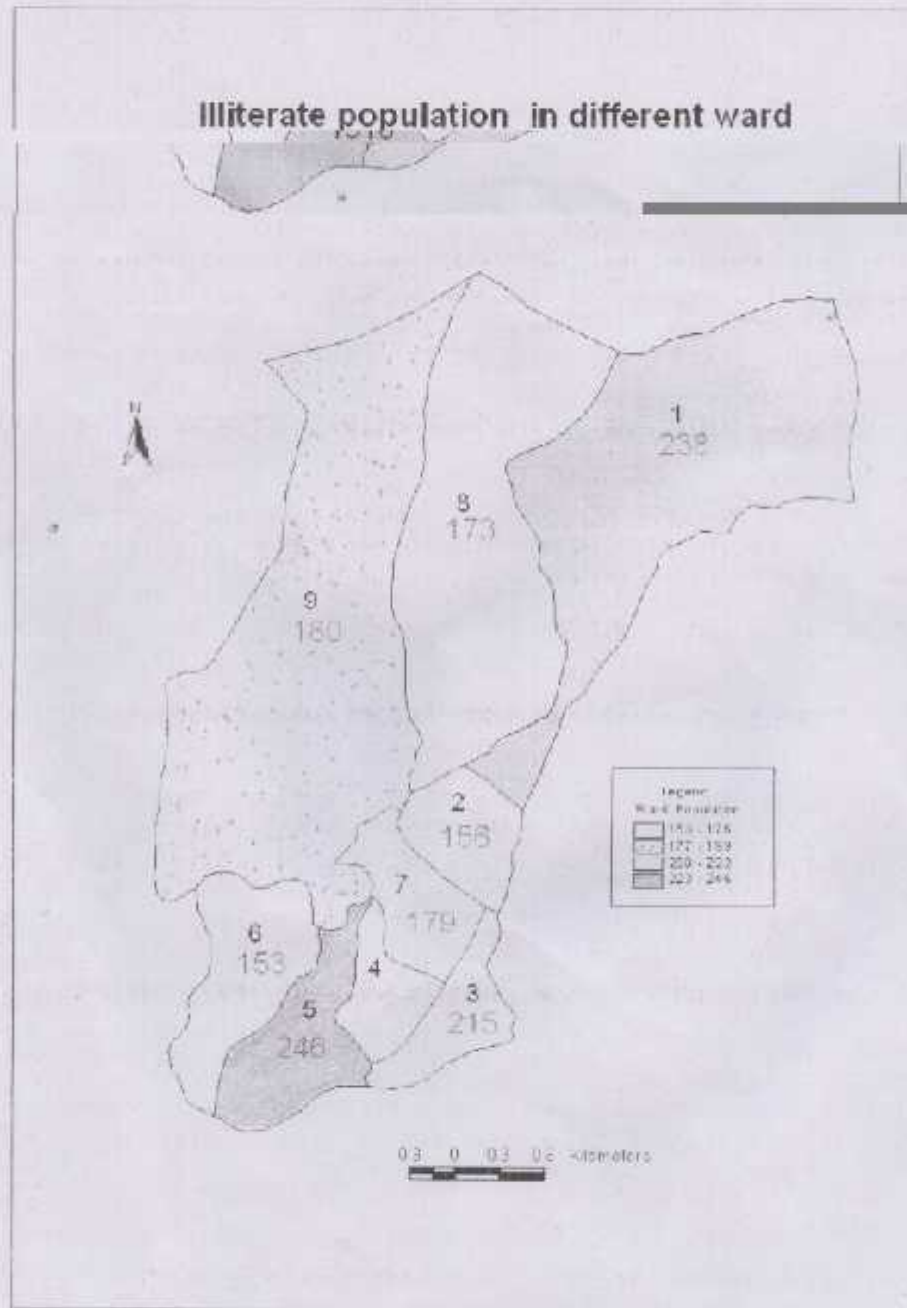
### Maps



### Elevation Map of Budhanilkantha VDC

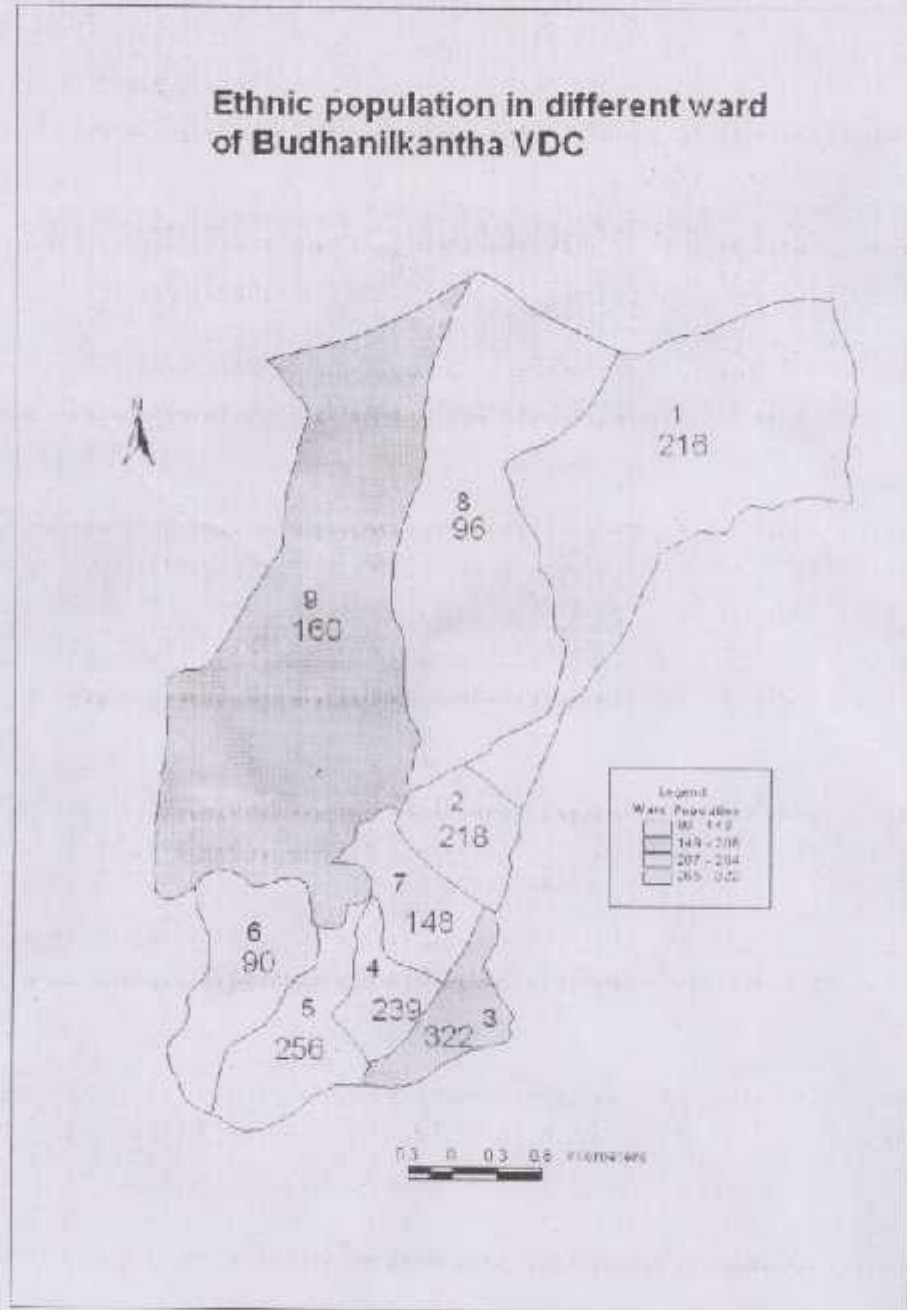


### Illiterate population in different ward

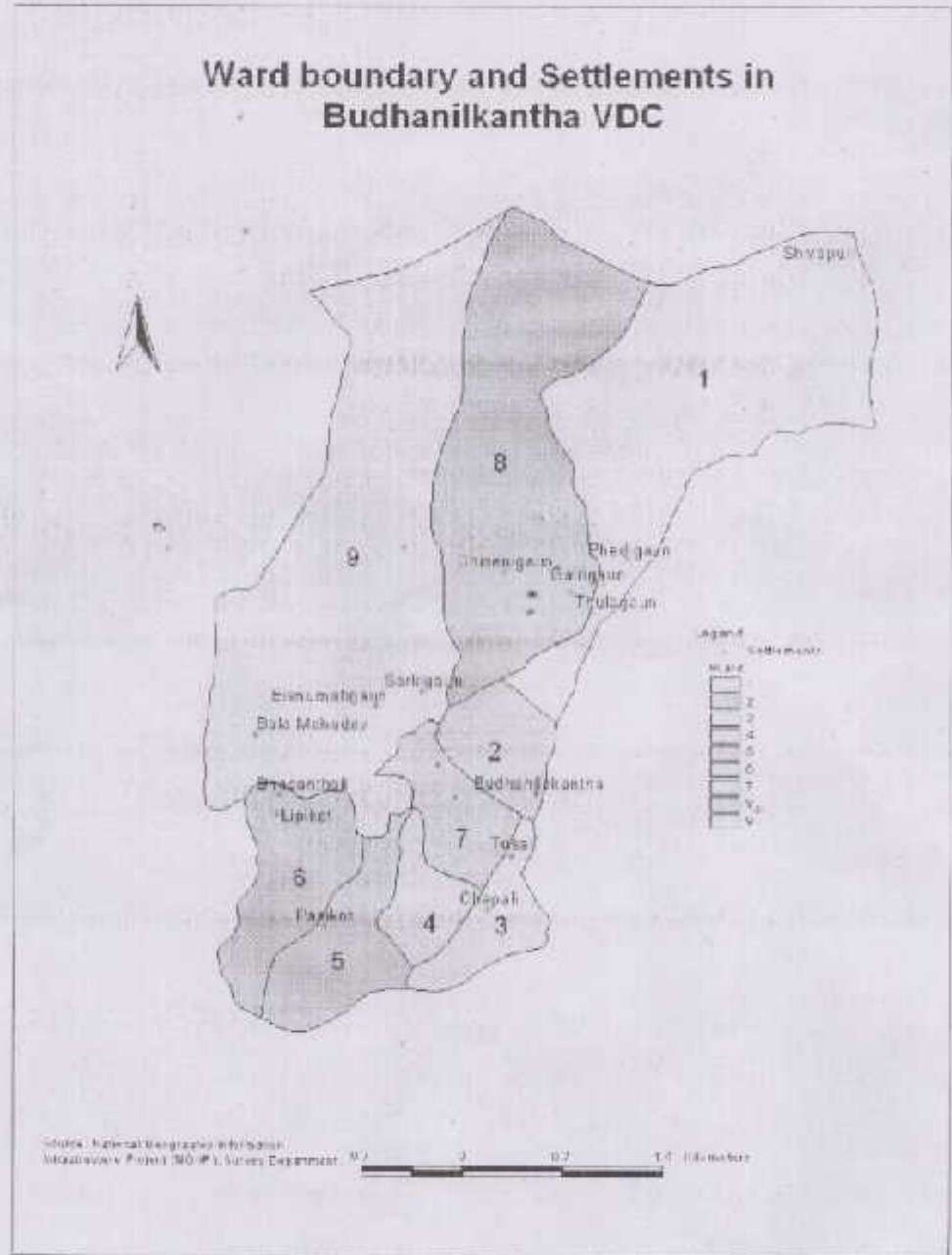




### Ethnic population in different ward of Budhanilkantha VDC



## Ward boundary and Settlements in Budhanilkantha VDC



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## Appendix - III

### Questionnaire

**Tribhuvan University**  
**Central Department of Population Studies**  
**Kirtipur, Kathmandu**

#### Introduce Background:

Respondent's Name:.....  
Class:.....Age:.....  
Sex:.....Date of birth:.....  
Place of Residence:.....  
Rural ..... Urban:.....  
Total Family Members:.....  
Schools Name:.....

#### I Household Information

1. Where do you live?

- A) Own House    B) Hostel                      C) Ranted Room  
D) Relatives House    E) Others (Specify)

2. How many members are there in your house?

Ans:-

3. What type of family is yours?

- a) Nuclear      b) Joint              c) Extended

4. What is the main source of living of your Family?

- a) Agriculture    b) Service    c) business              d) others (specify)

5. Are you married?

- a) Yes                      b) No

6. What was your age at marriage? \_\_\_\_\_

7. What was the reason for your marriage?

Ans:-

8. In your Opinion, What is an appropriate age of marriage for boys and girls?

Boys: \_\_\_\_\_                      Girls: \_\_\_\_\_

9. Are all members of yours family literate?

- A) Yes \_\_\_\_\_                      B) No \_\_\_\_\_

10. How many of them are literate? \_\_\_\_\_

11. Is your father/mother literate?

- A) Yes \_\_\_\_\_                      B) No \_\_\_\_\_

12. What is the highest level complete by him?

Father \_\_\_\_\_                      Mother \_\_\_\_\_

13. What is the main occupation of your Father?  
 A) Agriculture B) Government/Private Service C) Business D) None
14. Does your house hold own land?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
15. Is the land owned by your household sufficient for your livelihood?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_

## II: Knowledge on STD and HIV/AIDS

16. Have you ever heard any STIs?  
 A) Yes B) No
17. Name of the STIs you have heard.  
 \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
18. From where did you heard first?  
 A) Radio B) Television C) Newspaper D) Friends E) Parents
19. Do you know the way of transmitted STIs?  
 B) Yes \_\_\_\_\_ B) No \_\_\_\_\_
20. How are STIs transmitted?  
 A) Unsafe Sexual Contact B) Living Together C) Eating Together  
 D) Sharing Infected Syringe/Blade E) By Mosquito Bite F) Using Public Toilet
21. Have you ever heard about HIV/AIDS?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
22. From where did you heard first?  
 A) Radio B) Television C) Newspaper D) Friends E) Parents
23. Have you knowledge on modes of HIV/AIDS transmission?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
24. What are the modes of the AIDS?  
 A) Unsafe Sexual Contact B) Living Together C) Eating Together  
 D) Sharing Infected Syringe/Blade E) By Mosquito Bite F) Using Public Toilet
25. Do you know the way of prevention of STIs and HIV.AIDS?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
26. What are the ways of prevention?  
 A) Abstinence (No Sexual Contact) B) Check Blood Before transfusion
27. Have you ever suffered by any STIs?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
28. What did you do after infection?  
 A) Had Medical Treatment B) Informed To Parents C) Informed To Friends  
 D) Did Nothing E) Others: \_\_\_\_\_
29. If you meet any HIV/AIDS infected patient would you do the following activities?  
 A) Shake Hands (I) Yes (Ii) No B) Eat Together (I) Yes (Ii) No  
 C) Sleep in Bed (I) Yes (Ii) No D) Share Cloths (I) Yes (Ii) No
30. Would your family accept you if you were suffered from STIs and HIV.AIDS?  
 A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
31. Why would your family not accept you?  
 A) Fear of Transformation B) Social Reputation C) Family Reputation  
 D) Other (Specify) \_\_\_\_\_

### III: Knowledge on use of Condom

32. Have you ever heard about Condom?  
A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
33. From where did you hear?  
A) Radio B) Television C) Newspaper D) Friends  
E) Parents F) Teachers G) Others (Specify) \_\_\_\_\_
34. Why do you think people use condom?  
A) Avoided Conception B) Prevention from STIs and HIV/AIDS  
C) Others \_\_\_\_\_
35. Would you use condom to prevent STI and HIV/AIDS?  
A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
36. Why would you not use condoms?  
A) Fear from Society B) Don't Know How to Use  
C) Difficult To Get D) Other \_\_\_\_\_
37. Have you ever had sexual relation with any one?  
A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
38. with whom?  
A) Boy/Girl /Friend B) Prostitute C) Other (Specify) \_\_\_\_\_
39. Did you use condom at the any time of intercourse?  
A) Yes B) No
40. Why you did not use condom?  
A) Didn't Know B) Was Not Available C) Don't Know How to Use  
D) Not Necessary E) Other (Specify): \_\_\_\_\_

### IV: Information on Drug

41. Have you heard about drug?  
A) Yes \_\_\_\_\_ B) No \_\_\_\_\_
42. From where did you heard first?  
A) Radio B) Television C) Newspaper  
D) Friends E) Parents F) Teachers  
G) Other (specify) \_\_\_\_\_
43. Have you heard the following drugs?  
A) Cannabis I) Ganja II) Charesh III) Bhang IV) Dhaturu  
B) Heroin I) Smack II) Brown Sugar  
C) Opium I) Codeine II) Methadine III) Morphine  
IV) Pethidine V) Tidigeri  
D) Sleeping Tablet I) Valium II) Librium III) Ativan  
IV) Burkam  
E) Others I) Gum II) Boot Polish III) Lodex  
IV) Kerosene V) Petrol VI) Others: \_\_\_\_\_
44. How do the drugs addicts use drug?  
A) Smoking B) Sniffing C) Chasing D) Swallowing  
E) Drinking F) Injecting
45. In your opinion is there necessary to prevent people from using drug?



A) Yes \_\_\_\_\_ B) No \_\_\_\_\_

46. If yes, How?

A) Making Strict Law    B) Social Discard    C) Public Awareness  
D) Counseling and Revalidation

47. Do you think use of drug and STI and HIV/AIDS are related?

A) Yes                      B) No

### **V: Group Discussion and Public Communication**

48. Have you ever discussed about STI and HIV/AIDS with your friends?

A) Yes \_\_\_\_\_ B) No \_\_\_\_\_

49. Why didn't you discuss with friends?

A) Don't Like              B) Feel Shy              C) Not Necessary

D) Other: \_\_\_\_\_

50. Do you read on news paper or what T.V about the information on STLs and HIV/AIDS?

A) Yes                      B) No

51. Why don't you read or watch?

A) Not Available              B) Don't Like              C) Other (Specify): \_\_\_\_\_

52. Has any organization conducted awareness program in your locality?

A) Yes                      B) No

53. Have you participated on such programs?

A) Yes                      B) No

54. Have you Share the knowledge on the topics to your friends?

A) Yes                      B) No

55. What do you think the state has to do protect the reproductive health to the adolescents?

A) Conduct Awareness    B) Improve the Curriculum