# KNOWLEDGE AND ATTITUDE TOWARDS STIS, HIV AND AIDS AMONG HIGHER SECONDARY SCHOOL STUDENTS OF CHITWAN DISTRICT

# A THESIS SUBMITTED TO THE CENTRAL DEPARTMENT OF POPULATION STUDIES (CDPS), FACULTY OF HUMANITIES AND SOCIAL SCIENCES, TRIBHUVAN UNIVERSITY (TU) IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS IN POPULATION STUDIES

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# MAY 2011

# DECLARATION

Except where otherwise acknowledged in the text, the analysis in thesis represents my own original research.

.....

Mohan Prasad Lamichhane May 2011

# RECOMMENDATION

This is to certify that the thesis Submitted by MOHAN PRASAD LAMICHHANE Entitled

Knowledge and Attitude Towards STIs, HIV AND AIDS Among Higher Secondary School Students of Chitwan District is Recommended for External Examination.

Date: May 2011

# **VIVA-VOCE SHEET**

We have conducted the viva-voce examination of the thesis

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and find that the thesis to be an independent work of the student written according to the prescribed format. We recommend the thesis to be accepted as the partial fulfillment of the requirements for Master of Arts in Population Studies.

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## **CHAPTER ONE**

## INTRODUCTION

#### 1.1 Background of the Study

Adolescent is the period of rapid emotional growth and development. The word adolescent is derived from Latin word 'Adolescere' which means grow to maturity. Adolescence is defined as the stage of life span during which individual reach sexual maturity; it is the period of transition from puberty to maturity. Some adolescents become sexually active in early age. In many countries unmarried girls and boys have sex in their adolescent stage and have greater possibility to attack with Human Immunodeficiency Virus (HIV) and other STIs.

The adolescents are at greater risk of STI/HIV infection due to ignorance, risky behaviour and lack of information, services and menstrual hygiene. The main purpose of reproductive and sexual health education is to make young people aware of the various mental, physical and emotional changes at the period of adolescence. Furthermore, they should emphasize on providing knowledge about the disadvantages of early sexual intercourse especially unsafe sex. The higher secondary level students will involve in sexual activities after marriage in the very near future and therefore are needed to be well informed about the various diseases that are easily transmitted by unprotected sexual intercourse. Sexual behaviour and activity during adolescence are the fundamental causes of STIs, AIDS and unwanted pregnancies.

STIs increase the likelihood of HIV transmission considerably, as well as having other reproductive health consequences such as chronic pain, infertility or life-threatening ectopic pregnancies. While data on STIs in developing countries are scarce particularly for young people, UNFPA (2003) estimates that at least a third of the more than 333 million new cases of curable STIs each year occur among people under age of 25 years. Young people are also substantially more likely than adults to become re-infected after having been treated.

International Conference on Population and Development (1994) has recognized the special needs of adolescents and recommended for formulation of policies and programmes addressing their needs. Following the ICPD recommendations, various governments have formulated policies and programmes. The World Population Day

2003 was celebrated all over the world by a slogan: *One Billion Adolescent: Right to Health, Information and Services.* 

The single most important preventive measure for people is to know their own HIV status. If they are uninfected, this knowledge helps them protect themselves; if they are infected, the information helps them to protect their partners.

Testing also provides the entry point to appropriate treatment and care for individuals who test positive.

HIV/AIDS being an incurable and fatal disease, many people believe that knowledge of the disease itself will stimulate people to protect themselves from it. Hence, this study is focused on the knowledge of adolescents studying at higher secondary schools regarding this issue.

## **1.2 Statement of the Problem**

The population in age group 10-19 years is defined as adolescents. Adolescence is further categorized into two categories namely as early adolescence (10-14) and late adolescence (15-19). Adolescent is the period of transition from childhood to adulthood. All adolescents experience biological as well as social change during this period. For instance, many adolescent of this age go through puberty, experience change in their body structure, leave home, leave school and get married (Acharya, 1999).

In Nepal, adolescents comprise of more than one fifth (22%) of the total population (CBS, 1995) which is rather more (23.3%) in 2001 (CBS, 2003) owing to high fertility and a youthful population. The proportion of adolescents in the total population is likely to increase in the coming years. A number of socio cultural factors and traditional beliefs operating in Nepalese society have contributed to a high level of illiteracy, early age at marriage, early and frequent child-bearing and their associated complications, unintended pregnancies and unsafe abortion.

HIV/AIDS has been increasing since the first case was detected in 1988 in Nepal. Only three male and one female were detected of HIV infection for the year when it was diagnosed at first in the year 1988. Since then the incidence rate is increasing each year and the new cases detected in the year 2008 is 960 for male and 407 for female (NCASC, 2009). The national data as of February 28, 2009 reveals 6755 individuals having HIV of which 1656 have developed Acquired Immune Deficiency Syndrome (AIDS). Of the total AIDS cases, 437 have died. HIV transmission is increasing in population of 14 to 49 years age group.

Inaccessibility to adequate information and education on adolescent sexual and reproductive health is still a major problem among youths in Nigeria and this is more worrisome with the issue of HIV and AIDS.

In addition this district experiences a high prevalence of women's trafficking for commercial sex work in India. These women return to their villages after they are identified with HIV/AIDS and many of them stay with their family and marry.

Some of the studies were done previously in Nepal but they all were focused on broad reproductive health area. They did not enter into specific reproductive health issue like STIs, HIV and AIDS with respect to students' perception. Therefore, the researcher wants to investigate such specific issue. So, the research problem stated as "Knowledge and Attitude towards STIs, HIV and AIDS among Higher Secondary School Students of Chitwan District".

## 1.3 Objectives of the Study

The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are:

- ) To explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents.
- J To explore knowledge, modes of transmission and preventive measures of HIV/AIDS among respondents.
- ) To identify views and their attitude towards HIV/AIDS and STIs People Living with HIV and AIDS in their community.

#### 1.4 Significance of the Study

The son of former South African President Nelson Mandela, Makgatho Mandela had died of the pandemic was vital in the fight against stigmatizing AIDS victims. Mr. Mandela's son died at the age of 54. The openness of these leaders showed that HIV/AIDS knew no boundaries (UN, 2005). Thus it is most essential to create awareness about this pandemic everywhere.

In Nepal, adolescents constitute over one-fifth of the total population. They are the backbone of the society and parents of tomorrow. They have great responsibility to make the society developed in future. The adolescents are vulnerable; they have high risk of increasing and transmitting STIs; including HIV/AIDS. That is why the research study will help to know the knowledge and attitude of adolescents regarding STIs and HIV/AIDS. The available studies on adolescent sexuality are limited in number and are rarely studied from the viewpoint of demographic perspective. Moreover there have not been conducted any studies regarding knowledge and attitude towards STIs and HIV/AIDS among rural adolescents in Chitwan District. It will also help to know the prevention as well as transmission knowledge of STIs and HIV/AIDS of adolescents and the research has great significance for the policy makers and planners to develop appropriate curricular and co curricular activities.

One of the major social problems in rural area of Chitwan district is found girls trafficking. An estimated number of 153000 girls are trafficked in Indian brothels from mountain and hills of Nepal. A significant proportion of these figure were reported to have been trafficked from rural area of Chitwan district. The trafficked women returning from Indian brothels have high risk of HIV transmission. Some studies have shown that more than 70 percent of them are infected with HIV/AIDS (Acharya, 2002). Hence, it is more necessary to increase the level of awareness among people in Chitwan district. As such this study has great significance for the GOs, NGOs and local community to administer their activities in the school and community level.

Adolescent population has less access to information regarding puberty, physical changes, reproductive health, contraceptives, STIs and HIV infection. If adolescent boys and girls are supported with proper information as mentioned above, knowledge creates positive attitude and positive attitude leads towards healthy behaviour.

Knowledge of STIs and HIV/AIDS is generally measured by the answer provided to the question, "Have your ever heard of an illness called HIV or STIs?", the young who have heard of HIV or STIs does not necessarily indicate that they have adequate knowledge on symptoms, preventive measures and mode of transmission etc. Hence, this study aims to categorize knowledge on HIV and STIs on the basis of these measures.

This study will help to understand the importance of knowledge and attitude regarding reproductive health including STIs and HIV/AIDS among adolescent as well as parents and community. This study will be also a valuable literary asset to the upcoming researcher who intends to do study in this field. This study may useful references to programmer, curriculum planner, policy makers and persons who involved in STIs, HIV and AIDS.

## 1.5 Limitations of the Study

Almost all the studies have some sorts of limitations and this study is not an exception on this fact. One short survey itself has several limitations. So this study has some limitations that are mentioned as follows:

- This study being academic and limited to both time and resources, the sample populations are taken only from four public higher secondary schools of Chitwan District. Therefore, the findings of the research can be generalized only for the areas having similar characteristics and not for whole country.
- This is completely school-based study, so it may not represent out of school adolescent and population group other than adolescent. Even in adolescent group the study may ignore the early adolescents. Therefore, this study is concentrated only on late adolescents of four public higher secondary schools in Chitwan District.
- Several confounding variables may have played to determine the knowledge, however, such factors could not be included in this study.

## **1.6 Organization of the Study**

The study has been organized out into five chapters. Chapter First deals with introduction with the general background, statement of the problem, objective of the

study, significance of the study, Limitation of the study, and Organization of the study followed by chapter second with Literature review, third research methodology, fourth with back ground characteristic of the respondents, this chapter also dealt with analysis and interpretation of data. The final chapter five states summary, conclusions and recommendations.

#### **1.7 Chapter Summary**

The population in age group 10-19 years is defined as adolescents. Adolescence is further categorized into two categories namely as early adolescence (10-14) and late adolescence (15-19). Adolescent is the period of transition from childhood to adulthood. All adolescents experience biological as well as social change during this period. For instance, many adolescent of this age go through puberty, experience change in their body structure, leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among respondents, and c) to identify views and their attitude towards HIV/AIDS and STIs People Living with HIV and AIDS in their community.

Adolescent is the period of rapid emotional growth and development. The word adolescent is derived from Latin word 'Adolescere' which means grow to maturity. Adolescence is defined as the stage of life span during which individual reach sexual maturity; it is the period of transition from puberty to maturity. Some adolescents become sexually active in early age. In many countries unmarried girls and boys have sex in their adolescent stage and have greater possibility to attack with Human Immunodeficiency Virus (HIV) and other STIs.

This study will help to understand the importance of knowledge and attitude regarding reproductive health including STIs and HIV/AIDS among adolescent as well as parents and community. This study will be also a valuable literary asset to the upcoming researcher who intends to do study in this field. This study may useful references to programmer, curriculum planner, policy makers and persons who involved in STIs, HIV and AIDS.

This study being academic and limited to both time and resources, the sample populations are taken only from four public higher secondary schools of Chitwan District. Therefore, the findings of the research can be generalized only for the areas having similar characteristics and not for whole country. This is completely school-based study, so it may not represent out of school adolescent and population group other than adolescent. Even in adolescent group the study may ignore the early adolescents. Therefore, this study is concentrated only on late adolescents of four public higher secondary schools in Chitwan District. Several confounding variables may have played to determine the knowledge, however, such factors could not be included in this study.

# **CHAPTER TWO**

## LITERATURE REVIEW

#### 2.1 Background of the HIV/AIDS

Human Immunodeficiency Virus (HIV) is an infectious agent that causes acquired immunodeficiency syndrome (AIDS), a disease that leaves a person vulnerable to life-threatening infections. Scientists have identified two types of this virus. HIV-1 is the primary cause of AIDS worldwide and HIV-2 is found mostly in West Africa. HIV belongs to the retrovirus family of viruses.

HIV transmission occurs when a person is exposed to body fluids infected with the virus, such as blood, semen, vaginal secretions, and breast milk. The primary modes of HIV transmission are (1) sexual relations with an infected person; (2) sharing hypodermic needles or accidental pricking by a needle contaminated with infected blood; and (3) transfer of the virus from an infected mother to her baby during pregnancy, childbirth, or through breast-feeding (Aryal ,2000).

When HIV enters the body, it infects lymphocytes, white blood cells of the immune system. The virus commandeers the genetic material of the host cell, instructing the cell to replicate more viruses. The newly formed viruses break free from the host, destroying the cell in the process. The new viruses go on to infect and destroy other lymphocytes.

Over a period that may last from a few months to up to 15 years, HIV may destroy enough lymphocytes that the immune system becomes unable to function properly. An infected person develops multiple life-threatening illnesses from infections that normally do not cause illnesses in people with a healthy immune system. Some people who have HIV infection may not develop any of the clinical illnesses that define the full-blown disease of AIDS for ten years or more. Doctors prefer to use the term AIDS for cases where a person has reached the final, life-threatening stage of HIV infection (Gubhaju, 2002).

#### 2.2 HIV/AIDS in the World

AIDS was first reported in 1981 in United States of America. The causative organism of AIDS- HIV was identified in leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among s so no country of the globe is immune to HIV/AIDS. This is why this issue needs an issue of global thinking and intervention (Aryal, 2000).

The total number of people living with the prevalence of HIV rose in 2004 to reach its highest level ever: an estimated 39.4 million people are living with the virus. This figure includes the 4.9 million people who acquired HIV in 2004. The global AIDS epidemic killed 3.1 million people in the past year.

The number of people living with HIV has been rising in every region, compared to two years ago, with the steepest increases occurring in East Asia, and in Eastern Europe and Central Asia. The number of people living with HIV in East Asia rose by almost 50 percent between 2002 and 2004, an increase that is attributable largely to China's swiftly growing epidemic. In Eastern Europe and Central Asia, there were 40 percent more people living with HIV in 2004 than in 2002. Accounting for much of that trend is Ukraine's resurgent epidemic and the ever-growing number of people living with HIV in the Russian Federation.

The single most important preventive measure for people is to know their own HIV status. If they are uninfected, this knowledge helps them protect themselves; if they are infected, the information helps them to protect their partners.

Testing also provides the entry point to appropriate treatment and care for individuals who test positive.

HIV/AIDS being an incurable and fatal disease, many people believe that knowledge of the disease itself will stimulate people to protect themselves from it. Hence, this

study is focused on the knowledge of adolescents studying at higher secondary schools regarding this issue.

Researchers and analysts also pointed out that to be effective, prevention efforts must address the contextual factors of people's real lives—such as poverty, discrimination, illicit drug use in the community, the ratio of men to women in a given population, and racial segregation—and their influences on sexual behavior (Adimora, 2005).

The worldwide incidence of STI is high and increasing. The situation has worsened considerable with the emergence of HIV epidemic. Although the incidence of some STIs has established in parts of the world, there have been increasing cases in many regions (UNFPA, 2003).

Sub-Saharan Africa remains by far the worst affected region, with 25.4 million people living with HIV at the end of 2008, compared to 24.4 million in 2006. Just under two thirds (64%) of all people living with HIV are in sub-Saharan Africa, as are more than three quarters (76%) of all women living with HIV (UNAIDS, 2009)

Studies have found a connection between higher AIDS incidence and lower income. For instance, a study of African American women in North Carolina found that those with HIV infection were more likely than non-infected women to be unemployed; receive public assistance; have had 20 or more lifetime sexual partners; have a lifetime history of genital herpes infection; have used crack or cocaine; or have traded sex for drugs, money or shelter (Charles, 2009).

#### 2.3 HIV/AIDS in Asia

National HIV infection levels in Asia are low compared with some other continents, notably Africa. But the populations of many Asian nations are so large that even low national HIV prevalence means large numbers of people are living with HIV. Latest estimates show some 8.2 million people were living with HIV at the end of 2004, including the 1.2 million people who became newly infected in the past year. AIDS claimed some 640,000 lives in 2008. Among young people 15–24 years of age, 0.3 percent of women and 0.4 percent of men were living with HIV by the end of 2009.

Asia is not just vast but diverse, and HIV epidemics in the region share that diversity, with the nature, pace and severity of epidemics differing across the region. Overall, Asian countries can be divided into several categories; according to the epidemics

they are experiencing. While some countries were hit early (for example, Cambodia, Myanmar and Thailand), others leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among among people at high risk of exposure to HIV, and have golden opportunities to pre-empt serious outbreaks. These countries include Bangladesh, East Timor, Laos, Pakistan, and the Philippines.

China, although moving at a varied pace, HIV has spread to all of China's 31 provinces, autonomous regions and municipalities. In some parts, such as Henan, Anhui, and Shandong, HIV was already spreading a decade ago among rural people who sold blood plasma to supplement their incomes. Elsewhere, the virus has established a more recent but firm presence among injecting drug users and, to a lesser extent, sex workers and their clients. Much of the current spread of HIV in China is also attributable to injecting drug use and paid sex. HIV prevalence among drug injectors was measured at between 18 percent and 56 percent in six cities in the southern provinces of Guangdong and Guangxi in 2008, while in Yunnan province some 21 percent of injectors tested positive for HIV in 2009. Sexual transmission of HIV from injecting drug users to their sex partners looks certain to feature more prominently in China's fast-evolving epidemic. Some 47 percent of surveyed female drug injectors in Sichuan province and 21 percent in neighbouring Yunnan province reported selling sex for money leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among th men in Beijing, conducted in 2008-2009, found that approximately 3 percent of the men were HIV-infected (almost all of whom had been unaware of their serostatus).

India's epidemics are even more diverse than China's. Latest estimates show that about 5.7 million people were living with HIV in India in 2008. Serious epidemics are underway in several states. In Tamil Nadu, HIV prevalence of 50 percent has been found among sex workers, while in each of Andhra Pradesh, Karnataka, Maharashtra and Nagaland, HIV prevalence has crossed the one percent mark among pregnant women. In Manipur, meanwhile, an epidemic driven by injecting drug use has been in full swing for more than a decade and has acquired a firm presence in the wider population. HIV prevalence measured at antenatal clinics in the Manipur cities of Imphal and Churachand has risen from below 1 percent to over 5 percent, with many of the women testing positive appearing to be the sex partners of male drug injectors. Several factors look set to sustain Manipur's epidemic, including the large proportion (about 20%) of female sex workers who inject drugs and the young ages of many injectors (40% of male injectors surveyed in 2008 were under 25 years of age)

There are signs that injecting drug use is playing a bigger role in India's epidemics than previously thought. Most surveillance sites for injecting drug users are in the northern states where injecting is common behaviour, but other parts of the country have yielded equally troubling evidence. In the southern city of Chennai, for example, 26 percent of drug injectors were already infected with HIV when a sentinel site was established there in 2008; by 2009, 64 percent were infected. In most cities where injecting drug users have been surveyed, at least one quarter of them and, in Chennai, 46 percent said they lived with a wife or regular sex partner. This has probably contributed to the fact that Chennai also has among the highest HIV-prevalence rates among pregnant women in the country. It is likely that partners who injected drugs infected many of those women (Fleming and Wasserheit, 2009).

Most new HIV infections in Asia occur when men buy sex and large numbers of men do so. Household-based surveys in a number of Asian countries suggest that between 5 percent and 10 percent of men buy sex, which makes commercial sex a large and lucrative industry in Asia. Many sex workers especially very young women from rural areas are either coerced into the industry or join it under duress, because they lack other employment opportunities. Nepal have reported earning around 2200 rupees or US\$ 30 a week, six times the average wage income (UNAIDS, 2009).

#### 2.4 HIV/AIDS in Nepal

HIV/AIDS and sexually transmitted infection now a day are emerging as a major threat Nepalese context. Since the first case of AIDS detected in 1988 in Nepal, the number of cases over the years have been gradually increasing. For example, the cumulative HIV/AIDS situation in 1996/97 was recorded to be 790 cases of which 61.6 percent were females. This situation in 1998/99 has sharply increased to 1108 cases, an increase of 1.4 times as HIV positive in 1996/97, 152 cases recorded have had AIDS. This figure for 1997/98 was recorded at 25 cases. Additionally, 62 of the 152 AIDS patients and 108 of the 225 AIDS patients were also recorded have had died. This suggests that death due to AIDS in 1997/98 was 1.5 times greater as compared to that of 1996/97 (Pant, 2000).

HIV/AIDS has been increasing since the first case was detected in 1988 in Nepal. Only three male and one female were detected of HIV infection for the year when it was diagnosed at first in the year 1988. Since then the incidence rate is increasing each year.

Heterosexual transmission is the primary mode of HIV transmission, which correlates with unsafe sex. The national data as of February 28, 2009 reveals 6755 individuals having HIV of which 1656 ha leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among care for STIs and injecting drug users (IDUs) were reported having high rate of HIV. Remarkably, the number of housewives with HIV infection is increasing. It is thought that HIV might have passed to them through their husbands who might have exposed to high-risk behaviour of HIV transmission. Given the high rate of HIV amongst the populations with high-risk behaviors, Nepal ranks in 'concentrated epidemic' countries (NCASC, 2009).

Unsafe injecting drug use is the wellspring of Nepal's epidemic, too. Use of nonsterile injecting equipment is widespread and accounts for the high HIV prevalence 22 percent to 68 percent across the country in 2002 among male injectors, many of them younger than 25. Younger injectors appear more likely to report risky practices in parts of Nepal; in the east, for example, injectors under 25 were three times as likely to report using non-sterile equipment at last injection compared with older injectors. Nepal's epidemic also highlights the potential links between HIV infection and mobility. Injecting drug users from cities with low prevalence, but who had injected drugs elsewhere, have been found to be two to four times more likely to have acquired HIV than those who had remained in their home cities. Half of the sex workers surveyed in central Nepal and who said they had worked in Mumbai (India) were HIV-infected, compared with 1.2 percent of those who had never been to India (UNAIDS, 2009).

The major mode of transmission of HIV in the country is heterosexual. It has been estimated that there are 120,000 people living with HIV/AIDS in Nepal at the end of 2009. There were an estimated 3000 AIDS deaths in 2009 in Nepal. These estimated figures are higher than the reported figures for a variety of reasons, mainly the lack of an adequate surveillance system. However, the recent estimation as per the prevalence rate could reach more than seventy thousand infected cases (MOH, 2010).

#### 2.5 Global Situation of STIs

There are a number of pressing sexually related public health and social policy issues facing countries around the world today. According to the United States Centers for Disease Control and Prevention, in the United States a teen becomes pregnant every 30 seconds, and every 13 seconds a teen contract a STI. For most people in the United States, engaging in heterosexu leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among erility if she is not treated. STIs should be diagnosed and treated by qualified medical practitioners, and all sexual partners must be treated in order to avoid reinfection (NCASC, 2008).

STIs continue to be a major and growing public health problem in many parts of the world, especially in developing countries with an estimated annual incidence of 340 million curable STIs in 2009.

The epidemic of STIs in the developing countries is characterized by high incidence and prevalence, high rate of complications, increasing problem of antimicrobial resistance due to inadequate treatment and increasing risk of transmission and acquiring HIV infection. The increasing urbanization and industrialization in developing world leads to migration of young men and women in search of employment in urban areas and even in other countries. This growing phenomenon often results in increased unsafe commercial sexual activities that help to the spread of STIs and HIV epidemic (Fleming and Wasserheit, 2009).

Genital lesions, such as those caused by herpes, increase one's chance of contracting HIV three- to five-fold. And a person who is co-infected with HIV and another STI is more likely to spread HIV to others (Fleming and Wasserheit, 2009).

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

#### 2.6 The Situation of STIs in Nepal

Regarding the symptoms of leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among ectively. Similarly, about eight percent of the CSWs in the project area and five percent in the control area also had experienced purulent discharge (New ERA, 1995).

A study on HIV/Syphilis prevalence in pregnant women in four urban areas of Nepal showed that the prevalence rate of syphilis in the study population suggests a marked risk for pregnant women of contracting HIV infection for at least two reasons: the modes of transmission of HIV and other STIs are similar, the important role of STIs in facilitating the transmission of HIV (Bista, 1997).

Nepal being a landlocked and one of the least developing countries in the world with immense problem of poverty, illiteracy, ignorance and number of young unemployed population, has all the predisposing factors of increasing proportion of population being at the risk of STI and HIV.

Nationwide STI data are scarce and non-specific. According to the annual health report of Ministry of Health, a total of 16528 RTI/STI/HIV cases were reported out of 6067376 OPD cases, which was 0.19 percent of total OPD cases in 2008-2009. The percentages of RTI/STI/HIV cases of total OPD cases were 0.22 in 2005/2006, 0.22 in 2006/2007 and 0.37 in 2007/2008 (MOH, 2009).

STI prevalence among sex workers (SWs) is notably higher. Data from Pokhara, Chitwan and *Tarai* revealed that syphilis prevalence among SWs was about 18.8 percent in *tarai*, 19 percent in leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among STI patients, 9 percent in female SWs of *tarai* and 21 percent in SWs of Pokhara.

Similarly among family planning attendees, Trichomoniasis was 6 percent, Chlamydia was 1.7 percent, Gonorrhoea was 1.7 percent, active syphilis was 1.0% and HIV was 0.3 percent as per results of study conducted in 2008 (NCASC, 2009)

There were a total of 17429 patients of sexually transmitted disease in 2002. The highest case was found in *Tarai* (9418) followed by Hill (6935) and Mountain (1076) (MOH, 2010).

#### 2.7 Knowledge on STIs and HIV/ AIDS

Twenty percent among adolescents and about 26 percent among youth reported that they know how to avoid AIDS. The knowledge of protecting one for deadly sexually transmitted disease among the adolescent and youths shown by the data is far from satisfactory because these groups of population are considered to be highly vulnerable to AIDS exposure (Pant, 2000).

A study by FPAN reveals that 85 percent of respondent have knowledge of STIs. Two thirds of respondents reported HIV/AIDS as the main type of STIs, followed by syphilis (20%) and gonorrhea (13%). Fifty two percent of the respondents said electronic media as main source of information; followed by school (19%), print media (12%), friends and relatives (10%) and health workers (7%). The role of parents as source of information on STIs is negligible in the study area. The overwhelming majority (94%) has heard of HIV/AIDS. Ninety three percent of the respondents perceive unsafe sexual intercourse as one of the important ways of HIV/AIDS transmission, followed by unsafe blood transfusion (78%) and sharing injection (74%) (Pathak and Subedi, 2002).

A KAP survey among 1400 young people in seven different districts of Nepal shows that Nepalese are highly aware of the HIV risk, but that this awareness does not necessarily translate into safe sexual behavior. Although an overwhelming majority (92%) of teenagers have heard about HIV/AIDS, only 74 percent of teenagers knew that they should use condoms leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among ntercourse.

Two notions "too young to be pregnant" and "unprotected intercourse just once could not lead to conception or STD transmission" are factors that lead to risky behaviour among adolescents (Gubhaju, 2002).

Knowledge about STIs is generally poor among young people. A study among young sex workers in Cambodia found that their limited knowledge was based on a mixture of facts, myths and rumors and was not always correct. An unfortunate misconception among many young people, including in Kampala, Uganda, and Ho Chi Minh City, Viet Nam, is that STI symptoms will go away over time or that good personal hygiene will prevent STIs (and HIV). One in five female university students in Ilorin, Nigeria, 30 per cent of youth in parts of Chile and half of young men and women in sites in Guatemala also hold this belief (UNFPA, 2003).

In Nepal, knowledge of AIDS is much higher among men (72%) than among women (50%). Although women's knowledge of AIDS is lower than men's, the percentage of women who have heard of AIDS has nearly doubled in the last five years from 27 percent in 1996. Two fifths of women and two-thirds of men believe that there is a way to avoid HIV/AIDS. As level of education increases, respondents knowledge of AIDS also increases: knowledge of AIDS is almost universal among respondents who have passed their SLC.

Fifty-eight percent of women and nearly one-third (32%) of men have either not heard about AIDS or do not know whether the disease can be avoided. Three percent of women and 2 percent of men think that there is no way to avoid HIV/AIDS.

One- third of women and three-fifths of men agree that using condoms is a way to avoid HIV/AIDS, while 37 percent of women and 54 percent of men mentioned limiting the number of sexual partners.

Men are two and half times (51%) more likely than women (21%) to spontaneously say that AIDS can be avoided by using condoms. Thirteen percent of women and 28 percent of men stated that the disease could be avoided by limiting the number of sexual partners, while 18 percent of women and 21 percent of men believe that avoiding sex with a person who has many partners can prevent HIV/AIDS. The percentage of respondents who mentioned avoiding sex with prostitutes was much higher among males (25%) than among females (3%).

The response to tackle the pandemic also has to be multi-sectoral, combining the efforts of government and civil society, including the private sector. Governments need to integrate HIV/AIDS concerns into national development planning, sectoral plans and poverty reduction strategies. They also need to pay more attention to health, nutrition, education, gender equality and social justice. All level of government must be mobilized (Hak-Su, 2004).

Three programmatically important ways to avoid the transmission of HIV/AIDS are abstaining from sex, using condoms, and limiting the number of sexual partners. Women are much less knowledgeable about programmatically important ways to avoid HIV/AIDS than men. Nearly twice as many women (62%) as men (33%) are not aware of any programmatically important ways to avoid the disease. Four times as may men as women mentioned one way (20% and 5 % respectively) and one in three

women and nearly one in two men mentioned two or three ways to avoid HIV/AIDS. Younger respondents, those residing in urban areas, respondents living in the hill zone, and those living in the western development region are more aware of programmatically important ways of HIV/AIDS prevention than their counterparts. The relationship between respondent's level of education and AIDS prevention knowledge is very strong. Eighty-seven percent of women with and SLC and above knew two or three programmatically important ways of HIV/AIDS prevention, compared with only 19 percent of women with no education. A similar pattern is observed for men (NDHS, 2006).

The incidence of HIV/AIDS among adolescents is limited but increasing particularly among girls. For example in Nepal, adolescents constitute about 16 percent of the HIV/AIDS cases with adolescents girls representing 72 percent of the cases. Knowledge of HIV/AIDS is limited among adolescents: for example, only 19-24 percent of married adolescent girls are reported to have ever heard of HIV/ADIS in Bangladesh and Nepal (UNFPA, 2009).

A study on HIV/AIDS knowledge, sex and condoms in first grade high school adolescents in Gombe State, North East Nigeria reports that 676(80%) have heard of HIV/AIDS through Radio 261(31%), health worker 245(29%) and friends118 (14%). Six hundred and sixteen (73%) have heard of AIDS related death and included school mate 49(8%), brother 55(9%), sister 49(8%). Six hundred and eight (72%) of students have discussed AIDS with a f leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among (75%), and mother to child 625(74%). Three hundred and four (36%) have ever had sexual intercourse, 63(21%) made Sexual debut at 13years 63(21%) at 15years, 52(17%) at 18years (UNAIDS, 2010).

Inaccessibility to adequate information and education on adolescent sexual and reproductive health is still a major problem among youths in Nigeria and this is more worrisome with the issue of HIV/AIDS (UNAIDS, 2010).

The adolescent are at greater risk of RTI/STI/HIV infection due to ignorance, risky behaviour and lack of information and services, menstrual hygiene (Kabir, 2003).

### **2.8 Chapter Summary**

This chapter basically focused on background of the HIV/AIDS, HIV/AIDS in the world, HIV/AIDS in the Asia, HIV/AIDS in Nepal, knowledge of STIs and HIV/AIDS and global situation of STIs. From review of literature it was found that in Nepal, knowledge of AIDS is much higher among men (72%) than among women (50%). Although women's knowledge of AIDS is lower than men's, the percentage of women who have heard of AIDS has nearly doubled in the last five years from 27 percent in 1996. Two fifths of women and two-thirds of men believe that there is a way to avoid HIV/AIDS. As level of education increases, respondents knowledge of AIDS also increases: knowledge of AIDS is almost universal among respondents who have passed their SLC.

A study on HIV/AIDS knowledge, sex and condoms in first grade high school adolescents in Gombe State, North East Nigeria reports that 676(80%) have heard of HIV/AIDS through Radio 261(31%), health worker 245(29%) and friends118 (14%). Six hundred and sixteen (73%) have heard of AIDS related death and included school mate 49(8%), brother 55(9%), sister 49(8%). Six hundred and eight (72%) of students have discussed AIDS with a friend (170) 28%, schoolmate 157 (26%). Six hundred and seventy six (80%) have received sex education from one or both parent. Three hundred and four (36%) have ever had sexual intercourse, 63(21%) made Sexual debut at 13years 63(21%) at 15years, 52 (17%) at 18years.

The proposed study done at selected higher secondary schools of Chitwan district, significantly differs in its objectives and methods from those of aforementioned studies in the ground that it basically concerns on the knowledge and attitude regarding STIs, HIV and AIDS. Similarly, more studies and researches are carried out on STIs, HIV and AIDS on global basis. Thus, to some extent, to fulfill this research gap, the researcher tried to examine the knowledge and attitude towards STIs, HIV and AIDS. The researcher believes that this study will be proved to be a significant and valuable literary asset on this ground.

# CHAPTER THREE RESEARCH METHODOLOGY

This study has been made to assess the current stage on knowledge and attitude towards STIs, HIV and AIDS. This section describes the selection of study area and population, sampling techniques and selection of respondents, construction of tools, pilot study, nature of data and method of data collection, data processing techniques and methods of data analysis and interpretation.

## 3.1 Selection of Study Area and Population

Chitwan district has diverse geographical and socio-cultural nature. The total population of Chitwan District enumerated in 2001 is 6,71,846. Among them 3,60,103 are male and 3,11,743 are female. There are 20 higher secondary schools in Chitwan District. Out of these 20 schools, four of them have enrolled students in both grade eleven and twelve. This study has been carried out in four public higher secondary schools with both grade eleven and twelve and one with grade eleven only. Likewise, the schools are selected in different locations so that they represent to the whole District. Three of the schools are located in urban area and another one is located in rural area.

## 3.2 Sampling Technique and Selection of Respondents

According to the review of school enrollment registers, there were a total of 659 students in selected four public higher secondary schools. Out of this universe, researcher has taken 152 samples, which is approximately 23 percent of the total population. The population size in the selected four schools and the sample size are listed in table 3.1.

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S.N.	Name of School	Population	Sample
1	Shree Bal Kumari Higher Secondary School, Narayangarh	145	33
2	Shree Laxmi Higher Secondary School, Lanku	339	77
3	Shree Janajyoti PDMalla Higher Secondary School, Amritnagar	139	32
4	Shree Bhimnagar Higher Secondary School, Bhimnagar	36	10
	Total	659	152

### Table 3.1: Distribution of Sampling Population

The total samples of 152 were selected on the basis of proportionate stratified random sampling method for four schools at first stage. It was aimed to take 150 samples

however two more questionnaires were distributed in Shree Bal Kumari Higher Secondary Schools for the special request of students. It is worth to note that the enrollment of girls and boys are almost similar in the selected schools i.e. 339 and 318 for boys and girls respectively. Hence, at second stage, boys and girls respondents were selected on the basis of propotionate stratified random sampling method.

Systematic random sampling was applied to select the respondents. For this purpose, the sampling frame was prepared separately for boys and girls on the basis of attendance register at the survey date.

### **3.3 Construction of Tools**

The semi-structured questionnaire was designed for the quantitative data collection. Most of the questions were pre-coded and some open questions had also been included in the questionnaire.

The study questionnaire included the socio-economic and demographic characteristics of the respondents. The whole set of questionnaire was divided into four aspects:

- 1. Individual and Household Characteristics of respondents
- 2. Knowledge on STIs and HIV/AIDS
- 3. Attitudes towards infected people
- 4. Attitudes on role of different authorities to decrease the incidence.

#### 3.3.1 Pilot Study

The questionnaire was administered for pilot study in 15 students in urban school (Nepal Secondary School, Ratnanagar) and 15 students in rural school (Jhhuwani Ma. Vi., Jhhuwani) respectively for required modification to make it more understandable, simple, valid and socially acceptable. Pilot study was conducted with the help of teacher who are currently teaching at respective schools. After piloting, the questionnaire is made final with sitting together with the thesis supervisor.

#### 3.4 Nature of Data and Method of Data Collection

Study uses primary source of data. Literature review is based on secondary source whereas data were colleted through primary source. Basically, the study was conducted on the basis of quantitative technique approach, however qualitative technique was also applied as a supplement of quantitative method.

The quantitative data were collected using self-administered questionnaire. The study was focused on late adolescent age group of 15 to 19. Before administering questionnaire, students were pre-informed by researcher himself in the orientation leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among about the secrecy of the information they provide. The selected students were asked to go to the ground to give their personal and private information confidently.

### **3.5 Data Processing Techniques**

The filled questionnaires were edited thoroughly. After all questionnaires were edited, a codebook was prepared for the semi-open and open questions. The questionnaires were coded according to the codebook. All the questionnaires were edited to see if there are mistakes in skipping as well as other errors. After completing the manual edition, the master table in SPSS was created with the help of professional and all data were entered. When the data entry was completed then they were edited to find out the entry errors known as data cleaning.

#### 3.6 Data Analysis and Interpretation Techniques

The data analysis is simply based on descriptive type of analysis. The frequency table, cross tabulation and other necessary information were extracted from edited data in SPSS. On the basis of this information, the analysis and interpretation have been made. The interpretation was made according to the researcher's observation and literature review.

### 3.7 Operational Definition of the Variables

#### Age of Respondents

The completed age of respondents. The study is limited to the adolescent of age group 15 to 19. Two boxes have been provided to enter the two digits age in questionnaire. So all the respondents are within this age limit.

### Sex of Respondents

The respondents can be categorized either as male or female, which is nominal scale.

## **Caste/Ethnicity of Respondents**

Five caste/ethnic groups were included in questionnaire, however, one more caste was found so all respondents have fallen into six caste/ethnic groups.

## **Place of Residence**

The respondent's current place of residence, whether they reside into municipality (urban) or within VDC (rural).

## **Religion of Respondent**

The religion of respondents has been categorized into two religions whether they are Hindu or Buddhist. The information about religion was gathered in pre study of schools. It was informed that there are some Muslim students in Tribhuvan higher secondary school. However, they did not appear in systematic sampling so the respondents were included in Buddhist and Hindu groups.

## **Marital Status**

Two categories for marital status are included in the questionnaire. Other categories such as divorced, separated were not included assuming its inapplicability.

# **Type of Previous School**

The type of previous school denotes whether the respondents studied in boarding school (private) or they studied in government school before S.L.C. Only two grades nine and ten were considered for the reference.

### **Family Members**

The number of persons living together in a same household. Two boxes are provided to enter the number of family members.

### **Parents' Occupation**

The current major occupation of their parents. The occupation of father and mother were asked separately and all respondent reported their parent's occupation within the given category.

#### **Parent's Education**

The highest level of educational attainment of respondent's father and mother. Respondent could report their parents' education within six categories. Knowledge on leave home, leave school and get married. The main objective of the study is to reflect the picture of knowledge and attitudes of higher secondary school students regarding HIV/AIDS and STIs in selected schools in Chitwan District. The specific objectives of the study are: a) to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, b) to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among symptoms respectively.

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

The major modes of transmission of STIs were precoded. There were four major modes of transmission and some more modes were found in others category after data collection. The respondent is categorized as high, middle and low category for knowledge on modes of transmission of STIs if he/she reports more than three, two to three and less than two modes respectively.

#### **Knowledge on Preventive Measures of STIs**

The respondent is categorized as high, middle and low category for knowledge on preventive measures of STIs if he/she reports more than four, two to four and less than two modes respectively.

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

The respondent is categorized as high, middle and low category for knowledge on modes of transmission of HIV/AIDS if he/she reports more than three, two to three and less than two modes respectively. Beside this various statements were given and the respondents were asked to state whether true or false.

#### 3.8 Chapter Summary

This chapter shows the research methodology. This chapter explained selection of study area, sampling technique and selection of respondents, construction of tools, nature and method of data collection, data processing technique, data analysis and interpretation technique and operational definition of the variables.

# **CHAPTER FOUR**

## ANALYSIS AND INTERPRETATION OF DATA

#### 4.1 Individual Characteristics of the Respondents

Several variables were included in questionnaire to examine the socio economic characteristics of respondents as well as to find out the relationship between dependent and independent variables. The variables used to collect individual background characteristics have been described within this subsection.

#### 4.1.1 Age-Sex Composition

The respondents were selected from late adolescent age group of 15 to 19. Table 2 shows the distribution of respondents by age and sex.

A go	Ma	ale	Fei	nale	Total	
Age	Number	Per cent	Number	Percent	Number	Per cent
15	1	1.3	-	-	1	0.7
16	8	10.4	14	18.7	22	14.5
17	25	32.5	17	17 22.7		27.6
18	24	31.2	27	36.0	51	33.6
19	19	24.7	17	22.7	36	23.7
Total	77	100.0	75 100.0		152	100.0

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

Source: Field Survey, 2010

Table 4.1 shows that more than one-third (33.6%) respondents are of 18 years old followed by 17 years old (27.6%). Only one male of 15 years has been found in this study. Table 1 shows that there are dissimilarities in age by sex. The female dominates in ages 16 and 18 while number of male respondents is higher in rest of other ages.

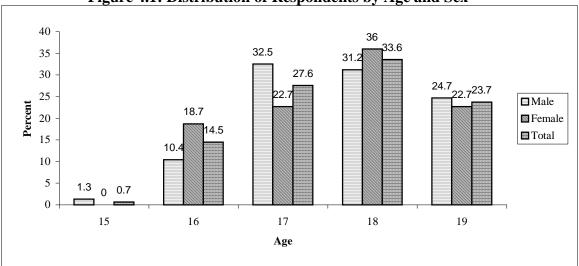


Figure 4.1: Distribution of Respondents by Age and Sex

Source: Table 4.1

#### 4.1.2 Marital Status

Marital status of the respondents can be considered as one of the key factors for knowledge and attitudes on STIs and HIV/AIDS. As seen in table 3, about one in every ten students in higher secondary school are married. More girls (5.9%) than boys (3.9%) are married. The data show that girls get married earlier than boys.

Table 4.2: Distribution of Respondents by Marital Status and Sex

Marital Status	M	ale	Fer	nale	Total	
Iviai itai Status	Number	Per cent	Number	Per cent	Number	Per cent
Married	6	3.9	9	5.9	15	9.9
Unmarried	71	46.7	66	43.4	137	90.1
Total	77	50.7	75	49.3	152	100.00

Source: Field Survey, 2010

Figure 4.2: Distribution of Respondents by Marital Status and Sex

#### 4.1.3 Caste/Ethnicity

Table 4.3 gives the information about the caste and ethnicity of the respondents. The total respondents fall into six caste/ethnic groups. Among them the highest number of respondents are Brahmin (40.1%) followed by Chhetri (21.1%), Tamang (19.1%), Newar (14.5%), Magar (3.9%) and Gurung (1.3%). This can be attributed that the enrollment of minority people in higher secondary level is low.

Caste/Ethnicity	Number	Percent
Brahmin	61	40.1
Chhetri	32	21.1
Tamang	29	19.1
Gurung	2	1.3
Newar	22	14.5
Magar	6	3.9
Total	152	100.0

 Table 4.3: Distribution of Respondents by Caste/Ethnicity

Source: Field Survey, 2010

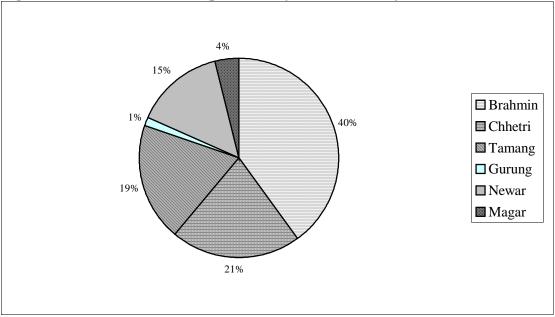


Figure 4.3: Distribution of Respondents by Caste/Ethnicity

Source: Table 4.3

#### 4.1.4 Religion

Table 4.4 shows that the majority of the students studying at higher secondary schools are Hindu (82.9%). The remaining (17.1%) students fall under the Buddhism. There were two Muslim students at Laxmi Higher Secondary School; however, they did not appear in the sample.

Religion	Number	Percent		
Hindu	126	82.9		
Buddhist	26	17.1		
Total	152	100.0		

 Table 4.4 Distribution of Respondents by Religion

# 4.1.5 Type of Previous School

The question was asked to the respondents whether they have studied in government or boarding school in their S.L.C. level. Table 6 shows the distribution of respondents by the type of their previous school.

Table 4.5: Distribution of Respondents by Type of School Previously Attended

Number	Percent
61	40.1
32	21.1
152	100.0
	61 32

Source: Field Survey, 2010

According to table 4.5, only 6.6 per cent of the respondents have studied in boarding school in the past whereas the overwhelming portions of the students are from government schools.

# 4.1.6 Place of Residence

All the respondents were asked their current place of residence. According to table 7, more than three in every five students (60.5%) live in rural area and remaining (39.5%) live in urban area.

Place of Residence	Number	Percent
Urban	61	40.1
Rural	32	21.1
Total	152	100.0

 Table 4.6: Distribution of Respondents by Place of Residence

Source: Field Survey, 2010

# 4.2 Household Characteristics

In this subsection the household background of the respondents is aimed to collect. Household characteristics include parents' education, parent's occupation and family size. The questions regarding these household characteristics were included in the questionnaire.

#### **4.2.1 Educational Level of Parents**

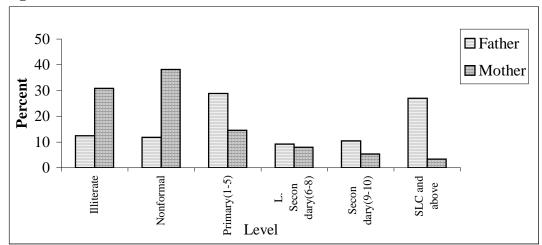
The educational attainment of the parent's is an important socio- economic factor. This factor can play the vital role for the level of knowledge of their children. In questionnaire the of father and mother were asked separately. The result combined for both of the parents is shown in table 4.7.

Level	Fat	her	Mot	her
Level	Number	Percent	Number	Percent
Illiterate	61	40.1	61	40.1
Nonformal	32	21.1	32	21.1
Primary(1-5)	29	19.1	29	19.1
L. Secondary(6-8)	2	1.3	2	1.3
Secondary(9-10)	22	14.5	22	14.5
SLC and above	6	3.9	6	3.9
Total	152	100.0	152	100.0

Table 4.7: Distribution of Respondents by Parent's Educational Attainment

Source: Field Survey, 2010

From table 4.7, it is seen that nearly 31 percent of the respondent reported that their mothers are illiterate which is about 13 percent for father. There is higher proportion



**Figure 4.4: Parent's Educational Attainment** 

Source: Table 4.7

#### **4.2.2 Parent's Occupation**

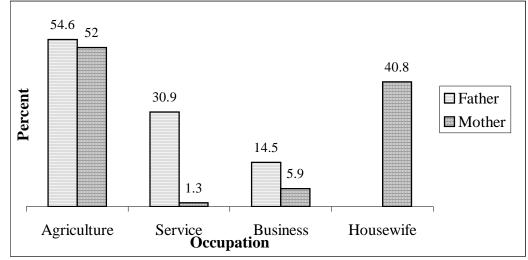
The occupation of the parents can also be taken as the important variables that determine the socio-economic status of the household and also affects the knowledge on STIs and HIV/AIDS. Table 4.8 examines the occupation of father and mother of the respondents.

Occupation	Fat	her	Mother		
Occupation	Number	Percent	Number	Per cent	
Agriculture	83	54.6	79	52.0	
Service	47	30.9	2	1.3	
Business	22	14.5	9	5.9	
Housewife	-	-	62	40.8	
Total	152	100.0 152		100.0	

Table 4.8: Distribution of Respondents by Parent's Occupation

As stated in table 4.8, most of the respondent's parents are dependent on agriculture. About 55 percent fathers are involved in agriculture followed by 31 percent in service sector.





Source: Table 4.8

# 4.2.3 Family Size

Small family size is an indicator of healthy and happy family. There is more possibility related topics and result is presented in table 10. Later on, the number of family members has been recoded to three categories only.

Family Size	Number	Per cent
Less than 5	83	54.6
5-10	47	30.9
More than 10	22	14.5
Total	152	100.0

Table4.9: Distribution of Respondents by Family Size

Source: Field Survey, 2010

Table 4.9 shows that nearly four in every five respondents (78.3%) have the family size of five to ten persons. The percent of respondents that fall in the family size of

less than five members is more than 14 and the respondents who have family size of more than ten constitute about 7 percent.

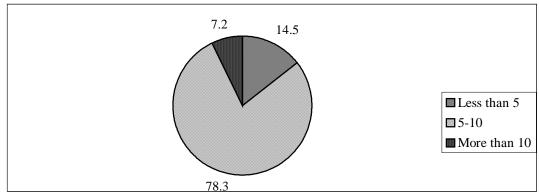


Figure 4.6: Distribution of Respondents by Family Size

Source: Table 4.9

## 4.2.4 Household Facility

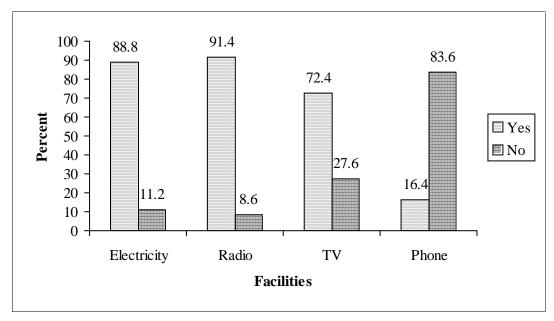
The respondents were asked to specify whether they have the household facilities such as electr respondents by availability of the household facilities.

Facilities	Y	es	Ň	No		tal
racinties	Number	Per cent	Number	Per cent	Number	Per cent
Electricity	83	54.6	79	52.0	83	100.0
Radio	47	30.9	2	1.3	47	100.0
TV	22	14.5	9	5.9	22	100.0
Phone	-	-	62	40.8	-	100.0

Table 4.10: Distribution of Respondents by Facility at Home

From table 4.10, it is seen that nearly 89 percent of respondents have electricity at their household ancent have the telephone facility. Another important point to note here that the households have radio even though they have not electricity at their home.





Source: Table 4.10

Similarly, the information on the number of facilities available at home has been extracted and the result is shown in table 4.11.

Number of Facility	Number	Per cent
None	83	54.6
Only one	47	30.9
Any Two	22	14.5
Any Three	-	-
All four	83	54.6
Fotal	152	100.0

Table 4.11: Respondents by the Number of Facilities Available at Home

Table 4.11 states that only 24 households (15.8%) have all of above mentioned four facilities whereas 2 percent households have not any facilities. Likewise the households having only one, any two and any three are about 11 percent, 20 percent and 52 percent respectively.

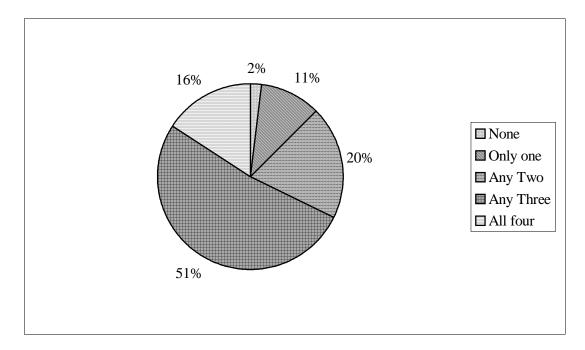


Figure 4.7: Respondents by the Number of Facilities Available at Home

Source: Table 4.11

#### 4.3 Knowledge on STIs

The knowledge on sexually transmitted infection is measured in terms of several variables. First of all it is examined whether thedge on modes of transmission and knowledge on preventive measures have been examined. The knowledge is

categorized into high, medium and low based on the number of options respondent reported.

## 4.3.1 Heard of STIs

The foremost important variables to assess the 9.3%) have heard about sexually transmitted infection. Only one female respondent reported that she has not heard about STIs.

Tuble 1121 Distribution of Respondences by ficuring of 5115 ficeof uning to ber							
Heard of STIs	Male		Female		Total		
	Number	%	Number	%	Number	%	
Yes	83	54.6	79	52.0	83	54.6	
No	47	30.9	2	1.3	47	30.9	
Total	77	100.0	75	100.0	152	100.0	

Table 4.12: Distribution of Respondents by Hearing of STIs According to Sex

Source: Field Survey, 2010

The respondents who have heard about sexually transmitted infection were further asked to state which STIs they have heard. The table 4.13 gives the distribution of responding reporting different STIs.

Table 4.13: Distribution of Respondents by Type of STIs

STI Types	Number	Per cent
Gonorrhea	83	54.6
Syphilis	47	30.9
HIV/AIDS	22	14.5
Others	-	-

Source: Field Survey, 2010

As stated in table 4.13, the HIV/AIDS is very common type of sexually transmitted infectiention HIV/AIDS under STIs. The next common name of STI is Gonorrhea which is heard by nearly 62 percent and Syphilis by 41 percent. Some other diseases such as Trichonomonaisis, Veneral Wart, Chanchroid are reported by only about 9 percent of the respondents.

### 4.3.2 Knowledge on Symptoms of STIs

It is important to ask the symptoms of sexually transmitted infection to evaluate the knmptoms of STI or not. Table 4.14 gives the distribution of respondent by knowledge on symptoms of STI.

Knowledge	Number	Per cent
Yes	83	54.6
No	47	30.9
Total	22	14.5

 Table 4.14: Distribution of Respondents by Knowledge on Symptoms of STIs

Source: Field Survey, 2010 Note: The Percentage is taken to 152

According to table 4.14, 146 respondents (96.1%) know the symptoms of STIs. The five respondents (3.9%) stated that they do not know the symptoms of sexually transmitted infection.

The respondents who know the symptoms of sexually transmitted infection were asked to mention the symptoms. According to table 16, 128 respondents (84.2%) reported foul white discharge from vagina (33.6%), bleeding other than menstruation period (26.3%) as the symptoms of STIs. Some respondents (5.3%) reported change in weight as symptoms of sexually transmitted infection.

Symptoms	Number	Per cent
Foul white discharge from vagina	83	54.6
Lower abdominal pain during intercourse	47	30.9
Bleeding other than menstruation period	22	14.5
Sores/Abrasion around vagina, itching	-	-
Drop of pus from Penis	83	54.6
Change in weight	47	30.9

 Table 4.15: Distribution of Respondents by Symptoms of STIs

Source: Field Survey, 2010

Note: Total percentage may exceed hundred due to multiple response Number=152

The points recorded in focus group discussions (FGD) also support the above symptoms of sexually transmitted disease. On the issue of symptoms of sexually transmitted infection both group male and female reported the similar types of symptoms. Male participants in Jana Aadarsha Multiple Campus, Chitwan added that pain in penis during intercourse is also symptoms of STIs. The female group in Jana Aadarsha Multiple: forgetting habit and hair losing.

After all it is aimed to examine the level of knowledge on symptoms of STIs. The level of knowledge is divided into four categories namely no knowledge, low, intermediate and high knowledge. It has also been examined the level of knowledge with various independent variables. Table 4.16 shows the distribution of respondents by level of knowledge on symptoms of STIs according to background characteristics.

~ ,	-	No		J	0				Total	
Background Characteristics		Knowledge Low		JOW	Intermediate		High		I otai	
Characteristics	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Place of residence										
Urban	4	6.7	17	28.3	29	48.3	10	16.7	60	100.0
Rural	2	2.2	23	25.0	54	58.7	13	14.1	92	100.0
Sex										
Male	1	1.3	16	20.8	44	57.1	16	20.8	77	100.0
Female	5	6.7	24	32.0	39	52.0	7	9.3	75	100.0
Previous School	1		1	L	1				1	<u> </u>
Government	4	6.7	17	28.3	29	48.3	10	16.7	60	100.0
Boarding	2	2.2	23	25.0	54	58.7	13	14.1	92	100.0
Education	1								1	
Grade 11	4	6.7	17	28.3	29	48.3	10	16.7	60	100.0
Grade 12	2	2.2	23	25.0	54	58.7	13	14.1	92	100.0
Total	6	3.9	40	26.3	83	54.6	23	15.1	152	100.0
Source: Field Survey 2010		-					-		•	

Table 4.16: Distribution of Respondents According to Level of Knowledge on<br/>Symptoms of STIs by Background Characteristics

Source: Field Survey, 2010

The table 4.16 clearly shows higher percentage of students living in urban (16.7%) than in the rural areas (14.1%) have higher level of knowledge (among those who reported having known of symptoms of STIs). However, the percentage of students having no knowledge is also higher in urban (6.7%) as compared to rural (2.2%).

Males are more knowledgeable than female respondents. According to table 17, only 1.3 percent male of respondents for middle knowledge is more or less same for both sexes.

The respondents of respondents in grade twelve have no knowledge whereas nearly one fourth (23.5%) have high knowledge on symptoms of STIs. The corresponding figure for grade eleven is (5%) and (10.9%) respectively.

#### 4.3.3 Knowledge on Transmission of STIs

In questionnaire, the question to assess the knowledge on transmission of STIs was included. First of all respondents were asked whether they know the mode of transmission of STIs or not. According to table 18, 149 respondents (98%) know the mode of transmission of sexually transmitted infection. Only three respondents reported that they don't know the modes of transmission of STIs.

Knowledge	Number	Per cent
Yes	4	6.7
No	2	2.2
Total	152	100.0

Table 4.17: Distribution of Respondents by Knowledge on Mode of Transmission

Source: Field Survey, 2010

The respondents who have knowledge on mode of transmission of STI were further asked to state the modes. Table 4.18 gives the result.

Ways of Transmission	Number	Per cent
Sexual contact with infected person	4	6.7
Living together with infected person	2	2.2
Infected mothers to fetus	4	6.7
Dirtiness of sexual organ	2	2.2
None use of condom	4	6.7
Blood transfusion	2	2.2
Drug Abuse	4	6.7

 Table 4.18: Distribution of Respondents by Modes of Transmission

Source: Field Survey, 2010

Note: Percent may exceed hundred due to multiple responses Number= 152

According to table 4.18, almost all the respondents (97.4 %) stated the sexual contact with infected person is the most important modes of transmission. Likewise, 121 respondents (79.6%) reported infected mother to fetus or newborn baby as mode of transmission. The proportion that stated dirtiness of sexual organ could cause disease is 23 percent and the respondents who reported living together with infected person is way to transmit the disease is nearly 6 percent. Similarly, only few respondents mentioned some other ways.

The knowledge on transmission of sexually transmitted infection is further categorized into four categories. The respondents who do not know the ways of transmission or who knows but did not mention the distribution of respondents by level of knowledge on transmission of STIs.

		5115 by Duckground Characteristics								
Background Characteristics	No Knowledge		Low Intermediate		High	1	Tot	al		
Characteristics	Number	%	Number	%	Number	%	Number	%	Number	%
Place of residence	e									
Urban	-	-	9	15.0	48	80.0	3	5.0	60	100.0
Rural	2	2.2	11	12.0	75	81.5	4	4.3	92	100.0
Sex	Sex									
Male	1	1.3	11	14.3	59	76.6	6	7.8	77	100.0
Female	1	1.3	9	12.0	64	85.3	1	1.3	75	100.0
Previous School										
Government	-	-	9	15.0	48	80.0	3	5.0	60	100.0
Boarding	2	2.2	11	12.0	75	81.5	4	4.3	92	100.0
Education										
Grade 11	_	-	9	15.0	48	80.0	3	5.0	60	100.0
Grade 12	2	2.2	11	12.0	75	81.5	4	4.3	92	100.0
Total	2	1.3	20	13.2	123	80.9	7	4.6	152	100.0

Table 4.19: Distribution of Respondents by Level of Knowledge onTransmission of STIs by Background Characteristics

Table 4.19 shows that student living in urban area (5%) have comparatively higher level of knowledge than their rural counterparts (4.3%) (among those who reported having known of ways of transmitting STIs).

### 4.3.4 Preventive Measures of STIs

It is essential to check whether the students have knowledge on preventive measures of sexually transmitted infection or not. The question was included and the result indicating acceptance of respondents for each measure is shown below.

Preventive Measures	Number	Per cent
Use of condom during sexual intercourse	-	-
Sex with only one partner	2	2.2
Abstinence during infection period	-	-
Always clean owns sexual organs	2	2.2
Avoid sharing foods, clothes, toilet	-	-

Table 4.20: Distribution of Respondents by Preventive Measures of STIs

Source: Field Survey, 2010

Note: The percentage may exceed hundred due to multiple responses Number=152

As shown in table 4.20, use of condom during sexual intercourse is the most preferred ways of prevention from sexually transmitted infection, which has been reported by 151 respondents (99.3%). Likewise, sex with only one partner is reported by 127 respondents (83.6%), sexual abstinence during infection period by 112 respondents

(73.7%), clean own sexual organs (48.7%), and avoids sharing foods, clothes, toilets etc. (7.9%).

Background Characteristics		No wledge	L	Low Intermedia		nediate	High		Total	
Characteristics	N	%	Ν	%	N	%	N	%	Ν	%
Place of residence										
Urban	-	-	-	-	9	15.0	48	80.0	3	100.0
Rural	1	1.1	2	2.2	11	12.0	75	81.5	4	100.0
Sex						1				
Male	-	-	1	1.3	23	29.9	53	68.8	77	100.0
Female	1	1.3	3	4.0	30	40.0	41	54.7	75	100.0
Previous School										
Government	-	-	3	2.1	48	33.8	91	64.1	142	100.0
Boarding	1	10.0	1	10.0	5	50.0	3	30.0	10	100.0
Education	L				1	L				
Grade 11	-	-	9	15.0	48	80.0	3	5.0	60	100.0
Grade 12	2	2.2	11	12.0	75	81.5	4	4.3	92	100.0
Total	1	0.7	4	2.6	53	34.9	94	61.8	152	100.0

Table 4.21: Distribution of Respondents by Level of Knowledge on Preventionfrom STIs by Background Characteristics

The student currently living in urban area does not fall into no knowledge category. However, the share of respondents falling into high knowledge category is little higher in rural (64.1%) compared to urban area (58.3%). About 38 percent of urban student have intermediate knowledge, which is approximately 33 percent for rural area.

Males are more likely to have knowledge about preventive methods of sexually transmitted disease tspondent has no knowledge about it however all male have knowledge about preventive measures. The respondents in low category are 23 and 30 percent respectively for male and female and nearly 30 and 40 for intermediate knowledge for male and female respectively.

Table 4.21 shows that more than double (64.1%) respondents who had studied in government school have high knowledge compared to boarding school (30%). Half of the respondents of boarding school fall into intermediate knowledge category, which is one-third for government school respondents. There is one respondents of

government school who has no knowledge on preventive methods of sexually transmitted infection.

Students of grade eleven have slightly higher knowledge than grade twelve in the issue of preventiodge and low knowledge category for grade twelve students.

### 4.3.5 Source of Information

Table 4.22 provides the information on the distribution of the respondents who have knowledge on STIs by source of information. The electronic media is the main source of information.

	- 2.2 - 2.2
2 - 2	-
- 2	- 2.2
2	2.2
-	2.2
-	-
2	2.2
-	-
2	2.2
	- 2

 Table 4.22: Distribution of Respondents by Source of Information on STIs

According to the table 4.22, the major source of information for STIs is Radio (90.1%), followed by teacher and TV (78.3%). negligible in the study area. It can also be generalized here that parents do not share much about sexual diseases with their children.

# 4.4 Attitudes towards STIs

After knowing knowledge about sexually transmitted infection it is important to assess the attitudes of respondents toward this disease and the people infected with it. To assess this some information such as suggestion for avoiding STI and suggestion for the infected person were gathered during the field survey.

### 4.4.1 Suggestion for Avoiding STIs

Together with the knowledge, attitudes and perceptions of respondents were also measured. For this the respondents were asked to suggest for avoiding the sexually transmitted disease. The table 4.23 gives the detail information about it.

Suggestions	Number	Per cent
Use of condom during sexual intercourse	-	-
Always clean own sexual organs	2	2.2
Always keep sexual relation with only one partner	-	-
Beware of disease and infected person	2	2.2
Avoid intercourse with infected person	-	-
Acquire the sexual education	2	2.2
Keep the infected person separate in society	-	-
No birth from infected mothers	2	2.2
Do not have bad friends	-	-
Sex in matured age only	2	2.2
Not stated	_	-
Sex in matured age only	2	- 2.2

 Table 4.23: Distribution of Respondents by Suggestions for Avoiding STIs

Note: The percentage may exceed hundred due to multiple responses Number=152

Table 4.23 clearly shows that the main suggestion, which is given by majority of respondents, is to use condom during sexual intercour 11 respondents' view sexual education should be acquired to prevent from this disease. 8 respondents have not mentioned any preventive measures.

### 4.4.2 Suggestions for Infected Persons

In the process of assessing the attitudes towards infected people it is worth to ask them the suggestions they want to give to the infected person. The question was asked to collect this information and the result is listed in the table 4.24.

Suggestions	Number	Per cent
Go for treatment	-	-
Use condom or avoid sex	2	2.2
Do not afraid with the disease	-	-
Make aware to others	2	2.2
Do not give birth	-	-
Counseling with health personnel	2	2.2
Take medicine Regularly	-	-
Keep sexual organs clean	2	2.2
Not Stated	14	9.2

Source: Field Survey, 2010

Note: The percentage may exceed hundred due to multiple responses Number=152

According to the table 4.24, the highest number of respondents (55) reported that they would suggest infected person to avoid sex or to use con suggested by 45 respondents (29.6%). There are other suggestions like to keep sexual organs clean by about 11 percent, regular counseling with health personnel by about 7 percent and to take medicine regularly by nearly 5 percent. Some respondents (14) did not state any suggestion to the infected person.

#### 4.5 Had any STIs

At the field survey it was aimed to know if there are some students who have had any sexually transmitted infection in the past and the question was administered. To the response of this question only one male reported that he had sexually transmitted infection in the past. While responding the supplement question, which aimed to know the name of STI he did not, mentioned the name of STI.

Occurrence	Μ	ale	Female		Female		Total	
Occurrence	Number	Percent	Number	Per cent	Number	Per cent		
Yes	2	1.3	-	-	2	0.7		
No	76	98.7	74	100.0	150	99.3		
Total	78	100.0	74	100.0	152	100.0		

 Table 4.25: Distribution of Respondents by Occurrence of STIs

Source: Field Survey, 2010

### 4.6 Knowledge on HIV/AIDS

In this study, knowledge on HIV/AIDS has been assessed through various questions. First of all very common question "have your ever heard about HIV/AIDS?" is given in the questionnaire. ce between HIV and AIDS, preventive measures ways of transmitting, treatment are used further to analyze the knowledge on HIV/AIDS.

#### 4.6.1 Heard of HIV/AIDS

To access the knowledge on HIV/AIDS, respondents were asked whether they had heard about HIV/AIDS or not. All of the respondents reported that they have heard about HIV/AIDS.

### 4.6.2 Knowledge on Full form of HIV

The respondents were asked if they know the full form of HIV. The full form itself gives lots of knowledge about HIV. So this question is valuable to the researcher. As

stated in the table 27, 121 respondents (79.6%) reported that they know the full form of HIV.

Knowledge	Number	Per cent
Yes	121	79.6
No	31	20.4
Total	152	100.0
Correct	Number	Per cent
Yes	113	93.4
No	8	6.6
Total	121	100.0

 Table 4.26: Distribution of Respondents by Knowledge on Full form of HIV

Source: Field Survey, 2010

The respondents who reported that they knew the full form of HIV were further asked to write the full fo given correct full form of HIV whereas some of the others didn't write or they did not mention correctly.

### 4.6.3 Knowledge on Full form of AIDS

Knowledge on full form of AIDS also gives the important understanding about the AIDS. According to table 28, 113 respondents (74.3%) reported that they know the full form of AIDS.

Education	Y	es	No		Total	
Lucation	Number	Per cent	Number	Per cent	Number	Per cent
Grade XI	2	1.3	-	-	2	100.0
Grade XII	2	1.3	-	-	2	100.0
Total	76	98.7	74	100.0	150	100.0
Education	Correct		Incorrect		Total	
Luucuton	Number	Per cent	Number	Per cent	Number	Per cent
Grade XI	2					100.0
UTAUC AI	2	1.3	-	-	2	100.0
Grade XII	76	1.3 98.7	- 74	- 100.0	2 150	100.0

Table 4.27: Knowledge on Full form of AIDS and by Education

Source: Field Survey, 2010

The respondents who stated to have known the full form of AIDS were requested to write the full form of it. The table 28 displays the result of it. Out of the respondent

reported having known of full form of AIDS, almost 96 percent of them reported the correct full form.

## 4.6.4 Knowledge on Difference Between HIV and AIDS

It is important to ask if there is any difference between HIV/AIDS or they are same. The question was included in the questionnaire and the result is shown in table 29.

Table 4.28: Distribution of Respondent by Knowledge on Difference BetweenHIV and AIDS and by Sex

a	Ŷ	Yes		No		'otal
Sex	Number	Per cent	Number	Percent	Number	Per cent
Male	45	58.4	32	41.6	77	100.0
Female	38	50.7	37	49.3	75	100.0
Total	83	54.6	69	45.4	152	100.0

Source: Field Survey, 2010

Table 4.28 shows that more than half (54.6%) of the respondents reported there is difference between HIV and AIDS while others reported there is no difference. The proportion of male is higher (58.4%) than female (50.7%) who stated that there is difference.

The distribution of respondents reporting various differences between HIV and AIDS is given in table 4.29.

Table 4.29: Distribution of Respondents by Differences Between HIV and AIDS	

Differences	Male	Female	Total	Per cent
Different stage	7	3	10	6.6
HIV is a virus and AIDS is a disease	29	24	53	34.9
HIV is treatable but AIDS not	3	7	10	6.6
Don't know	8	4	12	7.9

Source: Field Survey, 2010

Note: The total may exceed 85 due to multiple responses Number=152

From table 4.29, 10 respondents (6.6%) stated that HIV and AIDS is the different stage of the disease. Likewise more isease. 'HIV is treatable but AIDS is not' is another difference reported by 6.6 percent respondents. Similarly there are 12 respondents who said there is difference but did not mention the difference. The table shows that 29 male and 24 female reported 'HIV is a virus and AIDS is a disease' as a

major difference. Eight male and four female could not mention any difference between HIV and AIDS.

### 4.6.5 Knowledge on Transmission of HIV

The respondents were asked if they know how HIV can be transmitted. The table 4.30 gives the result of it.

		No		
Number	Percent	Number	Per cent	
2	1.3	-	-	
76	98.7	74	100.0	
2	1.3	-	-	
76	98.7	74	100.0	
2	1.3	-	-	
76	98.7	74	100.0	
135	88.8	17	11.2	
	2 76 2 76 2 76 76	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Table 4.30: Knowledge on	Transmission	of HIV and by Caste
Tuble neor introvieuge on	I I WIIDIIIIDDIOII	of the value of Cubic

Source: Field Survey, 2010

According to table 4.30, About 89 percent reported that they know the ways of transmission of HIV and remaining 11 percent mentioned that they did not know about it.

The table 4.30 also shows the data classified by caste/ethnicity. There were two respondents from Gurung caste both of them reported that they know the ways of transmitting HIV/AIDS. M%) have the knowledge on transmitting HIV.

The question was included to assess the knowledge on ways of transmission of HIV. Table 4.31 gives the distribution of respondents by knowledge on ways of transmission of HIV.

<b>Table 4.31:</b>	Distribution	of Respondents	s by Ways	of Transmissio	n of HIV
--------------------	--------------	----------------	-----------	----------------	----------

Number	Per cent
127	83.6
120	78.9
91	59.9
90	59.2
37	24.3
3	2.0
1	0.7
	1

Source: Field Survey, 2010

As stated in table 4.31 highest number of respondent (127) reported that sexual contact with infected person is the way of transmission. Similarly there are 120 respondents (78.9d mother (24.3%), sex without use of condom (2%) and sex with multiple partner (0.7%).

The question for ways of transmission was multiple response questions. It is important to find out which is most prominent factor among above mentioned various ways of transmission. For this respondents were asked to circle only one option and the result is shown in the table 4.32.

 Table 4.32: Distribution of Respondents by Knowledge on Most Prominent

 Factor

Prominent Factor	Number	Per cent
Sexual contact with infected person	84	55.3
Infected blood transfusion	26	17.1
Infected mother to fetus	11	7.2
Breast feeding from infected mother	4	2.6
Sharing needle	9	5.9
Don't know	1	.7
Total	135	88.8

Source: Field Survey, 2010

Note: The percent is taken from the total sample 152

As shown in table 4.32 more than half of the respondents (55.3%) said that the sexual contact with infected person is thm infected mother to baby as the prominent ways of HIV transmission. Only one respondent reported that he/she does not know the major risky factor for transmission. The participant of focus group discussion (FGD) showed their activeness over the modes oal also increases the risk of transmitting this virus. Together with other information the study tried to categorize the level of knowledge on agents of HIV/AIDS. In this study four level of knowledge has been categorized on the basis of number of statement respondents' reports.

 Table 4.33: Level of Knowledge on Agents of HIV/AIDS by Background

 Characteristics

Background Characteristics		No wledge	Lo	)W	Interi	nediate	H	ligh	Т	otal
Characteristics	Ν	%	Ν	%	N	%	Ν	%	Ν	%
Place of residence										
Urban	8	13.3	3	5.0	16	26.7	33	55.0	60	100.0
Rural	9	9.8	6	6.5	30	32.6	47	51.1	92	100.0
Sex										
Male	9	11.7	2	2.6	26	83.8	40	51.9	77	100.0
Female	8	10.7	7	9.3	20	26.7	40	53.3	75	100.0
Previous School										

Government	8	13.3	3	5.0	16	26.7	33	55.0	60	8
Boarding	9	9.8	6	6.5	30	32.6	47	51.1	92	9
Education										
Grade 11	8	13.3	3	5.0	16	26.7	33	55.0	60	8
Grade 12	9	9.8	6	6.5	30	32.6	47	51.1	92	9
Total	17	11.2	9	5.9	46	30.3	80	52.6	152	100.0

The share of respondents falling into high knowledge category is little high in urban area (55%) compes of female have knowledge about ways of transmission of HIV/AIDS than male respondents. According to table 33, more than half (52%) of the male respondents fall into high knowledge category which is slightly more for female (53.3%). The respondents in low category are about 3 and about 9 percent respectively for male and female and nearly 84 and 27 for intermediate knowledge for male and female respectively.

Table 4.33 shows that 12 percent of respondents who had studied in government school have no knl fall into intermediate knowledge category, which is 80 percent for boarding school respondents.

Students of grade twelve have higher knowledge than grade eleven in the issue of mode of transmission of HIV. The table shows that more than two thirds (66.7%) of grade twelve students have high knowledge, which is only about 46 for grade, eleven's student. About thirteen percent of respondents of grade eleven fall into no knowledge category compared to only about 8 percent of grade twelve.

### 4.6.6 Knowledge on Preventive Measures of HIV/AIDS

As shown in table 4.34, 132 respondents (86.8%) reported that they knew the preventive methods of HIV/AIDS. Twenty of the respondents mentioned that they did not know the preventive methods of this disease.

The table 4.34 shows the distribution of respondents by knowledge on preventive methods of HIV/AIDS and by their family size.

DIZC						
Family Size		Yes	No		Total	
Family Size	Number	Per cent	Number	Per cent	Number	Per cent
Less than 5	55	88.7	12	11.3	67	100.0
5-10	67	84.8	7	15.2	74	100.0
More than 10	10	90.9	1	9.1	11	100.0
Total	132	86.8	20	13.2	152	100.0

Table- 4.34: Knowledge on Preventive Measures of HIV/AIDS & by their Family Size

Source: Field Survey, 2010

The knowledge on preventive methods is high (90.9%) to the respondents with large family size i.e. more than 10 followed by respondent with less than five family members (88.7%). preventive methods of HIV.

The respondents were asked to state the preventive methods of HIV/AIDS. They could give multiple responses for this question. The information provided by the respondents is given in the table 4.35.

Preventive Measures	Ν	Per cent
Avoid sex with multiple partners	92	60.5
Use of condom during sexual intercourse	115	75.7
Sexual abstinence	39	25.7
Avoid sharing needle and intravenous drug use	77	50.7
Scan blood before transfusion	79	52.0
Source: Field Survey, 2010	l.	

Table 4.35:	Knowledge on	Preventive	Measures (	of HIV/AIDS
	I MOWICUGC ON	IIC CHUIC	mucasur cs (	

Note: Percentage may exceed hundred due to multiple responses Number=152

Majority of the respondents (75.7%) reported to use condom during sexual intercourse followed by avoid sex with multiple partner (60.5%), scan blood before transfusion (52%), avoid sharing needle and intravenous drug use (50.7%) and sexual abstinence (25.7%).

#### 4.6.7 Knowledge on Type of Vulnerable People

The question was included to assess the knowledge on type of people who are more vulnerable for HIV transmission. The result is given in the table 4.36.

Table 4.50. Knowledge on Vullerable Teople for III V	mection	
Vulnerable People	Number	Per cent
Those who keep unsafe relation with multiple partners	121	79.6
Who are drug abuse	88	57.9
Commercial Sex Workers	103	67.8
Homosexuals	30	19.7
More mobile persons	12	7.9
Adolescents and Youths	37	24.3
Having high desire for sex	2	1.3

 Table 4.36: Knowledge on Vulnerable People for HIV Infection

Source: Field Survey, 2010 Note: Percentage may exceed hundred due to multiple responses Number=152

From the table 4.36 we can see that 79.6 percent of the respondents reported that the

persons who keep unsafe sexual relation with multipts (67.8%) reported commercial sex workers, drug abuser (57.9%), adolescent and youth (24.3%), homosexual (19.7%), more mobile people (7.9%) and the people having high desire for sex (1.3%).

### 4.6.8 Source of Knowledge

It is important to find out the source of information from which students hear about HIV/AIDS. The distribution of respondents by source of information is given in table 4.37.

Sources of Information	Number	Per cent
Radio	134	88.2
TV	132	86.8
Newspaper	115	75.7
Textbook	101	66.4
Teacher	119	78.3
Friends	103	67.8
Parents	57	37.5
Health Persons	5	3.3

 Table 4.37: Sources of Information on HIV/AIDS

Source: Field Survey, 2010

As shown in table 4.37, it is clear that the main source of information is Radio (88.2%) followed (66.4%), parents (37.5%) and health person (3.3%). From this data we can generalize that the parents are still not so open on the matter of HIV/AIDS with their children.

### 4.7 Attitudes towards HIV/AIDS

The attitudes towards HIV/AIDS have been assessed from various attitudes and perceptions about this disease and infected persons.

### 4.7.1 Attitudes on Curative Measures of HIV/AIDS

It was aimed to collect the information with respondent whether HIV/AIDS can be cured or not. The following is given in table 4.38 by sex.

Attitude	Μ	ale	Fen	nale	То	tal
Attitude	Ν	%	N	%	Ν	%
Curable	10	13.0	5	6.7	15	9.9
Not curable	56	72.7	53	70.7	109	71.7
Don't know	11	14.3	17	22.7	28	18.4
Total	77	100.0	75	100.0	152	100.0

Table 4.38: Attitude on Curative Measure of HIV/AIDS and by Sex

Source: Field Survey, 2010

In total, 109 respondents (71.7%) reported it couldn't be cured whereas about one in ten (9.9%) stated this disease could be cured. The proportion of respondent who stated as don't know is 28 percent.

If we analyse the data frd be cured while only about 7 percent reported so. More number of female reported that they don't know whether it could be cured or not. Nearly 71 percent female said that this cannot be cured and the male stating so is about 73 percent.

### 4.7.2 Attitudes towards Various Statements about HIV/AIDS

Some daily used statements about HIV/AIDS were given in questionnaire and respondents had to state wrts is given in the table 4.39.

	Ma	rried	Unm	arried	Τα	otal
Statements	Number	Per cent	Number	Per cent	Number	Per cent
HIV/AIDS is a disease for a specific group such as drug	10	13.0	5	6.7	15	9.9
abuser, prostitutor, person having multiple sex partner etc.						
HIV/AIDS can be transmitted through mosquito bite	56	72.7	53	70.7	109	71.7
HIV/AIDS can be transmitted by sitting, necking, handshaking with infected person	11	14.3	17	22.7	28	18.4
HIV/AIDS can be transmitted by sharing toilet	10	13.0	5	6.7	15	9.9
HIV/AIDS can be transmitted if a person sit immediately at a place of infected person	56	72.7	53	70.7	109	71.7
HIV/AIDS infected person should be separated from society	11	14.3	17	22.7	28	18.4

 Table 4.39: Agreeing the Statements about HIV/AIDS according to Marital

 Status

Source: Field Survey, 2010

From table 4.39, we can see that 117 respondents stated HIV/AIDS is a disease for a specific group he statement that sharing toilet could transmit HIV/AIDS. And 7.9 percent of the respondents' belief that it can be transmitted by handshaking, sitting, necking with infected person.

#### 4.7.3 Attitudes towards the Infected People

The educated adolescents are very elite group of society. Thus, it is worth to assess their behavior to the infected person. The question was asked to collect this information and the result is shown in the table 4.40.

Attitudes	Number	Per cen
We should love and respect them	149	98.0
We should hate them	3	2.0
Total	152	100.0

#### **Table 4.40: Attitudes towards Infected Person**

As stated in table 4.40 almost all (98%) of the respondent respondents who say that the infected person should be hated in the society. The number of students reporting so is 3 that are two percent.

# 4.7.4 Perception on Responsible Authority for Lowering the Epidemic

The question was included to collect the information on the most responsible authorities for lowering the prevalence of HIV/AIDS and other STIs. The following table gives the information about it.

Authority	Number	Per cent
Individual	57	37.5
Community	36	23.7
Government	40	26.3
N/INGOs	19	12.5
Total	152	100.0

 Table 4.41: Stating the most Responsible Authorities for Decreasing the

 Epidemic

Source: Field Survey, 2010

As shown in table 4.41, more than one third of the respondents reported that the individual is oneing 13 percent stated that the non governmental (national or international) should be responsible for lowering the incidence.

# 4.7.5 Role of Community

All of the sample students were asked to state the role of various authorities that can play important roen, which has been summarized in table 4.42.

|--|

83	54.6
57	37.5
10	6.6
18	11.8
	10

Source: Field Survey, 2010

From table 4.42, it shows that more than half (54.6%) reported that community should love, respect to the infected person. Community should encourage the infected person

so that they would not hesitate to survive in society like other normal people. Similarly more than 37 percent of the respondents reported that cociety. There are nearly 12 percent of the respondents who did not mention any role of community.

## 4.7.6 Role of Government

The role of government was also asked in questionnaire. Table 44 gives the various roles of government viewed by the respondents and the number and percentage of respondents.

Table 4.45: Perception on Role of Government for Lowering the Epidemic			
Role	Number	Per cent	
Government should provide free or cheap treatment for the infected people	21	13.8	
Free distribution of contraceptive means	17	11.2	
Government should love and encourage to the victims	11	7.2	
Should generate awareness	64	42.1	
Should provide skillful training and employment	22	14.5	
Should provide economic and social assistance	7	4.6	
Should provide sexual education in school and college level	6	3.9	
Should prohibit of prostitution	11	7.2	
Should discourage to the drug abuser	6	3.9	
Not stated	28	18.4	

Table 4.43: Perception or	Role of Government for	Lowering the Enidemic
		Lowering the Epidemic

Source: Field Survey, 2010

Table 4.43 states that the important role that can be played by government is to make aware to its citizen4.6%) and sexual education and discourage of drug trade (3.9%). According to Table 43, little more than 18 percent respondent did not mention any role of government.

### 4.7.7 Role of N/INGOs

The various roles to be played by non-governmental (national or international) organizations mentioned by respondents are given in table 4.44.

#### Table 4.44: Perception on the Role of N/INGOs

Role	Number	Per cent
Should provide free shelter	21	13.8
Should provide employment opportunities	17	11.2
Should love and encourage	11	7.2
Should generate awareness	64	42.1
Should distribution contraceptive means	22	14.5
Should provide free treatment	7	4.6
Should provide skillful training	6	3.9

Should coordinate to government's programs	11	7.2
Not stated	6	3.9

Note: The total percentage may exceed hundred due to multiple responses Number=152

The table 4.44 clearly shows that the important role on non-governmental organizations is to create awareness in the society about the disease. This role is mentioned by 63 respondents (41.4%). The respondent reportin programmes nearly 4 percent, skillful training and employment about 3 percent. There are 49 respondents who did not want to mention any role of non-governmental organization to decrease the trend of STIs and HIV/AIDS.

#### 4.7.8 Individual Role

The individual role is most important factor that could lead to lower the increasing trend of HIV/ AIDS and other sexually transmitted diseases. The respondents were asked what will be your role or what will you do for lowering the incidence of these diseases. The result is given in table 4.45.

Role	Number	Per cent
We should generate awareness in our society	21	13.8
We should discourage of girls trafficking	17	11.2
We should love, respect and encourage the infected persons	11	7.2
We should encourage to be safe for those who intent to have sex	64	42.1
We should encourage to have sex with only one partner	22	14.5
Not Stated	7	4.6
Source: Field Survey 2010		

Table 4.45: Perception on their Own Role for Lowering the Epidemic

Source: Field Survey, 2010

It is clearly seen in above table that majority of the respondent (58.6%) stated that they can make theirual relation with risky partners is about 5 percent. Some respondents (7.9%) reported that they could contribute to discourage the girls trafficking. As stated in Table 4.44, about 15 percent of the respondents do not want to mention any role of individual.

#### 4.8 Chapter Summary

This chapter consists of individual characteristics of the respondents which includes age-sex composition, marital status, caste/ethnicity, religion, types of previous school and place of residence. Similarly chapter four contains household characteristics

which includes educational level of parents, parent's occupation, family size and household facility. Likewise knowledge and attitude on STIs and HIV/AIDS to respondents are also included in chapter four. At end of the chapter four role of government, NGOs and individual responsible for lowering the epidemics are mentioned.

# **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary of Major Findings

The present study entitled, "Knowledge and Attitude towards STIs, HIV and AIDS among Higher Secondary School Students of Chitwan District" is based upon 152 respondents out of the 659 study population of higher secondary level students of different four higher secondary schools of Chitwan District.

The objectives of the study are stated as: to explore knowledge on symptoms, modes of transmission and preventive measures of STIs among the respondents, to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among respondents and to identify views and their attitude towards HIV/AIDS and STIs infected persons in their community.

To carry out the study effectively the semi-structured questionnaire was designed for the quantitative data collection. Most of the questions were pre-coded and some open questions had also been included in the questionnaire. The questionnaire was pretested to 15 students in urban and rural schools. After the pretesting and suggestions from supervisor, some modifications were made on previous questionnaire and finalized them.

The study questionnaire included the socio-economic and demographic characteristics of the respondents. The whole set of questionnaire was divided into four aspects: individual and household characteristics of respondents, knowledge on STIs and HIV/AIDS, attitudes towards infected people and attitudes on role of different authorities to decrease the incidence.

The methods of study was qualitative and quantitative both and the findings of this study was analyze descriptively. Highest proportion of respondents (33.6%) is of 18 years of age. Most of the respondents (90.1%) are unmarried. Respondents are found more knowledgeable about STIs. Almost all (99.3%) have heard about STIs.

Knowledge of HIV/AIDS is universal. Almost 87 percent of the respondents know the preventive methods of HIV/AIDS. Majority of the respondents (75.7%) reported to use condom during sexual intercourse followed by avoid sex with multiple partner

(60.5%) to prevent from HIV/AIDS. The main source of information of HIV/AIDS is Radio (88.2%) followed by TV (86.8%). The parents are still not so open on the matter of HIV/AIDS with their children.

One hundred and seventeen respondents stated HIV/AIDS is a disease for a specific group such as drug abuser, per measures of STIs among the respondents, to explore knowledge, modes of transmission and preventive measures of HIV/AIDS among respondents and to identify views and their attitude towards HIV/AIDS and STIs infected persons in their commu ey should love and respect to the infected person.

Based on the findings and conclusion, it is recommended that the perceptions perceived by the respondents can be considered as the entry point for the planners and policy makers relating to these matters.

Based on the small-scale study carried out in different four higher secondary schools of Chitwan District from the selected 152 students, the major findings are presented below.

### **Individual Characteristics**

- Highest proportion of respondents (33.6%) is of 18 years of age.
- Most of the respondents (90.1%) are unmarried.
- The highest number of respondents is Brahmin (40.1%) followed by Chhetri (21.1%) according to caste/ethnicity.
- Majority of the respondents are Hindu (82.9%) and the remaining are Buddhist (17.1%).
- ) A large proportion of respondents (93.4%) have studied in government schools in their secondary level.
- ) More than 60 percent of the respondents (60.5%) live in rural area.

#### **Household Characteristics**

- Most of the respondent's fathers (29%) have primary level of education while
   38 percent respondent's mothers have attained nonformal education.
- ) Most of respondent's parents (father 54.6% and mother 52%) are engaged in agricultural occupation.
- ) The average family size of the respondents is 6-7 members.

A large proportion of respondents have radio (91.4%) and electricity (88.8%) at their home.

### **Knowledge and Attitudes about STIs**

- Respondents are found more knowledgeable about STIs. Almost all (99.3%)
   have heard about STIsnd communication materials.
- ) There is inclusion of STI and HIV/ AIDS Chapter in secondary level. Even though one respondent have not heard about STIs, HIV/AIDS is very common type of STI among adolescents.
- ) There is no effect of parent's education for the knowledge on symptoms of STIs of their children. Males are more knowledgeable than female respondents on symptoms of STIs.
- Higher percentage of respondents whose previous school was boarding have higher knowledge on symptoms of STIs compared to those of government school.
- ) The educational level of respondents inferences the level of knowledge on symptoms of STIs.
- ) The respondent studying in grade twelve have higher knowledge on symptoms of STI than those studying in grade eleven.
- Almost all respondents (98%) know the mode of transmission of STI.
- ) The respondent whose father is in service (100%) are more knowledgeable compared to those whose father is in business (95.5%).
- ) Large proportion of the respondents (97.4 %) stated the sexual contact with infected person is the most important modes of transmission followed by infected mother to fetus or newborn baby (79.6%) as way of transmission.
- Students living in urban area have comparatively higher level of knowledge (5%) than their counterparts in rural (4.3%) among those who reported having known of ways of transmitting STIs.
- ) Males are more knowledgeable about ways of transmission of STIs than female respondents.
- ) Respondents whose previous school was boarding are more likely to know about STI.

- ) Students studying in grade eleven have low level of knowledge than those of grade twelve.
- ) 'Use of condom during sexual intercourse' is the most preferred way of prevention from STI followed by 'sex with only one partner' and 'sexual abstinence during infection period'.
- ) Males than female respondents are more likely to know about preventive methods of STIs. Respondents who had studied in government school are more knowledgeable compared to boarding school.
- Students of grade eleven than of grade twelve are slightly more likely to have knowledge on prevention from STI.
- Major source for STI is Radio (90.1%), followed by teacher and TV (78.3%). The role of health persons as source of information on STIs is negligible in the study area. Parents do not share much about STIs with their children.
- ) The highest number of respondents (55) reported that they would suggest infected person to avoid sex or to use condom in case of sex followed by 51 respondents would suggest going for treatment timely without any hesitation.
- ) Only one male reported that he had sexually transmitted infection in the past.

# Knowledge and Attitudes about HIV/AIDS

- ) Knowledge of HIV/AIDS is universal.
- Almost 80 percent of the respondent know the full form of HIV, however, 93.4 percent of them wrote the correct full form of HIV. Similarly 113 respondents (74.3%) reported that they knew the full of AIDS. Out of these respondents, about 96 percent reported the correct full form.
- ) More than half of respondents (54.6%) reported there is difference between HIV and AIDS.
- ) Most of the respondents (88.8%) know the ways of transmission of HIV. Almost 84 percent reported that sexual contact with infected person is the way of transmission followed by 79 percent 'infected blood and other organs transfusion'.
- ) The share of respondents falling into high knowledge category is little higher in urban area (55%) compared to rural area (51.3%).

- Females are more likely to know about ways of transmission of HIV/AIDS than male respondents.
- ) Students of grade twelve are more knowledgeable than grade eleven in the issue of mode of transmission of HIV. More than half of the respondents (55.3%) said that the sexual contact with infected person is the most risky factor for the transmission of HIV.
- Almost 87 percent of the respondents know the preventive methods of HIV/AIDS. Majority of the respondents (75.7%) reported to use condom during sexual intercourse followed by avoid sex with multiple partner (60.5%) to prevent from HIV/AIDS. Almost 80 percent of the respondents reported that the people who keep unsafe sexual relation with multiple partners are vulnerable for the transmission of this virus. Almost 72 percent reported HIV/AIDS couldn't be cured whereas one in ten (9.9%) stated this disease could be cured.
- ) The main source of information of HIV/AIDS is Radio (88.2%) followed by TV (86.8%).
- ) The parents are still not so open on the matter of HIV/AIDS with their children.
- ) One hundred and seventeen respondents stated HIV/AIDS is a disease for a specific group such as drug abuser, person having multiple sex partners.
- Almost all (98%) of the respondents reported that they should love and respect to the infected person.
- Almost two fifths (37.5%) of the respondents reported that the individual is one who must be responsible to lower the increasing trend of HIV/AIDS in our society. Community should encourage the infected person so that they would not hesitate to survive in society like other normal people.
- ) The important role that can be played by government, non-governmental organization as well as individual is to make aware to the citizens about STIs and HIV/AIDS.

### **5.2 Conclusion**

Based of the findings of the study, it is concluded that the knowledge and attitude towards STIs, HIV and AIDS of higher secondary level students are almost universal. Male students are more knowledgeable than female respondents on symptoms of STIs. The respondents studying in grade twelve have higher knowledgeable on symptoms of STIs than those studying in grade eleven. The respondents whose father is in service are more knowledgeable compared to those whose father is in business. Respondents who had studied in government school are more knowledgeable compared to boarding school. Parents do not share much about STIs and AIDS with their children.

The main source of information of HIV and AIDS is radio and television. That means mass media plays a vital role in creating awareness on HIV and AIDS. Majority of the respondents have positive attitude towards love and affection is needed for infected persons.

## **5.3 Recommendations**

# **5.3.1 General Recommendations**

- ) The study has found some common points for example generation of skillful training and employment opportunities, awareness about the infections, love and encourage to the infected people are to be performed by various sectors such as government, non governmental organizations, community and individual as well.
- ) Thus the perceptions perceived by the respondents can be considered as the entry point for the planners and policy makers relating to these matters.

### 5.3.2 Recommendations for Further Research

- ) The participants in focus group discussion reported one very important issue. A participant stated that the best way to prevent from HIV would be to give birth by test tube system. This system is recently introduced in Nepal. This can be a matter of further research.
- ) The students in higher secondary level have good knowledge about STIs and HIV/AIDS. The study however, could not cover the sexual and reproductive health situation and practices of the respondents. Hence, further study can be carried out to assess their knowledge and behaviour on sexual and reproductive health.
- ) It is also necessary to study the level of knowledge and attitudes of STI and HIV/AIDS among the adolescent who are out of schools.

# REFERENCES

- Acharya, B. (2002). A Review of Trafficking Problems with Reference to Nepal. In Bal Kumar K.C., (ed), *Population and Development*. Vol. 10, Kathmandu: Central Department of Population Studies.
- Acharya, L.B. (1999). Knowledge of HIV/AIDS: Case of married females of age 15-19 in Nepal. In Bal Kumar K.C. (ed), *Population and Development*. Vol. 6. Kathmandu: Central Department of Population Studies.
- Adimora, A. A. and Schoenbach, V.J. (2005). Social Context, Sexual Networks and Racial Disparities in Rates of Sexually Transmitted Infections. *Journal of Infectious Disease*. 191 (2). New York: University of New York.
- Aryal, R.H. (2000). HIV/AIDS: an emerging issue in the health sector with special reference to Nepal. In Bal Kumar K.C., (ed), *Population and Development*, Vol. 7. Kathmandu: Central Department of Population Studies.
- Bista, K.P. and Kaupan, A. (1997). HIV/Syphilis prevalence in Pregnant Women in Four Urban Areas of Nepal. Kathmandu: National Centre for AIDS and STD Control.
- Central Bureau of Statistics (1995). *Population Monograph of Nepal*, Kathmandu: Government of Nepal, National Planning Commission, Central Bureau of Statistics.
- Central Bureau of Statistics (2003). *Population Monograph of Nepal*, Kathmandu: Government of Nepal, National Planning Commission, Central Bureau of Statistics.
- CBS and MOPE (2003). *Population Projections for Nepal 2001-2021*, Kathmandu: MOPE.
- Charles, F. (2009). HIV Transmission Among Black Women of North Carolina. Morbidity and Mortality Weekly Report 54(2). New York: University of New York
- District Development Committee (2061). District Development Plan, 2061/62. *Programme and Budget*, Kathmandu: District Development Committee.
- Fisher, A. and Stoeckel, L. (1983). Handbook for Family Planning Operations Research Design. *The Population Council*. New York: University of New York.
- Fisher, A. and Stoeckel, L. (2002). Designing HIV/AIDS intervention studies. *The Population Council*. New York: University of New York.

- Fleming, D.T. and Wasserheit, J.N. (2009). From Epidemiological Synergy to Public Health Policy and Practice: the Contribution of Other Sexually Transmitted Diseases to Sexual Transmission of HIV Infection. Sexually Transmitted Infections 75 (2: 3-17. New York: University of California
- Gubhaju, B. B.(2002). Adolescent Reproductive Health in Asia. *Asia Pacific Population Journal* Vol.17. New York: United Nations.
- HAK-Su, K. (2004). Why We Must Defeat HIV/AIDS in UN CRONICLE. Vol. XLI,(1). UN Publications. New York: Department of Public Information.
- Kabir, U. A. (2003). Strengthening HIV/AIDS Prevention in UNFPA Programming. In South and West Asia, Kathmandu, Nepal.
- Ministry of Health (MOH) (2009). Annual Health Report 2007/2008, DOHS: Chitwan.
- Ministry of Health (MOH) (2010). Annual Health Report 2008/2009, DOHS: Kathmandu.
- Ministry of Health (MOH). (2006). *Nepal Demographic and Family Health Survey*. Kathmandu: New ERA, and Macro International Inc..
- National Centre for AIDS and STD Control (NCASC) (2009). Cumulative HIV/AIDS Situation of Nepal. Chitwan: Department of Health Service, National Centre ro AIDS and STDs.
- National Centre for AIDS and STD Control (NCASC) (2008). National STI Case Managemnet Guidelines, Kathmandu: Department of Health Service, National Centre for AIDS and STDs.
- New ERA (1995). A baseline Study on Commercial Sex Workders and Sex clients on the Land Transportation. Routes from Naubise to Janakpur and Birgunj. Kathmandu: Family Health International, National AIDS Prevention Control Project.
- Pant, P.D. (2000). Levels, Trends and Patterns in Reproductive Health in Nepal. In Bal Kumar K.C. (ed.). *Population and Development*. 6 (2) Kathmandu: Central Department of Population Studies.
- Pathak, R.S. and Govinda Subedi (2002). Meeting Young People's Sexual and Reproductive Health (SRH) Needs in Nepal. *A Study of Finnish Project Area of FPAN*, Kathmandu: Central Department of Population Studies.
- Population Reference Bureau (PRB) (2004). *World Population Data Sheet,* Washinton, DC: Population Reference Bureau.

- Skhom, H., et al. (2002). Survey on Health Seeking Behaviour of Women Working in the Entertainment Sector in Phnom Penh. Phnom Penh, Cambodia: *Center for Advanced Study*. New York: Pharmaciens Sans Frontiers and Family Health International.
- United Nations (UN) (2005). UN News Service, January 10.
- United Nations Population Fund (UNFPA) (1994). Plan of Action. *International Conference on Population and Development*. Cairo: United Nations Population Fund .
- United Nations Population Fund (UNFPA) (2009). The State of the World Population, New York: UNFPA.
- United Nations Population Fund (UNFPA) (2003). Population and Reproductive Health Country Profiles, New York: UNFPA.
- United Nations Population Fund (UNFPA) (2009). The State of the World Population. New York: UNFPA.
- United Nations Population Fund (UNFPA) (2003). *The South Asia Conference on Adolescents*, Kathmandu: UNFPA CST for CASA.

## APPENDIX

# Questionnaire

Central Department of Population Studies, A Questionnaire on Knowledge and Attitude Towards STIs and HIV/AIDS among Higher Secondary School Students of Chitwan District.

# **A. Individual Characteristics**

Code No:

Name of Scl	nool:			
1. Grade:	111	2. Faculty:	Science	1
3. Age(completed):			122	
			Manageme	nt2
			Humanities	53
			Education.	4
4. Sex:	Male	1 5. Ma	rital Status:	Married1
	Female	2		Unmarried2
6. Caste/Eth	nicity:	Brahmin	•••••	1
		Chhetri2		
		Tamang3		
		Gurung4		
		Newar	4	5
		Others(specif	fy)	5
7. Religion:		Hindu	•••••	1
		Buddhist2		
		Others(specify)3		
8. Previous School:		Government.	1	
		Boarding		
9. Place of Residence:		Urban	1	
		Rural	2	

### **B.** Household Characteristics

10. How many members are there in your family?

11. What is your father's educational level?

Illiterate	1
Non formal	.2
Primary (1-5)	3
L. Secondary(6-8)	.4
Secondary(9-10)	5

SLC and a	above		.6	
12. What is your mother's educational level	?			
	Illiterate			1
	Non formal			2
	Primary (1-5)			3
	L. Secondary	(6-8)		4
	Secondary(9-	10)		.5
	SLC and above	ve		.6
13. What is your father's occupation?	Agriculture		•••••	.1
	Service			.2
	Business		• • • • • • • • • • • •	.3
	Other (specify	y)		.4
	Not stated			.9
14. What is your mother's occupation?	Agriculture		1	L
	Service		2	
	Business			;
	House wife		4	Ļ
	Other (specify	y)	5	5
	Not stated		9	)
15. Which of the following facilities are the	re at your hom	e?		
		Y	Ν	
	Electricity	1	2	
	Radio	1	2	
	TV	1	2	
	Phone	1	2	
C. Knowledge and Attitude on STIs and I	HIV/AIDS			
16. Have you ever heard about STIs?	Yes1			
	No2		Q.N	<b>o. 28</b>
17. (If yes) From which source did you hear	c? (Multi	ple r	esponse	)
	Radio		A	
	TV			
	Newspaper Textbook			
	Teacher			
	Friends			
	Parents			

Others (specify).....X

18. Which of the following STIs have you heard?

C .				
		Y	Ν	
	Gonorrhea	1	2	
	Syphilis	1	2	
	HIV/AIDS	1	2	
	Others (spe	cify)		
19. Do you know the symptoms of STIs?				
	Yes 1			
	No 2	(	Q.No. 21	
20. (If yes) What are the symptoms of STIs	? (Multiple re	esponse)	)	
Foul white discharge from vagina	•••••	A		
Lower abdominal pain during interc	course	B		
Bleeding other than menstruation p	eriod	C		
Sores/Abrasion around vagina, itchi	ing	D		
Drop a pus from penis		Е		
Others (specify)		X		
21. Do you know how can be STIs transmit	tted? Yes	1		
	No.	2	Q.No. 2	3
22. (If yes) What are the factors for STIs tra	ansmission?( <i>1</i>	nultiple	response)	
Sexual contact with infected person		A		
Living together with infected person	n	B		
Infected mothers to fetus		C		
Dirtiness of Sexual organs		D		
Others (specify)	••••••	X		
23. Have you ever had any STIs?	Yes1			
	No2	Q	<b>2.No. 25</b>	
24. (If yes) That STI has you had? (specify,	)			
25. What are the methods of preventing fro	m STIs? (Mu	ltiple re	sponse)	
Use of condom during sexual interc	ourse		A	
Sex with only one partner			В	
Abstinence during infection period	of partner	•••••	C	
Always clean owns sexual organs			D	
Avoid sharing food, clothes and toil	let with infect	ed perso	onE	
Others (specify)	••••••		X	
26. What do you suggest for avoiding STIs	?			
			•••••	

27. What do you suggest for STIs infected persons in your community?

.....

28. Have you ever heard about HIV/AIDS?

Yes.....1

No.....2 end the interview

29. (If yes) From which source did you hear? (Multiple response)

29. (If yes) From which source did you hear? (Multiple respon	ise)
RadioA	
TVB	
NewspaperC	
TextbookD	
TeacherE	
FriendsF	
ParentsG	
Others (specify)X	
30. Do you know the full form of HIV?	
Yes1	
No2 Q	.No. 32
31. (If yes) what is the full form of HIV?	
32. Do you know the full form of AIDS?	
Yes1	
No2 Q	.No. 34
33. (If yes) What is the full form of AIDS?	
34. Is there any difference between HIV and AIDS?	
Yes1	
No2 Q.N	lo. 36
35. (If yes) What are the differences between HIV and AIDS?	

36. Do you know how can be HIV/AIDS transmitted?

Yes.....1 No.....2 Q.No. 39

37. (If yes) How can be HIV/AIDS transmitted? (Multiple respons	(g)	
S7. (If yes) now can be mit/ADS transmitted? ( <i>Multiple respons</i> Sexual contact with infected personA	0)	
Infected Blood/organs transfusionB		
Sharing unsterilized needle/instrumentsC		
Infected mother to fetusD		
Breast feeding from infected motherE		
Others (specify)X	0	
38. What is the most prominent factor for HIV/AIDS transmission	2	
Sexual contact with infected person1		
Infected blood transfusion2		
Infected mother to fetus		
Breast Feeding from infected mother4		
Sharing needle5		
Other (specify)6		
Don't Know9		
39. Do you know the preventive methods of HIV/AIDS?		
Yes1		
No2 <b>Q.No. 41</b>		
40.(If yes)What are the methods for preventing HIV/AIDS?(multip	ole res	sponse)
Avoid Sex with multiple partnerA		
Use condom during sexual intercourseB		
Sexual abstinenceC		
Avoid sharing needles and intravenous drug useD		
Scan blood before transfusionE		
Others (specify)X		
41. State whether the following statements are true or false		
- HIV/AIDS is a disease for a specific group	Т	F
(Drug Abuse, multiple sex partner and prostitutes)	1	2
- HIV/AIDS can be transmitted through mosquito bite	1	2
- HIV/AIDS can be transmitted by eating, sitting, necking,		
handshaking with infected person	1	2
- HI V/AIDS can be transmitted by sharing toilet		
clothes and other things with infected person	1	2
- HIV/AIDS can be transmitted if a person sit immediately		
at a place that of infected person	1	2
- HIV/AIDS infected person should not be adjusted in a		
Community and should be separated	1	2
· 1		

42. What type of people are more vulnera	ble for HIV/AIDS transmission?			
Persons who keep unsafe sexual re	elation with multiple partnersA			
Persons who are drug abuse	В			
Commercial Sex workers	C			
Homosexuals	D			
More mobile persons	Е			
Adolescents and Youths	F			
Others (specify)	X			
43. Can HIV/AIDS be cured?	Yes1			
	No2			
	Don't know9			
44. How should we behave to the infected person?				
	Love/Respect them1			
	Hate them2			
	Don't know9			
45. Who will be the most responsible for	decreasing the epidemic?			
	Individual1			
	Community2			
	Government3			
	N/INGOs4			
46. What should they do for decreasing th	e epidemic?			
Community:				
Government:				
N/INGOs:				
47. What do you do for decreasing the epi	demic?(Your responsibility)			

Thanks for your kind cooperation.

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