

**KNOWLEDGE AND ATTITUDES ON STIs AND HIV/AIDS  
AMONG HIGHER SECONDARY SCHOOL STUDENTS  
(A Case Study of Banganga Higher Secondary School, Gajehada, Kapilvastu)**

**Submitted By  
Bishnu Kumar Thapa**

**A Dissertation Submitted To  
Central Department of Population Studies,  
Faculty of Humanities and Social Sciences**  
for the partial fulfillment of Master's Degree of Arts in Population Studies

**TRIBHUVAN UNIVERSITY  
KIRTIPUR, KATHMANDU**

**2010**

**Central Department of Population Studies  
Faculty of Humanities and Social Science  
Tribhuvan University,  
Kirtipur, Kathmandu, Nepal**

## **RECOMMENDATION LETTER**

This is to certify that **Mr. Bishnu Kumar Thapa** has worked under my supervision and guidance for the preparation of the dissertation entitled **Knowledge and Attitudes on STIs and HIV/AIDS among Higher Secondary School Students (A Case Study of Banganga Higher Secondary School, Gajehada Kapilvastu)** for the partial fulfillment of Master's Degree of Arts in Population Studies. To the best of my knowledge, this study is original based on primary data and carries useful information in the field of STIs and HIV/AIDS.

Therefore, I recommend this dissertation for evaluation to the dissertation committee.

---

**Prof. Dr. Ram Sharan Pathak**  
(Supervisor)

**Central Department of Population Studies  
Faculty of Humanities and Social Science  
Tribhuvan University,  
Kirtipur, Katmandu, Nepal**

## **APPROVAL SHEET**

This dissertation on entitled **Knowledge and Attitudes on STIs and HIV/AIDS among Higher Secondary School Students (A Case Study of Banganga Higher Secondary School, Gajehada)**, submitted by **Bishnu Kumar Thapa** has been approved as partial fulfillment of the requirements for the Master's Degree of Arts in Population Studies.

Approved By

---

**Dr. Prem Singh Bisht**  
(Professor and Head)

---

**Mr. Rajendra Karki**  
(External Examiner)

---

**Prof. Dr. Ram Sharan Pathak**  
(Supervisor)

## ACKNOWLEDGEMENT

This dissertation is submitted to the Central Department of Population Studies, Faculty of Humanities and Social Science, Tribhuvan University, for the partial fulfillment of Master's Degree of Arts in population studies. This study has been carried out with the help of proper guidance and continuous supervision of respected **Prof. Dr. Ram Sharan Pathak** of CDPS. Therefore, I am very much indebted to him for his help in providing me with his encouragement and suggestions during the work which made this work simple and possible.

I would like to give special thanks to my friends Mr. Durga, Laxmi, Kabita Jamuna as well as other colleagues and associates for their respective helps and suggestions. Finally, I am grateful to Miss. Bhumi Maya Rana for typing and designing this dissertation.

I would like to express my sincere gratitude to **Prof. Dr. Prem Singh Bisht**, Head of Central Department of Population Studies for encouragement, support and permission to carry out research on selected topic. I am also equally grateful to all my respected teachers and administrative staffs of the Department. I am very much indebted to my mother Mrs. Ganga Kumari Thapa and my sister Mrs. Sita kumari Thapa, brother Mr Lil Bdr. Thapa, whose perpetual inspiration and encouragement with financial supports helped me to reach at this position.

Thank you

**Bishnu Kumar Thapa**

## ABSTRACT

Sexually transmitted infections (STIs) and HIV/AIDS are the major challenges for world health to emerge in 21<sup>st</sup> century. The aids epidemic may be the most devastating health disaster in human history. HIV/AIDS has become major as well as critical public health issue particularly in Africa facing the worst effect of the epidemic. At least 45 million people are now living with HIV in the world. An estimated 5.1 million people were newly infected with HIV by the end of 2008. Among them 95 percent in Sub-Saharan Africa, eastern Europe and Asia.

The study on “knowledge and Attitudes on STIs and HIV/AIDS among higher secondary school students in carried out by using Banganga Higher secondary school’s students in Gajehada Kapilvastu” has been primary data collected from one higher secondary school of Gajehada VDC. The main objectives of the study are to evaluate the knowledge and perception about the modes of transmission and method of prevention of STIs and HIV/AIDS. The sample size is 193 students of the selected Higher Secondary School and selected by census method. Out of the total sample size of 193 students, 88 are boys and 105 are girls. They are from both grades eleven and twelve.

The average age of respondents is 16/17 years and their average family size is 5 to 10 members. About 21 percent respondent’s father’s have educational level of S.L.C passed, whereas the major occupation of the respondent’s parent’s (64.75% father and 90.64% mother) are engaged in agricultural occupation. The majority of the respondents (35.21%) are Brahmin, Chhetri and Tharu constitute second and third rank respectively. Majority of the respondents (76.64%) are unmarried. Almost respondents (97.92%) have heard about STIs. All the respondents (100%) stated that sexual contact with infected person is the most important mode of transmission of STIs and all of the respondents reported that use of condom during sexual intercourse is the most important way of prevention from STIs.

All of the respondents reported that they have heard about HIV/AIDS because of the electronic media and their curriculum also includes about HIV/AIDS. All of the respondents know the ways of transmission of HIV/AIDS is sexual contacts. All of the respondents reported that the use of condom is the most important and effective method of prevention of HIV/AIDS. Most of the respondents (98.45%) reported that the commercial sex workers are vulnerable to HIV/AIDS in the society. Majority of the respondents have accepted AIDS infected persons all of them die which is accounted for (75.65%).

## LIST OF CONTENTS

	<i>Page No.</i>
<b>Recommendation Letter</b>	<b>i</b>
<b>Approval Sheet</b>	<b>ii</b>
<b>Acknowledgement</b>	<b>iii</b>
<b>Abstract</b>	<b>iv</b>
<b>List of Contents</b>	<b>v-vii</b>
<b>List of Table</b>	<b>viii-ix</b>
<b>List of Figure</b>	<b>ix</b>
<b>Abbreviations</b>	<b>x</b>
<b>CHAPTER I: INTRODUCTION</b>	<b>1-8</b>
1.1 Background of the Study	1
1.2 Statement of the Problem	4
1.3 Significance of the Study	6
1.4 Objectives of the Study	6
1.5 Limitation of the Study	7
1.6 Organization of the Study	8
<b>CHAPTER II: LITERATURE REVIEW</b>	<b>9-23</b>
2.1 HIV/AIDS and STIs Situation in the World	9
2.2 The HIV/AIDS and STIs Situation in SAARC Countries	12
2.3 HIV/AIDS and STIs Situation in Nepal	13
2.4 Knowledge on STIs and HIV/AIDS	16
2.5 Major Routes of Transmission of HIV/AIDS	18
2.5.1 Injecting Drug Users (IDUs)	19
2.5.2 Commercial Sex Workers and their Clients	20
2.5.3 The Migrant Workers	20
2.6 Prevention, Care and Treatment	21
2.7 Conceptual Frame Work	22

<b>CHAPTER III: METHODOLOGY</b>	<b>24-26</b>
3.1 Selection of the Study Area	24
3.2 Nature and Sources of Data	24
3.3 Questionnaire Design	25
3.4 Sample Size and Selection Procedures	25
3.5 Method of Data Collection	25
3.6 Data Management	26
3.7 Data Analysis and Interpretation	26
<b>CHAPTER IV: DEMOGRAPHIC AND SOCIO ECONOMIC CHARACTERISTICS OF RESPONDENTS</b>	<b>27-35</b>
<b>4.1 Household Characteristics</b>	<b>27</b>
4.1.1 Family Size	27
4.1.2 Educational Level of Parents	28
4.1.3 Parent's Occupation	29
4.1.4 Household Facilities	30
<b>4.2 Individual Characteristics</b>	<b>31</b>
4.2.1 Age and Sex Composition	31
4.2.2 Caste/ Ethnicity	33
4.2.3 Religion	34
4.2.4 Marital Status	35
4.2.5 Current Place of Residence	35
<b>CHAPTER V: KNOWLEDGE AND ATTITUDE ON STIs AND HIV/AIDS</b>	<b>36-51</b>
5.1 Knowledge on STIs	36
5.1.1 Heard of STIs	36
5.1.2 Knowledge on Types of STIs Heard	37
5.1.3 Knowledge on Symptoms of STIs	37
5.1.4 Sources of Information on STIs	38
5.1.5 Knowledge on Mode of Transmission of STIs	39
5.1.6 Knowledge on Preventive Methods of STIs	41

<b>5.2</b>	<b>Attitude on STIs</b>	<b>41</b>
5.2.1	Attitude Towards STIs Infected Person	41
5.2.2	Attitude Towards Sexually Transmitted Infection (STIs)	42
5.2.3	Suggestion for Avoiding STIs	43
5.2.4	Suggestions for Infected Persons of STIs	43
<b>5.3</b>	<b>Knowledge on HIV/AIDS</b>	<b>44</b>
5.3.1	Heard of HIV/AIDS	44
5.3.2	Source of Information	45
5.3.3	Knowledge on Full-Form of HIV/AIDS	45
5.3.4	Knowledge on Modes of Transmission of HIV/AIDS	46
5.3.5	Knowledge on Preventive Methods of HIV/AIDS	47
<b>5.4</b>	<b>Attitudes on HIV/AIDS</b>	<b>48</b>
5.4.1	Views on Vulnerable Group for HIV Infections	48
5.4.2	Perception on HIV/AIDS Infected Person	49
5.4.3	Opinion on HIV/AIDS	49
5.4.4	Teacher's Perception to Provide Information on STIs and HIV/AIDS	50
<b>CHAPTER VI: SUMMARY, CONCLUSION AND RECOMMENDATIONS</b>		<b>52-56</b>
<b>6.1</b>	<b>Summary of the Findings</b>	<b>52</b>
6.1.1	Household Characteristics	52
6.1.2	Individual Characteristics	52
6.1.3	Knowledge and Attitudes about STIs	53
6.1.4	Knowledge and Attitudes about HIV/AIDS	54
<b>6.2</b>	<b>Conclusion</b>	<b>55</b>
<b>6.3</b>	<b>Recommendations</b>	<b>56</b>
<b>References</b>		<b>57-59</b>
<b>Appendix: Questionnaire</b>		



## LIST OF TABLES

	<i>Page No.</i>
Table 2.1: Cumulative HIV/AIDS Situation of Nepal	
Table 2.2: Cumulative HIV Infection by Sub-group and Sex	
Table 4.1: Distribution of Respondents by their Family Size	27
Table 4.2: Distribution of Respondents by Parents Educational Level	28
Table 4.3: Distribution of Respondents by Parent's Occupation	29
Table 4.4: Distribution of Respondents by Facilities at Home	30
Table 4.5: Distribution of Respondents by Age and Sex	32
Table 4.6: Distribution of Respondents by Caste/Ethnicity	33
Table 4.7: Distribution of Respondents by Religion	34
Table 4.8: Distribution of Respondents by Marital Status	35
Table 4.9: Distribution of Respondents by Current Place of Residence	35
Table 5.1: Distribution of Respondents by Heard of STIs According to Sex	36
Table 5.2: Distribution of Respondents by Types of STIs Heard	37
Table 5.3: Distribution of Respondents by Knowledge on Symptoms of STIs by Sex	38
Table 5.4: Distribution of Respondents by Source of Information STIs by Sex	39
Table 5.5: Distribution of Respondents by Knowledge on Mode of Transmission of STIs by Grade	40
Table 5.6: Distribution of Respondents by Knowledge on Mode of Transmission of STIs by Grade	40
Table 5.7: Distribution of Respondents by Knowledge on Methods of Prevention of STIs	41
Table 5.8: Distribution of Respondents by having Attitude Towards STIs Infected Person	42
Table 5.9: Distribution of Respondents by having Attitude Towards STIs be Cured or Not	42
Table 5.10: Distribution of Respondents by Suggestions for Avoiding STIs	43

Table 5.11: Distribution of Respondents by Suggestions to STIs Infected Person	44
Table 5.12: Distribution of Respondents by Source of Information on HIV/AIDS	45
Table 5.13: Distribution of the Respondents by Knowledge on Full-Form of HIV/AIDS	46
Table 5.14: Distribution of the Respondents by Knowledge on Modes of Transmission of AIDS	46
Table 5.15: Distribution of the Respondents by Knowledge on Preventive Methods of HIV/AIDS	47
Table 5.16: Distribution of the Respondents by Views on Vulnerable Group for AIDS Infection in Society	48
Table 5.17: Distribution of the Respondents by Perception on HIV/AIDS Infected Person	49
Table 5.18: Distribution of the Respondents by Opinion on HIV/AIDS	50
Table 5.19: Distribution of the Respondents by Opinion on Teachers Behaviour in Providing Information on STIs and HIV/AIDS and Response for Not Describing	51

## **LIST OF FIGURES**

Figure 1: Conceptual Framework of the Study	23
Figure 2: Percentage Distribution of Respondents by Parents' Education	29
Figure 3: Percentage Distribution of Respondents by Facilities at Home	31
Figure 4: Single Year age Distribution of Respondents by Sex	32
Figure 5: Distribution of Respondents by Caste/Ethnicity	34

## ACRONYMS AND ABBREVIATIONS

AIDS	:	Acquired Immune Deficiency Syndrome
CBS	:	Central Bureau of Statistics
CDPS	:	Central Department of Population Studies
FHI	:	Family Health International
GOs	:	Government Organizations
HIV	:	Human Immunodeficiency Virus
ICPD	:	International Conference on Population and Development
IDUs	:	Injecting Drug Users
IEC	:	Information, Education and Communication
INGO	:	International Non-Governmental Organization
IVDUS	:	Intravenous Drug Users
MOH	:	Ministry of Health
NAC	:	National AIDS Committee
NCASC	:	National Centre for AIDS and STDs Control
NDHS	:	Nepal Demographic and Health Survey
PRB	:	Population Reference Bureau
RH	:	Reproductive Health
SAARC	:	South Asian Association for Regional Co-operation
SLC	:	School Leaving Certificate
STDs	:	Sexual Transmitted Diseases
STIs	:	Sexually Transmitted Infections
SWs	:	Sex Workers
T.U.	:	Tribhuvan University
T.B.	:	Tuberculosis
UNAIDS	:	The Joint United Nations Programs on HIV/AIDS
UNFPA	:	United Nations Fund for Population Activities
UNICEF	:	United Nations Children Fund
USA	:	United State of America
VDC	:	Village Development Committee
WHO	:	World Health Organizations

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Adolescence is a period of transition from childhood to adulthood in which physical, social, psychological, emotional and behavioral changes take place. It is also known as "the teenage years". This is also a period of a "milestone" for everyone. This is a time of preparation for undertaking greater responsibilities. Adolescent's health is the outcome of several factors such as socio-economic status, environment in which they live and grow, good guidance. UNFPA, UNICEF and WHO define "young people" as a between the ages of 10 to 24, "youth people" between the ages of 15-25 and "Adolescents" as the population 10-14 are early and 15-19 as late-adolescents (UNFPA, 1998).

Psychologically, adolescence is the age when an individual becomes integrated into the society of adults or the age when the child no longer feels that is below the level of his/her elder but equal at least insight this integration into adult socially has many aspects. More or less linked with puberty and maturity. It also includes very profound intellectual changes these intellectual transformations typical of the adolescents thinking unable a person not only to achieve integration into the social relationship of adults, but also develop the phenomena of responsibility and feeling of being a part of society.

The diseases that can be transmitted from one person to another mainly through sexual contact are known as sexually transmitted infections (STIs) including STDS and HIV/AIDS. Some STIs can also be transmitted by other routes such as blood, semen, vaginal secretion and breast feeding.

Human Immunodeficiency Virus (HIV) is an infection agent that causes Acquired Immune Deficiency Syndrome (AIDS) which destroy immune system of the body and loses body's natural ability to fight against various

diseases. The infected person may lose weight and become ill with disease like persistent, severe diarrhea, fever, skin disease, pneumonia, TB or tumor. At this stage, he or she developed AIDS (WHO). Therefore, AIDS is the last stage or life threatening stage of HIV infection. The full form of AIDS is:

- A - Acquired = not born with
- I - Immune = body defense system
- D - Deficiency = not working properly, and
- S - Syndrome = group of signs and symptoms

The adolescents are at greater risk of STI/HIV infection due to ignorance, risk behaviour and lack of information and services, 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. Further more, they should emphasize on providing knowledge about the disadvantages of early sexual intercourse especially unsafe sex.

AIDS (Acquired Immune deficiency Syndrome) is not one disease, but a set of diseases caused by the human immune deficiency virus (HIV) that can breakdown the today's immune system and lead to total infections and some forms of cancer. Human immune deficiency virus kills by weakening the boys' immune system until it can no longer fight infection. Opportunistic infections are illness such as pneumonia meningitis, some cancers, tuberculosis (TB) or other parasitic, viral, and fungal infections that occur when the immune system is weakened (PRB, 2006).

Acquired Immune Deficiency (AIDS) was first recognized internally in 1981. An estimated 40 million people are now living with HIV in the world at the end of 2005. An estimated 4.9 million people were newly infected with HIV including 540000 children. Each day around 14000 people world wide become newly infected with HIV (PRB, 2006). The HIV/AIDS pandemic is

one of the most serious health problems in the world today because of high case totality rate and lack of curative treatment of vaccines. HIV is spread through blood, semen, vaginal secretions and breast milk, the most common method of transmission is unprotected sexual intercourse with an HIV-positive partner.

### **Stages of HIV/AIDS**

Most of the people have misunderstanding that HIV and AIDS are same but it has some differences. HIV is virus, but AIDS is the syndromatic stage of different disease, so we can define it is stages.

#### **Window Period:**

In these stages, people may be infected but we can't diagnose by blood test. It is very dangerous period for transmission. In this period, the immune power starts to fight against HIV.

#### **Carrier Stages:**

In this stage, we can see HIV virus in affected blood test. But the infected person is as like as general as general or, healthy people. At that time, the virus does not show syndrome.

### **AIDS**

AIDS is the last stage of HIV. In this stage, the patients show different syndromes of different diseases for example: diarrhea, fever, headache, etc. at last the patient is to be died.

#### **Symptoms of AIDS**

- Weight loss more than 10 percent of patient's body,
- The patient suffers from continuous coughing, diarrhea and mid fever.
- Sows are found in his/her tongue and sexual organs.
- A few patients of this disease may develop enlarged lymph nodes in groins neck and axils.

- The patient gradually losses all natural defense mechanism.
- Red spots are found in his/her body.
- The HIV virus passes to the brain through the blood which it's cells as a result patient becomes mentally abnormal.

**The ways to prevent AIDS are:**

- Avoid unsafe sex with prostitutes and multiple partners
- Use of condom
- Avoid injections and blood transfusion from infected persons.
- Avoid needles used by infected persons
- Check the blood before transfusion
- Infected person should not give birth to babies
- Don't use drugs
- Keep contact with health workers to get proper service.
- Get more information on sexually transmitted disease STIs and AIDS.

**1.2 Statement of the Problem**

Nepal is facing rapid increment in HIV/AIDS victims in present day. WHO & UNAIDS estimate that Nepal has mere that 61000 people living with HIV/AIDS. The prevalence of HIV/AIDS has increased so rapidly that Nepal is now classified as a country with concentrated HIV/AIDS epidemic.

The number of adolescent living with HIV/AIDS, the virus which cause AIDS, reached about 40 million by the end of 2001. Adolescents especially those aged 15-20 years are believed to engage in high level of unprotected sexual activity both within and outside marriage living them espoused to risk of unplanned unwanted pregnancy and contacting STIs including HIV/AIDS. Such behavior often resulting in early out of wedlock pregnancy constitutes a major threat to health of these adolescents as well as retarding their potential, education carrier and economic development.

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, 2005) 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 belief have contributed to high level of illiteracy, early age at marriage , early and frequent child bearing and their associated complications, unwanted pregnancies and unsafe abortion related health risk for adolescents only there male and one female were detected of HIV infection for the year 1988. Since, than the incidence rate is increasing each year and the new cases in January 2007 is 169 and total HIV/AIDS infected people are 8678, among them 61..05 are male and 2573 are female (NCASC, 2007)

The various sources of information of AIDS transmission and the persisting misconception in the student's level must also be assessed. Training and orientation programmers organized for community leaders, women group members and school teachers, which broaden the total coverage SRH programmed in the community. These groups play an important role for further advection and education to the community on SRH issues. (Bists, 2002)

HIV/AIDS is today's most burning issues in the world and it has no any cure prevention is the only remedial aspect of the disease. There for, public awareness is the most essential things to protect from this disease.

Adolescents especially, those aged 15-20 years are believed to engage in highly of unprotected sexual activity both and after marriage also leaving them exposed to risk of unplanned pregnancy and contacting STIs including HIV/AIDS. Such behavior often resulting in early out of wed lock pregnancy constitutes a major threat to health of these adolescents as well as retarding their potential, education carrier and economical development. Nation wide STIs data are scarce and non-specified because they often have short terms sexual relationship and do not consistently use condom to protect themselves



### 1.3 Significance of the Study

“**Morning** shows the day and the youth are the pillar of the nation”. Energetic human resource can contribute for a multicultural development of the nation. It is possible only through the health people who are physically and mentally sound. “Health is the wealth” it is a by product of quality services.

HIV/AIDS has become an increasing global phenomenon. With AIDS we are confronting an epidemic that began with a whisper only a decade ago and now roars like thunder around the globe. Everyday 14000 of people through the world are infected with HIV.

According to recent STIs some 7000 young people age 15-24 infected with HIV everyday. In Nepal, adolescent constitute over one fifth of the total population, they are the backbone of the society and parents of tomorrow. The higher secondary level school students are important in the society. All the students do not rank among so called ‘high risk’ group in relation to AIDS. However, that they are adolescents and most likely start to experience and experiment with their sexuality makes them potentially vulnerable to AIDS related risk behaviors. That is why the resource study will help to know the knowledge, attitude, behavior and preventive measures regarding STIs and HIV/AIDS. That study will also be useful for planners, demographers and social workers. The global HIV/AIDS epidemic has forced more attention on STIs prevention & control due to the evidence of strong correlation between the spread of STIs and HIV transmission. Both curable and non-curable STIs increase the risk of sexual transmission and acquisition of HIV (WHO, 2001). Sexual route spreads 80 percent of HIV infection and there is interrelationship between HIV/STIs.

Though some researches in HIV/AIDS have been carried out specially focusing to secondary school students, they are not enough. In this context, this research would be a vital source for identifying level of knowledge, attitude and behavior of youth on STIs and HIV/AIDS to cope with the prevalence of HIV/AIDS in developing countries like Nepal. This research can easily measure what would be in future and what would be the remedy to reduce and deal with the problem, **would be one of the vital parameter (NCASC, 2007).**

#### **1.4 Objectives of the Study**

The main objective of this study is to find out the knowledge and attitude on STIs and HIV/AIDS among Higher Secondary School's adolescents. The specific objectives are as follows:

- To examine the knowledge of STIs and HIV/AIDS among Higher Secondary School students,
- To identify the knowledge and modes of transmission of STIs and HIV/AIDS,
- To assess their attitude and understanding about STIs and HIV/AIDS.

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

This study is consists of the knowledge and attitude towards adolescent STIs and HIV/AIDS among higher secondary school students of age between 16-18 years. This study has been limited within selected school i.e. Banganga Higher Secondary School Gajehada, Kapilvastu. Every study has their own limitations. Therefore, this study have own limitation they are as follows:

- This study is based on primary data about knowledge and attitude towards adolescent STIs and HIV/AIDS.
- This study is limited within Banganga Higher Secondary School of Kapilvastu district; therefore, the findings may not be generalized for all over the nation.
- This study takes account of the higher secondary school adolescents, so the study does not represent the view of non-school adolescents.
- This study is covered 95% of the students of the total admitted students.
- The study does not cover more than the objectives of the study.

## **1.6 Organization of the Study**

The study is organized into six chapters. The first chapter is introductory that includes background of the study, statement of the problem, objectives, significance, limitation and organization of the study. In the second chapter, review of literature and conceptual framework are presented. The third chapter deals with methodology, which includes selection and introduction of the study, sample size and sampling technique, questionnaire design, method of data collection, data processing, data analysis and interpretation.

The socio-economic and demographic characteristics of respondents are described in the fourth chapter. In the fifth chapter, the knowledge and attitude on STIs and HIV/AIDS of the respondents has been described. At last, sixth chapter presents the summary, conclusions and recommendations.

## **CHAPTER II**

### **LITERATURE REVIEW**

Adolescence is a period of transition from childhood to adulthood in which physical and behavioral changes take place. It is also known as the teenage years. This is also a period of a milestone for everyone. This is a time of preparation for undertaking grater responsibilities. Adolescents' health is the outcome of several factors such as socio-economic status, environment in which they live and grow good guidance and family/community. UNFPA, UNICEF and WHO define young people as a between the ages of 10 and 24, youth as those aged 15-25, and adolescents as the population aged 10-19 years. Adolescents aged 10-14 is known as early adolescents and 15-19 as late adolescents (UNFPA, 1998)

Adolescence is the second decade of life and it is a period of rapid development. Major physical changes take place and differences between boys and girls are accentuated (WHO, 1998). Since about one third of the worlds populations are between the age of 10 and 24 with vast majority living in developing countries. They have not received specific attention in most population and health research and programs. During the past decade young people and their health needs have been the subject of greater attention worldwide. Especially, the issue of adolescent reproductive health received global attention after the international conference on population and development (ICPD) 1994(CBS, 2003).

#### **2.1 HIV/AIDS and STIs, in the World**

Adolescence is a period of transition from childhood to adulthood in which physical and behavioral changes take place. It is also known as the teenage years. This is also a period of a Milestone for everyone. This is a time of preparation for undertaking grater responsibilities. Adolescents health is the outcome of several factors such as socio-economic status, environment in which they live and grow, good guidance, and family/community. UNFPA,

UNICEF and WHO define young people as a between the ages of 10 and 24, youth as those aged 15-25, and adolescents as the population aged 10-19 years. Adolescents aged 10-14 is known as early adolescents and 15-19 as late adolescents (UNFPA, 1998).

Adolescence is the second decade of life and it is a period of rapid development. Major physical changes take place and differences between boys and girls are accounted (WHO, 1998). Since about one third of the worlds population are between the age of 10 and 24 with vast majority living in developing countries. They have not received specific attention in most population and health research and programs. During the past decade young people and their health needs have been the subject of greater attention worldwide. Especially, the issue of adolescent reproductive health received global attention after the international conference on population and development (ICPD) 1994 (CBS, 2003).

Adolescent are more vulnerable than adults to unplanned pregnancies, STIs and HIV/AIDS. It has been documented that although premarital sex is less common in the Asia region, it is clearly on the rise. It has been observed that when adolescents become sexually active, they tend to have multiple partner and use condoms and other contraceptive inconsistently furthermore, younger women are more vulnerable to forced sex and sex in exchange for gifts and money, with increasing risk of contracting STIs, including HIV/AIDS (Ashford, 2001).

It has been found that while women, in general, are more likely than men to be infected with HIV during unprotected vaginal intercourse prevalence of HIV infection among adolescent girls is strikingly high. Biologically young girls are vulnerable to the risk of HIV transmission because their genital tracts are not fully mature. Other biological, cultural and economic factors that make young girls particularly vulnerable to the sexual transmission of HIV. The vulnerability of adolescent girls of STDS including HIV/AIDS has a negative impact on the educational prospects as well as high rate of material death. The

following factors influence the sexual and reproductive of adolescents in Asia and the Pacific.

- Inadequate access to correct information.
- Availability of and access to youth friendly healthy services.
- Peer pressure and the erosion of the role of the family and
- Economic constraints (Gubhaju, 2002).

Sexual Transmitted Disease (STD) are among the most common health problems in the United States, and women experience a disproportionate amount of the burden associated with these illnesses, including complications such as sterility, prenatal infections, genital tract neoplasm, and possible death. Available data suggest that female to male transmission is less efficient than male to female transmission. Human mobility in the era of AIDS has dramatically increased the potential for the spread of HIV, which is now the leading killer of persons between the ages of 25 and 44 in the United States and similar Western nations. It is the leading cause of adult death in many Third World countries. (SAGE)

In Africa the HIV/AIDS epidemic could also bring a slowdown in socio-economic progress and an increase in couples' desire for children (PRB, 2005).

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, WHO estimates that at least a third of the more than 333 million new cases of curable STIs each year occur among people under age 25. Young people are also substantially more likely than adults to become re-infected after having been treated (UNFPA, 2003).

Almost a quarter of people living with HIV are under the age of 25. Young people now represent half of all new cases. An estimated 6,000 young people are infected every day—one every 14 minutes. The majority are women and girls. In sub-Saharan Africa, 63 percent of those who were HIV positive in 2003 were between the ages of 15 and 24. In the Russian Federation and other

countries of Eastern Europe and Central Asia, more than 80 percent of those living with HIV are under the age of 30, a majority of them young men. In these regions, as well as in Southeast Asia and China. HIV is spread primarily by drug infection and commercial sex workers. One third of new cases of curable sexually transmitted infections every year are contracted by young people under 25 (UNFPA, 2005).

The AIDS epidemic may become the most devastating health disaster in human history. The disease continues to ravage families and communities throughout the world. In addition 25 million people who died of AIDS by the end of 2005 at least 40 million people are now living with HIV at the end of 2005. An estimated 4.9 million people were newly infected with HIV in 2005. But of the total HIV infected people, 95 percent are from the sub-Saharan Africa, Eastern Europe or Asia. In Southwest Asia, 74,00,000 are living with HIV and 480,000 are living with HIV and 480,000 have died from the AIDS (PRB, 2006).

## **2.2 The HIV/AIDS Situation in SAARC Countries**

The first HIV infection of South Asian region was reported in India in 1986. This means that the endemic was introduced in the region some what later than other parts of the world. The infection rates in South Asia are lower than Africa but the spread of HIV is rapid. However, current trends show that this region will be severally affected very soon. The epidemic in South Asia is newer and many countries are yet to develop a proper monitoring system. For this reason the estimates of HIV is south Asia are often made on the basis of inadequate information (Aryal, 2000).

The virus of HIV/AIDS was reported in India in 1986, and second goes to Pakistan 1986, Srilanka 1987, Nepal 1988, Bangladesh 1989 and Maldives 1991. The latest estimates show that about 5.1 million people were living with HIV in India in 2003. Serious epidemic are underway in several states. In Tamil Nadu, HIV prevalence of 50 percent has been found among sex workers

while in each of Andra Pradesh, Karnataka, Maharashtra and Haryana, HIV prevalence measured at antenatal clinic in the Manipur cities of Imphal and Chaurachmand has rose. Below 1 percent to over 5 percent with many of the women testing positive appearing to be the sex partners of male drug injections. Several factors look set to sustain Manipuri's epidemic, including the large proportion about 20 percent of female sex workers who inject drugs and the young ages of many injectors (UNAIDS, 2004).

Although the reported HIV cases are very small in Maldives, Maldives is highly vulnerable to the AIDS pandemic. A sustained rapid economic growth to 7.2 percent has exposed Maldives to the outside world. HIV/AIDS prevention and control activities are given higher national priority under the national AIDS council programmed. The government of Sri Lanka established a national task force (NIF). In 1987 and a short term plan of action was formulated in July 1987. A multi sectoral, multidisciplinary national AIDS committee (NAC) first formed in 1988. NAC has four sub-committee on laboratory services and surveillance, HIV care and counseling legal and ethical issues on HIV/AIDS and information, education and communication (IFC ) functioning under it (Devkota, 2005).

### **2.3 HIV and STIs Situation in Nepal**

HIV/AIDS has been increasing since the first case was detected in 1988 in Nepal. Only 3 male and 1 female were detected of HIV infection for the year when it was diagnosed at first in the year 1988. Since the rate is increasing each year because of extensive use of commercial sex workers, high rates of sexually transmitted diseases, low use of condom, drug users etc. Nepal ranks sixth among Asian nations in absolute numbers of HIV positive persons considering existing open borders with India, the threat of HIV/AIDS in Nepal is tangible because of migrant working population in metros of India, lack of job opportunities in Nepal, drug transfer and silk route. The main identified mode of HIV transmission in Nepal is heterosexual contact, primarily



commercial sex workers and their clients. Intravenous drug users (HIV/AIDS), migrant workers. (UNAIDS, 2004).

The first case of AIDS in Nepal was reported in 1988. The National centre for AIDS and STD control (NCASC) of the Ministry of Health and Population has estimated an average of 70000 adult HIV-positive people in Nepal (NCASC, 2006 a). As of September 2006, a total of 1171 AIDS cases among the 7894 cases of HIV infection were reported to NCASC (NCASC, 2006 b). However, these figures are probably grossly under-estimated given the existing medical and public health infrastructure and limited HIV/AIDS surveillance system in Nepal. (NDHS, 2006).

The results of the IBBS conducted so far clearly indicate that the early concentrated stage and is driven by injecting drug use, commercial sex, and migration, findings from the last rounds of the IBBS conducted in 2005 among 1945 show that about 30 percent of male IDUS in Kathmandu (New ERA and SACTS, 2005a), Pokhara (New ERA and SACTS, 2005 b), Eastern Terai (New ERA and SACTS, 2005c), and western and far western Terai sub-regions (New ERA and SACTS, 2005d) reported having sex with FSWS, and more than half do not use condoms when they have sex with FSWS. Similarly migrants who have sexual intercourse with sex workers in India have a higher risk of HIV infection, and only a few use condoms when they have sex with their spouses (New ERA and SACTS, 2006).

STIs prevalence among sex workers (SWS) is notably higher. Data from Pokhara, Kathmandu and Terai revealed the syphilis prevalence among SWS were 18.8 percent in Terai, 19 percent in Kathmandu and 13.8 percent in Pokhara clients of sex workers were found to have 5.3 percent syphilis. Similarly among family planning attendees, trichomoniasis was 6.0 percent, Chlamydia was 1.0 percent and HIV was 0.3 percent as per results of study conducted (UNAIDS. 2004).

As of October 2001, a total of 533 AIDS cases and 1564 cases of HIV infection were reported to the ministry of Health National center for AIDS and STD control (NCASE. 2001). However these figures are probably grossly underestimated given the current medical and public health infrastructure and limited HIV/AIDS surveillance system in Nepal. One estimated shows approximately 34000 cases of HIV/AIDS infection in Nepal (UNAIDS, 2004).

The national data as of December 31, 2004 reveals 4593 individual having HIV of which 846 have developed AIDS of the Total AIDS , cases 233 have died. HIV transmission is increasing in population of 14 to 49 years age groups. sex workers their clients seeking care for SITS and injecting tug users (IDUS) were reported having high rate of HIV. Remarkably, the number of house wives with HIV infection is increasing. It is though that HIV might have spread to them through their husbands who might have exposed to high-risk behaviours of HIV transmission. Given the high rate of HIV risk behaviours Nepal ranks in concentrated epidemic countries (NCASC, 2004).

According to Ministry of Health and Population, National Centre of AIDS and STD Control (NCASC) cumulative HIV/AIDS situation of Nepal as Jestha 2066 (in June, 2009) shows the following table.

**Table 2.1: Cumulative HIV/AIDS Situation of Nepal**

Condition	Male	Female	Total	New Cases of This Month
HIV positives (including AIDS)	8345	4080	12425	390
AIDS (Out of the total HIV)	1445	599	2044	109

Source: NCASC, 2009.

**Table 2.2: Cumulative HIV Infection by Sub-group and Sex**

Condition	Male	Female	Total	New Cases of This Month
Sex Workers (SW)	6	802	808	13
Clients of SWs/STD	5448	143	5591	156
Housewives		2780	2780	127
Blood or organ recipients	28	10	38	0
Injecting Drug Users	2290	46	2336	41
Men having Sex with Men (MSM)	69		69	19
Children	441	278	719	34
Sub-group not identified	63	21	84	0
Total	8345	4080	12425	390

Source: NCASC, 2009.

## 2.4 Knowledge on STIs and HIV/AIDS

The NDHS 2006 show that 73 percent of women and 92 percent of men age 15-49 have heard of AIDS. Knowledge of AIDS varies by background characteristics and this is more evident among women than men. Since overall knowledge of AIDS among men is very high, there is little difference by background characteristics. (NDHS, 2006)

The level of awareness of AIDS is lower among older respondents, especially among respondents age 40-49, and among ever-married women and men. Respondents living in rural areas are less likely to know about AIDS than urban residents. For example, 69 percent of rural women have heard of AIDS, compared with 91 percent of urban women. (NDHS, 2006)

In Nepal, knowledge of AIDS is much higher among men (72%) than women (50%). Although women's knowledge of AIDS is lower than men's the percentage of women who have heard of AIDS has nearly double in the last five years from 27 percent in 1996 (Pradhan et al, 1997). Two fifth of women and two thirds of men believe that there is a way to avoid HIV/AIDS. As ll,evel

of education increase, respondent's knowledge of AIDS also increases respondents who have passed their SLC (NDHS, 2001).

Regarding the STIs, 8.5% of the young people have knowledge of STIs, two third reported HIV/AIDS as the main type of STIs followed by syphilis (20%) and gonorrhoea (13%) (Pathak and Subedi, 2002).

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, 2001).

Young women and men age 15-24 are relatively more knowledge. the various modes of prevention than older respondents. for instance, about 35 percent of women and 65 percent of men age 40-49 mentioned that using condoms and limiting sex to our uninfected partner can reduce to risk of HIV/AIDS infection, compared with 65 percent of women both women and men is highest among never- married respondents and lowest among those divorce, separated or widowed (NDHS, 2006).

Education and wealth are strongly associated with AIDS awareness. Knowledge of AIDS is universal among women with SLC or higher level of education, compared with just over half of women with no education. Similarly, awareness is lowest among women living in the poorest households and highest among women living in the wealthiest households. Knowledge of AIDS is also higher among women who have traveled away for their home, particularly among those who have been away for six months or more in the past 12 months (NDHS, 2006).

## **2.5 Major Routes of Transmission of HIV/AIDS**

It is presumed that the major routes of transmission for HIV/AIDS in Nepal remains heterosexual and through sexual contact. However, very little data exists to be able to clarify the extent of transmission in this route. Existing data indicates that the highest rates of infection are among injecting drug users and that IDUS as well as sex work contribute to a large and significant proportion of HIV transmission (Acharya, 2005).

The major mode of transmission of HIV in the country is heterosexual. Using that these are more than 60,000 people living with HIV/AIDS in Nepal at the end of 2003. By far the largest numbers of reported HIV infection come from men who have been clients of sex workers (57.2%) following by injecting drug users (16.0%) HIV infection in Nepal mainly occurs in the younger age of 20 to 39 years. HIV/AIDS and STDS are emerging as a major threats of Nepalese socio-economic and health service. The following milestones in AIDS and STD prevention activities in Nepal.

- 1986 organization of STD/AIDS control committee.
- 1987/88 implementation of short-term plan.
- 1995 national policy on AIDS and STD prevention adopted.
- 1997-2001 strategic plans for HIV/AIDS prevention adopted.
- 2002 National AIDS council formed.
- 2002-2006 National strategy for HIV/AIDS prevention adopted
- 2004 STIs case management guidelines development (DOHS, Annual Report, 2003/04).

Studies conducted in main highway routes in different parts of the country indicate that transport workers (track drivers and their helpers) are also turning to one of the major population sub-group susceptible to HIV infection. Recent studies in the far western region suggest that transmission among infected migrant laborers returning home from India could also contribute

largely to a rise in HIV infection. According to one policy assessment report, the epidemic has reached the concentrated stage and may be on the verge of spreading to the entire reproductive age population (Acharya, 2005).

Many Nepalese adults lack accurate knowledge about the ways in which the AIDS virus can and cannot be transmitted. Only 29 percent of women and 49 percent of men know that AIDS cannot be transmitted by mosquito bites. Relatively larger proportions of respondents (59 percent of women and 75 percent of men) are aware that a healthy looking person can have the AIDS virus. Similar proportions of women and men (58 percent of women and 77 percent of men) correctly believe that a person can not get the AIDS virus by touching someone who has AIDS. 45 percent of women and 63 percent of men correctly believe that a person cannot become infected by sharing food with a person who has AIDS (NDHS, 2006).

The potential for the spread of HIV in Nepal is larger because of extensive use of commercial sex workers, high rates of sexually transmitted diseases, low level of condom use and pockets of intravenous drug users. As of April 30, 2005 a total of 876 AIDS and 4904 cumulative cases of HIV infection were report to the ministry of Heath, National Centre for AIDS and STD control (Acharya, 2005).

### **2.5.1 Injecting Drug Users (IDUs)**

Number of ID users including heroin users in increasing all over Nepal. Currently in Kathmandu valley, HIV infections among IDUs are estimated at 67 percent (CREHPA, 2003). These studies show that the IDUs, both male and female are in their early 20s. The median age of IDUs at the times of their first sexual encounter was 18 for males and 16 years for females. The study further shows that 89 percent of male and 81 percent of females had been sexually active (New Era, 2002).

Several of these research studies also indicate a very risky sex and drug taking behaviour of IDUs which makes them more susceptible towards HIV

infection (CREHPA, 2002; New Era, 2002; FHI, 2002). In one of the study, two thirds of the IDUs reported being sexually active before the age 10. 80 percent of male IDUs had unprotected sex with their regular partner. The study also found low rate of condom use (FHI, 2002).

### **2.5.2 Commercial Sex Workers and their Clients**

Commercial sex workers are found all over Nepal but they tend to get concentrated in large cities, border towns, and truck routes and the Haat Bazaar areas in the villages (New Era, 2002). Nepal's sex work is primarily street based though more recently concentration of sex workers is becoming more pronounced in the dance and cabin restaurants operating in cities of Kathmandu valley and Pokhara. The scale and magnitude of commercial sex work and trafficking in Nepal seem to be much larger than what is usually believed (New Era, 2002).

Poverty and economic hardship has been found to be the main factors for motivating most of the women to get involved in the sex work because they needed the money immediately and sex work was the only way out for them. Another study also shows that the reasons for the women to get involved in sex work are mainly related to financial issues such as need of money, poverty, unemployment and hunger etc. In addition to financial reasons, social reasons also appear to have much influence in pushing girls women into sex work (New Era, 2002).

### **2.5.3 The Migrant Workers**

Just as internal and external labour migration constitute the hidden or unrecognized dynamism of the real economy of Nepal. It is now being identified as the hidden and unrecognized dynamic of the spread of HIV/AIDS in the country (Acharya, 2005, 2002). According to 2001 census the country had 7,62,000 external and 14,00,000 internal migrants, male and female together. The western region has the highest proportion of external migrants working abroad. Migration to India will undoubtedly continue to increase in

coming years. Many of these men are contracting HIV/AIDS in India and bringing it back to their wives in Nepal. A recent survey of men returning from Mumbai to Nepal revealed an HIV infection rate of 10 percent (MoH, 2003).

## **2.6 Prevention, Care and Treatment**

In this third decade of the epidemic, there is still neither a cure nor vaccine for AIDS. Life-prolonging drugs have become more affordable and accessible, yet treatment is still largely unavailable to most people who need it in developing countries. As of June, 2005, out of the 605 million people needing treatment, only 10 million are receiving it. Treatment prolongs the lives of many AIDS patients. It does not cure AIDS. More than 50 HIV vaccine candidates have undergone clinical trials since 1987 and researchers continue to 1987 and researchers continue to develop strategies for improving defenses against the virus. Despite this progress, a safe and effective vaccine is years away (PRB, 2006).

HIV is transmitted in three ways: (a) through sexual contact; (b) through direct exposure to blood, primarily as a result of injecting drug use, blood transfusions, or unsafe injecting in health-care settings; and (c) from infected mother to child, during birth or as a result of breast feeding. Effective means exist to prevent transmission through each of these modes.

As HIV continues to spread, prevention remains the backbone of programs to cure the epidemic for the foreseeable future. However, there is a need for more comprehensive programs that encompass prevention, care, treatment, and support interventions. Comprehensive prevention programs for people living with HIV include (PRB, 2006: 12).

- General education about the risk of sexual transmission,
- Support for low-risk behaviour, including condom use;
- Diagnosis and treatment of STIs,
- Counseling and testing for HIV;
- Preventing mother-to-child transmission;
- Ensuring the safety of blood and blood products;

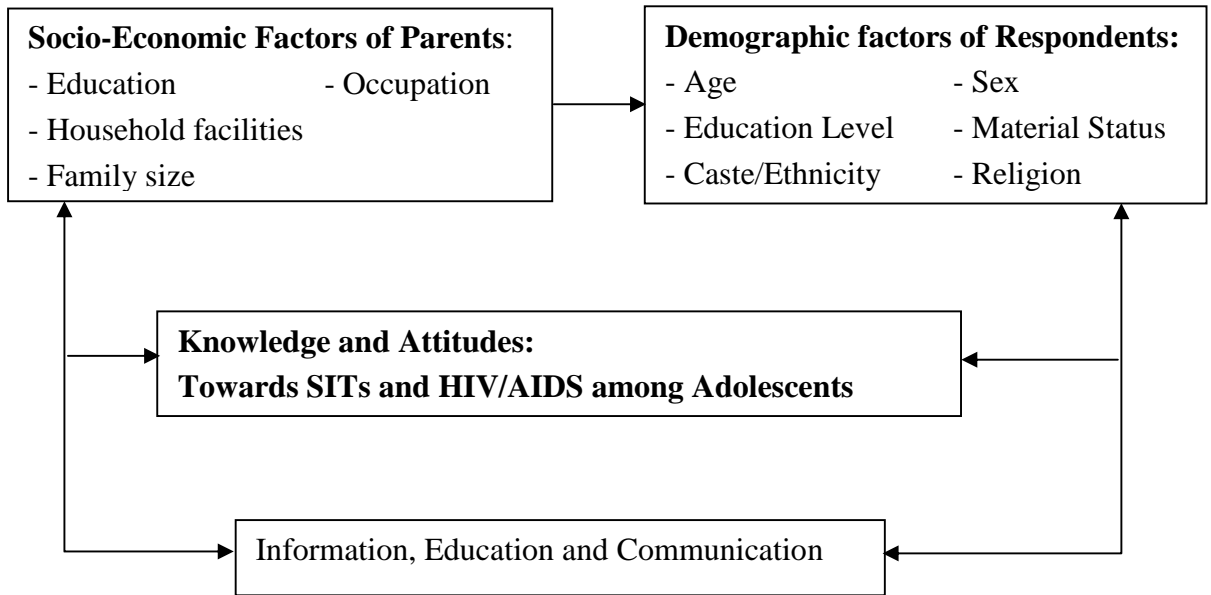


- Needle exchange programs; and
- Reducing the stigma attached to HIV and AIDS.

Women are most aware that the chances of getting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners (65 percent) or by abstaining from sexual intercourse (60 percent). Among men, the most commonly known prevention methods are use of condoms (84 percent) and limiting sex to one uninfected partner (83 percent). Knowledge of condoms and the role that they can play in preventing the transmission of AIDS is much less common among women than among men (58 percent versus 84 percent). Fewer women and men (55 percent and 77 percent, respectively) are aware that using condoms and also limiting sex to one uninfected partner can reduce the risk of getting the AIDS virus (NDHS, 2006).

## **2.7 Conceptual Framework**

There are various factors to determine the level of knowledge and attitude towards SITs and HIV/AIDS. Parental socio-economic background characteristic such as education, occupation, family size and household facilities could play an important role to determine the knowledge and attitudes towards SITs and HIV/AIDS of their children. Demographic factors of respondents such as age, sex, educational level, marital status, caste/ethnicity and religion may also affect the knowledge and attitudes towards SITs and HIV/AIDS. IEC materials may play a vital role in determining knowledge and attitudes towards SITs and HIV/AIDS among adolescents.



**Figure 1: Conceptual Framework of the Study**

The conceptual framework which is made on the basis of literature review helps to analyze the knowledge and attitude of context of HIV/AIDS among secondary level school students.

## **CHAPTER III**

### **METHODOLOGY**

This chapter deals with the research methodology employed to collect the primary as well as secondary data needed for the present study. Specially, this chapter discusses the introduction to the study area, nature and sources of data, questionnaire design, sample selection, and sample size, method of data collection, data management and data processing and analysis.

#### **3.1 Introduction to the Study Area**

This study is based on the Higher Secondary level's students of Banganga Secondary school Gajehada. This school is located at the Gajehada VDC of Kapilvastu district, Lumbini. It is about 2 km. south from the Mahendra Highway. Banganga Higher Secondary School was established on 2032 BS and running from grade 1 to 12. There are 1054 students studying in Primary, lower secondary and secondary level and 203 students in Higher Secondary (11 and 12) level. It is one of the Higher Secondary School of Gajehada VDC. Banganga Higher Secondary School is a part of education sector in Kapilvastu district and provides the better education among the several schools of this district.

#### **3.2 Nature and Sources of Data**

This study is primarily based on primary data as main source of information. To draw the reliable and acceptable findings of the research, both primary and secondary sources were used in this study. The primary data collected from the survey in August 2009. Secondary data used in this study were collected from the various national, international annual reports, newspaper bulletins and previous dissertations published by government and non-government organizations. Questionnaire were prepared and interviewed to the targeted students. The findings of this study are mainly based on primary data (Field Survey, 2009). The primary data that is qualitative and quantitative

in nature were collected directly from the respondents under higher secondary school students by means of interview, questionnaire and observation methods.

### **3.3 Questionnaire Design**

A well knitted questionnaire was developed for the study. For this study, structure, semi-structure and open-ended questions designed for quantitative data collection. Most of the questions were pre-coded and the questionnaire was also pre-tested and then required modifications were made before-field work. The study questionnaire included the socio-economic and demographic characteristics of the respondents. The whole set of questionnaire was divided into four sections.

- i) Household characteristics
- ii) Individual characteristics
- iii) Knowledge and attitude on STIs and
- iv) Knowledge and attitude on HIV/AIDS

### **3.4 Sample Size**

Banganga Higher Secondary School, Kapilvastu has 203 students in higher secondary level (11 and 12), out of them 94 students in grade 11 and 109 students in grade in grade 12. Out of total students 193 or (95%) students (89 students from grade 11 and 104 students from grade 12) are taken as respondents and collect the required information by using census method.

### **3.5 Method of Data Collection**

This study is based on the primary data as main source of information. Primary data was collected from the field study through surveying the higher secondary school students. Students were using structured questionnaire. Structured questionnaire is based on closed and open ended question. I used the census method to get the required information from the respondents.

### **3.6 Data Management**

After collection of the questionnaires, they were checked, edited and post coded. Then the necessary tables were generated using the traditional method i.e. tally bar. The gathered descriptive data have been presented in different tables.

### **3.7 Data Analysis and Interpretation**

The collected information are put together and analyzed in a separate chapter of interpretation. The data obtained from the field survey was processed and analyzed to interpret their implication. The data analysis and interpretation have been made based on the number of cases (simple frequency tables), percentage distribution, cross tabulations as well as the figures i.e. bar-diagram and pie-charts.

## CHAPTER IV

### DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

This chapter presents the socio-economics and demographic characteristics of the respondents, mainly as age and sex, caste/ethnicity, education, religion, marital status, parent's education and current place of residence. Socio-economic background also provides information about parent's occupation, and housing facilities of respondents.

#### 4.1 Household Characteristics

This section identifies about the socio-economic status of respondents parents such as level of education, parent's occupation and family size and facility available in the household. The questions regarding these household characteristics were included into the questionnaire.

##### 4.1.1 Family Size

Family size shows the status of quality of life. Small family size may be considered as an indicator of healthy and happy life. To find out the family size of the respondents, they were further asked about the number of their family members and the result is presented in table 4.1.

**Table 4.1: Distribution of Respondents by their Family size**

Number of family size	Number	Percent
Less than 5 members	35	18.13
5 - 7 members	95	49.22
8 -10 members	48	24.87
more than 10 members	15	7.77
Total	193	100.0

*Source: Field Survey, 2009.*

The above table 4.1 shows that majority of the respondents (49.22%) have the family size of five to seven members. 28.87% percent of the respondents have the family size of eight to ten members and the lowest proportion of them (7.77%) reported family size of more than 10 members.

#### 4.1.2 Educational Level of Parents

Parent's education is one of the important socio-economic factors that may determine their children's level of knowledge and attitude in every aspect. In questionnaire the educational level of father and mother were asked separately in household roster schedule. The results are shown in table 4.2.

**Table 4.2: Distribution of Respondents by Parents Educational Level**

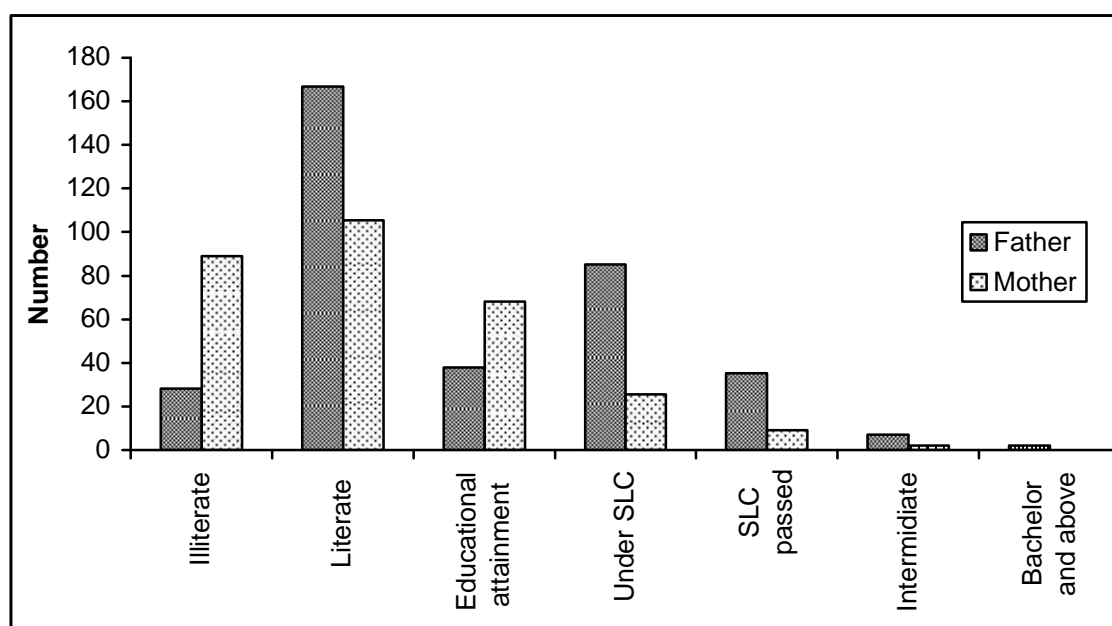
Literacy/Education	Father		Mother	
	Number	Percent	Number	Percent
Literate	165	85.49	104	53.87
Illiterate	28	14.51	89	46.11
Total	193	100.0	193	100.0
<b>Level of literacy</b>				
Educational/attainment	38	23.03	68	65.38
Under SLC	85	51.52	25	24.04
SLC passed	35	21.21	9	8.65
Intermediate	7	4.24	2	1.92
Bachelor and above	2	1.21	-	-
Total	165	100.00	104	100.00

*Source: Field Survey, 2009.*

Note: Educational status of parents who are still alive only.

Table 4.2 shows that higher proportion of respondents mothers (46.11%) are illiterate whereas only 14.51 percent respondent's fathers are illiterate. Among literate, majority of respondents mothers (65.38%) have attained primary level of education and only 1.92% mothers have passed the intermediate level of education and above comparatively, the respondent's father's educational attainments are better than their mother's. The table shows that the 51.52% of fathers are under S.L.C, 21.21% are SLC passed and only

1.21% of fathers are Bachelor and above. It is easily say that the educational situation is poor in the respondent's parents, it also affects the knowledge and attitude of their children.



**Figure 2: Percentage Distribution of Respondents by Parents' Education**

#### 4.1.3 Parent's Occupation

The occupation of parents can also be taken as the important variable that determines the socio-economic status of the household and it may also affects the knowledge of their children on STIs and HIV/AIDS. Information about respondent's parents' occupation is presented in table 4.3.

**Table 4.3: Distribution of Respondents by Parent's Occupation**

Occupation	Father		Mother	
	Number	Percent	Number	Percent
Agriculture	125	64.75	175	90.64
Business	12	6.22	5	2.59
Service	5	2.59	-	-
Labour/Daily wages	15	7.77	13	6.73
Foreign workers	36	18.64	-	-
Total	193	100.0	193	100.0

Source: Field Survey, 2009.

Note: Occupation status of parents who are still alive only.



Table 4.3 shows that higher percentage (64.75%) of respondents reported their father's major occupation is agriculture, followed by foreign workers (18.64%), business (6.22%), daily wages (7.77%) and the lowest proportion (2.59%) reported service. Most of the respondent's mothers are dependent on agriculture/housewife (90.64%). Involvement in other occupation is very low. The proportions of respondents whose mothers are involved in business and daily wages are only 2.59 and 6.73 percent respectively. No one of them reported their mothers involving in service and foreign workers.

#### 4.1.4 Household Facilities

Household facility is important economic indicator of the family as well as country. More the household facility at home that makes easy to survive the member of family. Respondent's household facility is shown in table 4.4.

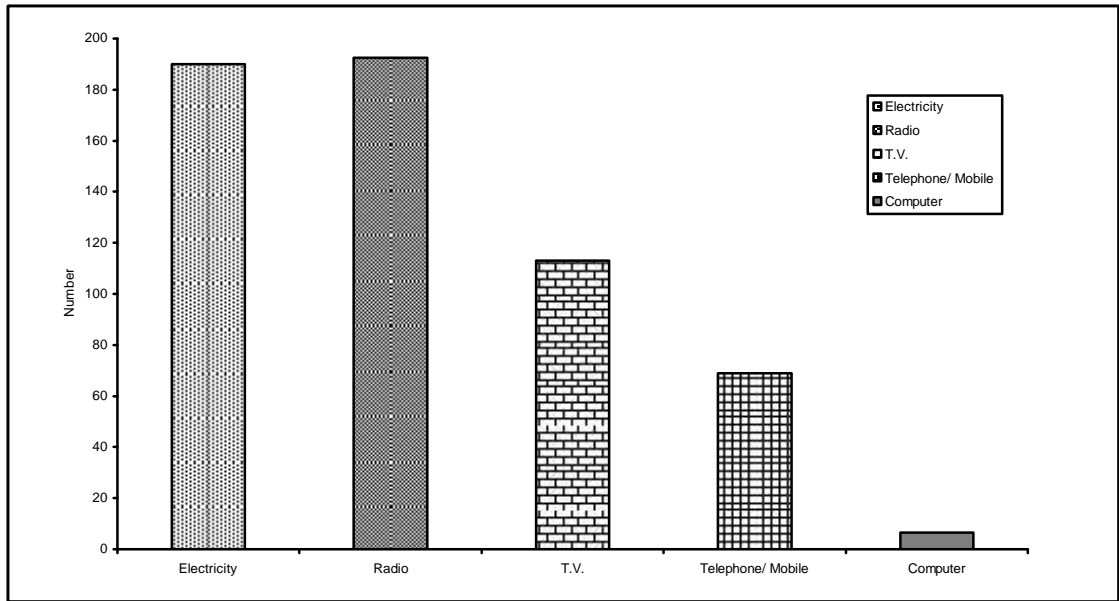
**Table 4.4 : Distribution of Respondents by Facilities at Home**

Facilities	Number	Percent
Electricity	190	98.45
Radio	193	100.0
T.V.	115	59.59
Telephone/ Mobile	68	35.23
Computer	5	2.59

*Sources: Field Survey, 2009.*

Note: The sum of number and percentages may exceed 100 due to multiple responses.

From table 4.4 it is seen that most of the respondents (98.45%) have facility of electricity, followed by (100%) have facility of Radio. Similarly, 59.59 percent respondents have television and low percentages of respondents (35.23%) have telephone (including mobile) facility at their home but very low percentage of respondents (2.59%) have facility of computer at their home.



**Figure 3: Distribution of Respondents by Facilities at Home**

## **4.2 Individual Characteristics**

This section includes different characteristics of the respondents, individual characteristics include age and sex, caste ethnicity, religion, marital status and place of residence of respondents at the time of survey. To obtain the information about these individual characteristics the questionnaire was given to respondents about it.

### **4.2.1 Age and Sex Composition**

Age and sex composition are the strong determining factors for the demography. In order to know the age and sex of the respondents, the question was asked about it and the distribution of the respondents by single year of age and sex obtain from the field are presented in Table 4.5.

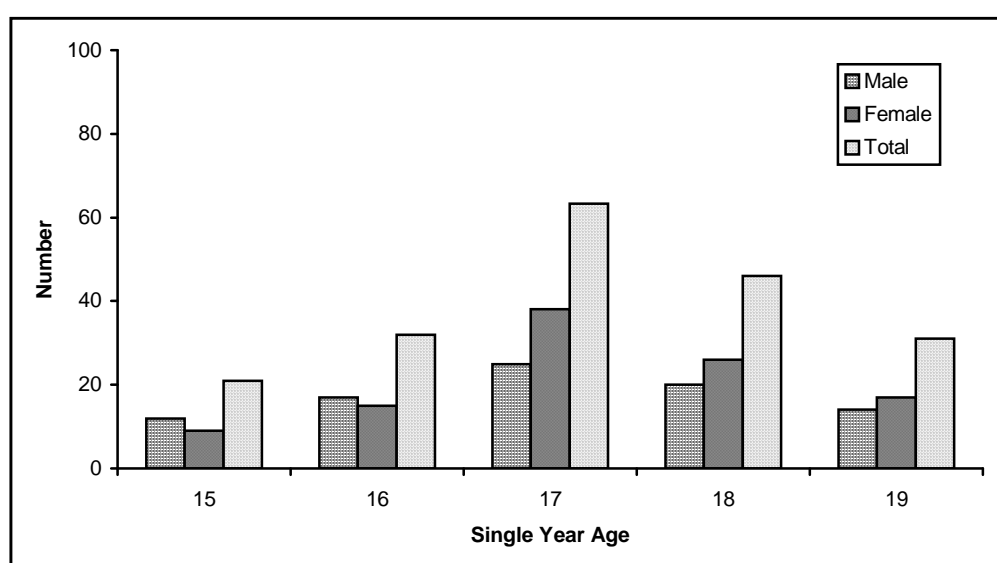
**Table 4.5: Distribution of Respondents by Age and Sex**

Age in years	Respondents					
	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
15	12	13.62	9	8.57	21	10.84
16	17	19.32	15	14.25	32	16.54
17	25	28.41	38	36.14	63	32.64
18	20	10.16	26	24.74	46	23.81
19	14	7.24	17	16.14	31	16.04
Total	88	100.0	105	100.0	193	100.0

*Source: Field Survey. 2009.*

The age of the students ranges from 15 to 19 years. Table 4.5 shows that highest percentage (32.64%) of respondents is found in the age of 17 years which is followed by 18 years (23.81%) and 16 years of age (16.54%). The lowest percentage (10.84%) of respondents is found in the age 15 years.

The table also clarifies that higher proportions of males (28.41%) and females (36.14%) are found in 17 years of age. The lowest percentages of male (7.24%) and females (8.57%) are found in 19 years and 15 years of age respectively. The single year age/sex distribution of the respondents can also be observed in figure 4.



**Figure 4: Single Year Age Distribution of Respondents by Sex**

#### 4.2.2 Caste/Ethnicity

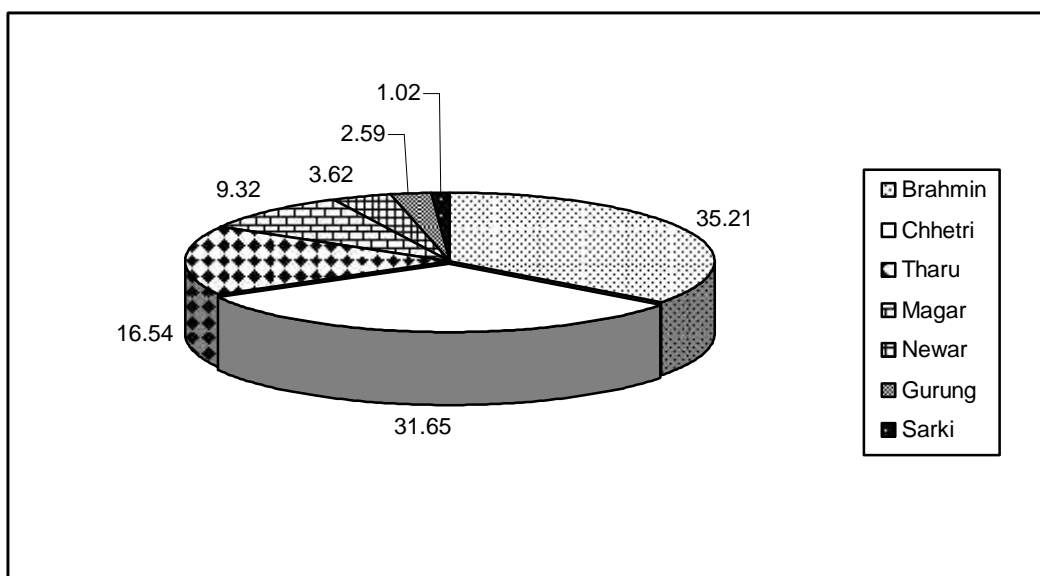
Caste/ethnicity in the context of Nepal is important social factor affecting attitude and standard of people (K.C., 1995). According to census, 2001, more than 100 caste ethnic groups were prevalent in Nepal. A question on caste ethnicity was kept in the questionnaire. The caste/ethnic status of the respondents is presented in table 4.6.

**Table 4.6: Distribution of Respondents by Caste/Ethnicity**

<b>Caste/Ethnicity</b>	<b>Number</b>	<b>Percent</b>
Brahmin	68	35.21
Chhetri	61	31.65
Tharu	32	16.54
Magar	18	9.32
Newar	7	3.62
Gurung	5	2.59
Sarki	2	1.02
Total	193	100.0

Source: Field Survey, 2009.

Table 4.6 gives the information about the caste/ethnicity of the respondents. The total respondents fall into seven caste/ethnic groups. Among them the highest proportion of respondents are Brahmin (35.21%) followed by Chhetri (31.65%), Tharu (16.54%), Magar (9.32%), Newar (3.62%), Gurung (2.59%) and Sarki (1.02%). The distribution of respondents by caste/ethnicity can also be observed in figure 5.



**Figure 5 : Distribution of Respondents by Caste/Ethnicity**

#### 4.2.3 Religion

Religion belief and social values guides the human behaviour. Religion has become a sensitive topic in ethnically diverse Nepalese society, because, caste/ethnicity has close relationship with religion. In Nepalese society, religion is affected by caste system (K.C., 1995). In the study area three religion groups are found which are presented in table 4.7.

**Table 4.7: Distribution of Respondents by Religion**

Religion	Number	Percent
Hindu	159	82.38
Buddhist	25	12.95
Christian	9	4.66
Total	193	100.0

Source: Field Survey, 2009.

Table 4.7 shows the composition of respondents by religion. In this study area most of the respondents (82.38%) are Hindu, 12.95% are Buddhist and 4.66% are the Christian.

#### 4.2.4 Marital Status

Table 4.8 shows that the marital status of the respondents. Due to rural area some adolescent's students are getting married.

**Table 4.8: Distribution of Respondents by Marital Status**

Marital Status	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Unmarried	78	88.62	70	66.65	148	76.64
Married	10	11.32	35	33.31	45	23.32
Total	88	100.0	105	100.0	193	100.0

Source: Field Survey, 2009.

Above table shows that 76.64 percent respondents are unmarried and 23.32 percent are married, among them female proportion is high.

#### 4.2.5 Current Place of Residence

Respondents were asked about their current living status i.e. whether they were living in their home, hostel, rented house or relative's house. This also affects the level of knowledge and attitude on HIV/AIDS because it is expected that the mobile population generally have more knowledge on such matters than others who stay in one place. The responses on the living status are presented in Table 4.9.

**Table 4.9: Distribution of Respondents by Current Place of Residence**

Current place of residence	Number	Percent
Home	185	95.84
Relative's house	8	4.15
Total	193	100.0

Source: Field Survey, 2009.

Table 4.9 shows that majority of the respondents are resided in their own home which is accounted for 95.84 percent and 4.15 percent accounted relatives house.

## CHAPTER V

### KNOWLEDGE AND ATTITUDE ON STIs AND HIV/AIDS

This chapter presents the analysis about the extent of knowledge on STIs and HIV/AIDS among adolescents and it also discusses their attitudes on the respective issues. In the context of knowledge, heard of STIs, HIV/AIDS and their names, knowledge on transmission, knowledge on preventive measures and sources of knowledge and described. Similarly, regarding their attitudes, their opinion on HIV/AIDS, whom they think the most vulnerable from STIs and their opinion on sexuality education.

#### 5.1 Knowledge on STIs

The knowledge on sexually transmitted infection is measured in terms of several variables. First of all, it is examined whether the respondents heard about STIs or not. Then knowledge on symptoms, mode of transmission, preventive measures have been examined.

##### 5.1.1 Heard of STIs

The most important variables to access the knowledge on STIs was taken as heard of STIs. The question was asked if the respondents have heard about STIs or not. The responses are presented in table 5.1.1.

**Table 5.1: Distribution of Respondents by Heard of STIs According to Sex**

Heard of STIS	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Yes	88	100.0	101	96.14	189	97.92
No	-	-	4	3.80	4	2.04
Total	88	100.0	105	100.0	193	100.0

Source: Field Survey, 2009.

According to table 5.1, most of them (97.92%) have heard about sexually transmitted infection. But 2.04 percent respondents have not heard STIs. All the male respondents heard about the STIs but four female respondents have heard about STIs.

### 5.1.2 Knowledge on Types of STIs Heard

The respondents who heard about sexually transmitted infection were further asked to state which STIs they have heard. Table 5.2 gives the data about different types of STIs they have heard.

**Table 5.2: Distribution of Respondents by Types of STIs Heard**

Types of STIs	Number	Percentage
Gonorrhea	110	56.99
Syphilis	95	49.22
HIV/AIDS	193	100.0
Hepatitis-B	29	15.03
Others	18	9.33

Source: Field Survey, 2009.

Note: Only those who have heard about STIs.

As stated in Table 5.2, the HIV/AIDS is very common type of sexually transmitted infection which is heard by all of the respondents (100 %). Gonorrhea and syphilis are heard by 56.99 and 49.22 percent of the respondents respectively. About 9 percent of the respondents have heard others types of STIs like Genital warts and Chlamydia. 15.03 percent of the respondents have heard of Hepatitis-B also.

### 5.1.3 Knowledge on Symptoms of STIs

It is important to ask the symptoms of sexually transmitted infection to evaluate the knowledge about respondents. Table 5.3 gives the data about knowledge on symptoms of SITs.



**Table 5.3: Distribution of Respondents by Knowledge on Symptoms of STIs by Sex**

Symptoms of STIs	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Headache	32	36.34	49	46.65	81	41.95
Swelling limbs	53	60.22	41	39.05	94	48.74
Itching around genital and mouth	55	62.50	52	49.51	107	55.44
Yellowish pus-like discharge from vagina	48	54.55	45	42.85	93	48.15

Source: Field Survey, 2009.

Note: Total percentage may exceed hundred due to multiple responses.

Table 5.3 shows that among the respondents who have heard STIs, most of them understand that the main symptoms of STIs is itching around genitals (55.44%) followed by swelling limbs (48.74%). Yellowish pus-like discharge from vagina (48.15%) and 41.95 percent of the respondents said headache as one of the symptoms of STIs.

#### **5.1.4 Sources of Information on STIs**

Actually respondents felt difficult to pronounce STIs they were familiar of the word STDs. When researcher himself reminded them to give responses on STIs. Less information is given as infection through the different Medias as well. Respondents were asked about the media through which they heard about STIs. The responses are tabulated in 5.4.

**Table 5.4: Distribution of Respondents by Source of Information STIs by Sex**

Sources of Information	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Radio	65	73.84	64	60.94	129	66.82
T.V.	39	44.32	36	34.25	75	38.84
Magazine	16	18.14	17	16.14	33	17.05
NGO/INGO	8	9.04	10	9.52	18	9.32
Health Personnel	26	29.55	30	28.54	56	29.02
Friends	21	23.84	12	11.42	33	17.05
Parents	10	11.34	16	15.22	26	13.44
Teacher/Textbook	78	88.65	95	90.45	173	89.62

Source: Field Survey, 2009.

Note: Only those who have heard of STIs and total percentage may exceed hundred due to multiple responses.

It is notable from table 5.4 that the strongest media to get information on STIs is teacher/textbook for the Higher Secondary school adolescents for which about 90%) of the girls and boys reported on it. The second strongest media is found to be radio 66.82 percent of the respondents reported. Friends and health personnel to be less effective to have heard about STIs (17.05% and 29%) respectively. The socio-economic status of parents was found low they were less informative about sexuality and STIs to their children. Only 13.44 percent of the respondents reported that they have heard about STIs by their parents. T.V., NGO/INGOS and magazine also seemed less effective to provide sufficient information on STIs.

### **5.1.5 Knowledge on Mode of Transmission of SITs**

First of all, respondents were asked whether they know the mode of transmission of STIs or not. According to table 5.5, among those who have heard of STIs 187 respondents (96.89%) know the mode of transmission of

STIs. Only 6 respondents of grade eleven reported that they do not know the mode of transmission of STIs. It shows that the knowledge is different by level of education.

**Table 5.5: Distribution of Respondents by Knowledge on Mode of Transmission of STIs by Grade**

Knowledge on Transmission of STIs	Grade 11		Grade 12		Total	
	No.	Percent	No.	Percent	No.	Percent
Yes	85	95.51	102	98.10	187	96.89
No	4	4.49	2	1.92	6	3.11
Total	89	100.0	104	100.0	193	100.0

Source: Field Survey, 2009.

Note: Only those who have heard of STIs.

The respondents who have knowledge on mode of transmission of STIs were further asked to specify the modes. Table 5.6 gives the data about it.

**Table 5.6: Distribution of Respondents by Knowledge on Mode of Transmission of STIs by Grade**

Knowledge on Transmission of STIs	Grade 11		Grade 12		Total	
	No.	Percent	No.	Percent	No.	Percent
Sexual contacts	89	100.0	104	100.0	193	100.0
Living together	35	39.33	25	24.01	60	31.10
Contaminated needles and blood	72	80.90	88	84.62	160	82.90
Mother to fetus	44	49.44	75	72.12	119	61.66

Source: Field Survey, 2009.

Note: Only those who have knowledge on STIs.

Table 5.6 shows that (100.0%) of respondents of grade eleven and twelve stated sexual contact with infected person as the most important mode of STIs transmission. The second most reported mode of transmission (82.9%) is contaminated needles and blood in which (80.9%) and (84.62%) of the respondents said grade eleven and twelve respectively. Living together with

infected person and infected mother to her child were reported by 31.1 and 61.66 percent respectively. It shows that the level of knowledge is differing due to level of education.

### **5.1.6 Knowledge on Preventive Methods of STIs**

The respondents were also asked about whether they have knowledge on preventive methods of STIs or not. Table 5.7 shows the clear picture about their knowledge on preventive methods.

**Table 5.7: Distribution of Respondents by Knowledge on Methods of Prevention of STIs**

<b>Preventive Methods of STIs</b>	<b>Number</b>	<b>Percent</b>
Using condom	193	100.0
Sexual contact with single partner	135	69.95
Avoiding contaminated syringes and blood	122	63.21
Common use of patient's essentials	45	23.32

Source: Field Survey, 2009.

Note: The percentage is based on only those who have knowledge on modes of STIs transmission and its sum may exceed 100 due to multiple responses.

## **5.2 Attitude on STIs**

This section deals with the respondents view towards STIs, STIs infected person, vulnerable professionals in the society. The attitude towards STIs has been addressed from various types of attitudes and perceptions about this disease and infected persons.

### **5.2.1 Attitude towards STIs infected Person**

Table 5.8 gives the distribution of respondents by having attitude towards STIs infected person in their community.

**Table 5.8: Distribution of Respondents by having Attitude Towards STIs Infected Person**

<b>Attitude</b>	<b>Number</b>	<b>Percent</b>
Hate them	40	20.43
Love and respect them	35	18.11
Help and participate them	95	49.21
Don't know	23	11.92
Total	193	100.0

Source: Field Survey, 2009.

Table 5.8 shows that 67 percent of the respondents have positive attitude towards STIs infected person in their community. Only 20 percent respondents have negative attitude and 11.92 percent of the respondents reported they don't know toward STIs infected person.

### **5.2.2 Attitude towards Sexually Transmitted Infection (STIs)**

Table 5.9 gives the distribution of the respondents by having attitude towards STIs for this respondents were asked the question, STIs be cured or not. Among the respondents 67 percent said STIs be cured, 20 percent said not cured and 12 percent of the respondents said they don't know towards STIs be cured or not.

**Table 5.9: Distribution of Respondents by having Attitude Towards STIs be Cured or Not**

<b>Attitude</b>	<b>Number</b>	<b>Percent</b>
Yes	130	67.35
No	40	20.43
Don't know	23	11.92
Total	193	100.0

Source: Field Survey, 2009.

### 5.2.3 Suggestion for Avoiding STIs

For this, respondents were asked to suggest for avoiding SITs. Table 5.10 gives the detailed information about it.

**Table 5.10: Distribution of Respondents by Suggestions for Avoiding STIs**

<b>Suggestions</b>	<b>Number</b>	<b>Percent</b>
Using condom during sexual intercourse	193	100.0
Always clean own sexual organs	56	29.02
Always keep sexual relation with one partner	115	59.55
Acquire sexual education	98	50.75
Avoid sexual intercourse with infected person	85	44.04
Keep the infected person separate	21	10.84
Not stated	12	6.23

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

Table 5.10 clarifies that the main suggestion, which is given by majority of respondents, are used condom during sexual intercourse which is reported by majority of respondents (100%) followed by the always keep sexual relation with one partner (59.55), acquire sexual education (50.75%), avoid intercourse with infected person (44.04%), always clean own sexual organs (29%), and only 10.84 percent respondents suggest keeping infected person separately. six percent respondents have not mentioned any preventive measures.

### 5.2.4 Suggestions for Infected Persons of STIs

Table 5.11 gives the distribution of the respondents by suggestions to infected person in their community.

**Table 5.11: Distribution of Respondents by Suggestions to STIs Infected Person**

<b>Suggestions</b>	<b>Number</b>	<b>Percent</b>
Go for treatment	79	40.93
Use condom or avoid sex	155	80.31
Make aware to others	19	9.84
Keep sexual organs clean	45	23.32
Others suggestions	10	5.14
Not stated	3	1.55

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

Table 5.11 shows that most of the respondents (80.3%) suggests for using condoms or avoiding sex to the infected persons. likewise 40.93 percent respondents suggest to go for treatment, about 10 percent respondents would suggest make aware to others and keep sexual organs clean only respondents (5.14%) would suggest other suggestions and (1.55%) respondents did not state any suggestion to the infected person.

### **5.3 Knowledge on HIV/AIDS**

In this study knowledge on HIV/AIDS has been addressed through various questions first of all, whether heard about HIV/AIDS, full form of HIV/AIDS, source of information modes of transmission and methods of prevention. The data obtained about it are presented simultaneously.

#### **5.3.1 Heard of HIV/AIDS**

To examine the knowledge on HIV/AIDS respondents were asked whether they have heard about HIV/AIDS or not. All of they respondents reported that they have heard about HIV/AIDS because of their text book where information about HIV/AIDS are included.

### 5.3.2 Source of Information

Table 5.12 provides the information on the distribution of the respondents who have knowledge on HIV/AIDS by source of information.

**Table 5.12 Distribution of Respondents by Source of Information on HIV/AIDS**

Source of information	Number	Percent
Radio	175	90.64
T.V.	94	48.74
Magazine	33	17.05
NGO/INGO	18	9.32
Health Personnel	58	30.04
Friends	28	14.55
Parents	14	7.24
Teachers/Text book	186	96.34

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

Table 5.12 clearly shows that about all of the respondents were found having heard about HIV/AIDS. Regarding source of information on HIV/AIDS, the table shows 96.34 percent of the respondents have heard about HIV/AIDS through teacher textbook followed by Radio (90.64%). Similarly, around 49 percent each of the respondents reported T.V. and friends as the source of information on HIV/AIDS followed by Health Personnel (30.04%), Magazine (17.05%), NGO/INGO (14.932%) and only 7.24 percent respondents reported parents as the source of information on HIV/AIDS.

### 5.3.3 Knowledge on Full-Form of HIV/AIDS

To find out the level of knowledge on HIV/AIDS, respondents were asked to write the respective full-forms. The responses were categorized in two levels as correctly written and incorrectly written. These two categories of responses are tabulated in table 5.13.



**Table 5.13: Distribution of the Respondents by Knowledge on Full-Form of HIV/AIDS**

<b>Knowledge on full-form of HIV/AIDS</b>	<b>Number</b>	<b>Percent</b>
Correctly written	168	87.05
Incorrectly written	25	12.94
Total	193	100.0

Source: Field Survey, 2009.

It is evident from Table 5.13 shows that most of the respondents have written the full-form HIV/AIDS correctly which is accounted for 87.05 percent. The rest 12.94 percent of the respondents have not written correctly.

#### **5.3.4 Knowledge on Modes of Transmission of AIDS**

In order to know about the level of knowledge on HIV/AIDS among the respondents, they were asked the ways of transmission of AIDS. Respondents are found to have proper knowledge on the ways of transmission of AIDS. Table 5.14 presents the responses on the ways of transmission of AIDS by sex.

**Table 5.14: Distribution of the Respondents by Knowledge on Modes of Transmission of AIDS**

<b>Modes of transmission</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
Sexual contacts	88	100.0	105	100.0	193	100.0
contaminated needles and blood	76	86.34	93	88.54	169	87.54
mother to fetus	66	75.0	75	71.42	141	73.05
Brest feeding	13	14.74	35	33.31	48	24.84
sharing razor	41	46.54	28	26.65	69	35.74
kissing	4	4.54	8	7.61	12	6.23

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

No matter about sex differences all of the respondents reported that the main ways of transmission of HIV/AIDS are sexual contacts followed by contaminated needles and blood (87.54%), mother to fetus (73.05%), sharing razor (35.74%). The percentage is high for boys for this option because mostly the boy's use razor for shaving and barbers use one razor for only one person. Sharing razor also may transmit. If the bloody razor of infected person makes wound to healthy, but such chance is rare.

### 5.3.5 Knowledge on Preventive Methods of HIV/AIDS

It is important to ask about the preventive methods of HIV/AIDS to evaluate the knowledge about the preventive methods. Among the respondents who have ever heard about HIV/AIDS were asked about the methods of prevention of it. All of the respondents were reported having heard about HIV/AIDS. The goal of HIV/AIDS programmes is not only to make people knowledge about HIV/AIDS but it is to change the attitude and behaviour about it. The result from the survey among the secondary school adolescents on the knowledge of preventive methods of HIV/AIDS is presented in table 5.15.

**Table 5.15: Distribution of the Respondents by Knowledge on Preventive Methods of HIV/AIDS**

Methods of prevention of AIDS	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Use condom	88	100.0	105	100.0	193	100.0
Don't have sex with multiple partner	42	47.72	85	80.94	127	65.40
Use sterilize surgical instruments	48	54.55	74	70.45	122	63.21

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

It is notable from the table 5.15 that the respondents shortly choose only three main preventive methods of HIV/AIDS. Interestingly, all of the

respondents reported that the use of condom is the most important and effective method of prevention of HIV/AIDS. Similarly, higher proportions of girls (80.94%) whereas boys (47.72%) said not to have sex with multiple partners in order to prevent HIV/AIDS and 70.45 percent of the girls also said to use sterilized surgical instruments while only 54.55 percent of the boys agreed on this.

## 5.4 Attitudes on HIV/AIDS

This section deals with the respondents view towards AIDS, AIDS infected person, vulnerable professionals in the society, opinion on HIV/AIDS. The open discussion status in Higher Secondary school is also attempted to collect.

### 5.4.1 Views on Vulnerable Group for HIV Infection

In order to know their views on vulnerable group for HIV infection based on their understanding about AIDS, respondents were asked a question about it. The responses are tabulated in table 5.16.

**Table 5.16: Distribution of the Respondents by Views on Vulnerable Group for AIDS Infection in Society**

Vulnerable group	No. of Respondents	Percent
Youth/adolescents	43	22.25
Drivers	45	23.32
Drugs addicts	145	75.12
Commercial sex workers	190	98.45
All	7	3.62

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

It is clear from the table 5.16 that most of the respondents (98.45%) said that the commercial sex workers are vulnerable to HIV/AIDS in the society, followed by drug addicts (75.12%), drivers (23.32%). Twenty-two percent of respondents also reported the youth/adolescents as vulnerable group of HIV

infection in the society. The least proportion of the respondents also said all as vulnerable group of AIDS in the society.

#### 5.4.2 Perception on HIV/AIDS Infected Person

In order to know their attitudes on HIV/AIDS infected person, respondents were asked about what is your perception about AIDS infected person some options were given in which 'all of them die,' 'some of them die', 'nobody dies at all' or 'don't know' were given. Respondents choose only two of them, which are 'all of them die' and 'some of them die'. The responses are tabulated in table 5.17.

**Table 5.17: Distribution of the Respondents by Perception on HIV/AIDS Infected Person**

Perception on HIV/AIDS infected person	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
All of them die	68	77.24	78	74.25	146	75.65
Some of them die	20	22.72	27	25.71	47	24.15
Total	88	100.0	105	100.0	193	100.0

Source: Field Survey, 2009.

Table 5.17 shows that among the respondents 75.65 percent consisting 77.24 percent of the male and 74.25 percent of the females reported that all of the HIV infected person die, while 24.15 percent (male 22.72 and female 25.71%) said that some of them die.

#### 5.4.3 Opinion on HIV/AIDS

IN order to know about their attitude towards AIDS, respondents were asked about how they have perceived the AIDS whether it is a fatal disease, sexually transmitted disease, communicable disease and so on. The responses are tabulated in table 5.18.

**Table 5.18: Distribution of the Respondents by Opinion on HIV/AIDS**

<b>Opinion on HIV/AIDS</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
Fatal disease	48	54.55	56	53.31	104	53.84
Sexually transmitted disease	86	97.72	98	93.31	184	95.32
Communicable disease	23	26.12	19	18.05	42	21.74
Dangerous disease	38	43.14	37	35.22	75	38.84
Immune deficiency Syndrome	26	29.55	24	22.85	50	25.95

Source: Field Survey, 2009.

Note: Total percent may exceed hundred due to multiple responses.

It is clear to note from the table 5.18 that the majority of the respondents have accepted AIDS as sexually transmitted disease which is accounted for 95 percent of the respondents followed by fatal disease (53.84%), dangerous disease (38.84%), immune deficiency (25.95%) and 21.74 percent accepted AIDS as communicable disease.

#### **5.4.4 Teacher's Perception to Provide Information on STIs and HIV/AIDS**

Because of our societal belief, teacher's perception on STIs and HIV/AIDS or (sexuality) has not been changed as that had to be. Teachers in the remote areas still hesitate to teach clearly on sexuality what they have understood. Rather they have less information on it because it became trend to provide less information and they also learnt less from their teacher. But in the urban situation is different. Because of interest and availability of different media, adolescents get more information on STIs and HIV/AIDS or (sexuality) on the one hand and teacher also provides information without hesitation on the other.

**Table 5.19: Distribution of the Respondents by Opinion on Teachers Behaviour in Providing Information on STIs and HIV/AIDS and Response for Not Describing**

Teacher's description	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Yes	63	71.54	83	79.05	146	75.65
No	25	28.41	22	20.94	47	24.15
<b>Total</b>	<b>78</b>	<b>100.0</b>	<b>72</b>	<b>100</b>	<b>150</b>	<b>100.0</b>
Reason for not describing	No.	Percent	No.	Percent	No.	Percent
Shy	25	100.0	22	100.0	54	100.0

Source: Field Survey, 2009.

Table 5.19 clarifies that majority of the respondents with no difference regarding sex said that their teacher does not hesitate to describe regarding sexuality and sexually transmitted infections. The proportions of such adolescent students 75.65 percent. The rest 24.15 percent of respondents said that their teacher hesitate to describe reported that it was because of their shyness.

## **CHAPTER VI**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **6.1 Summary of the Findings**

This is the study on knowledge and attitudes towards STIs and HIV/AIDS among Higher Secondary level students of Gajehada VDC in Kapilvastu district based on the small scale study carried out only one Banganga Higher Secondary school of Gajehada VDC. The main objectives are to analyze the knowledge on HIV/AIDS and STIs among adolescents by their background characteristics and identify the knowledge on modes of transmission and prevention methods of STIs and HIV/AIDS among the respondents. Altogether 193 students are taken as a sample size. From the field survey following major findings are taken, which are as follows.

##### **6.1.1 Household Characteristics**

- The majority of the respondent's (74.09%) family size is 5 to 10 members.
- Most of the respondent's fathers (85.49%) are literate whereas only 53.87% mothers are literate.
- Most of respondent's parents (64.75% father and 90.64% mother) are engaged in agricultural occupation.
- All of the respondents have radio facility and 98.45 percent have electricity facility at their home.

##### **6.1.2 Individual Characteristics**

- Highest proportion of respondents (32.64%) is aged 17 years. Among them female proportion is high than male.
- The highest numbers of respondents are Brahmin (35.21%) followed by Chhetri (31.65%).
- Majority of the respondents are Hindu (82.38%).

- Majority of the respondents (76.64%) are unmarried and only (23.32%) are married among them female proportion is high.
- Majority of the respondents are resided in their own home (95.84%)

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

- More respondents are found knowledge about STIs. Almost respondents (97.92%) have heard about STIs. This can be the result of increasing access to information, education and communication materials as well as there is inclusion of STIs and HIV/AIDS chapter in secondary level and Higher Secondary level textbook.
- Among the respondents who have heard about STIs, all of them know about the HIV/AIDS, followed by Gonorrhoea (56.99%) and syphilis (49.22%).
- Among the respondents who have heard about STIs, most of them understand that the main symptom of STIs is itching around genitals (55.44%) followed by yellowish pus-like discharge (48.15 %).
- The strongest media to get information on STIs is teacher/textbook (89.62%) for the Higher Secondary school adolescents.
- Almost all of the respondents (97.0%) reported that by sexual contact the STIs can be transmitted from one person to another.
- All of the respondents (100%) reported that the STIs can be prevented using condom followed by the respondents who said sexual contact with single partner (69.95%).
- 67 percent of the respondents have positive attitude towards STIs infected person.
- Most of the respondents (67.35%) reported that STIs be cured.
- All the respondents (100%) suggest that using condom during sexual intercourse avoiding from STIs.
- Almost all respondents (88.31%) would suggest for using condoms or avoid sex followed by (40.93%) would suggest to treatment.



#### **6.1.4 Knowledge and Attitudes about HIV/AIDS**

- All of the respondents were found having heard about HIV/AIDS. Regarding source of information on HIV/AIDS, the table shows that almost all of the respondents (96.34%) have heard about HIV/AIDS through teacher/textbook followed by radio (90.64%).
- Most of the respondents have written the full-form of AIDS correctly which is accounted for (87.05%).
- All of the respondents reported that the main ways of transmission of HIV/AIDS is sexual contacts, followed by contaminated needles and blood (87.54%) and mother to fetus (73.05%).
- All of the respondents reported that the use of condom is the most important and effective method of prevention of HIV/AIDS. Similarly, higher proportions of girls (80.94%) than boys (47.72%) said not to have sex with multiple partners in order to prevent HIV/AIDS.
- Most of the respondents (98.45%) agreed that the commercial sex workers are vulnerable to HIV/AIDS in the society followed by drug addicts (75.12%).
- The majority of the respondents have accepted AIDS as sexually transmitted disease which is accounted for (95.32%) followed by fatal disease (53.84%).
- Majority of the respondents have accepted AIDS infected persons, all of them die which is accounted for (75.65%) followed by some of them die (24.15%).
- Majority of the respondents with no difference regarding sex said that their teacher do not hesitate to describe regarding sexuality, STIs and HIV/AIDS. Interestingly, all of the respondents who said that their teacher hesitate to describe reported that it was because of their shyness.

## 6.2 Conclusion

The changing social norms and values regarding sex and the increasing age at marriage are attributed to adolescents' premarital sexual activities. Due to such activities, they may have risks of various health hazards, socio-economic and demographic consequence namely unwanted pregnancy, unmarried mother and HIV infection. In such a situation, they must be supported by correct information to dispel the mental stress and help them practice responsible sexual behaviours.

Findings from the study show that respondents have more knowledge on STIs and HIV/AIDS. Respondent's parents were found low educational level, low employee and low economic condition.

Among the respondents who said to have heard about STIs, most of them said to have heard of syphilis and gonorrhoea but they are ignorant about other venereal diseases like urinary problems and genital warts.

Teacher/textbook is found to be the strongest media provide the information regarding STIs and HIV/AIDS. It shows that the out-school adolescents would have very less knowledge on it. The other important media are radio, health person and friends. These media are very rare for out of school adolescents because they may not have educated friends to give information on these matters.

Most of the respondents said that the commercial sex workers are vulnerable to HIV/AIDS but lower proportions of them reported drug addicts, drivers and adolescents. Less proportion of the respondents reported their teacher hesitates to describe openly about sexual matters. All of them said this reported the only one reason behind it is his/her shyness. Despite the high knowledge on STIs and HIV/AIDS, adolescent boys are found less exposed towards drug addicts and the severe impact of carelessness in blood transfusion. Similarly, the respondents are found to have less informed about sexuality, STIs and HIV/AIDS through their parents.

### **6.3 Recommendations**

On the basis of findings and conclusion of the study, following recommendations are made for the further improvement on the awareness, changing attitude and reducing and controlling of STIs and HIV/AIDS

- It is notable that adolescents are less exposed on drug addiction for which they have said less vulnerable to HIV transmission are likely to ignore it in their behavioural life. Therefore, they should be provided detailed and proper knowledge on it.
- STIs and HIV/AIDS through different media such as radio and TV. Also they should be informed through non-formal education and education campaign.
- Sexuality education is highly welcomed by students of lower secondary, secondary school and Higher Secondary level. Therefore, the sexuality education should be provided in school level education.
- The plan and policy should be targeted to adolescents' health, education and overall improvement of their physical, social and psychological change.
- Majority of adolescents reported that use of condom is the most important method of preventing HIV/AIDS and STIs transmission therefore it is necessary to make them more knowledgeable in the using methods of condom.
- Sex education should be provided to the society through information, education and communication programmes.
- Knowledge on prevention mode of transmission and other information of STIs and HIV/AIDS should be provided regularly.
- HIV/AIDS programs should be launched based on the adolescents by GOs, INGO and CBOs.

## **REFERENCES**

- Acharya, L.B., 1999, "*Knowledge of HIV/AIDS: Case of Married Females of age 15-19 in Nepal*", in KC Bal Kumar (ed), *Population and Development in Nepal*, Vol. 6, pp.127 -136.
- Acharya, Sunil 2005, "*The HIV/AIDS Situation in Nepal*", *Population Magazine*, Vol. III, pp.25 (Katmandu: PSSN).
- Aryal, R.H. 2000, HIV/AIDS: "*An Emerging Issue in the Health Sector with Special Reference to Nepal*", K.C. Bal Kumar (ed.), *Population and Development in Nepal*, Vol. 7, pp.89-110 (Katmandu: CDPS).
- Ashford, Lori S. 2001, New Population Policies: "*Advancing Women's Health and Rights*"; *Population Bulletin*, 56, (1): 1-44.
- Budhathoki, K., 1998, *STDs in Nepal, A Country Profile Report* (Kathmandu: MOPE).
- CBS and MOPE, 2003, *Population Projections for Nepal 2001-2021* (Kathmandu: Ministry of Population and Environment).
- Central Bureau of Statistics (CBS), 1995, *Population Monograph of Nepal*, Vol. I and II (Kathmandu: CBS).
- Central Bureau of Statistics (CBS), 2003, *Population Monograph of Nepal*, Vol. II, pp. 325-236.
- CREHPA, 2003, *Injecting and Sexual Behaviors of Female Injecting Drug Users in Kathmandu Valley, Materials from Qualitative Interviews*, March, 2003 (Kathmandu: REHPA).
- Department of Health Services (DOHS), *Annual Report (HMG/N), 2003/2004*, pp.167-176.
- Devkota, B., 2005, *Knowledge of STIs- HIV/AIDS and Sexual Behaviours*, An Unpublished M.A. Dissertation Submitted to Central Department of Population Studies (Kathmandu: CDPS).

- Family Health International (FHI), 2002, *A Situation Assessment of Sex Workers in Kathmandu Valley*, Report of Kathmandu Sex Workers (Kathmandu : FHI).
- Gubhaju, B.B; 2002, "Adolescent Reproductive Health" in *Asia-Pacific Population Journal*, Vol. 17, pp.107.
- Joint United Nations Programme on HIV/AIDS (UNAIDS), 2006, *Report on the Global AIDS Epidemic* (Geneva: UNAIDS).
- Ministry of Health, 2003, *National HIV/AIDS Strategy (2002-2006)*, Nepal (Kathmandu: MOH).
- MOH, New ERA and ORC Macro, 2002, *Nepal Demographic and Health Survey, 2001* (Kathmandu: New ERA, ORC Macro and Ministry of Health), pp.195-207.
- MOHP, New ERA, Macro International Inc., 2007, "*HIV/AIDS Related Knowledge, Attitudes and Behaviour*", *Nepal Demographic and Health Survey, 2006* (Kathmandu : New ERA, Macro International Inc. and Ministry of Health and Population), pp.199-224.
- New ERA, 2002, *Behavioural Surveillance Survey in the Highway Route of Nepal* (Kathmandu : New ERA).
- Pathak Dr. R.S. and Subedi Govinda, "*Meeting Young Peoples Sexual and alth needs in Nepal, A Study of Finish Project Area of FPAN*", November 2002, pp.61-67, (Kathmandu : FPAN).
- Population Reference Bureau (PRB), 2004, *World Population Data Sheet* (Washington, DC: PRB).
- Population Reference Bureau (PRB), 2005, *World Population Data Sheet*, (Washington DC: PRB).
- Population Reference Bureau (PRB), 2006, "*The Global Challenges of HIV and AIDS*", *Population Bulletin*, Vol. 61 (1): p.3.
- Population Reference Bureau (PRB), 2006, "*The Global Challenges of HIV and AIDS*", *Population Bulletin*, Vol. 61 (1): p.3.12

- Population Reference Bureau (PRB), 2006, *World Population Data Sheet*, (Washington DC: PRB).
- UNAIDS, 2004, *Country Profile, The HIV/AIDS/STDs Situation and the National Response in Nepal*, Joint United Nations Programme on HIV/AIDS (Katmandu: UNAIDS).
- UNAIDS/WHO United Nation, 2005, *Population Development and HIV/AIDS with Particular Emphasis on Poverty* (New York: UN).
- UNFPA, 1998, *the South Asia Conference on Adolescents* (Katmandu: UNFPA).
- UNFPA, 2003, *State of the World Population* (New York: UNFPA).
- WHO, 1998, *World Health Report* (Geneva: World Health Organization).
- WHO, 1998, World Health Organization, *Strategies for Adolescent Health and Development South-East Asia Region*, New Delhi.



**Codes for (QN-10) and (QN -14)**

Relation to household head (QN-10)	Completed Grade (QN-14)
01: Head	0: No education
02: Wife/Husband	1: Primary education
03: Son/Daughter	2: Lower secondary education
04: Daughter/son in law	3: Secondary education
05: Grand son/Grand Daughter	4: Higher secondary/Intermediate level
06: Father/Mother	5: Bachelor and above.
07: Father/Mother in law	
08: Brothers/Sisters	
09: Nephew/Niece	
10: Other (specify).....	

**Group 'B'**

**Individual Questionnaire for Higher Secondary Students.**

**Section-I Background of the students.**

QN	Questions	coding categories	Skip
101	Where do you live?	At home.....1 Hostel .....2 Rented house .....3 Relatives .....4 Others (specify) .....	
102	What is the main source of income in your family?	Agriculture.....1 Business.....2 Service.....3 cottage industry.....4 Others (specify).....	
103	Who is the main earner of your family?	Father.....1 Mother.....2 Brother.....3 Others (specify).....	
104	Do you usually read a newspaper?	Yes .....1 No.....2	
105	Do you usually listen to the radio?	Yes.....1 No.....2	
106	Are you married?	Never married.....1 Currently married.....2 Widowed.....3 Separated.....4 Divorced.....5	→ 108
107	If yes, how old were you when you first got married?	Age.....	
108	What is the best age for marriage?	Age for boy..... Age for Girl.....	



**Section II: Knowledge and Attitude on STIs:**

SN	Questions	Coding categories	Skip
201	Have you ever heard of STIs?	Yes:.....1 No.....2	→ Section III
202	If yes, what is the source of information about STIs? (Note: multiple answer possible).	Radio.....01 TV.....02 Local FM.....03 Local News paper.....04 Textbook.....05 Teacher.....06 Parents.....07 Friends.....08 Schools.....09 Marie stopes centre.....10 Others (specify).....	
203	What are the types of STIs? (Note: multiple answer possible)	Syphilis.....1 Gonorrhoea.....2 HIV/AIDS.....3 Other specify.....	
204	What are the means of STIs?	Unsafe sexual contact.....1 Unsafe syringe.....2 Other (specify)..... Don't know.....98	
205	Do you know the symptoms of STIs?	Yes.....1 No.....2	→ 207
206	If yes, what are the main symptoms of STIs?	Weight loss.....1 Headache.....2 Swelling limbs.....3 Itching around genital or mouth.....4 Others (specify).....	
207	Is there anything, a person can do to avoid getting STIs?	Yes.....1 No.....2	→ 209

208	If yes, what can a person do?	Abstain from sex.....1 Be mutually faithful.....2 Consistent use of condom...3 Other (specify).....	
209	If a person wants, what is the main source for treatment of STIs?	Public health sector.....1 NG health sector.....2 Private health sector.....3 Don't know.....98	
210	Have you ever had any STIs?	Yes.....1 No.....2 → 212	
211	If yes, which STIs have you had?	HIV/AIDS.....1 Hepatitis 'B' .....2 Gonorrhea.....3 Syphilis.....4 Others (specify).....	
212	In your view, It is necessary knowledge and awareness about STIs?	Yes.....1 No.....2 → 214	
213	If yes, why is it necessary?	.....	
214	What attitude do you have towards STIs infected person in your community?	Hate them.....1 Love and respect them.....2 Help and participate them in social work.....3 Others (specify)..... Don't know.....98	
215	What can you do for the control of STIs? (Note: Multiple answer possible)	Provide sex education for All people.....1 Reduce the unsafe intercourse .....2 Conduct the campaign to aware the people about STIs .....3 (Specify).....	
216	What do you suggest for STIs infected person in your community?	..... .....	

**Section III knowledge and Attitude on HIV/AIDS.**

SN	Questions	Coding categories	Skip
301	Have you ever heard of HIV/AIDS?	Yes.....1 No.....2	→ End the interview
302	If yes, what is the source of your information? (Note: Multiple answer possible)	Radio.....1 T.V.....2 Local FM.....3 Local Newspaper.....4 National Daily news paper...5 Text books.....6 Teacher.....7 Parents.....8 School.....9 Friends.....10 Others (specify).....	
303	Do you know the full forms of HIV/AIDS?	Yes.....1 No.....2	→ 305
304	If yes, what is the full form of HIV/AIDS?	..... .....	
305	Is there any difference between HIV/AIDS?	Yes.....1 No.....2	→ 307
306	If yes, what is the difference between HIV and AIDS?	..... .....	
307	How is HIV transmitted?	Unsafe intercourse.....1 Blood.....2 Sharing intravenous needles.....3 Birth from infected mother..4 Other (specify).....	
308	What is the method for preventing HIV/AIDS? (Note: Multiple answer possible)	Sexual abstinence.....1 Use of condom.....2 Non use of syringes.....3 Avoiding births from infected mother.....4 Others (specify).....	
309	How would you think about people with HIV/AIDS?	Positive.....1 Negative.....2 Don't know.....98	
310	What are the barriers encountered by young people in access to STIs, HIV/AIDS info and services in the locality?	Lack of education.....1 Social stigma and discrimination.....2 Facility refusal.....3 Lack of opportunity.....4 Others (Specify).....	
311	In your opinion who are the most vulnerable group in your society from HIV/AIDS	Adolescent and youth.....1 Drives.....2 Drug Addicts.....3 Commercial sex workers.....4 Others (specify).....	

312	Can HIV/AIDS be cured?	Yes.....1 No.....2 Don't know.....98	
313	What is your perception about AIDS infected person?	All of them die.....1 Some of them die.....2 Not die at all.....3 Don't know.....98	
314	What attitude do you have towards HIV/AIDS infected person in your community?	Hate them.....1 Love and respect them.....2 Help and participate them in social work.....3 Others (specify)..... Don't know.....98	
315	In your opinion, who play the vital role for controlling the epidemic?	Individual.....1 Community.....2 Government.....3 NGOs/INGOs.....4	
316	What do we do to control the HIV/AIDS? (Note: Multiple answer possible)	Provide sex education.....1 Provide contraceptive device...2 Control unsafe intercourse.....3 Others (specify).....	
317	Is it necessary to have education about HIV/AIDS in curriculum of grade XI and XII?	Yes.....1 No.....2	
318	What do you suggest for HIV/AIDS infected person?	..... ..... ..... .....	
319	What is your contribution in your society for controlling epidemic?	..... ..... ..... .....	

**Thanks for your information**