

**KNOWLEDGE, ATTITUDE AND BEHAVIOUR OF LOWER SECONDARY AND  
SECONDARY SCHOOL ADOLESCENTS To STDs, HIV/AIDS and Sexuality  
(A Case Study in Taplejung District)**

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## **RECOMMENDATION LETTER**

This thesis entitled "**Knowledge, Attitude and Behaviour of Lower Secondary and School Adolescents to STDs, HIV/ AIDS and Sexuality**" has been prepared by Ram Kumar Prasai under my guidance and supervision. I, hereby, recommended this thesis for acceptance.

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## ABSTRACT

This Study entitled "Knowledge, Attitude and Behavior of Lower and Secondary School Adolescents to STDs, HIV/AIDS and Sexuality," is based on the field survey conduct in the secondary schools of Taplejung district. This study has tried to figure out the general knowledge attitude and behavior of School Adolescents on sexuality, STDs and HIV/AIDS. It becomes helpful to understand the knowledge, attitude and behavior mainly by gender wise on STDs, HIV/AIDS and sexuality.

Out of the total sample population of 294, the percentages of Adolescents (77.9%) who have heard of HIV/AIDS is higher than the percentages (63.3%) who have heard of STDs. Only, 62.2 percent have heard of puberty. It shows that majority of adolescents percentage of the study area are lower. It is due to the inclusion of more numbers of adolescents (144) in the sample population from class 8. Adolescents of class 8 had poor knowledge about these disease and sexuality. For example, more than 80% of the class 10 adolescents have heard of STDs and HIV/AIDS but less than 58 percent of class 8 adolescents have heard of these diseases.

The knowledge of sexuality STDs and HIV/AIDS is poor among female adolescents in comparison to the male adolescents due to the lesser number of sources of knowledge. Due to the lack of sufficient knowledge, some of them had misconception about ways of transmission, symptom and preventive measure of STDs and HIV/AIDS. The total percentages of adolescents (7.5%) who had experience of sexual intercourse before marriage is low but the percentages of male (18.4%) is more than three times higher than that of female (5.6%). Because of lack of sufficient knowledge of STDs and HIV/AIDS, some of them have negative attitude and bad behavior on these diseases. Therefore, for the development of significant knowledge, we should inform and educate them about STDs, HIV/AIDS and Sexuality.

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# CHAPTER -I

## INTRODUCTION

### 1.1 General Background

Adolescence is the period of physical psychological and social maturing from childhood to adulthood. These are the formative years when the maximum physical, psychological and behavior changes take place. These years also a time of preparation for undertaking greater responsibility, a time of exploration and widening horizons and a time to ensure healthy all round development. Adolescent is a large and growing segment of the population. (WHO/UNFPA/UNICEF, 1999)

The world health organization (WHO) defines as individuals between 10 and 19 years of age. The broader term "youth" encompasses the 15-24 years old age group.

Specific health services of adolescents were virtually non-existent in Nepal before the international conference on population and development (ICPD) in 1994. It was only after annual meeting of WHO/SEARO for developing regional strategy of adolescent health and development in 1996, emphasis was given in Nepal for developing special programs for adolescent health. This issue then got its place in the nine five year plan and second long term health plan (1997-2017) of the country. Since then various programs on adolescent health is being carried out from Government and NGO.

Sexual maturity influences adolescent sexual activity. They therefore may bear increased risk of sexually transmitted diseases (STDs) including Acquired Immune Deficiency Syndrome (AIDS). There are different types of STDs some of them are (a) syphilis (b) gonorrhoea (c) chancroid (d) Herpes genitalis (e) candidiasis (f) venereal wart (g) HIV/AIDS (NCASC, 1998).

AIDS (Acquired Immunodeficiency Syndrome) is a medical diagnosis of illness syndrome.

A - Acquired - not born with

I - Immune - body defence system

D - Deficiency - not working properly

S - Syndrome - group of signs and symptoms

It is an emerging problem. Every nation is threatened by it. It is a serious fatal Sexually Transmitted Disease

Cause by HIV (Human immunodeficiency Virus). HIV weakens the immune system. This disease is called a syndrome because it consists of several signs and symptoms affecting different parts of body.

HIV is transmitted by

- a. Sexual intercourse (semen/vaginal secretions of infected person passing through injured skins or mucus membrane of the healthy person).
- b. Using unsterilized piercing instrument (syringes and needles contaminated with infected blood).
- c. From an infected mother to her child (her new born child).and
- d. Infected blood transfusion(blood of infected person passes through injured skin)

The HIV virus is not transmitted by social contact like shaking hands, sitting playing and working together. Similarly, HIV is not transmitted through food, water, toilet bathroom and insects.

There are three stages of HIV infections.

- a. A healthy person infected with HIV Around the time of infection some people have a short - illness similar to glandular fever. After this most people remain healthy with no signs of illness for many years. However HIV is still present infect other without either partner knowing it.
- b. Illness associated with HIV infection may being to appear. A person is infected with HIV may being to show signs of illness after six months or many years.

### **Clinical signs of AIDS**

- ❖ Major signs-weight loss greater than 10% of body weight per month, fever for longer than one month, diarrhea for longer than one month persistent severe fatigue ect.
- ❖ Minor signs -cough for more than one month Itchy skin rash, cold sores all over the body thrushes in mouth and throat.

- c. The illness of AIDS Finally, so much of the immune system is destroyed that the person is attacked by rare and serious infection which eventually kill him/her.

**Treatment** -there is no definite Therapy of AIDS. Treatment is for symptoms and opportunists infections.

**Prevention** - It is the only answer to check the further spread of the disease in the community.

For prevention

1. Adopt safe and clean sex
2. Avoid needles used by drug addict and infected people
3. Use condom
4. Avoid multiple sex partners and stick to one partner only.
5. Avoid blood transfusion unless absolutely necessary
6. In case of doubt get a blood test done.

Mann (1987) indicated that "knowledge is the key to prevention" you can protect yourself against the AIDS and therefore prevent AIDS every where in the world, at home or traveling. Don't take risks during your travel that could send

AIDS home with you. If this advice sound strict remember this since there is no cure and no vaccine so for AIDS, prevention is vital.

## **1.2 Statement of the problem/problem identification**

Adolescent age is the transitional age from childhood to adulthood. In general most of the secondary school student as well as some of the lower secondary students in Nepal are of adolescents. In Nepalese culture and society they are at the position of entering into married life to become future parents.

HIV/AIDS evidences are increasing among the adolescents in Nepal. It is widely believed that adolescents sexual activities are increasing over time out of 1,050 reported HIV /AIDS cases in Nepal in 1998,168 where from 14-19 years ago group, which is about 16% of the total reported cases. It may be as high as 34% among the females (Ban, 1998).

Sexually transmitted diseases are everywhere and become a major public health problem in developed and developing countries. The prevalence rates are higher in developing countries, where knowledge of STDs and treatment is less accessible. Of all (the STDs) the major STDs are Gonorrhoea, syphilis, and Trichomoniasis, in both developed and developing regions. The worldwide prevalence of sexually transmitted disease is high and increasing day by day. With the emergence of the human immune deficiency virus and AIDS, the awareness of STDs becomes of great importance and necessary too (Northridge, 1999).

Adolescents are especially at risk of infection with STDs including HIV/AIDS. Similarly, the highest rates of infection with STDs including HIV are found among young people age 20-24. Teen age (15-19) have the next highest rates of STDs, infection. WHO estimates that half of all people infected with HIV and younger than age 25 and in developing countries up to 80% of all new infections are among 15-41 years old. Adolescents are at risk of STDs and HIV/AIDS because they often have short-term sexual relationships and do not consistently use condoms to protect themselves (Shane, 1997).

According to the new population projection of Nepal, out of the total population of 23,151,423 in 2001 more than one fifth was constituted of adolescent population. It is estimated till 2021 (MOPE, 2003).

Nepal is one of the developing countries with rapidly increasing adolescent population. There are problems of early marriage, unwanted pregnancies, spreading HIV/AIDS and other sexually-transmitted infections. Adoption of truthful information about sexually transmitted diseases and HIV/AIDS is one of the problematic jobs because Hindu religion prohibits them to talk about adolescent behaviour openly. Religion predominately prohibited two different sexes to be exposed before marriage. A problem of uninformed and unprotected adolescent sexual activity is the increased exposure to STDs infection with HIV/AIDS. Adolescents of rural areas are less informed about sexuality, STDs and HIV/AIDS and also they can not openly talk about it. Less number of adolescents participate in such activities because most of them hesitate to talk about sex and sexuality. Again, the effect of social barriers such as religion, culture, tradition etc. is more in rural areas of Nepal. That is why, to identify the real knowledge, attitude and behaviour of adolescents about sexuality, STDs and HIV/AIDS is one of the problematic jobs. According to the census 2001, the adolescent's population of Taplejung district is 33804. Most of them are deprived of reproductive rights due to the lack of

communication services. The source of knowledge for STDs, HIV/AIDS and sexuality is course book. Most of them hesitate to talk in such areas. So, it is difficult to identify their reality about it. Without identifying their reality, it is difficult to bring change on them. Negatives attitude, bad behaviour and inadequate knowledge may become the cause of STDs and HIV/AIDS infection which ultimately harm their future and overall development of life. The variation of tradition, institution and social barriers are some inhibitors to launch effective programs and to provide accurate reproductive and sexual health information and useful services to the adolescents in Nepal.

### **1.3 Objectives of the study**

The main objective of the study is to reflect the picture of knowledge, attitudes and behaviour of lower secondary and secondary school adolescents on sexuality, STDs and HIV/AIDS in some selected school of Taplejung District. The specific objectives of the study are;

1. To examine the level of knowledge on sexuality STDs and HIV/AIDS among the adolescents.
2. To examine the level of knowledge for the preventive measure's of STDs and HIV/AIDS.
3. To identify the pre-marital sexual behaviour of adolescents.
4. To identity adolescent's attitude and behaviour on sexuality, STDs and HIV/AIDS

### **1.4 Conceptual Framework**

In this project study, it has attempted to explain the effect of several factors on knowledge, attitude and behaviour of anyone about sexuality STDs and HIV/AIDS. In general knowledge, attitude and behaviour of any one is influenced by socioeconomic and demographic factors. Here, socioeconomic factors affect demographic factors and level of education. Place of residence also affect the level of education. These three combinable affect IEC the level of IEC ultimately affect the knowledge, attitude and behaviour on sexuality, STDs and HIV/AIDS. Sufficient information, fact on conception, better level of knowledge positive attitude and good behaviour are the cause of achievement of high level of IEC. Opposite of above mentioned points are the cause achievement of low level of IEC.

## **1.5 Significance of the study**

Adolescent sexual and reproductive health issues, including unwanted pregnancy, unsafe abortion (as defined by the World Health organization), and STDs and HIV/AIDS, are addressed through the promotion of responsible and healthy reproductive and sexual behaviour including voluntary abstinence and the provision of appropriate services and counseling specially suitable for that age group (ICPD, 1994)

One common concern among the health planners is the increasing evidence of HIV/AIDS among people of all ages in general and among adolescents in particular. HIV/AIDS being an incurable and fatal disease, many people believe that knowledge of the disease itself will stimulate people to protect themselves from it (Acharya, 1999)

In Nepal, adolescents constitute one fifth of the total population. They are the backbone of society and parents of tomorrow. They have great responsibility to make the society developed in coming future. They are vulnerable to the rising incidence of STDs and HIV/AIDS. Knowledge is the key to prevention of such diseases. Examination and assessment of their knowledge, attitude, and behaviour to sexuality, STDs and HIV/AIDS plays a crucial role. Innovative programmers help to inform counsel and provide facilities that sexuality, STDs and HIV/AIDS service would be accessible to adolescents which ultimately prevent them to become a victim of STDs HIV/AIDS previous studies about adolescent's knowledge, attitude and behaviour on STDs HIV/AIDS and sexuality are limited. Again such studies are rare in rural areas like Taplejung District. So, it would be helpful to formulate further policy and program in the related field in Nepal.

## **1.6 Scope and limitation of the study**

In the field of research study, it is not possible to find complete figure without assuming some fact. So, this study is limitation to the adolescents of lower secondary and secondary school in rural areas of Taplejung district. This study didn't cover the adolescents who are out of school.

## **CHAPTER-II**

### **LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

This chapter includes available literature related to knowledge, attitude behavior and prevalence of STDs and HIV/AIDS among adolescents and youths. It has attempted to present sexual and reproductive health behaviors national, regional and worldwide on STDs and HIV/AIDS.

#### **Introduction**

Acquired Immune Deficiency Syndrome (AIDS), a state of a disease caused by Human Immunodeficiency Virus (HIV) was first diagnosed in America in 1981. AIDS, through ultimately leads the person to death, is not a disease itself but a state of having deficiency of immunity power in human beings. When this virus (HIV), a group of retrovirus family, enter into a human body it starts to reduce the defensive power of the body against any foreign organism by damaging the tissues, organs and lymphocytes- a small white blood cell circulating in blood and lymph. By which it creates a favorable environment for other germs of diseases and leads the person to life-threatening illness. So doctors prefer to use the term AIDS for cases where a person has reached the final life-threatening stage of HIV infection. (WHO, 2004)

This Virus (HIV) was first identified in 1983 in a homosexual man then has spread silently throughout the world. It is transmitted when a person is exposed to body fluids infected with the virus, such as blood, semen vaginal secretions and breast milk. Therefore the primary modes of transmission are:

- i. Sexual relations with HIV infected persons.
- ii. Sharing hypodermic needles or accidental pricking by a needle containamited with infected blood.
- iii. Transfer of the virus from an infected mother to her baby during pregnancy, childbirth or through breast-feeding.
- iv. Transfusion of infected blood. (NCASC, 2003)

When a virus enters a body, it becomes identifiable within three months and may lose long for 15 year. Throughout that period, it may destroy much lymphocyte enough to lead one's life to death. (WHO, 2004). The large epidemics of HIV infections are found to be transmitted through sexually and sharing hypodermic needle by drugs users. And most

the adolescents are found to be infected rather than other age-group. So the greater risk of transmitting HIV lies on the lack of education in adolescents and they don't care to the matter, either they are sexual partners or the drugs users.

Keeping the matter in consideration, in 1994, the International Conference on Population and Development (ICDP) promised basic sexual and reproductive health services to all by the year 2015 (UNFPA, 2004). Young people seek comprehensive and youth friendly programs that not only offer broad reproductive health choices, but also teach effective decision making skills. They want services that promote education concerning sexually transmitted disease, contraceptives, unwanted childbirth etc. The most successful sexual and reproductive health programs involve adolescents and take what they have to say into consideration (FHI and NCASC, 2003)

## **2.1 World Wide Scenario**

Designation of this topic is mainly based on the previous study of adolescents. Sexually transmitted infections and HIV/AIDS. Previous researches related to STDs and HIV/AIDS are divided into different sub-groups.

### **2.1.1 Adolescents, STDs and HIV/AIDS**

In 1995, young people aged 15-19 was estimated at 512 million of which 83 percent living in developing countries. By the next century, over half of the world's population will live in urban areas where young people are estimated to be poverty and stressful loss of family ties. In developing countries, four out of five of world's young people live and where more than half of population is under the age of 25 years. With 28 percent of the world's population between 10 and 24, 1.5 percent billion people growing up today will be the leaders, citizens and sexually active at early ages, with an increasing proportion of these activities occurring outside of marriage. More and more young people are suffering from STDs including HIV/AIDS, seeking unsafe abortion, resulting into the consequence of early, close and frequent pregnancies and social problems. About half of all HIV infections so far have occurred in young people under age 25. Since the start of the pandemic at least six million youth have even infected with HIV (Khanal, 1997).

Each year more than two million have unsafe abortions. Adolescents are especially at risk of infection with STDs including HIV/AIDS. Similarly, the highest rates

of infection with STDs, including HIV/AIDS are found among young people age 20-24. Teens ages 15-19 have the next highest rates of STDs infection (Shane, 1997).

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

The incidence of RTIs and STDs among Adolescents has increasing markedly worldwide for the past 2 decades. Gonorrhoea Chlamydia, Syphilis, Herpes, genital warts and HIV are the most prevalent RITS/STDS among the teens. One-fifth of people worldwide with AIDS are within their twenties (Alok, 1998:28).

In most of the surveys of sub-Saharan Africa, around two fifths of the respondents agreed that they had been treated for STDs. This is undoubtedly an under statement as this is a matter which endangers their occupational success and incomes and where the interviews found the discussions most difficult. Some of these respondents remember only that the doctor told them that they had a venereal disease. Nevertheless, information was collected from 248 respondents about the last treatment where they remember the diagnosis made. In over 80 percent of the cases that was Gonorrhoea, in 11 percent Syphilis, and 3 percent Candididiasis. It is significant in view of the discussion of chancroid as a major cofactor for HIV-transmission that only one respondent reported a diagnosis of chancroid (I. O. Orubuloye, John C. Caldwell, 1994).

### **2.1.2 Sexuality, STDs and HIV/AIDS**

Sex and sexuality are often viewed in America as dirty, shameful and certainly not issues that are appropriate for adolescents. Adults especially resist the idea that adolescents are sexual beings. The key notion is that sexuality not necessarily the act of sexual intercourse-but sexuality, is a normal, fundamental part of development. Just like every other step of development, youth need this one to be addressed, discussed, and supported by the family, adults and society in general (Harding, 1998).

An Indonesian Study showed relation between sexual behaviour (sex with multiple partners) and spread of HIV that men with high level of sexual activity, such as

frequent clients of sex workers have frequent contact with women with high level of sexual activity, such as female prostitutes. at the same time these men were also found having contacts with low activity women (wives or other sexual partners), through which a multiple epidemic may occur (Anderson and Gupta, 1989).

Carael (1997 : 116) indicated that in many societies, urbanization increases opportunities for sexual encounters and provides new model of sexual behaviour. The results suggested that urbanization and modernization favour transgression of more restrictive traditions that exists in some rural areas. AS more people marry late and more relationships become informal, higher risk behaviours tend to concentrate in cities and towns. However, this difference does not mean that the extent of 'causal' sex in rural and urban areas (excluding commercial sex) is not correlated. On the contrary, the more non-regular sex in rural areas the more regular there is in urban areas.

Although American young people (aged 15-19) are 15 percent more sexually active today than they were in 1979, their use of condoms has also increased from 21 to 58 percent. AIDS remain a problem because the age at which HIV infection occurs is becoming lower over time. New studies estimate that 25 percent of individuals infected with HIV between 1987 and 1991 were less than 21 years of age. This is apparently a substantial increase. Sexual contact between males accounts for approximately 35 percent of aids cases among young people who are 13-19 years old and some 70 percent of the instances are among young adult men aged 20-24 (Center for disease Control. 1993 i selik et al ., 1993).

### **2.1.3 Pre-martial Sexual Behavior**

Yaser (1999) found that many young people start sex before marriage. They often change sexual partners several times, increasing the risk of unwanted pregnancy and STDs. It is noted that those adolescents and young adults live in serious reproductive health risks resulted from inadequate factual information, tool little guidance about sexual responsibility and limited access to reproductive health care. Despite the apparent need for information, counseling and services, young people remain under served by most reproductive health programme. Now-a-days many teenagers get their direction from peers or media. Which often give skewed or sensationalized portrayals of sexuality?

Chaudhary (1999) analyzed the study of pre-martial sex in Bangladesh. The Bangladesh study based on rural-urban sample of over 1200 adolescents, reveals that the prevalence of sex among adolescents in general, increases with age and this is higher in

urban than in rural areas among boys than among girls. The majority of unmarried urban adolescents boys reported to have engaged in sexual relation by their early teens, while a good proportion of urban unmarried adolescent girls have had sexual relations by their late teens. Over 6 in 10 unmarried urban adolescents boys reported to have had sexual experience at age less than 16. The figure rises to 8 in 10 at age 16. More than one in 10 urban unmarried adolescent girls reported to have had sexual experiences at age below 16. This figure rises to one in 5 and one in 3 at ages 17 and 18 respectively. The prevalence of pre-martial sex among adolescents is lowest among rural girls. However, the incidence of pre-martial sex among rural adolescent's boys is not uncommon. About one in four to two in five unmarried rural adolescents' boys reported to have had sexual experiences at ages 16, 17 and 18 respectively.

The initiation of sexual intercourse in early life is associated with enhanced risk of HIV and STDs (Dixon-Mueller and WasserHeit, 1990), usually due to prolonged sexual exposure unless first sexual intercourse marks the beginning of a mutually monogamous relationship.

#### **2.1.4 School-age Girls, Women, STDs & HIV/AIDS**

Girls and women are highly vulnerable to HIV/AIDS and a lack of education makes them more so. Girls are at greater risk than boys because of gender inequalities in status, power and access to resources (Over, 1998).

Girls are particularly vulnerable to contracting AIDS for social, cultural economic and even psychological reasons. By contrast, some cultural norms can reduce girl's risk of HIV/AIDS infection such as those of Indian sub continent shown to be effective in protecting girls from pre-martial and extramarital sex (Caldwell and others, 1999).

Gender role can be unhealthy for men as well because they tend to encourage men's physical risk. Because of their gender roles, many women around the world have trouble about sex or monitoring reproductive health concern. They may be able to ask their partners to use condoms or to refuse sex, even when they know they risk getting pregnant or being infected with STIs including HIV. In Uganda, one person in every four believes that women can not refuse sex, even she knows her partner has AIDS (Oodit, 1998).

Knowledge of AIDS seems to be increased as age of women increases. About 29 percent of women of age 19 years have heard about AIDS while only 14 percent of age 15 years has heard about it. The adjust odds ratios based on logistic regression also are

statistically significant for the ages 17, 18 and 19. For instance, women aged 19 years have 2.4 times higher odds acquiring knowledge of AIDS compared to a women aged 15 years. Similarly, women who are married before the age of 15 are less likely to have the knowledge of AIDS compared to their counterparts. Out of 320 women who were married before the age of 15 only 1 percent have knowledge, whereas out of the 662 women with more than 15 years of age at marriage, 19 percent knows about AIDS. This association is statistically significant (Acharya, 1999).

### **2.1.5 Use of Condoms, STDs and HIV/AIDS**

Condoms if properly stored and used give adequate protection against STDs and HIV and, in addition, prevent unwanted pregnancy. Until recently condoms have not proved popular as a means of contraception in Nigeria primarily because of their association with prostitution and extra marital relationship and because of the fear that a condom can disappear into the womb and thereby cause sterility. Husbands do not like to suggest the use of condoms to their wives because it will imply that they themselves have been using them extra marital affairs. However recent research findings in the Ekiti district of Nigeria indicate that condoms are now being accepted by single girls to prevent unwanted pregnancy that could drive them into premature marriage (Caldwell Orubuloye, and Caldwell, 1992).

Only 12 percent of the users had experienced condom breakage, while only 2 percent believed that condoms were harmful. However, 76 percent would continue to use condoms primarily as protection against STDs and unwanted pregnancy the reminder would stop using condoms because it is artificial and reduce enjoyment of sex. Interestingly, 56 percent of sex worker had ask their clients to use condoms, at least on one occasion, more than half of whom had agreed to do so for protection against STDs and AIDS.

However,62 percent of the sex worker reported that their clints like restrictions placed on the,64 percent said they would go on to have sex with their clients who refused to use condoms and 44 percents said they would charge more for clients who refused to use condoms. Partly because of protection against STDs and because of fear of AIDS, 12 percent of the clients always provided their own condoms,8 percent usually did so, while 56 percent did so occasionally and 18 percent had never done so (Orubuloye,1997).

According to recently conducted a study in Lima, Peru it is found that 59 percent of the men had heterosexual relationship and only 30 percent of them used condom regularly during such encounters (Mahler,1997 : 39).

An urgent priority to combine contraception especially of condoms use, with prevention of sexually transmitted diseases (STDs) was found essential. Barrier methods, which help to prevent an unwanted pregnancy as well as these diseases and cervical cancer, must be given priority (Oliveria, 1995 : 9).

Therefore the success of STD/HIV prevention programmes was measured with the promotion of condom. Among sexually activity men and women, use of condoms is found to be the reliable method to prevent SDTs contraction including HIV. The conditions were found more serious among urban people who are exposed to the risk of having multiple sex partners (Messersmith, et al, 1994 :97, WHO 1992 : 18).

### **2.1.6 Infertility, STDs and HIV/AIDS**

There is considerable evidence, generally based on differentials in the levels of infertility that considerable variation in the prevalence of sexually transmitted disease occurs among Sub-Saharan African populations. The highest rates of primary infertility (or the total absence of live born children) have been reported in central a Africa and parts of eastern Africa, where HIV Zero prevalence levels are also generally very high. While 3 percent of all women globally are childless at the end of the childbearing years (Frank, 1987)

The Congo STD epidemic was so severe that by the mid-twentieth century around half the women in some districts of the region were tendered infertile at such an early age that they were unable to bear any children at all during their reproductive years (Caldwell, 1997).

### **2.1.7 IEC, STDs and HIV/AIDS**

In turn, adolescents learn about what they see as appropriate sexual behavior and what is desirable, through advertisement, television and music videos. The media can be our allies, particularly if they include healthy, accurate and honest messages into the context of television shows. Media advertising should also target males too often advertisements, especially those centered on condoms, contraception. SYDs and pregnancy are geared thwarts women (Harding, 1988).

One cannot be too careful to prevent pregnancy, sexually transmitted diseases (STDs), including Acquired Immune-Deficiency Syndrome (AIDS), if one cannot even speak about them. Another message that is vital to distribute to society is that education about sexual health and sexuality does not encourage or increase sexual activity. This misconception acts as the primary barrier to communication and openness. To create an enabling environment for youth and sexuality education, we must work on conveying a positive, "user-friendly" message about adolescent sexuality. Adolescents also want media that do not confuse the message. The United States media are guilty of mainstream (Harding, 1998).

## **2.2 The case of SAARC Countries**

Dara on prevalence of STDs, including HIV/AIDS are not available for all SAARC countries and are also limited in scope. However the limited information that is available reveals a high level of prevalence of RTIs and STDs among both married and unmarried adolescent girls and boys. For example, in Bangladesh over 40 percent of unmarried and married adolescent girl and twenty percent of unmarried adolescent boys are reported to have symptoms of RTIs and STDs. The incidence of HIV/AIDS among adolescents is limited but increasing particularly among girl. For example in Nepal, adolescent constitute about 16 percent of the HIV/AIDS cases with adolescents girls representing 72 percent of the cases. Knowledge of HIV/AIDS is limited among adolescents. For example, only 19-24 percent of married adolescents girls are reported to have even heard of HIV/AIDS in Bangladesh and Nepal (UNFPA 1998).

Use of condoms by CSWs with all their clients was found low among CSWs working in Nepal (40%) where as 86 percent of the CSWs in India use condoms regularly with their clients. HIV/AIDS is spreading rapidly in Nepal-AIDS was first identified in Nepal in 1988 and by the end of 1996, a total of 82 AIDS cases are close to 500 HIV infections were reported to the Ministry of Health's National Center for AIDS control (Chin, 1997).

### **2.3 The Case of Nepal**

The incidence of STDs and HIV/AIDS is increasing at an alarming rate. Among adolescent boys, 10 percent reported their first sexual contact was with commercial sex-workers. Fifty percent of female adolescent STS patient are rapidly involve in the commercial sex trade. Just less than one in five of these patients (16-19 year) were found infected by HIV virus (UNFPA, 1998).

Study of 370 female commercial sex workers in Kathmandu Valley in 1994 found that 72.4 percent of them had and of the four symptoms of STDs namely vaginal discharge, pelvic inflammatory disease, ulcerative disease, and urethritis. Furthermore, the blood samples of 341 CSWs were tested for VDRL (Venereal Disease Research Laboratory, tested for Syphilis). Hepatitis B and HIV of the total sample, 28.4 percent of the CSWs were found to have been infected with one of diseases. Therefore, high-risk behavior group and prevalence of the STDs were found linked each other (Subedi, et al, 1994:100).

Adequate level of knowledge on STDs/AIDS and use of condom has not been found among the long route truck drivers. Moreover, most of them were found ignoring the possible health disaster and consequences of HIV/AIDS. Many of them had reported that they had not even seen HIV/AIDS infected persons in their lifetime. The situational seriousness is not only because of the spreading prevalence of STDs and HIV/AIDS, but also the knowledge gape of the causes and consequences of STDs among the vulnerable of people as truck and taxi drivers (Mainali, 1995 : 6).

Limited clinic based studies in Nepal also reveal a high degree of prevalence of some types of STDs. For example, clinic based study conducted among a group of pregnant women visiting for the first time health facilities for antenatal care (ANC) services revealed one third of them had at least one STD related sign/symptom (UNICEF, 1999)

Data, although limited, also show an increasing number of HIV/AIDS cases among women, particularly adolescents girls and prostitutes. For example, in Nepal, One third of diagnosed HIV/AIDS positive cases were females, of whom 32 percent were adolescents (UNICEF, 1999).

It has been reported that large number of CSWs work in Nepal and girls are trafficked from one place to another within Nepal and even across the boarder to India. This situation makes the CSWs the most vulnerable groups to bring infected by HIV. One researcher was warned that the ethnic group of Badi could wiped out unless they were

made aware of AIDS. CSWs are stigmatized and all CSWs are associated with STDs, HIV and AIDS. We found very difficult to talk with CSWs about AIDS, they took the question personally that we suspected them of having AIDS. Therefore, in final questionnaire that we suspected those of having AIDS infection were deleted. Use of condom by CSWs and negotiating for condom were explored in some depth (New, ERA, 1998, :75).

A study on HIV/Syphilis prevalence in pregnant women in four urban areas of Nepal showed that the prevalence rate of syphilis in the study population suggests a marked risk for pregnant women of contracting HIV infection for at least two reasons:

- i. The modes of transmission of HIV and other STDs are similar.
- ii. The important role of STDs in facilitating the transmission of HIV.

The prevalence rate of HIV was found to be 0.2 percent. The number of HIV positive individuals varied between the different sites. However the total number (4 in 1802) is too small to allow statically valid statements about the significance in the prevalence rate of different areas. Although there was no HIV positive sample found in Kathmandu, there is little evidence to believe that the prevalence rate should be different (or even lower) in other urban areas. The fact that there is no significant different of the syphilis prevalence rate for a different area indicates that STDs are more or less equally distributed (Bista, 1997)

Regarding the symptoms of STD, nearly one fourth (24%) had suffered from sores/ulcer around vagina and slightly less than one fifth (18%) from too much pain inside vagina during intercourse. The corresponding figures were 18 percent and 13 percent in the control areas respectively. Similarly, about eight percent of CSWs in the project area and five percent in the control area also had experienced purulent discharge (New ERA, 1995).

HIV/AIDS and sexually transmitted disease now a days are emerging as a major threat in the aspect in Nepal. Since the first case of AIDS detected in 1988 in Nepal, the number of cases over the year has been gradually increasing. For example, the cumulative HIV/AIDS situation in 1996/97 was recorded to be 790 cases of which 61.6 percent were males and 38.4 percent were females. This situation in 1998/99 has sharply increasing to 1,108 cases, an increasing of 1.4 times as compared to the figure corresponding 1996/97. Of the total cumulative case recorded as HIV positive in 1996/97, 152 cases were recorded have had AIDS. The figure for 1998/98 was recorded at 225 cases. Additionally, 62 of the 152 AIDS patients and 108 of the 225 AIDS patient were also recorded to have

had died. This suggestion that death due to AIDS in 1997/98 was 1.5 times greater as compared to that of 1996/67 (Pant, 2000).

The available data related to STD and RTI were not available in separate form. Besides, the data that were recorded were recorded were also different in terms of the denominator as well as in terms of its comparability. It is therefore; more than 100 cases were reported to be RTI/STD/HIV cases in 33 district in 1996/98 followed by 19 district were the 50-99 such cases were recorded. Similarly, 20-50 RTI/STD/HIV new cases in 13 districts (Pant, 2000).

| Estimated number of people living with HIV/AIDS end-2001 |                      | Children orphaned<br>by AIDS<br>(0-14 years) |
|----------------------------------------------------------|----------------------|----------------------------------------------|
| Adult and children (4-49 years)                          | Children (0-4 years) |                                              |
| 58,000                                                   | 1500                 | 13,000                                       |

**Source : The state of the world's children, UNICEF, 2004.**

## 2.4 Conceptual Framework

In this research study, it has attempted to explain of several factors on knowledge, attitude and behavior of anyone sexuality STDs and HIV/AIDS. In general knowledge, attitude and behavior of any one is influenced by socioeconomic and demographic factors. Here, socioeconomic factors affect demographic factors and level of education. Peace of residence also affects the level of education. These three combinely affect IEC. The level of IEC ultimately affects the knowledge, attitude and behavior on sexuality, STDs and HIV/AIDS. Sufficient information, fact on conception, better level of knowledge, positive attitude and good behavior are the cause of achievement of high level of IEC. Opposite of above mentioned points are the cause achievement of low level of IEC.

**Figure: Conceptual Framework**

## **2.5 Selection of Variables**

### **2.5.1 Independent Variables**

- Socio-Economic Factors
  - ) Education
  - ) Caste/ethnicity
  - ) Religion
  - ) Occupation
- Demographic Factors
  - ) Age
  - ) Sex
  - ) Marital status
  - ) Age of marriage

### **2.5.2 Dependent Variable**

- I. Knowledge, attitude on sexuality, STDS and HIV/AIDS.
- II. Sexual behavior.

## **2.6 Working Hypotheses**

- I. Male adolescents know more about STDS, and HIV/AIDS.
- II. Higher the grade higher the knowledge on STDS and HIV/AIDS.

# **CHAPTER - III**

## **METHODOLOGY**

### **3.1 General Background**

A set of methods was employed to conduct the research. The measurement of adolescent level of knowledge and attitude to sexuality STDs and HIV/AIDS is an essential task. The present behaviour of anyone reflects his/her future status and only the face to face interaction can find out human behaviour. For this purpose the whole study needs to be carried out the basis of the primary data and it consists of selection of study area, sample selection questionnaire design, method of data collation data processing, data analysis and interpretation.

### **3.2 Study area**

Taplejung district is one of the mountainous districts. The total area of this district is 3646 sq. km. and is bordered by Sankhuwashabha in the west, Therhathun and Pantchthar in the south, India in the east and China in the north. It is located between  $27^{\circ} 15'$  to  $27^{\circ} 57'$  north latitude and  $87^{\circ} 32'$  to  $88^{\circ} 15'$  east longitude. Phungling is a Headquarter of this district. It is linked both by air mail and north-south highway. It takes three days traveling by bus from Kathmandu and about two hours by plane. The main cast/ethnic compositions are Limbu, Bramin, chhetri, Rai, Gurung, Magar, Sherpa, Kami, Sarki ect. Some secondary school and VDC s are target study areas of this district.

### **3.3 Sample selection**

The data for the study was collected from 4 schools of rural areas in the Taplejung district.

From these select schools 294 adolescents in the age group between 10-19 years of the both sexes was contacted for interview. For this purpose student of class 8, 9 and 10 has been included. All the students of these classes are above ten years of age. So, all of them be interviewed those who are present during the survey period has been interviewed.

This study is carried out using primary data. The data generated by a survey method conducted with in the class 8,9,10 students. It was a simple random sample (Lottery method) survey based on probability sampling.

## Distribution of Adolescents by School, Grade and Sex

| Name of school                            | Class |        |      |        |      |        | Total |
|-------------------------------------------|-------|--------|------|--------|------|--------|-------|
|                                           | 8     |        | 9    |        | 10   |        |       |
|                                           | male  | female | male | female | male | female |       |
| Shree Sharda<br>Secondary, Thumbedin      | 18    | 17     | 15   | 15     | 10   | 15     | 90    |
| Shree Chaksibote<br>Secondary, Chaksibote | 10    | 12     | 8    | 10     | 4    | 8      | 52    |
| Shree Bhanjyang<br>Secondary, Lumbedin    | 14    | 15     | 12   | 14     | 9    | 13     | 77    |
| Shree Sinam Secondary<br>School, Sinam    | 14    | 14     | 12   | 13     | 10   | 12     | 75    |
| Total                                     | 56    | 58     | 47   | 52     | 33   | 48     | 294   |

### 3.4 Questionnaire Design

A set of semi-structured questionnaire has been developed for this study. Questionnaire has been constructed on the basis of knowledge, attitudes and behaviour of adolescents to sexuality, STDs and HIV/AIDS. The questionnaire has also included questions about household characteristics such as parent's education, occupation; caste/ethnicity etc. questionnaire was pretest before getting finally print for field visit.

### 3.5 Data Collection Method

Topic of sexuality, STDs and HIV/AIDS is sensation for unmarried as well as some adolescent students. Generally they may hesitate to answer questions about sex and sexuality. Interview has been taken in two methods. In two schools questionnaire was distribute to all the students in the classroom. Necessary instruction was provided to the students about ways of filling questionnaire respondents was carefully supervised during the administration of questionnaire to minimize data error. For other two schools, two adolescents (one male and one female) for each school have been employed by establishing report with them. Necessary instructions have been given them to fill the

questionnaire from each respondent. The researcher worked as a supervisor during the survey period.

### **3.6 Data processing**

In this study pre-coded questionnaires have been used. At the beginning of the data processing, all the field questionnaire have been manually reviewed and checked and the data has been managed in DBASF program their by editing entry errors and required tables has been produced by using SPSS/PC<sup>+</sup> software.

# **CHAPTER -IV**

## **SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS**

In this chapter, socioeconomic and demography characteristics such as their ethnicity, religion, parent's education, parent's occupation age-sex structure, marital status, age at marriage and family size of the respondents are described.

### **4.1 Social Characteristics**

Taplejung district being a mountainous district of Eastern Nepal, there is a diversity of ethnicity. They have been categories in major cast/ethnic group as Brahmin, Chhetri, Limbu, Rai, Magar, Newar and Gurung. Table (4) shows caste/ethnicity and Religious status of the sample population.

#### **4.1.1 Caste/ethnicity**

Table (4) shows caste/ethnicity and religious status of sample population. Among the total respondents of 294, majority of them were found to be Brahmin (34%), followed by Limbu (27.8%), Chhetri (21%), Rai (5.7%), Tamang (4%), Kami (3%), Magar and Newar (1%) and Gurung (0.7%).

#### **4.1.2 Religion**

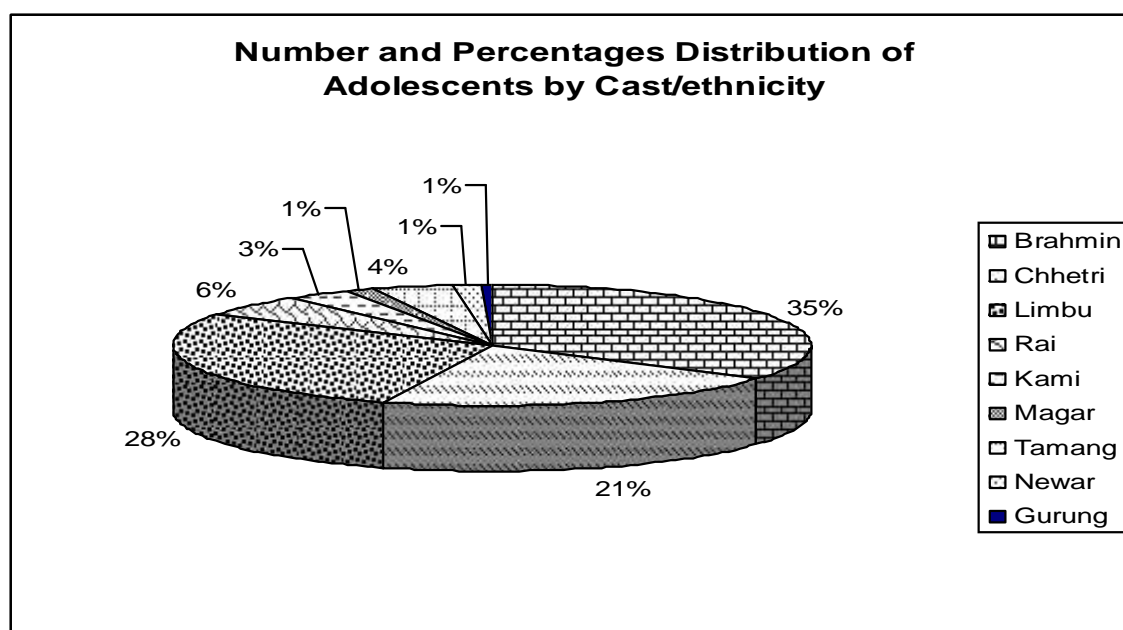
In this study, among the total respondents only three religious group were found. Majority of them were found to be Hindu, i.e. (58.5 %) followed by Kirat (34.7%) and Buddhist(6.8%).

**Table 4: Number and Percentages Distribution of Adolescents by Cast/ethnicity and Religion**

| Characteristics         | Number     | Percent      |
|-------------------------|------------|--------------|
| <b>Castle/ethnicity</b> |            |              |
| Brahmin                 | 101        | 34.4         |
| Chhetri                 | 62         | 21.1         |
| Limbu                   | 82         | 27.9         |
| Rai                     | 17         | 5.8          |
| Kami                    | 10         | 3.4          |
| Magar                   | 4          | 1.1          |
| Tamang                  | 12         | 4.1          |
| Newar                   | 4          | 1.4          |
| Gurung                  | 2          | 0.7          |
| <b>Total</b>            | <b>294</b> | <b>100.0</b> |
| <b>Religions</b>        |            |              |
| Hindu                   | 172        | 58.5         |
| Bouddha                 | 20         | 6.8          |
| Kirant                  | 102        | 34.7         |
| <b>Total</b>            | <b>294</b> | <b>100.0</b> |

Source: Field Survey, 2006.

Fig - 1



### 4.1.3 Parent's Education

Table (5) shows the number and percentage distribution of adolescents who had responded about their parent's education. From the table, the percentage of literate father (70.1%) was higher than the percentage of literate mother (52.7). Among literate father, 43.2 percent had primary level, while 3.9 percent had SLC level and only 1.5 percent had IA level education. Other 0.9 percent has above IA level education. Similarly, among literate mothers, 48.4 percent had primary level while 3.2 percent had SLC level and only 0.6 percent had IA level education. No one mother had above IA level education. Except in primary level, the percentage of literate father was higher than the percentage of literate mother in each level. It shows that the representation of adolescents in this study was both from educated and non-educated family background.

**Table 5: Percentage Distribution of Adolescents by their Parent's Education**

| Characteristics                     | Number | Percent |
|-------------------------------------|--------|---------|
| <b>Father's Education</b>           |        |         |
| Illiterate                          | 88     | 29.9    |
| Literate                            | 206    | 70.1    |
| <b>Completed level of education</b> |        |         |
| Primary                             | 89     | 43.2    |
| Lower secondary                     | 71     | 34.5    |
| Secondary                           | 33     | 16.0    |
| S.L.C                               | 8      | 3.9     |
| I.A                                 | 3      | 2.31    |
| I.A +                               | 2      | .09     |
| Total                               | 206    | 100     |
| <b>Mother's Education</b>           |        |         |
| Illiterate                          | 139    | 47.3    |
| Literate                            | 155    | 52.7    |
| <b>Completed level of education</b> |        |         |
| Primary                             | 75     | 48.4    |
| Lower secondary                     | 51     | 32.9    |
| Secondary                           | 23     | 14.8    |
| S.L.C                               | 5      | 3.2     |
| I.A                                 | 1      | 0.6     |
| Total                               | 155    | 100.0   |

**Source: Field Survey, 2006.**

Note: In this study education of some dead parents was also included.

### 4.2 Economic Characteristics

Although in the context of Nepal most of the adolescent population are consider to be economically active but school adolescents are economically inactive. Students should depend upon their parents. That is why, in this study the occupation of parents in considered as the occupation of each adolescents.

#### 4.2.1 Father's Occupation

In this study five types of occupation were recorded as the major occupation. Table (6) shows that, among the total respondents majority of their father were found to be engaged in agriculture (85.3%), those involved in teaching (7.8%), Business (5.1%), Health working (1.1%) and Postman (0.7%).

#### 4.2.2 Mother's Occupation

Similarly, table (6) shows that most of their mother were engaged in agriculture (92.8%) and then in teaching (3.45%), Business (2.4%) and health worker (1.4%).

**Table 6 : Percentage Distribution of Adolescents by their Parent's Occupation**

| Characteristics            | Number | Percent |
|----------------------------|--------|---------|
| <b>Father's occupation</b> |        |         |
| Agriculture                | 251    | 85.3    |
| Teaching                   | 23     | 7.8     |
| Business                   | 15     | 5.1     |
| Heath worker               | 5      | 1.1     |
| Postman                    | 2      | 0.7     |
| Total                      | 294    | 100.0   |
| <b>Mother's occupation</b> |        |         |
| Agriculture                | 274    | 92.3    |
| Teaching                   | 10     | 3.4     |
| Business                   | 7      | 2.4     |
| Heath worker               | 4      | 1.4     |
| Total                      | 294    | 100.0   |

**Source: Field Survey, 2006.**

Note: In this study occupation of some dead parents was also included.

### 4.3 Demographic Characteristics of Adolescents

In this study demographic characteristic such as age-sex and marital status have included.

#### 4.3.1 Age-Sex Composition

The study would have been expected to report adolescents at their age above 10 and below 19 years. Table 7 shows that majority of them (21.8%) reported in age 15 and least of them (4.8%) reported in age 19. The percentage of female was slightly higher than the percentage of male from age 13 to 16 years but was lower than male form age 17 to 19. The low percentage of females than the percentage of male in higher age might be the cause of drop out rate of female.

**Table 7: Number and Percentage Distribution of Adolescents by Age and Sex**

| Age   | Female |         | Male   |         | Total<br>Percent |
|-------|--------|---------|--------|---------|------------------|
|       | Number | Percent | Number | Percent |                  |
| 13    | 20     | 14.7    | 21     | 13.3    | 13.9             |
| 14    | 29     | 21.3    | 31     | 19.6    | 20.4             |
| 15    | 30     | 22.1    | 34     | 21.5    | 21.8             |
| 16    | 27     | 19.9    | 30     | 19      | 19.4             |
| 17    | 15     | 11.0    | 20     | 12.7    | 11.2             |
| 18    | 10     | 7.4     | 13     | 8.2     | 7.8              |
| 19    | 5      | 3.7     | 9      | 5.7     | 4.8              |
| Total | 136    | 100.0   | 158    | 100.0   | 100.0            |

**Source : Field Survey, 2006.**

Note: In this study the reported minimum age of adolescents was 13 year.

#### 4.3.2 Marital Status by Sex

Table (8) presents the marital status of sample population. Out of the total adolescents, overwhelming of them was unmarried, i.e., 96.3 percent and other 3.7 percent were married.

Among the total males no one were found to be married but only 8.1 percent female were married. It shows that there is the prevalence of early marriage practice among females.

**Table 8: Percentage Distribution of Adolescents about their Marital Status by Sex**

| Description | Male |       | Female |       | Total Number | Total Percent |
|-------------|------|-------|--------|-------|--------------|---------------|
|             | No   | %     | No     | %     |              |               |
| Married     | -    | -     | 11     | 8.1   | 11           | 3.7           |
| Unmarried   | 158  | 100.0 | 125    | 91.9  | 283          | 96.3          |
| Total       | 158  | 100.0 | 136    | 100.0 | 294          | 100.0         |

**Source : Field Survey, 2006.**

# CHAPTER - V

## Data Presentation and Analysis

### 5.1 Level of Knowledge on STDS and HIV/AIDS

#### 5.1.1 Knowledge on STDs

This chapter is devoted to analyze the effect of socioeconomic and demographic variables on knowledge of STDs. The differential of knowledge on STDs according to socioeconomic and demographic characteristics is discussed below.

#### 5.1.2 Heard of STDs

Table (9) shows the frequency and percentage distribution of adolescents who have heard or do not heard the name of different STDs. It was found that 59.9 percent had heard of STDs and 40.1 percent did not heard of it. Out of the total adolescents who had heard of STDs, 88.6 percent had heard the name of Syphilis.

**Table 9: Percentage Distribution of Adolescents by Heard of STDs and Heard of Name of Different STDs.**

| Heard of STDs                    | Number | Percent |
|----------------------------------|--------|---------|
| Yes                              | 176    | 59.9    |
| No                               | 118    | 40.1    |
| Total                            | 294    | 100.0   |
| <b>Heard of the name of STDs</b> |        |         |
| <b>Gonorrhoea</b>                |        |         |
| Yes                              | 103    | 64.2    |
| No                               | 73     | 35.8    |
| Total                            | 176    | 100.0   |
| <b>Syphilis</b>                  |        |         |
| Yes                              | 156    | 88.6    |
| No                               | 20     | 11.4    |
| Total                            | 176    | 100.0   |
| <b>Candidiasis</b>               |        |         |
| Yes                              | 4      | 2.3     |
| No                               | 172    | 97.7    |
| Total                            | 176    | 100.0   |

Source : Field Survey, 2006.

### 5.1.3 Heard of STDs by Level of Education

The information education and communication may differ from grade to grade. That is why; an attempt has been made to present the heard of STDs by Education. Out of the total adolescents, their percent from class eight, nine and ten who had heard of STDs was 41.2 percent, 60.6 percent and 75.8 percent respectively. Among those who have ever heard of different types of STDs 27.7 percent from class eight, 66.7 percent from class nine and 79.7 percent from class ten had heard the name of Gonorrhoea. Similarly, 63.8 percent from class eight, 76.7 percent from class nine and 86.9 percent from class ten had heard about Syphilis. No one has heard of Candidiasis from class eight and nine but only 4.4 percent of them have heard of it from class ten. This shows that knowledge on STDs was found to be higher among adolescents of higher grade.

**Table 10: Percentage Distribution of Adolescents about Heard of STDs and Name of STDs by Level of Education**

| Heard of STDs.              | Class 8 |       | Class 9 |       | Class 10 |       |
|-----------------------------|---------|-------|---------|-------|----------|-------|
|                             | No      | %     | No      | %     | No       | %     |
| Yes                         | 47      | 41.2  | 60      | 60.6  | 69       | 75.8  |
| No                          | 67      | 48.8  | 36      | 39.4  | 12       | 24.2  |
| Total                       | 114     | 100.0 | 99      | 100.0 | 81       | 100.0 |
| <b>Heard of Gonorrhoea</b>  |         |       |         |       |          |       |
| Yes                         | 13      | 27.7  | 40      | 66.7  | 55       | 79.7  |
| No                          | 34      | 72.3  | 20      | 33.3  | 14       | 20.3  |
| Total                       | 47      | 100.0 | 60      | 100.0 | 69       | 100.0 |
| <b>Heard of Syphilis</b>    |         |       |         |       |          |       |
| Yes                         | 30      | 63.8  | 45      | 76.7  | 60       | 86.9  |
| No                          | 17      | 36.2  | 14      | 23.3  | 9        | 13.2  |
| Total                       | 47      | 100.0 | 60      | 100.0 | 69       | 100.0 |
| <b>Heard of Candidiasis</b> |         |       |         |       |          |       |
| Yes                         | -       | -     | -       | -     | 4        | 5.8   |
| No                          | 47      | 100.0 | 60      | 100.0 | 65       | 94.2  |
| Total                       | 47      | 100.0 | 60      | 100.0 | 69       | 100.0 |

Source: Field Survey, 2006

### 5.1.4 Heard of STDs by Sex

Out of the total respondents of 59.9 percent who have heard of STDs, the proportion is higher among males (65.2%) as opposed to their female counterparts (53.7%). Table 11 shows that majority of them, 80.6 percent male but no female have heard of Candidiasis. The percentage of male is higher than the percentage of females in each case.

**Table 11 Percentage Distribution of Adolescents about Heard of STDs, Name and Different STDs by Sex.**

| Heard of STDs.              | Male |       | Female |       | Total Percent |
|-----------------------------|------|-------|--------|-------|---------------|
|                             | No   | %     | No     | %     |               |
| Yes                         | 103  | 65.2  | 73     | 53.7  | 59.9          |
| No                          | 55   | 34.8  | 63     | 46.3  | 40.1          |
| Total                       | 158  | 100.0 | 136    | 100.0 | 100.0         |
| <b>Heard of Gonorrhoea</b>  |      |       |        |       |               |
| Yes                         | 60   | 58.3  | 41     | 56.2  | 57.2          |
| No                          | 43   | 41.7  | 32     | 43.8  | 42.6          |
| Total                       | 103  | 100.0 | 73     | 100.0 | 100.0         |
| <b>Heard of Syphilis</b>    |      |       |        |       |               |
| Yes                         | 83   | 80.7  | 58     | 79.5  | 80.1          |
| No                          | 20   | 19.4  | 15     | 20.5  | 19.9          |
| Total                       | 103  | 100.0 | 73     | 100.0 | 100.0         |
| <b>Heard of Candidiasis</b> |      |       |        |       |               |
| Yes                         | 4    | 3.9   | -      | -     | 2.3           |
| No                          | 99   | 96.1  | 73     | 100.0 | 97.7          |
| Total                       | 103  | 100.0 | 73     | 100.0 | 100.0         |

Source : Field Survey, 2006.

### 5.1.5 Knowledge of Transmission Modes of STDs.

From the table 10, out of 294 respondents, 46.9 percent reported to have knowledge on modes of transmission of STDs. But living together with infected person and simple contact of infected person were responded as modes of STDs transmission by 10.9 percent respondents respectively. It showed that there was misconception among the adolescents about the transmission of STDs.

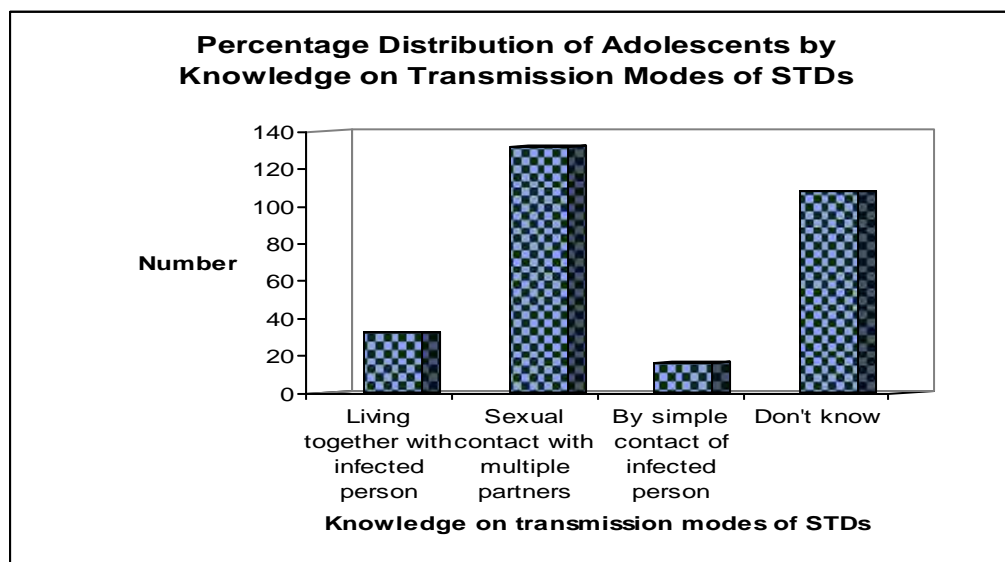
**Table 12: Percentage Distribution of Adolescents by Knowledge on Transmission Modes of STDs**

| Knowledge on transmission modes of STDs | Number | Percent |
|-----------------------------------------|--------|---------|
| Living together with infected person    | 32     | 1.09    |
| Sexual contact with multiple partners   | 132    | 46.9    |
| By simple contact of infected person    | 16     | 5.5     |
| Don't know                              | 108    | 36.7    |
| Total                                   | 294    | 100.0   |

**Source: Field Survey, 2006.**

Note: In above table, "Don't know" includes those respondents who hadn't heard of STDs.

**Fig - 2**



### **5.1.6 Knowledge on Symptoms of STDs by Sex**

Table 13 shows that the knowledge about the symptoms of STDs among adolescents. From the table, 20.4 percent males and 26 percent female had noticed headache as a symptom of STDs infection. Whereas, only 5.5 percent females but no males had noticed swelling of limbs as a symptom. Thus some of them had misconception about the symptom of STDs. Other three major symptoms of STDs were responded by more number of male then females. Majority of males (49.5%) and females (39.7%) responded yellowish pus-like discharge from urethra and vagina as a symptom of STDs.

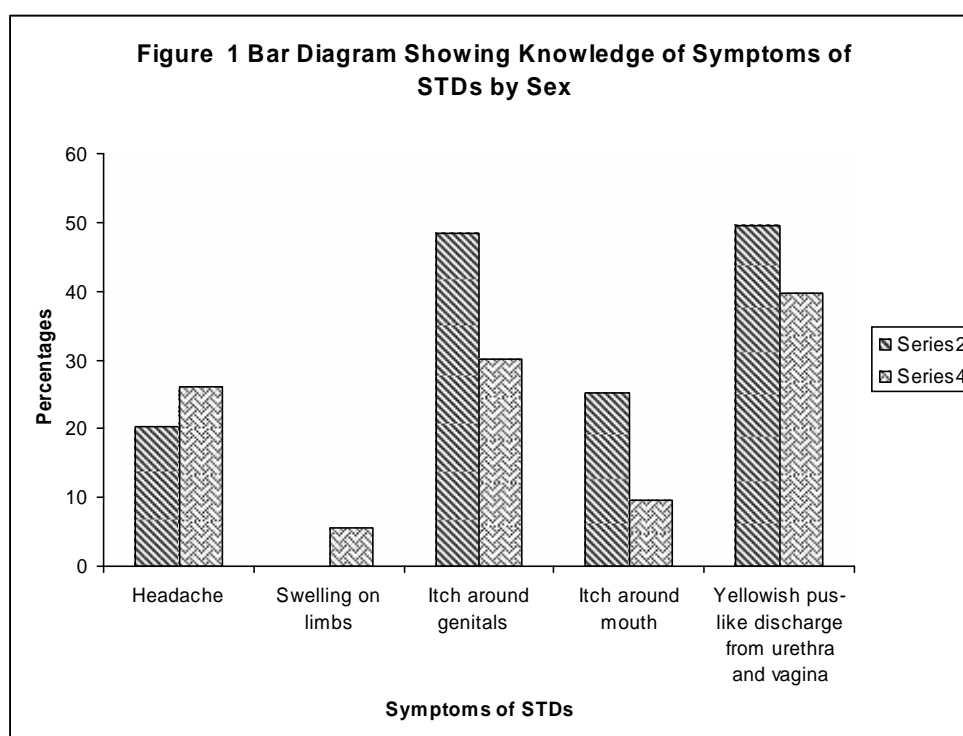
**Table 13: Percentage Distribution of Adolescents by Knowledge on Symptoms of STDs by Sex.**

| Symptoms                                             | Male |      | Female |      |
|------------------------------------------------------|------|------|--------|------|
|                                                      | No   | %    | No     | %    |
| Headache                                             | 21   | 20.4 | 19     | 26   |
| Swelling on limbs                                    | 113  | -    | 4      | 5.5  |
| Itch around genitals                                 | 50   | 48.5 | 22     | 30.1 |
| Itch around mouth                                    | 26   | 25.2 | 7      | 9.6  |
| Yellowish pus-like discharge from urethra and vagina | 51   | 49.5 | 29     | 39.7 |

**Source: Field Survey, 2006.**

Note: Above table was based on multiple responses of adolescents who had heard of STDs (103 male and 73 female)

**Fig - 3**



### 5.1.7 Knowledge on Preventative Measures of STDs by Sex

Out of the 176 respondents who have heard of STDs, 78.8 percent male and 75.3 percent female had knowledge to use condom during sexual intercourse for the preventive measures of STDs. Similarly, 23.3 percent male but only 16 percent female had knowledge to have single sex partners as a preventive measure of STDs. The table 14 also

presents the misconception of adolescents about the preventive measures of STDs which was higher among females than males.

**Table 14: Percentage Distribution of Adolescents by Knowledge on Preventive Measures of STDs by Sex.**

| Method of Prevention                         | Male |      | Female |      | Total |
|----------------------------------------------|------|------|--------|------|-------|
|                                              | No   | %    | No     | %    |       |
| Use condom during sexual intercourse         | 81   | 78.6 | 55     | 75.3 | 77.4  |
| Stick to one sex partner                     | 24   | 23.3 | 19     | 16.0 | 24.4  |
| Avoid walking together with infected persons | 7    | 6.8  | 12     | 16.4 | 10.8  |
| Avoid eating fly contaminated food           | 5    | 4.9  | 7      | 9.6  | 6.8   |

**Source: Field Survey, 2006.**

Note: This table was based on the multiple reasons from those adolescent who had heard of STDs.

#### 5.1.8 Source of Knowledge of STDs

The information collected by respondents to know their sources of knowledge on STDs is given in table 15. Out of total respondents of 176 who had heard of STDs, majority of them, 73.5 percent male and 72.6 percent females respondent's teacher, in other sources the percentages of female adolescents was lower than the percentages of male adolescents. It means that female adolescent had less number of sources in comparison to the male adolescents.

**Table 15: Percentage Distribution of Adolescents About Source of Knowledge on STDs by Sex.**

| Source of Knowledge | Male |      | Female |      | Total |
|---------------------|------|------|--------|------|-------|
|                     | No   | %    | No     | %    |       |
| Text Book           | 73   | 70.8 | 49     | 67.1 | 69.4  |
| Teacher             | 76   | 73.5 | 53     | 72.6 | 73.1  |
| Friends             | 40   | 38.9 | 23     | 31.5 | 35.8  |
| Radio               | 58   | 56.6 | 35     | 47.9 | 52.8  |
| Television          | 17   | 16.8 | 7      | 9.6  | 13.6  |

**Source: Field Survey, 2006.**

Note: This table was based on information from adolescents who had heard of STDs (male 113 and female 73) and respondents were included more than one media.

### 5.1.9 Knowledge on HIV/AIDS

To measure the level of knowledge indicators such as heard of HIV/AIDS transmission of HIV/AIDS, its symptoms and preventative measures to protect from HIV/AIDS are used.

### 5.1.10 Heard of HIV/AIDS

Table (16) shows that out of the total respondents about 77.9 percent had heard of HIV/AIDS. Remaining 22.1 percent didn't hear of it.

**Table 16: Percentage Distribution of Adolescents by Heard of HIV/AIDS**

| Heard of HIV/AIDS | Cases | Percent |
|-------------------|-------|---------|
| Yes               | 229   | 77.9    |
| No                | 65    | 22.1    |
| Total             | 294   | 100.0   |

Source: Field Survey, 2006.

### 5.1.11 Heard of HIV/AIDS by Education

Out of the 77.9 percent respondents who had heard of HIV/AIDS, the highest percentages of adolescents (93.8%) were reported from class ten while only 57percent were reported from class eight.

**Table 17: Percentage Distribution of Adolescents About Heard of HIV/AIDS by Level of Education**

| Heard of HIV/AIDS | Class 8 |       | Class 9 |       | Class 10 |       | Total % |
|-------------------|---------|-------|---------|-------|----------|-------|---------|
|                   | No      | %     | No      | %     | No       | %     |         |
| Yes               | 65      | 57    | 88      | 88.8  | 76       | 93.8  | 77.9    |
| No                | 49      | 43    | 11      | 11.2  | 5        | 6.2   | 22.1    |
| Total             | 114     | 100.0 | 99      | 100.0 | 81       | 100.0 | 100.0   |

Source: Field Survey, 2006.

Fig - 4

### 5.1.12 Heard of HIV/AIDS by Sex

Out of total respondents of 77.9 percent who had heard of HIV/AIDS, the proportion of male (82.9%) is higher than that of female (72.1%).

**Table 18: Percentage Distribution Adolescents about Heard of HIV/AIDS by Sex**

| Heard of HIV/AIDS | Male |       | Female |       | Total |
|-------------------|------|-------|--------|-------|-------|
|                   | No   | %     | No     | %     |       |
| Yes               | 131  | 82.9  | 98     | 72.1  | 77.9  |
| No                | 27   | 17.1  | 38     | 27.9  | 22.1  |
| Total             | 158  | 100.0 | 136    | 100.0 | 100.0 |

**Source : Field Survey, 2006.**

### **5.1.13 Knowledge of Transmission of HIV/AIDS by Sex**

Number and percentages distribution of adolescents about knowledge on transmission of HIV/AIDS by sex is given in table (19). From the table, out of the total respondents, 67.1 percent male and 58.8 percent female reported their knowledge on transmission mode of HIV/AIDS.

**Table 19: Percentage Distribution of Adolescents about Knowledge on Transmission of HIV/AIDS by Sex**

| Knowledge on transmission | Male |       | Female |       | Total % |
|---------------------------|------|-------|--------|-------|---------|
|                           | No   | %     | No     | %     |         |
| Yes                       | 106  | 67.1  | 80     | 58.8  | 63.3    |
| No                        | 52   | 32.9  | 56     | 41.2  | 36.7    |
| Total                     | 158  | 100.0 | 136    | 100.0 | 100.0   |

**Source: Field Survey, 2006.**

#### 5.1.14 Knowledge on ways of Transmission of HIV/AIDS

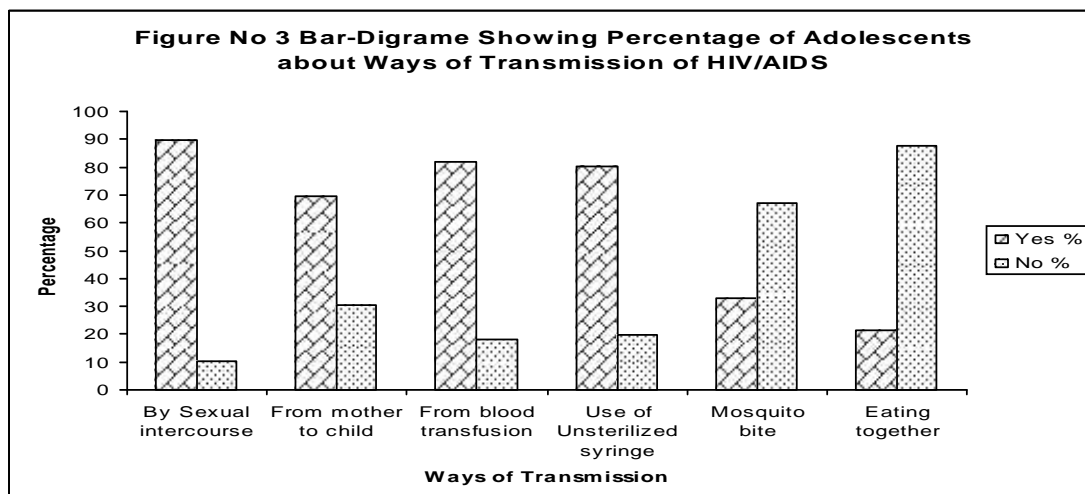
This question was put forward to those respondents who had knowledge on transmission of HIV/AIDS. Out of the 63.3 percent respondents the percentage of respondents who said HIV/AIDS is transmitted from sexual intercourse was 89.8 percent, and by the use of unsterilized syringe was 80.7 percent while remaining 10.5 percent, 30.6 percent, 18.3 percent and 19.9 percent respondents were in oppose of each ways respectively. In the same question, out of the 63.3 percent respondents, 32.8 percent said that HIV/AIDS is transmitted from mosquito bite. Thus misconception about the ways of transmission of HIV/AIDS was found among the respondents.

**Table 20: Percentage Distribution of Adolescents about Way of Transmission of HIV/AIDS by Sex**

| Ways of Transmission of HIV/AIDS | Yes |      | No  |      |
|----------------------------------|-----|------|-----|------|
|                                  | No  | %    | No  | %    |
| By Sexual intercourse            | 167 | 89.8 | 19  | 10.2 |
| From mother to child             | 129 | 69.4 | 57  | 30.6 |
| From blood transfusion           | 152 | 81.7 | 34  | 18.3 |
| Use of Unsterilized syringe      | 149 | 80.1 | 37  | 19.9 |
| Mosquito bite                    | 61  | 32.8 | 125 | 67.2 |
| Eating together                  | 40  | 21.5 | 146 | 87.5 |

**Source: Field Survey, 2006.**

Note: This table was based on the multiple response from adolescents who had knowledge on transmission of HIV/AIDS (106 male and 80 female)



### 5.1.15 Knowledge on Symptoms of HIV/AIDS

Out of the total respondents of 229 who had heard of HIV/AIDS only 34.1 percent responded loss of body weight as a symptom of HIV/AIDS. Similarly, diarrhea for more than one month and fever for more than one month were responded as symptoms of HIV/AIDS by 35.4 percent and 34.5 percent respondents respectively. Although, all of the three are major symptoms of HIV/AIDS but due to the lack of knowledge majority of them didn't know these symptoms as major symptoms of HIV/AIDS.

**Table 21: Percentage Distribution of Adolescents about Knowledge on Symptoms of HIV/AIDS by Sex**

| Major Symptoms of HIV/AIDS       | Responses |      |      |      |
|----------------------------------|-----------|------|------|------|
|                                  | Yes       |      | No   |      |
|                                  | No        | %    | No   | %    |
| Loss of body wt. by 10%          | 78        | 34.1 | 15.1 | 65.9 |
| Diarrhea for more than one month | 81        | 35.4 | 148  | 64.6 |
| Fever for more than one month    | 79        | 34.5 | 15   | 65.5 |

**Source: Field Survey, 2006.**

Note: This table was based on the multiple responses from those adolescents who had heard of HIV/AIDS (both male and female 229).

### 5.1.16 Knowledge on Preventive Measures of HIV/AIDS by Sex

Table (22) shows that majority of adolescents, 7.9 percent female had knowledge of condom use during sexual intercourse as a preventive method of HIV/AIDS. The percentage of male is higher than the percentage of female in each measure. It indicated that more number of adolescent had knowledge about the preventive measure of HIV/AIDS than female adolescents.

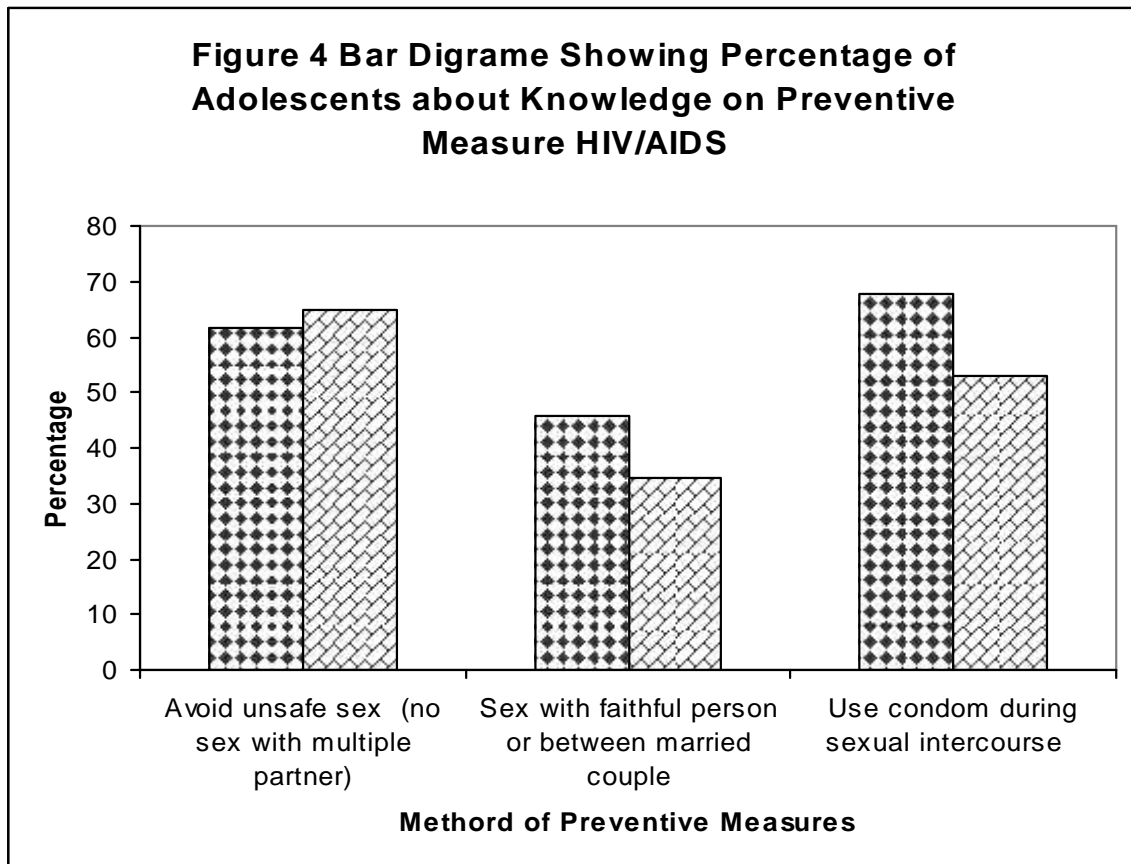
**Table 22: Percentage Distribution of Adolescents about Knowledge on Preventive Measures of HIV/AIDS by Sex.**

| Methods to Prevent from HIV/AIDS                   | Responses |      |        |      |       |
|----------------------------------------------------|-----------|------|--------|------|-------|
|                                                    | Male      |      | Female |      | Total |
|                                                    | Yes       |      | Yes    |      |       |
|                                                    | No        | %    | No     | %    |       |
| Avoid unsafe sex (no sex with multiple partner)    | 81        | 61.8 | 46     | 64.9 | 55.5  |
| Sex with faithful person or between married couple | 60        | 45.8 | 34     | 34.7 | 41.0  |
| Use condom during sexual intercourse               | 89        | 67.9 | 52     | 53.1 | 61.6  |

**Source: Field Survey, 2006.**

**Note :** This table was based on the multiple response from those respondents who had heard of HIV/AIDS (131male and 98 female).

Fig - 6



#### 5.1.17 Source of Knowledge on HIV/AIDS by Sex

Table (23) presents different sources of knowledge about HIV/AIDS those who had heard of HIV/AIDS. Each respondent had reported that they had more than one source of knowledge about HIV/AIDS. Out of the total respondents of 229 who had heard of HIV/AIDS majority of them, 78.8 percent responded teacher as the name of source of knowledge. Poster/pamphlets were the source of knowledge for only 3.8 percent male but none of female. Except teacher, in other sources the percentage of female adolescents was lower than the percentage of male adolescents. It means that female adolescents had less number of sources in comparison to the male adolescents.

**Table 23: Percentage Distribution of Adolescents about Source of Knowledge on of HIV/AIDS by Sex.**

| Source of Knowledge | Male |      | Female |      | Total |
|---------------------|------|------|--------|------|-------|
|                     | Yes  |      | Yes    |      |       |
|                     | No   | %    | No     | %    |       |
| Radio               | 72   | 63.7 | 50     | 51   | 53.3  |
| Teacher             | 98   | 74.8 | 73     | 74.5 | 74.7  |
| Friends             | 56   | 42.7 | 33     | 33.7 | 39    |
| Poster/Pamphlets    | 5    | 3.8  | -      | -    | 2.2   |
| Magazine            | 25   | 22.1 | 11     | 11.2 | 15.7  |

**Source: Field Survey, 2006.**

Note: This table was based on the multiple responses from those adolescents who had heard of HIV/AIDS (131 male and 98 female).

## **5.2 Attitude and Behaviour on STDs and HIV/AIDS**

These chapters analyze the attitude and behavior of adolescents on STDs and HIV/AIDS. The attitude and behavior depends upon the knowledge of adolescents on STDs and HIV/AIDS.

### **5.2.1 Attitude on Curative Measures of STDs by Sex**

The question "Are STDs curable?" was put forward to all the 294 respondents. Out of the total respondents, 35.4 percent male but only 16.9 percent female reported to be curable while 36.1 percent male and 36.4 percent female reported not curable. It shows that majority of them had negative attitude about the curative measure of STDs.

**Table 24: Percentage Distribution of Adolescents Attitude on Curative Measures of STDs by Sex**

| STDs Curable | Responses |       |        |       |       |
|--------------|-----------|-------|--------|-------|-------|
|              | Male      |       | Female |       | Total |
|              | Yes       |       | Yes    |       |       |
|              | No        | %     | No     | %     |       |
| Yes          | 56        | 35.4  | 23     | 16.9  | 26.9  |
| No           | 57        | 36.1  | 50     | 36.8  | 36.4  |
| Don't know   | 45        | 28.5  | 63     | 46.3  | 36.7  |
| Total        | 158       | 100.0 | 136    | 100.0 | 100.0 |

**Source: Field Survey, 2006.**

### 5.2.2 Attitude on Curative Measures of HIV/AIDS by Sex

As we know that HIV/AIDS is fatal disease, so appropriate curative measures are rare. An additional question was put forward to know their attitude about the curative measures of HIV/AIDS. Table (25) shows that out of total respondents of 294 majority of them were found to be in confusion whether it is curable or not. Only 16.5 percent female responded "not curable". The confusion was found among more number of female than male.

**Table 25: Percentage Distribution of Adolescents Attitude on Curative Measures of HIV/AIDS by Sex**

| HIV/AIDS Curable  | Response |       |        |       |       |
|-------------------|----------|-------|--------|-------|-------|
|                   | Male     |       | Female |       | Total |
|                   | Yes      |       | Yes    |       |       |
|                   | No       | %     | No     | %     |       |
| Difficult to Cure | 7        | 4.4   | 13     | 9.6   | 6.8   |
| Curable           | 10       | 6.3   | 13     | 8.8   | 7.5   |
| Partly Curable    | 65       | 41.2  | 33     | 24.3  | 33.3  |
| Not Curable       | 24       | 15.2  | 22     | 16.2  | 15.6  |
| Don't Know        | 52       | 32.9  | 56     | 41.1  | 36.7  |
| Total             | 158      | 100.0 | 136    | 100.0 | 100.0 |

**Source: Field Survey, 2006.**

### 5.2.3 Opinion Regards STDs and HIV/AIDS

To know the opinion regarding STDs and HIV/AIDS, "is it essential to give knowledge about STDs and HIV/AIDS to the students?" was asked. Among them, 72.2 percent male and 60.3 percent female reported it to be too much essential. It means that all of them had necessity feeling of sex-education including STDs and HIV/AIDS.

**Table 26: Percentage Distribution of Adolescents Attitude about Opinion Regards STDs and HIV/AIDS by Sex**

| Provide knowledge on STDs & HIV/AIDS | Male |       | Female |       | Total |
|--------------------------------------|------|-------|--------|-------|-------|
|                                      | Yes  |       | Yes    |       |       |
|                                      | No   | %     | No     | %     |       |
| Essential                            | 44   | 27.8  | 54     | 39.7  | 33.3  |
| Too much essential                   | 114  | 72.2  | 82     | 60.3  | 66.7  |
| Not necessary                        | -    | -     | -      | -     | -     |
| Total                                | 158  | 100.0 | 136    | 100.0 | 100.0 |

Source: Field Survey, 2006.

From the table (27), out of the total respondents, only 31 percent male and 27.2 percent female reported their views positively in the answer of the question "is it possible for healthy looking person to have HIV/AIDS. Majority of them, 69 percent male and 72.8 percent female reported negatively. It shows that in their opinion healthy looking persons can not have HIV/AIDS.

**Table 27: Percentage Distribution of Adolescents Regarding Opinion on Providing Knowledge on HIV/AIDS**

| Provide knowledge on STDs & HIV/AIDS | Male |       | Female |       | Total |
|--------------------------------------|------|-------|--------|-------|-------|
|                                      | Yes  |       | Yes    |       |       |
|                                      | No   | %     | No     | %     |       |
| Yes                                  | 49   | 31.0  | 37     | 27.2  | 29.3  |
| No                                   | 109  | 69.0  | 99     | 72.8  | 70.7  |
| Total                                | 158  | 100.0 | 136    | 100.0 | 100.0 |

Source: Field Survey, 2006.

#### 5.2.4 Behavior on STDs

To know their behavior on STDs, a question "if you may suffer from STDs, what you do?" was asked to all the respondents. Hundred percent respondents reported to "consult to a doctor". It means that they want treatment instead to keep it secret.

**Table 28: Percentage Distribution of Adolescents about Behavior on STDs by Sex**

| If you may suffer from STDs, what do you do? |      |       |        |       |        |
|----------------------------------------------|------|-------|--------|-------|--------|
| Response                                     | Male |       | Female |       | Total% |
|                                              | No   | %     | No     | %     |        |
| Keep Secret                                  | -    | -     | -      | -     | -      |
| Consult to a doctor                          | 158  | 100.0 | 136    | 100.0 | 100.0  |

**Source: Field Survey, 2006.**

Another question "listening to the words HIV/AIDS or STDs what do you feel" was put forward to all the respondents. In response of the question majority of them, 75.9 percent male and 75.7 percent female reported to have feeling of fear and 1.9 percent male and 3.7 percent female reported to have feeling of shyness. Remaining was reported to have feeling of normal and nothing. From their response it can be conclude that those who had feeling of 'normal' and 'nothing' can talk openly about HIV/AIDS and STDs but those who had feeling of 'shyness' and 'fear' can't talk openly about it.

**Table 29: Percentage Distribution of Adolescents about Behavior on STDs and HIV/AIDS by Sex**

| Listening to the words HIV/AIDS or STDs what do you feel? |      |       |        |       |       |
|-----------------------------------------------------------|------|-------|--------|-------|-------|
| Response                                                  | Male |       | Female |       | Total |
|                                                           | Yes  |       | Yes    |       |       |
|                                                           | No   | %     | No     | %     |       |
| Normal                                                    | 26   | 16.5  | 21     | 15.4  | 16.0  |
| Shyness                                                   | 3    | 1.9   | 5      | 3.7   | 2.7   |
| Fear                                                      | 120  | 75.9  | 103    | 75.7  | 75.8  |
| Nothing                                                   | 9    | 5.7   | 7      | 5.1   | 5.4   |
| Total                                                     | 158  | 100.0 | 136    | 100.0 | 100.0 |

Source: Field Survey, 2006.

### 5.3 Knowledge Of Sexuality

#### 5.3.1 Knowledge of Puberty

In this chapter, it has attempted to analyze the reported knowledge of adolescents about puberty. In which knowledge of adolescents about the major signs of puberty as well as their knowledge about age at menstruation in girl and age at semen production in boys are described.

#### 5.3.2 Heard of puberty by sex

Out of the total respondents of 294, majority of them had heard of puberty Table (31) shows that, 65.2 percent male while only 58.2 percent female had heard of puberty. It shows that the knowledge of male adolescents on puberty was higher than that of their female counterparts.

**Table 30: Percentage Distribution of Adolescents about Heard of Puberty by sex**

| Heard of Puberty | Male |      | Female |      | Total % |
|------------------|------|------|--------|------|---------|
|                  | No.  | %    | No.    | %    |         |
| Yes              | 103  | 65.2 | 80     | 58.8 | 62.2    |
| No               | 55   | 34.8 | 56     | 41.2 | 37.8    |
| Total            | 158  | 100  | 136    | 100  | 100     |

Source: Field Survey, 2006.

### 5.3.3 Knowledge on Major Signs of Puberty by Sex

This question was put forward to those adolescents who had heard of puberty. Among them, 42.7 percent male and 33.8 percent female reported 'Shyness' as a sign of puberty in girls. Majority of them 89.3 percent male and 85 percent female reported "menstruation" as another sign of puberty in girls. The percentage of male was higher than the percentage of female in the case of other major signs. From the same number of respondents, only 23.3 percent male and 12.5 percent female reported dream wet as major sign of puberty in boys. Majority of them, 86.4 percent male and 81.3 percent female beard moustache formation as a major sign of puberty in boys. The percentage of male was higher than the percentage of female in the case of other major signs. The higher percentage of male shows that more number of male adolescents had the knowledge about the major signs of puberty.

**Table 31: Percentage Distribution of adolescents about the Knowledge on Major sign of Puberty by Sex**

| What are the major signs of Puberty in Girl? |      |      |        |      |        |
|----------------------------------------------|------|------|--------|------|--------|
| Major Signs                                  | Male |      | Female |      | Total% |
|                                              | Yes  |      | Yes    |      |        |
|                                              | No   | %    | No     | %    |        |
| Shyness                                      | 44   | 42.7 | 27     | 33.8 | 38.8   |
| Breast enlargement                           | 82   | 79.6 | 50     | 62.5 | 72.1   |
| Menstruations                                | 92   | 89.3 | 68     | 85   | 87.4   |
| Willingness to makeup                        | 59   | 57.3 | 11     | 13.8 | 38.3   |
| Attractiveness to boy                        | 82   | 79.6 | 48     | 60   | 71     |
| What are the major signs of puberty in boys? |      |      |        |      |        |
| Masculine voice                              | 91   | 88.3 | 61     | 76.3 | 83.1   |
| Beard & moustache formation                  | 89   | 86.4 | 65     | 81.3 | 84.2   |
| Attractiveness to girl                       | 84   | 81.5 | 62     | 77.5 | 79.6   |
| Dream wet                                    | 24   | 23.3 | 10     | 12.5 | 18.6   |

**Source: Field Survey, 2006.**

Note : This table was based on the multiple responses from adolescents who had heard of puberty (103 male and 80 female).

### 5.3.4 Knowledge on Age of Menstruation and Semen Production

Starting of menarche and semen production are the signs of puberty. In general, 12 to 15 years of age is the menarche starting age of girls and 12 to 16 years of age is the starting age of semen production in boys. From the table 32, years of them, 66 percent male and 75 percent female reported 12 to 15 years of age as the menarche starting age of girls in the girls. The higher percentage of female shows that more number of female shows that more number of female adolescents had knowledge about the menarche starting age of girls in comparison to their male counterparts. From the same table, 79.6 percent male and 60 percent female reported 12 to 16 years of age as the starting age of semen production in boys. The higher percentage of male shows that more number of male adolescents had knowledge about starting age of semen production in boys.

**Table 32: Percentage Distribution of Adolescents about the Knowledge and Age of Menstruation and Semen Production**

| In your opinion, in which age Menarche starts of girls? |      |       |        |       |         |
|---------------------------------------------------------|------|-------|--------|-------|---------|
| Age                                                     | Male |       | Female |       | Total % |
|                                                         | No.  | %     | No.    | %     |         |
| Below 10 years of age                                   | -    | -     | -      | -     | -       |
| 10 to 12 years of age                                   | 8    | 7.8   | -      | -     | 4.4     |
| 12 to 15 years of age                                   | 68   | 66.0  | 60     | 75    | 69.9    |
| 15 years and above                                      | 27   | 26.2  | 20     | 25    | 25.7    |
| Total                                                   | 103  | 100.0 | 80     | 100.0 | 100.0   |
| What is the starting age of semen production in Boys?   |      |       |        |       |         |
| Below 12 years of age                                   | -    | -     | -      | -     | -       |
| 12 to 16 years of age                                   | 82   | 79.6  | 48     | 60    | 71.0    |
| Above 16 years of age                                   | 21   | 20.4  | 32     | 40    | 29.0    |
| Total                                                   | 103  | 100.0 | 80     | 100.0 | 100.0   |

Source: Field Survey, 2006.

### 5.4 Attitude and Behaviour on Sexuality

#### 5.4.1 Attitude on Sexual Intercourse

Two different questions were asked to extract their attitude about Sexual Intercourse. Out of the total respondents, all of them were in oppose of sexual intercourse at young age and intercourse “no” in each question.

**Table 33: Percentage Distribution of Adolescents about Attitude on Sexual Intercourse By Sex**

| Should we involve in sexual intercourse at young age? |      |       |        |       |        |
|-------------------------------------------------------|------|-------|--------|-------|--------|
| Response                                              | Male |       | Female |       | Total% |
|                                                       | No   | %     | No     | %     |        |
| Yes                                                   | -    | -     | -      | -     | -      |
| No                                                    | 158  | 100.0 | 136    | 100.0 | 100.0  |
| Total                                                 | 158  | 100.0 | 136    | 100.0 | 100.0  |
| Should we intercourse before marriage?                |      |       |        |       |        |
| Yes                                                   | -    | 0     | -      | 0     | 0      |
| No                                                    | 158  | 100.0 | 136    | 100.0 | 100.0  |
| Total                                                 | 158  | 100.0 | 136    | 100.0 | 100.0  |

**Source: Field Survey, 2006.**

#### 5.4.2 Pre-martial Sexual Behavior

Collection of information on pre-martial sexual behavior is quite difficult task. Everyone hesitate to give their real answer. In this study question was asked only for unmarried adolescents. Table (35) shows that, out of the total unmarried adolescents of 283, 7.5 percent reported to have experience of sexual intercourse. Among them 18.4 percent male and 5.6 percent female had experience of sexual intercourse. It shows that the prevalence of premarital sexual behaviour among male adolescents was more than three times higher than that of female adolescents.

**Table 34: Percentage Distribution of Adolescents on Pre-martial sexual Behavior by sex**

| Should we involve in sexual intercourse at young age? |      |       |        |       |        |
|-------------------------------------------------------|------|-------|--------|-------|--------|
| Response                                              | Male |       | Female |       | Total% |
|                                                       | No   | %     | No     | %     |        |
| Yes                                                   | 15   | 18.4  | 7      | 5.6   | 7.5    |
| No                                                    | 143  | 81.6  | 118    | 94.4  | 92.5   |
| Total                                                 | 158  | 100.0 | 125    | 100.0 | 100.0  |

**Source: Field Survey, 2006.**

### 5.4.3 Age at First Sexual Intercourse

Out of the total adolescents who had sexual experience, 46.7 percent but none of the female had first sexual experience at age 15. Similarly, 26.6 percent male and 42.8 percent female had first sexual experience at age 18. The first sexual contact of males was found to be at younger age (15 years) than that of female (16 years).

**Table 35: Percentage Distribution of Adolescents about age at first Sexual Intercourse by Sex**

| Should we involve in sexual intercourse at young age? |      |       |        |       |        |
|-------------------------------------------------------|------|-------|--------|-------|--------|
| Age at first sexual intercourse                       | Male |       | Female |       | Total% |
|                                                       | No   | %     | No     | %     |        |
| 15                                                    | 7    | 46.7  | -      | -     | 31.8   |
| 16                                                    | 4    | 26.7  | 2      | 28.6  | 27.3   |
| 17                                                    | -    | -     | 2      | 28.6  | 9.1    |
| 18                                                    | 4    | 26.6  | 3      | 42.8  | 31.8   |
| Total                                                 | 15   | 100.0 | 7      | 100.0 | 100.0  |

**Source : Field Survey, 2006.**

Note : This table was based on the information from unmarried adolescents who had sexual experience (15 male and 7 female).

## CHAPTER - VI

### SUMMARY, CONCLUSION AND RECOMMENDATION

This study analyzed the knowledge, attitudes and behaviour on sexuality, STDs and HIV/AIDS among adolescents in four lower and secondary schools in Taplejung district. Data were collected from Field Survey and the survey was conducted in January 2006.

A total of 294 respondents were interviewed from purposively selected four schools. Knowledge of adolescents on STDs and HIV/AIDS was by using risk analysis with 95 percent confidence interval. Major findings, conclusion and recommendation of the study as follows ;

#### 6.1 Summary of the Findings

The socioeconomics and demographic characteristic of adolescents was different. The knowledge, attitudes and behaviour on sexuality, STDs and HIV/AIDS possess by them was different. Major findings are summarized in each of the followings:

##### 6.1.1 Socio-Economic and demographic Characteristics of the adolescents

- ) Study showed that adolescents were from major ethnic groups Brahmin (34%) Limbu (27.8%) and Chhetri (21.0%).
- ) Out of the total adolescents, most of them were Hindus.
- ) Most of the fathers of adolescents were literate (70.1%).
- ) The main occupation of their parents was agriculture.
- ) Majority of the adolescents (96.3%) were unmarried. Among married, all were girls (8.1%).

##### 6.1.2 Knowledge on STDs and HIV/AIDS

- ) The percentage of adolescents who had heard of STDs was higher among males (59.9%) as opposed to their female counterparts (40.1%).
- ) Majority of the adolescents (86.9%) have heard of "Syphilis".
- ) The adolescent's percents of class eight, nine and ten who had heard of STDs was 27.7 percent, 63.1 percents and 79.7 percent respectively.

- ) Out of 294 adolescents, 46.9 percent had appropriate knowledge on transmission modes of STDs.
- ) Some of the adolescents had misconceptions about the symptoms of STDs.
- ) Out of 186 respondents who had heard of STDs, majority of them, 78.8 percent male and 75.3 percent female had knowledge to use condom during sexual intercourse as a preventive measure of STDs.
- ) Out of the total respondents, 77.9 percent had heard of HIV/AIDS while only 63.3 percent of them had knowledge on its transmission and least of them had knowledge on its ways of transmission and preventive measures.
- ) Class book and teacher had reported their main sources of knowledge for both STDs and HIV/AIDS.

### **6.1.3 Attitude and Behavior on STDs and HIV/AIDS.**

- ) Out of the total adolescents of 294, 35.5 percent male but only 16.9 percent female responded STDs as a curable disease.
- ) Only 15.6 percent adolescents were confidence that HIV/AIDS is not curable while remaining was in confusion.
- ) Majority of the adolescents (66.7%) were in want of sex-education including STDs and HIV/AIDS.
- ) Majority of the adolescents, 75.9 percent male and 75.7 percent female had feeling of fear while listening to the words STDs and HIV/AIDS.

### **6.1.4 Knowledge on sexuality**

- ) Out of the total respondents of 294, 62.2 percent (65.2% male 58.2% female) had heard of puberty.
- ) The knowledge of male adolescents was higher than that of their female counterparts about the major signs of puberty.
- ) Out of the total respondents of 183, majority of them, 66 percent male and 75 percent female reported 12 to 16 years of age as the menarche starting age of girls. Similarly, 79.6 percent male and 60 percent female reported 12 to 16 years of age as the starting age of semen production in boy.

### **6.1.5 Attitude and Behavior on Sexuality**

- ) Hundred percent adolescents were in purpose of sexual intercourse at young age and before marriage. Out of the total unmarried adolescents of 283, 7.5 percent (18.4% male Vs. 5.6% female) had experience of sexual intercourse.
- ) Out of total adolescents who had sexual experience, majority of males (46.7%) reported age at first sexual contact at the age of 15 while majority of female (42.8%) reported at the age of 18.

### **6.2 Conclusion**

- ) The percentage of adolescents (77.9%) who had heard of HIV/AIDS was higher than other areas. Knowledge on transmission, symptoms and preventive measures was also higher. It may be the cause of frequent advertisement of HIV/AIDS through media and involvement of HIV/AIDS related articles in their course book.
- ) Due to the lack of significant knowledge of STDs and HIV/AIDS some of them had miss-conception about ways of transmission, symptoms and preventive measures of these diseases. For example, 10.2 percent responded avoid of fly contaminated foods one the preventive measure of STDs and 32.8 percent responded mosquito bite as one of the transmission way of HIV/AIDS.
- ) Majority of the adolescents had knowledge to prevent from STDs and HIV/AIDS by using condom during sexual intercourse.
- ) Majority of them had negative attitude of STDs and HIV/AIDS but had good behavior. For example, only 26.9percent thought that STDs are curable and 29.3 percent thought to have HIV/AIDS for a healthy looking person.
- ) Out of the total adolescents who had sexual experience, majority of males (46.7%) reported age at first sexual contact at the age of 15 while of females (42.8%) reported at the age of 18. The first sexual contact of males was found to be at younger as (15 years) than that of females (16 years).
- ) The percentage of males and higher grade adolescents who had heard of STDs, HIV/AIDS and sexuality was higher then the percentage of female and lower grade adolescents.

### **6.3 Recommendations for Policy Implications**

Adolescent's population has been increasing rapidly in Nepal. More adolescents mean diverse need and more problems in the absence of adequate services to cater for these needs. Today's adolescents are the parents of future generation and backbone of the society and nation, therefore adequate services, efforts and intervention must be focus on them for every side for their development. In this study their level of knowledge on STDs, HIV/AIDS and sexuality was not found to be significant. Practices of early marriage and marital sexual behavior were also reported. On the basic of findings and conclusion of this study following recommendation were made.

Education about sexual health and sexuality need to be encouraged through family, community and school level. It would be beneficial for those adolescents who are out of school.

Information, education and communication are important to increase awareness of STDs and HIV/AIDS. Such program should be provided through formal as well as informal education.

To enhance the knowledge and awareness informal educational program should launch through government level as well as other non governmental organization.

### **6.4 Further Research Issues.**

- I. This study is based on a small -sized sample of school adolescents (10-19 years). In rural areas of Nepal, the number of adolescents who are out of school is high. Thus, further studies can be carried out on adolescents who are out of school.
- II. In this study socioeconomic variables are not diverse because the sample was selected purposively. Thus, further study may include diverse socioeconomic variables to explore the knowledge, attitude and behavior of study population on STDs, HIV/AIDS and sexuality.

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