

**KNOWLEDGE AND ATTITUDES ON STIs AND HIV/AIDS AMONG
HIGHER SECONDARY SCHOOL STUDENTS
(A case Study of Haraiya Higher Secondary School Students,
Rudrapur V.D.C., Rupandehi District)**

**By
PADAM PRASAD ACHARYA**

**Central Department of Population Studies
Tribhuvan University
Kirtipur, Kathmandu
2009**

CHAPTER-I INTRODUCTION

General Background of the Study

Adolescent is derived from the Latin word “Adolscere” which means grow the maturity. Adolescent is defined as the state of life span during which individual reach sexual maturity, it is the period of transition from puberty to maturity.

Adolescent is a period of transition or is characterized by dramatic physical changes moving the individual from childhood in to physical maturity. The sudden and rapid physical changes those adolescents experiences typically lend this period of development to be one of self consciousness, sensitively and concern over one ‘own body and changes and excruciating comparisons between oneself and peers. During adolescent, it is appropriate for youngsters to have and demonstrate a need to separate from their parents and establish their own identify. However, in some families, significant conflict may arise over the adolescent’s acts or gestures of rebellion and the parents needs to maintain control and have the young continue in his or her former childhood behaviours of compliance.

The adolescent period is a time in which individual explore and develop their sexuality, gender and sex roles. The adolescent period is also taking great responsibilities. Adolescence is the large and growing segment of the population. WHO defines adolescence as the range of age 10 to 19 years. Male and female population of age 10-19 years defined as adolescents. Adolescents can be divided into two groups early adolescents 10-14 years and late adolescents 15-19 years. Adolescents is the second decade of life and move gradually towards a more mature sense of identify and purpose. Moreover, it is a time when growth is accelerated, major physical changes take place and difference between boys and girls are accentuated (WHO,1998)

According to the censuses, the total population of adolescents in age group 10-19 years is 23.62 percent. Among them 23.94 percent are boys and 23.30 percent are girls. The proportion of adolescents in the total population is likely to increase in the coming year. In the context of world, about one third to the world’s population is between the ages to 10 to 24 with vast majority living in developing countries received global attention after the international conference on population and development (1994). Since adolescence is a time of mental and psychological adjustments and it is a situation of being on longer a child, but not an adult either. Adolescent psychology is associated with the notable changes in the beahviour and characteristics of adolescents. Cognitive, emotional, attitudinal changes take place during this period, which can be a cause of conflict on one hand and positive ;personality development on the other. Due to the adolescent experiencing various cognitive and physical changes, it is frequently notable that they are giving more importance to their peer group and less to their parent. Due to the aggregated influence of whom they might go on to indulge in activities not deemed as socially acceptable, although this may be more of a social phenomenon them a psychological one.

In the search for a unique social identify for themselves, adolescents are frequently found confused between right and wrong. So denoted this period, as one of the storm, stress and conflict at this development stage is normal and not unusual. Mid to late adolescence is characterized by a need to establish sexual identity through becoming comfortable with one’s own body and sexual feelings. Through friendships with members of the opposite sex, dating and experimentation, adolescents learn to

express and receive intimate or sexual advances in a comfortable manner that is consistent with internalized values.

There are grave risks associated with early sexual activity. Whether within or outside of marriage the age at which adolescents reach physical and sexual maturity has been declining in recent decades. This has expanded the period of time that young people face the risks associated with teenage sexual activity and increase the health risk with STIs including HIV/AIDS.

Diseases that are easily spread from one person to another person by sexual contact is known as the sexually transmitted disease. In other words, sexually transmitted disease is generated and transferred one to another by sexual intercourse and injecting drug. STDs share the higher proportion of maternal morbidity and mortality both in developed and developing countries. STDs can cause pain and some cause infertility and even death if, not treated in time. Each year more than 33 million new cases of STDs and HIV/AIDS arise in the world. Among them one million new cases of HIV/AIDS infections and millions of other viral STDs such as herpes and hepatitis occur in the world. Almost of the cases are happening in the developing countries Nepal.

Sexually transmitted infections (STIs) are the disease, which are transmitted through sexual contact during the unprotected intercourse. STDs and once called venereal diseases or (VD) is infectious disease that spread from person to person through intimate contact. STDs affect boys and girls of all ages and backgrounds who are having sex. It does not matter if they are rich or poor. STDs are more than just an embarrassment, these cause serious health problems if untreated. Some STDs can cause permanent damage, such as infertility (the inability to have a baby) and even death (in case of HIV/AIDS).

One reason STDs spread in adolescents is that they think they need to have sexual intercourse to become infected. That is wrong. A person can get some STDs, like herpes or genital warts, through skin-to-skin contact with an infected area or sore. Another myth about STDs is that they cannot get STDs if they have oral or anal sex. That is also wrong because the viruses or bacteria that cause STDs can enter the body through tiny tears in the mouth and anus, as well as genitals. STDs do not even know that they have. These people are in danger of passing an infection on to their other sex partners without even realizing it.

Some of the things that increase a person's chance of getting an STDs are:

Sexual activity at a young age: The younger the person starts having sex, the greater his or her chances of becoming infected with an STD.

Lots of sex partners: People who have sexual contact, not just intercourse but any form of intimate activity with many different partners are more at risk than those who stay with the same partner.

Unprotected Sex: Latex condoms are the only form of birth control that reduce the risk of getting an STD. Spermicides, diaphragms and other birth control methods may help prevent pregnancy, but they do not protect a person against STDs.

In other words, sexually transmitted disease (STDs), also known as sexually transmitted infections (STIs) are diseases that are commonly transmitted between partners through some form of sexual activity, most commonly vaginal intercourse, oral sex or anal sex. They were commonly known as venereal disease or (V.D.). STDs are serious, sometimes painful and can cause a lot of damage. Some STDs infect sexual and reproductive organs others (HIV, Hepatitis B and syphilis) cause general infections. Sometimes a person has an STD with no signs or symptoms. Other times, the symptoms go away on their own. Either way, they still have the STD until they get

treated. A few STDs cannot be cured. However, some most STD can be cure if person get treated.

No all sexually transmitted diseases are associated with any obvious symptoms and some may even mimic certain pregnancy symptoms, which is why routine testing- even in the absence of any STD symptoms should be performed. In any case, there are certain STD signs.

Lesions in the area of the mouth, anus, penis and vaginas.

Swelling or redness near the penis or vagina.

Skin rash.

Painful urination.

Weight loss.

Dull constant pain, fever, hills or night sweats.

Yellowing the skin.

Vaginal bleeding.

Painful intercourse.

Severe itching.

Adolescents of both sexes are at high risk of contacting and transmitting HIV/AIDS.

Adolescents usually face peer pressure to take sexual risk. If they have good knowledge and attitude about STDs and HIV/AIDS, they do not involve such type of work and if they are interested use condoms properly or safe sexual contact.

The HIV/AIDS is the global problem. Although HIV/AIDS are caused by many factors, such as blood transfusion and drug addiction, the unsafe sex practice has been the main reason.

The term HIV means:-

H = Human-Pertaining to Human beings

I = Immuno-Deficiency-Weakening of Body Defense system

V = Virus-Smallest disease Causing Microorganism

HIV is the viral infection that affects the cells present in our blood, semen and other bodily fluids; it is primarily transmitted through vaginal or anal sex. The infection affects the body's immune system, destroying infections-fighting cells called T-cell lymphocytes, leaving those affected highly susceptible to illnesses their bodies would otherwise be able to fight off (such as pneumonia or even cancer). That is why those who acquire HIV often develop acquired immune deficiency syndrome (AIDS). AIDS refers to the most advanced stage of HIV infection.

The term AIDS means;

A= Acquired – not born with

I = Immune – Body's Defense System

D = Deficiency – not working properly

S = Syndrome – a Group of Signs and Symptoms

AIDS is a fatal diseases broken out all over the world, means Acquired Immune Deficiency syndrome caused by deficiency of Immunity resulting from Micro Organism. That microorganism is HIV that is immune deficiency virus. It HIV positive affect the persons, that person is victim of AIDS. HIV that belongs to retrovirus group causes the AIDS. The diameter of HIV is 1/1000 millimeter .There are various kinds of STDs identified such as syphilis, gonorrhoea, chancroids, trichomoniasis, herpes, lymphogranuloma and HIV/ AIDS.

It was first identified in the 1980s, spreadness of this disease is seen much more in underdeveloped countries because of the lack of accessibility of Accurate information or effective prevention programs.

The first cases of AIDS were recognized in the United States of America in 1981. The HIV was isolated in 1983 in France. Testing of HIV became commercially available in 1985. The first HIV infection in Nepal was identified in 1988.

Since its emergence, HIV became a global crisis challenging the humanity of our time. The crisis is projected to get worse, at risk of turning into a catastrophe if a prompt multi-sectoral response is further delayed. HIV accounts for the highest number of deaths by any single agent. HIV is still rapidly growing, this pandemic is taking away millions of lives, which result into reversing development trends enhancing the gap between haves and have not, rich and the poor and leaving thousands of young children, orphaned and older of dependent parents in an appallingly disheartening state.

HIV gradually reduces the body's ability to fight against the infections. AIDS is the later stage of HIV and signs of different infections. That stage is called AIDS. AIDS is not a disease itself but a collection of different symptoms and signs of different infections. According to the Oxford dictionary "HIV/AIDS is illness, which attacks the body's ability to resist infection and usually causes death." It is being one of the most burning problems of the world. It needs immediate action and effective planning to control.

1.1.1 Mode of Transmission

Human immune-deficiency virus (HIV) transmission occurs when a person is exposed to body fluids infected with the virus such as blood, semen, vaginal secretion and breast milk.

People with high risk behaviors such as commercial sex workers, persons with transmitted diseases are the main groups infected with HIV. However, the latest reports show that low risk behaviors people like housewives and pregnant are also increasingly found HIV positive meaning transmission of HIV in the general population.

Transmission of HIV occurs mainly through following routes;

Sexual transmission

HIV transmission through sexual intercourse (either vaginal or anal) is the most important route of transmission. As HIV/AIDS is transmitted mainly by sexual contact, it is essentially a sexually transmitted disease.

Through blood and skin piercing instruments

Transfusion of blood infected with HIV can transmit the virus from an infected person to a non-infected person.

Likewise, contaminated needles, skin piercing instruments for stitching of wounds, tattooing, piercing of nose and ear for wearing ornaments and dental works can transmit HIV virus.

Mother to Child Transmission

An HIV infected woman can transmit the infection to her child before, during or shortly after birth. As more and more women of childbearing age are infected, this route is emerging as one of the major modes of transmission.

High Risk Behavior for HIV Transmission

Theoretically everybody is at risk of HIV/AIDS but the following groups of people are considered to be at high risk;

Saliva to Casual Contact

There is no evidence that people who exchange saliva with an HIV infected person will become infected with the virus. The only time when kissing may become risky is if open

lesions; such as those from cold sores or herpes are present. Sweat, tears, urine or decimeters are other risk free. Therefore, pose no known risks to contracting HIV.

- i. Persons with many sex partners
- ii. Injecting drug users
- iii. migrating population
- iv. Persons with sexually transmitted diseases

1.1.2 Heterosexual Transmission

Initially it was thought that HIV/AIDS is limited to homo sexual, but it is now apparent that it has become a problem of the heterosexual Population also. It is increasingly noted that husbands with high-risk behaviors can infect their innocent wives at home. thus, married women might emerge as one of the vulnerable groups to acquire HIV infection especially in our context. The infection then can pass to the newborn child.

When HIV attacks and damages the human body's defense mechanism, which is known as immune system. The Immune system is a complex process of many organs e.g. blood, lymph, gland, thymus etc. However, the body's defense system is not fully understood. usually the body is able to combat infection and return to a normal healthy condition. But if the infection is sever, the body cannot cope with the disease and having serious sequel and might die.

In HIV infection, the infection is life long and the infected person remains infections for the whole life. HIV selectively infects specific white blood cells called T4 lymphocytes, also called CD4 cells. They are essential to initiate immune response. HIV then gradually kills the T4 lymphocytes and the number of these cells gradually decreases over a period of time. when there are very few CD4 cells, other microorganisms attack the body and the person dies of the second disease, such as, tuberculosis, pneumonia, diarrheas.

Once infected with HIV, a large proportion dies with in 5-10 years. some people who have HIV infection may not develop any of the clinical illness that defines the full-blown disease of AIDS for ten years or more. Doctors prefer to use the term AIDS for cases where a person has reached the final, life threatening stages of HIV infections.

1.1.3 Clinical aspects of HIV/AIDS

Nature of the virus

The causative agent of AIDS is called HIV. It was previously designated as human T-cell lymphotropic type –III (HTLV-III) by scientists of united states of America and lymphadenopathy associated virus (LAV) by scientists of France. Later on, in 1986, International expert committee has named this virus as Human immuno-Deficienly virus (HIV). There are two members of HIV viruses: HIV-1 and HIV-2.

HIV-1 is responsible for the majority of AIDS cases all over the world and HIV-2 has been isolated in some cases of AIDS in western Africa (Mali, senegal, Ivory cost, etc)

Structure of HIV

HIV belongs to a group of Retroviruses, which contains RNA in its core and is surrounded by protein and lipid envelope. IT has an enzyme called Reverse trans criptase.

Replication of HIV

For replication, the HIV attaches itself to the helper I-lymphocytes and some macrophages, which has got special receptors called CD4. After contact with CD4 receptors of the T-lymphocytes, the virus sheds its lipid coat and inject its RNA in to the cell. Then with the help of an enzyme reverse transcriptase the RNA Transfer in to DNA. Which inserts itself into human DNA. Then HIV becomes part of Human cell. So the infection is infection is irreversible and last lifelong.

HIV may remain dormant for years and may be activated while the body's immune system is fighting another disease. The viral DNA starts to instruct human cell to produce viral components. The viral proteins migrate towards the surface of the cell by the process of budding. In this way, large number of new virus particles detach themselves from the infected host cells and are taken away in the blood stream. The virus in circulation spreads to other parts of the body and can pass on to other people through infected blood, blood products, body fluids like semen, vaginal and cervical secretions. Infection may pass from an infected woman to her child before, during or shortly after birth and also through breast feeding.

Properties of HIV

HIV is easily destroyed by boiling and steaming. It can also be destroyed by various chemicals like hypochlorite, glutaraldehyde, formaldehyde, alcohol, acetone, phenols and several detergents. The virus cannot survive long outside blood/body fluids.

1.1.4 Natural History of HIV

There are generally seems to be three period when HIV enters in to the human body. They are as follows (Maharjan 1996).

a) Acute infection/Window period

During this period few patients might have some flu like symptoms e.g. fever, night sweat, skin rash, headache, lough etc. Sero-conversion (i/e.e HIV antibody production) takes place after a few weeks (6-12 weeks) of infection and this period is called window period. During this period, the person is infections but might not be positive for HIV antibody test.

b. Asymptomatic stage/carrier stage

This stage may last from few to many (9-15) years. The HIV infected person during this stage remains asymptomatic. However, some patients may present themselves with persistent generalized lymphadenopathy.

c. Symptomatic Stage/AIDS

This is the stage of exhibiting symptoms. Constitutional symptoms in this stage include persistent fever, diarrhoea and loss of weight exceeding 10 percent of body weight. There is presence of other infections like oral candidiasis, pulmonary tuberculosis, labial or genital herpes. There might be presence of cancer called kaposi's sarcoma, which is characteristics of HIV infection.

Due to severe immune depression, opportunistic infections can occur.

Protozoal :- Pneumocystis Carinii pneumonia, Toxoplasmosis

Fungal-Visceral/oesophageal candidiasis, cryptococcosis.

Bacterial - Atypical mycobacteriosis, salmonella septicalmica

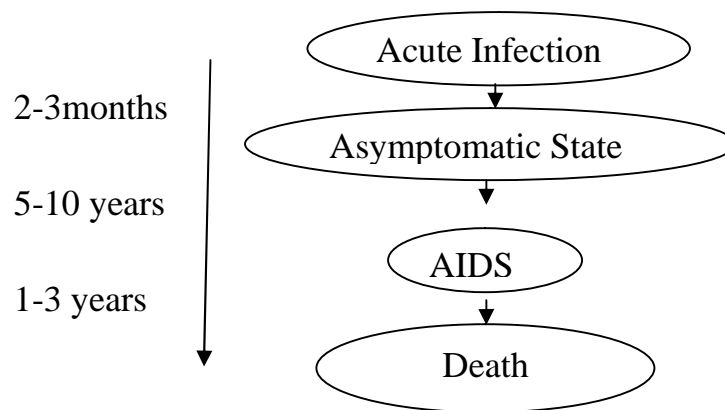
Viral - Cytomegalovirus infection

A majority of persons present with neurological manifestations like dementia, tremor and slowness, aphasia in initial stage and loss of vision incontinence and paraplegia in terminal stage.

1.1.5 Manifestation in Infants and Children

Only about 20-40 percent of infants born to HIV positive women will be infected with HIV. Clinical manifestation in these children include failure to thrive, weight loss, diarrhoea, oral and oesophageal candidiasis, pneumonia, fever etc.

Natural History of HIV infection



1.1.6 Clinical Features of AIDS

Most people do not experience any symptoms for the first few months after becoming infected HIV. In some cases, people will experience flu like illness with ion that time that will include a fever, headache, swollen lymph nodes and general fatigue. These symptoms however are usually confused with other illnesses and are often dismissed for some people, the infection willll remain dormant for than 10 years, although their capability to infect others will not in fact, the period before severe symptoms becme apparent is also the time when people are most infections. Here are two types of symptoms are appear in the infected person that is grouped in two heading as major and minor.

Major Signs are:

- ❖ Fever of long period more than one month
- ❖ Graudla body weight loss more than 10 percent.
- ❖ Continuous diarrhoea for more than one month.
- ❖ Persistent of severe fatigul.

Minor Signs are:

- ❖ Cough for more than one month.
- ❖ Generalized pruritic dermatitis.
- ❖ Various types of herpes to be seen.
- ❖ Oropharyngeal candidiasis or thrush.
- ❖ Persistence generalized lymphadenopathy.

The presence of at least two major sighns and one minor sighn are suggestine of AIDS. However, it is suggested to carry out HIV test to con firm the diagnosis. Presence of opportunistic infections like cryptococcal menigetistis, oesphagial condidiasis and cancer like Kaposi's sarcoma also suggest the diagnosis of AIDS.

1.1.7 Laboratory Diagnosis of HIV/AIDS

The antibodies are produced after 6-12 weeks of infection with HIV. Usually ELISA (Enzyme Linked Immuno-sorbent Assay) test is sued for HIV screening purposes. A positive test indicates that the person has been infected with HIV. Scientists believe that a majority of HIV positive persons develop AIDS within in 10-15 years after infection. However, the test cannot tell when a person develops AIDS. Commonly available test include:

Serodia

HIV Check
Dipstick etc.

World Health Organization (WHO) recommends use of two or three ELISA tests based on different preparations methodology and manufactures with similar results to be considered as confirmatory test for developing countries. However, a confirmatory test called the western Blot can be carried out to rule out false positive and false negative results. Western Blot offers a reliable diagnosis through a fines analysis of the antibodies diluted against protein fraction of the virus.

During the window period when there is no antibody formation, demonstration of viral antigen can be done by an antigen detection test. It is very sensitive but costly test. This method is not performed routinely and present not available in Nepal (NCASC, 2002).

1.1.8 Preventive Measures of HIV/AIDS

Adopt safer sex.

Avoid multiple sex partner except one spouse.

Avoid needles used by drug addicts and infected people HIV infected should not get pregnant.

Use of condoms can also prevent AIDs.

Use safe blood, if transmission in unnecessary.

In case of doubt, test the blood.

To make people aware about HIV/AIDS.

The potential for the spread of HIV in Nepal is large because of extensive use of commercial sex workers, high rates of sexually transmitted disease, low levels of condom use and pockets of intravenous drug users. In Nepal, root causes of STDs/ HIV transmission are illiteracy, low quality of living standards and limited access to health facilities deteriorating socio-economic life pattern, open border with India, which results girls trafficking to the India brothels or prostitutes, cultural values and seasonal enough. In fact, HIV/ AIDS being incurable and fatal diseases, and very limited massages are disseminate at school level, higher secondary and intermediate level sex and sexuality, which in turn shows that plan and policy is not enough cope with pandemic STDs- HIV./AIDS in Nepal. However the latest reports shows that low risk behaviours people like housewives and pregnant are also increasingly found HIV positive meaning transmission of HIV in the general population. Hence, this study has focused on their knowledge of Adolescents studying at higher secondary schools regarding this issue.

1.2 Statement of the Problem

Transmission of HIV among the children and youth is just a human tragedy but has major economic consequences as well one fifth of the global population is in between the age of 10 and 19 in developing countries. Often the population of youth upto 25 years constitutes more than half of the population. Although very few researchers have been carried out on this, the economic consequences of the substantial number of the people dying in their young age are likely to be server. Children die of AIDS faster in developing countries than in industrialized countries of the west. In Europe, 80% of HIV infected children survive at least until their third birth day and more than 20 percent reach age of ten. The more rapid course of pediatric AIDS in poor courtiers is mainly explained by poor nutrition, poor health services and wide spread infections diseases to which children/ youth are particularly vulnerable. These hazardous conditions make childhood with AIDs in poor countries and rich countries rather different. (UNAIDS, 1997.

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

Nepal is one of the developing countries, so it cannot be ignored from this problem. Although the HIV/AIDS cases are very low in Nepal as compared to other countries. People in Nepal due to poor socio-economic status and illiteracy they get married early and evolve in sexual intercourse without basic safe sex knowledge, by which they are of at great risk to acquire STDs-HIVs which is the main cause of spreading STDs, HIV/AIDS.

A large number of adolescence is unknown regarding STDS. They don't know how it spread? And how it can be safe guarded. Therefore, the present study on "Knowledge and attitudes on STDS and HIV/AIDS among higher secondary school students" will help to explore the knowledge of adolescence.

1.3 Significance of the Study

This research will help to make HIV/AIDS prevention program for secondary level/higher secondary level students and make to HIV/AIDS education more effective and fruitful at secondary level.

This study will be beneficial for curriculum designer especially at secondary level, national planner and policy maker.

This study will help to understand the importance of knowledge and attitude regarding STDS and HIV/AIDS among adolescent and community.

This study will helpful to further researcher as the source of research. This research would be a vital source of information for indentifying the level of knowledge and attitude among adolescents on HIV/AIDS to cope the prevalence of HIV/AIDS in developing countries like Nepal.

So, I hope that this study will help to understand the importance of knowledge and attitude regarding STDS and HIV/AIDS among adolescents as well as parents and community.

1.4 Objectives of the Study

The main objective of the study is to reflect the image of knowledge and attitude of higher secondary schools adolescents regarding STDs-HIV/AIDS in Rupandehi district the other specific objectives of the study are as follows:

- ❖ To identify of the socio-economic and demographic background of respondents and their parents.
- ❖ To identify of the various sources of information about STDS, HIV/AIDS.
- ❖ To access the knowledge perception about STDS, HIV/AIDS.
- ❖ To examine the knowledge about the modes of STDS and HIV/AIDS transmission.
- ❖ To evaluate knowledge about preventive measures of STDs and HIV/AIDS.

1.5 Limitations of the Study

Almost all the studies and researchers have some sorts of limitations and this study is not an exception on this fact. One survey or census in itself has several limitations. So, this studies has also some limitations which are mentioned as follows:

This study is limited only among students of Haraiya higher secondary school of Rudrapur village development committee in Rupandehi district. So, the findings of the result cannot be generalized for other population group and other places. This study is completely schools based study so it may not represent out of schools adolescent and population group other than adolescent. Although in adolescent group, the study may ignore the early adolescent. Since the students in higher secondary schools are generally above 15 years of age. Therefore, this study concentrated only on late adolescent of higher secondary school level. This study is focused on knowledge and attitudes of the students on only some aspects of reproductive and sexual health as STDS and HIV/AIDS.

CHAPTER - II

LITERATURE REVIEW

This chapter deals with the review of developed theories in the context of the study of HIV/AIDS and STDs, because literature review is the minor of the study. It gives information about both theoretical and empirical on the basis of developed theories on HIV/AIDS and STDs. Likewise, a conceptual framework will be suggested as guidance for the present study.

2.1 Theoretical Literature Review

In many societies, adolescents face pressure to engage in sexual activity. Young women, particularly low income adolescents are especially vulnerable. Sexually active adolescents of the both sexes are increasingly at high risk of contracting and transmitting sexually transmitted diseases, including HIV/AIDS, and they are poorly informed about how to protect themselves. Program for adolescents have prove most effective when they secure the full involvement of adolescent in identifying their reproductive and sexual health needs and in designing programs that address to these needs (ICPC, 1994). Adolescents are typically poorly informed about how to protect themselves (UN, 1994). STDs poses significant risk for adolescent. The highest rates of infection for STDs, including HIV, are found among young people of age 20 to 24 and the next higher rate occurs among adolescent 15 to 19. Each year, 1 out of every 20 adolescents contacts a STDs. Some of which can cause lifelong problems (such as infertility) if left, untreated (Karki, 2003).

For the vast majority of adolescents, sexual relations begin with marriage. However, because of rising age at marriage in the most South

Asian countries the incidence of premarital sex is also rising and which is unprotected causing greater risk of unwanted pregnancy, unsafe abortion of STDs. The younger the adolescent with an unwanted pregnancy the more likely she is to seek abortion. An induced abortion often done clandestinely and by untrained practitioner poses grave danger to the reproductive health and life of the adolescent girl. It is estimated that between 1 and 9.4 million abortions occur among girl adolescents every year globally (WHO, 1997:13). Adolescent boys and girls, particularly those who are unmarried are lacking information on reproductive health; existing reproductive health care facilities are unfriendly with adolescent. Parents play a minor role in education of children on reproductive health and sexuality, but cultural factors interface discussions on private matters with their children. Parents may also lack knowledge of reproductive health. Adolescent also lack accurate information about their physiology, sexuality and reproductive health. Only 3 percent and 25 percent of late adolescent girls in Pakistan and Sri Lanka could correctly mention the number of fertile days in the menstrual cycle respectively. In Bangladesh, only 39 percent of unmarried adolescent girls are reported to have prior knowledge of menstruation before they experienced it (UNFPA, 1998:6-21). There are over one billion young people ages 15 to 24 peaked around 1985 at 21 percent. Between 1995 and 2050 it will decline from 19 to 24 percent, but actual numbers will grow from 859 million to 1.06 billion. If enough employment, opportunities can be created, these new workers could give greater productivity and economic development, and generate substantial revenues for health care, education and social security (UNFPA, 1999:23). Sexual attitude and behaviour of adolescent are finding highly influence by peer's behaviour (Jo et al., 1986) found that adolescent females who have sexually active best friends on the basis of sexual experience. Walter found that students whose friends had

intercourse without use of condoms were much more likely to get involved in high risk sexual or drug behaviours (Panta, 2004, cited in Puri, 2002). Diclemente found that sexually active adolescents who perceived peer's norms to support condom use were more likely to use condoms consistently (Puri, 2002, cited in Panta, 2004).

Adolescents often feel neglected in family planning program. Correcting this problem, special counselling is required to their sexuality and other needs as part of transition to adulthood. So specific reproductive health need of adolescents must be openly acknowledged, of course there are many other health hazardous facing adolescents but sexual and reproductive health issues merit separate consideration and he proposes to pay the attention to six component of reproductive health: adolescents reproductive health, STDs/AIDS, infertility, cervical cancer, violence against women and abortion (Liljestrand 1997, cited in Panta, 2004).

Khanal (1999:52) stated that, adolescent have right to seek knowledge and information about health and sensitive sexual issue. Information on sexual maturity, sexuality and gender information could be delivered through various outlets, including counselling and family life, education centres, health clinics, youths and women's groups and so on. Contraceptive suitable for your people like condoms, oral pills, injections, implants and emergency contraception should be available to adolescents. At present however, unmarried adolescents are either restricted from the free supply of their choice or hesitant to seek them because of the society's negative attitude. Only condoms are freely available for everybody in Nepal because of their promotion of HIV/AIDS prevention while other contraceptives methods for adolescents are not really available.

More than 3 million people died of AIDS and nearly 5 million people became newly infected with HIV in 2004. There were just under 40 million people living with the disease-nearly half of them women-yet fewer than 1 in 5 people at high risk of infection had access to proven prevention interventions. The number of AIDS orphans climbed to 15 million, 12 million of whom live in Sub-Saharan Africa (UNFPA, 2004).

The ICPD noted the severity of HIV/AIDS in 1994 and, responding to the expansion of the epidemic, the review five years later (ICPD+5) defined specific and urgent goals. Key follow up actions specified that HIV/AIDS prevention should be "an integral component" of sexual and reproductive health programmes at the primary care level. Strengthening this approach to services was a UNFPA priority in 2004, complementing ongoing commitments to women and young people and to condom programming.

The socio-economic impact of HIV/AIDS is felt at all the society, individual household family community, nations and to variety degree in all sectors-small holder; agriculture commercial agriculture, mining manufacturing tourism transport health, education and so on. Mass media campaigns, schools AIDS education programmes, condom social marketing and seminar intervention are recognized to be necessary but not sufficient for slowing spread of HIV. Almost everywhere it is being realized that providing information influence to the number of sexual determinates and drug infective behaviour, some to these causes are economics. If it possible to understand them it should also be possible to change which include social, cultural, physical and logical factors (WHO, 1995:21).

The high level of HIV infection among younger and young people signals society's failure to protect its children, the world risks its future. If levels of HIV prevalence risk not only will the health consequences be serious but also the demographic, economic and social consequences (Halperin, 2001).

In some communities many adolescents heard their own households, raise children and care for their parents who are dying of AIDS. Without immediate action, what is true of these communities to day could become true of towns, cities, and even entire nations in the future (UNAIDS, 2001).

Unfortunately, HIV infection is increasing most rapidly among young people. Half of all new infections in the United States occur in people younger than 25. From 1994 to 1997, 44 percent of all HIV infections among young people aged 13-24 occurred among females and 63 percent among African-Americans. While the number of new AIDS cases is declining among all age groups, there has not been a comparable decline in the number of HIV infections among young people (CDC, 1998). Unprotected sexual intercourse puts young people at risk not only for HIV, but also for other sexually transmitted diseases (STDs) and unintended pregnancy. Currently adolescents are experiencing sky rocketing rates of STDs. Every year three million teens or almost a quarter of all sexually experienced teens than among older adults (Eng and Butter; 1996) some sexual active young African-American and Latin women are at especially high risk for HIV infection, especially those from poorer neighbourhoods. A study of disadvantage out of school youth in the United States job corps found that young African-American women had the highest rate of HIV infection and that women 16-18 years old had 50 percent higher rates of infection than young men.

Another study of African-American and Latin adolescent females found that young women with order by friends 3 years older or more are at higher risk for HIV (Miller, 1997).

2.2 Empirical Literature Review

This subsection presents the review of empirical literature related to HIV/AIDS and STDs.

2.2.1 The Scenario of the World

AIDS was first recognized in the United States in 1981. However, it is clear that AIDS cases had occurred in several parts of the world before 1981. The evidence now suggests that AIDS epidemics began at roughly the same time in several parts of the world, including the United States and Africa.

As the end of 2004, 39 million people worldwide were living with a symptomatic human immunodeficiency virus (HIV) infection or acquired immune deficiency syndrome (AIDS), and more than 20 million had died of AIDS since the beginning of the epidemic. More than 95 percent of people living with HIV an AIDS live in low and middle income countries nearly two-thirds are in Sub-Saharan Africa and nearly one five live in South or Southeast Asia In 2004, 4.9 million people were newly infected 23.1 million people died of AIDS (UN, 2005).

An estimated 38.6 million people worldwide were living with HIV at the end of 2005. And estimated 4.1 million people become newly infected with HIV and 2.8 million lost their lives to AIDS. Overall, the HIV incidence rate (the proportion of people who have become infected with HIV) is believe to have peaked in the late 1990s and to have stabilized subsequently, not withstanding increasing incidence in several

countries (UNAIDS, 2006). Africa remains the global epicentre of the AIDS South Africa's AIDS epidemic-one world-shows no evidence of a decline.

AIDS is the most devastating health disaster in the human history. It continues from one individual to family, community, nation and the world. In the context of world, 25 million people who had died by the end of 2005, at least 40 million people are living with AIDS now. 4.9 million people were infected with it in 2005-95 percent of them in Sub-Saharan Africa, Eastern Europe, and Asia. Countries throughout the industrialized world face serious challenges from AIDS. Infection rates have not declined significantly in Western Europe or North America, where the epidemic has spread from the gay male population to ethnic minorities, the poor, and other marginalized groups.

Sub-Saharan Africa is the hardest hit region in the world. Most of the Africans die with this illness rather than other causes deaths. South Africa has the largest number of people living with HIV and AIDS between (4.5-6.2) million. Swaziland has the highest adult HIV prevalence rate. More than 30 percent of adults are infected with HIV and AIDS (PRB, 2006). Countries throughout the industrialized world face series challenges from AIDS. Infection rates have not declined significantly in Western Europe or North America, where the epidemic has spread from the gay male population to ethnic minorities, the poor, and other mar marginalized groups.

The number of people living with HIV/AIDS has risen from around 8 million in 1990 to nearly 40 million today, and has been growing. Around 63 percent of people living with HIV/AIDS are from sub-Saharan African (UNAIDS/WHO, 2006). In percent of population

aged 15-49, the top 15 HIV/AIDS prevalence countries outside Africa are Haiti, Bahamas, Trinidad and Tobago, Belize, Guyana, Suriname, Papua New Guinea, Cambodia, Barbados, Honduras, Jamaica, Thailand, Ukraine, Estonia, and Myanmar (PRB, 2006).

The incidences of STIs, HIV and AIDS among the adolescents has made each nation worried about the future. Acquired Immunodeficiency Syndrome (AIDS) epidemic is the most destructive health disaster in the human history. HIV/AIDS is a major threat to the productive segment of the labour force by reducing earning and skills and experience. There is still neither a cure nor vaccine for AIDS. Though life-prolonging drugs have been made accessible and affordable, the treatment is out of access of especially those who are living in the developing countries (PRB, 2006). The first case of it was reported before two decades in Los Angeles in June 5, 1981. The causative factor of AIDS, i.e. HIV was identified in 1983. Irrespective of race, ethnicity, geographical boundaries, gender and socioeconomic condition, HIV/AIDS has been spreading. HIV prevalence rate in developing countries is higher compare to developed countries (PRB, 2006).

Observing the global epidemic, it is estimated that 38.6 million people worldwide were living with HIV by the end of 2005 and 4.1 million became newly infected with HIV. Out of this figure, it is estimated that 2.8 million had died due to AIDS (UNAIDS, 2006). Out of total infected children, only 15 percent are living outside Africa region. The number of HIV infected people is increasing in continuous basis because of growing population and life prolonging efforts of antiretroviral therapy (UNAIDS, 2006). More than 58 countries are providing HIV and AIDS education through primary (74%) and secondary (81%) level school education. However, HIV preventive

programs are failing to reach to those who are in the greatest risk. Efforts to increase HIV knowledge among youth people remain inadequate throughout the world (UNAIDS, 2006).

In Asian HIV infection profile shows that 8.3 million [ranges from 5.7 million - 12.5 million] people living with HIV in 2005. In 2006, the figure of HIV infected people has increased to 8.6 million [ranges from 6 million to 13 million]. The cumulative death of AIDS due to HIV infection including those who become newly infected is approximately 630000 [ranges from 430000 - 900000] (UNAIDS, 2006) by the late of 2006 in Asia. Mainly poverty related factors such as separation of marital partners, sex for commercial gain, high prevalence of other sexually transmitted infections, unsafe sexual behaviours plays the chief role in increasing the HIV infection rate. Customs, beliefs and practices like sexual partnership, across age groups, use of intra vaginal desiccants, use of alcohol and drugs and so forth are the major risk factors in contributing to HIV transmission (Narain et al., 2004).

Pre-marital sex, poverty, illiteracy, income inequalities, social translation, gender inequalities, violence, sexual abuse, powerlessness, trafficking of girls and women and so on compel girls and women of reproductive age to be involved in unsafe sexual activities. Consequently, they have greater risk of being infected by HIV/AIDS (UNFPA, 2001). The young girls are more vulnerable because of inability to refuse unwanted or unsafe sex. In the case of Bangladesh around 95 percent of 15-19 years of age do not know even a single preventive method of HIV/AIDS (UNFPA, 2001).

Globally, the AIDS pandemic shows no sign of slowing, despite concerted efforts to control it and a few success stories. The difficulties in

reducing the number of new infections are also compounded by poor access to lifesaving treatment. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that only about 15 percent of the 6.5 million people in developing who need treatment have access to anti-retroviral drugs.

HIV/AIDS spreads continuously all over the world. Now at least 40 million people are suffering from HIV and 25 million people had died till the end of 2005. The disease is crippling progress at the personal, family community and national levels. Now, 38.6 million people are infected in the world. Prevalence rate refers to the percentage of adults' ages 15 to 49 infected with HIV. Sub-Saharan Africa, North and Middle East Africa, South and southeast Asia, East Asia, Oceania, Latin America, Caribbean, Eastern Europe, Western Europe, North America etc. regions people are infected by the HIV/AIDS.

Table 2.1 : World Situation of HIV/AIDS

| Region | People Living with HIV | People Newly Infected | Prevalence (% of adults, infected) | Deaths Due to AIDS in 2005 |
|-----------------------------|------------------------|-----------------------|------------------------------------|----------------------------|
| World | 40300000 | 4900000 | 1.1 | 3100000 |
| Sub-Saharan Africa | 258000000 | 3200000 | 7.2 | 2400000 |
| North Africa/Middle East | 510000 | 67000 | 0.2 | 58000 |
| South/Southeast Asia | 7400000 | 990000 | 0.7 | 480000 |
| East Asia | 870000 | 140000 | 0.1 | 41000 |
| Oceania | 74000 | 8200 | 0.5 | 3600 |
| Latin America | 1800000 | 200000 | 0.6 | 66000 |
| Caribbean | 300000 | 30000 | 1.6 | 24000 |
| Eastern Europe/Central Asia | 1600000 | 270000 | 0.9 | 62000 |
| Western/Central Europe | 720000 | 22000 | 0.3 | 12000 |
| North America | 1200000 | 43000 | 0.7 | 18000 |

Source : Joint United Nations Program on HIV/AIDS (UNAIDS), and World Health Organization (WHO), AIDS Epidemic Update, December 2005 (2005:3). The Global Challenge of HIV and AIDS, Population Bulletin, Vol. 6, No. 1, Population Reference Bureau, March 2006.

2.3 HIV and AIDS in the Caribbean

It is estimated that more than half million people are infected with HIV. Out of the twelve countries, the highest HIV prevalence is in Latin America and the Caribbean region. In Haiti, Bahamas, Barbados, Dominican Republic and Guyana the HIV/AIDS epidemic has spread to the general population. In other Caribbean countries, the HIV and AIDS epidemic is still concentrated among the population groups who engage in high-risk behaviour-commercial sex workers, men who sex with men, and injecting drug users-but it is accelerating rapidly and is posed to strike the general population.

Currently, the primary mode of transmission of HIV and AIDS in the Caribbean is sexual intercourse between men and women. Women account more than on third of all AIDS cases in the Caribbean, and the infants of HIV-infected mother can contract the disease during pregnancy, Childbirth or breast feeding. Many young people begin tend not to use condoms to protect themselves; they are at high risk of contracting HIV.

Table 2.2 : HIV/AIDS Prevalence Rates among Adults (Age 15-19) in Caribbean Countries, December 1997

| S.N. | Country | HIV/AIDS Prevalence Rate (%) |
|------|---------------------|------------------------------|
| 1. | Haiti | 5.17 |
| 2. | Bahamas | 3.77 |
| 3. | Barbados | 2.89 |
| 4. | Guyana | 2.13 |
| 5. | Belize | 1.89 |
| 6. | Dominican | 1.89 |
| 7. | Honduras | 1.46 |
| 8. | Suriname | 1.17 |
| 9. | Jamaica | 0.99 |
| 10. | Trinidad and Tobago | 0.94 |
| 11. | Argentina | 0.69 |
| 12. | Venezuela | 0.689 |

Source : UNADIS, Report on the Global HIV/AIDS Epidemic, June 1998, PAHO/WHO, 2000 (UN, 2001, p. 13).

The Caribbean's epidemics and countries' AIDS response vary considerably in extent and intensity. HIV infection levels have decreased in urban parts of Haiti and in the Bahamas and have remained stable in neighbouring Dominican Republic and Barbados. Because of the accessibility of antiretroviral treatment in both Bahamas and Barbados appears to be reduction. AIDS deaths. It is known as the 2nd most affected region in the world. And, AIDS in the leading cause of deaths it this region (WHO/UNAIDS, 2006).

2.4 HIV/AIDS in Asia

HIV infection level in Asian countries is comparatively lower than other continents. But in some Asian countries are very much suffered by this disease. In the context of Asia continents 8.2 million people were living with HIV at the end of 2004. Asian countries can be divided into several categories; according to the epidemic prevalence. While some other countries such as; Cambodia, Myanmar and Thailand are just in starting phase and starting rapid experience of epidemic such as; Indonesia, Nepal, Viet Nam, and several province of China. And some countries including Bangladesh, East Timor, Laos, Pakistan, and Philippines are experiencing extremely low level of HIV PREVALENCE (Khanal, 2005).

Later estimates show that some 8.3 million people were living with HIV in Asia at the end of 2005 more than two-thirds of them in one country, India. India is the country which has the largest number of people suffering with this epidemic in the world. In Asia, about one in six people 16 percent in need of antiretroviral treatment are now receiving it. While progress has been strong in Thailand while the coverage of treatment still remains below 10 percent in India. China has expanded the HIV surveillance and improved in estimating of the AIDS pandemic disease. Approximately, 650,000 people were living with HIV in 2005 in China. Injecting drug users account for almost half 44 percent out of their total infected percents. Injecting drug users and unprotected sex are the main courses of spreading of HIV in Asia. An example is Viet Nam, where HIV has spread into 59 provinces and all cities. In 2005, and estimated 360,000 adults and children were living with HIV in Myanmar and national adult prevalence stood at 1.3 percent. HIV

epidemics remain relatively limited in Bangladesh, the Philippines, Indonesia and Pakistan, although each of these countries risks as more serious epidemic if prevention methods are not improved (UNAIDS, 2006). HIV prevalence is also rising rapidly in many parts of eastern and southern in Asia. China and India will see millions of additional infectious unless they launch effective, large-scale prevention programmes (PRB, 2006).

2.5 The Scenario among the SAARC Countries

HIV/AIDS one of the burning issue among SAARC countries. Evidence from selected SAARC countries suggests poor knowledge of HIV/AIDS. Among ever married adolescents' girls in 1999, there were 5.4 million new infections worldwide, 4.0 million in Sub-Saharan Africa and around one million were in South East Asia (UNFPA, 2000: 15). The limited infection (RTIs) and STDs among both married and unmarried adolescents' girls and boys in SAARC region. The incidence of HIV/AIDS among them is limited but increasing particularly among girls (UNFPA, 1998: 6-21). Sex-education suited to the needs of diverse groups of people should be an integral part of AIDS prevention program, but it is a very sensitive, controversial and complex subject matter which raises many questions for which there are no easy answers. Who should be targeted for sex education ? What should be its contents ? What is the optimum strategy for improving it ? Contents and strategies of sex education for groups of people differing in age, sex, education and occupation should be tailored to the needs, interest and absorbing capacity of each group (Moni, 1996).

2.6 The Scenario of HIV/AIDS in Nepal

According to official report, HIV infection has increased by more than 100 percent among women and by 200 percent among children in the past 18 months. The number of HIV infected housewives reached 1,883 on May 14 this year from 765 in December 2005, according to data available at the National Centre for AIDS and STD control (NCASC). Similarly, the number of children infected with HIV reached 428 from 138 in the same period.

According to data, infection through blood transfusion or organ transplant has increased by 144.44 percent while it increased by 47.66 percent among the clients of sex workers nine cases of infection among recipients of organs and blood were reported until 2005, but the number was 22 in May, 2007.

Similarly, infection among Tritravenous Drug Users (IDUs) has increased by 67.40 percent. Altogether, 1,134 such cases were reported in 2005, but the number had reached 1900 by May this year. The number of clients of sex workers infected with HIV has reached 4421 (4,317 males and 104 females) from 2,994 (2,898 males and 96 females) in 2005. In 2005, the number of sex workers infected with HIV was 606. This had reached 615 by May, 2007. The overall number of HIV infected people in the country reached 9,329 by May, 2007 from 5,647 in 2005, according to NCASC records.

In the contest of Nepal, the first 91st) HIV/AIDS was identified in July, 1988. Since then, spread ness of this disease has become very large because of the extensive use of commercial sex-workers, high rate of sexually transmitted disease, low level of using condom, lack of

education, and increasing rate of drug users. Nepal is facing increases in HIV prevalence among high-risk groups such as, sex workers, injecting drug users (IDU) men who have sex men (MSM), and migrants. There is an urgent need to scale up effective interventions, especially among IUDs. Nepal's poverty, political instability and gender inequality, combined with low level of education and literacy make a task all the more challenging, as do the denial, surround HIV/AIDS. The National Centre for AIDS and STD Control (NCASC) of the Ministry of Health and Population has estimated an average of 70,000 adult HIV positive people in Nepal (NCASC, 2006).

Nepal's HIV epidemic is largely concentrated in high-risk groups, especially female sex workers (FSW), IUDs, MSMs and migrants. Injection drug use appears to be extensive in Nepal and to significantly overlap with commercial sex. Another important factor is the high number of sex workers who migrant or are trafficked to Mumbai, India to work, thereby increasing HIV prevalence in the sex workers in Nepal more rapidly. According to UNAIDS, 75,000 people were living with HIV at the end of 2005 (The World Bank, November 2006). According to 31 July, 2006 (NCASC), 1115 cases of AIDS and 7373 HIV infectious and 340 have already died from AIDS (Bhandari, 2006).

Under the HIV/AIDS surveillance plan, NCASC has been conducting integrated bio-behavioural surveys (IBBS) on a regular basis since 1999 MONF RHW MKOAR at-risk population, such as female sex workers (FSWs), injecting drug users (IUDS), men having sex with men (MSM), labour migrants, and clients of FSWs in geographical areas of Nepal.

The result conducted so far clearly indicated that the HIV epidemic in Nepal is in the early concentrated stage and is driven by injecting drug use, commercial sex, and migration. Finding from the last round of the IBBS conducted in 2005 among IDUs show that about 30 percent of male IDUs in Kathmandu (New ERA and SACTS, 2005a), Pokhara (New ERA and SACTS, 2005b) reported having sex with FSWs, and more than half do not use condom when they have sex with FSWs. Similarly, migrants who have sexual intercourse with sex workers in India have a higher risk of HIV infection and only a few use condoms when they have sex with their spouse (New ERA and SACTS, 2006).

Nepal is not far from this problem. The history of HIV/AIDS epidemic in Nepal is more than 17 years. The number of HIV infected people including AIDS has increased at an alarming rate reaching a total of 13885 in 14 May 2009. Out of 13885 cases 9163 males and 4722 are females. A total of 527 cases have been found death due to AIDS (NCASC, 2009).

Table 2.3 : Cumulative HIV/AID Situation of Nepal as of 14 May, 2009

| Condition | Male | Female | Total |
|-------------------------------|------|--------|-------|
| HIV positive (including AIDS) | 9163 | 4722 | 13885 |
| AIDS (out of total HIV) | 1680 | 704 | 2385 |

Table 2.3 : Cumulative HIV by Sub-Group and Sex

| Sub Groups | Male | Female | Total | New cases in this month |
|-------------------------------|------|--------|--------|-------------------------|
| Sex workers (SW) | 6 | 808 | 814 | 4 |
| Injecting Drug use | 2400 | 49 | 2449** | 16 |
| Men having sex with men (MSM) | 95 | - | 95 | 12 |
| Blood or organ recipients | 29 | 12 | 41 | 1 |
| Clients of SWS/STD | 6070 | 104 | 6174 | 89 |
| Housewives | - | 3386 | 3386 | 86 |
| Male partners | 6 | - | 6*** | 6 |
| Children | 504 | 337 | 841 | 22 |
| Sub group not identified | 53 | 26 | 79 | 0 |
| Total | 9163 | 4722 | 13885 | 236 |

** Mode of transmission - IDUS or Sexual.

*** Male Partners of FSW/Female IDU/Female Migrant.

The numbers of infected persons are increasing from those people who are engaged in commercial sex. The highest numbers of infected persons are male clients of commercial sex workers (Table 2.4).

Table 2.4 : Cumulative HIV Infected by Age Group

| Age group | Male | Female | Total | New cases in May 2009 |
|----------------|------|--------|-------|-----------------------|
| 0-4 years | 199 | 121 | 320 | 9 |
| 5-9 years | 235 | 164 | 399 | 11 |
| 10-14 years | 81 | 56 | 137 | 2 |
| 15-19 years | 248 | 254 | 502 | 2 |
| 20-24 years | 1184 | 817 | 2001 | 19 |
| 25-29 years | 2083 | 1108 | 3191 | 45 |
| 30-39 years | 3742 | 1607 | 5349 | 87 |
| 40-49 years | 1117 | 467 | 1564 | 46 |
| 50 above years | 274 | 127 | 402 | 15 |
| Total | 9163 | 4722 | 13885 | 236 |

* Cumulative Death : 527

Source: NCASC,2009.

From the above table, the HIV infection is found to be maximum in the age group 30-39 years. Still now there is no cure for AIDS so health education and mass awareness are the two key factors to address the problem.

2.7 The Prevalence of HIV

The available of HIV prevalence data show that 49 percent to 68 percent of Injecting Drug Users (IDU) was HIV positive the year 2001. About 17 percent workers in Kathmandu and 0.8 percent in Pokhara was estimated. In the year 2001, HIV was estimated to be prevalent among 17 percent FHWs who returned from India. A study was conducted in 1993 showed that the prevalence of STDs in a serious problem among FSWs in Kathmandu. Three female out of four FSWs were found to have a STDs

related problem (NCASC, 2004). Poverty, low level of education, poor income, gender inequality, stigma, and discrimination are some major factors contributing to HIV vulnerability in Nepal. According to national situation, young people, mobile population, FSWs multiple sex partners, and Injecting Drug Users (IDU) are most vulnerable.

CHAPTER - III

METHODOLOGY

This chapter refers to the methodology that fulfils the study's objectives. Methodology is the process or method that is used for the data collection, processing, tabulating and analyzing. It is very systematically solve the research problem. It helps to find out t he problem or research and way how the problems occur in that research.

3.1 Selection of the Study Area

This study has been carried out at Rudrapur VDC of Rupandehi district. The headquarter of this district is Bhairahawa of western region, Lumbini zone. There are 69 VDC in this district. The political boundary is Nawalparasi in the east, Palpa in the North, Kpilvastu in the west and republic India in the south. The main caste/ethnicity of this district if Brahmin, Chhetri, Magar, Tharu, Kami and so on. The main occupation of this district is agriculture.

Shree Haraiya Higher Secondary School has been selected by simple random sampling method for this study. The total number of sample for this study has been taken 114 students among 265 students. All of them were choosed from both grade 11 and 12. This study areas has been choosen because of the pre-informed area for the researcher to draw the real information of adolescents.

3.2 Questionnaire Design and Field Study

Questionnaire was constituted the major tool of the study. It was designed to explore the necessary information with respect to secondary adolescents about knowledge, attitude on HIV/AIDS and STDs and

preventive measures of some attempts to identify the sources of information about HIV/AIDS and STDS.

This study is utilized both quantitative and qualitative research approaches to collect information from the respondents. Household and individual questionnaire was designed to collect the data.

Included all type of questions were divided in to 4 categories, they are :

-) Individual questionnaire
-) Household questionnaire
-) Knowledge on STIS and HIV/AIDS
-) Attitude on STIS and HIV/AIDS

3.3 Data Collection

This study uses both types of primary and secondary sources. Existing data were collected through primary source whereas literature review is based on secondary sources. Quantitative technique was used a major approach in collecting information, however, qualitative technique was also used as supplement of quantitative method.

Mainly, this study were focused higher secondary school adolescents of grade 11 and 12. Data for this study were collected through the direct interview method. The questionnaire was filled up in the field through interview with the respondents. The questionnaire was checked for consistency.

The questionnaire was divided in the schedules, information on household characteristics and knowledge and attitude towards STDs and

HIV/AIDS. The survey tools were developed same for both male and female adolescents.

The questionnaire included socio-economic and demographic characteristics in relation with knowledge and attitude on STDS and HIV/AIDS of adolescents of higher secondary school students. Data collection was done with the assistance of school staffs.

3.4 Methods of Data Analysis

Data is the main part of the research study. Researcher gets raw data from the field survey. Then it is needed to manipulate according to the nature of data in the form of analysis. First of all, collected data are edited to answer their accuracy and completeness.

Data obtained from the survey were used to analyze the knowledge and attitudes on STIS and HIV/AIDS of the higher secondary level students (adolescents). The data and descriptive information has been analyzed. Basically, bar diagram, pie-charts, frequently table, percentage distribution and other methods are also used for analyzing and interpreting the data results. Descriptive and simple mathematical interpretation procedure will be adopted in this thesis. The required tables are generated with the help of SPSS programme.

CHAPTER - VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Methodologically, this is the ultimate chapter of this dissertation. This is the chapter which is developed to summarize and conclude the entire dissertation. In addition, it recommends the further steps for betterment in the regarded topic of knowledge and attitude towards STIs and HIV/AIDS among higher secondary small scale study and not applicable in generalizing the whole context. Even though, the gist findings are to be comprehended. According to the study, research conducted in Haraiya Higher Secondary School of Rudrapur VDC in Rupandehi district, the findings, concluding points and recommendations that are to be carried out are gradually described in the following topics.

6.1 Summary of Findings

A research was carried out at Shree Haraiya Higher Secondary School in Rupandehi district. The study on knowledge and attitudes on STIs and HIV/AIDS is a study conducted among students studying in grade 11 and 12. Based on the small study of grade 11 and 12 of Shree Haraiya Higher Secondary School of Rupandehi district from the selected 114 students, the major findings are presented below.

6.1.1 Individual Findings

-) Male are more (59.6%) than female (40.4%) respondents.
-) Highest proportion of respondents (43.9%) is of seventeen years of age.
-) All the respondents are unmarried except 3.61 percent respondents.
-) The higher number of respondents is Brahmin (50.0%), followed by Chhetry (26.3%).
-) Majority of the respondents are Hindus (84.21%), Buddhists (12.29%), Islam (1.75%) and Christians (1.75%).

6.1.2 Household Characteristics

-) Most of the respondents (70.2%) fall in to 5-10 numbers of family size.
-) Most of the respondents (44.7%) father's educational level is SLC and above and most of the mother's educational level is primary (18.4%).
-) Agriculture is the main occupation (60.5%) for father's and 80.7 percent for mothers of the parents of respondent.
-) A large proportion of respondents have radio (94.1%).

6.1.3 Knowledge and Attitudes about STIs

All of the respondents have heard about STIs. Majority of respondents have heard about STIs from school teacher (94.1%). All of the respondents have heard about HIV and AIDS and 90.4 percent have heard about syphilis.

Most of the respondents have known about the major symptoms of STIs. Symptoms are more informed to grade 11 comparing to class 12 and male rather than female.

In the context of transmission of STIs, sexual contact with multiple persons is known by all (100%) respondents followed by infected mothers to foetus (90.4%).

About 94.7 percent respondents have knowledge about using condom during sexual contact is the most reliable measure of STIs prevention followed by sexual contact with single person (85.1%).

About 94 percent respondents (107) reported that they would suggest infected person to use condom during sexual intercourse followed by to go for treatment to health institutional (85.1%).

Different background characteristics have not any drastic differences in the knowledge and attitude towards STIs. Male have relatively positively response towards infected persons than female. Students of grade 12 have relatively more knowledge than grade 11 and have positively response towards STIs. Ages of respondents have no only drastic differences in knowledge and attitude towards STIs.

6.1.4 Knowledge and Attitude Towards HIV and AIDS

The hundred percent respondents have the knowledge of HIV/AIDS and all have heard from radio as well as school teacher. All (114) respondents (100%) have known that HIV be transmitted from infected mother to foetus followed by sexual contact with multiple parents (94.7%).

About 95 percent respondents have the knowledge of using condom during sexual contact to prevent for HIV followed by sexual contact with single person (89.5%). Most of the respondents (95.6%) have the knowledge about vulnerability for HIV infected from the person

who keeps unsafe sexual relationship followed by commercial sex worker (90.4%).

From the basis of about 90 percent respondents, HIV/AIDS is not cured. Majority of respondents are in favour of love and respect to HIV infected persons. More than 76 percent respondents are not in favour of secrecy of HIV infected family member and about 89 percent are in favour of HIV infected female teachers to teach. Individual is most responsible for decreasing the epidemic of HIV/AIDS according to 90.4 percent respondents.

6.2 Conclusion

HIV/AIDS is burning problem in the world. Nepal is not so far from this problem. On the basis of above analysis and results the study have concluded that among the respondents knowledge about STIs and HIV/AIDS was better.

Adolescents are crude present and concrete tomorrow of the nation. So, adolescents sexual and psychological health should be considered worthy than any other matters. That is why it stands as a considerable matter of great concern to the national as well as the international institutions.

Third world countries like Nepal cannot stay away from modernization and westernization with the integration and evolution of our traditional norms, values and culture, adolescents come in influence first and proceed toward destruction, if they are not well guided and motivated toward merits and demerits of sexual knowledge and activities.

The findings of this study are nearly similar with DHS 2006 in case of both male and female. The knowledge of HIV and AIDS is hundred

percent in this study where as 98.4 percent female and 98.6 percent male have presented in DHS 2006, which is almost similar. On knowledge of HIV prevention, 94.7 percent respondents are in favour of using condom during sexual contact in this study where as 88.8 percent in DHS 2006 which is lower with 6 percent. The percent of female towards HIV infected female teachers is higher in DHS 2006 (96.6%) then this study (82.6%) on the other hand DHS report is lower (87.2%) than this study (92.7%) on perception of male towards HIV infected female teachers.

6.3 Recommendations

This segment deals with the necessary considerations that to be carried out for the betterment of the study area. Recommendations are generally formed on the basis of findings and conclusions for this study are found and scripted in previous sections. Concerning to those the very favourable Sand and specific recommendations are sorted out and listed below. After the keen observation to the primary data of Shree Haraiya Higher Secondary School's adolescents are observed well known or familiar to STIs and HIV/AIDS.

This research is not complete study. It is prepared for the present situation. It has not covered a complete knowledge and attitudes on STIs and HIV/AIDS among other higher secondary school students.

The study however, could not cover the sexual and reproductive health situation and practices of the respondents. Hence, further qualitative and quantitative research study can be carried out to assess their knowledge and behaviour on sexual and reproductive health.

The following recommendations are proposed to pay concern further more for good results.

-) Teachers and textbooks are observed as the major source for the information on STIs and HIV/AIDS. Availability, easy accessibility and reasonability of those should be mentioned.
-) Programs concentrated towards knowledge and attitude on STIs and HIV/AIDS should cover the adolescents as much as possible. Besides this, the other age group also should be involved to this type of program keeping in mind that all social members are vulnerable.
-) Possible associating agencies like NGOs, INGOs, **Sungabha Community Development Centre (SCDC)** should play significant role in advancing the knowledge and attitude towards STIs and HIV/AIDS on higher secondary school adolescents in Rudrapur VDC in Rupandehi district.
-) Modes of IEC (Informal Education and Communication) like electronic media, a paper media are little bit backward to those to teachers and textbooks. Therefore, they should be specifically focused and managed necessary requirements. Besides that, the references toward the subject matter should be available in the school libraries.
-) Interacting programs between school adolescents to school teacher/social member should be launched and performed so that adolescents should know the preventive, curative and rehabilitative measures.
-) Facilitation programs by the related authorities like educationalists, physicians etc. and others should be regularly visited and advised

the school going adolescents. So that they could their physical/ mental imbalances and their curative measures.

- J It is also necessary to study the level of knowledge and attitudes of STIs and HIV/AIDS among the adolescent who are out of schools.

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

6.4 Further Research Issues

Basically, the research is academic and limited with resources like time, economic support and other constraints. Therefore, whatever, is collected in this study is a negligible part of the study area. Even though the study area is small, the integrated variable according to the social dimensions are enumerable. Likewise, this dissertation covered very few and left huge or piles of subject matters related to the STIs and HIV/AIDS which is left out for the incoming students, colleagues and researchers for the study area.

Tribhuvan University

Central Department of Population Studies (CDPS)

**A Questionnaire on Knowledge and Attitude on STIs, HIV and AIDS among
Secondary School Students in Rupandehi District**

(The Answer Sheets will be used only for these writing and will be kept secretly)

A. Individual Characteristics

Code :

Name of Students : _____

Name of School : _____

VDC : _____

1. Class : 11 12

2. Age (Completed) :

3. Sex : Male1
Female2

4. Martial status : Married1
Unmarried2

5. Caste/Ethnicity Brahmin1 Tharu4
Chhetri2 Yadav5
Magar3 Dalit (specify)6
Others (Specify)XX

6. Religion : Hindu1 Buddhist2
Islam3 Christian4
Others (specify)XX

B. Household characteristics

| No. | Questions and filters | Coding Categories | Skip | | | | |
|---|--|--|----------|---------|---|---|--|
| 7. | How many members are there in your family : | <input type="text"/> <input type="text"/> | | | | | |
| 8. | How many brothers and sisters do you have ? (Including yourself) | <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;">Brothers</td> <td style="text-align: center; border: none;">Sisters</td> </tr> <tr> <td style="text-align: center; border: none;"><input type="text"/><input type="text"/></td> <td style="text-align: center; border: none;"><input type="text"/><input type="text"/></td> </tr> </table> | Brothers | Sisters | <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> | |
| Brothers | Sisters | | | | | | |
| <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> | | | | | | |
| 9. | Can your father read and write ? | Yes1 No2 → 11 | | | | | |

| | | | |
|-----|--|---|------|
| 10. | (If yes) what is your father's educational level ? | Non formal1 Primary (1-5)2 L. Secondary (6-8)3 Secondary (9-10)4 SLC and above5 | |
| 11. | Can your mother read & write ? | Yes1 No2 | → 13 |
| 12. | (If yes) what is your mother's educational level ? | Non formal1 Primary (1-5)2 L. Secondary (6-8)3 Secondary (9-10)4 SLC and above5 | |
| 13. | What is your father's occupation ? | Agriculture1 Service2 Business3 Not stated98 Other (specify)XX | |
| 14. | What is your mother's occupation ? | Agriculture1 Service2 Business3 Not stated98 Other (specify)XX | |
| 15 | Which is the following facilities are there at your home ? | Electricity1 Radio2 Television3 Phone4 Other (specify)XX | |

C. Knowledge and Attitude on STIs.

| | | | |
|-----|---------------------------------|-------------------------|------|
| 16. | How you ever heard about STIs ? | Yes1 No2 | → 24 |
|-----|---------------------------------|-------------------------|------|

| | | | |
|-----|--|---|------|
| 17. | (If yes) From which source did you hear ? (Multiple response) | Radio1 Television2 School/teacher3 Friends/Relatives4 Newspapers5 Poster/Pumplet6 Family members7 Not stated98 Other (specify)XX | |
| 18. | Which for the STIs have you heard ? (Multiple Response) | Syphilis1 Gonorrhoea2 HIV & AIDS3 Not stated98 Other (specify)XX | |
| 19. | Do you know the symptoms of STIs ? | Yes1 No2 | → 21 |
| 20. | (If Yes) What are the symptoms of STIs ? (Multiple Response) | Burning/pain urination1 Lower abdominal pain2 Swelling/wound in genital area ..3 Foul smelling discharge4 Blood in urine5 Lost of weights6 Not stated98 Other (specify)XX | |
| 21. | What are the factors for STIs transmission ? (Multiple response) | Sexual contact with multiple person1 Infected mothers to foetus 2 From unsterilized syringe/ needles3 Infected blood transfusion4 Living together with infected person5 Handshake with infected person ..6 Not stated98 Other (specify)XX | |

| | | | |
|----|---|---|--|
| 22 | In your opinion, where STIs are treated ? | Health institutions1 Personal clinic2 Medical hall3 Traditional healer4 Not stated98 Other (specify)XX | |
| 23 | In your opinion, what are the preventive measures of STIs ? | Sexual contact with single person 1 Using condom during sexual contact 2 Always clean the sexual organs ...3 Using sterilized syringe/needle ...4 Away from infected person5 Using safe blood6 Not stated98 Other (specify)XX | |

D. Knowledge and Attitude on HIV & AIDS

| | | | |
|-----|---|--|--|
| 24. | Have you ever heard about HIV & AIDS ? | Yes1 No2 → End | |
| 25. | (If yes) from which source did you hear ? (Multiple Response) | Radio1 Television2 School/teacher3 Friends/Relatives4 Newspapers5 Poster/Pumplet6 Family members7 Not stated98 Other (specify)XX | |

| | | | |
|-----|---|--|-----|
| 26. | How can HIV be transmitted ? (Multiple Response) | Sexual contact with multiple person1 Infected mothers to foetus2 From unsterilized syringe/needles3 Infected blood transfusion4 Living together with infected person5 Handshake with infected person6 From mosquito bite7 Not stated98 Other (specify)XX | |
| 27. | Do you know the symptoms of HIV & AIDS ? | Yes1 No2 | →29 |
| 28. | (If Yes) What are the major symptoms of HIV & AIDS ? | Loss of body weight1 Diarrhoea (frequently)2 Fever for more than one month ..3 Sweating4 Swelling lymph nodes5 Not stated98 Other (specify)XX | |
| 29. | Do you know the preventive method of HIV ? (Multiple response) | Avoid sex with multiple partner1 Using condom during sexual contact2 Sexual abstinence3 Using sterilized syringe/needle ..4 Away from infected person ...5 Using safe blood6 Safe from mosquito bite 7 Not stated98 Other (specify)XX | |
| 30. | Do you know of a place where people can go to get tested for the HIV virus? | Yes1 No2 | →32 |

| | | | |
|-----|--|---|--|
| 31. | (If Yes) Where is that ? (Multiple response) | Hospital1 Health centre2 Health post/sub health post3 Red Cross4 Not stated98 Other (specify)XX | |
| 32. | How should we behave to the infected persons ? | Love/Respect them1 Hate them2 Placed secretly3 Don't care them4 Not stated98 Other (specify)XX | |
| 33. | If a member of your family got infected with the HIV virus, would you want it to remain a secret or not ? | Yes, Remain a secrete1 No2 Not stated98 | |
| 34. | If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household ? | Yes1 No2 Not stated98 | |
| 35. | In your opinion, if a female teacher has the HIV virus but is not sick, should she be allowed to continue teaching in the school ? | Should be allowed1 Should not be allowed.....2 Not stated98 | |
| 36 | What types of people are more vulnerable for HIV transmission ? | Commercial sex workers1 More mobile persons2 Foreign employees3 Persons who keep unsafe sexual relationship4 Adolescents and youths5 Not stated98 Other (specify)XX | |

| | | | |
|-----|--|--|--|
| 37. | Who will be the most responsible for decreasing the epidemic of HIV & AIDS ? | Individual1 Community2 Government3 NGO/INGOs4 Others (specify)XX | |
| 38. | In your opinion, can HIV & AIDS be cured ? | Yes1 No2 Not stated3 | |

39. Your responsibility for decreasing the epidemic of HIV and AIDS

.....

.....

.....

Thank You !