ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

RISK SEXUAL BEHAVIOR

AMONG

COLLEGE STUDENTS AND BAR LADIES

THE CASE OF AWASSA

BY

BERHANU DENDENA

May 2007

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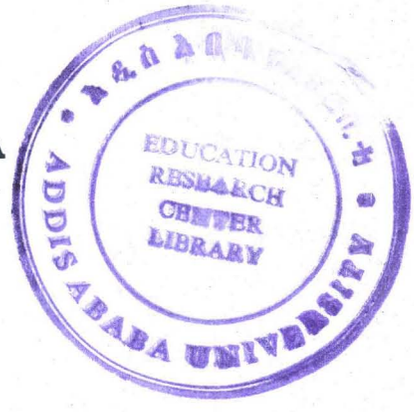
A THESIS SUBMITED TO THE SCHOOL OF GRADUATE STUDIES OF Addis Ababa UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTRE OF ARTS IN SPECIAL NEEDS EDUCATION

BY

BERHANU DENDENA



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APPROVAL OF BOARD OF EXAMINERS

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Acronyms

- **ANC:** Antenatal Care
- **AIDS:** Acquired Immune Deficiency Syndrome
- **ART:** Anti Retro viral Treatment
- **CT:** Counseling and Testing
- **HAPCO:** HIV/ AIDS Prevention and Central Office
- **HIV:** Human Immune Virus
- **ISAPSO:** Integrated service for AIDS Prevention and Support Organization
- **FMOH:** Federal Ministry of Health
- **PLWHA:** People Living With HIV/AIDS
- **SNNPR:** Southern Nation, Nationalities and Peoples Region
- **PMTCT:** Prevention Mother To Child Transmission
- **STI:** Sexually Transmitted Infections.
- **UPEPFAR:** United States President's Emergency Plan For AIDS Relief.
- **VCT:** Volunteer Counseling and Testing
- **SIV:** Simian Immune deficiency Virus.
- **FHI:** Family Health International
- **HCT:** HIV Counseling and Testing
- **UNAIDS:** Joint United Nations Program on HIV/AIDS
- **UNFPA:** United Nations Population Fund
- **SPSS:** Statistical Package for Social Sciences
- **WHO:** World Health Organization
- **ACAFEDO:** Awassa city Administration Finance and Economic Development Office

Abstract

The purpose of this study was to investigate the risk sexual behavior among college students and bar ladies.

To meet the objective, the Hawasa University students, bar ladies found in Awassa, and customers participated in the study. The number of respondents was 480 (180 male students, 150 female students and 150 bar ladies). The students were selected using stratified random sampling technique. However, bar ladies were chosen using simple random sampling technique. In addition 40 respondents (10 male students, 10 female students, 10 bar ladies and 10 customers) participated in interviews.

The data obtained through the questionnaire were entered, cleaned and analyzed using the SPSS software, and analyzed and interpreted through Mean, Standard Deviations, One way -ANOVA and Tukey multiple comparison test. The data gathered through interviews were analyzed and interpreted using thematic analysis.

The study found out that college students had better knowledge about HIV/AIDS than bar ladies. However, in practice bar ladies were more protected from HIV/AIDS. They were better in HIV/AIDS prevention strategies than college students. College students had more favorable attitude towards VCT than bar ladies. Mass media (TV and Radio), anti-AIDS clubs, school and health institutions were the major sources of HIV/AIDS information for college students and bar ladies. Finally, it is very helpful encouraging college students to transfer their knowledge about HIV/AIDS in to practice.

CHAPTER ONE

INTRODUCTION

1.1 Background

AIDS has been known for about two decades now. In fact, 20 years ago, this potentially deadly infection did not even have a name. Now, most of us have heard of this horrible pandemic. Currently many people are familiar with the terms HIV/AIDS (Routh, 2005).

It has been one of the most destructive human disease that outburst devastatingly, even not seen in the history of man kind. Mann (1992) pointed out that this disease is the most frightening event in that the epidemic swift the counter attacks of human ingenuity and huge advanced technology. Regarding its seriousness Routh (2005, P.5) states that "HIV/AIDS has dramatically and devastatingly affected the lives of millions of people living with the disease, as well as the lives of their families, children, (and) communities."

The statistics over the last 20 years numbs one beyond comprehension. Who can imagine the miserable life of 37.8 million people throughout the world carrying the virus? Who can attest the life long severity of the disease, the complicated life that follows and its burden, except that of a victim (Routh, 2005)?

HIV infects an astronomical number of people worldwide each day. Approximately 14,000 new infections occur, more than half of them are among young people below age 25 (UNAIDS, 2004).

The spread of the virus is accelerated by various factors. These include widespread and worsening poverty, increased prostitution, injection drug use, weak educational systems, inadequate health care system, and high rates of

sexually transmitted diseases. On top of this, an environment in which information about HIV prevention is not found and effective treatment options are expensive complicates the problem.

Furthermore, the spread of the virus is exacerbated by the economic need of individuals who migrate to find work or food and large population displacement due to refugees fleeting, warfare and civil strife (Smith, 2001).

HIV/AIDS has a devastating effect in Africa, specially, in the South and East. By the end of 2001, over 28 million people were infected with the virus, and 13 million died of AIDS (UNAIDS, 2005). As a result of this, there were 12 million HIV/AIDS orphans through out Africa (Routh, 2005). Nelson Mandela, retired president of South Africa (quoted in Routh, 2005, P.33) said, "ADIS today in Africa is claiming more lives than the sum total of all wars, famines, and floods."

Today, 90 percent of people with HIV infection live in the developing world. The most seriously affected countries are found in Africa, due to the rapid spread of the virus in these nations. What makes difficult preventing and treating HIV/AIDS in these countries is the powerful stigma associated with the disease and poverty. Furthermore, many countries are not able to finance for the health care needed to control the challenge of the epidemic (Routh, 2005).

1.2 Statement of the problem

In spite of the efforts made to mitigate the expansion of HIV/AIDS in Ethiopia, still it is spreading in our country. It is taking the lives of thousands of citizens and eroding the human power. It is obvious that as more people die, the work force shrinks and the country becomes even poorer. The disease is putting an enormous strain on the economy of the country. Many of the

infected people may not get access for HIV treatment due to fear of societal stigma and discrimination; so most of them develop AIDS and die (ISAPSO, 2001).

Despite the fact that there is free distribution of medicine for HIV carriers, most of them develop AIDS and die due to lack of awareness about ART. Besides, some HIV positive people do not want to reveal themselves for they fear societal discrimination and stigma (UNAIDS, 2004).

The pitiful event that needs due attention is the high vulnerability of women to HIV/AIDS infection. Estimates in December 2005 indicate that 40 million people are living with HIV worldwide, of which about 17.5 million are women. However, in some countries women now account for more than half of the HIV infections (WHO, 2005).

Unique social and biological experience put women at high risk. Smith (2001) indicates that because of their various social roles and vulnerability, women are influenced in different ways by HIV policies than are men. A good example for this is that, policies promoting partner notification and disclosure did not give emphasis to the documented potential for assault against women by men who learn of their female partner's HIV seropositive status. To the contrary, women are less likely than men to be aware of their partner's HIV status and risk behavior.

In addition to social factors, there could be biological vulnerability. It results from several factors. The higher concentration of HIV in semen than vaginal secretions, as well as increased surface areas and the greater vulnerability of the female genital tract to HIV infection have great contribution to the sexual transmission of HIV from men to women than from women to men (Smith, 2001).

Biological changes associated with puberty that increases susceptibility to infection, causes younger women to be infected with HIV than men. They are particularly vulnerable making up beyond half of all HIV diagnoses in the 13 to 24 year age range (Smith, 2001). Most of the time women with in this school and college age are expected to pass most of their time in schools and college.

College students who are free from the pressure of their family may face their campus and residence as new planet. Their maturity, the surrounding environment, influence of the opposite and same sex, extreme sense of freedom, their propensity to engage in exploratory behavior, their needs for peer and social approval, and sense of non vulnerability could affect the sexual behavior of adolescents (Wulfert,1993). For instance, according to the preliminary data the researcher found in Awassa colleges, some college girls were found with pregnancy and abortion cases.

These pregnancy and abortion cases clearly indicate that there were unsafe sexual practices among college students. But HIV/AIDS is mainly transmitted through unsafe sex. It is surprising that bar ladies who are doing sex more frequently are not facing pregnancy and abortion cases as that of college girls. Most of them are protecting themselves from unsafe sex. This may indicate that there could be significant differences between college students and bar ladies in knowledge, attitude and practice pertaining to sex. However, no study as yet has documented these differences. There was, thus, a need for an empirical study that explores the possible differences between the two groups.

Following this line of enquiry, the study attempts to investigate the following research questions.

- ❖ To what extent do college students differ in knowledge of AIDS and high risk reduction behavior as a function of age and level of Education?
- ❖ Are there differences between college students and bar ladies in their attitudes towards HIV/AIDS prevention strategy (use of condom) as a function of age and level of education?
- ❖ To what extent do college students differ in sexual behavior from bar ladies due to age and level of education?
- ❖ Is there a significant difference in attitudes towards VCT between bar ladies and college students due to age and level of education?
- ❖ What are the sources of information about HIV/AIDS for College students and bar ladies?

1.3 Objectives of the study

The general objective of this study was to investigate the differences between college student and bar ladies in knowledge, attitude, behavior and practice. It pertained to explore their awareness about HIV/AIDS and risk-reduction behaviors.

The specific objectives were the following:

- ❖ To explore awareness about HIV/AIDS and high-risk reduction behavior among college students and bar ladies as a function of age and level of education
- ❖ To find out differences in attitudes towards use of condom as feasible intervention strategy among college students and bar ladies as a function of age and level of education.
- ❖ To pin point whether the knowledge about the nature and spread of HIV/AIDS brings about any change in sexual behavior of college students relative to bar ladies due to age and level of education.

- To point out the differences between college students and bar ladies regarding attitudes towards Voluntary Counseling and Testing of HIV/AIDS (VCT).
- To investigate the source of information about HIV/AIDS for college students and bar ladies.

1.4 Significance of the Study

As indicated earlier, the objective of the study was to explore the sexual behavior of bar ladies and college students. The study compares their knowledge, attitudes, behavior and practice. Based on this, it attempted to find out the preventive measures utilized by each group. Thus, the result of the study is expected to:

- Initiate colleges and Universities to develop intervention strategies for HIV high risk reduction.
- Help colleges and Universities to mainstream HIV/AIDS in their educational and institutional system.
- Initiate colleges and Universities to intensify prevention and mitigation of impact with special focus on gender equity so as to decrease women vulnerability to HIV/AIDS.
- Provide basic information for planners and policy makers so that they can make improvement in intervention strategies, particularly in colleges and Universities.
- Serve as springboard for further research in the area.

1.5 Delimitation of the Study

The scope of the study was delimited to examining and analyzing knowledge, attitudes and sexual behavior among college students and bar ladies and also attitudes towards VCT. It is obvious that college students and bar ladies are available in many towns of our country. However, the

study is geographically delimited to Awassa. This is due to the following factors. Firstly, there is an increased HIV prevalence in Awassa (MOH, 2006). Secondly, nowadays the town is in its fastest rate of development. Infrastructures have been fulfilled with higher quality. Various social institutes such as market areas, hotels, bars, schools, colleges, Universities, and hospitals are expanded. This fastest development of the town drew the attention of many people from different parts of the country. Now the population is estimated around 130,759 (ACAFEDO, 2006). Youngsters from age 15 up to 24 in the town account 35,174 (26.9%) (ACAFEDO, 2006).

Many findings indicate that the most vulnerable group of a society is 13- 24 years age (Smith, 2001). More than 10,000 youngsters are college students in Awassa (ACAFEDO, 2006). Since the researcher knows Awassa for more than 25 years, and he was a college student there eight years ago, he has personal experience and observation about college students' risk sexual behavior.

Hence conclusions to be drawn will reflect what the situation looks like in the stated town.

The researcher selected KAPB Study because it is a vital means in order to have first hand information about the risk sexual behavior of individuals, particularly institutionalized students who are free from family pressure.

1.6. Limitation of the study

This study suffers from the limitations that investigation of sexual behavior is a highly sensitive one. There fore, many individuals do not reveal information on personal matters such as sexual practices they normally kept to secrete. Due to this, some respondents may not respond honestly. With full understanding of this limitation the findings of the study was interpreted using cross check questions.

1.7 Operational definition of Key terms.

Abstinence: refers to refraining one self from any sexual activity or engagement (Fonseca, 1994)

Adolescence: refers to the period of life during which the growing individual makes the transmission from child hood to adult hood with the age range of 12 –19. During this time the reproductive organs become capable of functioning. It also refers to the years of High School and college (American Encyclopedia, 1972).

Attitude: Feelings or responses that could be favorably or unfavorably employed towards sexual issues, things, persons or, events orders (Wortman, 1992).

Bar: An establishment where soft and alcoholic drinks are served for clients, rooms and sex workers are available.

Bar ladies: They are women serving at Hotels and bars and gives sexual service with payment.

Chat bet: A place where "chat" and "shisha" are ready to entertain customers with payment. The customers could be students, bar ladies or civil servants.

College Students: individuals who live and attend higher education in a reserved institution from 3-4 years.

Gender: a phenomena that is occurred as the consequence of culturally constructed attributes and behaviors render to the either sex (male or Female) of human being (Maccoby and Jaklin, 1991).

Hotel: Establishments in which food and drinks are served for clients, rooms for accommodation are also available.

Hotel-based sex workers: ladies employed by the hotel's owner to serve food and drinks and also sell sex to the hotel's clients to increase their income.

Intervention strategies: they are strategies used to mitigate the expansion of HIV/AIDS by persistent use of condom, being faithful to a single life time partner and practicing abstinence.

Sexual Behavior: indicates a wide range of physical activities included in the body such as erotic expressions or feelings of affection (Spencer, 1993)

Voluntary counseling and testing: is the process by which an individual by his /her own initiative or voluntarily under goes HIV /AIDS counseling and HIV testing.

Young Adult: Refers to the time of life in which an individual will be matured sexually and reached his/her full height (20-40) (Rathus, 1986).

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Human Sexual Behavior and HIV /AIDS

2.1.1 Human Sexuality's

It has been so difficult to give simple answer to the question "What is Human sexuality?" A number of scholars attempted to forward various assumptions and theoretical explanations to define the term. For instance, Freud saw sex as a powerful psychological and biological force; while Malinowski emphasized its sociological and cultural dimensions; Henery Miller used portrays of sex in his novels to make a philosophical statement about the human condition (William et al., 1995).

Spencer (1993) pin points that one can define his/her sexuality as he/she experiences and expresses himself as sexual being. Human beings' awareness of themselves as either of the opposite sex is part of their sexuality, and the capacity they have for erotic experience and responses.

Generally, Sexuality is a broadly encompassing term used to refer to all aspects of being and feeling sexual. To express it more briefly it is important to look through different dimensions of sexuality that interact in all of lives. Therefore, human sexuality is a multidimensional phenomenon that has biological, psychological, behavioral, clinical, moral and cultural aspects, No single dimension of sexuality is universally dominant. Some of these dimensions are discussed as follows (King, 1996).

i. Biological dimension

Biological factors largely control sexual development from conception up to birth and our ability to reproduce after puberty. The factors comprise both sexual anatomy and sexual physiology. The sexual anatomy influences our sexual desire, sexual functioning and satisfaction, whereas the sexual physiology determines certain sex differences in behavior such as the tendency of males to act more aggressively than females (King, 1996).

ii. The psychosocial dimension

This perspective includes psychological factors such as emotions, thoughts, and personalities in combination with social element in which how people interact. The importance of this dimension is that it sheds light on many sexual problems and the way we develop as sexual beings.

Our gender identity that is the personal sense of being male or female is primarily shaped by psychosocial forces. Our early sexual attitudes which often stay with us in to adulthood are based largely on the meaning and purpose of sex. This information will be provided by parents, peers and teachers (Denny, 1992; Masters et al.,1995).

iii. The Behavioral Dimension

Behavioral dimension takes the biological and psychological forces in to account. It helps us to understand what, how and why we do sex (King, 1996).

iv. The Clinical Dimension

The clinical dimensions of sexuality examine the obstacles that can lessen the pleasure or spontaneity of our sexual encounters. Physical problems such us illness, injury, or drugs can affect the sexual response patterns or damage

them completely. Feelings such as anxiety, guilt, embarrassment, or depression and conflicts in our personal relationships can also knock our sexuality out (Denny, 1992).

V. The Cultural Dimension

Our cultural differences on sex may amuse us for that various trends and practices of sex are employed at different societies. They can also enable us to understand that our view point is not shared by other people in other places.

What is labeled as "moral" or "right" varies from culture to culture, from century to century. There is no comprehensive sexual value system that is right for everyone and no single value and moral code that are indisputably correct and universally applicable (King, 1996).

2.1.2 Human Sexual Behavior

A major component that contributes to the transition of a child to adulthood is sexual development. During puberty, adolescents experience changes in their hormones, reproductive organs, feelings and thought. These hormonal and bodily changes affect adolescents' behavior including their sexual behavior. Kimmel and Wiener (1995) attest that adolescents' sexual behavior is a result of increasing strong winner drives not yet channeled and controlled.

Denney (1992) indicates that when we think of sexual behavior we tend to consider interpersonal sexual activities. These include solitary sexual activities such as self stimulation or autoeroticism that bring about sexual excitation. In studying human sexual behavior, there could be a question that needs to be addressed; i.e., "What is 'normal' sexual behavior?" The answer is: it depends on different factors such as the age of the individual and the

society; and the time in which the person lives. What is considered normal may change over the life span of a person and from generation to generation.

King (1996) indicates that we use the term normal behavior statistically if a large number of people engage in it. Master et al (1995); King (1996) and Denney (1992) mention different types of sexual behavior that fall in to two categories; solitary sexual behavior and couples sexual behavior.

A. Solitary Sexual Behaviors

i. Masturbation

It provides sexual excitement and pleasure by self-stimulation of the genitals. It is common in both males and females. Both single and married persons are using this self stimulation. However it is more frequent among single men (Denny, 1992; King, 1996).

ii. Fantasies

It is a form of autoeroticism and performed by an individual. It requires recalling erotic and sexually stimulating episodes that occurred in the past; or imagines sexually arousing situations. It is different form masturbation in that it does not involve touching genital organs. A person can fantasize in the absence of additional sexual activities. It may be used in masturbation to increase sexual excitation and to reach orgasm (Master etal, 1995; King, 1996).

B. Couples Sexual Behavior

i. kissing

Many people use this most common sexual behavior to show affection. It can be used for sexual arousal, when it is placed on lips. The lips may be left closed or may be opened. Sucking a tongue is also used in kissing. For sexual

arousal, kissing does not necessarily be lip-with lip. It may be any where on the body such as ears, neck, hands, feet, breast, navel, genitals and annals (Denny, 1992; King, 1996; Master, 1995).

ii. Homosexuality

An individual with sexual orientation primarily to members of the same sex is termed homosexual. It is viewed very differently in different cultures. The shift from regarding homosexual as moral issue to viewing it as a scientific issue was initiated during the mid 1850.However, by the time there was a controversy between physicians and physician moralists for that moralists condemned same-sex activities. The term homosexual includes both male to male sexual partners (gays) and female to female partners (lesbians) (King, 1996).

iii. Heterosexuality

An individual with a sexual orientation primarily to members of the opposite sex is termed heterosexual. Various types of sexual techniques can be used in this engagement. Marital and premarital sexual practices are dominant in heterosexual combination (Susan, 2003; King, 1995; Standing & Kisekka 1989).

iv. Bisexuality

Bisexual refers to sexual attraction of an individual to people of either sex. There is the biggest confusion and controversy with bisexuality. Some group of people view an individual who engaged in bisexual behavior as really homosexual. However, the commonly used definition of bisexual, suggested by Mac Donald (1981), quoted in King (1996, p, 218) is different from this notion. It reads as follows:

To be bisexuality means that a person can enjoy and engage in sexual activity with members of both sexes or recognizes to do so. Although the strength and direction of preference may be constant for some bisexuals, it may vary considerably for others with respect to time of life and specific partners.

The above sexual behaviors are claimed to be the result of biological, psychological, social and cultural influences that interact to produce sexual orientation. For instance, Freud (1961) believed that a person's sexual orientation depends up on how the Oedipus complex is resolved. He considered heterosexuality as the normal and homosexuality as the result of fixation at early stage of development. However, the social learning theorists such as Masters and Johnson (1979) cited in King (1996) explain homosexuality and heterosexuality as learned behavior. Each of these sexual orientations is dependent on the learning history of an individual.

2.1.3 Why Do We Study Human Sexual Behavior?

Human sexuality as a science took some of its biggest leaps during the early 19th century. During that time, physicians and religious zealots had attempted to point out what was sexually right and wrong (Denny, 1992). Today the field of sexuality has got wide sphere of attention from various thinkers. And they are indicating the significance of studying the field.

Learning about sexual behavior, as other fields can provide people with knowledge that has high potential for use in their day to day lives. It has a number of practical applications that other subjects may not provide easily. Acquiring accurate information about sexuality can have contributions to prevent sexual problems and it can help in educating children about sex.

Having adequate and sufficient information about sex can help people to deal more effectively with certain types of challenges that are faced in their lives. There is a unique argument to become knowledgeable about sexual issues today. HIV/AIDS is now the number one overall cause of death in Africa. And it has also moved up to fourth place among all causes of death worldwide. Furthermore, being knowledgeable can help us make sexual choices that are, quite, literally, and life saving (Masters et al., 1995). Ahlberg (1991) indicates that prevention and control of AIDS involves dealing with human sexuality. But little is known about sexuality in general, particularly in Africa. Seventeen years ago, after reviewing studies on sexuality in Africa, Standing & Kiekie (1989) found out a deeper understanding of relationship between sexual behavior and HIV/AIDS transmission.

Sexuality is one of the most sensitive issues in HIV/AIDS research that did not get due attention in Africa. Routh (2005) noted that the socio-cultural bases of STDS in Africa do not receive the proportional emphasis it deserves. This calls for the importance of giving special concern to human sexual behavior in designing and planning HIV/AIDS interventions.

Generally, studying sexual behavior of human beings could provide knowledge that leads to reasoned and responsible interpersonal sexual behavior. It can also help people make important personal decisions about sex. In short, learning about sexuality and sexual behavior is an inevitable preparation for living. It provides conducive ground to decide on personal and social problems such as STD, unwanted pregnancy, sexual harassment, sexual abuse and rape.

2.1.4 Risk Sexual Behavior

There are various factors that expose an individual to risk whether he/she is homosexual, heterosexual or bisexual. The infected organs that are touched and contacted could contaminate a healthy person. Mouth, anus, vagina, penis and fingers are human organs usually used during sexual intercourse. However, due to personal and environmental hygiene, biological factors and infectious agents, these organs are highly vulnerable to different diseases. Thus, a person engaged in oral sex, anal sex, vaginal sex or finger fuck could infect the partner or be infected. King (1996) indicates that any sexual activity such as anal intercourse, oral intercourse and vigorous vaginal intercourse in which bleeding occurs would greatly increase the risk due to open sore on the penis, vagina, anus or mouth.

A. Anal Sex

The anus is very sensitive to touch because of the multiple nerve endings it has. The sphincter muscle found in the anus uses rhythmic muscular contractions during orgasm in both males and females. Anal sex is common among male homosexuals (Masters et al., 1995). A person engaged in anal intercourse uses not only penis insertion, but also anal mouth intercourse. However, this situation exposes the individual to transmit or get different infections. STI and HIV are the leading one to transmit through anal and oral sores (Master et al., 1995).

B. Oral Sex

Oral stimulation is the first sexual behavior that most people engage in. It includes mouth-to-mouth, mouth -to-vagina, mouth-to-penis and mouth to anus. Oral stimulation of the vulva (clitoris, labia, and vaginal openings) is called cunnilingus. Any sore in the mouth could facilitate the transmission of STI between the partners (Master et al, 1995; Denny, 1992).

C. Penile Vaginal Sex

The most common and widely used heterosexual and bisexual practice is penile-vaginal sex. Two partners are engaged in it. The possibility of STI transmission is significantly highest in this heterosexual practice. Especially the case of having unsafe sex with multiple partners increases the infection of HIV and other infectious disease (King, 1996; Denney 1992; Master et al., 1995).

D. Finger fuck

Finger fuck is the other widely used practice to bring about sexual arousal. Homosexuals, heterosexuals and bisexuals often get sexual excitement and sexually arouse their partners by inserting finger in to mouth, anus or vagina of the partner. This practice can also be a passage way of STI transmission from infected nails to the organs inserted and vice versa.

2.1.5 HIV/AIDS

The Human Immune Virus (HIV), new to the human species, has been the leading fatal disaster for human creature. Scientific studies of the origins of HIV indicate that the virus is similar to that of SIV (Simian Immune deficiency Virus) found in rhesus monkeys, sooty Mangabeys, African green monkeys, and chimpanzees. HIV-2 that infected some people found to be closely similar to SIV.

Based on this ground, Myers et al (1992) (cited in King, 1996) indicates that there is considerable evidence that human acquired the virus through cross-species transmission like adapting a human host.

Wherever it originates, however, the most sensitive issue nowadays is its rapid mode of transmission and an adverse impact it puts on human lives. Currently, in the world, there are more than 38 millions of people, living with the virus and many have died from AIDS (UNAIDS, 2005).

A clear distinction must be made between being infected with HIV and developing AIDS. A person, who has been infected with HIV, with rare exceptions, shows antibodies to the virus. This person is said to be sero-positive for HIV antibodies. A sero-positive person may show no symptoms but can pass the virus on to others during sexual intercourse, sharing needles, blood transfusion and mother to child (at birth or Breast feeding).

Humffman (1991) shows that AIDS is a tragic illness which damages the human body's natural defense against disease and infection. It is caused by HIV. Once the virus enters in to the blood stream, it travels to other parts of the body. A person infected with HIV may take a lapse of many years to become AIDS patient.

The period between contracting the virus and developing the symptoms of AIDS is highly variable. Some individuals develop the symptoms quite quickly, where as others remain free of symptoms for as long as eight up to nine years. The average incubation interval is estimated to be seven up to ten years (Berer, 1993; Stroebe and Stroebe, 1996).

AIDS is an opportunistic disease. As the term, Acquired Immune Deficiency Syndrome indicates, it opens the gate for other diseases. Because when immune deficiency occurred, the immune system is being hindered from functioning. Then, a syndrome, a group of symptoms or illness could originate for any causes (Spencer, 1993).

The transmission of HIV has been highly associated with unprotected sexual intercourse such as vaginal, anal and oral. The exchange of semen, blood, vaginal and cervical secretions and sores in mouth and anus are the main factors that facilitate the transmission of the virus. Furthermore, breast milk from an infected mother to child and sharing needles are also reported as causes (HAPCO/MOH, 2004; Berer, 1993).

2.1.6 HIV/AIDS in Ethiopia

Now it has been about two decades that HIV/AIDS has been a global problem, not only a public health issue of some countries. It influences every sphere of a society such as the economical, political, educational and social settings. The pitiful event is that the epidemic is more sever in Africa. Ethiopia is among the countries severally hit by the pandemic (ISAPSO, 2001).

The first two AIDS cases in Ethiopia were reported to the Ministry Of Health (MOH) in 1986. Since then the epidemic appears to have grown up. Various factors are contributing to the spread of the virus. The leading risk factors are the presence of sexually transmitted infections (STI), multiple sexual partners, harmful traditional practices such as female genital mutilation, circumcision, uvulecotomy, blood letting, tattooing, prostitution, men with disposable income, alcohol, unsafe blood transfusion, transmission from infected mother to fetus (HAPCO/ MOH, 2006).

Due to the above causes, the 1986 reported two HIV cases, surprisingly increased to an accumulated total of 147,000 by mid 2000. This does not include the vast majority of infection and many more deaths. MOH (2005) estimation indicates that there were 1.3 million people living with HIV/AIDS in Ethiopia by the year 2003. This is unbearable situation to deal with for a resource poor country. Some results recorded in the last few years indicate

some encouraging signs that the transmission of HIV is progressing at a slower rate. But the rate of change is not as such remarkable (MOH, 2005).

Therefore, so as to understand the problem and to mitigate its expansion, the country's HIV/AIDS control and mitigation efforts over the past six years have intensified. Sufficient conducive environment have supported a multi sectoral approach and social mobilization strategies. These strategies involve the participation of all individuals including civil society in HIV/AIDS prevention and mitigation efforts at national, regional and community level. Among the activities done by the government are that it issued HIV/AIDS polices, established the National AIDS council in 2000, implemented key guidelines for surveillance, VCT, STI, Home-based care, Prevention of Mother To Child Transmission (PMTCT), Anti Retroviral Treatment (ART) and Universal Precautions (UP) (MOH, 2005).

Beside this, civic society, faith based organizations and PLWHA associations have been engaged in anti-stigma campaigns, promoting openness and caring for the risk. Various non-governmental organizations such as the United States President's Emergency plan for AIDS Relief (UPEPFAR), Global fund, the World Banks MAP program and other donors have significantly invested their technical and financial supports. With the collective effort and resource facilitation of these bodies, large scale social mobilization and expansion of HIV/AIDS prevention, care, support and treatment services have been tried to put on action.

The number of centers providing service for prevention, care and treatment has grown significantly. For instance currently, in the country there are 658 Counseling and Testing centers (CT) and , 132 ART and 173 PMTCT service providers for the daily increasing number of people (MOH, 2006).

The overall outcome of the above efforts has been recorded. The behavioral trends (2000 Vs, 2005) from the Demographic Health Survey (DHS) among the general population reveal high level of awareness and changes in behavior; prevalence of premarital sex decreased from 7.8% to 3.9% among men 15-19 age; from 20.8% to 13.4% among men 20-24 age; and from 40% to 1.0% among women 15-19 ages; and from 16.5% to 3.1 among women 20-24 age. In addition to these a decreased prevalence rate of multiple sexual partners also has been observed. It has decreased from 5.4% to 4.1% among men 15-49 age and from 1.1% to 0.2% among women 15-49 age. Condom usage is increased from 30.3% to 51.7% among men 15-49 age 13.4% to 23.6 among women 15-49 age (MOH, 2006). As the report indicated the data for females was not found. As the result the figure for males became high as compared to females.

However, four regions in the country such as Amhara, Oromia, Addis Ababa and SNNPR have been affected seriously. This is due to the combined effects of both relatively high HIV prevalence and large population sizes. They accounted for 86.6% of all PLWHA in 2005. Similarly they shared 86.7% of the total estimated HIV positive pregnancies, 85.3% of new infections, 87.9 of new AIDS cases, and 88.2% of AIDS death that occurred in the country in 2005 (MOH, 2006).

According to the estimated figure of MOH (2005), above 1.32 million people were living with HIV/AIDS. Of the total, 634,000 people were living in rural areas and 686,000 in urban areas. In the age group 15-49 years, there were more women living with HIV/AIDS than men. It has also been estimated that in 2005 a total of 137,500 new AIDS cases, 128,900 new HIV infections (353 a day) including 30,300 HIV positive births and 134,500 (368 a day) AIDS deaths including 20,900 in children that are below 15 years occurred (MOH, 2006).

By the same year, the estimated number of orphans was a total of 744,100 with ages ranging from 0-17. This involves 529,777 maternal, 464,518 paternal, and 250,195 dual orphans. For the total orphans, the number of dual orphans is subtracted from the sum of maternal and paternal AIDS orphans. The number of persons required ART was also estimated around 277,800 including 43,100 children (MOH, 2006). The annual report of Ethiopian Fiscal year, 1998 (from July 1, 1997 up to June 30, 1998 E.C) disclosed that from a total of 564,351 people who received VCT, 13.7% tested HIV positive (15.7% females and 11.6% males). Among 52,428 pregnant women who took HIV test 4172, (18%) were HIV positive (MOH, 2006).

To sum up, the adjusted HIV prevalence for Ethiopian in 2005 was 3.5% that involves 10.5% in urban and 1.9% in rural areas. Higher HIV prevalence has been recorded in females than males. Generally 1.32 million people are living with the virus. 744,100 children are orphans due to AIDS and 277,800 people need ART (MOH, 2006).

This terrifying situation calls for devising ways and means for systematically reaching every member of the society in our country. The intervention strategies designed to tackle the problem should involve the provision of information regarding HIV/AIDS transmission and prevention. The strategy could help the people to bring about the desired behavioral changes to control and prevent the spread of the infection (ISAPSO, 2001).

2.1.7 Knowledge about HIV/AIDS

Knowledge is powerful and a vital means to tackle the expansion of HIV/AIDS within a given society. Knowledge of HIV provided through formal, informal or non-formal education enables human beings to bring about behavioral changes that intern protect them from risk sexual activities (WHO, 1994;

UNAIDS, 2004). However, knowledge and behavioral changes alone do nothing in avoiding risk situations. They should be supplied by action. In other words the newly changed behavior that comes through knowledge need to be observed performing acceptable actions of intervention such as abstinence, faithfulness or condom use (UNAIDS, 2004).

Despite the above fact, People who know about HIV/AIDS continue to put themselves at risk. It is difficult to make speculation as to why these people do not take adequate care to protect themselves from conditions that claim their lives. It is much more difficult for people to see the connection between having sex with some one to night and dying of AIDS after some year (Kimmel and Weiner, 1995). However, King (1996); Master et al. (1995) noted that sexual behavior is difficult to alter for a number of reasons. For instance, sex drives are very strong and sexual intercourse is very enjoyable. So, people who are in the habit of having sex with many partners find it very challenging to change their behavior. Similarly, several studies (Gardos G., 1988; Hanly C., 1988; Edward L. et al., 1989) (cited in EPHA, 1999) reads as "College students are reasonably well informed about AIDS but are reluctant to change their sexual behavior unless the threat of infection is personalized."

As ISAPSO (2001) indicates, many people are often heard of saying;

> "I want to go on having sex with different partners because my friends who have a lot of friends did not die of AIDS."
>
> "I will die someday. Anyway; so why I spoil my mood now, rather I will enjoy"
>
> "I will just go on like before, but may be in the future I should be a bit more careful about whom I go to bed with."

To sum up knowledge of HIV/AIDS is very important to save oneself from the infection. However, indicated above some people expose themselves to the disease knowingly. This indicates that knowledge should be supplemented with action.

2.2 Prostitution

The exchange of sexual acts for payment often with money is termed as prostitution. The busiest actor/actress who expands prostitution wildly is a commercial sex worker. A prostitute performs sexual acts with a person of the opposite sex or a person of the same sex. In this social event, the customer is required to pay limited charge immediately for the service provided (Masters et al., 1995).

Both females and males can be prostitute in that they engaged in sexual act for payment. Many prostitutes have their own reason to be engaged in commercial sex work. Most of them view sex as a way of gaining financial security. Others do sex to obtain money to support an expensive drug habit or dependency. Adolescent girls, who run away from home, sometimes became prostitutes. This is due to lack of support and the challenge they face.

In many countries, numerous factors can contribute to the existence of prostitution. The customer's willingness to pay for sex is the primary cause. Some customers, particularly men, may temporarily separate from their sexual partners due to some social circumstances. This temporary loneliness is often treated by prostitutes. Others with a physical or personality problem may face challenge to obtain partners easily. In some societies it is very difficult to arrange sex with non-prostitutes. Some males are very fond of special technique of sexual intercourse that their partner deprive them or do

not know. Some cannot stand investing their time and money for affection; rather they buy physical sex in the shortest way (Master et al, 1995).

According to the time and place they serve, female prostitutes can be classified in to different categories. For instance, there are house girls who work sex in brothel, street girls who solicit in public, bar ladies (B-girls) who meet their clients in bars, and call girls who will be appointed usually through telephone. Prostitutes can have "pimps" that provide affection, protection, arrange for bail, look for customers and available for an occasional loan. In return, pimps share the prostitutes' income. And also have free sex when customers are not available (Master et al, 1995).

2.3 Prostitution in Ethiopia

Ethiopia has been a religiously oriented country for many centuries. However, nothing hindered the emergence and existence of prostitution in the country. But the lack of documented facts about prostitution hinders to explain its history and nature in detail.

Andargachew (1988) attests that there are no data as to when and where commercial sex work first appeared in the country, although commercial sex workers have been known in Ethiopia since olden years. Pankhurst (1974) states that there were indications that institutions related to prostitutions existed at the royal campus of the middle age at the 17th century.

Various factors have contributed to the expansion of prostitution. The migration of people, particularly females from rural areas, has been the main factor. The migrant females employed in tella or araki houses were not only serving as waitress, but also entertaining the customers. In due course of time, many of them became commercial sex workers. The foundation and development of different cities with the opening of hotels, bars, restaurants,

and local beverage and food houses like tella, araki, tej and other eating and drinking houses increased markedly the number of commercial sex workers (FHI, 2002).

According to the census conducted by FHI (2002) in Addis Ababa, there were 3460 establishments with waitress. The number of commercial sex workers was 8134. If studies are conducted in other towns of the country, even higher number of prostitutes could be found. However, the lack of such systematically documented work blocked any intervention strategies for related social problems. Despite these constraints, the Sidama Zone Social and Labour Affair Department Administration (SZSLAD, 2006) estimated that there were 3,184 commercial sex workers in various establishments found in Awassa. This figure includes commercial sex workers, even found in local beverage houses.

HIV/AIDS and sex work are highly interrelated social phenomena. The epidemic is a new issue that has fuelled concern over sex work and how societies think about and deals with it. In many countries HIV was first identified in the sex worker population. As the virus expands, international agencies, governments, and NGOs recognized the need to create interventions for this highly vulnerable group who engage in risk sexual behavior and do not have the means or knowledge to reduce their risk of infection (UNAIDS, 2000; HAPCO and MOH, 2004).

The major issues that make sex workers much more vulnerable to HIV infection is their lack of control over their bodies and decisions. They should entertain their client in any way that maximizes the pleasure. The customer can use any part of the sex worker inappropriately for that he/she paid for it. This is based on the amount of payment and property agreed on between the two partners. However, most of the time, some men enforce sex workers to do

unsafe sex that exposes them to risk (UNAIDS, 2000). These factors make sex workers to be preserved as the main source of HIV infection. Due to this, health care professionals recommend HIV test for sex workers whenever they are presented with a recurrent fever, tuberculosis, diarrhea, or STD. These are indicators used for HIV testing in the general community. However, because of the risk situation in which sex workers live, any single episode of such an illness for them was taken as suggestive of HIV infection (UNADIS, 2001).

2.4. Sexual activities of college students

Adolescents explore and experiment with their newly developing sexuality during young adulthood. Many of them are not matured enough to have a sexual contact with another person that is marked by mutual care and concern because they are still too focused on their own developmental tasks and concerns. But early adulthood will be the time for most individuals to begin to feel secure in their own matured sexual and emotional linkage (Denney, 1992; Masters et al., 1995). This favorable development would result in being ready during the early adult years to commit oneself to build a life with another person and to have children. Therefore, the phase of early adulthood which ranges from approximately age 20 to 40 is the time in that people make important life choice such as marriage, occupation and lifestyle (Denney, 1992).

The frequency of sexual intercourse is at its highest level during early adulthood. Many factors like psychological, biological and cultural could contribute to this high rate of sexual relationship. This is due to that sex motivation is probably as high during the early adult years as it is at any other time in life cycle. Furthermore, the number of sexual partners is more during this period (King, 1995; Denney, 1992; Master et al., 1995).

Early adulthood is a time for many young adults to attend college where they live among other single men and women. The restrictions that limit sexual expression during the adolescence years decrease in early adulthood. So that young adults will not be under their parents control as they were in adolescence. This makes them have a high degree of sexual interaction. They have more opportunity for sexual exploration than they did during adolescence because of their increased freedom and independence, needs of peer and social approval and greater availability of partners (Denney, 1992; Wulfert, 1993).

Master et al. (1995) point out that a majority of college men and women in USA are sexually active. A survey done at a mid western university revealed that females had an average of 5-6 sexual partners, while the figure for males became 11.2. Factors contributing for this sexual experience in early adulthood are often warm, exciting, gratifying, and untroubled situation.

The major health risks to all sexually active young people are STD and HIV. In both developed and developing countries, rising trends in the incidence and prevalence of STD/HIV among the young present a serious challenge to their health and well-being. Age and sex-specific HIV prevalence data found from serosentiel surveillance and several community studies revealed that young people are at risk of HIV infection in Ethiopia. For instance, EPHA (1997) revealed that the prevalence of HIV among high school and college students attending clinics for STDs, in Addis Ababa had shown 19% sero-positivity. The report indicated that there should be a serious concern about protecting this sector of the population from AIDS. Furthermore, studies conducted among freshman students in Ethiopia at Gonder college of Medical Science indicated that the students' knowledge about HIV/AIDS was above average. Forty percent of students had sexual intercourse and half of that

sexual contact was with prostitutes or with causal individuals. Among these, most (75%) did not use condoms (EPHA, 1997).

Globally, the infection is not evenly distributed, and currently sub Saharan Africa is disproportionately affected. In some countries, the HIV pandemic seems to be leveling off, and as the disease becomes endemic, peak incidence shifts to younger age cohort (UNAIDS, 2000).

According to UNAIDS BEST PRACTICE COLLECTION (2000), generally in the world, the number of young people increased to one billion. The figure of young generation, 800 million, in developing countries will increase by 20 percent in the next 15 years. This group of people is society's future, and it is crucial protecting them from HIV/AIDS infection.

2.5 Attitude towards VCT

UNAIDS (2000) attests that VCT was primarily used for other purposes. Diagnoses of infection in symptomatic people were employed through VCT. At the time testing was often accompanied by minimal counseling. From time to time, it has become important as an entry point for prevention and core intervention for HIV.

Hankins (2004) (cited in UNAIDS, 2004) pointed out two approaches to HIV testing such as client initiated and provider initiated. Both of them have their own guidelines. The former involves expansion of entry for VCT in a range of community settings, simplification and standardization of Counseling and Testing (C&T), expanded use of rapid tests, training lay providers to play a more significant role in C&T, adoption of new models of VCT focusing on couples, parents, men; and assisting HIV positive with disclosure.

Whereas the latter includes integration of C&T in TB, STI and antenatal care settings, integration of C&T in all acute care settings, integration of C&T in all health care facilities of communities where HIV prevalence is high and ART available, pretest counseling, tailored to clinical situation, informed consent prerequisite for testing, post test counseling for everyone who takes the test and finally referral of HIV positive for medical and psychosocial supports.

VCT is considered as a key approach and an important component of prevention, treatment, and care and support intervention for HIV transmission. HIV Counseling and Testing (HCT) could provide opportunities to design and implement individualized intervention strategies. This helps to curb the spread of HIV and lessen risky behavior. Unless a person is tested for HIV and identified with the virus, it is difficult to provide him/her with any care and support. And also it is not easy to mitigate the transmission of the epidemic (UNAIDS, UNFPA, UNIFEM, 2004; MOH/DPACD, 2002).

VCT in terms of treatment is to ensure that those who test positive receive counseling about stigma and the impact of HIV as well as about ART. So as to meet this, the provision of ART must be insured and counseling service must also be improved and increased. Access to VCT service, however, remains limited and demand is often low. In many high prevalence countries VCT is not widely available and people are often afraid of knowing their sero-status due to little care and support given after testing. For instance in Africa it has been recognized that less than 10% of people have access for testing and counseling services, while twenty four countries in sub-Saharan Africa have been designated high burden countries with HIV prevalence rates of up to 38% (UNAIDS, 2000 ; 2004).

Furthermore, there are various factors that influence counseling and testing service. These are fear of receiving HIV positive result, believing that one can

be HIV negative, suspecting the confidentiality of the result, fear of the chance to be infected at the testing center, and perceiving societal stigma and discrimination if sero-positive. These factors contribute to the emergency of differences on attitude between people towards HCT (Asmemaw, 2004).

The stigma associated with HIV/AIDS not only adversely affects people's attitude toward VCT, but also influences access to medication. It prevents people from seeking treatment and care when they are in need of it.

UNAIDS (2005) discloses that everyday, 8000 people living with HIV die from AIDS, most of these people could be saved through access to care, in particular, antiretroviral treatment. However, the vast majority of people in need cannot obtain care and treatment on time to prolong their lives. Most of them do not want to expose themselves because of its consequence at societal level. Some others are identified with HIV positive after they fall in to AIDS. Thus, negative attitude towards VCT hinders care and support. Thus, one can understand that distorted attitude toward VCT, Hinders the overall strategies possibly exerted to mitigate the transmission of the virus and care and support.

2.6. KAPB Studies

Various studies were conducted on HIV/AIDS by different researchers in Addis Ababa University postgraduate's program. Among these, KAPB studies were the one by which knowledge, Attitude, behavior and practice of many individuals were investigated. The following individuals carried out KAPB studies on HIV/AIDS and sex related issues for the partial fulfillment of their master's degree Yoseph (2006), Feben (2005),Mulunesh (2004), Abera (2001), Alemayehu (2001), Asnake (2001), Dagne (1999) and Mesgana (1997).

Among these researches five of them including Yoseph (2006), Abera (2001), Alemayehu (2001), Asnake (2001) and Asheber (1995) are in line with this study in that they used KAPB in investigating HIV/AIDS cases. Their findings are as follows

Yoseph (2006) carried out his study on 298 trainee teachers in Debre Markos Teachers Education College. The result showed that 36.91% of trainee-teachers were sexually experienced. Out of these, 37.96% practice sex with multiple partners and 28.18% had causal sex experience. The study revealed that gender and sexual experience status brought knowledge difference about HIV/AIDS. Male sexually inexperienced trainee-teachers had more knowledge about HIV/AIDS than their counter parts. Further results indicated that gender, residence, knowledge and risk perception were significantly associated with risk sexual behavior. Male students, who came from urban areas, who have low knowledge and who perceive the risk of HIV infection were prone to risk sexual behavior as compared with their counter parts. Finally, he recommended that educational programs about HIV/AIDS targeting trainee-teachers should be prepared to impart recent information.

Ashebir (1995) attempted to indicate differences in awareness about AIDS and risk- reduction behavior among 477 students of Teachers Training Institutes (TTI). The trainees' awareness was found to be moderately high, although, some misconceptions regarding HIV transmission were prevalent. Self reported changes in the risk reduction practices had shown a statistically significant ($P<.05$) difference due to sex, region and sex by residence interaction.

Further more, the study revealed that changes in behavior and personal concern due to the appearance of AIDS were very small and also the message based AIDS education used so far, had been necessary but not sufficient to

stop sexually transmission of HIV. As the result indicated more than three further of the respondents had engaged in unprotected sexual inter course with in 12 months of their stay in their institution.

Finally, the researcher recommended increasing of students' awareness about HIV/AIDS, organizing educational message to the male students that may enable them to recognize the importance of female partners' right and dignity; and create supportive environment that may defend campus students whose rights are threatened or abused.

The purpose of Abera (2001) study was assessing the status of AIDS education in the second cycle primary school of the Oromia region. So as to meet his objective, he surveyed school teaching materials, examined school implementation practice of AIDS education, and tested 600 student's awareness level on HIV/AIDS.

The finding revealed that teachers and Anti-AIDS club coordinators were not given enough orientation to successfully implement the program. The involvement of the risk groups and different social agencies in the department and implementation of the program were unsatisfactory. Major problem noted in the study were lack of peer education, and lack of enough references for teaching students in the school. Despite this, students' demonstrated an appreciable knowledge. But failures were investigated on the importance of care and support for people living with HIV/AIDS in curricula and actually on the student's care. Statistically significant differences between male and female students were found on awareness. Males were more aware than females.

The other KAPB study was conducted on high school students, by Alemayehu (2001). The study investigated sexual knowledge, attitude and source of

sexual information of 346 high school students. In the study, sexual knowledge and attitude were taken as dependent variables, where as sex, grade level and religion as independent variables.

The result implied that from the main and interaction effects, only sex by gender levels had shown statistically significant differences. On the gender differences, male participants performed better on sexual knowledge inventory than females. The grade level of participants had direct effect on achievements of participants in following the higher grade than the lower. Regarding sexual attitude all main effects sex, grade level, religion and one two way interaction indicated statistically significant differences.

Asnake (2001) also carried out a KAPB study to examine the attitude of 450 Bahir Dar University students towards HIV/AIDS intervention strategies such as abstinence, condom use and faithfulness.

The study found out gender differences as significant in attitude towards abstinence (females scale higher than males). However, differences were not observed on age and educational level. Concerning condom use first, second, third and fourth year students exhibited differences regardless of their age and gender.

Regarding faithfulness as HIV/AIDS intervention strategy, it seemed to be a likely method for young adults and senior students. The study revealed that all possible first order interaction between age, gender and educational level were significant. To sum up, the researcher recommended abstinence as a realistic and feasible intervention strategy. In addition to this he emphasized social marketing agencies and concerned bodies to give the reality of condom use to suspicion individuals.

The above researches are similar to this study in that all of them were employed on KAPB study. However, most of them were conducted on primary and secondary school students, and others focus on TTI and TTC trainee-teachers. But this work attempted to carry out a comparative study on risk sexual behavior among college students and bar ladies. Such never raised issue among the two groups, area of the study and organization of the study make it different from the others.

CHAPTER THREE

RESEARCH METHOD

The main purpose of this study was to examine risk sexual behavior among college students and bar ladies in Awassa. This chapter describes the study area, sample and sampling techniques, instruments of data collection, procedures of data collection and the method used to analyze the collected data.

3.1 Study Area

The study area was Awassa. It is the center of SNNPR which is found 275 km south of Addis Ababa. The city covers 1,628.04 hectare and is located 47.5 km above sea level. The population is estimated to be 130,759. There are many establishments in the city including two technical and vocational institutes, two governmental and six private colleges, one university, 175 hotels and 264 bars. There are also a number of governmental and private organizations. The city is in its fastest rate of development. It has above 24 km asphalt road that connects its eight sub cities and various districts.

Awassa was selected purposefully for the study because HIV prevalence had increased by the year 2006 (MOH,2006). Since the researcher lived in the town more than 25 years, he has the experience and knowledge about college students' sexual behavior.

3.2 Sample and Sampling Techniques

The major sources of data of this study were 480 respondents who filled the questionnaire and 40 interviewees. One hundred eighty male and 150 female University students, and 150 bar ladies gave information through the questionnaire. In addition, ten male students, ten female students, ten bar

ladies and ten bar and hotel customers (totally 40 individuals) were interviewed. The students were selected from Hawassa University and bar ladies and customers were chosen from hotels and bars in Awassa. According to the report of Hawassa University registrar office, the total number of male and female students was 5176 and 2167 respectively.

The students were selected using proportional stratified random sampling technique. The strata were faculty, department, year level and sex. There were eight faculties: faculties of Technology, Veterinary, Health Science, Social Science, Natural Science, Law, Agriculture, and Business and Economics. Among these, four of them (Agriculture, Economics and Business Management, Health Science and Technology) were selected using lottery method. Again by employing lottery method, four departments (Horticulture, Economics, Environmental Science and Civil Engineering) were chosen from the four faculties selected, one from each. Year levels (2^{nd}, 3^{rd}, and 4^{th} year) and sex (male and female) were considered in implementing random sampling. The sample distribution was carried out based on the following strata:

- First, the percentage of the students in each department was calculated and 330 sample students, intended for the study, were allocated to the respective departments. The number of students in the selected four departments was 985 males and 767 females. Among this, totally 180 (37.5%) males and 150 (31.25) females were included in the study.
- Second, the percentage of the students in each year level was computed; and based on their percentage, the number of participants, allocated for each group, was distributed to the respective year levels. For instance, there were 350 second year, 289 third year, and 173 fourth year male students in the four

sample departments. Based on this distribution, 80 male students from second year, 60 from third year and 40 from fourth year were selected. Regarding female students, there were 237 second year, 174 third year, and 86 fourth year students. From these given numbers of female students, 75, 40, and 35 were selected from second, third, and fourth year respectively. The selection was made randomly from their list taken from the registrar office of Hawassa University.

However, the selection of bar ladies was accomplished using proportional random sampling. It was carried out as follows:

- First, the number of hotels, bars and commercial sex workers working in hotels and bars was obtained from Awassa City Administration Finance and Economic Development Office (ACAFEDO). According to the report of ACAFEDO (2005) there were 320 hotels, 185 bars, more than 400 local beverage selling houses The number of commercial sex workers in Awassa was 3,184(SZSLAD,2005). Four sub cities (Misrak, Menaheria, Bahil Adarash, and Tabour were selected purposively from eight sub cities: (Misrak, Menaheria, Bahil Adarash, Tabour, Addis Ketema, Haik Dar, Mehal Ketema, and Loke Sefer). The four selected sub cities were found in the center of the town and had modern hotels high number of bar ladies.

- Second, with the help of assistants, the researcher checked bar to bar whether the bar ladies, registered in ACAFEDO, were available in their respective bars. New registration was made instead of those who changed their place. The number of bar ladies found in the selected sub cities, during the registration, was 252 in Tabour, 247 in Menaheria, 241 in Bahil Adarash and 235 in Misrak.

- Finally, 150 bar ladies were chosen using random sampling technique from the above total number of bar ladies in the four sub cities.

To strengthen the issues raised in the questionnaire, interview was held. It focused on the general University Anti AIDS club experience, difficulties encountered, and the sexual behavior and experience of selected students. Generally, two anti-AIDS club coordinators, ten female students, ten male students, ten bar ladies and ten customers were interviewed to examine condom accessibility and usage, anti-AIDS club participation and personal experience on sex.

One representative interviewee from SNNPR HAPCO was also included in the study to examine the activity of the organization in anti-AIDS clubs campaigns especially in Universities, hotels and bars.

3.3. Instruments

According to Converse and Presser (cited in O'Brien, 1993), it is very important to acquaint oneself with new research areas prior to constructing instruments for data collection. In line with this notion the researcher held focus group discussion and interview with Hawassa University students, the University's Anti-AIDS club coordinators, the SNNPR HAPCO Officers. Based on the preliminary data found from the FGD and interview the instruments were adapted from various sources.

The instruments used in this study for data collection were questionnaire and interviews. The questionnaire consisted of close ended and open ended items.

The items were initially adapted from works of UNAIDS (2002, 2003, 2004); WHO/MHO (2003 and 2004); and HAPCO (2004); Then, the researcher translated the items from English to Amharic. Next, the Amharic version was again translated in to English by two Postgraduate students in the department of Foreign Language and Literature. After that the original copy and the second version were given to language instructors to judge their equivalence. The instructors compared both instruments and gave comments. These professionals were selected from the Institute of Language Studies, Addis Ababa University. They have been teaching English language and translation courses for many years in the University. Based on their comments and suggestions, the final version was prepared. Finally, it was judged by two physicians in Yekatit 12 Hospital for some ethical and medical terms and concepts. Two measurement and evaluation instructors from Addis Ababa University also evaluated the instrument.

The educators categorized the items in five major areas

- Knowledge of the nature, transmission and prevention strategies of HIV(20items),
- Attitude towards HIV prevention(20 items),
- Sexual Behavior (20 items),
- Attitude towards VCT(20 items), and
- Source of HIV/AIDS information (9 items).

Thus, the questionnaire examined knowledge about HIV/AIDS, attitude of students towards intervention strategies, sexual behavior, and attitude towards VCT and sources of information about HIV/AIDS.

The attitude items were presented in a five point-Likert scale format (ranging from strongly agree to strongly disagree). There were three subscales each composed of 20 items and one subscale with nine items. They were selected from several sources (UNAIDS, 2004, 2005; Adewale, 1997; WHO, 1994).

3.4 Procedure

A pilot study was conducted to test and improve the instruments. It was carried out on a sample of 40 students (20 female and 20 male students) of Addis Ababa University, and 20 bar ladies from four sub cities of Addis Ababa. The students were selected randomly from four departments (History, Business Education, Political Science and Theatrical Art). Bar ladies were selected from Lideta, Arada, Bole and Gulele sub cities. Five bar ladies were selected from each sub city.

After the questionnaire was administered, the data were analyzed. Accordingly, based on the information found from the respondents, five items that were not clear were refined. The improvements of the items include grammatical correction, conceptual definition, simplifying technical terms and correcting instructional inconsistency.

i) Reliability

The reliability of each of the four subscales and the overall scale was examined using cronbach alpha. The results indicated that the reliability of each sub scale was between 0.76 and 0.81 (HIV/AIDS knowledge =0.80, sexual behavior = 0.76, HV prevention =0.77 attitude towards VCT, 0.81, and HIV/AIDS information = 0.77).

ii) Validity

The researcher employed the following procedures to examine the validity of the instruments.

- Based on the preliminary information found from FGD and interview, the instruments were adapted from various sources mentioned earlier.
- Professional advice and feedback were secured from language professionals, measurement and evaluation instructors, and physicians.
- The instruments were also tested in a pilot study.

The researcher went through the following procedures by considering ethical issues;

- Received letter of cooperation from the Department of Psychology. The letter helped the researcher to secure cooperation from concerned bodies.
- Secured permission from Hawassa University authorities to conduct the study and showed them the copy of the instruments. This is due to that the authorities have the right to know what the researcher does in their institution so as to avoid any risk occurred.
- Research participants were informed about the objective of the study and promised to reveal the study report by sending a copy of the final draft when it is accepted and approved by the department.

3.5 Method of Data Analysis

The SPSS version-10 software was used to enter, clean, and analyze the data collected through the questionnaire. The interpretation was employed by the help of preliminary statistics (Mean, Standard Deviations and Percentage). In addition to this, Analyses Of Variance

(ANOVA) and Tukey multiple comparison tests were used to examine group differences. Usually a 5% alpha level of significance is employed as a standard for rejection . Thus, for almost all tests of significant α=0.05 was used.

The qualitative data gathered through interview were analyzed thematically. In other words, the theme found in the collected information (the sexual experiences of college students and bar ladies, factors influence sexual behavior of college students and the experience of the Hawassa University anti-AIDS club and SNNPR HAPCO in mitigating the transmission of HIV) was interpreted by relating with the information found via the questionnaire, the existing reality and other findings.

CHAPTER FOUR

RESULT

4.1. Demographic Background of Respondents

Table-1 indicates that the study included 50 (10.4) male adolescents and 35 (7.3) female adolescents whose age was grouped under adolescents (12-19). And also it involved 130 (27.1) male young adults (20-40) and 115 (23.9) female young adults. The table shows the selection of students from each year in accordance with their proportion.

Table-1 Number of Male and Female Students based on Age and level of Education.

Age Group	Sex	2nd Year		3rd year		4th year		Total	
		N	%	N	%	N	%	N	%
Adolescent	M	47	9.8	3	0.6	-	-	50	10.4
	F	30	6.3	5	1	-	-	35	7.3
Young Adult	M	33	6.9	57	11.9	40	8.3	130	27.1
	F	45	9.4	35	7.3	35	7.3	115	23.9
Sub Total	M	80	16.7	60	12.5	40	8.3	180	37.5
	F	75	15.6	40	8.3	35	7.3	150	31.3
Grand Total		155	32.3	100	20.8	75	15.6	330	68.8

As indicated in **table-2,** 90 (18.8) adolescent bar ladies and 60(12.5) young adult bar ladies participated in the study. The bar ladies who had no education (N=40), elementary education (N=50) and secondary education (N=60).

Table 2 Number of Bar ladies based on Age and level of Education.

Age Group	Illiterate		Elementary		Secondary		Total	
	N	%	N	%	N	%	N	%
Adolescent	20	4.166	30	6.25	40	8.33	90	18.75
Young Adults	20	4.166	20	4.17	20	4.166	60	12.5
Total	40	8.33	50	10.42	60	12.5	150	31.3

4.2. HIV/AIDS Knowledge

Table-3 shows the means and standard deviations of knowledge scores for male students, female students and bar ladies. The one way ANOVA results indicated significant group differences ($F=25$, $df=2$, $p<.05$) in HIV/AIDS knowledge. Tukey multiple comparison tests also showed statistically significant differences between bar ladies and female students ($p<.05$), and bar ladies and male students ($p<.05$). However, there was no statistically significant difference in HIV/AIDS knowledge between male students and female students. Overall college students were more knowledgeable than bar ladies about HIV/AIDS.

Table-3 Number of Respondents, Mean and Standard Deviation of HIV/AIDS Knowledge of Students and Bar ladies.

Group	Sex	N	Mean	SD
Students	M	180	15.88	3.36
	F	150	16.00	3.72
Bar ladies	F	150	14.60	5.06
Total		480	15.52	4.11

Table-4 presents that male and female students have no difference on mean of HIV/AIDS knowledge score. But statistically significant differences ($p<.05$) were found due to level of education. For instance, fourth year students had

higher mean score than third year and second year students. Thus, fourth year students were more knowledgeable than the rest.

Table-4 Number of Respondents, Mean and Standard Deviation of HIV/AIDS Knowledge for Students by Gender and level of Education

Sex	2nd Year			3rd year			4th year		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
M	80	14.85	3.76	60	15.78	2.11	40	17.01	3.54
F	75	14.46	4.30	40	15.52	2.01	35	18.08	3.42
Total	155	14.67	4.03	100	15.65	2.06	75	17.55	3.48

Similarly, the main effect of education was observed in bar ladies. Bar ladies who had secondary education scored significantly higher than the others ($p<.05$). Table-5 also illustrates that bar ladies with elementary grade education level and those who did not learn showed lower mean score. The finding indicated that bar ladies with high education level were better than those with lower education level.

Table 5 Number of Respondents, Means and Standard Deviation of HIV/AIDS Knowledge for Bar ladies.

Education Level	N	Mean	SD
No Education	40	12.3	6.23
Elementary	50	14.72	2.16
Secondary	60	16.8	4.05

The main effect of age on HIV/AIDS knowledge was found. The one way ANOVA results indicated statistically significant differences (p. <05) in

adolescents and young adults of college students and bar ladies. Table-6 shows differences of means on HIV/AIDS knowledge between adolescents and young adults. Young adults scored higher mean than adolescents did. In each age group, adolescents scored lower mean than young adults. This indicates that knowledge increases following age increment. In general, young adults of college students and bar ladies were more knowledgeable than adolescents

Table-6. Number of Respondent, Mean and Standard Deviation of HIV/AIDS Knowledge of College students and Bar ladies based on Age.

Group	Sex	N	Mean	SD
Adolescent student	M	50	14.31	4.43
	F	35	13.54	4.39
Young Adult	M	130	17.45	2.38
	F	115	18.46	3.14
Adolescent bar ladies	F	90	13.44	4.19
Young Adult bar ladies	F	60	15.80	4.05

4.3. HIV/AIDS Prevention Strategies

The one way ANOVA result also showed that there were statistically significant differences ($F=54.342$, $df=2$, $p<.05$) between bar ladies and college students. Tukey multiple comparison test showed statistically significant group differences ($p<.05$) on HIV/AIDS prevention strategies. As the finding indicated bar ladies were more careful than college students in protecting themselves from HIV/AIDS. **Table-7** also presents the difference on HIV/AIDS intervention strategies between college students and bar ladies. The result

indicates that bar ladies scored higher than both male and female students. In the case of students, males scored higher than females did.

Table-7. Number of Respondents, Mean and Standard Deviation of HIV/AIDS Intervention Strategies, for College Students and Bar ladies .

Group	sex	N	Mean	SD
Students	M	180	50.24	8.55
	F	150	48.03	11.06
Bar ladies	F	150	60.09	12.61
Total		480	52.63	11.82

Statistically significant difference was not observed on HIV/AIDS prevention strategies due to level of education in male college students. As noted in **table-8,** second year male students got higher score on HIV/AIDS prevention than the rest of the group. However, fourth year female students showed statistically significant differences ($p<.05$). All in all, second year male students and fourth year female students were found with better attitude towards HIV/AIDS prevention strategies than third year students.

Table-8. Number of Respondents, Mean and Standard Deviation of HIV/AIDS Intervention Strategies for College Students based on Gender and level of Education.

	2nd Year			3rd year			4th year		
Sex	N	Mean	SD	N	Mean	SD	N	mean	SD
M	80	51.35	8.97	60	50.02	8.01	40	48.35	8.31
F	75	47.73	12.7	40	47.67	7.61	35	50.2	13.59
Total	155	49.54	10.84	100	48.85	7.81	75	49.28	10.95

The main effect of education was found on bar ladies. A multiple comparison test indicated statistically significant differences ($p<.05$) on HIV/AIDS prevention strategies. As the result indicated bar ladies who had education were found more careful on HIV/AIDS prevention. The mean scores presented in **table-9**, indicates that bar ladies who had secondary education scored 61.75 than others.

Table-9. Number of Respondents, Mean and Standard Deviation of HIV/AIDS Intervention Strategies for Bar ladies based on level of Education.

Education Level	NO	Mean	SD
No education	40	58.35	13.78
Elementary	50	59.48	11.64
Secondary	60	61.75	12.59

The main effect of age also observed on HIV/AIDS prevention strategies on both college students and bar ladies. A multiple comparison test indicated statistically significant differences ($p<.05$) among adolescents and young adults of college students and bar ladies. Thus, it is sound to say that HIV/AIDS prevention strategies increase with age. Young adults, in each sub group, scored higher mean than adolescents. Table-10 presents mean score differences.

Table-10. Number of Respondents, Mean and Standard Deviation of HIV/AIDS Prevention Strategies for College Students and Bar ladies by Age.

Group	Sex	N	Mean	SD
Adolescent Student	M	50	49.3	7.91
	F	35	47.57	11.72
Young Adult Students	M	130	52.83	9.87
	F	115	48.17	10.91
Adolescent Bar ladies	F	90	58.91	11.45
Young Adult Bar ladies	F	60	61.75	12.59

4.4. Sexual Behavior

The one way ANOVA results, Tukey multiple comparison tests and preliminary statistics (Mean and Standard Deviations) did not indicate significant differences on Sexual behavior between college students and bar ladies. As indicated in **table-11** the mean scores of male students, female students and bar ladies were equal (28.17, 28.47 and 28.06). Generally, college students and bar ladies had no significant differences on sexual behavior

Table-11. Number of Respondents, Mean and Standard Deviation of Sexual Behavior for College Students.

Group	Sex	N	Mean	SD
Students	M	180	28.17	2.45
	F	150	28.47	2.08
Bar ladies	F	150	28.06	2.31
Total		480	28.23	2.29

Furthermore, the result of the study did not show the effects of age and level of education on sexual behavior. Adolescents and young adults of each group (college students and bar ladies) did not exhibit statistically significant differences. Regarding level of education, second year, third year and fourth year students had no significant differences. Similarly, illiterate, elementary and secondary grade level bar ladies also had no significant differences. Table-12, 13 and14 present similar mean score of college students and bar ladies based on age and level of education.

Table-12. Number of Respondents, Mean and Standard Deviation of Sexual Behavior for College students by Gender and level of Education.

	2nd Year			3rd year			4th year		
Sex	N	Mean	SD	N	Mean	SD	N	Mean	SD
M	80	28.28	2.39	60	27.67	2.43	40	28.72	2.53
F	75	28.53	2.10	40	28.40	2.26	35	28.45	1.91

Table-13. Number of Respondents, Mean and Standard Deviation of Sexual Behavior for Bar ladies level of Education.

Education Level	No	Mean	SD
No Education	40	27.25	2.25
Elementary	50	28.64	2.2
Secondary	60	27.88	2.37

Table-14. Number of Respondents, Mean and Standard Deviation of Sexual Behavior for College students and Bar ladies by Age.

	Sex	N	Mean	SD
Adolescent students	M	50	27.63	2.41
	F	35	28.31	1.795
Young Adult student	M	130	29.67	2.54
	F	115	28.51	2.174
Adolescent bar ladies	F	90	28.44	2.63
Young Adult bar ladies	F	60	27.58	2.o4

4.5. Attitude towards VCT

Attitude towards VCT had statistically significant differences (F=9.889, df=2, p<.05). College students were significantly higher in favor of bar ladies. Their mean and standard deviation also showed statistically significant differences (male students' mean=67.36, female students' mean=67.51 and bar ladies' mean=61.81). Therefore, it is reasonable to infer that college students had good attitude towards VCT than bar ladies. This is illustrated in table-15.

Table-15. Number of Respondents, Mean and Standard Deviation of Attitude toward VCT for Students and Bar ladies.

Group	Sex	N	Mean	SD
Student	M	180	67.36	13.62
	F	150	67.51	11.89
Bar ladies	F	150	61.81	12.80
Total	F	480	65.67	13.08

The main effect of age and level of education on VCT's attitude were statistically significant ($p<.05$). Young adults of college students showed statistically significant differences than adolescent. Table 16 and 17 also indicates mean and standard deviations of young adult college students and adolescent college students due to level of education and age difference

Table-16. Number of Respondents, Mean and Standard Deviation of Attitude towards VCT for students by Gender and level of Education.

	2nd Year			3rd year			4th year		
Sex	N	Mean	SD	N	Mean	SD	N	Mean	SD
M	80	64.74	16.98	60	70.67	8.41	40	67.65	11.36
F	75	66.30	15.21	40	68.35	8.24	35	69.25	6.86

Table-17. Number of Respondents, Mean and Standard Deviation of Attitude towards VCT for Bar ladies by level of Education.

Education Level	No	Mean	SD
No Education	40	60.83	13.79
Elementary	50	63.46	13.13
Secondary	60	61.08	11.89

Young adult female students scored higher mean than male students and bar ladies. There is statistical significant difference ($p<.05$) between them. Table-18 labeled below, clearly implies the significant differences among this groups.

Table-18. Number of Respondents, Mean and Standard Deviation of Attitude towards VCT for Students and bar ladies by Age.

	Sex	N	Mean	SD
Adolescent students	M	50	66.48	11.85
	F	35	67.74	15.61
Young Adult student	M	130	69.69	18.29
	F	115	67.44	10.59
Adolescent bar ladies	F	90	65.34	13.35
Young Adult bar ladies	F	60	61.01	12.45

4.6 Sources of HIV/AIDS Information

Table-19. Students' and Bar ladies' Rating of Sources of Information about HIV/AIDS.

Sources	Male Students	Female Students	Grand Mean	Rank	Bar ladies	Rank
Friends	2.03	2.00	2.02	8	2.33	6
Family	2.89	2.43	2.66	5	2.64	5
TV/Radio	4.52	4.35	4.44	1	4.82	1
School	3.62	3.93	3.78	2	1.83	7
Anti-AIDS club	3.07	3.15	3.11	3	3.25	3
News Letters &Magazines	2.72	2.31	2.52	6	1.60	8
Health centers	2.83	2.52	2.68	4	3.4	2
Religious institutions	2.04	2.76	2.4	7	2.73	4
Film/Video	1.63	1.02	1.33	9	1.34	9

Table-19 clearly presents that mass media (TV and Radio) were the primary source of information for college students and bar ladies. Next to the media, for college students, sources of information schools, anti-AIDS club, Health Institutions, Family, News letters and magazines, Religious Institutions, Friend, and lastly film and video.

The degree of agreement between male students and female students on HIV/AIDS information sources was almost perfect with correlation coefficient

of 0.99. Similarly, the primary sources of information about HIV/AIDS for bar ladies were mass media (TV and Radio). Next to mass media anti-AIDS club and health institution were the second and third source of information for bar ladies. The correlation between bar ladies and male students and bar ladies and female students were o.95 and 0.94, respectively. The difference occurred because the information sources ranked with highest score by the students were given less value by bar ladies.

CHAPTER FIVE

DISCUSSION

5.1 HIV/AIDS Knowledge

According to the finding of this research, male and female students were found to have good knowledge of HIV/AIDS. The mean scores for male students, female students and bar ladies were respectively 15.88, 16.00 and 14.60. The average mean of the whole respondents was 15.52. Therefore, college students were more knowledgeable about HIV/AIDS than bar ladies. They clearly indicated the nature of HIV/AIDS, its mode of transmission and prevention better than bar ladies.

The result also revealed a significant relationship between HIV/AIDS knowledge and age. Using Pearson correlation, it was found that as age increases, knowledge also increases. This is in agreement with results of past researches conducted in other countries such as United States (1988), Greece (1993) and Ivory Coast (1993) (cited in EPHA, 1997). They revealed that knowledge about AIDS increases with increasing age that is related to increasing sexual activity. Sexual activity in turn was closely associated to multiple partner sexual contacts. Young adults were more knowledgeable than adolescents. Level of education was also positively correlated with knowledge about HIV/ AIDS.

The result of the study was inconsistent with some research findings. Several studies such as Broadribb (1983), Eyob (1996), FGAE (1998), FHI (2000) and UNFPA (1997) (cited in Alemayehu, 2001) revealed that adolescents are lacking adequate knowledge of sexuality. Sexuality refers to knowledge about human reproduction, changes of puberty,

birth control, sexually transmitted infections such as gonorrhea, syphilis, HIV/AIDS and the like (Tuttu, 1998; Broadribb, 1983) (cited in Alamayehu, 2001). Therefore, implementing these sexual issues in day to day life may save adolescents and young adults from sexually transmitted infections.

The presence of HIV/AIDS knowledge with college students may be the result of the provision of information, anti AIDS campaigns and the expansion of discussions and community dialogue, particularly in schools, colleges and in the society at large.

Other findings support the results of this study. Innocent et al., (2003), Mitchelln and Kaufman (2002), Abraham (2005), Prohaska et al., (1990) (cited in Yoseph (2006) indicated that knowledge about the transmission and prevention of HIV/AIDS of adolescents and adults were very high in their study. Wossen (2005), Mitchall and Kaufma (2002) and Gegu(2002) (cited in Yosseph, 2006) also point out that young adults are relatively knowledgeable about HIV/AIDS. EPHA (1997) also pointed out that the level of general knowledge about HIV/AIDS among college students is relatively high.

The result of the study is also consistent with general expectation that college students are knowledgeable about HIV/AIDS due to level of education. However, due to the pregnancy case the investigator observed on his relative and other college students, and the facts found from some preliminary data at the beginning of the study, it was expected that college students might not have adequate knowledge about sexuality. But the result indicated the opposite; college students

seems to be the ability to transfer their knowledge in to practice.

5.2 HIV/AIDS Prevention Strategies

The results of the present study showed that HIV/AIDS prevention strategies of college students and their knowledge about HIV/AIDS were unrelated. For instance, male and female students who had good knowledge of HIV/AIDS were found to have less favorable attitude towards HIV/AIDS prevention strategies. This is consistent with other findings. EPHA (1997) indicated that the attitude of college students towards the disease and their protective behavior did not match to the relatively high level of knowledge they have about the disease.

However, bar ladies who had lower mean knowledge score were found to have higher mean attitude score (60.09) on HIV/AIDS prevention than male (50.24) and female students (48.03).Therefore, bar ladies were more protected than college students.

Acquaintance with the transmission modes of HIV/AIDS would make students recognize the prevention strategies they use in risk situations. Kaufman (2002) pointed out that an increased awareness about HIV/AIDS mode of transmission and prevention helps to bring about pleasant behavior that in turn avoids risk factors. However, according to this study, the knowledge of college students about HIV/AIDS did not help them to bring about behavioral change. Rather they exposed themselves knowingly to risk. This is due to peer pressure, sense of

non vulnerability, sense of high freedom and availability of many partners, as the students reported through the interview.

Surprisingly 83 (46%) of male and 65 (43.3) of female students reported that they use faithfulness as a best preventive measure against HIV/AIDS. Similarly, 25 (13.9%) of male and 19 (12.7) of male students use condom as preventive strategy, and 9 (5%) of male and 13 (8.7) of female students indicated that they implement abstinence until marriage. However, in the case of faithfulness, it has been revealed by several studies (Hernandez, 1990; Wulfert.E, 1993) it is in accurate self perception of monogamy and may lead the students to consider incorrectly that they are protected from the epidemic, since they could not be absolutely sure about the compliance of their sexual partner.

As opposed to the students, above 85% of bar ladies reported that they never want to do sex without condom with their clients. But some times they could be forced to be engaged in unprotected sex. Their clients usually influence them not to use condom. This is done by increasing the payment for sex, by applying force or by inviting them too much alcohol. Despite these, bar ladies attempt to save themselves as much as possible, as they reported in the interview.

The finding of the study is consistent with the expectation of the investigator that college students may not protect themselves from HIV/AIDS as that of bar ladies. Thus, bar ladies had more favorable attitude towards HIV/AIDS prevention than college students.

5.3 Sexual Behavior

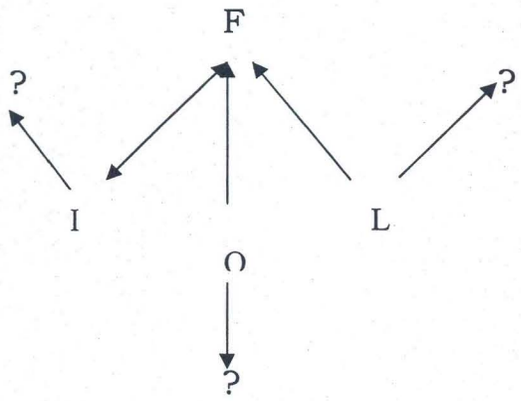
Sexual behavior` refers to feelings or responses that could be pleasant or unpleasant towards sexual issues or events (Wortman, 1992). The attitude of an individual towards sex gets its base in his early life. There are forces exerted on the individual to behave and demonstrate socially acceptable sexual behaviors. These forces could come from family, society, peers, schools, religious and other institutions (Alemayehu, 2001).

According to the results of this study, there is no statistically significant difference between students and bar ladies on sexual behavor.

According to the finding, 45(25%) male students and 33 (22%) female student had sexual intercourse with and without condom before they joined the University. These figures include those who are married, widows, unmarried and those who are fiancées. The sexual intercourse involves both causal and steady relationships. And also 43 (23.9%) male and 39(26%) female students had sex with and without condom after they joined the University.

The information found through the interview from the students and the anti-AIDS club coordinator supports the result found through the questionnaire. The information given by the whole informants in general were similar and repetition. However, it has an indication in that the problem is relay existed. Therefore, it is not wise to present the ideas of the whole informants here, rather it will be attempted to summarize.

According to these informants, there were some students actively engaged in risk sexual behavior, taking alcohol, smoking, and chewing chat. The same information was found from the ten female students interviewed in "chat bet" that they were extremely free in discussing their sexual experience and daily life activities. The information found from them indicated that they had many sexual partners. They did sex with their lover without condom and with others with and without condom. The following figure may show this sexual engagement.



F. Female students

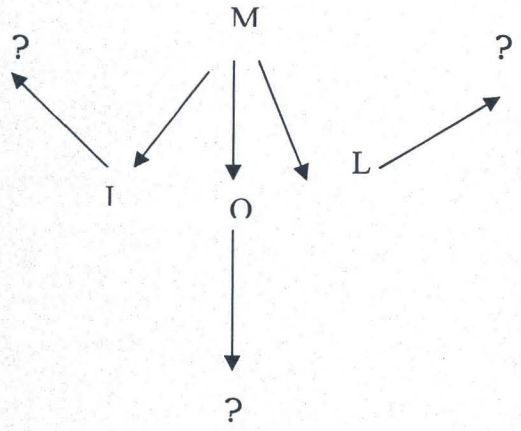
L. Lover in the University

O. Other students in the University

I. Individuals out of the University

?.Unknown sexual Partners

Information from male students also indicated that they had girls in the University and at the same time they occasionally visited bar ladies and other students in the University and nearby high schools, especially Adventist high school and Tabour high school.



M. Male students

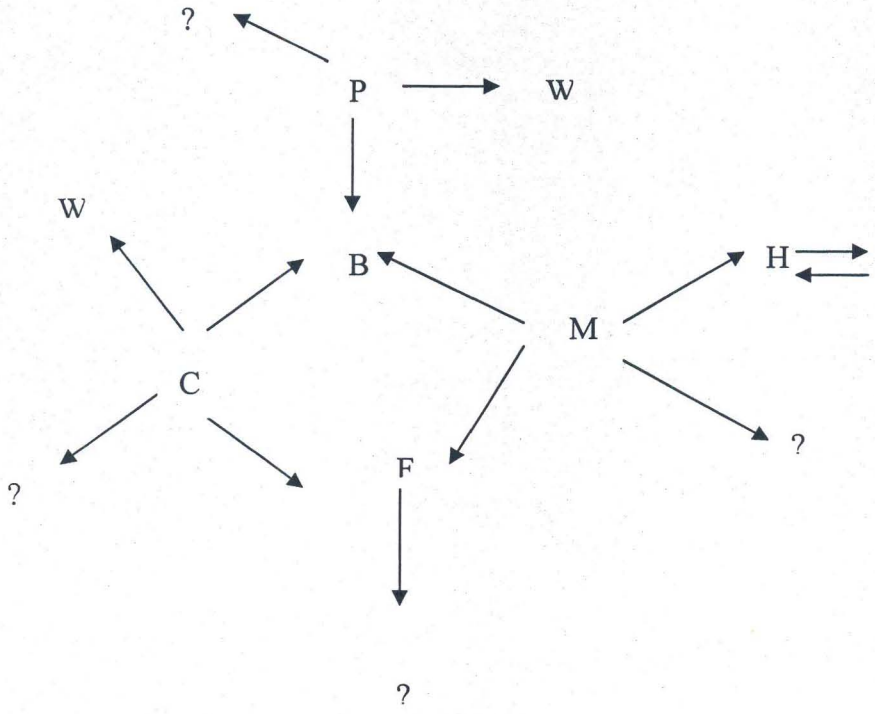
L. Lover in the University

O. Other female students

I. Individuals out of the University

?. Unknown sexual partners

The above Path of sexual relationships could be explained as follows.



P=pimps

B=bar ladies

C=clients /customers

F=female students

H=high school girls

M=male students

W=wife

?= unknown sexual partners

The sexual path illustrates the sexual inter-relationship between college male students, female students, bar ladies, customers, pimps and other unknown partners. As the path shows bar ladies have many contacts with different clients. This was also true for female students. They had sexual engagement with different partners.

Male students and other clients of bar ladies also had the same line of sexual path as that of bar ladies and female students. College male students revealed in the interview that they frequently visited girls from high schools. They also visited bar ladies assuming that the latter could provide them with special techniques of sexual intercourse.

The interview held with ten bar ladies revealed their sexual experience. They indicated that even if they drank a lot they could keep their conscious and can control themselves on sex. They emphasized that they never want to have sex without condom. However, some times their pimps and some clients enforce them to practice unprotected sex. They strongly believed that this type of sexual engagement put their life

at risk. The bar ladies also stated that college students were among their clients.

Customers who frequently visit bar ladies and pick college girls were systematically approached and interviewed. Most of these individuals had the capacity to invest their money to fulfill the desire of girls and to meet any requirement forwarded by the girls. According to the information gathered from ten customers, they had sex with some college students with condom and without condom. They had also engaged in unsafe sexual intercourse with many bar ladies. They disclosed that they could easily pick girls from any college available in Awassa. Seven customers, out of the ten, commented on the sexual behavior of college girls. The reason, they stated, why girls could be easily picked from colleges was their economical problem. Some girls, picked by them, were frequently asking money to fulfill educational materials.

The question marks put at the end of unspecified arrows indicate that there could be some other sexual contacts with some infrequently visited partners. For instance, pimps said that some times they visit house servants, elementary school girls, high school girls, college girls, governmental and non-governmental female workers. Moreover, male college students specified that they rarely had sexual contact with house servants and workers. The information given by the customers also indicated that they rarely had sexual intercourse with house servants, housewives, high school girls, governmental and non governmental female workers.

5.4 Attitude towards VCT

Voluntary counseling and testing is a process which takes place between a professional counselor and client. The process involves the individual's own initiation and voluntarism to undergo HIV/AIDS counseling and HIV testing (UNAIDS, 2004). It is a remarkable approach and an essential part of HIV intervention strategies (MOH/DPACD, 2002).

Based on this justification, the attitude of the Hawassa University students and the Awassa bar ladies' attitude towards VCT was examined. Thus, according to the finding, there was statistically significant group difference ($P<0.05$), in favor of college students. Therefore, based on the information found, it is sound to infer that male and female students had better attitude towards VCT than bar ladies.

The information found from the University anti-AIDS club coordinators and John Hopkins University representative indicated that college students had good attitude towards VCT. Many students took HIV test that was provided by "John Hopkins University" found in Hawassa University. The investigator attempted to contact the representative of "Jhon Hopkins University". He revealed that significant number of students took HIV test. However, the representative was not willing to report the exact number of students with HIV- positive status.

As opposed to students bar ladies had no favorable attitude towards VCT. The reason why bar ladies had less attitude towards VCT may be their unwillingness to know their HIV sero-positive status. The

information found from the bar ladies through the interview supports this fact. The interviewees revealed that they want to remain on their commercial sex work since it is their "only source" of income. HIV/AIDS and other sexually transmitted infectious diseases usually hinder their business. If they take HIV test, they may be identified with HIV positive or HIV negative. Then the problem is being HIV positive. In the interview, they disclosed their fear that if HIV is detected in their blood, clients may know and withdraw them from their only and daily income generating activity. This would result in facing hardship of life without any income.

To the contrary, according to the information found from the interview conducted with 10 female students at "chat bet", they were very suspicious about their HIV sero-positive status. As they noted they might be infected with HIV due to sharing of sharp materials in their group life in the same dormitory and risky sexual practice that they were engaged in with different partners.

5.5 Source of HIV/AIDS Information

Knowledge of HIV/AIDS is a vital means for adult to care themselves from risk sexual contact. It enables them to make sound decision about their sexual relationship with their partners. To make adolescents and young adults knowledgeable about HIV/AIDS information, there should be adequate sources of information. If sources of HIV/AIDS information are up to date, scientific, entertaining and attractive, they can easily capture the attention of adolescents and young adults (UNAIDS, 2004; 2005).

Based on this fact a research question, "what are the sources of information on HIV/AIDS for college students and bar ladies?" Was forwarded in this study. Based on the service they rendered with in the society, sources were selected from various published materials. Then respondents were asked to identify sources according to their importance in providing HIV/AIDS information.

As the finding revealed, mass media (TV and radio) were found as a primary source of information for college students and bar ladies. Examining each source specifically, schools and anti-AIDS club hold the second and third rank in giving HIV/AIDS information for students. However, since some respondents in the case of bar ladies had no education, schools had less importance (7th rank). But mass media (TV and Radio) were found to be their main sources of information.

The interview held with the University anti-AIDS club coordinator revealed that the participation of the students in the club was remarkable. According to the coordinator, the club occasionally prepared different programs (Drama, Music, Coffee ceremonies and Guest speakers) to draw the attention of the students that helped to impart information about HIV/AIDS. The coordinators reported that many students attended the programs and got information about HIV/AIDS. However, they did not bring about behavioral changes.

The SNNPR HAPCO representative also interviewed so as to get information about their activity in mitigating the transmission of HIV/AIDS especially in Universities and colleges. The respondent revealed that the Office is working with several educational institutions at the regional and woreda level. They are supporting anti-AIDS clubs found in schools, colleges and kebeles with

finance, training and materials (condom, magazines, booklets, brochures, posters and musical instruments).

It was disclosed that the provision of sex education is very important for college students. However, HAPCO did not attempt to include sex education in college curriculum due to the nature and structure of college courses. It also revealed that there was no study conducted to investigate risk sexual behavior of college students, but some researches on the area of HIV/AIDS, conducted in schools, were sponsored by the office. Generally, the office is attempting to reach college students through anti-AIDS clubs by providing sources of information about HIV/AIDS (printed materials).

This result coincides with other findings carried out by Solomon (1990), EPHA (1997) and Alemayehu (2001). Solomon (1990) reported that mass media, family and religious institutions played a great role, while educational institutions had a marginal role in the provision of STDS information. Where as, Alemayehu (2001) revealed that schools, health institutions and mass media were the three important sources. EPHA (1997) indicated that Television and Radio were the students' best sources of information about AIDS.

Generally, this study also found out that mass media schools, anti-AIDS clubs and health institutions as major sources of HIV information for students and bar ladies. As Alemayelu (2001) noted, the present campaign against AIDS and related STDS facilitated in the society and educational institutions via mass media, became in line with what this study reflects.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary

This chapter presents the summary of the study, conclusion drawn on the basis of the findings and recommendations that are assumed to be useful to intervene in the problems discussed.

The main purpose of this study was to investigate the risk sexual behavior among college students and bar ladies in Awassa. To this effect, the following research questions were formulated for study:

1. To what extent do college students differ in knowledge of HIV/AIDS and high risk reduction behavior from bar ladies as a function of age and level of Education?
2. Are there differences between college students and bar ladies in their attitudes toward HIV/AIDS intervention strategy (use of condom) due to age and level of education?
3. To what extent do college students differ in sexual experience from bar ladies due to age and level of education?
4. Is there significant difference in attitude toward VCT between bar ladies and college students due to age and level of education?
5. What are the sources of information on HIV/ADIS for college students and bar ladies?

To answer the above basic questions, the following procedures were carried out.

The study included 480 respondents (180 male college students, 150 female college students and 150 bar ladies). These respondents gave information through questionnaire. Additionally 40 respondents (ten male students, ten female students, ten bar ladies and ten customers) also participated in the study by giving information through interviews. Students were selected from Hawassa University using stratified random sampling technique. Bar ladies and customers were randomly selected from bars and hotels found in Awassa.

The selection of the students considered four departments (Horticulture, Economics, Environmental Science and Civiol Enginering departments). The selection of bar ladies was carried out by employing simple random sampling in four sub cities (Misrak, Menaheria, Bahil Adarsh and Tobour).

In seeking answer for the research questions raised, the researcher administered questionnaire and interview. The questionnaire was composed of open ended and close ended items. Generally four sub scales were included in the instrument with reliability coefficient knowledge =0.80, HIV prevention =0.76, Sexual behavior =0.77, attitude towards VCT =0.81 and source of HIV/AIDS information= 0.77. Most of the sub scales were relatively reliable.

The instruments were examined and judged by two physicians from Yekatit 12 hospital; two measurement and evaluation instructors form

the Department of Psychology, Addis Ababa University and two translation course instructors from the Department of Foreign Language and Literature. Based on the comment and suggestion of the educators the instruments were refined and administered for data gathering.

The data gathered were analyzed using SPSS version 10. Mean, standard deviation, one way ANOVA and Tucky multiple comparison tests were employed in the analysis. Accordingly the following results were found.

1. There were statistically significant differences in HIV/AIDS knowledge between college students and bar ladies. Therefore, college students were more knowledgeable about HIV/AIDS than bar ladies. But there was no statistically significant difference observed in HIV/AIDS knowledge between male students and female students.
2. There was no statistically significant difference observed in sexual attitude between college students and bar ladies. Therefore, college students and bar ladies had more or less similar sexual behavior.
3. There was statistically significant difference observed in HIV/AIDS prevention strategies between college students and bar ladies. Bar ladies were significantly higher than college students in preventing them selves from HIV/AIDS.
4. There was statistically significant difference in attitude towards VCT between college students and bar ladies. College students had significantly more favorable attitude than bar ladies.

5. Mass media (TV and Radio) were the primary sources of HIV/AIDS information for college students and bar ladies. School, anti-AIDS club and health institutions were also found to be the major sources of HIV/AIDS information next to mass media.

6.2 Conclusion

From the preceding findings, therefore, it may be possible to arrive at the following conclusions.

1. The level of general knowledge about HIV/AIDS of college students is significantly higher than that of bar ladies.

2. College students had good knowledge about HIV/AIDS but their sexual behavior indicated that they were in risk sexual activities.

3. Bar ladies were protected than college students from HIV/AIDS. They had good prevention strategies on HIV/AIDS. However college students were found in risk sexual engagement.

4. College students had good attitude towards VCT than bar ladies.

5. Mass media (TV and Radio), Schools, and anti-AIDS clubs were the primary sources of HIV/AIDS information for college students and bar ladies.

Generally, Hawassa University students have relatively high knowledge of HIV/AIDS. Their sources of information about HIV/AIDS were mass media, schools and anti-AIDS club. Their sources contribute greatly to the increasing knowledge of the students about the pandemic. However, HIV/AIDS intervention strategies of these students do not match with their level of knowledge of HIV/AIDS. Despite their developed awareness about risk behaviors, they do not keep themselves away from such dangers. But bar ladies who have no or have little knowledge about HIV/AIDS give value to their life.

6.3 Recommendations

Based on the results obtained and the conclusion drawn from this study, the investigator forwarded the following recommendations.

1. Since most college students live apart in a residential place being separated from their parents, they may face some challenges. Economic problems are the main which may hinder the success of students in their education. As the result indicated some college girls were engaged in risk sexual contact so as to get money to fulfill educational materials and to cover daily expenses (including personal hygiene). But some male students revealed that they cover their educational expenses by generating income through engaged in different works in their free time like giving tutor to elementary and high school students, home to home tutor and giving serves in different sectors of their University. Therefore, girls also should be encouraged to use their free time to work and generate their income. Furthermore, GOs, NGOs and other concerned bodies should support female students with finance and educational materials.
2. College students had knowledge about the nature, and transmission of HIV/AIDS. However, in practice, they could not protect themselves from danger. Therefore, they should be encouraged through mass media (TV and Radio) and anti- AIDS clubs to transfer their knowledge about HIV/AIDS in to practice.
3. The observed non significant difference in sexual behavior between college students and bar ladies should be replicated by further research by including wider population (students, bar ladies and customers) that may help to find the means to transfer HIV/AIDS knowledge into practice.

4. Abstinence and Condom use are effective strategies in tackling HIV/AIDS transmission. Therefore, they should be promoted in Universities anti-AIDS movement.
5. VCT is a remarkable approach and an essential part of HIV/AIDS intervention strategy. Believing this, college students had good attitude towards VCT. Therefore, the SNNPR HAPCO and Hawassa University should take the initiation to open VCT center in Hawassa University. This enables the students to know their sero-positive status early and take appropriate measures.

REFERENCES

Abera Megersa (2001). The Assessment of the Status of AIDS Education Programs in the Second Cycle Primary Schools of the Oromia region. Unpublished Master's thesis Addis Ababa University.

ACAFED (2006). *Indicators of Population and Development.*

Adeale, R. (1997). A comparative review of reasons for use and non use of condom among male and female undergraduate students of Obatemi Awolowo University, lle-life, Nigeria, Abstract Books; 1,308

Ahlberg, M.B. (1991). *Women, Sexuality & The Changing Social Order.* The Impact of Government Policies on Reproductive behavior in Kenya. Philadelphia; Gordon & Breach

Alemayehu Taye (2001). Adolescents' sexuality. Attitudes, Knowledge and Source of Information of High School Students. (The case of West Harraarghe). Unpublished Master's Thesis Addis Ababa University.

Andargachew Tesfaye (1988). *The crime problem and its correction.* Vol-I. Addis Ababa University Department of Sociology and Social Administration.

Ashebir Sinme (1995). Differences In The Awareness About AIDS and Risk Reduction Behavior Among Teachers Training Institute of Ethiopia. Unpublished Master's Thesis. Addis Ababa University

Asmamaw G/egiziabher. (2005). Development and Initial Validation of Attitude to wards HIV/AIDS. Unpublished Master's Thesis, Addis Ababa University. Addis Ababa.

Asnake Hailu (2001). Attitudinal Survey on High Risk Sexua Behavior(Intervention strategy). Relevant to HIV/AIDS with respectGender Age and Educational level: The case of Bahir Dar University students. Unpublished Master's Thesis. Addis Ababa University.

Berer, N. (1993). *Women & HIV/AIDS.* An international Resource book, Landon, Harpen Collins.

Borg, W.R. and Gall, M.D. (1989). *Educational research.* An introduction (5th ed). New York and London: Log man

Dagne Admasu (1999). Sexual Behavior Associated Problems and RiskFactors among High school Students in Jimma. Unpublished Master's Thesis. Addis Ababa University.

Denney,N.W.(19 92). *Human Sexuality.* A Mosby Imprint of Mosby –Year Book, Inc.

Encyclopidia Americana (1972). Grolier Incorporated, Danbury

EPHA (1997). *The Ethiopian Journal of Health development.* Vol-11. Addis Ababa University.

Feben Demissie (2005). The Relationship between Family Characteristics and Adolescents' Sexual Risk-Taking Behavior: The case of two high schools in Addis Ababa. Unpublished master's thesis Addis Ababa University.

FHI (2002).Mapping and Census of Female Sex Workers in Addis Ababa, Ethiopia.

Fonseca, M (1994). *Sex and the Teenagers.* 2nd ed, Delhi Vikas publishing house.

Freud, S. (1961). *The ego and the id.* lse American ed., New York Norton.

HAPCO &FMHO. (2004). National HIV/AIDS Prevention and Control Office (HAPCO) and Federal Ministry Of Health (FMOH). Ethiopian Strategic Plan for Intensifying Multisectoral HIV/AIDS Response, Addis Ababa, Ethiopia.

Humffman, K. et al., (1991). *Psychology in Action* (2nd). New York, John Wiley and sons.

Hernandez JT, Smith FJ. (1990).*Inconsistencies and Misconceptions Putting College Students at Risk of Infection.*

ISAPSO (2001). Facts *about HIV/AIDS* .Addis Ababa, Ethiopia

Kimmel, D.C & Weiner, I. B.(1995). *Adolescence; A Developmental Transition.* 2nd ed. John Wiley & Sons Inc.

King ,B.M. (19 96).*Human Sexuality Today.* 2nd ed . Prentile- Hall, Inc.

Koul, Lokesh (1996). *Methodology of Educational research.* Delhi Vikas publishing.

Maccoby, E.E. and Jaklin, C.N. (1991). *The psychology of sex difference.* New York, helend Stanford Junior University.

Mann J. (1992). *World AIDS Assembly: "A conference of Hope A new beginning".* AIDS Link. Regional Health Promotion Resource Center for ECSA, sep. No. 12, 1-3.

Mannino, J.D. (1999). *Sexually Speaking.* Mc Graw-Hill Companies, Inc.

Masters, et al., (1995). *Human Sexuality.* 5thed. Harper Collins College Publishers Inc. New York.

Mesgana Tesfa (1997). Personality and Attitudinal Variability Encouraging Rape Myth Acceptance and Sexual Aggression among Freshman students in Some Selected Colleges of Ethiopia. Unpublished Master's Thesis. Addis Ababa University.

MOH (2006). AIDS in Ethiopia 6th report. National HIV/AIDS prevention and Control office. Addis Ababa, Ethiopia.

MOH (2005). Health and Health indicators. Addis Ababa, Ethiopia.

MOH (2004). AIDS in Ethiopia 5th Ed. Addis Ababa Disease Prevention and Control Department.

MOH/DPACD. (2002).National Guide Line For Voluntary HIV Counseling And Testing In Ethiopia. HIV/AIDS and Other STI Prevention and Control Team.

Mulunesh Abebe (2004). Psycho Social Characteristics of Adolescents and its Implication for Risky Behavior. A case study of Gondor Town Secondary Schools. Unpublished Master's Thesis Addis Ababa University.

O'Brien,k. (1993). Improving Survey questionnaires through focus groups. In D.Morgan (2nd ed). Successful Focus Groups. Advancing the state of the art. New bury Park: SAGE Publications, Inc.

Pankhurst R. K. P. (1974). The History of Prostitution in Ethiopia. Journal of Ethiopian Studies, Addis Ababa. V-12,n-2, p.159-178.

Pedhozu, R. (1991). *Measurement, design, and Analysis.* Lawrence Erlbaum association Inc., publishers. New Jersey.

Rathus, S.A. (1987). *Essentials of Psychology.* New York; Holt Rinehart and Winston.

Reynolds, P.D. (1982). *Ethics and social science research.* Englewood, Newgersey: Prentice-Hall, Inc.

Routh (2005). AIDS in Africa: 25th Scenario.

Roson, C. (1993). *Real world research.* A Resource for Social Scientists and Practitioner Researchers. UK. Blackwell.

Saps Ford, R. (1999). *Survey Research.* London: SAGE publications.

Seyoum Tefera and Ayalew Shibeshi (1989). *Fundamentals of educational research for students and beginning researchers.* Addis Ababa University printing press.

Smith, R.A. (2001). *Social, Cultural and Scientific Records of HIV epidemic:* Encyclopidia of AIDS. Chicago: Penguin Books.

Snyder's Metal, (1986). Personality and sexual relations; Journal of personality and social psychology.

Spencer, A.R; et al. (1993). *Human Sexuality in A world or Diversity.* Massachusetts Allyn & Bacon.

Standing, H. & Kisekka, M.N. (19 89). *Sexual Behavior in Sub Saharan Africa*; A reviews & annotated bibliography (unpunished).

Stroebe, W & Stroebe, M.S. (1996). *Social Psychology & Health.* Buckingham, Open University Press.

Susan J. Bunting (2003). *Human Sexuality.* Dushkin /McGraw –HILL.

UNAIDS (2000).Consultation on STD. Intervention Strategies for Preventing HIV: What is the evidence?

UNAIDS (2000).Summary Booklet of The International Partnership Against AIDS in Africa Best practices.

UNAIDS (2001). India: HIV and AID Selected Discrimination, Stigmatization and Denial. Thomas Coram Research Unit. Institute of Education, University of London, Unite Kingdom.

UNAIDS (2004). Report and Resource Pack. Consultative meeting on HIV Testing and Counseling in The Africa Region. Johannesburg, South Africa.

UNAIDS,UNFAP, UNIFEM (2004). *Women and HIV/AIDS*: Confronting the Crisis. Prographics, Inc.

UNAIDS (2005). Expanding Access to HIV Treatment Through Community Based Organizations.

WHO (1994). School Health Education to Prevent AIDS and STD.Geneva, World Health Organization.

Wortman, C.B.; et al., (1992). *Psychology* .(4th ed). New York, Mc Grow Hill, Inc.

Wulfert E, Wan CK. (1993). Condom Use: *A Self-efficacy Model.* Health Psychol.

Yin, R.K. (1994). *Case Study, Research design and methods.* Thousands Oaks: SAGE publications.

Yoseph Mulugeta (2006). Risk Sexual Behavior, Risk Perception and Knowledge about HIV/AIDS among Student-teachers in Debre Markos College of Teachers Education. Unpublished Master's Thesis. Addis Ababa University

Appendix- A

ADDIS ABABA UNIVERSITY

FACULTY OF EDUCAION

DEPARTMENT OF PSYCHOLOGY

The purpose of this questionnaire is to gather general information about your knowledge, attitude, behavior and risk reduction intervention strategies to HIV/AIDS. The information gathered through this instrument is very essential for the successful completion of the study. Therefore, you have been selected to fill the questionnaire since in believing that you give all the necessary information frankly and honestly.

Your responses will be used only for educational purpose and kept in absolute confidentiality. Thus, nothing will affect you and anyone around you. Please, do not write your name on any pages of this questionnaire.

Thank you very much for your kindly cooperation.

Part I: Background information

Please, fill the space provided with accurate information and encircle the appropriate number of your choice.

1. Age _____
2. Sex _____
3. Religion _____

   3.1. Orthodox 3.2. Catholic 3.3. Protestant

   3.4. Muslim 3.5. Other specify _____

4. Martial status

   4.1. Unmarried 4.2. Married 4.3. Divorced
   4.4. Widowed 4.5. Other specify

5. Level of education

5.1 For students a. 2nd year b. 3rd year c. 4th year

5.2 For bar ladies a. No education b. Elementary c. secondary

6. Department (for students) _____

7. Education level of your parent

7.1. Father A. No education B. Elementary C. High school

D. College and above E. Other specify ____

7.1. Mother A. No education B. Elementary C. High school

D. College and above E. Other specify ____

Part-II Items on the Nature, Transmission and Prevention of HIV/AIDS. Please, encircle the correct answer for the following questions.

1. One of the following has less chance of HIV/transmission.

A. Deep kissing B. Unsafe sex (Sex without condom)

C. Withdrawal method D. Saliva

2. HIV can not transmit in one of the following.

A. Mosquito B. Mother to child C. Unsafe Sex

D. Sharing tooth brush and other sharp materials.

3. HIV highly concentrated in one the following.

A. Urines B. Sweet C. Saliva D. Blood

4. One of the following is true about HIV/AIDS?

A. It is a deadly disease B. The punishment of God

C. It is curable D. It is hereditary

5. One of the following does not contribute to prevent HIV infection.

A. Dry sex (rubbing penis on female's body)

B. Use of condom C. Faithfulness D. Abstinence

6. During sexual intercourse, which one of the following could have high possibility of HIV transmission?

A. Male to Female B. Female to male C. Female to Female

D. Both have equal chance to be infected

7. During sexual intercourse, which one of the following decreases the possibility of women to be infected with HIV?

A. Menstruation B. wound in genital part

C. Friction of sex organs D. No answer

8. A person living with HIV could be confirmed by:

A. If he/she is sick for a long time C. If he/she has T.B

B. Having a look on his physical D. Blood Test

9. Which one of the following is true?

A. Swimming with HIV/AIDS patient can cause infection.

B. AIDS patients can transmit the virus through cough.

C. People can transmit HIV, only when they are blown to AIDS.

D. Sharing sharp materials like shaver, scissors can cause HIV infection.

10. Which one is wrong?

A. Love can be expressed through embracing and kissing, without having sex.

B. It is possible to live together with HIV/AIDS patients.

C. A blood donor can be exposed to HIV during blood donation.

D. We have a means to know our HIV sero-status.

Say true or false for the following questions.

If you have no answer please indicate, "I don't know"

	Item	True	False	I do not know
1	Sex education leads youngsters to sex			
	Young girls are more vulnerable to HIV infection, because their sexual organs are immature and considerably more sensitive to be torn or damaged.			
	Homosexuality does not cause HV infection.			
4	A person who looks healthy can have HIV and can pass the virus on to other people.			
5	A condom can be reused to prevent HIV/AIDS.			
	Applying Vaseline to condom makes sexual intercourse suitable.			
	A person infected with STI is more vulnerable to HIV infection.			
8	Toilets can transmit HIV			
	To prevent HIV infection, one person should have sex with a person who seems healthy.			
	Oral sex and anal sex do not cause HIV infection.			

Part lll- Items on Attitude to Wards HIV prevention

Please, put a tick (√) mark in front of each sentence that Reflects your opinion

No	Issues	Strongly Agree	Agreed	Undecided	Disagree	Strongly disagee
1	I believe that virgin girls are free from HIV infection.					
2	It is not risk to have sex with any one whom l think that has no AIDS					
3	I should have sex with a girl to whom I invest my money and time.(for males) I should have sex with a man who invest money and time for me.(for females & bar ladies)					
4	It is not risk for a girl to have unsafe sex once with a person					

	who nags and harasses her.					
5	Males only should be more responsible for HIV transmission.					
6	Females only should be more responsible for HIV transmission					
7	I believe that sexual intercourse without condom is pleasurable					
8	I believe that my friends are at risk of HIV infection					
9	AIDS is avoidable only in one to one relationship					
10	I feel comfortable and enjoy casual sex with many partners.					
11	Even if I fell in love to some one , l do not want to have unsafe sex due to AIDS					
12	I believe that in my University/ bar my					

	friends use drugs.					
13	I believe that my friends in my university/ bar drink alcohol.					
14	I believe that there is high risk of HIV infection in my university/ bar.					
15	My religion does not support me to use contraceptive methods.					
16	If a girl feels that her friend is to quit with her, then she should do sex, for not to loss him.					
17	There are some groups who force me to do unsafe sex.					
18	I want to be provided with condom.					
19	I can express my love to my partner without sex					
20	I believe that it is					

	possible to tackle the transmission of HIV by using masturbation.					

Part VI .items on sexual experience /practice

Please, encircle the letter of your choice. A. yes B. No

1. Have you a faithful girl/boy friend? A. Yes B. No
2. If "yes "how long did you stay together? _____
3. Is your attitude towards sex, in conflict with your partner?

   A. Yes B. No
4. Have you ever had sex before you join University bar?

   A. Yes B. No
5. Do you have control over sex on the relationship?

   A. Yes B. No
6. Talking about sex and HIV/AIDS at family level could initiate children to sexual prosodic.

   A. Yes B. No
7. Why?_____
8. Have ever discussed about HIV/AIDS with your parents?

   A. Yes B. No
9. If 'yes' how much importance the discussion had?
10. Have you ever been infected with STD?

    A. Yes B. No
11. If 'yes' was the infection from sexual intercourse?

    A. Yes B. No
12. Have you had unsafe sex after you joined university/bar?

A. yes B. No

13. Have you ever been invited for sex by the same sex?

A. Yes B. No

14. If yes, what did you do by the time? _____

15. Have you had sex after drinking alcohol? A. Yes B. No

16. If yes, did you use condom? A. Yes B. No

17. Did you face condom damage during sexual intercourse?

A. yes B. No

18. Do you like to have sex with many partners? Why?

A. Yes B. No

19. Do you support anal and oral sex? Why?

A. Yes B. No

20. Do you support using masturbation? Why?

A. Yes B. No

PART- V- = <u>Items on attitudes towards VCT</u>

Please, put a tick (/) mark in front of each sentence that reflects your opinion.

No	Issues	Strongly agree	Agree	Un decided	Dis agree	Strong dis agree
1	I can accept what ever the HIV result will be due to the counseling that is given at post test of HIV.					
2	I want to make HIV test because I suspect my self.					
3	I believe that my HIV result will be confidential.					
4	I can not stand if my HIV test result be positive.					
5	If I am HIV positive, there are many service providers and groups who can help me with care and support (provide me with appropriate referral).					
6	I should get HIV test so as to make an informed choice about pregnancy and HIV prevention					
7	Getting an HIV test is scary but there are many					

	advantages that I get.					
8	I believe that I can get effective counseling service at VCT center.					
9	I do not want to let any one know about my HIV test result, if it be positive					
10	HIV VCT centers should be opened in my University.					
11	Training courses on HIV test should be available and accessible in my university.					
12	I believe that University students need to have continuous HIV test.					
13	I believe that HIV test providers are professionally trained in general counseling principles and practices.					
14	I am afraid that my blood test might be mismatched with others at VCT centers					
15	I believe that HIV					

	counseling is a confidential dialogue between me and care providers aimed at enabling me to cope with stress and make personal decision related to HIV/ AIDS					
16	I am afraid to take HIV test, because of the stigma and discrimination that come from my family and community.					
17	I believe that VCT is an important entry point to both HIV prevention and HIV related care.					
18	I want to be served by female VCT processional.					
19	I want to be served by male VCT processional					
20	I am ready to take HIV test.					

Part –VI- Items on source of information about HIV/AIDS

Please, rank the contribution of the following sources of information helped you get information about HIV/AIDS.

Levels: 1. Very Low 2. low 3.Medium 4.High 5. Very High

No	Source of information					
1	Friends					
2	Family					
3	TV/ Radio					
4	School					
5	Anti AIDS Club					
6	News letter and Magazines					
7	Health institutions					
8	Religious institutions					
9	Films/ video					
10	Other (specify)					

Appendix-B

Interview With male students

The purpose of this interview is to gather general information about your knowledge, attitude, behavior and risk reduction intervention strategies to HIV/AIDS. The information gathered through this instrument is very essential for the successful completion of the study. Therefore, you have been selected believing that you will give all the necessary information frankly and honestly.

1. Do you have a girl friend? A. Yes ☐ B. No ☐
2. If yes, did you have sex with out condom? A. Yes ☐ B. No ☐
3. Did you have many sexual partners? A. Yes ☐ B. No ☐
4. If yes, please mention? (college girls, high school girls, ---)
5. Do you take alcohol beverage? A. Yes ☐ B. No ☐
6. If yes, please, mention what you do after you drink alcohol._____
7. Do you chew chat? A. Yes ☐ B. No ☐
8. If yes, what do you do after chewing chat?

_____

9. Have you ever been infected with STD? A. Yes ☐ B. No ☐
10. If yes, how did you catch it?

_____

Thank you so much

Appendix-C

Interview with female students

The purpose of this interview is to gather general information about your knowledge, attitude, behavior and risk reduction intervention strategies to HIV/AIDS. The information gathered through this instrument is very essential for the successful completion of the study. Therefore, you have been selected believing that you will give all the necessary information frankly and honestly.

1. Do you have a steady boy friend? A. Yes ☐ B. No ☐
2. If yes, did you have sex with him without condom? A. Yes ☐ B. No ☐
3. Do you have sexual partners other than your boy friend?
   A. Yes ☐ B. No ☐
4. Have you ever received money or any gift from your sexual partner in return to sexual intercourse? A. Yes ☐ B. No ☐
5. Do you take alcohol beverage? A. Yes ☐ B. No ☐
6. If yes, what do you do after taking Alcohol?
7. Do you chew Chat? A. Yes ☐ B. No ☐
8. If yes, what do you do after chewing chat? _____
9. Have you ever caught STD? A. Yes ☐ B. No ☐
10. If yes, how did you catch it? A. Yes ☐ B. No ☐
11. Please, Would you give your opinion about the sexual behavior of your friends and the problem they faced?

Thank you so much

Appendix-D

Interview with Bar Ladies

The purpose of this interview is to gather general information about your knowledge, attitude, behavior and risk reduction intervention strategies to HIV/AIDS. The information gathered through this instrument is very essential for the successful completion of the study. Therefore, you have been selected believing that you will give all the necessary information frankly and honestly.

1. Do you have a boy friend? A. Yes ☐ B. No ☐
2. If yes, did you have sex with him w/o condom? A. Yes ☐ B. No ☐
3. If yes Why _____
4 Would you explain you relation ship with Pimps?
5 Do you take alcohol beverage? A. Yes ☐ B. No ☐
6. If yes, please describe what you do after taking alcohol _____
7. Do you Chaw Chat? A. Yes ☐ B. No ☐
8. If yes, what do you do after chews Chat? _____
9. Have you ever had sex with out condom? A. Yes ☐ B. No ☐
10. Would you give comment about the sexual behavior of your clients?
11. Would you mention that who are you clients?
12. Have you ever been visited by college students/ A. Yes ☐ B. No ☐
13. If yes, please, mention their attitude HIV prevention?

Thank you so much

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
hivknow1	14.71	16.338	.360		.795
hivknow2	14.78	16.447	.265		.799
hivknow3	14.78	16.097	.378		.794
hivknow4	14.79	16.450	.258		.800
hivknow5	14.75	15.271	.205		.822
hivknow6	14.77	15.777	.495		.788
hivknow7	14.83	15.965	.384		.793
hivknow8	14.79	16.106	.363		.794
hivknow9	14.85	15.794	.419		.791
hivknow10	14.83	15.656	.478		.788
hivknow11	14.82	15.759	.450		.790
hivknow12	14.86	15.452	.514		.786
hivknow13	14.84	15.953	.379		.793
hivknow14	14.80	15.573	.523		.786
hivknow15	14.86	15.901	.382		.793
hivknow16	14.83	15.997	.372		.794
hivknow17	14.80	15.716	.479		.788
hivknow18	14.79	16.031	.394		.793
hivknow19	14.80	16.120	.356		.795
hivknow20	14.77	16.161	.270		.800

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.58	17.467	4.179	20

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.802	.822	20

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.770	.774	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
hivinfo1	25.74	72.224	.046	.034	.806
hivinfo2	25.80	62.206	.444	.231	.749
hivinfo3	25.76	63.311	.401	.216	.755
hivinfo4	24.94	61.593	.541	.346	.736
hivinfo5	25.15	59.127	.583	.421	.728
hivinfo6	25.18	59.431	.609	.453	.725
hivinfo7	25.53	58.417	.615	.475	.723
hivinfo8	25.83	61.250	.475	.312	.744
hivinfo9	25.95	61.074	.420	.224	.754

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
28.73	76.359	8.738	9

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.765	.763	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
sexatt1	25.92	15.102	.338	.	.755
sexatt2	26.08	15.726	.215	.	.763
sexatt3	25.87	14.851	.399	.	.750
sexatt4	25.88	15.161	.315	.	.756
sexatt5	25.96	15.261	.306	.	.757
sexatt6	25.85	14.826	.403	.	.750
sexatt7	25.94	14.918	.394	.	.751
sexatt8	26.09	15.524	.283	.	.758
sexatt9	25.98	15.578	.223	.	.763
sexatt10	25.82	14.968	.363	.	.753
sexatt11	25.88	14.831	.405	.	.750
sexatt12	26.03	14.961	.419	.	.749
sexatt13	25.92	15.034	.357	.	.753
sexatt14	25.97	15.394	.271	.	.759
sexatt15	25.99	15.395	.278	.	.759
sexatt16	25.85	14.626	.458	.	.746
sexatt17	26.00	15.316	.301	.	.757
sexatt18	25.96	15.636	.202	.	.764
sexatt19	25.90	15.189	.310	.	.757
sexatt20	25.99	15.500	.247	.	.761

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
27.31	16.625	4.077	20

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.757	.780	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
hivprev1	49.95	123.420	.543	.507	.731
hivprev2	50.65	122.708	.552	.591	.730
hivprev3	50.83	124.986	.568	.484	.732
hivprev4	51.09	128.712	.555	.569	.737
hivprev5	51.03	130.897	.399	.505	.744
hivprev6	51.01	131.142	.401	.381	.744
hivprev7	49.56	126.243	.395	.242	.741
hivprev8	49.96	125.582	.425	.353	.739
hivprev9	48.83	134.135	.160	.257	.759
hivprev10	50.95	127.314	.440	.388	.739
hivprev11	49.60	138.371	.017	.082	.771
hivprev12	49.95	123.204	.477	.477	.735
hivprev13	49.76	122.335	.487	.430	.733
hivprev14	49.04	127.883	.333	.197	.746
hivprev15	49.89	135.199	.084	.243	.768
hivprev16	50.31	127.739	.332	.297	.746
hivprev17	48.97	141.924	-.082	.319	.779
hivprev18	49.83	125.537	.343	.309	.746
hivprev19	48.69	136.516	.090	.199	.763
hivprev20	49.96	130.289	.259	.214	.752

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
52.62	141.356	11.889	20

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.808	.810	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
vct1	62.28	152.768	.478	.453	.794
vct2	63.06	156.611	.332	.240	.802
vct3	62.58	153.816	.416	.295	.797
vct4	62.81	164.747	.142	.226	.812
vct5	62.93	157.727	.369	.216	.800
vct6	62.18	150.226	.534	.510	.790
vct7	62.18	151.089	.498	.482	.792
vct8	62.14	154.269	.482	.324	.794
vct9	62.72	164.584	.128	.216	.814
vct10	61.88	150.205	.560	.522	.789
vct11	61.76	151.008	.582	.562	.789
vct12	61.75	155.574	.430	.341	.797
vct13	62.29	150.794	.529	.432	.791
vct14	62.35	155.872	.446	.299	.796
vct15	63.04	160.777	.253	.155	.806
vct16	63.09	169.744	-.013	.271	.822
vct17	61.88	156.750	.399	.291	.799
vct18	62.62	160.131	.270	.385	.805
vct19	62.51	161.508	.245	.419	.806
vct20	62.35	150.128	.480	.399	.793

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
65.71	171.579	13.099	20

Declaration

I, the undersigned, here by declare that this thesis is my original work, and source of materials used for the study have been acknowledged.

Name. Berhanu Dendena

Signature. _____

Date. 22. May 2007

The thesis has been submitted for Examination with my Approval as a University Advisor.

Name. Seleshi Zeleke (PH.D)

Signature _____

Date of submission 22 May 2007