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Adolescent Sexual Behavior and the Risk of HIV Infection in Urban Ethiopia: The Case of Awassa City

By

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Abstract

HIV/AIDS is one of the serious health and social problems the world is facing to day. The epidemic is unique in its devastating impact on the social, economic and demographic development. In Ethiopia, the highest number of AIDS cases was reported in the age group 20-39 in the year 2003.This fact revealed that most of the infections occurred much earlier during the period of youth.

Past researches have focused on knowledge about condom distribution, pattern of condom utilization, sexual violence, knowledge, attitude and practice of HIV/AIDS and knowledge and sexual behavior on HIV/AIDS/STDs. Little is known, however, about correlates of youth sexual activity ,risky sexual behavior and factors that motivates youths to engage in sex. This study, therefore, addresses the sexual risk taking behavior among youths aged 15-24 who are of particular interest given the fact that HIV is mainly transmitted through sexual contact.

The study was aimed at exploring the sexual behavior of youths in the city of Awassa. A survey was conducted involving 383 unmarried youths aged 15-24 in the year 2005 using a structured questionnaire. Multinomial regression was used to examine whether different predictor variables were associated with sexual risk factors for HIV infection. Descriptive analyses of respondents' characteristics were made to obtain a general description of sexual risk behavior.

According to the analyses majority of the youths had never had sex and those who have ever had sex were sexually active occasionally. Despite the fact that most of the youths were aware of HIV/AIDS, considerable proportion of the respondents had misconception regarding how the virus can be transmitted. The regression analysis revealed that household socio economic status was found to have an influence on sexual risk taking behavior of youths. Furthermore, living arrangements of youths explains the variation in risk taking behavior i.e. living with both parents in the past and currently were protective factors from sexual risk. Moreover, current religiosity was also a protective factor from sexual risk taking behavior. Nevertheless, involvements in other behavioral risks and engagement in economic activities during the month prior to the survey were found to be significant in increasing the likelihood of risky sexual behavior.

Based on the findings of the study a better and widespread public education on HIV/AIDS, expansion of sexual health services for unmarried youths and implementation of programs that are intended to enhance household standard of living were commented. A policy issue that might emerge from this study is to open opportunities in the area where parents, healthcare providers, the school and religious leaders can guide youths on making responsible decisions especially on sexual issues.

CHAPTER ONE

1. INTRODUCTION

1.1Back ground of the study

HIV/AIDS is a serious health and social problem in the world. The disease killed more than 3 million people in the year 2003 alone. During the same year, nearly 5 million people become newly infected with HIV, bringing to 40 million the number of people living with the virus worldwide (UNAIDS 2004, Sheila 2004). Moreover, the epidemic is believed to be one of the greatest threats to eradicate poverty and achieve the Millennium Development Goals.

Sub-Saharan Africa is one of the most affected regions in the world. According to a report by the Department for International Development of the British Government, out of the total number of persons living with the virus, about 25 Million are in the region, representing about 9% of the total population of the region. In the most affected countries, one in four persons may be infected, with rates of infection still rising (DFID 2004).

Ethiopia is one of the countries in sub-Saharan Africa most affected by the AIDS epidemic. According to the estimate by the Ministry of Health, 2.2-3.0 Million people are living with HIV and 1.2 Million Children are AIDS orphans (MoH 2002, CSA 2001).

Data from 66 (37 urban and 29 rural) sentinel surveillance sites in the year 2003 revealed that HIV prevalence ranges from 20.2% in Bahirdar Health Center to 0.5 in Ayra Hospital, a rural site in Oromiya Region. Moreover, the prevalence is higher among women and urban population (MoH,2004).

The age and sex distributions of AIDS cases in Ethiopia shows that men and women are infected in nearly equal proportions. For example, in the age

groups 20 – 39, where the highest number of AIDS cases has been reported in the year 2003, males account for 52% and female for 48% (ibid). This is expected as HIV is predominantly transmitted through sexual contract, accounting for about 80% of the adult infection.

The main characteristic feature of HIV epidemic in Ethiopia is the fact that it is spreading throughout the general population rather than being confined to those population groups that are believed to be at a higher risk like commercial sex workers, truck drivers and soldiers, According to the study by Kloos and Hailemariam, higher proportion of children, adolescents and the young adults are being exposed to the virus than ever before (Kloos and Hailemariam Damien 200).

In 1985, one year before diagnosis of the first AIDS case in the country, the government of Ethiopia responded to a potential AIDS epidemic by forming a national task force for the prevention and control of HIV infection and AIDS. The task force issued the first AIDS control strategy by the end of 1985. In 1987, Ethiopia developed short- and medium-term plans in accordance with guidelines from the Global Program on AIDS. In September 1987, the government established an HIV/ AIDS department within the Ministry of Health (MOH). The department developed the Second Medium Term Plan in 1991.Moreover, in August 1989; the MOH drafted a four-point policy statement on AIDS prevention. As mounting epidemiological evidence indicated a worsening of the epidemic, the need for a strong and clear national policy backed by legal measures became apparent and finally a policy on HIV , which provides the frame work for national multi sectoral HIV/ AIDS strategies, was formulated and approved on August 14;1998(FDRE 1998 and MoH 1999) . In April 2000, the Government also established the National AIDS council with the responsibility of implementing, monitoring of performance and evaluation of the HIV program (MoH, 2004).In short, since the late 1990s, the government of

Ethiopia, with the support from international organizations, local non-governmental organizations, civil societies and religious institutions, has made a strong response and tremendous efforts towards addressing the AIDS epidemic.

Formerly, the focus of HIV intervention was on creating AIDS awareness and blood safety. Now it is extended to public AIDS awareness emphasizing change in sexual behavior including abstinence, faithfulness, and use of condom. So far, some major achievements are evident from the various interventions undertaken in Ethiopia. For example, the Demographic and Health Survey showed that more than four in five young woman and nine in ten young men are aware of AIDS. Furthermore, the last few years marked a significant decline in the rate of new infection in urban and rural areas (CSA 2001, MoH 2004). Although ignorance about the disease is not as acute as before, it is still unclear how perception of HIV risk and adolescent sexual behavior influence each other and how other socioeconomic and demographic factors influence both.

1.2. Statement of the problem and Rationale of the study

In most sub-Sahara African countries, the dominant way by which HIV Virus is being transmitted is through heterosexual contact followed by vertical transmission from mothers to children. Different documents also proved that sexual contact is still the dominant means of HIV transmission and it is found to be on the rise in Ethiopia, despite the fact that nearly all respondents had awareness regarding how the virus can be transmitted(MoH 2002,Getnet 2000). In addition, with continuously decreasing age at first sex in most urban centers in Ethiopia, the fastest growth rates of transmission of HIV is registered among youth who practice risky sexual activities. The report by UNAIDS also shows that young people between the age of 15 and 24 make up the majority of new infections in most developing countries, including Ethiopia (UNAIDS, 1998). The

prevalence of HIV positive cases for specimens collected in Awassa Health Center in the year 2003 revealed that 64.4% of all positives are in the age group 15-24. Moreover, 32.8% and 2.6% of all positives were reported for age ranges of 25-34 and 35-49, respectively. Because HIV is mainly transmitted through sexual contact in Ethiopia in general, it is reasonable to assume that youths in the city of Awassa experienced risky sexual behavior.

1.3 Literature Review

Nearly half of all people in the world today are under the age of 25.Out of which, approximately one-third of the world's population is between 10-24 years of age, and four out of five young people live in developing countries. The world has the largest number of young people ever and their number is increasing at the fastest rate. Nevertheless, about 85% of the world's youth live in poor countries where one-third of the youth are illiterate. In the least-developed countries, only 13% of girls and 22% of boys are believed to be enrolled in secondary education. Further more; approximately 70 million young people are unemployed worldwide. What is most important is the fact that, Young people, ages 15-24 have the highest infection rates from HIV/AIDS and other sexually transmitted diseases. In some developing countries, up to 60% of all new HIV cases occur among 15-24 year olds (Women Care 2001).

During the period of youth, sexual activity is often initiated, risk-taking and experimentation are normative, and many sexually active youths fail to take appropriate prevention precautions, despite basic knowledge of HIV transmission and prevention. Studies revealed that youths are sexually active for different reasons ranges from being in love to unplanned sexual activity. Moreover, there are several other factors influencing youths to engage in sexual activities such as Peer Pressure, transactional sex,

forced/coerced sex and their attitude to wards sex just to mention but a few(ibid)

A research conducted in 24 sub Saharan countries affirmed that youths are at greater risk of acquiring HIV than adults. The same work identified that behavioral, physiological and socio-cultural factors make young people more vulnerable than adults to HIV infection (Akinirinola and etal, 2004). According to the same report, in all countries, prevalence among youth women was about twice that among men. In other words, the period of youth is a time of tremendous growth and potential, but it is also a time of considerable risk. Youths are at risk for HIV and STDs as a result of the interplay between behavioural, biological, and socioeconomic factors. On the other hand, the health-related experiences, attitudes and behaviour of youths are intimately linked to their social, educational and economic aspirations and options.

Epidemiological studies show that young people in the developing world are not equally affected by HIV/AIDS. Those who are most socially and economically disadvantaged are at highest risk. The risk is increased by socio-cultural, political and economic forces, such as poverty, migration, war and civil disturbance. Different researchers also supported the finding that various socio-cultural, socio-economic and institutional factors are responsible for youth sexual activity and risk taking (Peltzer, N.D , Getnet 2000, Helmat and Damene 2000).

1.3.1 Social context of youths in Ethiopia

Although Ethiopia is a multiethnic country, there are common features in the traditional roles, status, responsibilities and socialization processes for youths. Youth is a time when many young people experience critical and life-defining challenges such as their first sexual experience, marriage, pregnancy, and parenthood (Aklilu and Hailom, 2002).

The traditional system in Ethiopia supported early marriage and childbearing. Available evidence suggests that in the past marriage and childbearing closely followed puberty, and first sex took place largely within marriage. Using the 2000 Demographic and health survey, Aklilu and Hailom estimated the median age at first marriage is identical to the median age at sexual debut for women age 25-49.Traditionally, young females were expected to be virgins at first marriage but that was not expected of males. This was part of the double sexual standard for males and females. In other words, parents and society implicitly approved of multiple sexual partners for young males but not for females (Aklilu and Hailom, 2002).Currently, some of the traditional arrangements have undergone changes as a result of modernization, urbanization, migration and formal education. One outcome of these changes is that some of the responsibilities of the extended family and the community to socialize youths, including the selection of future marriage partners, have been eroded. As part of the changes, state organs like the school system and others including religious bodies have emerged as socialization agents in addition to the family (Negussie 1998). Therefore, unlike in the past, a young person growing up in Ethiopia now will be confronted with different value systems of socialization that may influence behavior regarding sexuality.

1.3.2 Factors that increases sexual activity and HIV risk among youths

1.3.2.1 Poverty

In parts of the world where most people lack adequate housing, food and clothing, the everyday struggle to survive absorbs most of their energy and resources. Young people in such settings may consider other needs to be more pressing than protecting their sexual and reproductive health. For example, a study conducted in Dessie town revealed that HIV concerns take a very low priority in the risk hierarchy among the street youths due to their

preoccupation with survival issues under the condition of intense social and economic strain (Getnet 2000).

Youths being rational decision makers, engage in sexual activity for economic reasons. In line with this argument, studies show that young people are engaged in sex in the desire of economic gains (Nugussie 1998). Moreover, different studies have also shown that economic factors have a strong influence on individual sexual activity and risk behaviour through poverty and unemployment. For instance, according to some socio-demographic literatures, young people whose fathers are unemployed, those who live in poor household and neighbourhood have multiple sexual partners or have casual relationship than others (Dominique 1993, Unuigbe and Ogbeide 1999). Studies show that poverty is overwhelmingly the root cause of women bartering sex for economic gain or survival (Weiss, Whelan et al. 2000). The same research work showed that women who entered a sexual relationship out of economic necessity had increased odds of having STI including HIV infection.

There is no consensus regarding the relationship between poverty and HIV risk. Some writers argue that there is a positive and dual relationship between health and wealth. For instance, little education, which is believed to be the cause and a consequence of poverty, among youths found to be closely linked to their ability to avoid HIV/AIDS. Contrary to the above argument a research document revealed that ignorance of the mechanisms of transmission of HIV/AIDS was not associated with poverty. On the other hand, Mburano argued that the positive relationship between socio-economic status and HIV status disappears as HIV /AIDS becomes more endemic to African countries and speculated that the risk of HIV infection will be more associated to persons of lower socio-economic status (Mburano, 2001).

1.3.2.2 Gender roles

Although various literatures (Barnett, 1997, ICRW, 1996) showed that gender roles are changing rapidly in Sub-Saharan Africa, traditional stereotypes remain prevalent in many societies. Men are expected to be strong providers, protectors and authority figures in the family, and women primarily to be wives and mothers, whose role is to grow and prepare food for the family. Sexual experimentation before marriage and having more than one sexual partner after marriage are still widely ignored for men, while women are expected to abstain from sex until marriage and to be faithful to their husband once married. A study suggest that young men in the sub Saharan Africa, the region where HIV prevalence is one of the highest in the world, typically experience strong social pressures to prove their manhood by having sex; engage in sexual intercourse with commercial sex workers; have sex with many partners; or have unprotected intercourse. All of these behaviors increase young men's risk for HIV and other STIs. The sexual double standard can jeopardize women's sexual and reproductive health as well (Akinirinola.B and et al, 2004). Women with little power and low education may not be able to refuse sex or to ask their partners to use condoms, even when they know they risk contracting an STI, including HIV.

According to various socio demographic literatures, 'good women' are expected to be ignorant about sex and passive in sexual interactions (Rao Gupta and Weiss 1993; Paiva 1993).Moreover, the high social value placed on virginity in unmarried girls in many societies may pressure parents and the community to ensure that young women are kept ignorant about sexual matters. Such female ignorance is often viewed as a sign of purity and innocence. This prevents them from seeking information about sex or services relating to sexual health. A study conducted in different developing countries revealed the fact that levels of knowledge are almost always higher among men than among women, with 75% of men, on average, having

accurate knowledge about HIV/AIDS transmission and prevention as compared to roughly 65% of women (Akinrinola Bankole et al 2004). The same work also showed that this observed knowledge imbalance greatly hinders women's ability to be informed about risk reduction.

Further more, the ideas of masculinity that emphasize sexual domination over women as a defining characteristic of manhood contribute to violence against women which directly and/or indirectly increased women's vulnerability to HIV. The relationship among violence, risky behaviors and HIV/AIDS has been documented by a study which showed that individuals who have been sexually abused as children are more likely to engage in unprotected sex, have multiple partners, and trade sex for money (Heise, Ellsberg et al. 1999). Moreover, the experience of violence has also been found to be a strong predictor of HIV. For instance, a study showed that among women who sought services in a VCT clinic, the odds of reporting violence was ten times higher among HIV positive young women than similarly aged HIV-negative women (Maman, Mbwambo, 2002).

1.3.2.3 Impact of Migration

Poverty and the lack of economic opportunity make it more likely that both women and men will migrate in search of income and employment, which can disrupt stable social and familial relationships and expose both men and women to increased risk of infection. Moreover, in most settings, migrant populations are more likely to be socially marginalized, with restricted access to economic assets, information, and services (UNAIDS 1999). Research has shown that rural-to-urban migration of men leads them to form new sexual networks in areas where the ratio of men to women is unequal (Jean 2000). Furthermore, the same research revealed that when men are engaged in seasonal migration for work, and often return home to their community of origin, the vulnerability of their female partners who are left behind is significant. The situation is often further exacerbated

by the fact that wives and other long-term sexual partners of migratory workers find it extremely difficult to insist on the use of condoms when their men have been away for so long . This relationship of migration and HIV risk was also hold true for migratory women (Jean 2000).

1.3.2.4 Ethnicity and race

Various research works (Akinirinola and etal, 2004, Rosalie, 2002) revealed that gender and poverty intersects with ethnicity and race to create multiple vulnerabilities for those who belong to marginalized ethnic and racial minorities. Ethnic and racial minorities are also disproportionately represented among the poor in every region of the world. With less economic opportunity and hope, individuals from minority or disadvantaged groups are more likely to resort to risky behaviors such as injecting drug use or exchanging sex as a means of survival. Socially and economically marginalized populations also typically have less access to health information and services, increasing their vulnerability of contracting illness and reducing the chances that their illnesses will get adequately treated. Unfortunately, HIV prevalence rates among minorities are usually politically sensitive data and as a result very few countries disaggregate such data by race or ethnicity.

1.3.3 HIV/AIDS researches in Ethiopia

In Ethiopia, AIDS started to spread in the early 1980's. Since then the epidemic has touched every corner of the country and every walk of life and it has been rising at an alarming rate. Further more, different literature showed that some parts of the country are more affected than others. For instance, some major urban centers are more affected than other towns and rural parts. According to UNAIDS (2002) two areas in the country i.e. Bahir Dar in Amhara Region and Awassa in SNNP are particularly more affected. About 90 percent of reported AIDS cases occur to adults between ages of

15-49 or the most productive and reproductive segment of society. The peak AIDS cases occur in the age group 25-29 for both sexes and the male and female have equal opportunity of infection (UNAIDS 2002).

Even though there are many different studies conducted in Ethiopia regarding knowledge, attitude, practice and condom use, they are not well organized. Despite, few studies are available regarding sexual behavior of in school adolescent, street youths and commercial sex workers, there are no studies done on socioeconomic and demographic correlates of risky sexual behavior especially on out school adolescents. Attempts made to review some works and their summaries are given below.

A cross sectional study conducted by Yohannis and Alemayehu to assess College students' 'knowledge' about condom distribution, high-risk behavior and pattern of condom utilization revealed that out of 383 students 214 (56.1%) were sexually active. Among the sexually active students, 37.1% reported ever use of condom. Consistent condom use was reported only by 6.4%. Sexual contact with commercial sex workers was reported by 7.8% of them. The same study further showed that there is a wide gap between knowledge and practice of condom use among college students. (Yohannis and Alemayehu, 2002).

Moreover, another study by Mitike and others on Sexual Violence among Female Street Adolescents in Addis Ababa reported that there was a significant prevalence of rape among female street adolescents prior to 3 months from the survey. This high prevalence of violence and forced sex caused psychological problems, unwanted pregnancy and STDs including HIV/AIDS. In addition to that, the survey showed that sexual activity was early, the age range of sexual debut was 6-24 years; where the majority initiated at age between 10 and14(Mitike et al,2002). On the other hand, another study showed that the majority (55.7%) of street children and women did not know the transmission routes of STDs and HIV and a large

proportion (64.5%) of the street children did not attend any kind of health education programs. The same research discovered that the majority (55.7%) of the street children and women were unaware of the transmission routes of STDs and HIV and only (44.3%) of them were able to specify one or more of the common ways of transmission of the disease. The study also identified age as the basic demographic correlates of knowledge of transmission of HIV/AIDS (Solomon et al, 2002).

Furthermore, a community based cross-sectional study that was done to assess the knowledge, attitude and practice on HIV/AIDS among individuals aged 15 years and above in Gambella town found that sexual practice often begun as early as eleven years of age, the mean age being 16 and 18 years for females and males, respectively. The respondents were observed to have adequate knowledge with regard to ways of transmission of HIV/AIDS although risky behavior is widespread. This can be clearly seen from the fact that the majority reported unprotected sex and unsafe blood transfusion as common ways of HIV transmission and most of the individuals agreed that screening before marriage is basic to avoid HIV infection. In addition to that, abstinence was reported to be the most important way of prevention by the majority of respondents (Yayeh et al, 2003).

Even though surveillance of sero-prevalence of HIV is a priority in the Strategic Framework for the National Response to HIV/AIDS in Ethiopia, much surveillance in the country has been undertaken in antenatal clinics in urban areas. Unlike these surveillance studies, a study by Getahun and Jones on HIV prevalence in a rural small town showed that the prevalence was negligible; only 1.4% sera showed a positive result. Moreover, the reported AIDS cases varied by age of the respondents which was lower in the 10-14 year age group compared with any other age group. The research

output supports the idea that young people represent a "window of hope" for slowing the progression of the epidemic (Getahun and Jones,2003).

Another study by Negussie on HIV prevalence and socio-cultural contexts of sexuality among youth in Addis Ababa revealed that HIV is significantly prevalent among youth in Addis Ababa, particularly among out- of school and female youth. The same study discovered that different socio-cultural contexts of sexuality and gender norms underpin this excess vulnerability .For instance, the study identified the cultural shaping of young people's sexuality gave privileges for males to be sexually active, be in control of sexual relationships and be less responsible for precautions to prevent HIV/AIDS. Besides, it was identified that sexual relationships for girls were frequently motivated by gain in the form of money, gifts and job (Negussie, 2002).

A study undertaken by Zenabu on knowledge, attitude and behavior (KAB) on HIV/AIDS/STDs among workers in the informal sector in Addis Ababa showed that, awareness of Sexually Transmitted Diseases (STDs) was lower than AIDS. Further more, awareness of AIDS declined as age increased and increased as education level increased. Nevertheless, the study also indicated that educational attainment did not bring a change in sexual behavior. In addition to that, it indicated that misconceptions on mode of HIV transmission exist among the study group (Zenabu, 2003).

The study area, Awassa, the capital of the Southern Nations, Nationalities and peoples Regional State (SNNPR) is characterized by one of the high HIV Prevalence areas (11.1%) as compared to the national urban prevalence (12.7%) in the year 2002 (MoH 2004). Rapid population growth and large number of in migrants also characterize the city. Moreover, there are forces that pressurized adolescent to practice sexual activities. Fore example, high rate of unemployment, alcoholic consumption, "chat" chewing and unlicensed erotic video shows are common in the city. In addition, the

gender imbalance that is prevalent in the country is also common in the city resulting in both young men and women to practice unsafe sex and make them vulnerable to HIV epidemic and other sexually transmitted diseases

Past researches in the area of adolescent sexuality are based on data collected at one point in time and most of them had school adolescents as their target. Hence, the studies were not representative of all adolescents. This study therefore attempted to bridge the gap by taking some selected back ground characteristics at the time of the survey and earlier retrospective times by considering all adolescents, who are in school and out of school including street adolescents and those involved in sex work.

1.4. Research Questions

The purpose of this study is to show the demographic and socio-economic conditions that influence sexual risk behavior among young people in urban areas of Ethiopian. To this end, the following are the basic research questions the study will address.

1. What motivates youths to engage in sex?
2. What are the socioeconomic and socio-demographic factors that affect youth sexual activity and risky sexual behavior in Awassa?
3. What are the protective and other risk factors of youth sexuality in the area under the study?

1.5. Objective of the study

The general objective of the study is to explore the sexual behavior of youths in the study area.

Specific Objectives

- To identify the sexual risk taking behavior for those youths who have been sexually experienced.
- To examine the association between sexual behavior and self perceived risk of HIV infection among youth living in the study area.

- To examine the socio-demographic and other socio economic determinants of sexual risk taking behavior.

1.6. Significance of the study

There are significant difference in culture, behavior and Socio- economic environment between urban populations in Ethiopia and those in other countries. Therefore, it would not be useful to directly transform programs from other countries in order to prevent risk behaviors. This study is, therefore, significant in that it attempt to provide a scientific basis for the understanding of sexual risk taking in the City that may be replicated to other urban centers in the country.

1.7 Limitation of the study

The survey was based on information collected at a single point in time. Even if an attempt was made to incorporate retrospective information in order to overcome this problem, it was beyond the scope this study to assess broad trends of sexual risk taking in terms of time periods. Moreover, the survey was based on limited information collected on sexual networks. For example, information on partner characteristics was not incorporated in to the study. Due to the problems encountered during focus group discussions it was not possible to support quantitative findings qualitatively.

1.8 Definition of Variables:

Dependent variable

Sexual risks are those behaviors that increase the likelihood of risk of transmitting HIV. Abstinence (never having sex) was labeled as totally safe. The level of risk was measured as a composite of age at first sex (1 for less than 18 and 0 otherwise), number of life time sexual partners (0 for 1 and 1 other wise), having sex with commercial sex workers (1 for yes and 0 otherwise), ever use of condom (0 for yes and 1 for otherwise) frequency of condom use (0 for always and 1 for otherwise), sexual net work (0 for totally monogamous and 1 for others). Level of sexual risk behavior was categorized according to the total score as high, medium and low. The cutoff points were

identified based on the cumulative frequency of the distribution of the total score.

Independent variables

A) Houschold socio economic status

A composite variable for house hold socio economic status (SES) was derived based on availability of durable household commodities like radio set and TV set, fathers' and mothers' educational level and employment. First, a score was derived for each respondent based on availability of durable household commodities (0 no durable commodity is available and 1 for either one or both of the commodities are available) and level of parents education achieved (0 for primary completed, 1 secondary or more). The other component to the score was current employment status of parents (0 for unemployed, 1 for employed). SES was then categorized according to the total score into high, medium and low. The cutoff points were identified based on the cumulative frequency of the distribution of the total score.

B) Religiosity

Religiosity was measured in terms of frequency of visit to religious institution and attendance of religious services. Therefore, a religious person is the one who frequently attended religious institutions and participate in religious services.

C) Living arrangement

A social variable, living arrangement was measured in terms of with whom the respondent live most of the time. The categories were living with both or one parents and living with others.

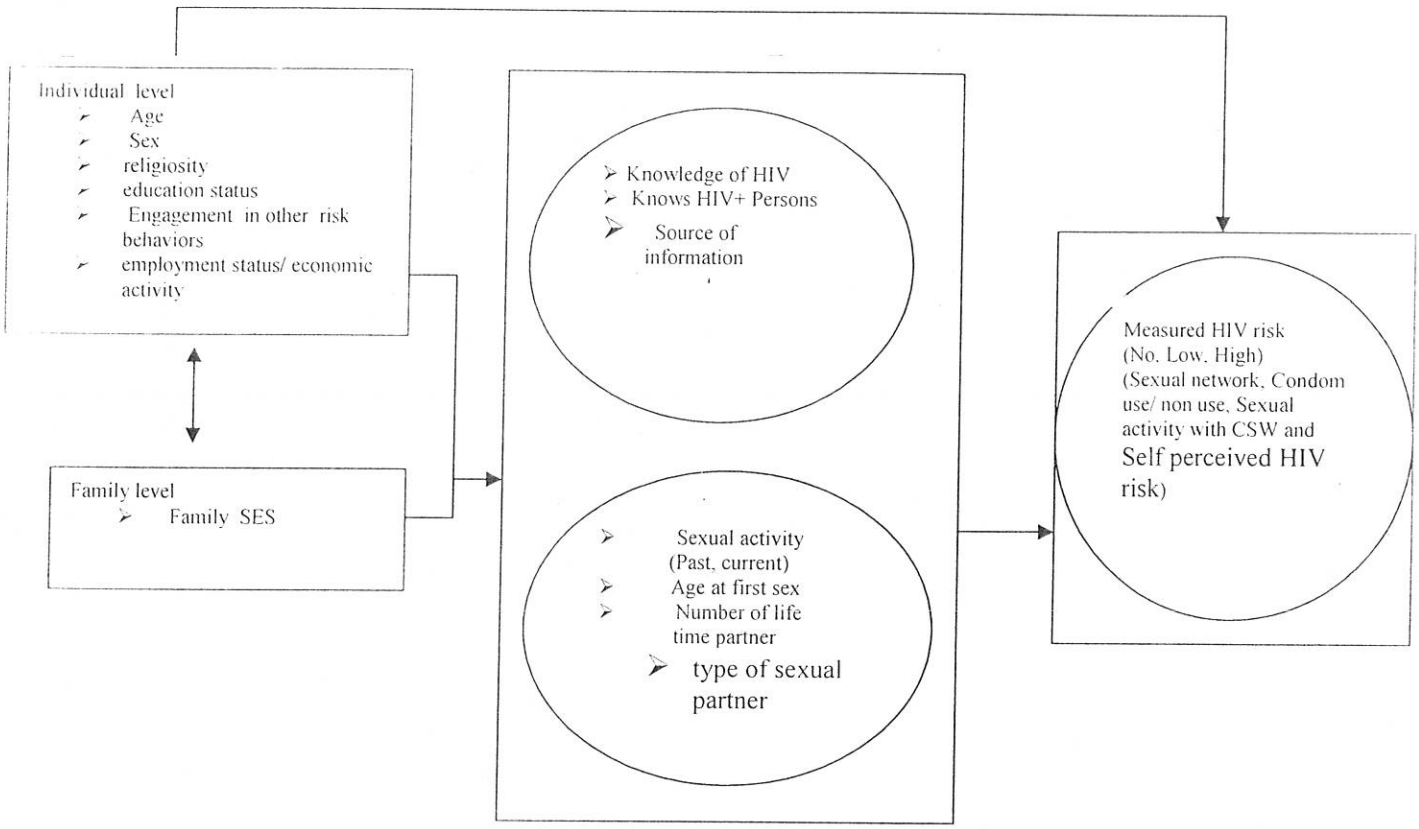
CHAPTER TWO

2. Methodology

The study considered youths aged 15-24 regardless of their educational status, employment status and level of sexual activity who are single or living with their parents as well as street youths. The study was based on face-to-face interview with youths at a place where they live.

2.1. Analytical framework

For the purpose of this study sexual risk behavior was treated as outcome variable. It was measured in terms of self perceived risk of HIV infection and indexed as a composite of some selected sexual risk behaviors. Moreover, socio- economic and demographic factors, knowledge of HIV/AIDS infection and sources of information regarding the virus were treated as background factors and intermediate variables in this study.



Source: Developed by the Researcher

2.2. Sample size Determination

In 1998 a study was conducted in order to asses the sexual activity of school youths in southern Ethiopia, particularly in Awassa. The study documented the fact that 36.4% of all youths had multiple sex partners (Negussie. 1998). This figure was used in order to estimate the minimum sample required for this study. Thus P is set at 0.364 and 1-p at 0.636. P is assumed to be normally distributed with mean pq and variance pq/n.

The values of p and q were plugged in the following formula to obtain the required sample size.

$$n = \frac{z^2_{a/2}\, p(1-p)}{d^2} + 10\% \text{ contingency}$$

$Z^2a/2 = 1.96 \approx 2$ Where Z= the standard normal deviate which corresponds to the 95% confidence level

d= margin of error = 0.05

P= proportion of youth who have had multiple sexual partner=0.364

1-p is the proportion of youth who have had a fixed sexual partner

The simple size is determined with the following assumptions

- A confidence interval of 95% ,a= 0.05
- A 5% margin of error is accepted

10% contingency, that is, for non-response

Since p=0.364 and 1-p=0.636, n is calculated as

$$n = \frac{z^2_{a/2}\, p(1-p)}{d^2} = 370 \text{ and } 10\% \text{ contingency} = 37$$

n= 370 +37 = 407

2.3. Sampling procedure

The household survey was based on two phases stratified sampling design.

The first phase sample selection was the selection of 'ketenas' (sub kebeles)

The city administration of Awassa is currently divided into 7- sub-cities and 38 sub-kebeles.

The geographic area of the city of Awassa was divided into three strata on the basis of physical environment, condition of neighborhood status and housing conditions as better, medium and poor. 24 sub-kebeles were grouped under poor neighborhood areas, 8 within medium neighborhood

areas and the remaining 7 were relatively better and grouped under rich neighborhood areas.

Then, ten sub-kebeles were randomly selected from the three strata that were proportionally distributed to the total the total number of ketenas that are in each stratum. Hence, 6 of the selected sub-kebeles were drawn from the poor stratum and 2 sub-kebeles from each of the remaining 2 strata.

Second phase sample selection: selection of sample element

Household were the unit of analysis. The list of households obtained from the kebeles Administration was utilized as sampling frame; households were randomly selected from the identified sub-kebles. All eligible respondents found in the sample household were interviewed using structured questionnaire.

The allocation of the size of sample households from each stratum was proportioned to its size. Moreover, snowball sampling was employed to select Street Adolescents.

2.4. Data collection Instruments

The study used structured questionnaire for date collection. The questionnaire was first developed in English, translated in Amharic and translated back in to English so that accuracy and consistency in the wording are ensured.

The questionnaire collected information on each youth's socio-economic and demographic characteristics as well as sexual activity and sexual experience. Furthermore, information on alcohol and other risk behavior and religiosity were collected at the time of the survey and on retrospective basis. On top of that, the socio-economic statuses of their family were also collected.

2.5. Survey Implementation

Two days training was given to the data collectors. A total of 18 persons participated in the training to serve as interviewers and 3 as supervisors. The training consisted of a combination of classroom training and practical experience. During the training, the questionnaire sections, questions and instruction were discussed in detail.

Actual fieldwork was carried out using 3 groups of interviewers, each group consisting of three male, three female interviewers and a supervisor. The principal investigator monitored and coordinated the fieldwork.

2.6. Data management and Analysis

All questionnaires were returned to the principal investigator for data Processing. Data processing consisted of editing, data entry, and editing of the computer-identified errors. A data entry clerk entered the data in to the computer. Data processing was done using SPSS.

Descriptive analyses of respondents' characteristics were made to obtain a general description of sexual risk behavior. Moreover, Multinomial Logistic regression was used to identify the relationship between the various dependent and independent variables.

2.7 Characteristics of the study area

2.7.1 Location

Awassa, the capital city of the Southern Nations Nationalities and Peoples Regional Government, is located 7.06 degree north of the equator and 38.48 degree east. Awassa is at 1685 mts above sea level and the city sits on a total area of 4000 hectars. The city is situated 275 kms south of Addis Ababa. The city of Awassa is located on the shore of one of the Rift Valley

lakes and Tabor Hill and Mt. Alamura are situated at the western and south western ends of the city.

2.7.2. Demographic Characteristics

This section briefly highlights demographic characteristics that are either directly or indirectly related to youths' sexual risk in the city.

A) Population Size

According to the 1994 census the population size of the city of Awassa were 69,169 of which 50.6% were males and the remaining 49.4% were females giving the sex ratio 97.4(CSA,1996). According to the same report the size of population aged 15-24 were 18,453 of which 8504 were males and 9949 were females. The result shows that there was unequal sex ratio in these age groups which was 116.

Table: 2.1 **Population size by five years age group (1994).**

Age group	Male		Female		Total
	N	%	N	%	
0-4	3938	51.3	3729	48.7	7667
5-9	4616	49.8	4657	50.2	9273
10-14	4762	47.0	5352	53.0	10114
15-19	4623	44.8	5692	55.2	10315
20-24	3881	47.6	4257	52.4	8138
25-29	3603	49.6	3657	50.4	7260
30-34	2701	55.3	2177	44.7	4878
35-39	2393	56.5	1841	43.5	4234
40-44	1641	65.2	874	34.8	2515
45-49	1064	65.0	572	35.0	1636
50-54	646	59.1	446	40.9	1092
55+	1161	56.7	886	43.3	2047

Source: CSA (1996)

B) Religion

According to the 1994 national census, orthodox Christians were the majority constituting 65% of the total population of the city of Awassa whereas protestants, Catholics and Muslims constitutes 26.9%, 3.3% and 4.0 % respectively (CSA,1996).

***Table:2. 2* Population by religion (1994)**

	Orthodox	Protestant	Catholic	Muslim	Others
Both sex	44960	18604	2296	2826	390
Male	22644	9358	1116	1650	201
Female	22316	9246	1180	1176	189

Source: CSA (1996)

C) **Migration status**

According to the 1994 Population and Housing Census of Ethiopia about 55.2% were migrants, whereas 44.1% were non migrants and the remaining 0.07 did not stated their status. Moreover, the census also shows that 58.9% of the migrants were from other urban center while 40.9% were from rural areas (CSA, 1996).

***Table:2. 3* Population by Migration status**

	Non migrant	Migrant	Not stated	Place of last residence	
				Urban	Rural
Both sex	30420	38064	451	22454	15581
Male	15311	19281	209	11170	8097
Female	15109	18783	242	11284	7484

Source: CSA (1996)

D) **Literacy Status**

According to the 1994 population and housing census, out of all population aged ten years and above 82.5% were all literate while the reaming 17.5% were illiterate.

***Table:2. 4.* Population aged ten years and above by literacy status**

	Population size	Illiterate	All literate
Both sex	51996	9060	42872
Male	26248	3115	23103
Female	25748	5945	19769

Source: CSA (1996)

2.7.3. Regional HIV Prevalence

The HIV prevalence was estimated to be 2.8% and 2.9% in the years 2003 and 2004 respectively. A report by the Ministry of Health shows that there was differential in prevalence rate based on place of residence. For example, in urban areas, HIV prevalence was estimated at 9.1% in the year 2004 while the rural prevalence was only 0.45 in the same year (MoH.2004). The same report revealed that a total of 184,000 and 202,000 persons were estimated to be living with HIV in the years 2003 and 2004 respectively. Of these, 31,000 and 33,000 new HIV infection occurred in 2003 and 2004 respectively in the region.

***Table:2.5.* Adult HIV prevalence in SNNPR**

Adult Prevalence%	2002	2003	2004	2005
Total	2.6	2.8	2.9	3.0
Female	3.0	3.1	3.3	3.4
Male	2.3	2.4	2.5	2.6
Urban Areas	9.3	9.2	9.1	9.1
Rural areas	2.0	2.1	2.3	2.4

Source: adopted from MoH 2004

2.7.3.1 HIV prevalence in the city of Awassa

The Awassa health center, one of the 37 antenatal care surveillance sites in the year 2003, has been collecting data since 1998. The table below shows prevalence of HIV for specimens collected in Awassa Health Center. According to the table, HIV prevalence has been declining continuously from the year 1998 to 2003 except for the year 2002.

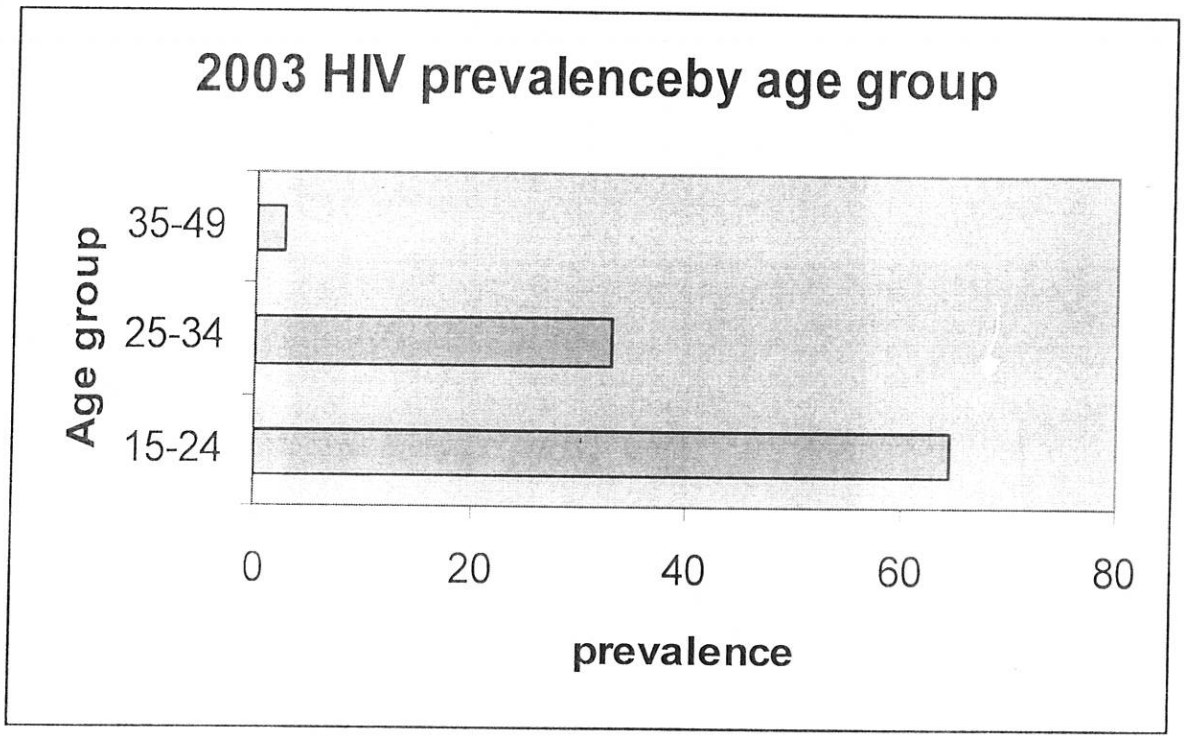
***Table:2.6.* HIV prevalence for Awassa Health Center from1998-2003**

Year	Awassa Heath Center surveillance site
1998	14.4
1999-2000	11.5
2001	10.0
2002	11.1
2003	8.8

Source: adopted from MoH 2004.

The Graph below depicts the prevalence of HIV for specimens collected in Awassa Health Center in the year 2003 by age group. According to the graph, 64.4% of all positives are in the age group 15-24. Moreover,32.8% and 2.6% of all positives were reported for age ranges of 25-34 and 35-49, respectively.

Fig.2.1 **HIV prevalence by age group**



Source: adopted from MoH 2004

CHAPTER THREE

3. Back ground characteristics of respondents

A total of 383 youths participated in the study, of which 51.7% were males and 48.3% were females. The age of youths ranges from 15-24, with 41.5% between the age group 15-19 and 58.5% in the age group 20-24 .Of the 383 youths surveyed, 51.7% were males and 48.3% were females. Moreover, the mean and median ages of the surveyed youths were 20.1 and 20.0 respectively. The standard deviation of the reported age of the respondents was 2.416 years. Moreover, the minimum age reported was 15 while the maximum age was 24.Quite a large proportion (64.0%) of youths were orthodox Christians followed by Protestants (23.2%) and Moslems (8.9%). Furthermore, large proportions of the respondents (95.0%) were litrate, 5% illiterate. Among the literate respondents (32.7%) had primary school education, (48.6%) had secondary school education and the remaining (18.7%) had attended school beyond secondary level education. In addition to that, most of the respondents (60.3%) were economically inactive during the past one month before the survey. Among the economically active respondents most (82.2%) responded that they control the money they earn during the past month.

***Table-3.1* Back ground characteristics of respondents**

Age in five years interval(n=383)	Percent	N
15-19	41.5	159
20-24	58.5	224
Total	100.0	383
Sex of respondents(n=383)		
Male	51.7	198
Female	48.3	185
Total	100.0	383
Religious domination(n=383)		
Orthodox	64.0	245
Protestant	23.2	89
Moslem	8.9	34
Catholic	3.1	12
Others	0.8	3
Total	100.0	383
school attendance(n=383)		
Yes	95.0	364
No	5.0	19
Total	100.0	383
Highest level of school completed(n=364)		
Primary	32.7	119
Secondary	48.6	177
Technical/vocational	13.5	49
University/college	5.2	19
Total	100.0	364
Employment status in the last 30 days(n=383)		
Nothing	60.3	231
Employed	13.8	53
Selling goods	8.6	33
Casual labor	11.0	42
Others	6.3	24
Total	100.0	383
Who controls the money that you earn(n=152)		
My self	82.2	125
Others	17.8	27
Total	100.0	152

Source: Household Survey, 2005

Employment status of the respondents was cross-tabulated with sex of the respondents and a Chi square test was administered in order to see any association that might exist between the two variables. The Chi square test shows that there is an association between employment status and sex of the respondents (χ^2=.014 where p<.05).

***Table:3.2* Economic activity during the past one month prior to the survey**

Employment status in the last 30 days	Sex of respondents				Total
	Male	N	Female	N	
Nothing	30.8	118	29.6	113	60.4
Employed	5.4	21	8.3	32	13.8
Selling goods	4.7	18	3.9	15	8.6
Casual labor	8.1	31	2.8	11	10.9
Others	2.6	10	3.7	14	6.3
Total	51.7	198	48.3	185	100

Source: Household Survey, 2005

3.1. HIV knowledge and awareness

There was a high level of awareness of HIV/AIDS in the study population. More than 93% of the youths indicated that they had heard of HIV/AIDS. Among these youths most (>90%) were aware of sexual transmission and transmission by sharing syringes and blood transfusion.

In addition youths were asked to name ways to prevent HIV transmission. Nearly 83% of youths reported that there was some thing they could do to avoid AIDS. Of the 383 youths included in the study, "avoid sex" was

mentioned by 95.2% of the respondents, "stay faithful to partner" by 93.2%" encourage partner to stay faithful " by 91.1%,"use condom for ever act of sex" by 92.6%,"avoid sharing needles" by 93.9% and "avoid casual sex " by 90.7%.

***Table3. 3:* Knowledge of modes of transmission of HIV/AIDS (n=383)**

Transmission mode	Percentage
Unprotected sex	97.5
Blood transfusion	93.7
Syringes used by various people (sharing needles)	95.5
During pregnancy	85.5
Mother to child (breastfeeding)	88.6
Casual contact (touching)	71.8
Ways to prevent HIV transmission	
Avoid sex	95.2
Stay faithful to partner	93.2
Encouraged partner to stay faithful	91.1
Use condom for every act of sex	92.6
Avoid sharing needles	93.9
Avoid casual sex	90.7

Source: Household Survey, 2005

Despite a strong national and local HIV risk reduction campaign and more than two decades long history of the epidemic, only 68.4% of the respondents reported that an HIV positive person could look healthy. Moreover, only 21.7% knew that HIV was not transmittable by sharing household utensils and 75.5% did know AIDS cannot be transmitted through mosquito bite. Furthermore, 20.4% believed that HIV/AIDS is curable in some cases. In general the data revealed that misconception regarding HIV persists among the study population.

Table3. 4: Percentage distribution of knowledge of HIV/AIDS of the respondents

	Agree		Disagree		Do not know		Total		Missing system	
	%	N	%	N	%	N	%	N	%	N
A person can get AIDS through mosquito bite	13.1	50	75.5	289	9.7	37	98.2	376	1.8	7
HIV infection could pass through sharing household utensils	21.7	83	71.8	275	5.5	21	99.0	379	1.0	4
A healthy looking person can be infected with the virus	68.4	262	26.9	103	3.7	14	99.0	379	1.0	4
A person can get AIDS the first time he/she has sex	63.4	243	23.0	88	11.7	45	98.2	76	1.8	7
AIDS is curable in some cases	20.4	78	68.1	261	8.6	33	97.1	372	2.9	11

Source Household Survey, 2005

3.2. Sexual activity and experience

Respondents were asked their current age and their status of ever having sex. According to the survey, 171 respondents 49.3% had sex where as 176(50.7%) reported that they never had sex. The data revealed that 39% of the total respondents in the age group 15-19 had sex at least once while 56.7% among those in the age group 20-24 had sex at least once in their life time. The chi square test of independence revealed that there is an association between current age and ever having sex ($\chi 2$ =0.001 and p< .05). This is supported by the result of Cramer's V correlation coefficient (0.174 Approx. Sig. 0.001). Nevertheless, the strength of the relation is weak but positive.

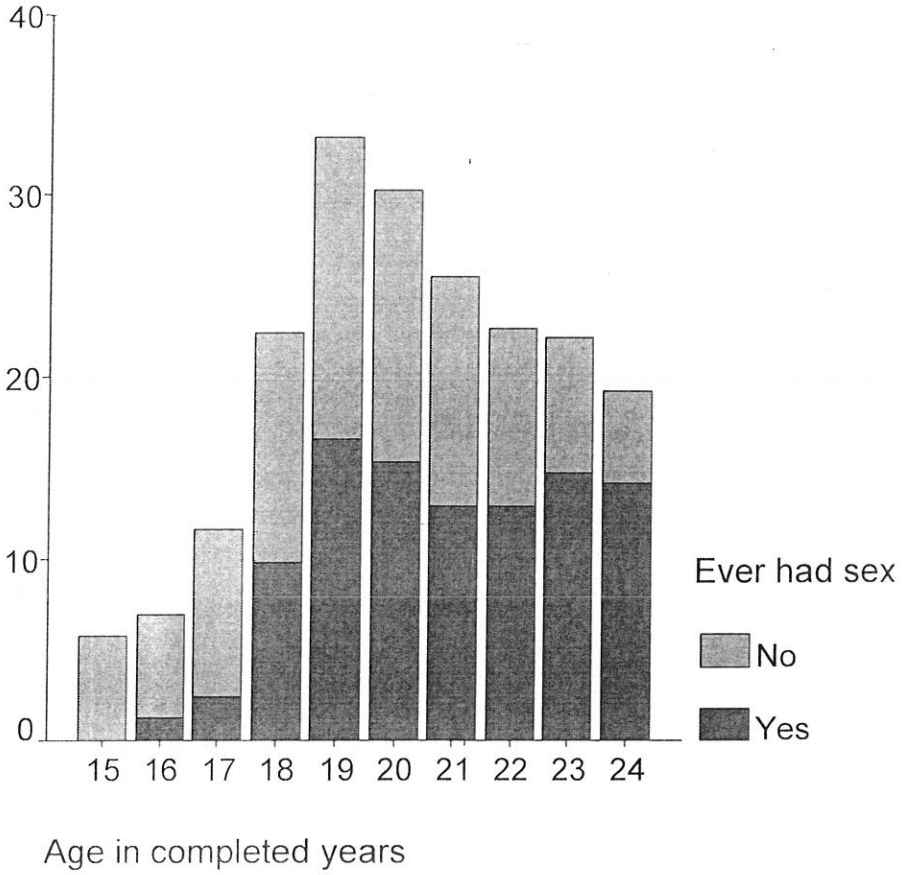
Table:3.5 **Percentage of who ever had sex by current age Current age by ever had sex (n=347)**

Age groups	Ever had sex	
	Yes	No
15-19	39.0	61.0
20-24	56.7	43.3

Source: Household Survey, 2005

The graph below depicts that no respondent currently aged 15 had had sex. In addition to that, negligible proportion of respondents who ever had sex are currently aged below17. Moreover, the majority of the respondents who ever had sex are currently aged 19 followed by aged 20.

Fig3.1 Respondents by age and experience of having sex



Source: Household Survey, 2005

Youths who had ever had sex were asked to report whether they had been sexually active during recall periods prior to the survey. The recall periods were 1 month, 3 months and 12 months. The figure below shows that although youths may have had sexual intercourse, they may not have been sexually active during the recall period prior to the survey. Approximately 68.8% of the sexually experienced youths were sexually active within the three months prior to the survey. Nevertheless, 74.2 of sexually experienced youths reported that they were sexually active within 12 months prior to the survey. Moreover, only 42.3% of the adolescents who ever had sex were sexually active within a month to the survey.

Table: 3.6 **Percentage distribution of sexual activity during recall period (n=171)**

	Yes		No		Do not remember		Total	
	%	N	%	N	%	N	%	N
Ever had sex during the past 1 month	42.3	72	56.3	96	1.4	3	100	171
Ever had sex during the past 3 months	68.8	118	26.3	45	4.9	8	100	171
Ever had sex during the past 12 months	74.2	127	21.2	36	4.6	8	100	171

Source: Household Survey, 2005

Status of ever having sex is cross- tabulated by sex of the respondents in order to see any association between the two variables. According to the table below out of the total respondents who admitted that they had sex 52% were male while the remaining 48% were females. A Chi square test was used to explore the possible association between sex and status of ever having sex. The test only indicates the existence or absence of association between the two variables. The chi square test of independence ($\chi 2 = 0.51$ and $p < .05$) revealed that the two variables have no association.

Table: 3.7 **percentage distribution of Ever had sex by sex of respondents**

Ever had sex	Sex of respondents	
	Male	Female
Yes	52.0	48.0
No	51.7	48.3

Source: Household Survey, 2005

Youths were asked at what age they first had sex. The result shows that 10.5 %of those who had sex begin having sex prior or at exact age 15. Moreover, 81% of the respondents who ever had sex begin sex while they were within the age group 15-19 while the remaining 8.5% begin sex after age 20.

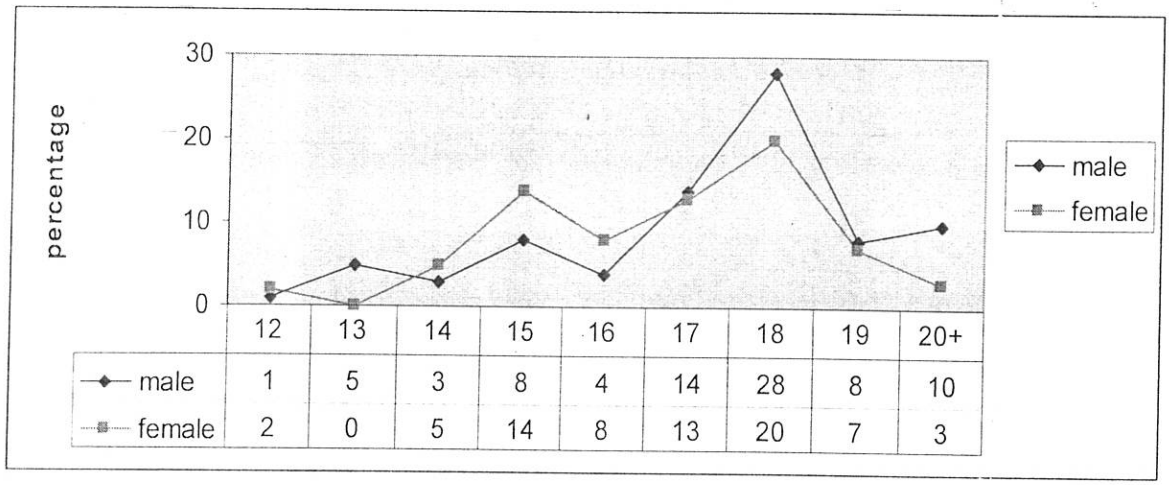
***Table:3.8* percentage distribution of age at first sex**

Age at first sex	Percent	Number
10-14	10.5	18
15-19	81.0	139
20-24	8.5	14
Total	100.0	171

Source: Household Survey, 2005

A sizeable proportion of the sexually experienced youths reported their first sex by age 18. Moreover, more females than males had sex at or before 15 years of age. Nevertheless, males out number that of females by having experienced sex at exact age 18. While these numbers are concerned, it is important to remember that the majority of the youths in the study area had not had sex by age 15 years, and many older youths had not experienced sex. It is also important to point out that some youths reported sex at age twelve.

***Fig.3.2* Age at first sex by sex of respondents**



	12	13	14	15	16	17	18	19	20+
male	1	5	3	8	4	14	28	8	10
female	2	0	5	14	8	13	20	7	3

Source: Household Survey, 2005

Age at first sex was cross tabulated with sex of respondents in order to see any association between the two variables. The table revealed that 56.3% of those who begin sex before age 15 were male. The table also shows that only 23.1% of the youths who begin sex after age 20 were females. The chi square test showed that ($\chi 2$ =0.173) there is no association between age at first sex and sex of the respondents.

***Table: 3.9* Age at first sex by sex of respondent**

Age at first sex by five years age groups	Sex of respondents			
	Male	N	Female	N
10-14	56.3%	10	43.8%	8
15-19	50%	69	50%	69
20-24	73.4%	11	26.6%	4
Total	52.6%	90	47.1%	81

Source: Household Survey, 2005

The educational level of youth's Parents particularly, that of mothers was cross tabulated with ever having sex of youths. For example, 32.9% of those youths who ever had sex had uneducated mothers. Moreover, 20.9% and 23.4% of those youths who eve had sex had mothers having educational level less than primary education respectively. In other words, more than two third of those youths who ever had sex had mothers having primary education or below.

Table: 3.10 **percentage distribution of ever had sex by Mother's educational level**

Mothers Educational status	Ever had sex		Total
	Yes	No	
No education	32.9	25.0	28.8
Less than primary	20.9	19.0	19.9
Primary	23.4	27.4	25.5
Secondary	17.7	22.6	20.2
Vocational technical	.6	1.	1.2
University	4.4	4.2	4.3
Total	100	100	100

Source: Household Survey, 2005

The data revealed that the characteristics of youth's family origin influence his or her sexual risk taking. For instance, mother's educational status was found to be related with the age at the onset of sexual intercourse i.e. youths who postpone sexual intercourse have better- educated mothers. The data showed that 75.6% of youths who had uneducated mothers begin sex within the age group 15-19. Moreover, the figures for youths who had mothers educated less than primary school and up to primarily school constitute 96.3% and 85.3% respectively. What is most important in this regards is the fact that no individual who ever had sex before age 15 had

mother educated beyond secondary level education. In other words, early onset of sexual activity in youths is a function of the characteristics of the individual and his or her family of origin- in particular mother's education level.

Table: 3.11 **Percentage distribution of age at first sex by mother's education**

Mothers educational status	Age at first sex by five years age groups						Total
	10-14	N	15-19	N	20-24	N	
No education	15.6	7	75.6	34	8.9	4	100
Less than primary	3.7	1	96.3	26	------	____	100
Primary	8.8	3	85.3	29	5.9	2	100
Secondary	11.1	3	74.1	20	14.8	4	100
Vocational technical	-----	____	------	____	100.0	1	100
University	-----	____	85.7	6	14.3	1	100
Total	9.9	14	81.6	115	8.5	12	100

Source: Household Survey, 2005

Even if the reliability and completeness of data on lifetime partnership is questionable, respondents were asked about their sexual partner through out lifetime which gives an indication of the level of sexual networking. According to the data, 30.9% of sexually experienced 15-24 males and females had only one partner throughout their life time. Moreover, 9.4% of sexually experienced youths had two sexual partners during their lifetime. Furthermore, 11.7% of the respondents who experienced sex had more than four sexual partners and 9.4% had 3-4 sexual partners throughout their life time.

Table: 3.12 **Percentage of respondents by number of lifetime sexual partner.**

Life time sexual partner(n=171)	Percent	Number
1	30.9	53
2	9.4	16
3-4	9.4	16
>4	11.7	20
Do not remember	38.6	66

Source: Household Survey, 2005

Among those who had ever experienced sex, 19.3% males and 11.7% females had one lifetime sexual partner. In addition to that, the data revealed that among those 5.8% males and 3.5% females had two sexual partners.

Table: 3.13 **percentage distribution of number of lifetime sexual partner by sex of respondents**

Sex of respondents	Number of life time partner					Total
	1	2	3-4	>4	Do not remember	
Male	19.3	5.8	7	7.6	12.3	52
Female	11.7	3.5	2.3	4.1	26.4	48
Total	31	9.3	9.3	11.7	38.7	100

Source: Household Survey, 2005

Mothers' educational level was also cross-tabulated with the number of sexual partner a youth had. It was found out that uneducated mothers had constituted the lion share of youths who had had more than 4 sexual partners. Moreover, 30% of youths who had had more than 4 sexual partners responded that their mothers attended education below primary level. Furthermore, more than 43% of youths who had had 3-4 sexual partner replied that their mothers attended schooling for few years i.e. only

less than primary level education. In short, the data revealed that mothers' education level is important regarding youths' sexual risk taking is concerned.

***Table: 3.14* percentage distribution of number of life time sexual partner by mother's educational level.**

Mothers educational level	Life time sexual partner				Total
	1	2	3-4	>4	
No education	26.1	31.3	12.5	35.0	26.5
Less than primary	10.9	12.5	31.3	30.0	18.4
Primary	26.1	37.5	37.5	25.0	29.6
Secondary	28.3	12.5	12.5	5.0	18.4
Vocational technical	2.2	--	--	--	1.0
University	6.5	6.3	6.3	5.0	6.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Household Survey, 2005

As stated earlier, research shows that youths have various reasons for having sexual intercourse ranging from pleasure to peer pressure to financial reasons. In this study, it was reported that 10.52% of youths who had sex for the first time stated that it was for pleasure, while 20.50% stated that it was because of peer pressure or friends doing it. Moreover, 16.37% of youths who experienced sex reported that they had sex for the first time because they were in love and equal numbers reported because they needed money or food. Furthermore, according to the data 5.26 % were forced into their first sexual experience.

***Table: 3.15* Numbers of respondents who agrees on the reasons to begin sex**

Reasons to have sex for the first time	Percentage	N
Forced	5.26	9
Fun/enjoyment/pleasure	10.52	18
In love	16.37	28
Needed food/money	16.37	28
Aroused	4.67	8
Friends doing it	20.50	35
Other	2.34	4
Not stated	23.97	41
Total	100	171

Source: Household Survey, 2005

Since many youths cite peer pressure as a reason for indulging in sex, the adolescent's perception about whether their peers are sexually active was compared with their own reported rates of sexual experience. Youths regardless of reported rate of sexual experience overestimated their peers' likelihood to be sexually active. For example, while only 44.6% reported that they were sexually experienced, a total of 80.9% of all youths believed their peers to be sexually active. In other words, only 12.4% of youths believed that their peers were not sexually active, while the remaining 6.7% responded that they do not know.

***Table: 3.16* percentage distribution of Perception of peers' level of sexual activity**

Perception of peers sexual activity	Percent	Number
Yes	80.9	310
No	12.4	47
Do not know	6.7	26
Total	100	383

Source: Household Survey, 2005

A cross tabulation of self reported sexual activity and perception to wards peer sexual activity revealed that 126 respondents who reported that they never had sex perceived their peers to be sexually active.

Table: 3.17 **percentage distribution of ever had sex by perception of peers level sexual activity**

Eve had sex	Perception to wards peer sexual activity			Total	
	Yes	No	Do not know	percentage	N
Yes	45.4	2.7	1.4	49.5	169
No	37	8	5.5	50.5	172
Total	82.4	10.5	7.1	100	341

Source: Household Survey, 2005

About 34.5% of both females and males aged 15–24 who had sex, believed they were at some risk of getting HIV. Moreover, 93.1% of those who did not have sex believe that they were not at personal risk HIV. Furthermore, 65% of adolescents who had had sex did not believe they were at any personal risk of HIV; thus, the vast majority of youths in the study area did not consider themselves at any personal risk of HIV/AIDS.

Table: 3.18 **percentage distribution of ever had sex by self reported level of risk of HIV**

Ever had sex	Personal risk of getting HIV/AIDS		Total
	Yes	No	
Yes	34.5	65.5	100
No	6.9	93.1	100
Total	20.6	79.4	100

Source: Household Survey, 2005

The respondents were asked whether they know some one who is infected with HIV/AIDS. The data revealed that 75.2% of the respondents know at least one person infected with the virus while the remaining 24.8% knew no one living with the virus. Chi square test was administered between knowing any person infected with HIV and sexual net work as risk behavior. The Fisher's Exact Test (0.042 where $p<.05$) shows that there is an association between the two variables. Furthermore, the test was supported by Crammers correlation coefficient (-0.095) i.e. there is negative relationship between knowing some one infected by the virus and sexual network but the magnitude of the relationship is weak. Furthermore, knowledge of persons infected with the virus and number of life time sexual partner is cross tabulated and a Chi square test was administered in order to see any relationship between the two variables. Fisher's Exact Test was ($\chi 2=.037$ $p<.05$) showing there is relationship between the two variables. The test was also supported by crammer's V (-.098).Therefore, there is a negative relationship between the two variables even if the magnitude of the relationship is weak.

Table 3.19: **percentage distribution of knowledge of person living with HIV virus**

Know any one who has had AIDS	Valid Percent	N
Yes	75.2	288
No	24.8	95
Total	100.0	383

Source: Household Survey, 2005

***Table:3.20* percentage distribution of knowledge person living with HIV virus by sexual net work**

Know any one who has had AIDS	Sexual Network		Total
	Monogamous	Others	
Yes	50.4	24.8	75.2
No	19.1	5.7	24.8

Source: Household Survey, 2005

***Table: 3.21* percentage distribution of knowledge of person living with HIV virus by number life time sexual partner.**

Have you ever know any one who has had AIDS	Number of life time sexual partner		Total
	1	>1	
Yes	50.1	25.0	75.3
No	19.1	5.6	24.7

Source: Household Survey, 2005

3.3 Condom use

The data revealed that nearly all youths i.e.96.8% had heard of condom. Adolescents identified books and magazines as the major sources of information regarding condom. Besides, friends were the second major sources of information regarding condom followed by radio and teachers constituting a total of 28.8%.In addition to that, other sources including family members were identified as sources of information about condom. The condom use rate among those sexually active youths is 87.7%. In this study among those who reported condom use, the majority (68%) used it regularly, 7.3% used it almost always, 18.6% used it some times, and 5.3% used it only once. This inconsistent use of condom put soot that the youths are at high risk of acquiring STIs including HIV/AIDS. Those respondents who ever had sex but reported non use of condom identified their reasons. The majority (61.9%) pointed out that they are not using condom because they had only one partner while 14.2% believed that condom use diminishes pleasure .Moreover, partner objection, fear to buy condoms and wrong belief like condoms are only used with prostitutes constituted 23% of respondents.

used to test for any possible differences that might exist between Sex of respondents, school attendance, highest level of school completed, religious denomination, current religiosity, past religiosity, father's educational status, mother's education, household socio economic status, involvement in other risky behavior, sexual involvement of friend's , knowledge of person living with the virus, knowledge regarding HIV infection, employment status, person who control income, person with whom the youths live (living arrangement at different times) and sexual risk taking behavior .

Moreover, Cramer's V was employed to measure the presence or absence and the strength of correlation. Cramer's V measures correlation between nominal variables and it is advantageous over methods like Phi and Yule's Q for it can be employed when tables are larger than 2 X2.

Sex of respondents

Sex of respondents was cross-tabulated with sexual risk taking behavior in order to identify if there is any possible association between the two variables. The Chi-square test (χ^2=2.18, Asymp Sig. = 0.335) revealed that sex of respondents was not significant in explaining differences in sexual risk taking behavior of youths in the study area.

School attendance

The Chi- square test (χ^2=9.32, Asymp Sig. =0.009) revealed that school attendance was significant in explaining differences in sexual risk taking behavior of youths in the study area. The Cramer's V (0.13) test confirmed that there is correlation between school attendance and sexual risk taking behavior. However, the variable, highest level of school completed was found to be not statistically significant (χ^2=9.67, Asymp Sig. =0.139) in illuminating sexual risk taking behavior of youths in the study area.