

**ADDIS ABABA UNIVERSITY  
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**Sexuality, Perception of risk of HIV/STIs and Condom use  
among high school adolescents in South-Gondar Administrative  
Zone, Amhara Region**

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**Sexuality, Perception of risk of HIV/STIs and Condom use among high school adolescents in South-Gondar Administrative Zone: A cross-sectional study**

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## **LIST OF ABBREVIATIONS**

AAU	Addis Ababa University
AIDS	Acquired Immunodeficiency Syndrome
ARC	AIDS Resource Center
FCSW	Female Commercial Sex Workers
DCH	Department of Community Health
DHS	Demographic and Health Surveys
FGD	Focus- Group Discussions
FHI	Family Health International
HIV	Human Immunodeficiency Virus
HAPCO	HIV/AIDS Prevention and Control Office
ICPD	International Conference on population and Development
MOH	Ministry of Health
MF	Medical Faculty
NGOs	Non-governmental Organizations
RH	Reproductive Health
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
WHO	World Health Organizations
UNAIDS	Joint United Nations Programme on HIV AIDS
UNICEF	United Nations Children’s Fund
UNFPA	United Nations Population Fund
VCT	Voluntary and Confidential HIV Counseling and Testing



## **ABSTRACT**

A cross-sectional descriptive survey through a self-administered, anonymous and structured questionnaire was conducted from December 2003 to January 2004 in randomly selected two high schools in South Gondar Zone to determine the sexual behavior of adolescents, their risk perception about HIV/AIDS and condom use. A total of 709 adolescents participated in the study. Of these, 489(69.0%) were males and 220(31.0%) were females. About 9% of the respondents were sexually active. Fifteen, (23.4%) of the sexually active respondents claimed to have more than one sexual partner. About 14.8% had coital contact with female commercial sex workers of which only 37.5% of them reported ever condom use. Six hundred seventy four respondents (95.1%) knew about STDs and AIDS was the most commonly known STD (92.1%) followed by gonorrhoea (89.85%) and Syphilis (88.9%). About 76.9% of the respondents mentioned teachers as the most common source of information for HIV/AIDS and STIs. More than 70% of the respondents answered favorably for all questions concerning “normal” interactions such as eating together, shaking hands and continuing friendship with HIV/AIDS patients. About 5.8% of students perceived to high chance of acquiring HIV. Only 47.4% of the students felt that most students have adequate information about condoms. Four hundred twenty two (59.5%) of the students approved the idea of condom distribution in schools. About 82.2% of school adolescents claimed to be voluntary to under go voluntary counseling and testing for HIV.

It was concluded that adolescents are engaged early to practice sex, exposed to high risk sexual behavior, unfavorable attitude manifested to towards HIV/AIDS patients, the perception of risk acquisition is weak and there is inadequate family and social support to discuss about sexuality and protective measure.

Hence, recommended that programs targeted towards adolescents should work with adolescents, promote their participation and equipped them with life skills to put their knowledge in to practice, and respond timely to the existing high demand for VCT by establishing accessible and affordable service centers.

Key words: Adolescent, sexuality, risk perception, condom use

# 1. INTRODUCTION

According to WHO/UNFPA/UNICEF the term “adolescence” has been defined as including those aged between 10-19years. A distinction is drawn between early adolescence (10-14 years) and late adolescence (15-19 years) (1).

Adolescence is the time of transition from childhood to adulthood, a time of physical, psychological and social changes. These changes have their specific characteristics in each cultural context and they are in steady change according to the development of society. Adolescents are a large and growing segment of the population. More than half of the world’s population is below the age of 25, and four out of five young people live in developing countries(2). During adolescence, young people develop their identity, move towards physical and psychological maturity, and become economically independent. Although adolescence generally is a healthy period of life, many adolescents often are less informed, less experienced, and less comfortable accessing family planning and reproductive health services than adults (3).

Adolescents may experience resistance or even hostility from adults when they attempt to obtain the reproductive health information and services they need. They therefore may be at increased risk of sexually transmitted infections (STIs), HIV, unintended pregnancy, and other health consequences that can affect their futures-and the future of their communities- for many years to come. Adolescents’ circumstances and needs vary tremendously depending on individual characteristics such as age, sexual activity,

schooling, and employment status, as well as their position within the range of adolescent years (4).

Despite increasing attention given worldwide to education, secondary-school enrollments of girls still lag behind boys'. For women ages 15 to 19, complications of pregnancy, childbirth, and unsafe abortion are the major causes of death. Young people ages 15 to 24 have the highest rates of sexually transmitted infections (STIs), including HIV. Statistics on rape suggest that between one-third and two-third of rape victims worldwide are 15 years old or younger (5)

An ever-increasing adolescent sexuality has become one of the major risk factors in the current pandemic of AIDS and its social, economical and health consequences (6). All young people develop an interest in sexuality during the periods of puberty and adolescence, because they became aware of their emerging bodily changes and of their physical differences (7).

Young people are at the center of the global HIV/AIDS pandemic. They also are the world's greatest hope in the struggle against this fatal disease. Today's youth have inherited a lethal legacy that is killing them and their friends, their brothers and sisters, parents, teachers and role models. Yet only a fraction of them know they are infected (8). Along with increased exposure to STIs and unintended pregnancy, adolescents who engage in sexual activity outside of marriage may face social stigmas, family conflicts, problems with school, and the potential need for unsafe abortions (9).

Effective prevention that enables people to adopt safer behavior requires not only just knowing who is at risk, but also understanding why they engage in risk behaviors; motivating them to reduce their risk; developing their knowledge and skills; improving their access to means of prevention in ways that are appropriate to them; and providing a supportive social and policy environment for behavior change (10).

Ethiopia's youth accounts for about 34 percents of the total population of the country. They are exposed to various risks such as early marriage, early pregnancy, STDs including HIV, unemployment, drug abuse and crimes. Hence, there have been several initiatives concerning the youth. These initiatives are more concentrated in the urban Ethiopia. This has been highly incriminated the rural youth are the victims of the risk at most (11).

Adolescents must learn the facts before they become sexually active, and the information needs to be regularly reinforced and built on, both in the classroom and beyond. A basic education of good quality for all children, offering sound knowledge about sexuality and HIV, is essential.

Any intervention measure towards adolescents should appropriately aim at school, which is where at least a substantial proportion of them are found. The reason for selecting schools is not only because they are "simply" available; in schools it is easy and conducive to provide them with information along side their formal training; and most

important of all, they will have the chance to internalize what they have been taught among themselves. Enduring patterns of health behavior can be established, including postponing the onset of sexual activity, which can quell the spread of HIV/AIDS. Establishing health patterns from the start is easier than changing risky behaviors already entrenched. Schools, parents' extended families, communities and peers are critical in guiding and supporting young people to make safe choices about their health and Well-being.

To date limited information is available concerning the specific determinants of condom use among school adolescents. Although various survey have been done to study sexuality and contraceptive use among school adolescents in Ethiopia, most of these studies are conducted in major towns and there is also a great gap between knowledge and practice which needs detailed research. In addition, most of the studies did not specifically assess factors that contribute to low use of condom among school adolescents. More ever, we have little information regarding risk perception of HIV/AIDS and STIs among the target groups. Thus, in order to generate further information on sexuality, perception of risks of HIV/STIs, and condom use, this cross-sectional study was conducted among high school adolescents. The study also considered the importance of collecting combined quantitative and qualitative data.

Therefore, this study attempted to answer questions like, how do adolescents perceive the extent to which their social environment support their actions to engage in protective behavior. How do adolescents perceive the risks associated with sexual activity? And

how peers and family support adolescents to use condom? And what factors facilitate or deter condom use among high school adolescent.

The information obtained from this study would be an important input for future efforts and to have influence in reorienting perception and in program developments of adolescents' reproductive health.

## **2. LITERATURE REVIEW**

### **2.1 BACKGROUND**

Adolescence comes from a Latin word “adolescere” which means to grow up. It is a cultural phenomenon unique to each civilization or society. On the other hand puberty is a biologic process universal to children everywhere (12).

Adolescence is a time for natural experimentation, abstract thought contemplating the future, empathy and idealism, building self-esteem; a time of self-criticism and the questioning of others and a time of burgeoning of the capacity to reproduce. It is a time when new skills and knowledge are needed for positive relationships with others, and to begin life in the work place: a time to enjoy life before the responsibilities of adulthood begin, in ways, which don't threaten their health and well being (13).

The definition of adolescence especially, that of youth has been changing in response to fluctuating political, economic and socio-cultural circumstances. Because of this WHO/UNFPA/UNICEF jointly defined adolescents to be those in the age group 10-19 years, youth in the age group 15-24 years and young adults in the age group 10-24 years (1,14). The period of adolescence encompasses the transition from childhood to adulthood during the second decade of life. It is one of the most crucial periods in an individual life, because during adolescence many key social, economic, biological and demographic events occur that set the stage for adult life (3, 15).

More than half of the world's population is below the age of 25 and one fifth of the world population is between the age of 10-19 years and four out of five young people live in developing countries (2). Adolescents constitute 20-30% of the population in sub-Saharan Africa. Several countries in Sub-Saharan Africa have large and increasing adolescent populations that exceed those from other parts of the world. The estimated total population of the 42 African countries that lie south Saharan is 610 million. Approximately, 20 percent of this population (120 million are adolescents aged 10-19 years. With an over all population growth rate of 2.7 percent in the continent, it is projected that this adolescent population will double in the next 25 years (16).

Young people constitute one-third of the total population in Ethiopia (11). Their number i.e. expected to grow from 20.3 million in 2000 to 25 million in 2010. The reproductive health problems of young people in Ethiopia are multifaceted and interrelated (17).

Constituting a large proportion of the population and also from various behavioral, cognitive and developmental perspectives, they are labeled as a vulnerable group and deserve due attention in terms of research and prevention. These are different factors that predispose them and make them a vulnerable group. The first and most important factor is that the proportion of sexually active at early age is now increasing than ever before due to earlier onset of menarche, social change and modernization, delayed onset of marriage, lengthening of socially defined period of adolescence, and peer pressure. Moreover and behaviorally, this stage is characterized by experimentation,



exploration, and most important of all, perception of personal invulnerability (18, 19, 20, 21, 22).

As adolescence is a time of choices, it involves gaining autonomy, assuming responsibility, and making choices about healthy, family, career, peer, and school. The ability to confront these decisions effectively is important to the well being of adolescents (22). The early onset of adolescent sexual activity, coupled with lack of knowledge and information about disease and its prevention, which is again made worse by their not being taught adequately on these matters in school (23), and family setting, and finally, their inability to make responsible decisions pertaining these matters, have all made them a susceptible group to the acquisition of the disease.

The health, attitudes and actions of adolescents define the future of any society, as they will grow into adults and parents of tomorrow. However, the issue of adolescents' sexual and reproductive health was for the first time given the necessary attention and discussion on the International Conference for population Development (ICPD) in 1994, in Cairo. The principle endorsed by the ICPD then to be implemented by all participating governments including our country was that, young people not only need but also have the right to reproductive health information and services (24).

Prevention is the key to reducing infection rates and ultimately defeating AIDS. Interventions must be relevant to local conditions. And they must be tailored to be

differences between boys and girls, young people living in rural and urban areas, children in school and out of school, younger and older adolescents and young people married and unmarried (8).

Why focus on young people?

1. Better understanding of the importance of this age group to public health in the school and long terms
2. Changing conditions combined with changing patterns of behavior have increased health hazards for young people.

Therefore, in general, we can consider the conclusion from three very important perspectives:

1. Demonstrating that adolescents are indeed sexually active
2. Demonstrating that a substantial majority of sexually active ones are not using condoms, the only protective measure available,
3. Convincingly presenting that adolescents lack basic information and knowledge about the disease and its prevention, and even if they have it, that it has failed to bring about desirable behavioral changes (25).

## ***2.2 Sexual behaviors of adolescents***

Sexual activity begins in adolescence for the majority of people. In many countries, unmarried girls and boys are sexually active before the age of 15(8). Adolescence is a time when many young people experience critical and life-defining challenges such as their first sexual experience, marriage, pregnancy, and parenthood. Adolescent sexual behavior is important not only because of the possible reproductive outcomes, but

because risk sexual behavior is associated with sexually transmitted infections such as HIV/AIDS (8).

Early initiation of sex poses health risks for both young women and men, most young adults who enter into a sexual relationship for the first time don't use any form of contraception, leaving the vulnerable to unintended pregnancies and unplanned parenthood. Unprotected sex also exposes the young to sexually transmitted infections young women are especially vulnerable because of their biological susceptibility- i.e., the immaturity of their reproductive organs (26). Adolescent sexuality is still a taboo in many places. And this left adolescents without the information and counseling they need. They get their first information about sexuality from their peers whose views are after inaccurate and based on rumors and personal experiences (27).

Many studies have been conducted all over the world that has tried to assess the sexual behaviors of adolescents. More than 80 percent of adolescents had their first sexual act before the age of 20 in most of the developed countries of Europe and America (28).

In the USA a sexual activity rate of 53% and 72.2% for females and males reported respectively (29). In another survey, in 1983 it was revealed that by age 15, 17% of the boys and 5% of the girls; by age 17, 48% of the boys and 28% of girls; and finally by age 20, 80% of boys and 74% of the girls were sexually active, indicating a progressive rise in sexual activity as age advances. In the Canadian youth and AIDS, a study shows 31% of the male and 21% of the female 9th grade students to be sexually active and this figure rose to 49% of males and 46% of females by grade 11(30). Recent survey of boys aged 15to 19 in Brazil and Hungary, found that more than a quarter reported having sex before

they were 15 years. A study in Bangladesh found that 88 percent of unmarried urban boys and 35 percent of unmarried urban girls had engaged in sexual activity by the time they were 18 years old (8). In Sub-Saharan Africa the age at first sexual intercourse ranges from 16-17.6 years (31). The mean age at first intercourse, reported retrospectively by age 20 - 24 years- old women, was 16.7 in Ghana, 16.4 in Kenya, and 15.9 in Uganda (32).

In Ethiopia different studies in different parts of the country revealed the mean age at first sexual debut to be between the ages of 13.6 to 19 years (33, 34, 35, 36, 37, 38, and 39). Studies conducted among school adolescents, in Addis Ababa in 1994 and 2000, reported that the mean age at first coital experience were  $15.50 \pm 5.39$  for girls,  $16.45 \pm 4.02$  years for boys and  $15.3 \pm 1.457$  years for both sexes, respectively (25,40). Sexual experience begins early in Ethiopian society; the median age at which women age 25-49 first had sexual intercourse is 16 years. Three in ten women in this age group have had sex by age 15, two in three by age 18, and more than 80 percent by age 20 (16). On the other hand, men initiate sex an average of four years later than women. The median age at sexual debut among men age 25-59 is 20.3 years. Less than 5 percent of men in this age group are sexually experienced by age 15, one in four by age 18, and one in two by age 20(16).

A study conducted in 1990 among senior high school students in Addis Ababa, reported 40.2 percent of respondents, and had already practice sexual intercourse at the mean age of 17 years (42). A recent survey conducted in South Gondar among out of school adolescent found that the mean age at first sexual intercourse was 14.66 years (43). The 2000 Ethiopia DHS data show that the median age at sexual debut was 16.3 years (43).

A study conducted by the Family Guidance Association of Ethiopia on adolescent sexuality revealed that 71.9% boys and 71.4% girls have had their sexual contact within the age range of 15 to 17 years. Thirteen percent said that they started sexual activity between 10 and 14 years of age (45).

Consequences of adolescents' sexuality leading to unwanted pregnancy are considerable in involving social, psychological and medical implications that affects the mother, the father and the new born. Globally, more than 10% of all births are to women 15 to 19 years old. In 10 out of 11 Sub Saharan Africa countries, at least one out of every five adolescents had one or more children or is currently pregnant (46). In Ethiopia the magnitude of unwanted pregnancy among adolescents was reported to be 15 to 50 % (45). In a survey of adolescents conducted in Awassa, Nazareth, and Addis Ababa, 64 percent of the respondents knew of a girl whose schooling was interrupted due to an unwanted pregnancy (47). A study conducted in Addis Ababa government high schools revealed that 23 percent of the girls who had sexual intercourse reported they had been pregnant at least once (48).

The Practice of multi-sexual contact is one of the major contributing factors for the transmission of HIV/STIs. In Cameroon men on average reported 10 lifetime sexual partners, compared with 5 in Kenya, 4 in Zambia and Benin. Women reported 3, compared 2 in the other three cites (49). A study conducted in USA among adolescents attending teen health clinics in a one year period showed that 40.3% of females and 69.4% of males aged 14 to 19 had more than one partners (50). The Ethiopian 2000 DHS data show that just over 1 percent of unmarried women and 4 percent of unmarried men

age 15 to 24 years have had more than one sexual partner in the 12 months preceding the survey (44). Recent study in South Gondar among out of school adolescents reported that 23.3% of the sexually active had more than one sexual partner (43).

### ***2.3 HIV/AIDS and Sexually Transmitted Diseases***

Adolescents are exposed to unsafe and early sex. The high rate of urbanization with fast migration rate from rural to urban, poverty, and lack of appropriate information, which is very common in developing countries, make the adolescents vulnerable for STD including HIV/AIDS (6). An estimated 11.8 million young people aged 15 to 24 years are living with HIV/AIDS. Each day, nearly 6,000 young people between the ages of 15 and 24 years become infected with HIV. Yet only a fraction of them know they are infected. More than two decades into the epidemic, the vast majority of young people remain uninformed about sex and sexually transmitted infections (8). Over 13 million children currently under 15 years have lost one or both parents to AIDS. The total number of children orphaned by the epidemic is forecast to more than double by 2010(8).

Young people are among the population groups who are at high risk of STIs including HIV/AIDS. The UNAIDS/WHO report estimated that there were 42 million people living with HIV, at the end of 2002. The HIV epidemic has been particularly severe in Sub-Saharan Africa where this report estimated that there are 24.9 million people living with HIV of which one third are younger than 25 years of age (52).

Today AIDS in Ethiopia is spreading at an alarming pace and its social and economic impacts have become frightening. Age and sex distribution of reported AIDS cases, 1986-2001, shows about 91 percent of infections occur among adults between 15 and 49 years (48). Based on the data obtained from National Sentinel Surveillance System, the 2001 estimate of HIV prevalence in Ethiopia is 6.6%; the prevalence rate is continuing to be high at 13.7% for urban area, while it remains relatively low at 3.7% rate for rural areas. The highest prevalence is seen in the age group of 15 to 24 representing recent infections (48).

One of the critical issues involved in tackling HIV/AIDS is giving care and support to people living with the infection. Stigmatization of AIDS patients is common because the disease is fatal, is usually accompanied by long periods of suffering, and is often an outcome of unsafe sexual practices. The stigma associated with HIV/AIDS causes discrimination and this has posed serious obstacles to confronting the epidemic (16). Ongoing research at the MIZ-Hasab Research Center shows that discussing sex and sexuality is considered taboo in Ethiopian society. Stigma and discrimination are a result of ignorance about the disease and traditional and religious beliefs about sex, sexuality, and sexually transmitted diseases.

At least 333 million cases of STDs occur each year (54). Over 100 million new sexually transmitted infections, excluding HIV, occur each year among young people under 25 years of age. STIs greatly facilitate HIV transmission between sexual partners, so treating and preventing them is an important step in breaking the HIV/AIDS chain of infection(8). Each year more than one out of 20 adolescents contract curable STD, excluding viral infections (55).

In Ethiopia, the magnitude of STD is masked by self-treatment practice. Studies conducted in some parts of the country among high school students revealed that the prevalence of self reported STDs were 11.5%, 13.2% of males and 4% of females and 7.9% in Kolla Diba, Harar, and Addis Ababa, respectively (35,39,40). Ethiopia 2000 DHS data show that more than half of women age 15-19 years and two in five women age 20-24 years has no knowledge on STIs. At the same time, two-fifths of teen men age 15-19 years and one-quarter of men in their early twenties (20-24) have no knowledge of STIs (44).

## ***2.4 Risk Perception, Knowledge and attitude towards AIDS Patients***

Adolescents may not adopt safe behaviors because they perceived their individual risk to be low. In Nigeria, 95 percent of girls aged 15 to 19 perceived their risk of getting AIDS to be minimal or non-existent; in Haiti, that figure for all adolescents' runs as high as 93 percent. A study in Malawi found that girls perceived little risk in having sexual relations with a boy whose mother knew their family (8).

Although a majority have heard of AIDS, many don't know how HIV is spread and don't believe they are at risk (51). New studies from across the globe have established that the vast majority of young people have no idea how HIV/AIDS is transmitted or how to protect themselves from the disease. In countries with generalized HIV epidemic, such as Cameroon, Central African Republic, Equatorial Guinea, Lesotho and Sierra Leone, more than 80 percent of young aged 15 to 24 don't have sufficient knowledge about HIV (8). In Mozambique the vast majority (74%) of girls and 62% of the boys between 15 and 19 years were unable to name a single way to avoid transmission of the infections (56). In Somalia, only 26 percent of



girls have heard of AIDS; only 1 percent knows how to avoid infection. In Ukraine, although 99 percent of girls had heard of AIDS, only 9 percent could correctly identify the three primary ways of avoiding sexual transmission (Abstain, Be faithful to one partner, and consistently and properly use of condom). Two thirds of young people in their last year of primary school in Botswana thought they could tell if some one was infected with HIV by looking at them (8).

In Zambia and Zimbabwe, where HIV prevalence is very high (19% and 25% respectively), even though, a relatively high proportion of girls can name ways to protect themselves, they still don't consider that they are at risk of acquiring AIDS (56).

In Ethiopia according to the first National Behavioral Surveillance Survey significant proportion of the population, particularly the youth are at high risk of HIV infection despite high level of knowledge about HIV/AIDS (57). According to this survey, 84% of urban out of school adolescents who had unprotected sex with non-marital partners do not feel that they are at risk. A recent study conducted in South-Gondar among out of school adolescents revealed that participants attitude towards perceiving themselves as susceptible to HIV infection indicated that only 5.3% of the rural and 11.2% of the urban sexually active adolescents were aware of being engaged in high-risk sexual practices (43).

Misconceptions about HIV/AIDS are wide spread among young people. They vary from one culture to another, and particular rumors gain currency in some populations both on how HIV is spread. Surveys from 40 countries indicate that more than 50 percent of young people aged 15 to 24 years harbor serious misconceptions about how HIV/AIDS is transmitted (8). Stigma and discrimination discourage young people from taking preventive measures against

HIV/AIDS, like using condoms, seeking treatment for infections, voluntary counseling and testing, and informing their sexual partner. The Ethiopia 2000 DHS data show that only 18 percent of young women age 15 to 24 and 12 percent of young men in the same age group believe that a person infected with HIV/AIDS should be allowed to keep this fact private.

At the same time, about one in two young women and men report they are willing to care for a relative with HIV/AIDS (44).

Voluntary and confidential HIV counseling and testing (VCT) is an important tool for preventing HIV. VCT allows adolescents to evaluate their behavior and its consequences. A negative test result offers a key opportunity to reinforce the importance of safety and risk-reduction behaviors (8). Nine out of 10 people living with HIV/AIDS don't know they are infected. Yet studies have shown that young people have strong interest in knowing their HIV status. More than 75 percent in Uganda indicated that they would like to be tested while still healthy (8).

In spite of the fact that the level of HIV/AIDS is high in Ethiopia HIV testing has been limited to antenatal clinics and to high-risk groups. Voluntary counseling and testing (VCT) although encouraged has attracted few people, even though ongoing research suggests that most women and men support VCT (53). A recent study conducted in South-Gondar among out-of-school adolescents shows that the majority (68.7%) of the urban, and 39% of the rural adolescents expressed their willingness to undergo VCT (43).

## ***2.5 CONDOM USE***

Correct and consistent condom use offers the best protection against HIV and other STDs, after abstinence and mutual monogamy (58). Since the consistent and correct use of condoms reduce the risk of HIV infection, HIV/AIDS prevention programs often include the promotion and distribution of condoms. Proponents of contraception education and condom availability programs argue that teenagers are sexually active and must be provided with the means to protect themselves against pregnancy and sexually transmitted disease (59). The major public health challenge in reducing HIV/AIDS and other STIs is to encourage greater use of condoms among people at risk. Despite the fact that condom is very effective against STIs many people at risk don't use them (60).

With no vaccine, and no accessible effective cure, the focus has been on education about transmission and prevention, with emphasis on sexual abstinence before marriage, fidelity within marriage, or condom use (61). However, what seems important as far as young people are concerned is controversy among different actors and agencies involved in AIDS education. Some, especially the NGOs have advocated condom use, while others, particularly religious organizations, have stressed sexual abstinence before marriage (61). Condom use in a sexual act involves more than one actor. This requires a perspective that captures social interactions and negotiations and gender dynamics, and the way they are played out, instead of focusing only on individual action (62).

People also justify not using condoms for other reasons. The looks and background of a partner, for instance being viewed to be beautiful, coming from a well-off family, being educated, or simply being seen as intelligent, are some times used as justifications (63).

Many other scenarios challenge the assumption of a rational connection between knowledge and condom use. Knowledge is of little significance in situations of sexual abuse, including reported rapes within and outside the family (8), and forced sexual intercourse even when people may think they are in love (64). Sexual activity may also take place in exchange for economic and other benefits, in which case the likelihood of condom use is reduced (65). This is particularly crucial in settings of deepening economic crises where women may be compelled to have sex without protection (66).

A study conducted among high school students in Addis Ababa showed that 62.2% of the students supported distribution of condoms at schools; however, only 42.2% of the sexually active reported using it on their first encounters while only 27.7% said they used it every time (25). According to another study conducted in Addis Ababa, condom use among sexually active students during their last intercourse was 72.9% (40).

While a study conducted among high school students in a rural town of Kolla Dibba revealed only 45.9% of the sexually active students had used condom (34), another study conducted in eastern Ethiopia indicated only 21% usually used them (39). Another study conducted among adolescents in Butajira high school revealed that only 20% of the sexually active boys used condom while only 15% of the girls used oral pills and condoms (38). A study conducted to assess the determinants of contraceptive use among urban adolescents in Ethiopia showed a large discrepancy between knowledge and actual practice of contraception—only 15% of males and 39% of females used condom contraceptives respectively (41). According to a study conducted in two towns of the Amhara region 48% of the sexually active students there had never used condoms while only 41% had used them on every sexual intercourse (67). Another study conducted among students of Gondar college of medical sciences revealed that only 80

(37.1%) of the sexually active had ever used condoms of which only 6.4% had used them regularly and only 5.1% on more than half of their encounters (68). In a recent study conducted among out-of-school adolescents in South Gondar Zone of the Amhara state some 19 male adolescents reported that they had sex with commercial sex workers and that they never used condoms (43). Negligence, embarrassment in buying it from shops and pharmacies, lack of knowledge and fear of reduced sexual pleasure are frequently mentioned as reasons for non-use of condoms (25, 34, 41).

The Ethiopia 2000 DHS show that knowledge and access is lower among women age 15-19, ever-married women, and uneducated women. Less than 2 percent of sexually active women ages 15-24 years have used a condom during their last sexual intercourse with any partner (46). In general adolescents have limited access to reproductive health services that focus on the special needs of adolescents. Inadequate knowledge about adolescent's sexual behavior, cultural influences, and the limited capacity of implementers hinder the provision of reproductive health education and services to young people. It is therefore essential to have data on the extent of adolescent sexual activity and condom use, perception of risk of HIV/STIS, and other reproductive health issues in order to have a clear understanding of the situation. Condoms are effective for preventing both unplanned pregnancies and STIs; condom promotion and distribution programs can play an important role in improving adolescents' reproductive health. To facilitate the design of effective programs and policies, program managers and policy makers need to understand the factors that facilitate or deter condom use among the target population. As has been described in detail earlier, AIDS is now a major problem that is spreading alarmingly and whose effects are not sparing any sector of society,

particularly young people who for various reasons possess predisposing behavioral characteristics. Very important reasons for why focus on school is that, students are a captive audience. Ensuring that the necessary knowledge, skills, and attitudes are inculcated in a manner, that will lead to safe sexual behavior calls for a range of learning objectives and related instrumental strategies over the entire school cycle. Therefore research geared towards investigating perceptions of risk of HIV/STIs, and ways of prevention and education are priority areas.

### **3. OBJECTIVE**

#### ***3.1 GENERAL OBJECTIVE***

To identify factors that characterize sexual behavior of high school adolescents their perception of the risk of HIV/STI and condom use

#### ***3.2 SPECIFIC OBJECTIVES***

- To describe the sexual behavior of high school adolescents
- To determine factors associated with risk sexual behavior among high school students
- To assess the practice of condom use among sexual active high school students
- To describe willingness for VCT of high school adolescents
- To assess the status of self-risk perception of HIV/STIs

## **4. SUBJECTS AND METHODS**

### ***4.1 Study Design:***

This cross-sectional study was carried out to describe the sexuality, perception of risk of HIV/STIs and condom use among high school adolescents in South-Gondar Administrative Zone, Amhara Region.

### ***4.2 The Study Area***

South Gondar Administrative Zone is one of the 11 zones in the Amhara National Regional State, which is located in the northwestern part of Ethiopia. It is bounded by North Gondar in the north, South and North Wello in the east, West Gojam in the south and Lake Tana in the west. Administratively, the zone is divided into 10 Woredas, and further subdivided into 279 rural and 32 urban Kebeles.

Based on the 1994 National Population and Housing Census of Ethiopia, the population of the zone as projected for July 2003 was approximately 2,116,541 with 1 to 0.96 male to female ratio. Of the total population about 24% are in the age range of 10-19 years. About 93% of the total population lives in rural areas depending on traditional rain fed agriculture, whereas 7% is urban dwellers. The gross primary school enrollment rate and the physical health service coverage of the zone were 48.24% and 40% respectively in the year 2003.

The capital of the zone, Debretabor, is located 666 kilometers northwest of Addis Ababa, about 100 Kms. from Bahir-Dar, the capital of the Amhara Region. It is subdivided into 9 kebeles and has a council that is responsible for political and administrative affairs. As of



July 2003, there are about 32,705 people living in the town, of which 28% were adolescents. There are a total of 6 different health institutions in the town. Two are under government ownership (one health center and one hospital). One clinic is privately owned. In addition there is one pharmacy owned by the Ethiopian Red Cross Society, two public drug stores, and one private drug vendor in the town. According to the report of woreda education office, there are six primary schools, one secondary school and one technical school. There are also one nursing school and one vocational training center in the town owned by the Government.

### ***4.3. Study Population***

The source population includes all secondary school adolescents in South Gondar. The study population is all school adolescents in 2 randomly selected secondary schools.

**Inclusion criteria:** Those aged 14 – 19 years; unmarried; who are currently attending secondary school during daytime at the time of data collection.

### ***4.4. Operational Definition***

**Adolescents:** Those who are in the age group of 10-19 years (1).

**Risk perception:** The possibility of individuals being exposed to HIV/STIs according to their understanding and awareness.

**Condom use:** Consistent and appropriate use of condom during sexual intercourse (8).

**Knowledgeable:** Those students who mentioned all the three primary methods of HIV/STIs preventions (Abstinence, be faithful to one partner, and consistently and properly use of condom).

**Safe sexual behavior:** Abstaining before marriage, being faithful to marriage, limiting sexual partner to one /avoiding multiple sexual partner, consistent and correct use of condom during sexual intercourse.

**Sexual risk behavior:** Any sexual behavior that does not fulfill the above statement?

#### **4.5 Sample Size**

The following assumptions were made: expected prevalence of condom use among adolescents 28%(44), design effect of 2,desired precision of 5% and 95% confidence level and adding 15% non-response rate.

##### **Formula for calculating the sample size**

$$n_0 = \frac{(Z \alpha/2)^2 P (1-P)}{d^2}$$

$d^2$

With the above assumptions, the sample size was calculated using the STATCAL program of EPI6 computer software package and the overall sample size was found to be 712. The number of subjects to be included was allocated to each section using the principle of probability proportional to size (P.P.S)

#### ***4.6 Sampling Procedure***

Two schools out of 9 were selected using simple random method. The total sample was distributed to the selected schools proportionate to their student population size. The number of respondents calculated from each school was divided equally in to two grades; 9th and 10th. From each grade, 6 sections were selected randomly and finally all students in the selected sections were then invited to participate in the survey.

#### ***4.7 Data Collection***

Five facilitators that completed 12<sup>th</sup> grade; unmarried, and fluent in Amharic language were recruited. Two supervisors' a health worker and a teacher were selected. They were responsible to lead the whole situation of data collecting process and to check the questionnaire, and correct any problem with the principal investigator.

Training was given for both the facilitators and the supervisors for three days before the pretest and for a day after the pretest. The training includes a briefing on the general objective of the study; discussing the contents of the questionnaire one by one and, the type of information needed to answer frequently when asked question, the methodology of the study in relation to reaching the intended goals, and more importantly, how to keep confidentiality and privacy. The training was given in the form of discussion and role-playing.

The data collection instrument was an anonymous structured close-ended questioner. The questionnaires were developed after review of relevant literatures. A number of questions that can address the objectives of the study were gathered and adapted from previous similar studies and other materials. The questions and statements were grouped and arranged

according to the particular objectives that they should be address. Then, the first draft of the questionnaire was produced and submitted to the advisors and colleagues including sponsoring organizations for comments. Valuable comments were taken from these individuals to improve quality of the instrument. After extensive revision, the final version of the English questionnaire was developed. At the end, the final English version was translated to Amharic by an individual who has a very good command of both English and Amharic languages, and again back to English by another individual who has the same language ability so as to ensure its validity and consistency.

Pretest of the questionnaire was carried out in Ibnat town, which is located 100 Km from the study area of the study subjects to ensure their validity, with a population that, more or less, has similar socio-demographic characteristics with the people of the study area. The result of the pretest was discussed with, and some corrections and changes were made on the questionnaires. Finally, trainees were allowed to fill the questionnaire by themselves and latter discuss on areas of difficulty. After the group discussion the principal investigator gave appropriate feedback.

On the day of data collection, the randomly selected students were told by their teachers (which were informed earlier) to remain in their class. Survey completion required duration of one class period for each shift. When finished, students were told to put their completed questionnaire in a box, which is located at the exit of each room. The over all activity of data collection was supervised and coordinated by the principal investigator and two other coordinators in each school. With the permission of school authorities, the

survey was conducted during the 3<sup>rd</sup> period in the morning and afternoon shift at the same time.

A total of four focus-group discussions (FGD) disaggregated by sex and school, were conducted using semi structured, open-ended questionnaires in order to provide more insight in to complex pattern of sexual behavior of school adolescents in the study area.

Two groups consisting of 10 female students and two groups consisting of 10 male students were organized for the FGD, participants were chosen by a simple random selection process. Participants were in the age group of 14-19 years of age, so that the discussion would reflect the sexual experience of school adolescents and the discussions were moderated using a prepared discussion guide. The principal investigator moderated the discussion for the male groups, while that of the female groups was by female nurse who was trained by the principal investigator. One male and one female assistant were also trained to organize the focus groups and handle the tape recording and note taking during the discussion. Each session was taped and the principal investigator together with the moderators and note takers transcribed the tape after each session.

## **4.8 Study Variables**

The analysis was focused on selected variables: -

### **Dependent variables-**

- Sexual activity
- Condom use
- Risk perception

**Independent variables** - Socio- demographic variables (sex, age,

Perceived family income and parental relationships)

- Knowledge
- Residency
- Pocket money
- Alcohol intake
- Number of partners

#### ***4.9 Data Processing and Analysis***

Dummy tables that consider the main research questions were drafted after designing the questionnaires. The data collected was categorized and coded on a well-drafted coding sheet. The data was entered into the computer and analyzed using EPI INFO and SPSS software. During the analysis, frequencies of different variables were determined, and chi-square test was performed on some selected variables. Odds ratios were calculated to determine associations of selected variables. Logistic regression was applied to assess the effects of each explanatory variable on the outcome variables using SPSS software. The qualitative data was compiled and summarized manually.

#### ***4.10 Ethical Considerations***

Before the fieldwork, ethical clearance was obtained from the Ethical Committee of the Faculty of medicine Addis Ababa University. Then, officials at different levels in the Amhara region were communicated through formal letters from the Department of Community Health, Faculty of Medicine, AAU. Response to the survey was anonymous. A letter with introduction of the study, method of questioning and confidentiality was attached to the cover page of the questionnaire. Participants were also informed that they have full right to discontinue or refuse to participate in the study. A formal letter was written to the South-Gondar Zone Education Desk. The schools' willingness to participate in the study was discussed with officials of high schools. Finally the respondents themselves drop their anonymous responses in the collection boxes.



## 5. RESULT

### 5. 1 Socio- demographic characteristics

A total of 712 school adolescents completed the questionnaire, of which 3 responses were excluded for gross incompleteness and inconsistency of responses. Analysis was made based on the 709 completed questionnaires. Thus, the response rate was 99.6 %. Out of the total 709 respondents, 489 (69.0 %) were males and 220 (31.0 %) were females. The mean age was 16.4 with a SD of  $\pm 1.30$  years, in a range between 14 and 19 years. All were single. (50.2%) of the respondents were grade 9 and the remaining (48.8%) were attending grade 10. All members of the study populations were Amhara by ethnicity and the vast majorities (97.9%) were orthodox Christians by religion. Four hundred seventy two (66.6%) were living with both parents, 654(92.2%) did not receive pocket money, and 433(61.1%) were from perceived medium economic status family. Alcohol consumption in the area was high, with 332(46.8%) of respondents reporting alcohol consumption either some times or daily. By contrast, only about 16 (2.3%) and 27 (3.8%) of respondents reported cigarette smoking and chat consumption respectively (Table 1).

The majority 299(42.2%) of the participants had illiterate fathers. Similarly most 442(62.3%) of adolescents' mothers were illiterate. The majority of the students, 512(72.2%) fathers were farmers and 612(86.3%) of their mothers were housewife. (Table2).

**Table 1: Socio- Demographic characteristics of the study population,  
School adolescents in South Gondar, April 2004**

<b>Variable</b>	<b>Number (709)</b>	<b>percent</b>
<b>Sex</b>		
Male	489	69.0
Female	220	31.0
<b>Age</b>		
14-16	399	56.3
17-19	310	43.7
Mean±SD	16.4±1.31 years	
<b>Marital Status</b>		
Single	709	100.0
<b>Religion</b>		
Orthodox Christian	694	97.9
Others	15	2.1
<b>Live with</b>		
Both parents	472	66.6
Single parent	86	12.2
Others	151	21.2
<b>Pocket money</b>		
Yes	55	7.8
No	654	92.2
<b>Perceived family economic status</b>		
Rich	93	13.1
Medium	433	16.1
Poor	138	19.5
Very poor	45	6.3

Others- Relatives, alone and friends

**Table 2: Parental characteristics of the respondents South-Gondar,  
April 2004**

<b>Variable</b>	<b>Number</b>	<b>Percent</b>
<b>Paternal education level</b>		
Illiterate	299	42.2
Read and Write	260	36.7
Grade 1-6	50	7.1
Grade 7-12	37	5.2
College	16	2.2
<b>Paternal Occupation</b>		
Daily laborer	12	1.7
Farmer	512	72.2
Civil servant	99	14
Employed in private sector	8	1.1
Has private business	78	11.0
<b>Maternal Occupation</b>		
House wife	612	86.3
Daily laborer	13	1.8
Maid servant	3	0.4
Employed in private sector	59	8.3
Has private business	1	0.1
Civil servant	21	2.9

## **5.2. Sexual history of survey respondents**

Out of the 709 student respondents 64(9.0%) were sexually active, of whom 47(9.6%) were boys 17(7.7 %) were girls. For male adolescents the median age at first sexual intercourse was 15 (mean=14.95±2.47) and the median age at first sexual intercourse for females was 16(mean=15.76±1.78).

More than 50% of the sexually experienced girls had their first experience before the age of seventeen years. If we consider this by the various stages in age, by age twelve, only 5.8% were sexually active, by age sixteen, 64.7%, and by age eighteen, 100% were sexually active. Again, more than 50% of the sexually active boys had their first experience before the age of seventeen. When this is spread out for the various ages, by age twelve years 20.9% were sexually active, by age sixteen 69.7%, and finally 100% were active by age eighteen. According to respondents, the main reasons given for first sexual encounter include sexual desire 32 (50.0 %), fell in love 22 (34.4 %), and raped 8(12.5%). Of those who are sexually active, 15(23.4%) adolescents reported that they had sexual intercourse with two or more partners. Of those sexually active respondents; a total of 7(14.8 %) male adolescents had history of sexual intercourse with female sex workers. Only 24(37.5%) of the sexually active students ever used condom, and 40 (62.5%) did not used condom on their first sexual encounter. Only 10(41.7%) of the sexually active students claimed that they had continuously used condom in the last 12 months. Nineteen (2.7%) adolescents reported history of signs and/or symptoms of STIs (Table 3). Generally residence, sex, family economy status, and educational status did not show statistically significant difference ( $p>0.05$ ) where, as age, pocket money living with single parent

and others and alcohol intake were significant ( $p < 0.05$ ) among school adolescents (Table 4)

**Table 3: Sexual history, among school adolescents in South-Gondar.**  
**April 2004**

<b>Variable</b>	<b>Number (64)</b>	<b>Percent</b>
<b>Ever had sex</b>		
Yes	64	9.0
No	645	91.0
<b>Relation of the first partner</b>		
An acquaintance	24	37.5
A friend	21	32.8
Fiancé	17	26.6
Commercial sex workers	2	3.1
<b>Reason to have sexual sex</b>		
Fell in love	22	34.4
Had desire	32	50.0
Raped	8	12.5
To get money/other gifts	2	3.1
<b>Sexual Partners so far</b>		
With one person	49	76.6
With two people and more	15	23.4
<b>Sexual partners during the last 12 months</b>		
With one person	57	89.1
With two or more people	7	10.9

**Table-4 Relationship between selected socio-demographic variable and sexual behavior of school adolescents South-Gondar, April 2004**

Variables	Ever had sex		OR (95%) CI	
	Yes	No	Crude	Adjusted*
<b>Residence</b>				
D/tabor	27	327	1	1
Kimirdingaye	37	318	1.41(0.81,2.47)	.692(.394,1.215)
<b>Sex</b>				
Female	17	203	1	1
Male	47	442	1.270(.712,2.266)	1.629(.572,1.996)
<b>Age</b>				
14-16	21	378	1	1
17-19	43	267	2.80(1.58,5.09)	.374(.206,.680)*
<b>Pocket money</b>				
Yes	13	42	3.66(1.69,7.49)	.256(.113,.580)*
No	51	603	1	1
<b>Family economic status</b>				
Rich	24	207	1	1
Medium	35	398	.076(0.43,1.37)	1.136(.489,2.637)
Poor	3	40	1.08(0.30,3.12)	1.177(.327,4.234)
<b>Living with whom</b>				
Both parents	24	448	1	1
Single Parents	13	73	3.32(1.48,7.14)	.267(.124,. 527)*
Others	27	123	4.10(2.18,7.69)	.257(.138,. 477)*
<b>Educational level</b>				
9 <sup>th</sup> grade	30	326	1	1
10 <sup>th</sup> grade	34	319	.863(.516,1.445)	1.335(.749,2.377)
<b>Alcohol drinking</b>				
Yes	25	352	1	1
No	39	293	1.87(1.08,3.31)	.523(.297,. 922)*

**NB** \*= significant

**\* Adjusted: For residence, sex, age, pocket money, and family economic status,**

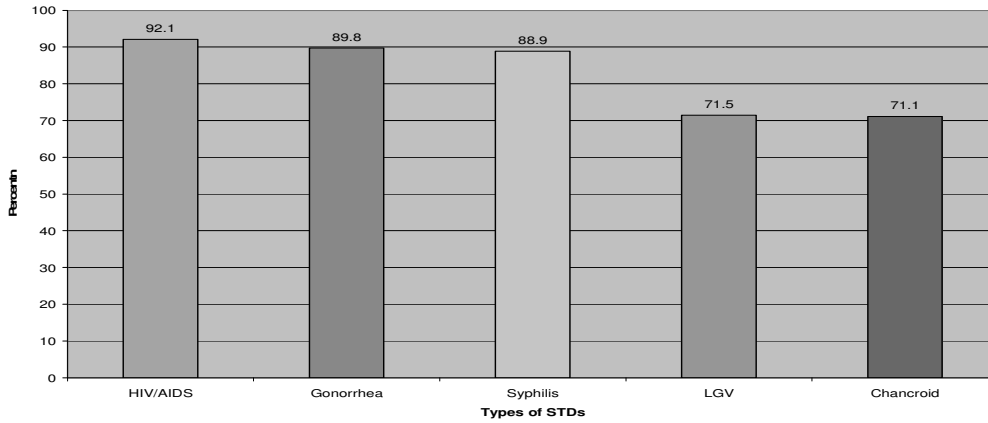
**Living with whom, educational level and alcohol drinking**

### **5.3 Knowledge and attitude towards HIV/AIDS and STDs**

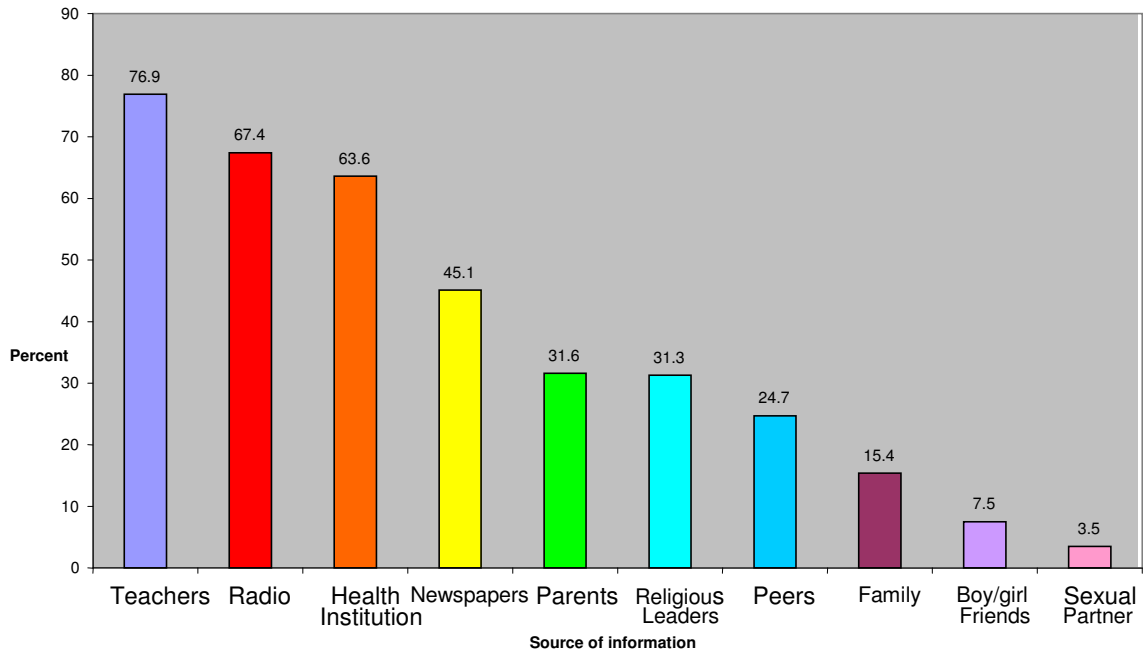
Four hundred six (57.3 %), 574 (81.0 %), and 569 (80.3 %) respondents claimed to have previous mass media information about sexuality, HIV/AIDS, and STDs respectively. Six hundred seventy four respondents (95.1 %) know about STDs while the rest 35 (4.9 %) claimed never heard of any STDs. AIDS was the most commonly known STD, 653(92.1 %) followed by gonorrhoea, 657 (89.8 %), syphilis, 630 (88.9 %), lymphogranuloma venereum, 507 (71.5 %) and chancroid, 504 (71.1 %) (Fig. 1) Two hundred twelve (29.9 %), 572 (80.7%), 494 (69.7 %), and 463 (65.3 %) mentioned increased risk to HIV, sterility, urethral stricture and abortion respectively as complications of STIs.

Figure 2 shows the source of information about HIV/AIDS and STIs. The most frequently mentioned source of information for HIV/AIDS were teachers, 545(76.9%) followed by radio, 478 (67.4 %), and health workers, 451 (63.6 %). The great majority of the respondents, 688 (97.0 %) knew that HIV is transmitted through unprotected sexual intercourse, infected blood, 598 (84.3 %), contaminated sharps, 614 (86.6 %) and 585 (82.5 %) respondents mentioned mother to child transmission (Table 5).Six hundred twenty three(87.9%), 426(60.1%),590(83.2%), 455(64.2%),and 378 (53.3 %) of school adolescents mentioned abstaining, avoiding casual sex, remaining faithful to one sex partner, using condom and avoiding sex with female commercial sex workers as a means of preventing HIV/AIDS and STDs respectively. Only 53.7 % of the participants agreed that a person could get HIV the first time he/she had sex. Twenty-seven, (3.8 %) respondents mentioned that one can identify by looking some has HIV.

**Figure 1. Knowledge of types of STDs among high school adolescents, South Gondar, April 2004**



**Figure 2. Source of information on HIV/AIDS and STIs among high school adolescents in South Gondar, April 2004**





**Table 5: Ways of HIV/AIDS transmissions as mentioned by high school adolescents In South – Gondar, April- 2004**

Ways of transmission	Number	Percent
Unprotected sexual intercourse	688	97.0
Infected blood (blood transfusion)	598	84.3
Contaminated sharp objects	614	86.6
Mother-to- child transmission	585	82.5
I don't know	3	0.4

NB. Percent will not add up to 100 as multiple responses are possible

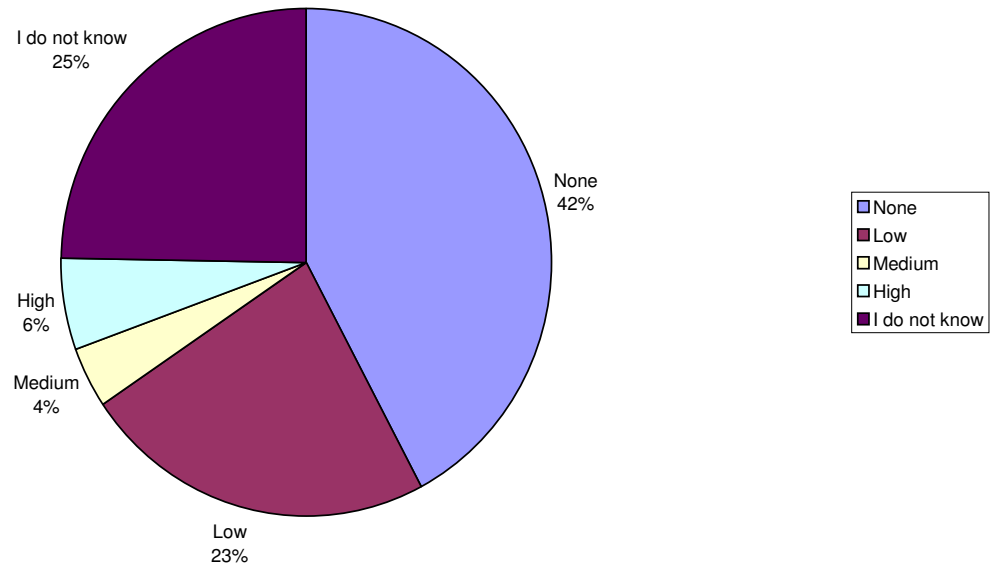
Six hundred two (84.9%), 644(90.8%), 530(74.8%), 670 (94.5%) and 609(85.9%) of the respondents agreed that interactions such as eating together, shaking hands, continue friendship with HIV/AIDS patients and infected students should continue schooling respectively. And, 233(32.9%), 124(17.5%), 100(14.1%) and 67(9.4%) of the respondents said that being not shopping from HIV positive shopkeeper, HIV infected person should not continue working with others, HIV patients should be isolated, and infected students should not continue schooling respectively (Table 6)

As shown in figure 3, 42.2% of the respondents replied that they have no chance of acquiring HIV/AIDS. One hundred sixty six (23.4%) believed to have low, 27(3.8%) medium and 41(5.8%) high chance of acquiring the virus. The most frequently reported source of information for changes that occur during adolescence was the radio and the school and only 168(23.7%) of the adolescents mentioned their parents as their source.

**Table 6: Attitude of high school adolescents to wards HIV/AIDS****Patients. South-Gondar, April-2004**

<b>Variable</b>	<b>Agree</b>	<b>Disagree</b>	<b>I don't know</b>
Would you eat together with a person who has HIV/AIDS?	602 (84.9%)	74 (10.4%)	33 (10.4%)
Would you shake a person's hand if you know that s/he has HIV/AIDS?	644 (90.8%)	50 (7.1%)	15 (2.1%)
Would you continue your friendship if you find out that a friend has HIV/AIDS?	530 (74.8%)	131 (18.5%)	48 (6.7%)
Would you give home care if a family member has HIV/AIDS?	670 (94.5%)	30 (4.2%)	9 (1.3%)
Should a student with HIV/AIDS be allowed to continue his/her education with others?	609 (85.9%)	67 (9.4%)	33 (4.7%)
Should a person with HIV/AIDS be allowed to work with others?	539 (76.0%)	124 (17.5%)	46 (6.5%)
If a shop keeper/food seller/ has HIV/AIDS would you buy food items from him/her?	434 (61.2%)	233 (32.9%)	42 (5.9%)
Should people with HIV/AIDS live separately from others?	100 (14.1%)	586 (82.7%)	23 (3.2%)

**Fig.3. Self-risk perception, of high school adolescents towards HIV/AIDS. South Gondar, April 2004.**



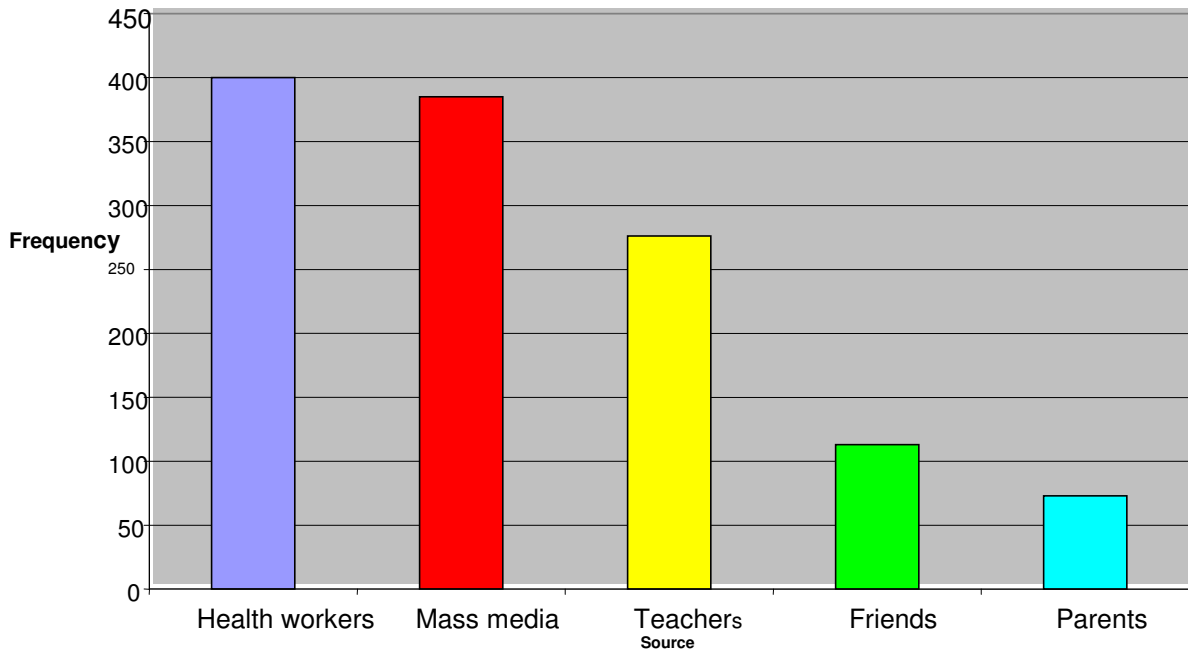
## 5.4 Condom Use

Only 27(37.5%) of the sexually active adolescents had ever used condom. Ten (41.7%) reported continuous condom uses in the last 12 months. Out of 14 only 4, (28.6%) use condom the first time they had sexual intercourse and, 9(64.3%) used condom the last time they had sexual intercourse. Seven had history of sexual contact with female sexual workers. And only 4(57%) used condom always, 1(14.3%) some times, and 2(28.6%) used most of the time. Three hundred twenty three (45.6%) agreed that using condom is a sign of not trusting to partner, and 122(17.2%) said that discussing about condom with young people could promote promiscuity. Only three hundred thirty six (47.4%) of the respondents claimed that most high school students are well informed about condoms. Negligence (31.0%), fear to buy from shops/pharmacy (24.0%), lack of knowledge and information (22.6%) and pressure from sex partners (17.0%) were the reasons mentioned for none condom use (Table 7). The most common source of information about condoms is health workers, 400(56.4%) followed by mass media, 385(54.3%) and teachers, 276(38.9%) (Fig.4). Four hundred twenty two (59.5%) of school adolescents approved the distribution of condoms in high school. Four hundred thirteen (58.3%) of the students preferred that condoms be distributed to students freely. Pertaining who should distribute condoms, 311(43.9%) chose anti-AIDS clubs followed by installed condom vending machine, 119(16.8%) (Table8). Condom use was associated with knowledge of HIV prevention. Those who were knowledgeable use condom less frequently than those who were not knowledgeable [OR=. 284(.085, .953)]. Result is presented in table 9.

**Table 7: Condom use and attitude of high school adolescents  
towards condom distribution. South- Gondar, April-2004**

Variable	Number	Percent
<b>Ever used condom</b>		
Yes	24	37.5
No	40	62.5
<b>Condom use in the last 12 months</b>		
Always	10	41.7
Most of the time	5	20.8
Some time	9	37.5
<b>Most high school students are well informed about condoms</b>		
Yes	336	47.4
No	243	34.3
I don't know	130	18.3
<b>Why do not sexually active students use condoms?</b>		
Negligence	220	31.0
Fear to buy from shops/pharmacy	170	24.0
Lack of knowledge and information	160	22.6
Pressure from sex partners	127	17.9
Religious inhibition	12	1.7
Condom is not available	10	1.4
Others	10	1.4
<b>Approval of condom distribution in high schools</b>		
Yes	422	59.5
No	236	33.3
I don't know	51	7.2

**Figure-4 Source of information about condom among high school adolescents in South, April 2004**



**Table 8: Preference on condom distribution, by high school adolescents. South- Gondar, April-2004**

Preference	Number	Percent
Anti-AIDS club/First aid-clubs	311	43.9
Installed condom vending machine	119	16.8
Never distributed	105	14.8
School clinic	88	12.4
Teachers	52	7.3
School counselors	34	4.8

**Table-9: Condom use among high school adolescents by selected variables, South- Gondar, April- 2004**

Variable	Condom Use		OR (95% CI)	
	Yes	No	Crude	Adjusted*
<b>Residence</b>				
D/tabor	14	13	.344(.121,.980)	.440(.135,1.437)
Kimir dingaye	10	27	1	1
<b>Sex</b>				
Male	20	27	1	1
Female	4	13	2.407(.682,8.496)	1.861(.411,8.425)
<b>Age</b>				
14-16	11	19	.963(.328,2.825)	.980(.281,3.410)
17-19	13	21	1	1
<b>Number of sexual partner</b>				
One	14	35	5.00(1.448,17.271)	3.371(.732,15.535)
>= Two	10	5	1	1
<b>Education level</b>				
9 <sup>th</sup>	11	19	1.069(.388,2.950)	.756(.227,2.519)
10 <sup>th</sup>	13	21	1	1
<b>Risk perception</b>				
Yes	5	4	.422(.101,1.760)	.620(.092,4.154)
No	19	36	1	1
<b>Knowledge of HIV prevention</b>				
Knowledgeable	16	15	.300(.104,.869)	.284(.085,.953)*
Not knowledgeable	8	25	1	1
<b>Alcohol</b>				
Yes	13	18	1.444(.523,3.990)	.772(.213,2.791)
No	11	22	1	1

NB. \*= Significant

\* Adjusted: For residence, sex, age, educational level, number of sexual partners, knowledge of HIV Prevention and alcohol

## **5.5 Risk perception**

Participants' attitude towards perceiving themselves as susceptible to HIV infection was asked and the result indicated that only 31(4.4%) of the school adolescents were aware of being engaged in high-risk practices. Among those who perceived themselves at risk, 22(70.9%) reported injuries with contaminated sharps, 5(16.1%) reported multi-sexual partner, 2(6.4%) reported no condom use, and 2(6.4%) reported sex with female commercial sex workers. The most frequently cited reason, by those who did not perceive themselves at risk, was that they did not have any sexual contact, 534(75.3%) followed by being abstained from sex, 217(30.6%). Total numbers of sexual partners and alcohol intake have shown significant association with self- risk perception (Table 10)



**Table-10 Risk perception, among school adolescents by selected variables, South- Gondar April- 2004**

Variable	Risk perception		OR (95% CI)	
	Yes	No	Crude	Adjusted*
<b>Residence</b>				
D/tabor	15	339	1	1
Kimir dingay	16	339	1.07(0.49,2.36)	.546(.067,4.423)
<b>Sex</b>				
Male	27	462	3.16(1.08,12.55)	.622(.036,10.739)
Female	4	216	1	1
<b>Age</b>				
14-16	17	382	1	1
17-19	14	296	1.06(0.48,2.33)	1.461(.177,12.093)
<b>Education level</b>				
9 <sup>th</sup>	18	338	1.39(0.63,3.14)	.686(.070,6.727)
10 <sup>th</sup>	13	340	1	1
<b>Number of sexual partners</b>				
One	3	46	1	1
>=Two	6	9	10.22(1.71,71.36)	.029(.002,.483) *
<b>Agree to VCT</b>				
Yes	2	40	1.10(0.12,4.62)	.447(.024,8.167)
No	29	638	1	1
<b>Knowledge of HIV prevention</b>				
Knowledgeable	20	406	1.22(0.55,2.86)	5.135(.479, 54,992)
Not knowledgeable	11	272	1	1
<b>Alcohol</b>				
Yes	16	194	2.661(1.290,5.488)	.023(.001, .727) *
No	15	484	1	1

NB. \*= Significant

\* Adjusted: For residence, sex, age, educational level number of sexual partners, agree to VCT, knowledge of HIV prevention and alcohol

## ***5.6 Willingness to voluntary counseling and testing (VCT)***

Only 436, (61.5%) Of the students heard about voluntary counseling and testing for HIV. Forty-two, (5.9%) reported history of previous VCT, and 583, (82.2%) agreed to undergo voluntary counseling and testing for HIV.

## **5.7 Study Findings- Focus Groups Discussion**

A total of 40 participants were involved in 4 focus group discussions. The following are the results, arranged in the order of the focus group protocol questions.

### **5.7.1 Sexuality**

Both the female and male groups have generally agreed on the most common age of starting sex to be as early as 12 years and above for (especially rural) females for different reasons, and 16-18 years for males. The respondents stated due to early age of starting sex females are exposed to difficulties such as reproductive tract problems, illegal abortion, quitting school, and separation from family adding this would finally lead them to street life and prostitution.

The participants said while parents are primarily responsible for openly teaching children about life, sexuality and marriage, they would ignore this for the wrong fear of involving their children in a situation of sexual promiscuity. The respondents admitted that there are sexuality lessons at school and on the media (especially radio), but added that they lack clarity.

According to the participants females are exposed to forced sex while fetching water, gathering firewood, going to and returning from school, and some times when parents are not willing to answer the marriage question from some body, hence they exposed for abduction practice to revenge the student and her family. Some of the respondents included adolescence itself among factors that lead to forced sex saying the sexual urge during adolescence itself pushes one into committing it without considering the consequences. According to the participants some hair and dressing styles some females in their area followed in testified males' desire for sex thereby causing forced

sex. Explaining the situation a respondent (boy 15) said: “males and dogs are the same-both are attracted by good-looking calves.” The respondents said sexual activity of females in their area is also affected by the fact that some females receive different gifts from their sexual partners. According to them males also take advantage of the difficult situation female students away from home find themselves in such as shortage of foodstuffs, stationary and cosmetics.

The participants said that they had only heard about RH and that they had known nothing about it, adding they used to associate it with females only.

### **5.7.2 HIV/AIDS and STIs**

The respondents have generally agreed upon the fact that the HIV/AIDS situation in the area is getting worse and argued that this is manifested in the growing number of PLWHA, of affected families, and of AIDS orphans.

They said that high risk behaviors for contracting HIV and STIs such as multiple sexual partnership, inconsistent/non use of condom, early sex and harmful traditional practices are prevailing in the area. They also recognized the teachers, the mini media and the anti-AIDS clubs at school as good sources of information but admitted that they didn't freely discuss about HIV/AIDS and STIs within their families. Illustrating the latter, a student girl said, “one day when I mentioned the issue to my daddy he strongly opposed me by saying ‘it doesn't concern you!’ from that day on I never mentioned the issue to members of my family. In fact we have been discussing it in our anti-AIDS club.”

The participants have enumerated the three rules of abstinence, faithfulness to partner and consistent use of condom, as well as continuous AIDS- education as ways of

HIV/AIDS prevention. They also stressed the need for avoiding stigma and discrimination, and for undergoing VCT before marriage. The majority of the respondents mentioned the main ways of HIV transmission: multiple sexual partnerships, contaminated blood, and mother-to-child.

According to the participants the major factors among students in the area for contracting HIV are two: alcoholism among student boys and separation from family among student girls. Early marriage, economical problems, lack of recreational centers, sharing of sharp equipment such as razor blades and needles, and the extraction of teeth have been listed by the respondents as risk behaviors in the area for contracting HIV. The participants also mentioned Gonorrhoea, Syphilis, Chancroid, and LGV to be common in the area adding starting from grade 5 they had information on STDs.

### **5.7.3 Condom**

The participants said they had heard of condom and explained its purpose as prevention of pregnancy and HIV/AIDS. They said because of cultural, religious and other barriers parents are not willing to discuss about condom with their children. A student girl said she once asked her parents about it and got an irritating response:” why don’t you study instead of talking about condom-are you learning about this in school?” She argues:” Illiterate people in some remote areas don’t even know the word ‘condom’- so how can we discuss having such gaps? Of course there is free discussion regarding condom with peers-both at school and out- of- school. Some literate individuals are also voluntary to discuss.” Respondents also mentioned some of the reasons for not using condom: alcoholism, perceived reduction in sexual

pleasure, as well as some reservations on condom as a means of effective preventive method such as breakage, spillage and associated mythical beliefs like condom reduces orgasm, condom themselves spread HIV, condoms encourage promiscuity, and condoms are a creation of the devil.

The participants said their families and friends encourage them to abstain and to become faithful to partners, but not to use condoms. A student's boy said: "we know much about HIV/AIDS. We have been hearing about it daily. The question is how can we manage the situation and avoid HIV infection?"

On peoples' attitude towards condom use a student girl said there are people who oppose it, and those who support it. According to her opponents of condom use say: "it reduces pleasure; God created us to have sex without condom; we mustn't use it for it is manufactured by outsiders as a tool to spread HIV; etc." She also recalled some destructive sayings used by opponents of condom use against HIV/AIDS intervention, and which undermine the seriousness of the disease such as '*achese-w-yacheseh*' meaning do it and accept all the consequences, and "there is no AIDS after 10PM."

She also said that there are individuals who strongly support the use of condom and cited an example: "I once heard a guy confessing on the radio that he, for fear of HIV/AIDS, inserts condom even when he sleeps alone."

A student boy said, "I discuss about condom use with my friends, but not with my family due to cultural reasons and lack of knowledge. They simply tell you that is '*Metifo*' (bad). A young boy expressed his feeling regarding condom use as follows: "I have a closer contact with my mother than with my father; but if I discuss about this

she will never talk to me or see me again.” He said, “we can discuss it among ourselves and reach to a solution” adding,” because condom is not 100 % protective and since its failure can lead to infection, abstinence is the best solution, anyway.”

A student girl on her part exclaimed,” how can I use condom while isn’t 100% protective?”

## 6. Discussion

This study has attempted to assess the sexual behavior, condom use and other related matters of high school adolescents in South Gondar Administrative Zone, Amhara Region, Ethiopia.

The basic demographic characteristics of the study population are not different from other similar school population.

Nine percents of the participating students admitted to having sexual experience accounting for 9.6 % of the boys and 7.7 % the girls. These figures are considerably low when compared with the results of similar studies that ranged from 31-59% in Northern Ethiopia (34,36) in Southern Ethiopia (37); and 32-41 % in Addis Ababa (46,71). The very high reports are from out-of-school adolescents' community based studies (36, 37, 43, and 46). This may suggest that the risk taking behavior regarding sexual matter increase among the out-of- school adolescent who are not engaged in some kind of productive life. In USA and Canada the figure were between 46-72% for boys and 24%-72% for girls (20); In Europe it was between 18.9%-78% for boys, and 17%-45% for girls (21); In Ethiopia in Harar nearly half of males and one-fifth of females (35), in north west Ethiopia Kolla Diba 31.9% for both sexes (34), in Jimma 40% for both sexes (41), in Addis Ababa 5.6% for girls, 39.8% for boys (25), in Addis Ababa 21.9% for both sexes (40); in Ethiopia in South Gondar 43.8% for urban and 42.0% for rural (43). The result for boys and girls was not fairly comparable to most of the previous findings. This could probably abstain is starting due to the different efforts made to tackle the spread of HIV/AIDS or it may be due to excluding of 11<sup>th</sup> and 12<sup>th</sup> grades from the study because of the new education policy (included in preparatory class).

The mean age at first sexual intercourse in this study was 15 years for males and 15.8 for females.



More than 60 % of the participants reported to experienced sexual intercourse before the age of seventeen, which shows early initiation of sex. Thirty four percent of the sexually active respondents claimed that the main reason given for first sexual encounter was fell in love, sexual desire (20.3%) and raped (12.5%) indicating either unplanned encounter or circumstances creating unfavorable situations for making responsible decisions.

Data on attitude towards sexual behavior showed that disapproval of sex before marriage is apparent among most school adolescents of South- Gondar. Of the interviewed adolescents more than two-thirds disapproved sex before marriage. About 14.8% of the sexually active students admitted to having had sex with female commercial sex workers, and 23.4% of the sexually active students reported also that they had had multiple sexual partners. All the above findings clearly and alarmingly indicate to a prevalent high risk behavior. This has also been the findings of various previous investigations (25, 29, 35, and 36). This indicates that the rate of promiscuity is high among these adolescents. This can predispose them to acquisition of STDs/HIV (69).

All except one student heard about HIV/AIDS. This is an encouraging finding, which may be due to the presence of anti-AIDS clubs in the school as well as the effort of teachers, different mass media, and the health education sessions being conducted by health workers.

More than 70% of the study population knew one or more sexually transmitted diseases indicating a high knowledge. HIV/AIDS is the most commonly known disease. This may be related to the information that is widely disseminated through different Medias and the gravity of the problem that HIV is affecting more and more people in the area and the country at large. The degree of knowledge of the different types of STDs, on the other hand might reflect the degree of spread of the disease. The most common source of information was teachers (76.9%)

followed by radio, (67.4%). This is an encouraging finding, which shows teachers have played a greater role in the provision of information and education on matters related to HIV/AIDS. Similar to most of the previous findings, radio was mentioned as the most source of information (The mass media has been also found the most important source of HIV/AIDS information in several studies (25, 36, 41, and 43). Given that teachers and the radio are important information sources for all students, this presents major opportunities for delivering messages that can be tailored to meet the needs of adolescents of different ages and situations. Their proximity to the students, their knowledge and the opportunities for continuous follow up and contact make teachers as essential part of HIV/AIDS education. On the other hand media that involve two-way communications appear to play lesser part. This might have influence on the depth of knowledge the study population acquire and the impact of information on change of behavior. It is encouraging that a great majority of the respondents (97%) knew the most common way of HIV/AIDS transmission (unprotected sexual inter course).

Only 53.7% of the participants agreed that a person could get HIV the first time he/she had sex. Thus, there is a big gap between level of awareness and knowledge of HIV transmission.

Studies conducted in some parts of the country among school adolescents revealed that the prevalence of self reported STDs were 11.5% and 7.9% in Kola Diba and Addis Ababa respectively (34,40). In our study self reported signs or symptoms of STIs among sexually active adolescents were 2.7%, which is very low.

More than 80% of the respondents answered favorably questions concerning normal inter actions such as eating together, shaking hands, and caring for the sick with HIV/AIDS patients. On the other hand it is discouraging that 41.1%, 17.5% and 32.9% of the respondents answered HIV positive person should be isolated, HIV infected should not continue working with others

and not interested to shop food items from a shopkeeper who is HIV positive respectively. This shows that misconceptions about HIV/AIDS are wide spread among school adolescents. The stigma associated with HIV/AIDS causes discrimination and this has posed serious obstacles to confronting the epidemic. Stigma and discrimination, are a result of ignorance about the disease and traditional and religious about sex, sexuality and sexually transmitted diseases (16). This indicates that a need to put an effort to improve the attitude of school adolescents. Only 5.8% of the respondents perceived to have a high chance of acquiring HIV. Our finding was even more discouraging compared to other findings (34). This can have a very negative influence on reducing high-risk behaviors, thus, becoming a major risk factor of HIV acquisition (20). Studies conducted in Ethiopia revealed that similar findings (43, 57).

A substantial proportion of the students have heard about voluntary counseling and testing for HIV, and claimed to be voluntary to under go voluntary counseling and testing for HIV. Prior to the survey only 5.9% of the respondents know their status. Our finding was even more compared to recent study conducted in South-Gondar among out-of-school adolescents (43), and a finding from Uganda. Voluntary and confidential HIV counseling and testing (VCT) is an important tool for preventing HIV. VCT allows adolescents to evaluate their behavior and its consequences (8).

Another characteristic feature which makes adolescent sexual activity high risk is their either none or very minimal use of any protective measures, specifically the use of condom (25). In this study only 37.5% of the sexually active students used condom in their first sexual encounter, and 41.7% claimed to have used condom continuously on their subsequent sexual

encounters. This figure seems comparable to earlier report (34), and higher to study in Addis (25, 40), yet we feel that the utilization of condoms is still not satisfactory. It requires intense effort to convince these groups of adolescents to adopt the use of condoms. Although condoms are available in many places only 47.4% of the respondents claimed that high school students are well informed about condoms. This indicates that information pertaining to condom is not provided to adolescents. This is also reflected during the FGD, which discussed about sexuality and condom use to be taboo in their area (The focus group participants of this study also outlined the existence of this problem in the study area). Regarding the source of information in this study, that health workers rather than schools are more important source followed by mass media. Teachers and parents are not considered as a main source of information. Similar findings were reported in Addis Ababa (25, 27). In this survey, only 38.9% choose teachers to be the best source of information, which is comparably high than previous study in Addis (25). This is evident that the role schools have played in the provision of information is very minimal or unsatisfactory. The consistent and correct use of condoms reduces the risk of HIV infection. HIV/AIDS prevention program often include the promotion and distribution of condoms.

This study, therefore, has demonstrated that there is a strong desire by these participants for distribution of condom in schools. About 60% of students support the distribution of condoms in high schools. Previous similar study conducted in Addis support this finding (25).

## **7. Strength and Limitation of the study**

### **7.1 Strength of the study**

This study has tried to assess the level of risk perception among high school adolescents and identifies some attitudes towards HIV/AIDS patients and willingness for VCT among target groups could be mentioned as the strength of the study.

The sampling technique employed, the achievement of high response rate, the use of appropriate methods to minimize bias and the use combining quantitative and qualitative data which helped us to collect more information, could be also mentioned as the strength of the study.

### **7.2 Limitations of the Study**

This study is subject to several limitations. The behavioral outcomes are based on self-reported information, which is subject to reporting errors and biases. Since the study touches very sensitive and intimate issues the possibility of underestimation cannot be ruled out. Some sort of desirability bias may not be eliminated even the survey was anonymous. The age representation was not comprehensive enough as it focused only on secondary school and 11th and 12th grades students were not included, because of the new education policy they are preparatory students. Lack of similar studies on 9<sup>th</sup> and 10<sup>th</sup> grade students in Ethiopia specific to adolescents' sexuality to compare results are limitations of the study. Finally, this study is based on cross-sectional data, which implies that the direction of causal relationships can not always be determined.

## 8. Conclusions

It is essential to reach young people before they engage in high risk behaviors, including drug and alcohol use. Information on HIV/AIDS and reproductive health, as well as life skills, should be integrated in to primary school curricula and offered through the school years.

1. Among the sexually active students more than 60% in this study were sexually engaged by age sixteen and also practiced high risk sexual behavior that is unprotected sex, multi-sexual partner, and sex with female commercial sex workers.
2. Though the majority of the study population had good knowledge of the ways of transmission of HIV/AIDS and means of prevention, unfavorable attitude towards HIV/AIDS patients manifested, and the perception of risk acquisition is weak.
3. Though the practice of condom use is low in the area, a substantial proportion of school adolescents support the promotion and distribution of condom in high schools.
4. The adolescents' preference regarding voluntary counseling and testing was found to be very high.
5. There is inadequate family and social support to discuss about sexuality and protective measures on the other hand there is free discussion with their peers about sexuality, condom use and other related issues

## **9. Recommendations**

- 1.** Upgrading the capacity of school clubs, peers teachers who are the main sources of information at present would help to disseminate accurate information and minimize misconception
- 2.** Sensitize the community to encourage open discussion among family members in general and between parents and children in particular.
- 3.** Respond timely to the existing high demand for voluntary counseling and testing for HIV by establishing accessible and affordable service centers.
- 4.** Create opportunity to work with adolescents, promote their participation and equipped with life skills to put knowledge in to practice
- 5.** Conducting further study to validate the need for promotion and distribution of condom in high schools is advisable.

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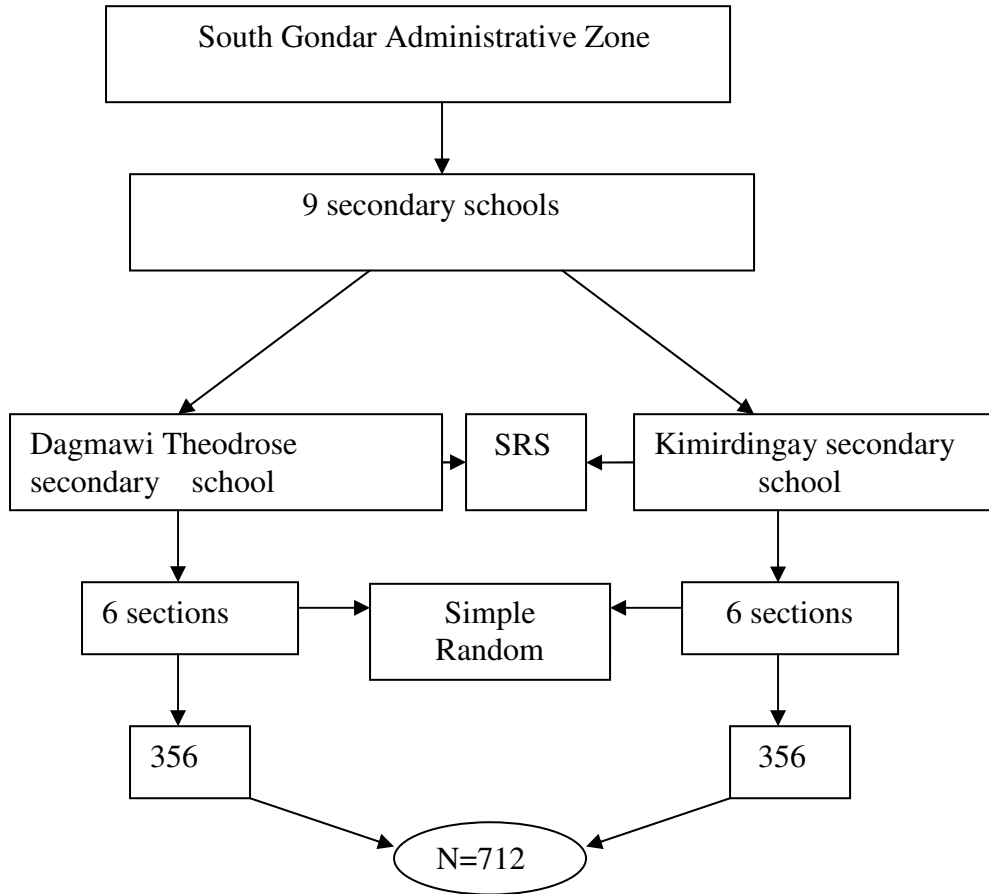
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**Appendix A: Schematic presentation of sampling procedure**



## Appendix B: Sample English questionnaire

### **STUDENT SELF REPORTING QUESTIONNAIRE TO BE FILLED BY HIGH SCHOOL ADOLESCENTS OF SOUTH GONDAR**

NOV.2003

Dear student,

In ensuring the health of adolescents, the understanding of existing problems and related behaviors of this group of the population is important. In line with this a study is proposed to assess the sexuality, perception of risk of HIV/STIs and determinants of condom use among high school adolescents and you are chosen to participate in this study. The choice of the grade and section is done randomly using a lottery type of approach.

The purpose of this study is to generate information about high school adolescents' sexual behavior, and their perception of risk of HIV/STIs; determinants of condom use; and to organize future school adolescent health service (interventions).

The study will involve various intimate and private life questions. In order to effectively attain the goal we are asking your help. Here is a survey for you to complete. There is no need to put your name on the survey, no individual responses will be reported. Your answers are completely confidential. It is your full right to refuse to answer any or all of the questions. If you don't want to participate you can leave the format on the table (upside down). But, you are requested to remain in your seats until others finish filling the format. However, your honest answers to these questions will help us in better understanding of what people think, say and do about certain kinds of behaviors. We request your truthful and keen participation. Please take a few minutes to answer to the questions.

Would you be willing to participate?

- Yes, I want to participate in the study. (Please go to the next page).
- No, I don't want to participate in the study.

Thank you very much!

## Part one: Background characteristics

No	Questions and filters	Responses	CODE
Q 101	Name of school	1. Dagmawi Theodrose secondary school 2. Kimirdingaye secondary school	/___/
Q 102	Sex?	1. Male 2. Female	/___/
Q103	Age?	_____ Year 99. Don't know year	/___/
Q104	Marital status?	1. Unmarried 2. Married 3. Divorced 4. Widowed 5. Separated	/___/
Q105	Grade level _____grade	1. Grade 9th 2. Grade 10th	/___/
Q 106	To which ethnic group do belong?	1. Amhara 2. Others	/___/
Q 107	What religion are you?	1. Orthodox 2. Protestant 3. Catholic 4. Muslim 5. Other, Specify_____	/___/
Q 108	With whom are you living now?	1. With father and mother 2. With mother only 3. With father only 4. With relatives 5. Fiancé 6. Spouse 7. Alone 8. Friends 9. Other (specify)_____	/___/
Q 109	Father's educational level?	1. Illiterate 2. Read and write 3. Grade 1-6 4. Grade 7-12 5. 12+2 6. 1st degree and above 7. Other, specify_____	/___/



Q110	Mother's educational level?	<ol style="list-style-type: none"> <li>1. Illiterate</li> <li>2. Read and write</li> <li>3. Grade 1-6</li> <li>4. Grade 7-12</li> <li>5. 12+2</li> <li>6. 1st degree and above</li> <li>7. Other, specify_____</li> </ol>	/___/
Q111	What is your father's occupation?	<ol style="list-style-type: none"> <li>1. Daily laborer</li> <li>2. Farmer</li> <li>3. Civil servant</li> <li>4. Employed in private sector</li> <li>5. Has private business_____</li> <li>6. Other (specify)_____</li> </ol>	/___/
Q112	What is your mother's occupation?	<ol style="list-style-type: none"> <li>1. House wife</li> <li>2. Daily laborer</li> <li>3. Maid servant</li> <li>4. Employed in private sector</li> <li>5. Has private business_____</li> <li>6. Other (specify)_____</li> </ol>	/___/
Q113	How do you perceive your family status?[Relative to your neighbors]	<ol style="list-style-type: none"> <li>1. Very rich</li> <li>2. Rich</li> <li>3. Medium</li> <li>4. Poor</li> <li>5. Very poor</li> </ol>	/___/
Q114	Do you have permanent pocket money?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	/___/
Q115	Do you drink alcoholic beverages like Tela, Tej, Beer, Arekie and the likes?	<ol style="list-style-type: none"> <li>1. Have never drunk</li> <li>2. I have tried once or twice</li> <li>3. I drink from time to time</li> <li>4. I drink daily</li> </ol>	/___/
Q116	Do you smoke cigarettes?	<ol style="list-style-type: none"> <li>1. Have never smoked</li> <li>2. I have tried once or twice</li> <li>3. I smoke from time to time</li> <li>4. I smoke cigarettes daily</li> </ol>	/___/
Q117	Do you chew khat?	<ol style="list-style-type: none"> <li>1. Have never chewed</li> <li>2. I have tried once or twice</li> <li>3. I chew from time to time</li> <li>4. I chew daily</li> </ol>	/___/

## SECTION -2. SEXUAL HISTORY

NO	QUESTIONS	RESPONSE	CODE
Q118	Have you ever had sexual intercourse?	1. Yes 2. No [if no skip to question number 34]	/___/
Q119	At what age did you first have sexual intercourse?	Age in years _____ 99. Don't know	/___/
Q120	What is/was the relation to you of your first partner?	1. An acquaintance 2. A friend 3. Finance 4. Spouse 5. A relative 6. Other (specify) _____	/___/
Q 121	Why did you decide to have sexual intercourse the first time? ( multiple answer may be possible)	1. Fell in love 2. Had desire 3. I got married 4. Raped 5. To get money and other gifts 6. Peer pressure 7. Was drunk or stoned 8. Others, specify _____	/___/
Q122	How much older or younger was the person with whom you had your first sexual experience?	1. More than 10 years older 2. 5-10 years older 3. Less than 5 years older 4. Younger 5. He was an age like me 99. Don't know	/___/
Q 123	How many sexual partners have you had so far?	1. With one person 2. With two people 3. With three people 4. With four people 5. With five to nine people 6. With ten or more people	/___/

No	Questions and filters	Responses	Code
Q 124	How many people in the total have you ever had sexual intercourse with during the last 12 months?	<ol style="list-style-type: none"> <li>1. With one person</li> <li>2. With two people</li> <li>3. With three people</li> <li>4. With four people</li> <li>5. With five to nine people</li> <li>6. With ten or more people</li> </ol>	/___/
Q 125	Have you ever used a condom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (if no skip to Q.129)</li> </ol>	/___/
Q 126	How often did you use condom in the last 12 months?	<ol style="list-style-type: none"> <li>1. Always [Skip to Question number 130]</li> <li>2. Most of the time</li> <li>3. Some time</li> </ol>	/___/
Q 127	Did you use a condom the FIRST time you had sexual intercourse?	<ol style="list-style-type: none"> <li>Yes 1</li> <li>No 2</li> </ol>	/___/
Q 128	Did you use a condom the LAST time you had sexual intercourse?	<ol style="list-style-type: none"> <li>Yes 1</li> <li>No 2</li> </ol>	/___/
Q 129	If you have not used condom at all, or haven't used it consistently what was the reason? ( multiple answer is possible)	<ol style="list-style-type: none"> <li>1. Not available</li> <li>2. Too expensive</li> <li>3. Ashamed to ask my partner</li> <li>4. partner objected</li> <li>5. Used other contraceptive</li> <li>6. Don't like them</li> <li>7. Wanted to get pregnant</li> <li>8. Ashamed to buy</li> <li>9. I trust my partner</li> <li>10. I was drunk or stoned</li> <li>11. Didn't think of it</li> <li>12. I didn't know how to use it</li> <li>13. It decreases satisfaction/pleasure</li> <li>14. It bursts</li> <li>15. My religion prohibits</li> <li>16. Others, specify_____</li> </ol>	/___/
Q 130	[For males], have you ever had sexual intercourse with commercial sex workers?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No [if no skip to question 134]</li> </ol>	/___/
Q 131	[For males], have you ever used a condom when making sexual intercourse with commercial sex workers	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No [if no skip to question 133]</li> </ol>	/___/
Q 132	[For males], if yes, how often did you use condom when making sexual intercourse with commercial sex workers?	<ol style="list-style-type: none"> <li>1. Always [if always skip to question 134]</li> <li>2. Some times</li> <li>3. Most of the time</li> </ol>	/___/

Q133	[For males], if you have not used condom at all, or have not used it consistently what was the reason?	<ol style="list-style-type: none"> <li>1. Not available</li> <li>2. Too expensive</li> <li>3. Shamed to ask my partner</li> <li>4. Partner objected</li> <li>5. Don't like them</li> <li>6. Shamed to buy</li> <li>7. I was drunk or stoned</li> <li>8. Didn't think of it</li> <li>9. I didn't know how to use</li> <li>10. It decreases satisfaction</li> <li>11. It bursts</li> <li>12. Other, specify_____</li> </ol>	/___/
Q134	Have you ever had symptoms of STI such as genital ulcer, abnormal genital discharge, and pain during urination or genital swelling?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No [skip to question 138]]</li> </ol>	/___/
Q135	If yes, whom did you first discuss the issue with?	<ol style="list-style-type: none"> <li>1. My partner (husband/wife)</li> <li>2. My friends/peers</li> <li>3. My parents</li> <li>4. My boy/girl friend</li> <li>5. Health workers</li> <li>6. Traditional healers</li> <li>7. Local injectors</li> <li>8. Others, specify_____</li> </ol>	/___/
Q136	If yes where did you go for treatment? ( some time more than one answer is possible)	<ol style="list-style-type: none"> <li>1. Went to Traditional healer 1</li> <li>2. Went to public health institution</li> <li>3. I bought some drug from pharmacy</li> <li>4. Went to local injectors</li> <li>5. Went to private clinics</li> <li>6. Others, specify_____</li> </ol>	/___/
Q137	Could you tell me why you prefer to seek health care in this place? ( more than one answer is possible)	<ol style="list-style-type: none"> <li>1. Effectiveness of treatment</li> <li>2. Free treatment</li> <li>3. Low cost of treatment</li> <li>4. Proximity</li> <li>5. For the sake of confidentiality</li> <li>6. Others, specify_____</li> </ol>	/___/

<b>SECTION THREE: THE FOLLOWING QUESTIONS ARE CONCERNING KNOWLEDGE AND ATTITUDE TOWARDS RISKS OF SEXUAL ACTIVITY, HIV/STIs AND THEIR PREVENTION</b>			
Q 138	Do you have any source of information about Sexuality? HIV/AIDS? STIs?	Yes 1 1 1	No 2 2 2 /___/ ___/ /___/
Q 139	From which person or from where do you learn most about adolescent and sexuality? (multiple answer is possible)	1. My parents 2. Sexual partner (husband/wife) 3. Other family members 4. Boy friends/girl friends 5. Friends/peers 6. Health institution 7. School 8. Religious leaders 9. News papers, posters or pamphlets 10. The radio 11. Others, specify_____	/___/
Q 140	Have you ever heard about HIV/AIDS?	Yes 1 No 2 [skip to question number 142]	/___/
Q 141	If yes, from which person or from where do you get more information about HIV/AIDS/STIs ( multiple answer is possible)	1. My parents 2. Sexual partner (husband/wife) 3. Other family members 4. Boy friends/girl friends 5. Friends/peers 6. Health institution 7. Teachers 8. Religious leaders 9. News papers, posters or pamphlets 10. The radio 11. Others, specify_____	/___/
Q142	Is there any thing a person can do avoid getting STIs and HIV/AIDS? ( multiple answer is possible)	1. Sexual abstinence 2. Avoid casual sex 3. Remain faithful to a partner 4. Use condoms in every act of sexual intercourse 5. Avoid sex with commercial sex workers 6. Others, specify_____	/___/

Q 143	If you look carefully, you can know if some has HIV?	1. Yes 2. No 99. Don't know	/__/ 
Q 144	A person can get HIV the first time he or she has sex?	1. Yes 2. No 99. Don't know	/__/ 
Q 145	Have you ever heard about STIs	1. Yes 2. No Skip to question 147]	/__/ 
Q 146	If yes, which diseases do you know about? ( multiple answer is possible)	1. Gonorrhoea 2. Syphilis 3. Chancroid 4. Lymphogranuloma venerum 5. HIV/AIDS 6. Others, specify_____	/__/ 
Q 147	What additional health problems (complications) can they develop if people do not get early treatments for STIs?	1. Exposure to HIV 2. Sterility 3. Urethral stricture 4. Abortion 5. Others, specify _____ 99. Don't know	/__/ 
Q 148	Using condom is a sign of not trusting your partner?	1. Agree 2. Disagree 3. Not sure	/__/ 
Q 149	A boy should have sex before he gets married?	1. Agree 2. Disagree 3. Not sure	/__/ 
Q 150	Discussing condom or contraceptive with young people promotes promiscuity?	1. Agree 2. Disagree 3. Not sure	/__/ 
Q 151	Do you believe you have done any thing that may have put you at risk of getting the HIV virus?	1. Yes 2. No [skip to question 153] 99. Don't know	/__/ 
Q 152	If yes, why?	1. Have had sex without condom 2. More than one sexual partner 3. Have had sexual intercourse with commercial sex workers 4. Injuries with contaminated sharps 5. Others, specify_____	/__/ 

Q 153	If no, why not?	<ol style="list-style-type: none"> <li>1. Have never made sexual intercourse</li> <li>2. I have abstained from sex</li> <li>3. One to one sexual relation</li> <li>4. No contact with CSW</li> <li>5. I did not share injections</li> <li>6. I always use condom</li> <li>7. Others, specify_____</li> </ol>	/__/_
Q 154	How can one prevent HIV/AIDS? ( multiple answer is possible)	<ol style="list-style-type: none"> <li>1. I don't know</li> <li>2. Abstain from sexual intercourse</li> <li>3. One to one only sexual relationship</li> <li>4. Condom use</li> <li>5. Avoid unsafe injections</li> <li>6. Avoid contaminated sharp objects</li> <li>7. Others, specify_____</li> </ol>	/__/_
Q 155	Would you eat together with a person who has HIV/AIDS?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 156	Would you shake a person's hand if you know that s/he has HIV/AIDS?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>3. I don't know</li> </ol>	/__/_
Q 157	Would you continue your friendship if you find out that a friend has HIV/AIDS?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 158	Would you give home care if a family member has HIV/AIDS?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 159	Should a student with HIV/AIDS be allowed to continue his/her education with others?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 160	Should a person with HIV/AIDS be allowed to work with others?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 161	If a shop keeper/food seller/has HIV/AIDS would you buy food items from him/her	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_
Q 162	Should people with HIV/AIDS live separately from others?	<ol style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>99. I don't know</li> </ol>	/__/_

Q 163	What is your chance of acquiring HIV/AIDS?	1. None 2. Small 3. Medium 4. High	/__/_
Q 164	Have you ever heard about voluntary counseling and testing for HIV?	1. Yes 2. No	/__/_
Q 165	Did you ever under go HIV test?	1. Yes 2. No	/__/_
Q 166	Are you voluntary to under go voluntary counseling and testing for HIV?	1. Yes 2. No 3. I am not sure	/__/_
Q 167	Please circle the ways of HIV/AIDS transmission	1. I don't know 2. Multi partner sexual intercourse 3. Infected blood 4. Contaminated sharp objects 5. Mother to child 6. Others, specify_____	/__/_
Q 168	From where do you think high school students obtain most of their information about condom?	1. From teachers 2. From their friends 3. From their parents 4. From the mass media 5. From health professionals 6. Others, specify_____	/__/_
Q 169	If sexually active students don't use condoms, what do you think is their <b>one</b> most important reason?	1. They don't have information about condoms 2. Pressure from sex partners 3. Pressure from parents 4. Religious 5. Being afraid to buy from shops/pharmacy 6. Condom is not available 7. Neglect 8. Other, specify_____	/__/_
Q 170	If condoms were to be distributed at schools would you approve of it?	1. Yes 2. No 99. Don't know	/__/_



Q 171	If condoms were to be distributed at schools, how should they be distributed?	<ol style="list-style-type: none"> <li>1. By teachers</li> <li>2. At school clinic</li> <li>3. By students/AIDS/First aid club members</li> <li>4. By school counselors</li> <li>5. By school installed condom vending machine</li> <li>6. Should never be distributed</li> <li>7. Other, specify_____</li> </ol>	/____/
Q 172	If condoms were to be provide to students what should their price be?	<ol style="list-style-type: none"> <li>1. Freely</li> <li>2. Five cents only</li> <li>3. Ten cents only</li> <li>4. Fifteen cents only</li> <li>5. Twenty or more cents</li> <li>6. Should never be sold to students</li> <li>7. Other, specify_____</li> </ol>	/____/
Q 173	Do you think most high school students are well informed about condoms?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>99. Don't know</li> </ol>	/____/

Thank you very much!

Appendix C: Sample Amharic Questionnaire

**ተማሪው በግል ጽፎ መልስ የሚሰጥበት መጠይቅ**

ደቡብ ጎንደር- ህዳር/1996

ውድ ተማሪ

ወጣቶች ጤናማ ሆነው እንዲገኙ ለማድረግ አሁን በእነርሱ ላይ የሚታዩትን የጤና ችግሮችና ተዛማጅ ባህሪያት አስቀድሞ መገንዘብ በጣም ጠቃሚ ነው። ይህን አስመልክቶ ስለወሲብ ሁኔታ እና ኤች.አይ.ቪን ጨምሮ በግብረ-ሰጋ ግንኙነት አማካይነት የሚተላለፉ በሽታዎችን እንዲሁም የኮንዶም ተጠቃሚነትና አጠቃቀም ዙሪያ በ 2ኛ ደረጃ ተማሪዎች ዘንድ ስላለው ሁኔታ ለመረዳት ይህ ጥናት ተዘጋጅቶታል።

ጥናቱ በርካታ በግል ህይወት ዙሪያ ጥያቄዎች አሉት። ስለዚህ ጥናቱ በትክክል የታለመለትን ግብ እንዲመታ የአንተን/የአንቺን ከፍተኛ ትብብር ይፈልጋል።

በተዘጋጀው መጠይቅ ላይ ስም መጻፍ አያስፈልግም መልስህ/ሽ በሚስጢር የሚያዝ ነው። ጥናቱ በፍቃደኝነት የሚከናወን ሲሆን ማንኛውም ተማሪ በጥናቱ ያለመሳተፍ መብቱ የተጠበቀ ነው። በጥናቱ መሳተፍ ካልፈለጉ መጠይቁን ከላይ ወደታች ገልብጠው በጠረጴዛው ላይ ያስቀምጡ ነገር ግን ሌሎች መጠይቁን ሞልተው እስኪጨርሱ ባሉበት ሥፍራ እንዲቆዩ ይጠየቃሉ።

የእርስዎ ቅንና እውነተኛ አስተሳሰብና ድርጊትዎን የሚገልጹ መልሶች ወጣቶች በወሲብ ባህሪያት ዙሪያ ምን እንደሚያስቡ፣ ምን እንደሚሉና፣ ምን እንደሚያደርጉ በማሳወቅ ረገድ ከፍተኛ ጠቀሜታ ስላለው ጥቂት ደቂቃዎችን ለእኛ በመስጠት እንዲተባበሩን እንጠይቃለን።

ታዲያስ መጠይቆቹን ለመሙላት ፈቃደኛ ነዎት?

/ / አዎ ወደ ሚቀጥሉት ገጾች ይሸገጋሩ

/ / አይደለሁም( አቁም)

**ክፍል- አንድ አጠቃላይ መረጃ**

ተ.ቁ	ጥያቄዎች	አማራጭ መልሶች	ኮድ
101	የትምህርት ቤቱ ስም?	1. ዳግማዊ ተወድሮስ 2ኛ ደረጃ ት/ቤት 2. ክምር ድንጋይ 2ኛ ደረጃ ት/ቤት	/-----/
102	ጾታ?	1. ወንድ 2. ሴት	/-----/
103	እድሜ( በአመት)?	----- አመት 99. አመቱን አላውቅም	/-----/
104	የጋብቻ ሁኔታ?	1. አላገባሁም 2. አግብቻለሁ 3. ተፋትቻለሁ 4. ባሌ/ሚስት የሞተብኝ 5. ተለያይተናል	/-----/
105	የትምህርት ደረጃ?	1. 9ኛ ክፍል 2. 10ኛ ክፍል	/-----/
106	ብሄረሰብ?	1. አማራ 2. ሌላ(ይጠቀስ)-----	/-----/
107	ሃይማኖት?	1. ኦርቶዶክስ 2. ፕሮቴስታንት 3. ካቶሊክ 4. እስልምና 5. ሌላ(ይጠቀስ)-----	/-----/
108	በአሁኑ ጊዜ የሚኖሩት ከማን ጋር ነው?	1. ከእናት እና አባቱ ጋር 2. ከእናቱ ጋር ብቻ 3. ከአባቱ ጋር ብቻ 4. ከዘመድ ጋር 5. ከፍቅረኞቹ ጋር 6. ከትዳር ጓደኞቹ/ባለቤቱ ጋር 7. ብቻዮን 8. ከሰፈር/ከት/ቤት/ጋደኞቹ/ኞቹ ጋር 9. ሌላ (ይጠቀስ)-----	/-----/
109	የአባትህ/ሽ የትምህርት ሁኔታ?	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ ብቻ 3. ከ1-6ኛ ክፍል 4. ከ7-12ኛ ክፍል 5. አስራ ሁለት ሲደመር ሁለት 6. የመጀመሪያ ዲግሪና ከዚያ በላይ 7. ሌላ(ይጠቀስ)-----	/-----/

110	የእናት የትምህርት ሁኔታ?	1. ማንበብና መጻፍ የማትችል 2. ማንበብና መጻፍ ብቻ 3. ከ1-6ኛ ክፍል 4. ከ7-12ኛ ክፍል 5. አስራ ሁለት ሲደመር ሁለት 6. የመጀመሪያ ዲግሪና ከዚያ በላይ 7. ሌላ( ይጠቀስ)-----	/-----/
111	የአባት/ሽ ሥራ ምንድን ነው?	1. የቀን ስራተኛ 2. ገበሬ 3. የመንግስት ስራተኛ 4. የግል ድርጅት ተቀጣሪ 5. በግል ሥራ ተዳዳሪ 6. ሌላ( ይጠቀስ)-----	/-----/
112	የእናት/ሽ ሥራ ምንድን ነው?	1. የቤት እመቤት 2. የቀን ስራተኛ 3. የግለሰብ ቤት ሠራተኛ/ተቀጣሪ 4. የግል ድርጅት ተቀጣሪ 5. በግል ሥራ ተዳዳሪ 6. ሌላ( ይጠቀስ)-----	/-----/
113	በአንተ/ቺ ግምት የቤተሰቦች/ችሽ የገቢ ሁኔታ ምን ይመስላል? (ከጎረቤት ጋር ሲነፃፀር)	1. ሀብታም 2. ድሃ 3. መካከለኛ 4. በጣም ድሃ	/-----/
114	ቋሚ የሆነ የኪስ ገንዘብ አለህ/አለሽ?	1. አዎን 2. የለም	/-----/
115	እንደ ጠላ/ጠጅ/ቢራ/አረቂ የመሳሰሉ አልኮል መጠጦችን ጠጥተህ/ህ ታውቃለህ/ቁያለሽ?	1. የለም ምንም ጠጥቼ አላውቅም 2. በህይወቴ አንዴ ወይም ሁለቴ ጠጥቻለሁ 3. አልፎ አልፎ እጠጣለሁ 4. በየቀኑ እጠጣለሁ	/-----/
116	ሲጋራ ታጨሳለህ/ታጨሻለሽ?	1. የለም ምንም አጭሽ አላውቅም 2. በህይወቴ አንዴ ወይም ሁለቴ አጭሻለሁ 3. አልፎ አልፎ አጨሳለሁ 4. በየቀኑ አጨሳለሁ	/-----/
117	ጫት ቅመህ/ሽ ታውቃለህ/ቁያለሽ?	1. የለም ምንም ቅመኔ አላውቅም 2. በህይወቴ አንዴ ወይም ሁለቴ ቅመኔያለሁ 3. አልፎ አልፎ እቅማለሁ 4. በየቀኑ እቅማለሁ	/-----/
<b>ክፍል ሁለት- የግብረ-ሰጋ ግንኙነትን የሚመለከቱ ጥያቄዎች</b>			
118	የግብረ-ሰጋ ግንኙነት አድርገህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. የለም (የለም ካሉ ወደ ጥያቄ ቁጥር 134 ይሂዱ)	/-----/

119	በመጀመሪያ የግብረ-ስጋ ግንኙነት የፈፀመከው/ሽው በስንት አመትህ/ሽ ነው ?	----- አመት 99. አላውቅም/አላስታውስም	/-----/
120	ለመጀመሪያ ጊዜ የግብረ-ስጋ ግንኙነት አብረውት ከፈጸሙት ስውጋር ያለዎት ግንኙነት ምንድን ነው?	1. የትምህርት ቤት ጓደኛ 2. ከት/ቤት ውጭ ያለ ጓደኛ 3. የፍቅር ጓደኛ 4. ባልና/ሚስት 5. የስጋ ዘመድ 6.ሌላ (ይጥቀሱ)	/-----/
121	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት ለማድረግ የወሰንክበት /የወሰንሽበት ምክንያት ምን ነበር?	1. ፍቅር ይዞኝ 2. በግል የወሲብ ፍላጎት 3. በጋብቻ 4. ተገድጄ 5. ገንዘብና ሌሎች ስጦታዎችን ለማግኘት	/-----/
122	ለመጀመሪያ ጊዜ በግብረ-ስጋ የተገናኘኝ ሽው/ሽው አድሜ ከአንተ/ች አድሜ አንፃር ሲታይ አንዴት ነበር?	1. ከ 10 አመት በላይ ይበልጠኛል 2. ከ 5 አመት እስከ 10 አመት ይበልጠኛል? 3. እስከ 5 አመት ይበልጠኛል 4. ከእኔ ያንሳል 5. እኩያየ ነው 99. አላውቅም/ አላስታውስም	/-----/
123	የግብረ-ስጋ ግንኙነት ከጀመርክበት/ሽበት ጊዜ አንስቶ እስከአሁን በጥቅሉ ከስንት ሰዎች ጋር የግብረ-ስጋግንኙነት አድርገሃል/ሻል?	1. ከአንድ ሰው ጋር 2. ከሁለት ሰዎች ጋር 3. ከሦስት ሰዎች ጋር 4. ከአራት ሰዎች ጋር 5. ከአምስት እስከ ዘጠኝ ከሚሆኑ ሰዎች ጋር 6. አስር ወይም ከዚህ በላይ ይሆናሉ	/-----/
124	በአለፍት 12 ወራት በጥቅሉ ከስንት ሰዎች ጋር የግብረ-ስጋ ግንኙነት አድርገሃል/ሻል?	1. ከአንድ ሰው ጋር 2. ከሁለት ሰዎች ጋር 3. ከሦስት ሰዎች ጋር 4. ከአራት ሰዎች ጋር 5. ከአምስት እስከ ዘጠኝ ከሚሆኑ ሰዎች ጋር 6. አስር ወይም ከዚህ በላይ ይሆናሉ	/-----/
125	የግብረ-ስጋ ግንኙነት በምታደርግበት/ጊበት ጊዜ ኮንዶም ተጠቅመህ/ሽ ታውቃለህ/ቂያለሽ	1. አዎን 2. የለም (የለም ወደ ጥያቄ ቁጥር 129 ይሂዱ)	/-----/
126	በአለፍት 12 ወራት ግብረ-ስጋ ግንኙነት ባደረግክበት/ሽበት ጊዜ ምን ያህል አዘውትረህ/ሽ ኮንዶም ተጠቅም/ሚ ነበር?	1. ሁሉጊዜ( ሁሉጊዜ ካሉ ወደ ጥያቄ 130 ይሂዱ) 2. አብዛኛው ጊዜ 3. አንዳንድ ጊዜ	/-----/
127	ለ መጀመሪያ ጊዜ የግብረ-ስጋ ግንኙነት ባደረግክበት/ሽበት ጊዜ ኮንዶም ተጠቅመህ/ሽ ነበር?	1. አዎን 2. የለም	/-----/
128	ለመጨረሻ ጊዜ ግብረ-ስጋ ግንኙነት ባደረግክበት/ሽበት ጊዜ ኮንዶም ተጠቅመህ/ሽ ነበር?	1. አዎን 2. የለም	/-----/

129	በአለፍት 12 ወራት ኮንዶም ጭራሽ ተጠቅመህ/ሽ የማታውቅ/ቂ ከሆነ ወይንም አልፎ አልፎ ከሆነ የተጠቀምከው/ሽው ምክንያቱ ምንድን ነበር? ( መልስ የሆነ ሁሉ ይከበብ)	<ol style="list-style-type: none"> <li>1. ስለማይገኝ</li> <li>2. ውድ ስለሆነ</li> <li>3. እንጠቀም ማለት ስላሳፈረኝ</li> <li>4. ጓደኛዬ ስለተቃወመ/ች</li> <li>5. ሌላ የወሊድ መቆጣጠሪያ ዜዶ ስለተጠቀምኩ</li> <li>6. ስለማልወድ</li> <li>7. ማርገዝ ስለፈለኩ</li> <li>8. ለመግዛት ስላፈርኩ</li> <li>9. ከጓደኛዬ ጋር ስለምንተማመን</li> <li>10. ጠጥቼ/ሌላ አነቃቂ እጽ/ወስጄ ስለነበር</li> <li>11. አላሰብኩበትም ነበር</li> <li>12. አጠቃቀሙን ስለማላውቅ</li> <li>13. እርከታ ስለሚቀንስ</li> <li>14. ይቀደዳል በማለት</li> <li>15. ሃይማኖቱ ስለሚከለክል</li> <li>16. ሌላ( ይገለጽ)-----</li> </ol>	/-----/
130	( ለወንዶች ብቻ) በአለፍት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት አድርገህ ታውቃለህ?	<ol style="list-style-type: none"> <li>1. አዎን</li> <li>2. የለም( የለም ከሉ ወደ ጥያቄ ቁጥር 134 ይሂዱ)</li> </ol>	/-----/
131	( ለወንዶች ብቻ) በአለፍት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት በምታደርግበት ጊዜ ኮንዶም ትጠቀም ነበር?	<ol style="list-style-type: none"> <li>1. አዎን</li> <li>2. የለም( የለም ከሉ ወደ ጥያቄ ቁጥር 133 ይሂዱ)</li> </ol>	/-----/
132	(ለወንዶች ብቻ) በአለፍት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት በምታደርግበት ጊዜ ምን ያህል አዘውትረህ ኮንዶም ተጠቅመህ ነበር?	<ol style="list-style-type: none"> <li>1. ሁሉጊዜ (ካሉ ወደ ጥያቄ ቁጥር 134 ይሂዱ)</li> <li>2. አብዛኛው ጊዜ</li> <li>3. አንዳንድ ጊዜ</li> </ol>	/-----/
133	(ለወንዶች ብቻ) በአለፍት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት ባደረግክበት ጊዜ ኮንዶም ጭራሽ ተጠቅመህ የማታውቅ ከሆነ ወይንም አልፎ አልፎ ከሆነ የተጠቀምከው ምክንያቱ ምንድን ነበር? ( መልስ የሆነ ሁሉ ይከበብ)	<ol style="list-style-type: none"> <li>1. ስለማይገኝ</li> <li>2. ውድ ስለሆነ</li> <li>3. እንጠቀም ማለት ስላሳፈረኝ</li> <li>4. እስከ ስለተቃወመ/ች</li> <li>5. ስለማልወድ</li> <li>6. ለመግዛት ስላፈርኩ</li> <li>7. ጠጥቼ/ሌላ አነቃቂ እጽ/ወስጄ ስለነበር</li> <li>8. አላሰብኩበትም ነበር</li> <li>9. አጠቃቀሙን ስለማላውቅ</li> <li>10. እርከታ ስለሚቀንስ</li> <li>11. ይቀደዳል በማለት</li> <li>12. ሌላ( ይገለጽ)-----</li> </ol>	/-----/

134	በአለፉት 12 ወራት እንደ የብልት መቁሰል፣ ተፎጥሮአዊ ያልሆነ የብልት ፈሳሽ፣ በምትሸናበት/ኝበት ጊዜ የማቃጠል ስሜት ወይንም የብልት አከባቢ ብሽሽት እብጠት የመሳሰሉ ምልክቶች ታይተውህ/ሽ ያውቃሉ?	1. አዎን 2. የለም ( የለም ካሉ ወደ ጥያቄ ቁጥር 138 ይሂዱ )	/-----/
135	ምልክቶቹ ታይተውህ/ሽ ከነበረ ጉዳዩን በቅድሚያ ለማን አወያየህ/ሽ?	1. ለባለቤቱ 2. ለአቻ ጓደኛዎ 3. ለቤተሰቦቹ 4. ለፍቅረኛዎ 5. ለጤና ባለሙያ 6. ለባህል መድሃኒት አዋቂ 7. ለመንደር መርፌ ወጊ 8. ሌላ(ይገለጽ)-----	/-----/
136	ለላይኛው ጥያቄ መልስህ/ሽ አዎ ከሆነ ምልክቶቹ እንደታየህ/ሽ ለህክምና ወዴት ሄድክ/ሽ? ( መልስ የሆነ ሁሉ ይከበብ )	1. ወደ ባህል መድሃኒት አዋቂ 2. ወደ መንግስት ጤና ድርጅት 3. ወደ ፋርማሲ ሄጄ መድሃኒት ገዛሁ 4. ወደ መንደር መርፌ ወጊ 5. ወደ ግል ክሊኒክ 6. ሌላ(ይገለጽ)-----	/-----/
137	እላይ ወደ ተጠቀሰው ቦታ ለመሄድ የመረጥከው/ሽው ለምንድን ነው? ( መልስ የሆነ ሁሉ ይከበብ )	1. ህክምናው ፍቱን ስለሆነ 2. የነጻ ህክምና ስለማገኝ 3. የህክምናው ዋጋ ዝቅተኛ ስለሆነ 4. ቅርብ ስለሆነ 5. ሚስጥር ስለሚጠብቁልኝ 6. ሌላ( ይገለጽ)-----	/-----/
<b>ክፍል- ሦስት ስለ አደገኛ ጾታዊ ግንኙነቶች ድርጊቶች የአባላዘር በሽታዎችን እና ኤች/አይ/ቪን ለመከላከል ያለንን አውቀት የሚያመለክቱ ጥያቄዎች</b>			
138	ከዚህ በታች ለተዘረዘሩት ጉዳዮች ትምህርት/መረጃ የምታገኝበት/ኒበት መንገድ አለ? ስለጾታዊ ግንኙነት ስለ ኤች/አይ/ቪ/ኤድስ በግብረ ስጋ ስለሚተላለፉ በሽታዎች	አዎን 1 1 1 የለም 2 2 2	/-----/ /-----/ /-----/
139	በጉርምስና ወቅት ስለሚታዩ ለውጦች እና ስለ ግብረ-ስጋ ግንኙነት በአብዛኛው ትምህርት የምታገኘው/ኒው ከየት ነው?	1. ከወላጆቹ 2. ከባለቤቱ 3. ከሌሎች የቤተሰብ አባላት 4. ከፍቅር ጓደኛዎ 5. ከአቻ ጓደኛዎ 6. ከጤና ተቋማት 7. ከ/ትቤት 8. ከሃይማኖት መሪዎች 9. ከጋዜጣ ወይንም ከሌሎች በራሪ ጽሁፎች 10. ከሬዲዮ 11. ሌላ ( ይገለጽ)-----	/-----/

140	ስለ ኤች.አይ.ቪ/ኤድስ ስምተህ/ሽታው ቃለህ/ቁያለሽ?	1. አዎን 2. የለም (የለም ካሉ ወደ ጥያቄ ቁጥር 142 ይሂዱ)	/-----/
141	ስለኤች.አይ.ቪ እና በግብረ-ስጋ ግንኙነት ስለሚተላለፉ በሽታዎች በአብዛኛው መረጃ የምታገኘው/ኚው ከማን/ከየት ነው? ( መልስ የሆነ ሁሉ ይከበብ)	1. ከወላጆቹ 2. ከበላቤቴ 3. ከሌሎች የቤተሰብ አባላት 4. ከፍቅር ጓደኛዎ 5. ከአቻ ጓደኛዎ 6. ከጤና ተቋማት 7. ከ/ትቤት 8. ከሃይማኖት መሪዎች 9. ከጋዜጣ ወይም ከሌሎች በራሪ ጽሁፎች 10. ከሬዲዮ 11. ሌላ ( ይገለጹ)-----	/-----/
142	አንድ ሰው አራሱን ከኤች.አይ.ቪ/ኤድስ እና ሌሎች በግብረ-ስጋ ግንኙነት ከሚተላለፉ በሽታዎች ለመከላከል ምን ማድረግ አለበት? ( መልስ የሆነ ሁሉ ይከበብ)	1. ከግብረ-ስጋ ግንኙነት መቆጠብ /መታቀብ 2. ድንገተኛ ግብረ-ስጋ ግንኙነት ማስወገድ 3. አንድ ለአንድ መወሰን 4. ኮንዶም መጠቀም 5. ከሌተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት አለማድረግ 6. ሌላ(ይገለጹ)-----	/-----/
143	አንድን ሰው አተኩሮ በመመልከት የኤች.አይ.ቪ ቫይረስ እንዳለበት ማወቅ ይቻላል?	1. አዎን 2. የለም 99. አላውቅም	/-----/
144	ማንኛውም ሰው በህይወቴ ለመጀመሪያ ጊዜ በሚያደርገው የግብረ-ስጋ ግንኙነት በኤች.አይ.ቪ ሊያዝ ይችላል?	1. አዎን 2. የለም 99. አላውቅም	/-----/
145	በግብረ-ስጋ ግንኙነት ሊተላለፉ ስለሚችሉ የአባለዘር በሽታዎች ስምተህ/ሽታው ቃለህ/ታውቁያለሽ?	1. አዎን 2. የለም( የለም ካሉ ወደ ጥያቄ ቁጥር 147 ይሂዱ)	/-----/
146	አዎን ካልክ/ሽ ምን ምን በግብረ-ስጋ ግንኙነት የሚተላለፉ በሽታዎችን ታውቃለህ/ታውቅያለሽ? ( መልስ የሆነ ሁሉ ይከበብ)	1. ጨብጥ 2. ቁጥኝ 3. ከርክር 4. ባምቡሌ 5. ኤድስ 6. ሌላ(ይገለጹ)-----	/-----/
147	የአባለዘር በሽታን በፍጥነት ወይም ወዲያውኑ አለመታከም ምን ተጨማሪ የጤና ችግር ሊያስከትል ይችላል? (መልስ የሆነ ሁሉ ይከበብ)	1. ለኤች.አይ.ቪ/ኤድስ መጋለጥ 2. መሃን መሆን 3. የሽንት ቴቦ መጥበብ 4. ውርጃ 5. ሌላ (ይገለጹ)----- 99. አላውቅም	/-----/



148	በግብረ-ስጋ ግንኙነት በምታደር ግበት/ጊበት ጊዜ ኮንዶም መጠቀም ተጣማሪን/ንደኛን ያለማመን ምልክት ነው?	1. እስማማለሁ 2. አልስማማም 3. እርግጠኛ አይደለሁም	/-----/
149	ወንድ ልጅ ከማግባቱ በፊት የግብረ-ስጋ ግንኙነት ማድረግ አለበት?	1. እስማማለሁ 2. አልስማማም 3. እርግጠኛ አይደለሁም	/-----/
150	ከወጣቶች ጋር ስለ ኮንዶም ወይንም ስለወለድ መከላከያ ዜዴዎች መወያየት ልቅ የግብረ-ስጋ ግንኙነትን ያስፋፋል?	1. እስማማለሁ 2. አልስማማም 3. እርግጠኛ አይደለሁም	/-----/
151	እስከአሁን ባለው ጊዜ ለኤች.ኤይ.ቪ ተጋልጫለሁ ብለህ/ሽ ታስባለህ/ቢያለሽ?	1. አዎን 2. የለም ( የለም ካሉ ጥያቄ ቁጥር 153 ይሂዱ) 99.አላውቅም	/-----/
152	መልስህ/ሽ አዎ ከሆነ ለምን?	1. የግብረ-ስጋ ግንኙነት ፈጽሜ አላውቅም 2. ከአንድ ሰው በላይ የግብረ-ስጋ ግንኙነት ስለፈጸምኩ 3. ከሌተኛ አዳሪ ጋር የግብረ-ስጋ ግንኙነት ስለፈጸምኩ 4. በስለታም ነገሮች በጋራ ስለተጠቀምኩ 5. ሌላ(ይገለጽ)-----	/-----/
153	መልስህ/ሽ ራስን ለኤች.ኤይ.ቪ ለሚያጋልጥ ስህተት አልሰራሁም ከሆነ ለምን?	1. የግብረ-ስጋ ግንኙነት ፈጽሜ አላውቅም 2. ከግብረ-ስጋ ግንኙነት ስለታቀብኩ 3. አንድ ለአንድ በታማኝነት ስለጸናሁ 4. ከሌተኛ አዳሪ ጋር ግንኙነት ስለማልፈጸም 5. ሌላ ስው በተወጋበት መርፌ ተወግቼ አላውቅም 6. ሁሉጊዜ ኮንዶም ስለምጠቀም 7. ሌላ(ይገለጽ)-----	/-----/
154	ከኤድስ በሽታ ራስን መከላከል የሚቻለው እንዴት ነው? ( መልስ የሆነ ሁሉ ይክበብ)	1. አላውቅም 2. ግብረ-ስጋ ግንኙነት አለማድረግ 3. አንድ ለአንድ መወሰን 4. በኮንዶም መጠቀም 5. ንጹህ ባልሆነ/ባልተቀቀል መርፌ አለመወጋት 6. የተበከሉ ስለታም ዕቃዎች አለመጠቀም 7. ሌላ(ይገለጽ)-----	/-----/
155	አንድ ሰው የኤድስ ቫይረስ እንዳለበት ብታውቅ/ቂ አብረህ/ሽ ትመገባለህ/ሽ ?	1. አዎን 2. የለም 99. አላውቅም	/-----/
156	አንድ ሰው ኤድስ ቫይረስ እንዳለበት ብታውቅ/ቂ በእጅ ሰላምታ ትሰጠዋለህ/ሽ?	1. አዎን 2. የለም 99. አላውቅም	/-----/

157	ጓደኛህ/ሽ ኤች.አይ.ቪ/ኤድስ እንዳለበት ብታውቅ/ቂ ጓደኝነትህን/ሽን ትቀጥላህ/ሽ ወይስ ታቋርጣለህ/ሽ ?	1. እቀጥላለሁ 2. አቋርጣለሁ 99. አላውቅም	/----/
158	አንድ የቤተሰብህ አባል በኤች.አይ.ቪ/ኤድስ ቢያዝ በቤት ውስጥ እንክብካቤ ታደርጋለህ/ሽ ?	1. አዎን 2. የለም 99. አላውቅም	/----/
159	ኤች.አይ.ቪ/ኤድስ የያዘው ተማሪ ከሌሎች ተማሪዎች ጋር ትምህርቱን/ትዋን እንዲቀጥል/እንድትቀጥል ትፈቅዳለህ/ሽ?	1. አዎን 2. የለም 99. አላውቅም	/----/
160	ኤች.አይ.ቪ/ኤድስ የያዘው ሰራተኛ ከጤነኛ ሰራተኞች ጋር እንዲሰራ መፈቀድ አለበት?	1. አዎን 2. የለም 99. አላውቅም	/----/
161	አንድ ባለሱቅ ወይም ምግብ የሚሸጥ ሰው ኤች.አይ.ቪ/ኤድስ እንዳለበት ብታውቅ/ቂ የምግብ ሸቀጦችን ትገዛዋለህ/ሽ?	1. አዎን 2. የለም 99. አላውቅም	/----/
162	ኤች.አይ.ቪ/ኤድስ ያለባቸው ሰዎች ከሌሎች ተለይተው መኖር አለባቸው?	1. አዎን 2. የለም 99. አላውቅም	/----/
163	አንተ/አንቺ በኤድስ ቫይረስ የመያዝህ/ሽ እድል/ሁኔታ ምን ያህል ነው?	1. ልያዝ አልችልም 2. በጣም አነስተኛ 3. መካከለኛ 4. በጣም ከፍተኛ 99. አላውቅም	/----/
164	በፈቃደኝነት ስለሚደረግ የኤች.አይ.ቪ የምክር አገልግሎት እና የደም ምርመራ ሰምትህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎን 2. የለም	/----/
165	በፈቃደኝነት የተመሰረተ የኤች.አይ.ቪ እና የደም ምርመራ አድርገህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎን 2. የለም	/----/
166	የኤች.አይ.ቪ የደም ምርመራ ለማድረግ ብትጠየቅ/ቂ ፈቃደኛ ትሆናለህ/ሽ?	1. አዎን 2. የለም 3. እርግጠኛ አይደለሁም	/----/
167	የኤድስ ቫይረስ የሚተላለፍባቸውን መንገዶች ግለጽ/ጨ? /መልስ የሆነው ሁሉ ይክበብ/	1. አላውቅም 2. ልቅ የግብረ-ስጋ ግንኙነት 3. በተበከለ ደም 4. በተበከለ ስለታም ነገር መወጋት 5. ከእናት ወደ ልጅ 6. ሌላ (ይገለጽ) -----	/----/

168	የ 2ኛ ደረጃ ተማሪዎች አብዛኛውን ጊዜ ስለ ኮንዶም መረጃ የሚያገኙት ከየት ነው ብለህ/ሽ ታስባለህ/ሽ?	1. ከአስተማሪዎች 2. ከጓደኞቻቸው 3. ከቤተሰብ 4. ከመገናኛ ብዙሃን (ሬዲዮ/ቴሌቪዥን ወዘተ 5. ከጤና ባለሙያዎች 6. ሌላ(ይገለጽ)-----	/----/
169	ግብረ-ስጋ ግንኙነት የጀመሩ ተማሪዎች ኮንዶም የምይጠቀሙ ከሆነ ዋነኛ አንድ ምክንያት ምንድነው ብለው ይጋምታሉ?	1. ስለኮንዶም በቂ መረጃ ስለሌላቸው 2. ከፍቅረኛ ግፊት ምክንያት 3. በቤተሰብ ግፊት ምክንያት 4. በሃይማኖት ግፊት ምክንያት 5. ከሱቅ/ፋርማሲ ለመግዛት በማፈር 6. ኮንዶም ስለማይገኝ 7. ግድየለሽነት 8. ሌላ(ይገለጽ)-----	/----/
170	ኮንዶም በት/ቤቶች ቢሰራጭ ትደግፋለህ/ሽ?	1. አዎን 2. የለም 99. አላውቅም	/----/
171	ኮንዶም በት/ቤቶች ስርጭት ቢጀምር በማን ቢከፋፈል/ ቢሰራጭ ይመርጣሉ?	1. በአስተማሪዎች 2. በት/ቤት ክሊኒክ 3. በፀረ-ኤድስ/መጀመሪያ ደረጃ እርዳታ ሰጪ ክበባት 4. በትምህርት ቤት አማካሪዎች /ካውንስለሮች 5. በት/ቤቱ በተገጠመ ማሽን (ኮንዶም ማስቀመጫ 6. መከፋፋል የለበትም 7. ሌላ (ይገለጽ) -----	/----/
172	ኮንዶም ለተማሪዎች የሚሰራጭ ከሆነ ዋጋው ስንት መሆን አለበት?	1. በነጻ 2. አምስት ሳንቲም 3.. አስር ሳንቲም 4. አስራ አምስት ሳንቲም 5. ሃያ ሳንቲም 6. ለተማሪዎች መሸጥ የለበትም 7. ሌላ( ይገለጽ)-----	/----/
173	በአንተ/ቺ እምነት አብዛኛዎቹ የ 2ኛ ደረጃ ተማሪዎች ስለ ኮንዶም በቂ መረጃ አላቸው ብለህ/ሽ ታምናለህ/ሽ?	1. አዎን 2. የለም 99. አላውቅም	/----/

**መጠይቁ እዚህ ላይ አብቅቷል  
ለትብብርዎ በጣም አመስግናለሁ::**

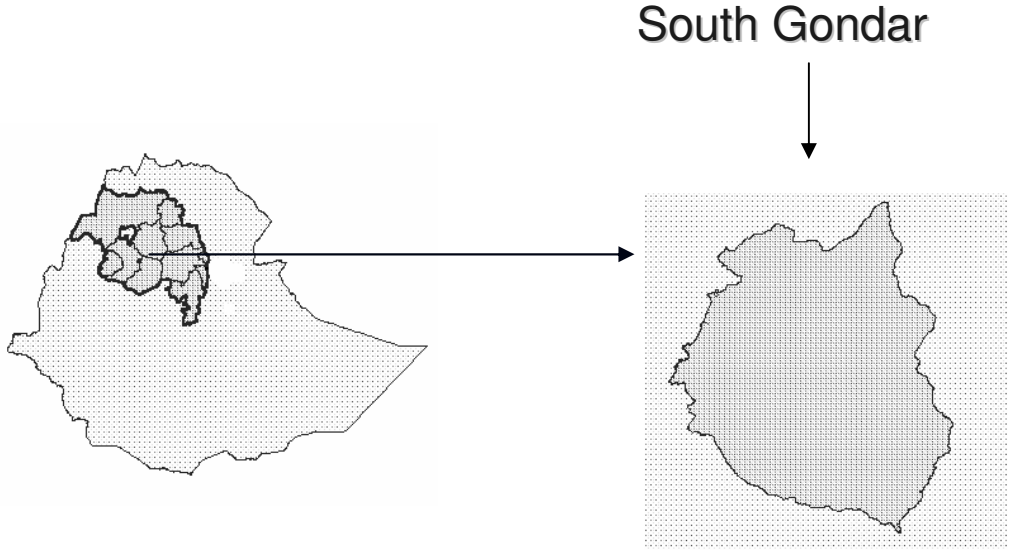
**Appendix D: Summary of FG D, South Gondar, January 2004.**

Issues Raised	Dagmawi Theodrose Sec. School		Kimirdingay Sec.School	
	Male	Female	Male	Female
<b>1. Sexuality</b>				
Premarital sex	✓	✓	✓	✓
Multiple sex partner	✓	✓	✓	✓
Sex outside of marriage	✓	✓	✓	✓
Sex with female sex workers	✓	✓	✓	✓
Discussion with peers	✓	✓	✓	✓
Discussion with parents	✓	✓	✓	✓
Source of information	✓	✓	✓	✓
<b>2. Perception of risk of HIV/STIs</b>				
HIV/AIDS	✓	✓	✓	✓
STIs	✓	✓	✓	✓
Discussion with peers	✓	✓	✓	✓
Discussion with parents	✓	✓	✓	✓
Discussion with teachers	✓	✓	✓	✓
School dropout	✓	✓	✓	✓
Chance of risk acquisition	✓	✓	✓	✓
Stigma	✓	✓	✓	✓
Discrimination	✓	✓	✓	✓
VCT	NR	NR	NR	NR
<b>3. Prevention Methods</b>				

<b>3.1 Condom</b>				
Knowledge	✓	✓	✓	✓
Can prevent HIV/STIs	✓	✓	✓	✓
Can prevent unwanted pregnancy	✓	✓	✓	✓
Source of information	✓	✓	✓	✓
Reasons for not use	✓	✓	✓	✓
Distribution	✓	✓	✓	✓
Price	✓	✓	✓	✓
<b>4. Barriers to Prevention methods</b>				
4.1 Misconceptions/rumors	✓	✓	✓	✓
Condom reduce sexual desire	✓	✓	✓	✓
Condom bursts during intercourse	✓	✓	✓	✓
Condom contains the virus in it	✓	✓	✓	✓
<b>4.2 social Pressure</b>	✓	✓	✓	✓
Attitude of parents/community	✓	✓	✓	✓
Attitudes of religious leaders	✓	✓	✓	✓
Rape/forced sex	✓	✓	✓	✓
Peer pressure	✓	✓	✓	✓
4.4 Risk behaviors	✓	✓	✓	✓
Alcohols	✓	✓	✓	✓
Chat	✓	✓	✓	✓
Cigarettes	NR	NR	NR	NR
Inject able drugs	NR	NR	NR	NR

NR= not raised as a problem

**Appendix E: Map of study area**



**Appendix F: DECLARATION**

I, the undersigned, declared that this is my original work, has not been presented for a degree in this or any other University, and that all sources of materials used for this thesis has been fully acknowledged.

Name\_\_\_\_\_

Signature\_\_\_\_\_

Place\_\_\_\_\_

Date of Submission\_\_\_\_\_

This thesis has been submitted for examination with my approval as University advisor

Name\_\_\_\_\_

Signature\_\_\_\_\_