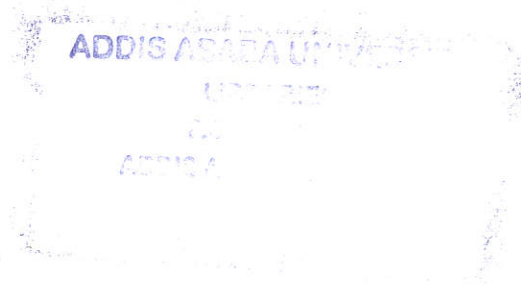


**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**



**THE RELATIONSHIP BETWEEN FAMILY  
CHARACTERISTICS AND ADOLESCENTS' SEXUAL RISK-  
TAKING BEHAVIOR: THE CASE OF TWO HIGH SCHOOLS IN  
ADDIS ABABA**

**FEBEN DEMISSIE**



**JUNE, 2005**

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ADDIS ABABA**

**Thesis Submitted to the School of Graduate Studies of Addis Ababa  
University in Partial Fulfillment of the Requirements for the Degree  
of Master of Arts in Developmental Psychology**

**FEBEN DEMISSIE**

**JUNE, 2005**  
**Addis Ababa**

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## LIST OF ABBREVIATIONS

**AIDS**-Acquired Immunodeficiency Syndrome

**HIV**- Human Immuno Virus

**PAI**-Population Action International ✓

**SC/US**-Save the Children /United States

**STD**-Sexually Transmitted Disease ✓

**UNAIDS**-United Nations Joint Program on HIV/AIDS

**UNFPA**-United Nations Fund for Population Activities ✓

**UNICEF** - United Nations Children's Fund ✓

**WHO**-World Health Organization ✓

## ABSTRACT

*Sexually active adolescents are increasingly at risk of HIV/AIDS and other sexually transmitted infections. The family environment is critical in supporting healthy adolescent development. As a primary agent of socialization, the family can exert a strong influence on adolescents' sexual behavior. To enhance family's role in this regard, it is important to understand the role of the family in influencing sexual behavior among school going adolescents.*

*In an attempt of investigating the role of the family on sexual behavior of adolescents' cross-sectional study that examined the association of familial characteristics and sexual-risk taking behavior of adolescents was conducted at two high schools in Addis Ababa. A sample of 480 students (240 male and 240 female) completed a pre-tested structured anonymous questionnaire. Qualitative information was also obtained from four focus group discussions.*

*The finding showed that 22.5% of the students are sexually active and only 24.1% used condom consistently. Further results show that familial characteristics, namely, perceived parent-adolescent communication, perceived parental monitoring, perceived parent-adolescent connectedness, family structure and education and income of parents are significantly associated with sexual activity of adolescents. Moreover, peer influence, peer pressure and perception of friends sexual activity, was significantly associated with sexual activity of adolescents. Significant difference by gender and school of attendance was also found with regards to family process variables, sexual activity and condom use of adolescents. The overall research finding indicates that adolescents who communicated with parents on sexual matters, who reported more parental monitoring, who have good parent-adolescents connectedness, who live with both parents and who come from well educated and high income families are not prone to premarital sexual activity as compared to their counterparts.*

*The evidence of this study suggests that parents need to be targeted when reproductive health intervention plans are set and implemented. Parents need to be aware of the importance of having good relationship with their children including, the importance of creating a free conducive environment where by their children feel free to discuss sexual matters with them, importance of close relationship with their children and importance of proper monitoring which contributes to the development of self care and discipline among adolescents. Moreover, other concerned bodies need to develop strategies that encourage positive parent-adolescent relationships. Additional studies are also needed to have a broader insight which includes samples which were not covered and issues that were not explained in this particular study.*

The family provides individuals with proper socialization and support in various aspects of their lives including protection from harmful behavior of different forms like premarital sexual activity and related unsafe sexual behavior. In this connection , a joint report by UNAIDS,WHO and UNICEF(2002) indicated that, parents, extended families, peers and the community are critical in guiding and supporting young people to make safe choice about their health and well being.

The situation of adolescents' reproductive health requires serious attention and intervention all over the world as it affects the adolescents' themselves, their parents, and the community at large. In recent years, reproductive health of adolescents has gained much due to the related negative consequences of early sexual activity. The problem is more significant in underdeveloped countries. As an indication of this problem in Africa, Okonofua (2000) stated that countries such as Kenya, Nigeria, and Ethiopia are among those with highest reported adolescent fertility rates in the world.

According to UNFPA, (cited in Govindasamy et al., 2002), more than one billion people in the world are between the ages of 15 to 24 and most live in developing countries. In Ethiopia, according to the Ministry of Health, as cited in Govindasamy et al., (2002) adolescents represent a significant proportion of the society. Currently, it is estimated that young people between ages of 10-24 constitute more than one-third of the total population which is roughly 21 million. These young people begin sexual activity early. Supporting this idea, Eyob, Abate and Genet (1996) stated that childbearing starts at an early age and prevails more among teenagers. As a result, adolescents in school and out of school are exposed to unplanned and unwanted pregnancies.

In a related survey conducted on sexual behavior among high school students in Addis Ababa, 38% reported that they were sexually active. Of these sexually active students, 71% experienced first sex between the ages of 14 and 16 (Solomon, 1990). A similar finding is observed among young people in other parts of Ethiopia. In Jimma, a finding from a survey on high school students revealed that 64% of the students were sexually active (Dagne, 1999). Another study among young people in Gondar has also shown that 55% of the respondents were sexually active (Kidane and Azeze, as cited in Govindasamy et al., 2002).

The existing literature clearly indicates that adolescents engage in sexual activities before they finish high school. This is true for adolescents in Addis Ababa. Most of the high school students in Addis Ababa are within the age group of adolescence, which is characterized by sexual motivation and ignorance of related consequences. At this period, adolescents have a feeling of independence and invulnerability thinking that they are able to handle situations by themselves. Consequently, they try to take personal decisions without consultation and permission of parents and other concerned bodies, in such risky matters, including sexual risk-taking behavior (Rewenge, 2003).

Adolescents' sexual risk-taking, which is reflected by involvement in premarital sexual activity coupled with the reluctance to use contraception, is observed to be the causes of various problems encountered by adolescents. Relating to this, Meekers and Calves (1999) stated that, premarital sexual activity of young people is associated with increasing evidence of reproductive health problems in that pregnancy occurring in unstable and socially disapproved sexual union may lead to unsafe abortion and school dropout. Moreover, premarital sexual activity and multiple partnership is closely associated with sexually transmitted diseases including HIV/AIDS.

HIV/AIDS occupies a significant position among the consequences of youth sexual activity. At present, the reproductive health situation of the youth is a major concern especially in relation to the virus. As UNAIDS data cited in Adu-mireku (2003) indicates, globally more than half of newly infected HIV victims are among persons between age of 15 to 24. In Sub-Saharan Africa, the rate of HIV infection is higher within the age range of 15 to 19 years than in other continents (Bankole et al., 2004).

In Ethiopia, as indicated by the Ministry of Health (2002), HIV/AIDS affects more than 2.2 million people in the country more than 2 million of who are adults. From the adult population, 91% of the infection occurs between the age groups of 15-49 with the highest prevalence of HIV/AIDS infection seen among young people between the ages of 15 to 24 years. When it comes to teenage pregnancy, 45% of the total birth in the country occurs among adolescent girls and young women (Govindasamy et al., 2002).

In the light of previous findings and the magnitude of the problem, systematic reduction of the number of people exposed to HIV/AIDS and other consequences of adolescent sexual behavior, is found to be necessary. In this connection, research efforts and prevention strategies must continue to identify related social factors, including the family, that are likely to influence the sexual behavior of adolescents. Taking this into consideration, the present study investigates the role of the family on adolescents' sexual behavior among high school students in Addis Ababa.

## **1.2 Statement of the Problem**

Adolescents' reproductive health is important for their healthy development. It is a great concern because of related negative consequences like HIV/AIDS, other STDs and unwanted pregnancies. A large number of adolescents are contracting HIV infection. According to a report

by Population Action International (2000), every year, almost half of all new HIV infections and at least one third of all new sexually transmitted infections occur among young people younger than 25 years. There is also a rise in unwanted pregnancy among teenage girls (WHO, 1994).

The family is considered as the primary influence affecting the behavior of adolescents. Like many other countries, in Ethiopia, the institution of the family plays a significant role in adolescents' lives. This socializing agent can play a major role in either facilitating risky behavior or protecting adolescents from such behaviors. In the country, though there are studies on sexual behavior of adolescents, few studies exist with regards to familial factors that affect adolescents' sexual behavior. This gap in knowledge creates the need to investigate the role of the family on sexual behavior among school going adolescents.

Therefore, given the importance of family in the Ethiopian cultural setting and the increase in adolescents' sexual activity, the present study investigates the relationship between family characteristics and adolescents' sexual behavior.

In this study, an attempt was made to answer the following basic questions.

1. Is there any relationship between parent-adolescent communication about sexuality and HIV/AIDS, and adolescents' sexual risk-taking behavior?
2. Is there any relationship between level of parental monitoring and adolescents' sexual risk-taking behavior?
3. Is there any relationship between parent- adolescent connectedness and adolescents' sexual risk – taking behavior?
4. Is there any significant difference by sex and school of attendance with regards to family process variables and adolescents' sexual risk-taking behavior?

5. Is there any relationship between family structure and sexual risk – taking behavior of adolescents?
6. Is there any relationship between level of education and income of parents' and adolescents' sexual risk- taking behavior?
- ✓ 7. Is there any association between peer influence and sexual behavior of adolescents?

### **1.3 Hypotheses**

**The study aims to test the following hypotheses**

1. Perceived parent-adolescent communication about sexuality and HIV/AIDS is related to adolescents' sexual risk - taking behavior.
2. Level of perceived parental-monitoring is associated with adolescents' sexual risk-taking behavior.
3. Perceived parent- adolescent connectedness is associated with adolescents' sexual- risk taking behavior.
4. There is significant difference by sex and school of attendance with regards to family process variables and sexual risk-taking behavior.
5. Students coming from families with one or both parents absent are more likely to take sexual risks.
6. Students coming from families with low level of education and income are more likely to have sexual risk – taking behavior.
7. Students who are pressured by peers and those who perceive their friends to have sex are more likely to be sexually active.

#### **1.4 Objectives of the Study**

The study has the following general and specific objectives.

##### **General Objective**

The general objective of the study is to investigate the sexual behavior of high school students and examine its association with selected familial characteristics.

##### **Specific Objectives**

1. To assess whether parents and adolescents communicate about sexuality and HIV/AIDS and examine its relationship with adolescents' sexual risk – taking behavior.
2. To assess the level of parental monitoring and its association with adolescents sexual risk-taking behavior.
3. To investigate the relationship between parent-adolescent connectedness and adolescents' sexual risk- taking behavior.
4. To investigate the difference by sex and school of attendance with regards to family process variables and adolescents' sexual risk-taking behavior.
5. To investigate the association of family structure with sexual risk-taking behavior of the adolescents
6. To investigate the association between income and educational level of parents, and sexual risk-taking behavior of adolescents.
7. To investigate the association of peer influence and sexual behavior of adolescents.

#### **1.5 Significance of the Study**

Considering the health risks related to school going adolescents that are sexually active, and the related negative consequences of risky sexual behavior, examining related risk and protective factors is necessary. From these factors, the home environment -the family-can be cited among

the major ones. However, few studies exist in the country that examine the association between familial factors and adolescents' sexual behavior.

Therefore, the study is important in that, it contributes valuable information towards better understanding of familial factors that influence adolescents' sexual behavior which can serve concerned bodies in the area. Moreover, it can aid in the design and implementation of effective prevention programs and it may encourage other researchers and policy makers to carry out a more extensive research in the area.

### **1.6 Delimitation of the Study**

The study is delimited to one governmental and one non-governmental high school in Addis Ababa. Moreover, though there are different factors affecting adolescents' sexual behavior, much emphasis is given to familial factors. Furthermore, methodologically, the research work is delimited to the use of self report questionnaire and focus group discussions.

### **1.7 Operational Definition of Terms**

**Family Characteristics-** refers to education and income of parent, family structure, parental monitoring, parent-adolescent communication about sexuality and parent-adolescent connectedness.

**Education and income-** Refers to educational status of parents and estimated monthly income of the major income earner in the family. It was measured by asking monthly income of the major income earner in the family and educational level of parents.

**Family structure-**refers to the presence of one or both parents in the home which was measured by asking current living arrangement of adolescents.

**Parental monitoring**-refers to parental supervision and control of adolescents' whereabouts. In this study, it was measured by a scale asking adolescents on their perception of their parents' knowledge about who they are with and where they are spending their time when they are not at school and away from home.

**Parent-adolescent connectedness**- refers to parental attachment and closeness. It was measured by using parent- adolescent connectedness scale.

**Parent- adolescent communication**-refers to parent adolescent discussion about sensitive issues like sexuality and HIV/AIDS. It was measured by asking adolescents whether they communicate about sexuality and HIV/AIDS with their parents.

**Family process variables**– refer to family characteristics that relate to parent- teen relationships which include perceived - communication, monitoring and connectedness to parents.

**Sexual risk –taking behavior**- In this study, engaging in premarital sex is considered as sexual risk-taking behavior. This will be measured by asking students questions related to sexual behavior which includes whether they have ever had sex and for students who have indicated that they have had sex related questions including condom use at the most recent intercourse follows.

**Adolescents**- In this study, young people (high school students) between the ages of 13 to 21 are considered as adolescents.

## **CHAPTER TWO**

### **Review of Related Literature**

#### **2.1 Context of Adolescence**

As children become adults, they pass through one of the major developmental periods, the period of adolescence. Adolescence is a transitional period where the child is passing to adulthood but is not yet an adult. As Kimmel & Wiener (1995) have stated, it is a transitional period that serves as a link between one relatively stable point in life to another relatively stable but different point.

Adolescence is a period characterized by the development of mature forms of thought, emotions and behavior. Moreover, it represents a transition between the physical, cognitive, social and sexual immaturity of childhood to physical, cognitive, social and sexual maturity of adulthood (Steinberg, 1993). These changes are quite disruptive for adolescents at this period, who are thought to lack mature skills to cope with the changes and consequently experience transitional stress. What is more, many adolescent boys and girls try to solve their personal problems by trial and error (Montemayer as cited in Howell, 2001).

Although the change that takes place during adolescence is universal, the effect of this stage is not universal. In the development of adolescence, genetic, biological and environmental factors (contexts) interact. These factors include the family and peers that have an important influence in determining the experience of the adolescent during the transition (Steinberg, 1993).

#### **2.2 Sexual Development in Adolescence**

Making transition from childhood to adulthood is considered as an important task of adolescents. According to Steinberg (1993), psychosocial tasks of adolescents include developments in identity, autonomy, intimacy, sexuality and achievement. More specifically,

engaging in safe and healthy sexual practices is the developmental task of adolescents (Planned Parenthood Federation of America, 2004).

Sexual development is a major component of a child's transition to adulthood. During puberty, adolescents experience changes in their hormones, reproductive organs, their feelings, and thoughts. These hormonal and bodily changes influence the behavior of the adolescent including his/her sexual behavior. In line with this, Freudians indicate that adolescent sexual behavior is a result of increasing strong inner drives not yet channeled and controlled. As these theorists pointed out, during adolescence - the genital stage, sexuality becomes the dominant motive of the adolescent (Kimmel & Wiener, 1995).

Adolescent sexuality is a developmental process whereby adolescents explore and discover their sexual development. As stated by PPFA (2004), sexual expression is an essential component of healthy human development especially when the participants are physically, cognitively and emotionally ready. However, adolescent sexuality is risky when it is untimely and inappropriately handled.

### **2.3 Trends of Sexual Behavior**

Many studies have been conducted all over the world to assess the sexual behavior of adolescents. Important trends in the area include sexual experience and activity, pregnancy and sexually transmitted infections including Acquired Immune Deficiency Syndrome (Meschke, et al., 2000).

Sexual activity begins in adolescence for the majority of young people in the world. As stated by Solomon (1990), different studies worldwide have shown that adolescents are sexually active with figures ranging from 17.3 % to 83% and this trend is increasing. According to a report by Save the Children Fund/US (2000), a survey conducted among 4, 216 unmarried youth selected

from different parts of Ethiopia for example showed that 47.4 % of males and 57. 2% of females experienced sexual intercourse. Similar finding is observed among high school students in Addis Ababa. This is shown by other researchers that students in Addis Ababa high schools are sexually active; exercising risky sexual practices (Fisseha et al., 1997; Solomon, 1990).

Adolescents' sexual activity differs between males and females. According to a study by Meekers & Calves (1999), in Cameroon, males become sexually active at an earlier age than females. Moreover, Adu-Mireku's (2003) study among Ghanaian school going adolescents showed that boys were more likely than girls to have ever had sexual intercourse. Unlike this finding, in Sub- Saharan Africa, the study by Bankole et al., (2004) has revealed that large proportion of young women are sexually active in the region as compared to men who had sex. A similar trend is indicated in Ethiopia. As stated by Govindasamy et al., (2002), young women in between the ages of 15 -24 are more likely to have sexual intercourse than young men in the same age.

A different finding however, was shown by different researchers in the country that boys are considerably more sexually active than girls (Fisseha et al., 1997; Filmona and Joyce, 1994; Solomon, 1990).When giving explanation for the gender difference in sexual activity, Fisseha et al., (1997) indicated that this may be because of the practices for cultural reasons. In Ethiopian culture girls are not encouraged to be involved in sexual activity, while it is acceptable for adolescent boys. As Levine (1965) stated, sexual experimentation for boys is acceptable behavior; however, it has to be carried out quietly and with carefulness.

### **2.3.1 Sexual Risk-Taking**

Sexually active adolescents engage in behaviors that are considered risky and that might expose them to different negative health and psycho-social consequences. For adolescents,

engaging in sexual intercourse is sexual risk-taking behavior. In this connection, Blum et al., (cited in Howell, 2001) considered any history of sexual intercourse as a category of risk. In line with this, Rodgers (cited in Howell, 2001) defined risk as a history of sexual intercourse involving either multiple partners or no condom use. For the purpose of this study, a history of sexual intercourse which includes premarital sexual activity and non-use of condom at the most recent intercourse among the students is considered as sexual risk-taking or risky sexual behavior.

Most adolescents engage in premarital sexual activity and do not use condom exposing themselves to risk. According to Bankole et al., (2004), 46 % of the young people in Ethiopia practice premarital sex, however only small proportion use condom. Other related studies also show that most adolescents do not use condom. In their study in Cameroon, Meekers et al., (1999), found that condom use is low among young people. Similarly, in their finding, Bankole et al., (2004) have stated that in countries, such as Ethiopia and Chad, condom use ranged between 2 to 9%. In this connection, Dagne's (1999) based on high school students in Jimma town showed that condom use is low among the students in the study and many of the students reported having multiple partners. Coming to high school students in Addis Ababa, Solomon's finding shows that among the students in the study, 54% of the sexually active youth have experienced sex with more than one partner but only 18 % reported that they have used condom (Solomon, 1990).

Studies indicate that there is gender difference in condom use. A study by Bankole et al., (2004), for example, showed that out of adolescents with ages ranging from 15-19, 10% of young men and only 4% of young women used condom at intercourse. In the same way Demographic Health Survey data (cited in Govindasamy et al., 2002), indicated that condom use

is extremely low among young women in Ethiopia. Only less than 2% of the sexually active young girls (with age ranging between 15-24) have used a condom during their last sexual intercourse. On the other hand, one in five sexually active men with the same age had used condom at the last sexual intercourse. A different finding, however, has been shown by Adu-Mireku, (2003) that boys are less likely than girls to report condom use.

### **2.3.2 Consequences of Adolescent Sexual Risk –Taking Behavior**

Different consequences occur as a result of adolescents early and unsafe premarital sexual practices which include unwanted pregnancy, abortion and sexually transmitted infections. Unintended pregnancy is a serious problem among adolescent girls especially since teenage pregnancy and delivery is associated with health risks and social problems before, during and after delivery. According to a report by Population Action International (2001), adolescent mothers face the risk of dying from childbirth than do women in their twenties; moreover, their children are vulnerable to health risks. In relation to this, a household study in Addis Ababa showed that the median age at first pregnancy was 16 years and two in three women become mothers before the age of 20 (Govindasamy et al., 2002).

A related consequence to adolescent sexual risk-taking is abortion. The report by Population Action International indicates that worldwide, more than one fifth of all pregnancies, nearly 46 million are terminated each year, 20 million of the abortion being carried out under illegal and unsafe conditions. From this, in Africa one in every 150 abortion leads to death (PAI, 2000). In the case of Ethiopia, abortion, which is illegal in the country, places female adolescents at risk primarily because it is usually conducted under unsafe condition and mostly in secret (Govindasamy et al., 2002).

The other major consequence is sexually transmitted infections including HIV/AIDS .A large number of adolescents are contracting STIs due to the fact that they have multiple partners and engage in unprotected sex (CDC cited in Meschke et al., 2000). In this connection, a report by WHO (1994) indicated that worldwide, more than half of the people with HIV infection are under the age of 25 years.

### **2. 3. 3 Vulnerability of Adolescents**

Adolescents, constituting a large proportion of the population, are exposed to undesirable consequences such as STDs, HIV infection and unwanted pregnancy. A large number of adolescents are contracting sexually transmitted infections. HIV/AIDS is the major sexually transmitted infection by which many young people are infected. In relation to this, a 1998 release report cited in Meschke et al., (2000) revealed that worldwide, five adolescents aged 10 to 24 are infected with HIV/AIDS every minute, resulting in 2.6 million infections each year . In Sub - Saharan Africa, the epidemic is affecting the majority of the youth. According to Bankole et al., (2004), out of nearly 10 million women and men aged 15 to 24 , roughly 1 in 14 are living with HIV/AIDS and half of newly infected cases in 2003 occurred among this age group.

In Ethiopia, in and out of school youth between the ages of 15 to 24 constitute 30% of the population and this age group accounts for the highest percentage of new HIV infections (AIDS Resource Centre-Ethiopia, 2003).In line with this, the Ministry of Health report shows that national HIV/AIDS prevalence in 2003 is 4.4 % of which 12.6% is prevalent in urban areas and 2.6% in rural areas, from this, HIV prevalence was more pronounced among the youth ranging in the age from 15 to 30 years. In addition, adult death due to HIV/AIDS account for about a third of all young peoples' death in the country (MOH, 2004).

Young people who are socially and economically disadvantaged are at a higher risk than others. This includes those who are poor, who are denied regular support by concerned bodies including the family and those who are stigmatized and discriminated. Young people who are mistreated are subject to poverty and are vulnerable to rape, coercive sex and such adolescents may exchange sex in order to fulfill their unmet needs (Solomon, 2004; Rewenge, 2003).

Lack of information can also facilitate early and unsafe sexual activity which leads to risk. Most young people do not get the necessary information. As reported by Bankole et al., (2004) , large proportion of adolescents in Sub-Saharan Africa have inadequate information on how to protect themselves against HIV/AIDS though a substantial proportion are sexually active and engage in behaviors that places them at risk of being infected with HIV/AIDS.

Most young people get information from their peers. As Thornburg's study (cited in Nicholas, 1994) showed, within a period of 12 years study, it was consistently found that peers are the single most important sources of information about sex. Similarly, as Odimegwu et al., (2002) indicated, almost half of the adolescents in the study reported friends as a major source of information on family life issues (sexual matters) which implies that adolescents rely on inaccurate information which exposes them to risk. In this connection, a similar finding is observed by Negussie et al., (1999) that most parents do not discuss about sexual changes with their adolescent children and adolescents get information on such matters from peers which add to their vulnerability.

As indicated previously, sexual development is one of the major changes in adolescence which can be followed by various consequences. As the literature shows, adolescents are at a higher risk of STD/AIDS, particularly those who lack proper guidance, support and supervision.

More specifically, an attempt was made in this study to examine familial influences that have an impact on sexual behavior of adolescents which are discussed in detail in the following parts.

## **2.4 Related Theoretical Perspectives**

The role of the family in shaping the behavior of the adolescent is explained by different theories. For the purpose of this study, ecological and attachment theories were considered to explain the role of the family on adolescents' sexual behavior.

### **2.4.1 Ecological Theory**

Ecological system theory emphasizes the influence of multiple systems on a person's behavior and the reciprocal relationships among them. These systems are the Microsystem, Mesosystem, Ecosystem and Chronosystem. Among these, the primary system, the microsystem includes the self, the family and peers (Bronfenbrenner, 1986).

Relating this theory to the reproductive health of adolescents, Manlove (2001) stated that multiple aspects of adolescents' life may affect teens reproductive health experiences including their family, one's own attitudes and behavior, peers attitude and behavior. In the broader context, the characteristics of the teen's community which includes school context, neighborhood involvement and the broader policies may affect reproductive health behavior. In the same way, Small and Luster (1994), illustrated the relationship between ecological framework to adolescent sexual activity. According to these researchers, risk factors in relation to sexual activity of adolescents may be present in adolescents themselves or exist in the setting in which they commonly interact which includes the family, peer groups, neighborhood and schools.

For this particular study, emphasis has been given to the Microsystem because the family context, which is included in there, is critical in the socialization of adolescents. In the family

system, characteristics and attributes of the family are related to the behavior of the individual child. In line with this, Crosby & Miller (cited in Lezin et al., 2004) stated that family characteristics such as parental monitoring, parent- adolescent communication and satisfaction with mother- daughter relationships can affect the behavior of the adolescent.

#### **2.4.2 Attachment Theory**

The other theory which relates to the influences of the family on adolescent sexuality is the attachment theory. Attachment theory is relevant to this study because it offers a way of understanding human needs for connection with others. According to Bowlby ( cited in Lezin et al., 2004), the theory is based on the idea that an infant's first attachment experience to his/her mother profoundly shapes the social and emotional development that follows.

In the same way, in the stage of adolescence, as stated by Santrock (1999), developmental psychologists believe that attachment or connectedness to parents may facilitate emotional adjustment, physical health and positive peer relations. On the other hand, low attachment to parents is a significant contributor to the occurrence of early sexual activity and association with deviant peers (Lezin et al., 2004).

#### **2.5 Family's Role on Adolescents' Sexual Behavior**

The family is the central institution in the socialization of children. In this institution, parents have an important role to play in the upbringing of their children. As Thornton & Camburn (1987) have stated, parents are guidelines for children as they both directly and indirectly transmit their standard of conduct during socialization processes.

Proper guidance, monitoring and support of the family can have an influence on adolescents' behavior. Supporting this idea, a synthesis of more than 300 studies by Simpson (cited in Markham et al., 2003) showed that parent-child connectedness and specific parenting practices

such as monitoring, guidance and open communication are effective ways in which parents can contribute to healthy adolescent development.

As Miller et al., (1999) indicated, characteristics of an individual's family can influence his/her sexual behavior because the family is the primary source of norms and role models. As a result, behaviors that are learned within the family environment are likely to provide the foundation for subsequent attitudes and behavior (Bakker & Winter, 2002).

This being the case, for many years, researchers have focused on familial influences on adolescents' sexual behavior. These researchers have illustrated the relationship between adolescents' sexual behavior and family characteristics. Among them, Miller et al., (1999) has tried to categorize familial influences into two which are family structural (contextual variables) and family process variables.

Family structural influences include contextual and structural features of the family consisting of socioeconomic status of the family, as measured by education and family income, and the presence or absence of both parents. These structural variables affect sexual behavior of adolescents both directly and indirectly, directly by affecting the behavior of adolescents and indirectly by influencing parental practices which in turn affect sexual behavior. The other category, the family process variables, explain in detail the relationships of adolescents and parents or practices of parents that include communication, monitoring and connectedness (closeness).

In this study, the above familial characteristics will be examined and explained in detail basing the importance of perception of adolescents on such issues. Previous studies on communication about sexuality, monitoring and other parental processes have shown the

importance of adolescents' perception on such issues (Fisher et al., cited in Howell, 2001 & Meschke et al., 2000).

### **2.5.1 Parent-Adolescent Communication about Sexuality**

Parent-adolescent communication has an important influence on the behavior of adolescents. If the adolescents are well informed by parents about the different changes that take place during the period, they will protect themselves from risky behaviors. On the other hand, if uninformed by parents, they will expose themselves to risky sexual behaviors based on informal sources of information which is distorted.

Indicating the importance of parent-adolescent communication, PPFA (2004), stated that early parental-communication on sexual matters allow children to talk about sex and is associated with the delay on the onset of sexual activity. Similarly, Sigelman et al., (cited in Miller et al., 1999) stated that parent- adolescent communication about sexual behavior and AIDS has been found to facilitate adolescents' knowledge about sex and their subsequent reduction of risk.

Different researchers agreed upon the importance of sex education to minimize adolescent reproductive health problems though the reality is far from this in many parts of the world. Many adolescents have been denied the access for such pertinent information especially from parents. Studies by Lema in Kenya, Chliabra in India and Anafari in Ghana (cited in Odimegwu et al., 2002), indicate that poor knowledge on reproductive health matters which is related to poor use of contraceptives is the main causes of reproductive health problems among sexually active adolescents. Negussie et al., (1999) came up with similar finding in a survey done in Ziway high school students. The study revealed that significant number of young people are sexually active; however, few are knowledgeable about safe sex.

As it can be seen from the above findings, lack of adequate information on issues related to reproductive health is the main factor among other things that expose adolescents to related reproductive health problems. Provision of sex education is therefore identified as an important intervention since it enhances a sense of responsibility to sexual matters including delay of first intercourse or use of contraceptives (Odimegwu et al., 2002).

Therefore, young people need sex education and for this to be effective and successful there is a need for parental involvement. In line with this, studies have examined whether parents are effective sex educators or not and the findings showed parents to be primary sex educators with influential sources of information and advice for their children (Meschke et al., 2000; Mturi, 2003).

However, even though sex education at home is encouraged, most teens don't communicate with their parents. A related study by Thornburg (cited in Nicholas, 1994) indicated that peers are the major source of information on sexual matters and parents are relatively unimportant in providing such information to their children. The same holds true in Africa as parent-adolescent communication about sexual matters is a taboo. As stated by Mutri (2003), traditionally such issues are not allowed to be discussed especially among unmarried adolescents and low level of communication is observed as a result.

In this connection, a study in Lesotho by Mutri in 1999 (cited in Mutri, 2003) showed that around 20% of adolescents discuss sex related matters with their parents. A similar finding is indicated in Ethiopia where most young people and their parents do not discuss sexuality issues. Negussie et al.,'s (1999) finding showed that the highest proportion of parents who reported communication with their children in the past were only 20%. Moreover, 54% of the students in

the study reported that it is culturally shameful to discuss about physical and psychological changes during adolescence:

Most parents don't discuss with their adolescent children and even if they discuss, there is low level of parent-adolescent communication. This can be because of different barriers. Among the most common problems in parent adolescent-communication are embarrassment, lack of knowledge, poorly defined values and fear of encouraging sexual activity (Fitzgerald et al., cited in Pick and Palos, 1995; Mutri, 2003; Odimegwu et al., 2002 & Negussie et al., 1999).

Although, both parents and adolescents find it difficult to discuss sex related matters, communication about sexuality varies within the population of parents and adolescents by sex. Parent-adolescent discussion about sex is mostly seen between mothers and their children whereas fathers are generally less involved in such discussions and report feelings of discomfort (Fabes & Martin, 2000; Meschke et al., 2000; Nicholas, 1994).

Parent-adolescent sexual communication also differs based on sex of adolescents. Related research suggests that there is clear difference between males and females. In a study by Hutchison (cited in Steinberg, 1993), one third of male adolescents in the study reported receiving at least some information about sexuality from their parents as compared to half of female adolescents. Similarly, finding by Adu-Mireku (2003), in his study of high school students in Gahanna, Accra, showed that there is difference by sex in family communication about HIV/AIDS where boys are less likely than girls to have ever talked about HIV/AIDS with their parents or other family members. However, Odimegwu et al., s'(2002) finding among Nigerian adolescents didn't confirm with the above findings in that more males than females have discussed family life issues with their mother, father or both.

life issues. On the other hand, Adu-Mireku's (2003) finding showed that student family communication about HIV/AIDS was not associated with sexual activity whereas such communication was associated with condom use. In Ethiopia, a study by Solomon (2004) among preparatory school students in Dessie town showed that there is no association between parent-adolescent communication about sexuality and HIV/AIDS when it comes to sexual activity and contraception use.

In summary, findings on communication remains the most thoroughly studied as well as the most inconclusive as to whether parent-adolescent communication about sexuality has positive relationship with reproductive health.

### **2.5.2 Parental Monitoring**

Level of parental monitoring (supervision) is another important familial influence. According to Jacobson & Crackett (cited in Howell, 2001), it is generally defined as the parents' knowledge of their children's whereabouts and friends. More specifically, DiClemente ,et al., (2001) defined parental monitoring by stating two important aspects which are adolescents' perception of their parents knowledge about whom they are with and where they are when not at school and away from home.

Parental monitoring is important in that it affects the behavior of the individual child. It is a protective factor against behaviors that leads adolescents to risk. Consistent and age appropriate supervision and monitoring helps children to learn what types of behavior are appropriate so that they can regulate their behavior and protect themselves from negative influences outside the home(Lezin et al, 2004).

Studies in relation to parental monitoring show that it is associated with risky behaviors that include involvement in drug and alcohol use, being easily influenced by deviant peers and taking

sexual risks (DiClemente, et al., 2001; Baumrind as cited in Miller, 1999). Similarly, Lezin et al., (2004) have explained the impact of parental monitoring and supervision by stating that monitoring can directly reduce the opportunity for risky behavior and indirectly influence peer relationship.

Research points to sex difference when it comes to parental monitoring, with adolescent females being monitored more than adolescent males. According to Jacobson and Crackets (cited in Howell, 2001), when the impact of monitoring and supervision is considered, for both boys and girls, parental monitoring could have stronger influence (association) with behavioral adjustment for girls than boys. Moreover, according to Li et al., (cited in Howell, 2001) rate of monitoring also vary by sex with adolescent females generally reporting high level of parental monitoring than adolescent males.

Coming to the association of parental monitoring and the sexual behavior of adolescents, researchers have shown the relationship between level of parental monitoring and adolescents' involvement in various risk taking behaviors (Howell, 2001; DiClemente, et al., 2001). Specific to sexual behavior, researchers showed that there is an association between parental monitoring and sexual behavior. When parents make consistent efforts to know their children's friends and whereabouts, young people report abstinence from sex, fewer sexual partners and more use of condoms and other forms of contraception (Howell, 2001).

In this connection, Millers' synthesis of research on family influence on adolescent pregnancy showed that among 20 studies that investigated the relationship between adolescent sexual behavior and family variables, he found that, parental monitoring and supervision has inverse relationship with teen pregnancy risks including not having sex, delaying sexual debate, having fewer partners and using contraception (cited in Lezin et al., 2004).

Similarly, Hollander (2003) reported a study among 6 public high schools in the U.S.A. The finding showed that increasing level of sexual experience is related with decreasing supervision held for both boys and girls. Other research in the U.S. have also pointed out related findings that there is link between parental monitoring and adolescents' sexual risk-taking behavior whereby increased level of monitoring was associated with fewer sexual intercourse and a greater likelihood of condom use (Kirby as cited in Lezin et al, 2004; Miller et al., 1999; Miller et al., 1986 and DiClemente, et al., 2001).

Studies in other countries indicate similar findings with regards to the relationship between parental monitoring and sexual behavior. In Thailand, Podhisita et al's (2001) finding shows that low level of family control is related with premarital sex. Similarly, in Ethiopia, Solomon's (2004) finding revealed an association between perceived parental monitoring and sexual activity of adolescents where those with low parental monitoring were more likely to be sexually active. However no significant difference was found in condom use when parental monitoring was considered.

Unlike the above findings that parental monitoring is associated with sexual activity of adolescents; Newcomer and Undry (cited in Small & Luster, 1994) found that parental supervision was not associated with less sexual activity. On the other hand, many of the research finding on parental monitoring show that low level of monitoring and lack of supervision appears contribute to adolescents' sexual risk-taking behavior (Inazu & Fox cited in Hayes, 1987; Meschke et al, 2000; Miller et al, 1986; Rodgers cited in Fabes, 2002). As Steinberg (1993) has stated, adolescents who spend time alone and those who are unsupervised, are more likely to be sexually active than others.

The finding that high monitoring is associated with less likelihood of having premarital sex has a clear explanation in that a parent who knows with whom and where his/her adolescents spends time can prevent the opportunity for risky behavior including premarital sexual activity. Supporting this idea, Miller (2002) has pointed out that parental monitoring might reduce sexual risk-taking behavior indirectly by decreasing children's association with high risk peers and by lowering teen alcohol and drug use, thereby decreasing teenagers' unprotected sexual activity.

### **2.5.3 Parent - Adolescent Connectedness**

Family connectedness, or parental attachment and closeness, to adolescents is another familial characteristic that affects adolescents' behavior. Blum and Rinehart (cited in Lezin et al., 2004) defined parent-child connectedness as the highest degree of closeness, caring and satisfaction with parental relationship which includes feeling understood, loved, wanted and paid attention to by family members. Parent- adolescent connectedness is characterized by the quality of emotional bond. When parent – teen connectedness is low, the emotional climate is harsher. Instead of affection, parents and children experience hostility and anger among themselves which results in negative consequences (Lezin et al., 2004).

Connectedness is important for healthy adolescent development. Young people who report high level of connectedness tend to be psychologically happier and physically healthier than those who do not have connectedness to the required limit. Supporting this idea, findings from a related study in different countries, stated by Karcher and Lee (2002), repeatedly showed that young people reporting less connectedness also reported psychological difficulties as well as poorer physical health.

Parent-teen connectedness and its association with sexual risk-taking behavior have been examined by different researchers and there is evidence that close relationship with parents is

associated with less sexual activity among teens. In this connection, as stated by Markham et al., (2003) a review of 18 studies in the United States dated 1980-1998, showed positive parental connectedness to be related to decreased risk of adolescent pregnancy.

Similarly, Hayes (1987) indicated that young people are more likely to experience sexual activity if they perceived themselves to receive little parental support. Miller's investigation on related studies also showed similar findings where parent-child closeness is associated with reduced sexual risk-taking behavior for both daughters and sons which includes postponement of sexual intercourse and more consistent contraception use (Miller, 2002).

Markham et al.'s (2003) finding also showed that students who perceive having greater family connectedness were significantly less likely than those with lower perceived family connectedness to report having had sex and using condom if sexually active. A similar study in Ethiopia by Solomon (2004) indicated that good parent-teen connectedness is related to being sexually abstinent.

The effect of connectedness in adolescents' behavior has been explained by different researchers, that where there is less adolescent closeness with parents, there is often an increase in peer influence on sexual issues (Whitebeak et al., cited in, Lezin et al., 2004 & Meschke et al., 2000). Similarly, Benda and Dibson (cited in Lezin et al., 2004) stated that parent-child closeness is related to mediating mechanisms such as adolescents use of substances and association with sexually active peers which is related to premarital sexual activity of adolescents.

Though adolescents' connection to parents affects their development, it varies by sex of adolescents. In line with this, a related study of adolescents in Taiwan by Karcher and Lee (2002) showed that there is gender difference in connectedness with girls being more connected

than boys. On the other hand, Markham et al's (2003) finding based on his study in the US showed that males have higher family connection than females. On the contrary, Solomon's (2004) finding shows that there is no difference in family connectedness by sex of adolescents.

Parent-adolescent connectedness and its link with sexual behavior is the most consistent finding across studies of family process variables. To sum up, as the literature shows, parent-adolescent connectedness, which includes parental attachment and closeness with adolescents, has been related to reduced adolescents' sexual activity.

#### **2.4.5 Family Structure**

In addition to parent-teen interaction, among the structural variables, family structure, which includes the number of parent figures who are at home, contributes to the healthy development of the child. Living in a family with two parents implies the availability of support and behavioral control in many aspects of adolescents' life which is not the case in a family with the absence of one or both parents (Miller, 2002).

Researchers have explained family structural influences on adolescents' sexual behavior by stating that the absence of one or both parents affects parental monitoring (Odimegwu et al., 2002; Meschke et al., 2000 Thornton and Camburn, 1987). Moreover, as stated by Flwelling and Bauman (1990), being a single mother often coincides with poverty and other stressors which in turn affects their parenting processes. Miller (2002) has also explained the impact of family structure by indicating that single or divorced parents have more permissive sexual attitudes and less parental monitoring.

The association between family structure and adolescent sexual behavior has been examined by different researchers and several studies have shown that sexual activity of adolescents is related to family structure. These studies have indicated that adolescents from two parent

families are less likely to risk premarital sexual activity and more likely to use contraception if they are sexually active.

Studies in the USA by different researchers at different times showed that adolescents, particularly females living with one parent are more likely to engage in early sexual behavior and less frequent use of contraception than adolescents who come from two parent families (Miller cited in Manlove, 2001; Hogan et al., & Moore et al, cited in Meschke et al, 2000; Hayes, 1987; Hepburn cited in Nicholas, 1994). A similar finding is observed for both sexes where earlier onset of intercourse and less contraceptive use is shown among teenagers with single families (Miller, 2002 & Flewelling et al., 1990).

Studies in Third-world countries reveal similar findings. A study among youth in Thailand by Podhista et al.,(2001) showed that males and females living in intact families with both parents are less likely to engage in premarital sex than those in one parent and non intact families. Rewenge (2003),based on his study of Cameroonian adolescents ,indicated a similar finding that young people who live with siblings or alone were more likely to take sexual risks including being sexually active .

In Ethiopia, a recent study by Solomon (2004) showed that living with friends increased the likelihood of sexual activity while living with parents was related to sexual abstinence. Solomon's finding however shows that there is no significant difference in condom use when living arrangement (family structure) is considered.

Though similar results were consistently found by researchers in the U.S. and other countries, a different finding was reported by Miller et al., (1999). Family structural variables which include marital status (which affects the presence or absence of parents in the home) failed to predict sexual behavior. In this connection, Baumrind (cited in Lezin et al., 2004) pointed out

that, not all single parent homes have problems. Baumrind found that if the single parent maintains an authoritative parenting style, children from such families do not differ from their counterparts in two parent authoritarian families.

In summary, most research consistently found that family structure influences sexual risk-taking behavior of adolescents whereby adolescents coming from non-intact families are more likely than those from families with both parents to be sexually active.

#### **2.5.6 Parental Education and Income**

The other characteristic (structural variables) of adolescents' family which is linked to sexual risk-taking is socioeconomic status of the family (parents' education and parents' /families income). There is abundant evidence that parents' socioeconomic status is related to adolescents' sexual risk-taking behavior where adolescents whose parents have higher education and income are more likely to postpone sexual intercourse. Studies in the US with regards to education of parents indicate that teenagers with well educated parents are more likely to postpone sexual activity (Meschke et al., 2000; Kahn et al., 1990; Thornton and Camburn, 1987 & Hayes, 1987).

A similar finding is observed in other countries including Thailand, Nigeria, & Ethiopia. As Podhista et al's (2001) finding showed there is a greater tendency among youth whose parents had no formal education to be involved in premarital sex compared to those whose parents have at least some formal education. Odimegwu et al's (2002) finding similarly showed that for males and females, a higher proportion of those whose father had no education were sexually active. A related investigation among unmarried women in Ethiopia by Zubedia (1992) indicated that there is inverse relationship between parents' education and sexual behavior of young women. Solomon's (2004), finding also shows that parental education is related to adolescent sexual behavior where those with illiterate parents were more likely to be sexually active.

As research findings show, there is a link between parents' education and adolescents' sexual behavior. Parents' education can indirectly affect adolescents' sexual behavior in that more educated parents place greater emphasis for their children in obtaining an education, pursuing a career and accordingly prevent pregnancy risks (Zubedia, 1992). Moreover, highly educated parents may exercise greater control and are able to give the appropriate care for their children because of greater skills and resources (Thornton and Camburn, 1987).

Income is another socioeconomic variable that is related to sexual behavior of adolescents. Related studies in the U.S show that teenagers from low income families are at greater risk of early sexual activity and child bearing (Miller as cited in Manlove, 2001 & Meschke et al., 2000). A similar finding is observed among Cameroonian adolescents. As Rewenge's (2003) study indicated young people who come from low income families with insufficient means to satisfy their need were more likely to take sexual risks than others. Odimegwu et al's (2002) finding also pointed out that adolescents who had low parental income were sexually active than those who reported high or medium parental income.

In Ethiopia, a similar finding is reported by Teweldebirhan (1996) based on a study of female adolescents in Awassa which showed that there is an association between income and sexual activity where teenagers who have been raised in lower income families are highly exposed to premarital pregnancy and birth.

As stated above, family income affects adolescents' behavior. Different researchers have tried to give different explanation for this. According to Bronfenbrenner (1986), family income may affect the adolescents' behavior in that the resources required for sustaining the health and well being of family members and further development of children depends on the families' financial resources. Furthermore, other researchers have added that parents who have low

earnings may not give appropriate family care and are unable to provide their young adolescents with all the basic needs of life which exposes such children to sexual exploitation by older members of the society (Odimegwu et al., 2002; Rewenge et al., 2003, Bankole et al., 2004).

Though different researchers have indicated the link between socioeconomic status of parents and sexual behavior and explained how it affects sexual activity, a different finding was observed by other researchers. For Example, Miller et al's (1999) finding showed that both education and income did not predict sexual behavior. Similarly, a study among high school students in Addis Ababa by Save the Children, US (2000), revealed that there is no relationship between family income of students with their sexual behavior and contraceptive use.

As indicated above, many researchers indicated that parents' education and income are related to adolescents' sexual activity while the findings of few studies did not confirm this finding.

## **2.6 Peer Influence**

Peers can also exert an influence on sexual behavior of adolescents. As indicated by Dubios et al., (cited in Fabes and Martins, 2000), peers may have more influence than the family on a teen's initial sexual behavior. Supporting this idea, Hayes (1987) stated that the attitudes and behaviors of peers are among the most important factor affecting the initiation of intercourses by adolescents.

Several researchers have suggested ways in which peers influence sexual behavior of adolescents. Studies show that peers are the major source of information on sexual matters (Hayes 1987; Nicholas, 1994& Negussie et al; 1999). Moreover, researchers have shown that peer pressure and perception of peers' sexual activity has been associated with sexual behavior of adolescents where those adolescents who have been pressured by peers and those who

perceived their peers as having sex, are more likely to have sex themselves (Hayes, 1987; Podhisita et al., 2001; Fisseha et al., 1997, Meekers et al., 1999 & Solomon, 2004).

When explaining the impact of peers on adolescents' behavior, researchers have indicated that teens can be easily influenced by peer pressure to compensate for the lack of a close parent-child relationship (Lezin et al, 2004). According to Newcomer et al., (cited in Hayes 1987), what adolescents believe their peers do has a stronger influence on adolescents because their behaviors and attitudes are more closely related to what they think their friends do and behave than what is actually going on among their peers.

All in all, the above findings show that sexual behavior of adolescents is associated with peer influence and behavior where those adolescents who are pressured by peers and those who perceive their friends to have sex are more likely to practice sexual intercourse themselves.

In summary of this chapter, it can be stated that adolescent sexual activity is followed by various consequence and different social factors affect their sexual behavior. The context in which adolescents live is important in that it contributes to their physical, social and psychological development. This includes the family, peers, schools and neighborhood environment. Among these, the first agent of socialization-the family, is the direct and the most important agent which contributes in protecting adolescents from risky behaviors including premarital sexual activity.

Many of the previous studies show that adolescents who come from families where there is lack of monitoring and support, and those adolescents who come form lower-socioeconomic status homes and non intact families are prone to risky behaviors including premarital sexual practices. On the other hand, strong family relationships is considered to be significant for the healthy development of adolescents which includes stable family processes such as good parent-

teen communication, higher family-connectedness and parental monitoring which can function as preventive mechanisms against sexual risk-taking behaviors including premarital and unsafe sexual practices.

Therefore, in this study an attempt was made to examine the different factors that are considered to be related with adolescent sexual behavior with more emphasis on familial characteristics. Additional factors such as peer influence were also examined. The results of the study are presented and discussed in the following parts.

## **CHAPTER THREE**

### **Methodology**

#### **3.1 Study Design**

The study is a cross-sectional survey, supplemented by focus group discussion.

#### **3.2 Study Population**

The target population of the study is high school students from grades 9 to 12 in one government and one non- government high school in Addis Ababa. Addis Ababa is selected as a research site because it is the researchers' residence. Moreover, it will be possible to conduct follow up studies in the area in the future.

#### **3.3 Sampling Procedure**

The sampling procedure employed in this study is stratified random sampling. From the list of high schools, classified as non-government and government, two high schools, one government and one non-government high school, were randomly selected using lottery method.

These schools were labeled as school A (The non-government school) and school B(The government school).In school A 409 students are attending their education and in school B 5336 students are attending their education in the 2004/2005 academic year. A total of 480 students, 240 from school A and 240 from school B were taken as the study sample. The students were stratified according to their sex and grade level.

Accordingly, in each grade strata, the number of students to be selected was determined by equal allocation method. After assigning the samples (students) in the strata, from each grade level, three sections were selected randomly for those grade levels that have more than three sections. Finally, simple random sampling was used to select the desired number of sample from each section. From each class (section) female and male students were randomly recruited using class roster.

Even though the number of students in grades 11 and 12 was lower than the number of students in grades 9 and 10, the upper grades were believed to give more adequate information regarding adolescent sexuality. In order to get sufficient information, the researcher took equal number of students from grades 9 to 12. Regarding sex of students, equal number of male and female students were considered for this study mainly because the number of males and females in both schools are approximately equal in number.

### **3.4 Data Gathering Instruments**

In this study, questionnaire and focus group discussions were used in gathering relevant information.

#### **Questionnaire**

A structured self report Amharic language questionnaire comprising of 42 major items was used for the study. The questionnaire which was originally developed in English was translated into Amharic by the researcher and another language postgraduate student. It was then back translated to English by other two English language post graduate students.

Most of the items for the study were adopted from existing studies (by Dagne, 1999; Solomon, 2004; SC/US, 2000; Declimintea et al., 2001 and Kracker & Lee, 2002). The questionnaire comprises of 10 items on socio-demographic and background characteristics, 6 items on communication about sexuality and HIV/AIDS, 2 items on parental-monitoring, 5 items on parent-adolescent connectedness, 4 items on peer influence & behavior and 15 items on sexual behavior.

The use of questionnaire is preferred for this kind of study dealing with sensitive issues to elicit responses on such issues and avoid interviewer distortion that often limits the use of face to face interviews.

### **Focus Group Discussion**

A series of four focus-group discussions were carried out among purposely-selected students to explain some of the findings from the questionnaire. The discussion was divided by sex (male and female students) and school of attendance (government and non- government schools). The number of participants ranged from 8 to 10 individuals and semi-structured discussion guide was used to lead the discussion. The focus group discussion was centered on the adolescents' view of sexual behavior and their perception of parents' role in shaping their sexual behavior.

### **3.5 Pre-testing**

After the development of the questionnaire and discussion guides, it was pre-tested on high school students other than the study samples. The purpose of the pre-test was to examine the appropriateness and quality of the instruments, checking clarity of the items and getting a hint on cooperativeness of the respondents. The questionnaire was pre-tested on 40 students randomly selected from grades 9 to 12. As soon as the questionnaire for the pretest was completed, a discussion was led by the researcher regarding clarity of the statements and wording of questions in order to gain feedback on the weaknesses and strength of the questionnaire.

Cronbach alpha reliability was also calculated. Accordingly, the reliability of parent – adolescent connectedness and parental-monitoring scales was found to be .74 and .68 respectively. Finally, based on the feedback from the pilot- test, appropriate modifications were made on the instruments.

### **3.6 Data Gathering Procedure**

Data was collected using the prepared questionnaire and discussion guides. After identifying the samples, the following steps were followed to collect data. The administration of the questionnaire was done with the help of two assistants who were given short- term training on how to administer the instrument. They were provided with orientation on the purpose of the

study, content of the questionnaire, how the questionnaires are to be returned and administration of focus group discussions. The researcher established an appropriate rapport with assistants and other concerned bodies to facilitate situations for research activities.

Before the day of administration, the purpose of the study was discussed with school directors and other concerned officials. The date and time of questionnaire and focus group discussion administration were set. In addition, a brief orientation about the whole purpose of the study was arranged for the respondents. Some terminologies and ways of completing the questionnaire were also discussed.

After filling the questionnaire, the respondents were told to place the questionnaire in a special box located in a suitable place. This together with the anonymity of the respondents is expected to foster better security of responses. To ensure uniform transmission of information the researcher was around, to respond to questions that may arise from misunderstanding.

For the focus group discussion, appropriate rapport was established before starting the focus group discussion. The respondents were assured that their responses will be kept confidential. The principal investigator moderated all focus group discussions, while the two trained assistants tape-recorded and took note of all the discussions.

### **3.7 Ethical consideration**

The respective school officials were contacted and informed about the whole purpose of the research project. The respondents were also informed about the objectives of the study and their right to participate or not to participate in filling the questionnaire or the focus group discussion. Moreover, students were told that their answers will be held confidential. After gaining verbal consent, the questionnaire and focus group discussions were administered.

### **3.8 Data Analysis**

The research is both quantitative and qualitative in nature. The quantitative data was analyzed using SPSS. In the study bivariate analysis was applied using chi-square and t-test.

To analyze significant difference by sex, between male and female students, with regards to family process variables and sexual behavior chi -square and t-test were used. To elaborate this more, chi -square was used to test significant difference in sexual behavior and family process variables including perceived communication and monitoring and t-test was used to test significant difference in parent adolescent -connectedness by sex.

To examine the statistically significant association of study variables with adolescents' sexual-risk taking behavior, chi-square test of significance at 0.05 levels was used. Regarding the focus group discussion, all focus group discussions were tape recorded and transcribed. Then, the materials were reorganized and analyzed according to predetermined themes.

## CHAPTER FOUR

### Findings

The major objective of this study is to investigate sexual behavior of high school students and examine its association with selected familial characteristics. This chapter is devoted to the presentation and interpretation of data related to the present study.

#### 4.1 Socio-demographic Characteristics

**Table 1 Percentage Distribution of Students by Socio-Demographic Characteristics and School of Attendance**

Variable	School A(n,%)	School B(n,%)	Total(n,%)	$\chi^2$ test
<b>Age</b>				
14-17	156(65)	146(60.8)	302(62.9)	$\chi^2=0.893$ P=0.345
18-21	84(35)	94(39.2)	178(37.1)	
<b>Sex</b>				
Male	120(50)	120(50)	240(50)	$\chi^2=.000$ P=1.00
Female	120(50)	120(50)	240(50)	
<b>Religion</b>				
Orthodox	150(62.5)	191(79.6)	34(71)	$\chi^2=17.392$ P=0.001*
Muslims	45(18.8)	24(10)	69(14.4)	
Protestants	33(13.8)	20(8.3)	53(11)	
Others	12(5)	5(2.1)	17(3.5)	
<b>Ethnicity</b>				
Amhara	122(50.8)	119(49.6)	241(50.2)	$\chi^2=16.192$ P=0.003*
Tigrea	57(23.8)	39(16.3)	96(20)	
Oromo	30(12.5)	45(18.8)	75(15.6)	
Guragea	22(9.2)	36(15)	58(12.1)	
Others	9(3.8)	1(.4)	10(2.1)	
<b>Family Structure</b>				
Both parents	175(72.9)	174(61.3)	322(67.1)	$\chi^2=10.657$ P=0.005*
One parent	47(19.6)	54(22.5)	101(21)	
Others	18(7.5)	39(16.3)	57(11.9)	
<b>Educational level of parents</b>				
No formal schooling	25(10.4)	79(32.9)	104(21.7)	$\chi^2=77.818$ P=0.000*
Primary	16(6.7)	55(22.9)	71(14.8)	
Secondary and above	199(82.9)	106(44.2)	305(63.5)	
<b>Family income</b>				
Low-income	1(.4)	114(47.5)	115(24)	$\chi^2=28.776$ P=0.000*
Medium income	24(10)	113(47.1)	137(28.5)	
High income	215(89.6)	13(5.4)	228(47.5)	

\* = statistically significant at P: P<0.05

educational level of parents ( $\chi^2=77.818, P=0.000$ ). Students were also asked whether they are currently married or not. All respondents in the study reported that they are not currently married.

#### 4.2 Sexual Behavior

Overall, 108(22.5%) reported having had sexual intercourse at least once. Less than one fourth of the students admitted that they had sexual intercourse. Unlike the result from the questionnaire, in the focus group discussion, the participants in the different groups indicated that proportion of high school students who are practicing sex is high.

**Table 2 The Number of Students by Age and Sexual Activity**

Ever had sex	14-17 (n, %)	18-21(n, %)	Total (n, %)	$\chi^2$ test
Yes	46(15.2)	62(34.8)	108(22.5)	$\chi^2=24.672$ P=0.000*
No	256(84.8)	116(65.2)	372(77.5)	
Total	302(100)	178(100)	480(100)	

\* = statistically significant at P: P<0.05

From the above table, it can be seen that the percentage of sexually active students increased from 15.2% among the age group of 14 to 17 to 34% in the age group of 18 to 21. There is statistically significant association between age and sexual activity which shows older students report of sexual activity to be higher than younger students ( $\chi^2=24.672, P=0.000$ ).

**Table 3 Percentage Distribution of Respondents by Sex and Premarital Sexual Activities**

Characteristics	Male (n,%)	Female (n,%)	Total (n,%)	$\chi^2$ test
<b>Ever had sex</b>				
Yes	78(32.5)	30(12.5)	108(22.5)	$\chi^2= 27.52$ P=0.000*
No	162(67.5)	210(87.5)	372(77.5)	
<b>Age of first sex</b>				
Less than 11	9(11.5)	-	9(8.3)	$\chi^2=5.509$ P=0.06
11-15	44(56.4)	15(50)	59(54.6)	
16-20	25(32.1)	15(50)	40(37)	
<b>First Partner</b>				
Fiancé	8(10.3)	4(13.3)	12(11.1)	$\chi^2=22.392$ P=0.000*
Student	53(67.9)	17(56.7)	70(64.8)	
Commercial sex worker	4(5.1)	-	4(3.7)	
Sugar daddy(mammy)	2(2.6)	9(30)	11(10.2)	
Housemaid	11(14.1)	-	11(10.2)	
<b>Age of first Partner</b>				
Five or more years older	12(15.4)	10(33.3)	22(20.4)	$\chi^2=15.915$ P=0.003*
Three or more years older	14(17.9)	12(40)	26(24.1)	
About the same age	45(57.7)	7(23.3)	52(48.1)	
Three or more years younger	6(7.7)	-	6(5.6)	
Five or more years younger	1(1.3)	1(3.3)	2(1.9)	
<b>Number of sexual partners</b>				
Only One	25(32.1)	14(46.7)	39(36.1)	$\chi^2=6.263$ P=0.180
Two	29(37.2)	10(33.3)	39(36.1)	
Three	8(10.3)	5(16.7)	13(12)	
Four	4(5.1)	-	4(3.7)	
Five and above	12(15.4)	1(3.3)	13(12)	
<b>Reasons why adolescents engaged in premarital sex</b>				
Physical Pleasure	41(52.6)	3(10)	44(40.7)	$\chi^2=38.262$ P=0.000*
For love	11(14)	14(46.7)	25(23.2)	
Forced	1(1.3)	6(20)	7(6.5)	
Financial Gain	7(9)	6(20)	13(12)	
Peer pressure	18(23.1)	1(3.3)	19(17.6)	
<b>Total</b>	78(100)	30(100)	480(100)	

\* = statistically significant at P: P<0.05

The above table shows distribution of respondents by sex and premarital sexual activity. As can be seen from the above table, 32.5% of the male students reported sexual activity while 12.5% of the female students reported the same. Age of sexually active students at the time of first sexual contact ranged between 9 to 20 years. The mean age of first intercourse was 14. There

was no statistically significant difference between male and female students with regards to age of first sexual intercourse ( $\chi^2=5.509$ ,  $P>0.05$ ).As the finding shows, more than half of the sexually active students (63%) had their first sexual intercourse at a younger age (under the age of 16 years).

Coming to first sexual partner, for 11.1% of the sexually active students (10.3% boys, 13.3% girls) the first sexual partner was a fiancé, for 64.8%(67.9% boys and 56.7% girls) a student, for 3.7%(only boys) commercial sex workers, for 10.2%(2.6% boys and 30% girls) the first sexual partner was sugar daddy/mummy and for 10.2% ,only males, the first sexual partner was a housemaid.

The above table also shows that (48%) of the sexually active adolescents, 57.7% boys and 23.3% of girls, reported that their first sexual partner was about the same age. For the majority of sexually active girls (73.3%), their first partner was older than them. On the other hand, for boys, 33.3% reported that their first sexual partner was older than them. Regarding younger partners, 9% of the sexually active boys reported that their first sexual partner was younger than them while 3.3 % of the girls reported that their first sexual partner was younger. Chi-square statistical analysis shows significant difference by sex with regards to age of sexual partner ( $\chi^2=15.915$ ,  $P<0.05$ ).More female students reported first sexual partners to be older than male students who are sexually active.

The sexually active respondents were asked about the number of partners they had sex with until the time of the study. Accordingly, as shown in the above table, 36.1% of the respondents (32.1% males and 46.7%females) never changed sexual partner since their first encounter. Many of the sexually active students (63.9%) admitted having sexual relationship with more than one partner.

As can be seen from the same table, 40.7% of the students (52.6% boys and 10% of girls) reported that physical pleasure was their reason for first sexual contact followed by love affair for 23.1%(14% boys and 46% girls), forced 6.5%(1.3% boys and 20% girls).Financial gain was the other reason reported by the respondents,12%(9% males and 20% females).For the rest,17.6%(23.1 boys and 3.3% girls) first sexual intercourse was initiated by peer pressure. Chi-square analysis shows statistically significant difference between girls and boys, girls are more prone to engage in sexual activity by being forced, for love and financial reasons than boys. On the other hand, boys are more prone to engage in sexual activity for physical pleasure and peer influence ( $\chi^2=38.262$ ,  $P=0.000$ ).

During the focus group discussion, many of the participants mentioned that physical pleasure is among the major reasons for sexual intercourse especially among boys. The female participants in the focus groups indicated the same view that most girls involve in premarital sexual activity for love. Peer pressure was also mentioned by the focus group discussants, they indicated their view that students can be lead to risky behavior by their peers. The other reason was financial gain which was stated as a common trend for girls who come from low income families. **As a 17 years old in school B commented,**

*“Now a days what we call sugar daddy has become common, many girls have sex with older men to get money without considering the different consequences that follow.”*

The environment in which adolescents live including the family, was also mentioned as a contributing factor for adolescents’ premarital sexual activity.

**Table 4 Distribution of Students Who Are Not Sexually Active by Sex and Reasons for not having Sexual Intercourse**

Reasons for not having sexual intercourse	Male (n, %)	Female (n, %)	Total (n, %)	$\chi^2$ test
Fear of STD/AIDS	49(30.2)	24(11.4)	73(19.6)	$\chi^2=39.779$ P=0.000*
Fear of parents	3(1.9)	8(3.8)	11(2.9)	
Want to wait until marriage	26(16)	75(35.7)	101(27.2)	
Think that it is wrong	37(22.8)	59(28.1)	96(25.8)	
No desire	22(13.6)	31(14.8)	53(14.2)	
No opportunity	6(3.7)	2(1)	8(2.2)	
Religious reasons	19(11.7)	11(5.2)	30(8.1)	
Total	162(100)	210(56.5)	372(100)	

\* = statistically significant at P: P<0.05

Students were asked about their major reason for not having sexual intercourse. Accordingly, the most important reason for not having sexual intercourse for boys (30.2%) was fear of STD/AIDS whereas waiting until marriage was the major reason for girls (35.7%). 25.8%, 22.8% of males and 28.1% of females, reported that the reason they have not had sex was because they think that it is wrong. For the rest, 14.2%, no desire was the reason followed by 2.2% no opportunity and 8% for religious reasons.

#### 4.2.1 Contraceptive Use

Among the sexually active students 57.4%, 51.3% of the boys and 73.3% of the girls, did not use any contraception the first time they had sex. On the other hand, 42.6% of the sexually active respondents, 48.7% boys and 26.7% girls, reported use of contraception at sexual debut.

**Table 5 Distribution of Sexually Active Students by Sex and Contraceptive Use**

<b>Contraceptive Use at First Intercourse</b>	<b>Male (n,%)</b>	<b>Female (n,%)</b>	<b>Total(n,%)</b>	<b><math>\chi^2</math> test</b>
<b>Contraceptive use</b>				
Yes	38(48.7)	8(26.7)	46(42.6)	$\chi^2=4.309$ p=0.038*
No	40(51.3)	22(73.3)	62(57.4)	
<b>Condom use</b>				
Yes	29(37.2)	1(3.3)	30(27.8)	$\chi^2=12.372$ P=0.000*
No	49(62.8)	29(96.7)	78(72.2)	
Total	78(100)	30(100)	108(100)	
<b>Contraceptive use at the most recent intercourse</b>	<b>Male (n,%)</b>	<b>Female (n,%)</b>	<b>Total (n,%)</b>	<b><math>\chi^2</math> test</b>
<b>Contraceptive use</b>				
Yes	38(48.7)	11(33.3)	49(45.4)	$\chi^2=1.270$ p=0.260
No	40(51.3)	19(63.3)	59(54.6)	
<b>Condom use</b>				
Yes	29(37.2)	3(10.0)	32(29.6)	$\chi^2=7.767$ P=0.006*
No	49(62.8)	27(90.0)	76(70.4)	
Total	78(100)	30(100)	108(100)	
<b>Consistent Condom use</b>				
Yes	26(33.3)	-	26(24.1)	$\chi^2=13.171$ P=0.000*
No	52(66.7)	30(100)	82(75.9)	
Total	78(100)	30(100)	108(100)	

\* = statistically significant at P: P<0.05

As can be seen from the above table, inspection of the chi-square analysis shows that there is statistically significant difference between the two sexes, where more males than females reported contraception use at sexual debut ( $\chi^2=4.309, p<0.05$ ). Regarding condom use at sexual debut, thirty sexually active students (27.8%) reported condom use. The statistical significant test indicates that there is statistically significant difference between male and female students in condom use ( $\chi^2 =12.372, P=0.000$ ). Male students reported more condom use than female students.

Of the remaining sixteen students who reported contraceptive use at sexual debut, 15.2% (7.9% males, 50% females), 10.9% (13.2% males only), 8.7% (2.6% males, 37.5% females) reported using pills, withdrawal and foam, respectively.

From the above table, it is shown that overall 49(45.4%) students reported contraceptive use at the most recent sexual intercourse. Result from the chi-square analysis show no statistically significant difference between male and female students with regards to contraception use at the most recent intercourse ( $\chi^2=1.270$ ,  $P>0.05$ ).

Of the students who reported contraceptive use at the most recent sexual intercourse, 65.3% used condom, followed by 10.2% pills, 10.2% Calendar method, 6.1% (males only) withdrawal, and 8.2% foam. In the same table, the result of condom use at the most recent sexual intercourse by sex is shown. There is significant difference in condom use with respect to sex of the respondents whereby more males 29(37.2%) than females 3(10%) reported condom use respectively ( $\chi^2 =7.767$ ,  $P=0.006$ ).

Furthermore, in the last part, a look at the distribution in the above table indicates that 33.3% of the male students who are sexually active use condom consistently while female students in the study did not report consistent condom use. Chi-square analysis confirmed the statistically significant difference between male and female students in consistency of condom use ( $\chi^2=13.171$ ,  $P=0.000$ ) where males indicated consistency of condom use which is not the case for female students who are sexually active.

#### **4.2.2 Sexual Risk- Taking**

In this study, sexual risk-taking behavior was categorized into three groups which are the high risk group, the at-risk group and the minimal risk group. The high risk category constituted those students who are sexually active and who did not use condom during the most recent sexual intercourse. The at-risk group constitutes those students with a history of sexual activity who did use condom at the most recent intercourse and the last one, the minimal risk group, consists of those students who reported no sexual debut.

**Table 6 Percentages of Categories of Sexual Risk- Taking and Selected Familial Characteristics**

<b>Familial Characteristics</b>	<b>Minimal risk 372(77.5%)</b>	<b>At risk 32(6.7%)</b>	<b>At a higher risk 76(15.8%)</b>
Not living with one or both parents	22%	72%	70%
Less perceived parental Monitoring	15%	94%	95%
No communication with parents regarding sexuality and HIV/AIDS	45%	69%	73%

As can be seen from the above, those who are at the minimal risk group constitute the largest group in the study (77.5%). On the other hand, students at the high risk (15.8%) and at risk group constitute (6.7%), together constitute 22.5% of the participants in the study. As can be seen in the above table, the majority of high risk and at risk group constituted students who don't live with one or both parents, who perceived less parental monitoring and who did not discuss with their parents about sexuality and HIV/AIDS.

On the other hand, the minimal risk group constituted relatively less students who don't live with one or both parents, who reported less parental monitoring and who did not communicate with their parents. Regarding sexual risk-taking behavior, many of the participants (discussants) in the focus group discussion mentioned that premarital sexual activity is a common practice among the majority of young people and that most young people who are sexually active do not use condom.

**Table 7 The Number of Students by Sex and Sexual Risk- Taking**

Sexual risk-Taking	Male (n, %)	Female (n, %)	Total (no, %)	$\chi^2$ Test
<b>Ever had sex</b>				
Yes	78(32.5)	30(12.5)	108(22.5)	$\chi^2= 27.52$ P=0.000*
No	162(67.5)	210(87.5)	372(77.5)	
Total	240(50)	240(50)	480(100)	
<b>Condom use at the last sexual intercourse</b>				
Yes	29(37.2)	3(10.0)	32(29.6)	$\chi^2 =7.767$ P=0.006*
No	49(62.8)	27(90.0)	76(70.4)	
Total	78(100)	30(100)	108(100)	

\* = Statistically significant at P: P<0.05

The result in table 7 shows that 22.5% had had sexual intercourse. Among males, 32.5% reported that they have had sexual intercourse, while 12.5% females admitted to have premarital sex. Chi- square analysis shows that there is significant difference between male and female students with regards to sexual activity ( $\chi^2= 27.52$ , P=0.000) where males are more prone to premarital sexual practices than females. In the focus group discussion, discussants in the different groups mentioned that more males practice premarital sex than females.

In the same table, the result of condom use at the last sexual intercourse by sex is shown. There is significant difference in condom use at the last intercourse with respect to sex whereby more males 29(37.2%) than females 3(10%) reported condom use ( $\chi^2 =7.767$ , P=0.006).

**Table 8 The Number of Students by School of Attendance and Sexual Risk-Taking**

Sexual risk-taking	School A (n, %)	School B (n, %)	Total (n, %)	$\chi^2$ test
<b>Ever had sex</b>				
Yes	41(17.1)	67(27.9)	108(22.5)	$\chi^2=8.076$ P=0.004*
No	199(82.9)	173(72.1)	372(77.5)	
Total	240(100)	240(100)	480(100)	
<b>Condom use at the last sexual intercourse</b>				
Yes	17(41.5)	15(22.4)	32(29.6)	$\chi^2=4.439$ P=0.035*
No	24(58.5)	52(77.6)	76(70.4)	
Total	41(100)	67(100)	108(100)	

\* = statistically significant at P: P<0.05

Table 8 shows the result of chi-square analysis. Statistically significant difference was indicated in sexual activity by school of attendance whereby in school B the report of students being sexually active is higher than in school A ( $\chi^2=8.076$ ,  $P=0.004$ ).

As can be seen in the same table above, there is statistically significant difference in school of attendance with respect to condom use at most recent sexual intercourse ( $\chi^2=4.439$ ,  $P<0.05$ ). The proportion of condom use is different when school of attendance is considered. More students in school A (41.5%) reported condom use at the last intercourse than students in school B (22.4%).

**Table 9 The Association between Family Structure and Selected variables of the study**

<b>Sexual Risk-Taking</b>	<b>Both Parents (n, %)</b>	<b>One Parent (n, %)</b>	<b>Others (n, %)</b>	<b>Total (n, %)</b>	<b><math>\chi^2</math> test</b>
<b>Ever had sex</b>					
Yes	32(9.9)	53(52.5)	23(40.4)	108(22.5)	$\chi^2=91.600$ $P=0.000^*$
No	290(90.1)	48(47.5)	34(59.6)	372(77.5)	
Total	322(100)	101(100)	57(100)	480(100)	
<b>Condom use at the last sexual intercourse</b>					
Yes	9(28.1)	18(34)	3(21.7)	32(29.66)	$\chi^2=1.199$ $P=0.549$
No	23(71.9)	35(66)	18(78.3)	76(70.4)	
Total	32(100)	53(100)	23(100)	108(100)	
<b>Parental Monitoring</b>					
More	248(77)	46(45.5)	27(47.4)	21(69.9)	$\chi^2=45.419$ $P=0.000^*$
Less	74(23)	55(54.5)	30(52.6)	159(33.1)	
Total	322(100)	101(100)	57(100)	480(100)	

\* = statistically significant at  $P: P<0.05$

The above table shows that 9.9% of sexually active students come from homes with both parents present while 52.5 % and 40.4% of the sexually active students live with one parent or others respectively. To test statistically significant association, chi-square analysis was used which shows that there is significant association between family structure and sexual activity( $\chi^2=91.600$ , $P=0.000$ ). More students coming from homes with one or both parents absent reported premarital sexual experience as compared to those who live with both parents. Regarding condom use at the last intercourse, in the same table it is shown that there is no

relationship between family structure and condom use at the most recent sexual intercourse ( $\chi^2=1.199$ ,  $P>0.05$ ).

The result in the same table indicates that there is significant difference in family structure with regards to parental monitoring ( $\chi^2=45.419$ ,  $P=0.000$ ). That is, the proportion of parental monitoring differs by family structure. As shown in the above table, many of those students who live with both parents (77%) reported high parental monitoring which is not the case for those with one or both parents absent in the home.

During the focus group discussion, participants universally agreed on the positive impact of living with both parents. As they mentioned, living with both parents can contribute in helping adolescents not to take sexual risks since it affects parental practices.

**Table 10 The Association Between Education of Parents and Sexual Risk-Taking**

Sexual Risk-Taking	No formal Schooling (n, %)	Formal Schooling (n, %)	Total (n, %)	$\chi^2$ test
<b>Ever had sex</b>				
Yes	45(43.3)	63(16.8)	108(22.5)	$\chi^2=32.843$ $P=0.000^*$
No	59(56.7)	313(83.2)	372(77.5)	
Total	104(100)	376(100)	480(100)	
<b>Condom use at the last sexual intercourse</b>				
Yes	11(24.4)	21(33.3)	32(29.6)	$\chi^2=.995$ $P=0.315$
No	34(76.5)	42(66.7)	76(70.4)	
Total	45(100)	63(100)	108(100)	

\* = statistically significant at  $P: P<0.05$

The above table shows that 43.3% of the students whose parents had no formal schooling were sexually active while 16.8% who reported their parents to have formal education were sexually active. To clearly observe the relationship between educational level of parents and sexual activity, chi-square analysis was in order.

Inspection of the calculated chi-square value ( $\chi^2=32.843$ ,  $P=0.000$ ) revealed that there is statistically significant association between parents' education level and sexual activity. However, there was no statistically significant association when it comes to condom use at the most recent intercourse ( $\chi^2=.001$ ,  $P>0.05$ ) which means the proportion of condom use at the last intercourse does not vary by educational level of parents.

**Table 11 The Association between Family Income and Adolescents' Sexual Risk-Taking**

Sexual risk-taking	Low-income (n, %)	Medium income (n, %)	High income (n, %)	Total (n, %)	$\chi^2$ test
<b>Ever had sex</b>					
Yes	42(36.5)	38(27.7)	28(12.3)	108(22.5)	$\chi^2=28.776$ $P=0.000^*$
No	73(63.5)	99(72.3)	200(87.7)	372(72.3)	
Total	115(100)	137(100)	228(100)	480(100)	
<b>Condom use at the last intercourse</b>					
Yes	9(21.4)	13(34.2)	10(35.7)	32(29.6)	$\chi^2=2.234$ $P=0.327$
No	33(78.6)	25(65.8)	18(64.3)	76(70.4)	
Total	42(100)	38(100)	28(100)	108(100)	

\* = statistically significant at  $P: P<0.05$

In analyzing family income, responses were categorized into three income groups. This was done using the salary structure obtained from Federal Civil Service Commission in the Country. From the structure, salary levels range from 1 to 18. Estimated monthly incomes falling between level 1 and 6 are categorized as low income, levels 7 to 12 are medium-income and those above level 12 are categorized as high income groups. As can be seen from the above table, 36.5% the students in the low income group reported that, they have had sex before. On the other hand, only 12.3% of the students from the high income group reported sexual activity.

In the same table, chi-square analysis shows statistically significant association between family income and sexual activity ( $\chi^2=28.776$ ,  $P=0.000$ ). With regards to sexual activity, more students from the low income group reported sexual activity than the other income groups. When

it comes to condom use, the findings show that there is no statistically significant association between family income and condom use during the most recent sexual intercourse ( $\chi^2=2.234$ ,  $P>0.05$ ) which means that the proportion of condom use does not vary by family income.

In the focus group discussion, the participants in different groups indicated the importance of education and income of parents in influencing their children's behavior including sexual activity. They added that girls are especially vulnerable to unwanted sexual activity if they do not get enough income to fulfill their needs because having sex with older partners (sugar daddy) for financial reasons have become a common trend. Furthermore, the students indicated that educational level and income of parents are important; however, in order to be effective in bringing mature and responsible behavior among adolescent, these important familial characteristics should be directed to promote trust, understanding and free communication between parents and adolescents.

**As an 18 years old girl in School A explained,**

*“Even if parents are highly educated, if they do not discuss with their youngsters well and they don't apply appropriate monitoring which their education contributes to, its' useless. It is the same with income, if the parents give the adolescent excess money with no follow up and monitoring it facilitates risky behavior of the child including taking- sexual risks.”*

## Alcohol consumption

**Table 12 Distribution of Students by Sex and Alcohol Consumption**

Alcohol consumption	Male (n, %)	Female (n, %)	Total (n, %)	$\chi^2$ test
Yes	124(51.7)	79(32.9)	203(42.3)	$\chi^2=17.286$ P=0.000*
No	116(48.3)	161(67.1)	277(57.7)	
Total	240(100)	240(100)	480(100)	
<b>Alcohol consumption during first sexual activity</b>				$\chi^2=1.131$ P=0.287
Yes	11(14.1)	2(6.7)	13(12)	
No	67(85.9)	28(93.3)	95(88)	
Total	78(100)	30(100)	108(100)	

\* = statistically significant at P: P<0.05

Table 12 shows that overall, 203(42.3%) of the students in the study reported alcohol use. Chi-square analysis shows that there is statistically significant difference in alcohol consumption by sex where more males than females reported that they have consumed alcohol ( $\chi^2=17.286$ , P=0.000).

In the same table, 13(12%) of the sexually active students reported that they have consumed alcohol at sexual debut. There was no statistically significant difference by sex in alcohol consumption during first sexual intercourse ( $\chi^2=1.131$ , P=0.287).

**Table 13 The Association of Alcohol Consumption and Sexual Activity**

Ever had sex	Alcohol Consumption		Total (n, %)	$\chi^2$ test
	Yes (n, %)	No (n, %)		
Yes	67(33)	41(14.8)	108(22.5)	$\chi^2=22.262$ P=0.000*
No	136(67)	236(85.2)	372(77.5)	
Total	203(100)	277(100)	480(100)	

\* = statistically significant at P: P<0.05

The chi-square test results shown in the above table reveals that there is a relationship between alcohol consumption and sexual activity ( $\chi^2=22.262$ , P=0.000). That is, the likelihood of having sexual intercourse among adolescents varies with alcohol consumption where more students who reported consumption of alcohol are prone to sexual activity.

**Table 17 Communication and Discussion Regarding Sexuality and HIV/AIDS**

<b>Variable</b>	<b>Male (n,%)</b>	<b>Female (n,%)</b>	<b>Total</b>	<b><math>\chi^2</math> test</b>
<b><i>Ever discussed about sexuality with others</i></b>				
Yes	191(79.6)	207(86.3)	398(82.9)	$\chi^2=3.765$ P=0.052
No	49(20.4)	33(13.8)	82(17.1)	
<b><i>Whom did you discuss with?</i></b>				
<b>Other Family members</b>				
Yes	73(37.4)	122(62.6)	195(40.6)	$\chi^2=20.737$ P=0.000*
No	167(58.6)	118(49.2)	285(59.4)	
<b>Peers</b>				
Yes	161(67.1)	173(72.1)	334(69.6)	$\chi^2=1.417$ P=0.234
No	79(32.9)	67(27.9)	146(30.4)	
<b>Health Practitioners</b>				
Yes	19(7.9)	19(7.9)	38(7.9)	$\chi^2=0.00$ P=1.00
No	221(92.1)	221(92.1)	442(92.1)	
<b>Teachers</b>				
Yes	35(14.6)	43(17.9)	78(16.3)	$\chi^2=0.980$ P=0.322
No	205(85.4)	197(82.1)	402(83.8)	
<b><i>Most important source of information about sexuality and HIV/AIDS</i></b>				
<b>Family</b>				
Yes	41(17.1)	84(35)	125(26)	$\chi^2=20.00$ P=0.000*
No	199(82.9)	156(65)	355(74)	
<b>Peers</b>				
Yes	56(23.3)	76(31.7)	132(27.5)	$\chi^2=4.180$ P=0.041*
No	184(76.7)	164(68.3)	348(72.5)	
<b>Health Practitioners</b>				
Yes	51(21.2)	49(20.4)	100(20.8)	$\chi^2=0.05$ P=0.822
No	189(78.8)	191(79.6)	380(79.2)	
<b>Teacher</b>				
Yes	54(22.5)	51(21.3)	105(21.9)	$\chi^2=.110$ P=.740
No	186(77.5)	189(78.8)	375(78.1)	
<b>Media</b>				
Yes	187(77.9)	181(75.4)	368(76.7)	$\chi^2=.419$ P=0.517
No	53(22.1)	59(24.6)	112(23.3)	
<b><i>Whom would you feel most comfortable discussing about sexuality and HIV/AIDS?</i></b>				
Parents	31(12.9)	52(21.7)	83(17.3)	$\chi^2=11.909$ P=.036*
Other Family Members	29(12.1)	41(17.1)	70(14.6)	
Peers	147(61.3)	126(52.5)	273(56.9)	
Health Practitioners	23(9.6)	16(6.7)	39(8.1)	
Teachers	6(2.5)	3(1.3)	9(1.9)	
Media	4(1.7)	2(0.8)	6(1.3)	

\* = statistically significant at P: P<0.05

= Multiple responses are possible

Students were also asked with whom they have ever discussed about sexuality and HIV/AIDS in addition to parents. As table 17 shows, overall 389(82.9%) of the students reported that they have had a discussion with other people in addition to their parents. Many students (334, 69.6%) reported that they have discussed with their peers on issues about sexuality and HIV/AIDS .There was no significant difference between boys and girls regarding discussion with peers.195 (40%) reported that they have discussed with other family members including sisters and brothers. As compared with male students female students were significantly more likely to discuss with other family members ( $\chi^2=20.737$ ,  $P=0.000$ ). The result from the same table shows that, 78 (16.3%) of the students reported having had a discussion with teachers while 38(7.9%) reported having had a discussion with health practitioners.

Regarding the most important source of information on issues related to sexuality and HIV/AIDS, mass media was reported by majority of the students. For both sexes (368, 76.7%) of the students reported mass media as the most important source of information. Moreover, 27.5% reported peers as the most important source of information followed by family which was reported by 26% of the students. There was a significant difference by gender for both peers and the family as a source of information where more females than males reported discussing with them. For the rest, 21.9% reported teachers and 20.8% reported health practitioners as the most important sources of information. There was no significant difference by gender for those who indicated teachers and health practitioners as the most important source of information.

As to the most preferred people to discuss with about sexuality and HIV/AIDS, the students preferred as their first choice, peers (273, 59.6%)followed by parents( 83,17.3%),other family members(70, 14.6%),health practitioners (39, 8.1%), teachers (9,1.9%) and Media 6(1.3%).As the finding shows, preference to discuss about sexuality and HIV/AIDS inclined to peers and parents. Statistically significant difference was also found by gender ( $\chi^2=11.909$ ,  $P<0.05$ ).

During the focus group discussion, the participants universally agreed that most young people discuss with their peers than their parents and other people. Moreover, the discussants in the different groups indicated their view that most parents do not discuss in detail about sexuality and HIV/AIDS with their adolescent children.

The participants in the different groups added their view that most parents do not discuss well with their adolescent children because •Most parents may not have the knowledge and skill, *“Most of the time, they tell us about sexuality and HIV/AIDS in a threatening way by mentioning people who died of AIDS or who are affected by consequences of sexuality.”*

**A 17 years old boy from School A**

- They think that discussing such issues will facilitate sexual risk- taking among adolescents
- Culturally it is considered inappropriate and shameful to discuss with parents about sexuality including HIV/AIDS.

Regarding the most important source of information, the participants in the different groups mentioned mass media as an important source of information for the majority of young people which even contributes for the discussion with other people including parents,

**As an 18 year old girl in School A indicated,**

*“I have gained a lot of information by a weekly radio program, it has given me and my parents an opportunity to discuss issues related to HIV/AIDS and Sexuality on a weekly bases based on the issues raised in the program.”*

When the issue of parent- adolescent communication and its association with sexual behavior was raised, the participants in the different groups universally agreed that parent-adolescent communication about sexuality and HIV/AIDS contributes in protecting adolescents from taking sexual risks. However, parents have to discuss these issues carefully and skillfully .They have to be knowledgeable and aware of the topic.

#### 4.4 Perceived Parental Monitoring

Of the 480 students who participated in the study, 159(33.1%) were categorized as having less perceived parental monitoring, the rest (66.9%) were categorized as having more parental monitoring.

**Table 18 The number of Students by School of Attendance and Perceived parental monitoring.**

Parental Monitoring	School A (n, %)	School B (n, %)	Total (n, %)	$\chi^2$ test
More	173(72.1%)	148(61.7%)	321(66.9%)	$\chi^2=5.878$ P=0.015*
Less	67(27.9%)	92(38.3%)	159(33.1%)	
Total	240(100%)	240(100%)	240(100%)	

\* = statistically significant at P: P<0.05

As can be seen from table 18, 72% of school A students reported more parental monitoring while 61.7% of the students in school B reported more parental monitoring. The results from chi-square statistical analysis shows that there is significant difference by school of attendance with regards to perceived parental monitoring ( $\chi^2=5.878$ , P<0.05).

**Table 19 The Number of Students by Sex and Perceived Parental Monitoring**

Parental Monitoring	Male (n, %)	Female (n, %)	Total (n, %)	$\chi^2$ test
More	122(50.8%)	199(82.9%)	321(66.9%)	$\chi^2 =55.760$ P=0.000*
Less	118(49.2%)	41(17.1%)	159(33.1%)	
Total	240(100%)	240(100%)	480(100%)	

\* = statistically significant at P: P<0.05

In the above table, the result of the chi-square analysis of parental monitoring by gender (sex) is presented. As the results indicate, there is significant gender difference with regards to parental monitoring ( $\chi^2 =55.760$ , P=0.000). That is, parental monitoring varies with sex of adolescents where 82.9% of the female students reported more parental monitoring while only 50.8% of the male students reported more parental monitoring.

**Table 20 The Association between Perceived Parental Monitoring and Selected Variables of the Study**

Variable	More (n, %)	Less (n, %)	Total (n, %)	$\chi^2$ test
<b>Alcohol Consumption</b>				
Yes	103(32.1)	100(62.9)	203(42.3)	$\chi^2=41.346$ P=0.000*
No	218(67.9)	59(37.1)	277(57.7)	
<b>Peer pressure to have sex</b>				
Yes	17(5.3)	41(25.8)	58(12.1)	$\chi^2=42.024$ P=0.000*
No	304(94.7)	118(74.2)	422(87.9)	
<b>Friends have had sex</b>				
None	266(81)	55(34.6)	315(65.6)	$\chi^2=105.88$ P=0.000*
Few	50(15.6)	70(44)	120(25)	
Most	11(3.4)	34(21.4)	45(9.4)	
<b>Ever had Sex</b>				
Yes	5(1.6)	103(64.8)	108(22.5)	$\chi^2=243.734$ P=0.000*
No	316(98.4)	56(35.2)	372(77.5)	
<b>Condom use at the last sexual intercourse</b>				
Yes	1(20)	31(30.1)	32(29.6)	$\chi^2=0.233$ P=0.629
No	4(80)	72(69.9)	76(70.4)	
Total	5(100)	103(100)	108(100)	

\* = statistically significant at P: P<0.05

The results from the above table indicates that there is statistically significant difference in proportion of parental monitoring when it comes to alcohol consumption ( $\chi^2=41.346$ , P=0.000).

That means the proportion of alcohol consumption is affected by monitoring. The finding shows that, 62.9% of the students who consumed alcohol reported less parental monitoring while 37.1% who did not consume alcohol reported less parental monitoring.

Coming to peer pressure, the chi-square analysis shows statistically significant association between parental monitoring and peer pressure to have sex. That is the likelihood of reporting peer pressure varies by parental monitoring among the adolescents in the study. In the same way, statistically significant association was found between parental monitoring and having friends who are sexually experienced. Those students who indicated that they have friends who are sexually experienced were more likely to report less perceived parental monitoring.

The statistical analysis regarding the association of parental monitoring and sexual activity presented in the above table indicates a significant association ( $\chi^2=243.734$ ,  $P=0.000$ ). As the findings revealed, majority of those students with less perceived parental monitoring reported being more sexually experienced than those students with more perceived parental monitoring. That means less monitored students are more likely to practice premarital sexual activity than those students with more parental monitoring.

In the last part of the tables, inspection of the chi-square test shows that there is no statistically significant association between parental monitoring and condom use at the most recent (last) sexual intercourse ( $\chi^2=0.233$ ,  $P>0.05$ ) which means that the proportion of condom use at the most recent intercourse is not affected by parental monitoring.

During the focus group discussion, most of the participants agreed that parental monitoring is different for daughters and sons. As the participants indicated, parents strictly monitor daughters which may not be the case for sons.

*“Parents strictly monitor their daughters but not their sons. Even though most girls want to be involved in different risk-taking behaviors, they don’t have access for such activities. The opposite is true for sons. For most boys, there is no strict parental monitoring, as a result they are easily influenced by peers and involve in risky behaviors including premarital sex.”*

#### **A 16 years old girl in school A**

When parental monitoring and adolescent sexual behavior was discussed, most of the participants in the different groups agreed that parental monitoring is effective when it is not extremely exercised (Too much control). Girls in both schools particularly agreed that excessive parental monitoring could in fact enhance risky behaviors.

The participants in the different groups added their view that adolescents should not always be under the extremely strict rule of parents without proper guidance and communication

because, if they are doing certain behavior for the sake of their parents without understanding the reason why they are doing it, they will involve in risky behaviors in the absence of their parents.

**As a 17 year old girl in school B mention,**

*“Strict monitoring is not appropriate by it self instead, there should be trust between parents and adolescents. Parents should consider the importance of having close relationship, explaining to their children and discussing with them on different issues that are considered to be important for the adolescents.”*

#### 4.5 Perceived Parent-Adolescent Connectedness

The perceived parent- adolescent connectedness scale ranged from five to twenty five. Forty two students (8.75%) scored 12 or below, 198(41.2%) scored between 13 to 20 and 240(50%) scored 21 to 25.

**Table 21 The Association between Perceived parent-Adolescent Connectedness and Sexual Risk-Taking**

Sexual-risk taking	12 or below(n,%)	13 to 20(n, %)	21 to 25(n, %)	Total (n, %)	$\chi^2$ test
<b>Ever had sex</b>					
Yes	37(88.1)	62(31.3)	9(3.8)	108(22.5)	$\chi^2=160.842$ P=0.000*
No	5(11.9)	136(68.7)	231(3.3)	372(77.5)	
Total	42(100)	198(100)	240(100)	480(100)	
<b>Condom use at the last intercourse</b>					
Yes	11(29.7)	18(29)	3(33.3)	32(29.6)	$\chi^2=0.070$ P=0.966
No	26(70.3)	44(71)	6(66.7)	76(70.4)	
Total	37(100)	62(100)	9(100)	108(100)	

\* = statistically significant at P: P<0.05

In checking the association between sexual risk- taking and parent-adolescent connectedness, chi-square analysis was used. The results show that parent–adolescent connectedness is significantly associated with premarital sexual activity ( $\chi^2=160.842$ , P=0.000).That is, parent-adolescent connectedness significantly affects the proportion of sexual activity .As shown in the above table, majority of those students with less perceived parent-adolescent connectedness

(88.1%) reported having had premarital sex. Adolescents who reported less perceived parent-adolescent connectedness were more sexually active than the other groups.

The results from the same table regarding the association between parent-adolescent connectedness and condom use at the last sexual intercourse reveals that there is no statistically significant association between the two ( $\chi^2=0.070$ ,  $P>0.05$ ). That means parent-adolescent connectedness does not result in significant variation in proportion of condom use, it did not affect the proportion of condom use at the last intercourse.

**Table 22 Mean Parent-Adolescent Connectedness Score (Standard Deviation) Among the Students at the Two High Schools**

<b>Characteristics</b>	<b>N</b>	<b>Mean(SD)</b>	<b>t- value</b>	<b>P-value</b>
<b>School of Attendance</b>				
School A	240	20.53(3.9)	3.917	0.000*
School B	240	18.9(4.7)		
<b>Sex</b>				
Male	240	18.85(4.5)	-4.624	0.000*
Female	240	20.66(4.01)		
<b>Ever had sex</b>				
Yes	108	14.87(4.2)	-16.564	0.000*
No	372	21.17(3.2)		
<b>Alcohol consumption</b>				
Yes	203	18.85(4.58)	-4.122	0.000*
No	277	20.45(4.06)		
<b>Peer Pressure to have sex</b>				
Yes	58	16.57 (4.98)	-6.156	0.000*
No	422	20.45(4.08)		
<b>Condom use at the last sexual intercourse</b>				
Yes	32	15.41(4.36)	0.849	0.398
No	76	14.64(4.2)		

\*=Statistically Significant

As can be seen from the above table, there is statistically significant difference in mean parent-adolescent connectedness across school of attendance where students in school A had a significantly higher connectedness scores ( $t=3.917$ ,  $P=0.000$ ). There was also statistically significant difference across gender where by females had significantly higher scores of connectedness than males ( $t= -4.624$ ,  $P=0.000$ ). Coming to sexual activity and alcohol consumption, sexually active students ( $t=- 16.564$ ,  $P=0.000$ ) and those students who reported consumption of alcohol ( $t= -4.122$ ,  $P=0.000$ ) had a significantly lower parent-adolescent connectedness scores.

In the same way, the finding shows that those students who reported having peer pressure to have sex ( $t= -6.156$ ,  $P=0.000$ ) had significantly lower connectedness scores. The final part of the table shows that there is no significant difference between mean parent-adolescent connectedness scores of those students who reported condom use and those who did not use condom at the last sexual intercourse ( $t= 0.837$ ,  $P>0.05$ ).

During the focus group discussion, participants had different view regarding parent – adolescent connectedness and its difference between sons and daughters. The participants from school A indicated their view that it differs from family to family .They indicated that in some families boys are more connected than girls while in others girls are close to their parents. On the other hand, in school B, the participants mentioned that daughters are more close to their parents than sons since they spent much of their time with their parents at home and culturally girls are encouraged to be close to their family. The participants in school B added that when it comes to boys, they are relatively less connected to their family and spend much of their time with their friends.

Regarding its contribution to sexual behavior, the participants universally agreed on the positive impact of having good parent-adolescent connectedness. The participants commented

that adolescents who are better connected to their parents are likely to postpone premarital sexual practices and are less likely to spend their time at places where they can take risks. As the participants added, closeness and attachment can also contribute to the free discussion about different issues and a feeling of accountability in what adolescent children do.

**As an 18 years old student in School B mentioned,**

*“Our parents have a life time experience, they have passed through what we are experiencing now and they can guide us. A more closely attached adolescent is able to discuss freely and can get a good parental guidance and support which contributes to the postponement of unplanned and unwanted sexual activity.”*

#### 4.6 Peer Influence and Behavior

In the social environment of adolescents, peers are among the people who have a major influence.

**Table 23 The Association between Peer Influence and Sexual Activity**

Ever had sex	Peer pressure to have sex		Total (n, %)	$\chi^2$ test
	Yes (n, %)	No (n, %)		
Yes	35(60.3)	73(17.3)	108(22.5)	$\chi^2=54.186$ P=0.000*
No	23(34.7)	349(82.7)	372(77.5)	
<b>Total</b>	58(100)	422(100)	480(100)	
Ever had sex	Best friend have had sex		Total (n, %)	$\chi^2$ test
	Yes (n, %)	No (n, %)		
Yes	62(67.4)	46(11)	108(22.5)	$\chi^2=131.534$ P=0.000*
No	30(32.6)	342(88.1)	372(77.5)	
<b>Total</b>	92(100)	388(100)	480(100)	
Ever had sex	Friends have had sex			$\chi^2$ test
	None(n,%)	Few(n,%)	Many(n,%)	
Yes	19(6)	57(47.5)	32(71.9)	$\chi^2=151.984$ P=0.000*
No	296(94)	63(52.5)	13(28.9)	
<b>Total</b>	325(100)	120(100)	45(100)	

\* = statistically significant at P: P<0.05

Overall, 58 students (12.1%) reported that they are pressured by peers to have sex. As indicated in the above table, the chi-square test reveals that there is a relationship between peer pressure to have sex and sexual activity ( $\chi^2=54.186$ ,  $P=0.000$ ) that is the likelihood of having premarital sexual activity among adolescents varies with peer pressure. As shown in the above table, more than half of the students who are pressured by peers (60.3%) reported having had sex before.

In the same table, the chi-square result for the association of best friends having had sex and the adolescents' sexual activity was significant ( $\chi^2=131.534$ ,  $P=0.000$ ). A similar finding can be observed in the last part of the table. There is statistically significant association between perceived friends sexual behavior and sexual activity of the adolescents themselves ( $\chi^2=151.984$ ,  $P=0.000$ ). The finding shows that the proportion of premarital sexual activity changes with perception of friends sexual behavior where most of the students who indicated having most friends who are sexually active (71.5%), practice premarital sex themselves. The results show that the risk of premarital sex is substantially influenced by perception of friends having had sex.

All in all, the chi - square result suggests that family characteristics namely, parents' educational level and family's estimated monthly income, family structure, parent-adolescent communication about sexuality and HIV/AIDS, perceived parental monitoring and perceived parent-adolescent connectedness were significantly associated with the risk of premarital sex that is these familial variables significantly affect the proportion of premarital sexual activity of the adolescents. Moreover, other variables including age, sex, alcohol use and peer influence were significantly associated with the risk of premarital sex. However, all of the familial variables were not associated with condom use at the last sexual intercourse; they hardly affect condom use at the last sexual intercourse.

## CHAPTER FIVE

### Discussion

In this part, the findings of the study are discussed in the light of previous findings.

The study revealed that 22.5%, less than one fourth of the students admitted having sexual experience accounting for 32.5% of boys and 12.5% of girls, respectively. The figures about the prevalence of sexual activity in the study is relatively lower when compared with previous findings (Dagne, 1999; Solomon, 1990; Solomon, 2004; Kidane and Azezea cited in Govindasamy et al., 2002).

It is believed that young adolescents often underreport their sexual experiences. To partially account for the underreport, the students were asked about their friends behavior because young people are likely to be more honest about their friends behavior than their own since they may not feel that it is acceptable to acknowledge that they are sexually active. The findings show that students reported a higher proportion of sexual activity than what they have reported for their own. In the same way, the focus group discussion participants indicated that majority of young people especially out of school adolescents practice premarital sex.

Adolescents in the study differed by age when sexual activity is considered. It was shown that percentage of sexually active students increased by age. Those in the age group of 18 to 21 reported more sexual activity than those with the age group of 14 to 17. The finding regarding gender difference shows that there was a statistically significant difference between male and female students in premarital sexual activity. It was found that males were more likely to report sexual activity than females. This result is fairly comparable with other studies. Adu-Mireku's (2003) finding showed that boys were more likely to report sexual activity than girls. Similar finding was obtained by other researchers within the country (Fisseha et al., 1997 & Filmona and

Joyce, 1994).The difference in sexual activity between boys and girls may be due to the protective factor of their family and for cultural reasons. As Levine (1965) indicated, In Ethiopian culture, girls are not encouraged to practice premarital sex while it is acceptable for boys.

Statistically significant difference was also found by school of attendance. More students in school B reported premarital sexual activity than students in school A. Possible explanation for this difference can be the socioeconomic background of the students which in turn affects quality of parent-adolescent relationship at the two schools. Educated parents and those with high income are believed to exercise greater control and facilitate free discussion with their children. Families with such background can give the appropriate care and guidance for their children because of greater skills and resources.

When it comes to age of coital sex, no significant difference was found between the sexes. There was however, significant difference with age of first sexual partner. Females were more likely to have older partners than males. This is consistent with earlier studies by Dagne(1999) and Solomon(2004).Such sexual relationship of younger girls with older men puts teenage girls at risk since condom use especially among older partners is generally low(Solomon,2004).

✓ Regarding the type of sexual partners, males were more prone to have sexual contact with students and commercial sex workers (a high risk group). On the other hand, more females reported to have sexual contact with older men who can help them financially as compared to males. This finding was also confirmed by the focus group discussion participants that sexual activity with older partners is a common practice among economically disadvantaged girls.

✓ Furthermore, the analysis of the study revealed the reason of participants for sexual intercourse. The majority of students reported that their first sexual intercourse was initiated by physical pleasure, followed by love affair(in order to express love to their partner). Statistical

analysis showed an association between sex of respondents and reason for first sexual intercourse. More males reported physical pleasure as their reason for sexual intercourse while more females reported love affair as their major reason for sexual intercourse. The reason that male students are sexually active for physical pleasure is related with Freud's theory that there is an increase in sexual activity during adolescence.

✓ As the finding of the study shows, majority of the sexually active students (63.9%) reported having multiple partners. No statistical difference was found by gender. The finding is similar with previous studies (Solomon, 1990; Dagne, 1999). Sexually active students are at risk because many of them have multiple partners, which facilitate the transmission of HIV/AIDS among young people.

✓ Minimal use of contraception is another characteristic which places adolescents at risk. Among the sexually active students, 42.6% reported contraception use at sexual debut while 45.4% reported contraception use at the most recent sexual intercourse. The most commonly used contraceptive methods reported among sexually active students were condom and pills.

✓ The finding indicated that sexually experienced adolescents are at a greater risk of exposure to HIV/AIDS and other STDs. In the current study, it was found that condom use is generally low. 27.8% and 29.6% of the sexually active students reported condom use at sexual debut and the most recent sexual intercourse. In addition, only 24.1% indicated that they have used condom consistently. The result of the present study is consistent with previous findings. As Meekers and Calves (1999) stated; condom use among adolescents is generally low. Dagne's (1999) finding among high school students in Jimma showed that only 37.3% reported consistent condom use. Lower condom use (18%) was also indicated by Solomon's (1990) finding.

Coming to gender difference in condom use, statistically significant difference was found between male and female students in condom use. More males than females reported condom use

at first and most recent sexual intercourse. Moreover, more consistency of condom use was reported by males which is not the case for females. Studies in relation to the finding on condom use show a comparable finding. In the study of young people in Sub-Saharan Africa, Bankole et al., (2004) found that 10% of young men and 4% of young women used condoms at intercourse. A similar finding based on demographic health survey data (cited in Govindasamy et al, 2002), revealed that condom use is extremely low among young women in Ethiopia. A different finding however, was shown by Adu-Mireku (2003) that boys are less likely than girls to report condom use.

Other risky behaviors were also indicated by the finding of the present study. Among the sexually active males 16 (20%) reported that they had sex with a commercial sex worker but only 4 (25%) used condom consistently. A report of alcohol consumption was also indicated by 42.3% of the responds where more males than females reported consumption of alcohol which is statistically significant. Statistically significant association between alcohol consumption and sexual activity was also indicated by this study where students who consume alcohol were more prone to sexual activity as compared to those students who didn't consume alcohol. Additional finding shows that 12% sexually active students reported they have consumed alcohol at first sexual intercourse.

The finding of the current study revealed that majority of at risk and high risk group (which includes those students who practice premarital sex) constitute 15.8% and 6.7% of the students in the study, respectively. More than half of the high risk group constitutes students who do not live with both parents, who perceive less parental monitoring and who did not report discussing with their parents about sexuality and HIV/AIDS.

Examination of the association between income and education of parents with sexual activity was found to be statistically significant. Those students whose parents had no formal education

reported more sexual activity as compared to those whose parents were educated. This is consistent with the finding of previous studies elsewhere. In the U.S.A it was found that adolescents whose parents have higher education are more likely to postpone sexual activity (Meschke et al., 2000, Khan et al, 1990; Thornton & Camburn, 1987; and Hayes, 1987).

A similar finding is indicated by studies in the third world countries that there is a greater tendency among adolescents whose parents had no formal schooling to be involved in premarital sex as compared to those whose parents had at least some formal education (Pohdistia et al, 2001; Odimegwu et al, 2002; Zubedia, 1992; & Solomon, 2004).

Parents' education can contribute to adolescents' sexual behavior indirectly in that educated parents place greater emphasis for their children to obtain higher education; they encourage them to put their attention on their education. Moreover, highly educated parents give appropriate information and guidance for their children because of availability of skills and resources. The finding of the study regarding the association of parental education and condom use revealed that there is no statistically significant association between condom use at the last intercourse and educational level of parents.

Family income was found to have a significant association with premarital sexual activity. Only 12.3% of students in the high income group reported sexual activity. Students in the low income group were more likely to report sexual activity than the other income groups. Prior studies in relation to income and sexual activity of adolescents' show that adolescents who come from lower income families were at a greater risk of practicing sex (Mescheke et al, 2005; Rewenge, 2003; Odimegwu et al., 2002 and Teweldebirhan, 1996).

Income of parents can directly and indirectly affect the sexual behavior of adolescents. Directly in that students involve in sexual activity for financial reasons while indirectly it can affect parental practices. As Odimegwu et al., (2002) indicated parents who are low income

earners may not have the ability to provide their young adolescents with all the basic needs of life which exposes their children to sexual exploitation. During the focus group discussion, the participants mentioned the importance of parental education and income in relation to sexual behavior of adolescent in that financially disadvantaged girls have sex with older men. Furthermore, the students indicated that educational level and income of parents are important; however, in order to be effective in bringing mature and responsible behavior among adolescent, these important familial characteristics should be directed to promote trust, understanding and free communication between parents and adolescents.

The other finding in relation to income is its association with condom use. The finding of the study showed that there is no statistically significant association between family income and condom use at the most recent intercourse.

Another structural variable, family structure was also examined with regards to sexual activity. In this study, statistically significant association was found between family structures and premarital sexual activity. Students who live with one parent or non intact families were more likely to report risk of premarital sexual activity than those from homes with both parents.

There was also statistically significant difference in parental monitoring by family structure. Majority of the students who come from homes with both parents present were categorized as having higher/ more parental monitoring. During the focus group discussion, the participants universally agreed on the positive impact of living with both parents and its contribution to sexual risk-taking by indirectly affecting parental practices.

Previous studies are in agreement with the findings of the present study. In this connection, these studies showed that adolescents who live with one parent are more likely to engage in early sexual activity (Hayes, 1987; Miller, 2002 and Fleweling et al., 1990). Similar findings were also reported by researchers in the third world countries. Adolescents from non-intact families are

more likely to sexually active when compared to those from intact families (Rewenge, 2003; Podhista et al., et al, 2001; and Solomon, 2004). Regarding condom use, as the finding of the study indicates there was no statistically significant association between family structure and condom use at the last sexual intercourse. Solomon's (2004) finding also confirm the findings of this study.

One encouraging finding regarding parents – adolescents communication, is that half of the students (49%) reported that they had had a discussion with their parents about sexuality and HIV/AIDS which is not the case with the finding of previous studies (Mutri, 2003; Solomon, 2004). 20.4% reported a discussion with their mother while 33.6% reported having a discussion with their father, the rest discussed with both parents. In this regard, different finding was reported by researchers elsewhere, that parent-child communication is mostly observed among mothers and their children (Fabes & Martin, 2000; Meschke et al., 2000; Nicholas, 1994).

As the finding shows, parent-adolescent communication about sexual matters differed by sex of adolescents. A statistically significant difference was found between male and female students where more girls reported having had a discussion with their parents than boys. A consistent finding was reported by Adu-mireku (2003) which indicates that boys were less likely than girls to have ever talked about HIV/AIDS with their parents.

However, Odimegwu et al s' (2002) finding among Nigerian adolescents did not confirm the above finding; rather their result showed that more males than females have discussed about family life issues with their parents. Significant difference was also found in parent-adolescent communication by school of attendance where school A students were more likely to report discussion with parents than school B students.

This difference might have resulted because of the differences in parent-child communication and the socio-economic differences between the two schools which indirectly affect parent-

adolescent communication. Level of communication may be higher for school A students because most of them come from families with educated parents – who have the skills and resources that contributed positively to the enhancement of parent-adolescent communication as compared to those parents with low level of education.

Regarding the association between parent adolescent-communication and sexual activity, the data showed a statistically significant association between the two. The proportion of sexually active students varies with communication where more students who didn't report communication with parents were sexually active as compared to those students who discussed about sexuality and HIV/AIDS with their parents before.

A similar finding was reported by Odimegwu et al., (2002) that adolescents with whom parents had discussed sexual matters were less likely to be sexually active than those with whom parents had never discussed such issues. In this connection, findings by different researchers in the U.S.A. showed that positive parent-adolescent communication is associated with later onset of sexual activity (Meschke et al, 2000; Paul & pick, 1991; Hayes, 1987). On the other hand, a different finding was reported by other researchers that parent-adolescent communication is not associated with sexual activity (Solomon, 2004; Adu-mireku, 2003; Miller as cited in Lezin et al, 2004).

When condom use at the last intercourse and communication with parents was examined, no statistically significant association was found. Proportion of condom use does not differ by communication with parents. This finding is similar with that of Solomon (2004). However, the finding of the study is different from that of Hutchison and Cooney cited in Howell (2001) and Adu-mireku (2003), who indicated that parent-adolescent communication and condom use are associated. In this connection, a review by Miller (cited in Lezin et al., 2004) revealed mixed findings that the association between parent-child communication and sexual

activity/contraceptive use differs from family to family which is associated with sexual activity and contraceptive use in some families but not in others.

The other finding of the present study was that, 69.6% reported having a discussion with their peers. Moreover, the major source of information on issues related to sexuality and HIV/HIDS was reported to be mass media followed by peers. Other researchers have also reported peers as being the major sources of information (Thornburg cited in Nicholas, 1994; Negussie et al, 1999; Odimegwu et al, 2002).

A related finding indicated by the study was that the preference to discuss issues about sexuality and HIV/AIDS inclined to peers and parents respectively. During the focus group discussion, a similar view was reflected about the major sources of information being mass-media and peers. It was also indicated that most young people prefer discussion with their peers. While peers can fill the gap in adolescents' knowledge about sexual matters, they may not get adequate information from their peers since they themselves may not have accurate information on such issues (SC/US, 2000). Adolescents need to discuss with their parents/families on different issues including reproductive health since it contributes to their healthy psycho-social development.

Regarding parent-adolescent communication, during the focus group discussion, the participants in the different group revealed that most parents do not discuss in detail about sexuality and HIV/AIDS. The reasons they gave were that (a) most parents do not have the knowledge and skill (b) Culturally, it is inappropriate and shameful to discuss such matters with their adolescent children and (c) even if it is discussed, parents think that, such discussions encourage/ facilitate sexual risk-taking on the part of their children. In this connection, different

researchers indicated similar findings (Fitzgerald cited in Pick and Palos, 1995; Odimegwu et al, 2002; Negusse et al, 1999; Mutri, 2003).

Parental monitoring is the other parent-adolescent relationship dimension. This study is consistent with previous findings that an increasing prevalence of sexual risks exist among adolescents with less perceived parental monitoring (Solomon, 2004; Diclementea et al., 2001; Buamrind cited in Miller et al., 1999; Miller, 1986).

In the present study, statistically significant difference was found by gender with regards to parental monitoring. Girls were prone to more parental monitoring than boys. This was also confirmed by the focus group discussion. Other researchers have also arrived at similar results (Jacobson and Craket, cited in Howell, 2001). A significant difference was also found by school of attendance where school A students reported more parental monitoring than school B students. This might have resulted due to socioeconomic differences between the two schools which indirectly affect their families' parental practices.

Additional findings were indicated in relation to parental monitoring that those who live in non intact families, who consume alcohol and those who report peer pressure are more likely to report less perceived parental monitoring. This is consistent with previous findings (Miller, 2002; Solomon, 2004). When it comes to condom use, the result of the study shows that parental monitoring was not associated with condom use at the most recent sexual intercourse. Unlike this finding, different researchers in the U.S.A. show the association of monitoring with condom use (Miller et al., 1999, Miller et al., 1986). On the other hand, Solomon (2004) arrived at a similar conclusion that there is no significant difference in condom use when parental monitoring is considered.

The other parent-child relationship variable, connectedness to parents, is among the protective factors that contribute to sexual abstinence. As the finding shows parent-adolescent

connectedness was associated with sexual behavior of adolescents where adolescents with less perceived connectedness were more likely to be sexually active. This was also confirmed by the focus group discussion participants. Findings of other studies agree with the observation made by the present study (Markham et al., 2003; Lezin et al., 2004; Meschke et al., 2000 and Solomon 2004). This finding is in line with attachment theory. Connectedness to parents may facilitate emotional adjustment, physical health and positive peer relations while low attachment to parents is a significant contributor to the occurrence of early sexual activity (Santrock, 1999; Lezin et al., 2004).

The other finding in relation to parent-adolescent connectedness was difference by sex. Female students were found to have higher connectedness scores than male students. This is consistent with previous research finding by Karcher and Lee(2002). During the focus group discussion, regarding sex differences, the participants in School A indicated their view that parent- adolescent connectedness with sons and daughters varies from family to family. On the other hand, participants in School B mentioned that daughters are closer to their parents than sons since they spend much of their time with their parents and culturally girls are encouraged to be close to their family.

Likewise, there was a significant difference by school of attendance. Students in school A were found to have higher connectedness scores than students in school B. When it comes to condom use at the most recent sexual act, there is no significant association between condom use and parent-adolescent connectedness. Unlike the findings of this study, different researchers elsewhere came up with the finding that condom use is associated with parent-adolescent connectedness (Markham et al, 2003; Lezin et al, 2004 and Meschke et al, 2000). Further research is necessary to verify this finding in Ethiopian cultural context.

The present study shows that those students, who consume alcohol, who are exposed to peer pressure and who are sexually active, were found to have lower connectedness scores. In this connection, as stated by Benda and Dobson (cited Lezin et al., 2004), where there is less adolescent connectedness with parents, there is often increase in peer influence on sexual issues, an association with sexually active peers' and use of alcohol which is related to pre-marital sexual activities of adolescents.

✓ The other finding worth noting is peer influence on adolescent sexual behavior. The findings from this study show that peer influence is associated with sexual activity. It was noted that adolescents who are pressured by peers reported more sexual activity than those who are not pressured by their peers. Similarly, those adolescents who reported having friends who are sexually active are more prone to practice pre-marital sex themselves. Other researchers have also arrived at similar findings (Hayes, 1987; Podhustia et al., 2001; Fisseha et al., 1997; Meekers et al., 1999 and Solomon, 2004).

As the finding in the current study revealed, familial characteristics were not associated with condom use at the last intercourse. Other research needs to examine the association of contraceptive use including condom use with familial characteristics.

All in all, the finding of the present study is linked with the ecological theory. The study findings reveal that risk factors associated to sexual activity exist in the settings in which adolescents commonly interact, which includes the family and peers (Small & Luster, 1994; Manlove, 2001).

Finally, it is worth to note that the study has limitations in that only two schools in Addis Ababa were considered which may not be representative of in and out of school youth in the country. In addition, much emphasis was given on only selected familial factors. Furthermore,

though focus group discussion was used, information was mainly obtained by self-report questionnaire from the adolescents only; no information was obtained from their parents.

Despite the above limitations, this study gives insight for concerned bodies about familial influences on adolescent sexual behavior. The finding of the study contributes significantly to the growing literature in the area. In this study, it was found that, the selected familial characteristics are protective factors against premarital sexual activity of adolescents.

## CHAPTER SIX

### Summary, Conclusion and Recommendation

In this section of the paper, summary and conclusions of this study and relevant recommendations are presented.

#### 6.1 Summary

At present, adolescents' risky behavior and their vulnerability especially in relation to unwanted pregnancy, unsafe abortion and sexually transmitted infections including HIV/AIDS creates a great concern. During this period, young people take risks without considering the consequences of such behavior. This may be in part due to lack of knowledge and inappropriate guidance by parents or other concerned bodies. In this study an attempts was made to investigate familial factors that are considered to be related with adolescent sexual behavior.

The major objective of the study was to investigate sexual behavior of adolescence and examine its association with selected familiar characteristics by way of finding answers to the following questions:

- Is there any relationship between parent-adolescent communication and adolescents' sexual risk taking behavior?
- Is there any relationship between level of parental monitoring and adolescents' sexual risk taking behavior?
- Is there any relationship between parent-adolescent connectedness and adolescents' sexual risk taking behavior?
- Is there significant difference by sex and school of attendance with regard to family process variables and adolescents' sexual risk-taking behavior?

- Is there any relationship between family structure and adolescents' sexual risk-taking behavior?
- Is there any relationship between education and income of parents and adolescents' sexual risk taking behavior?
- Is there any association between peer influence and sexual behavior of adolescents?

To gather information, both quantitative and qualitative methods were used. In order to deal with these basic questions, the related literature was reviewed. Two assistants who had experience in data collection were recruited. Moreover, short term training was given to the assistants on the objective, content and ethical issues of the study.

In this study, 480(240 male and 240 female) adolescents were included. Also four separate focus group discussions were conducted in order to support the quantitative results. The sampling procedure adopted in the study was stratified random sampling. Two high schools, one private and one government, were selected which were further stratified by sex and grade level.

To analyze the data, bivariate statistics (cross tabulations, chi-square) and t-test were applied using SPSS.

With the help of questionnaires and focus-group discussions, family characteristics and sexual behavior of students were assessed and the association was examined. Furthermore, the findings were analyzed and the discussions were reported on the basis of existing literature.

## 6.2 Conclusion

Thus, based on the data analysis, the finding of the study can be concluded as follows.

- ◆ The present study indicates that less than one fourth of the adolescents (22.5%) are sexually active.
- ◆ There is significant statistical association between parent/adolescent communication and sexual activity. Half of the adolescents reported a discussion with their parents. Students who didn't communicate with their parents reported having more sexual experience than those who have communications with their parents in this respect.
- ◆ There is significant statistical association between perceived parental monitoring and sexual activity. Students with less perceived parental monitoring are more likely to report sexual experience than those with more perceived parental monitoring. Moreover, the finding showed that having peer pressure and alcohol consumption is associated with perceived parental monitoring.
- ◆ Parent- adolescent connectedness is considered as a protective factor against risky behaviors. In this connection, statistical findings reveal that there is relationship between parent-adolescent connectedness and sexual behavior of adolescents where those students with lower connectedness were more likely to report sexual experience which is not the case for those with higher connectedness.
- ◆ There is statistically significant difference by sex in family processed variables. Females are more likely to be under the protective factor of the family than male students. In this study, it was found that more daughters communicate with their parents than sons, parental monitoring is high for daughters than sons and

daughters have higher connectedness scores than sons. There is also a significant difference by sex in sexual behavior and condom use of adolescents. Males were more likely to practice premarital sex than females, moreover; males were more likely to use condom at the last intercourse than females.

- ◆ Family structure is associated with sexual experience. Students coming from families where one or both parents are absent reported being more sexually experienced than students living with both parents.
- ◆ Education and income of the family contributes to the sexual behavior of adolescents. This was confirmed by the findings of the study. Students who have parents with formal education are less likely to have premarital sexual experience. Similarly those students who come from parents with low income are prone to practice premarital sex.
- ◆ Peer pressure and perception of friends as having sex have statistically significant association with sexual experience of adolescents. The influence of peer groups to adolescents' sexual behavior was also noted, in that those who are exposed to peer pressure reported and those who perceived their friends as sexually active indulged in pre-marital sex themselves.
- ✓ ◆ The most commonly used contraceptive among the students was condom. However, inconsistency of condom use was reported.
- ◆ While peers and parents were reported to be the most preferred people to discuss with about sexuality and HIV/AIDS, the study showed that Mass media was the dominant source of information on such issues followed by peers.

- ◆ Condom use at the most recent intercourse is not associated with familial characteristics in the study.

### **6.3 Recommendations**

Based on the findings the following recommendations are made:

- ◆ Parents should be targeted when reproductive health intervention plans are set and implemented. Parents need to be aware of the importance of their relationship with their children. They must take the responsibility of creating conducive atmosphere whereby their children feel free to discuss issues related to sexuality and HIV/AIDS. In this respect, parents need to make sure that they undertake proper monitoring which contributes to development of self-care and discipline among their adolescent children thereby preventing risky behaviors.

Parents should have the required awareness of the importance of close relationships with their children so that the later are interested to spend sufficient valuable times with their parents. This helps to create free discussions among family members where parents share their experience.

- ◆ Different organizations, including government bodies, churches, mosques, etc. need to develop strategies that promote positive parent/adolescent relationships. These organizations can create opportunity for provision of adult education to facilitate discussion on sexual matters and additional parental practices among parents. Creation of group activities such as formation of youth associations where panels, workshops and forums are prepared by parents, adolescents and other

concerned bodies are examples of initiatives that can be undertaken by the Community.

- ◆ Development and evaluation of programmes by focusing on empowering parents with the knowledge and skill to teach their children on reproductive health matters is also essential. The media can play great role in this respect.
- ◆ Peers being among the most important sources of information and the most preferred people to discuss with, peer education programs must be encouraged in order reach its target audience effectively. Reproductive health clubs should be organized in schools which creates opportunity for peer to peer education regarding reproductive health matters among youth.
- ◆ Findings from the study revealed that there is difference between male and female students in parent-adolescent communication, monitoring, connectedness, and sexual-risk taking behavior. Hence, it is necessary to take this fact into consideration, when designing programs related to reproductive health of adolescents.
- ◆ Finally, this study is believed to have contributed in the efforts to have insight on the role of the family in relation to adolescent sexual behavior. However, further studies are needed in order to have a broader insight which covers samples not included and issues not discussed and explained in this particular study.

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# APPENDICES

## Appendix- A

Addis Ababa University

Graduate Studies

Department of Psychology

### **Questionnaire for High School Students on Adolescents' Sexual Risk taking Behavior and Family Characteristics**

Questionnaire Serial Number \_\_\_\_\_

Confidentiality and Consent

Dear Respondents,

This questionnaire is designed for a research work approved by Addis Ababa University, Department of Psychology to be conducted in partial fulfillment of masters' degree in Developmental psychology. I am interested in learning more about your perceptions and practices related to your sexual and reproductive health and selected familial characteristics. The questionnaire explores a lot in very personal areas, this being the case, the information to be obtained from you is very essential to the successful completion of this study. I, therefore request you to kindly fill in the questionnaire as accurately and carefully as possible. Regarding confidentiality, the whole process of questionnaire administration is set up in such a way that utmost secrecy is maintained. To assure this, you are not expected to write your name in any of the questionnaire pages and the name of your school will not be mentioned in the study. In addition, all the information you give will be kept confidential.

To indicate your response, please put a  mark or write your answers in the space provided for the questions that require written responses. It will take you **30-35** minutes to complete the whole questionnaire. I thank you in advance for taking your time to respond to the questionnaire.

Would you be willing to participate in this study?

Agree \_\_\_\_\_ Disagree \_\_\_\_\_

If you decide not to participate, please return the questionnaire to the supervisor.

**Part 1 Background Characteristics**

**Write the Number in the Space Provided**

✓ 1.1 Age \_\_\_\_\_

✓ 1.2 Grade level \_\_\_\_\_

**Please Check One**

✓ 1.3 Sex

Male \_\_\_\_\_ 01

Female \_\_\_\_\_ 02

✓ 1.4 Religion

Orthodox Christian \_\_\_\_\_ 01

Muslim \_\_\_\_\_ 02

Catholic \_\_\_\_\_ 03

Protestant \_\_\_\_\_ 04

Others (Specify) \_\_\_\_\_ 11

✓ 1.5 Ethnicity

Amhara \_\_\_\_\_ 01

Guragea \_\_\_\_\_ 03

Oromo \_\_\_\_\_ 02

Tigrea \_\_\_\_\_ 04

Others (Specify) \_\_\_\_\_ 11

✓ 1.6 Marital Status

Married \_\_\_\_\_ 01

Unmarried \_\_\_\_\_ 02

1.7 With whom are you living now?

I live with both parents \_\_\_\_\_ 01

I live with my mother only \_\_\_\_\_ 02

I live with my father only \_\_\_\_\_ 03

I live with my brother/sister \_\_\_\_\_ 04

I live with my grandparents \_\_\_\_\_ 05

I live with my cousin \_\_\_\_\_ 06

I live with my mother and step father \_\_\_\_\_ 07

I live with my father and step mother \_\_\_\_\_ 08

I live with my friends \_\_\_\_\_ 09

I live alone \_\_\_\_\_ 10

Others (specify) \_\_\_\_\_ 11

### Part 3 Perceived Parental Monitoring

Below are two questions about parental monitoring, please check only one box, for each question, that best describes your parents (caregivers).

		Never 1	Rarely 2	Some Times 3	Most of the time 4	Almost Always 5
3.1	Your parents know <b>where you are</b> , when not at school and away from home.					
3.2	Your parents know <b>who you were with</b> , when not at school and away from home.					

### Part 4 Perceived Connectedness to Parents

Below are some statements about your perceived closeness to your parents (caregivers). Please, check only one box, for each statement, that best describes how true the statement is for you or how much you agree with it.

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
4.1	I enjoy spending time with my parents.					
4.2	My parents and I are pretty close to each other.					
4.3	My parents care a lot about me.					
4.4	I talk with my parents about my personal things and problems.					
4.5	My parents are warm and loving towards me.					

### Part 5 Peer Influence and Behavior

#### Please Check One

5.1 Is there pressure from your friends for you to have sexual intercourse?  
Yes \_\_\_01      No \_\_\_02

5.2 About how many of your friends have had sexual intercourse?  
None of them \_\_\_01      Most of them \_\_\_03  
A few of them \_\_\_02      All of them \_\_\_04

5.3 Think of your best friend, has he/ she ever had sex?  
No \_\_\_01      Yes \_\_\_02

5.4 Do you know of anyone among your male close friends who had sexual intercourse with prostitutes?

Yes \_\_\_ 01

No \_\_\_ 02

### Part 6 Sexual Behavior and Practices

#### Please Check One

6.1 Have you ever had sexual intercourse?

Yes \_\_\_ 01

No \_\_\_ 02 (If your answer is no, go to 6.15)

6.2 How old were you when you had sexual intercourse for the first time?

\_\_\_\_\_ Years old (Write the number in the space provided)

6.3 Who was your first sexual partner?

Fiance \_\_\_ 01

Student \_\_\_\_\_ 02

Commercial sex worker \_\_\_ 03

Housemaid \_\_\_\_\_ 04

Sugar daddy/mammy \_\_\_\_\_ 05

Others Specify \_\_\_\_\_ 88

6.4 At the time you had first intercourse, how old was your partner?

Five or more years older than me \_\_\_\_\_ 01

Three or more years older than me \_\_\_\_\_ 02

About the same age \_\_\_\_\_ 03

Three to four years younger than me \_\_\_\_\_ 04

Five or more years younger than me \_\_\_\_\_ 05

6.5 What was your **reason for sexual intercourse** the first time you had sex?

Physical pleasure \_\_\_ 01

Because all my friends were doing it \_\_\_ 06

Love affair \_\_\_\_\_ 02

Others (specify) \_\_\_\_\_ 88

I was forced \_\_\_\_\_ 04

To get Money \_\_\_\_\_ 05

6.6 When you played sex **the first time**, had you/your partner consumed any alcohol any other drug before hand?

Yes \_\_\_ 01

No \_\_\_ 02

6.7 Since your **first sexual experience**, how many sexual partners have you had so far?

\_\_\_\_\_ Number of partners

**Contraceptive use**

6.8 The **first time** you had sex; did you/your partner use any contraception?

Yes \_\_\_\_\_ 01

No \_\_\_\_\_ 02 (Go to question 6.10 if your answer is no)

6.9 What method did you use **at the first** sexual intercourse?

Condom \_\_\_\_\_ 01

Pills \_\_\_\_\_ 02

Rythm \_\_\_\_\_ 03

Withdrawal \_\_\_\_\_ 04

Foam (Tablets) \_\_\_\_\_ 05

Others (Specify) \_\_\_\_\_ 88

6.10 The **last time** you had sexual intercourse; did you or your partner use any contraceptive?

Yes \_\_\_\_\_ 01

No \_\_\_\_\_ 02 (Go to question 6.12 if your answer is no)

6.11 What method did you use (**at the last sexual intercourse**)?

Condom \_\_\_\_\_ 01

Pills \_\_\_\_\_ 02

Rythm \_\_\_\_\_ 03

Withdrawal \_\_\_\_\_ 04

Foam (Tablets) \_\_\_\_\_ 05

Others (Specify) \_\_\_\_\_ 88

6.12 Have often do use a condom with your partner?

Not at all \_\_\_\_\_ 01

Sometimes \_\_\_\_\_ 02

Most of the time \_\_\_\_\_ 03

Always \_\_\_\_\_ 04

**The Following Two Questions Are For Males Respondents Only**

6.13 Have you ever had sexual intercourse with a commercial sex worker?

Yes \_\_\_\_\_ 01

No \_\_\_\_\_ 02

6.14 If the answer is yes, how often did you use condom?

Not at all \_\_\_\_\_ 01

Sometimes \_\_\_\_\_ 02

Most of the time \_\_\_\_\_ 03

Always \_\_\_\_\_ 04

**Answer the Following Question Only If You Had Never Had Sexual Intercourse**

6.15 What is the main reason for you not to have sexual intercourse?

Fear of STD/AIDS _____	01	No desire _____	05
Fear of parents _____	02	No opportunity to get friends who fit _____	06
Want to wait until marriage _____	03	For religious reasons _____	07
I think that it is wrong _____	04	Others(Specify) _____	88

***THANK YOU!***

## Appendix- B

### Discussion Guide for Focus Group Discussion of Adolescents A Study of Family Characteristics and Adolescents' Sexual Risk-Taking Behavior among High School Students in Addis Ababa

#### Adolescent Males/Adolescent females

Name of Moderator \_\_\_\_\_

Name of Note taker \_\_\_\_\_

Date \_\_\_\_\_ Total time taken \_\_\_\_\_ minutes

Code number of tape recorded \_\_\_\_\_

School of attendance (School A/School B)

Hello, thank you for taking your time to talk to us .We are \_\_\_\_\_ ( the moderator) and \_\_\_\_\_(Note taker).We are working on a research approved by Addis Ababa University, Department of Psychology to be conducted in partial fulfillment of a masters degree in Developmental Psychology.

We are here to learn from you about sexual behavior of adolescents and parents' (Families) role in shaping their sexual behavior which will contribute to design a better prevention programs .We would like to explain to you some of the ground rules for the meeting.

1. The discussion will last about 1hour-1:30.
2. Everything you say will remain confidential.
3. Your name will not be used when reporting on the findings.
4. Your participation is voluntary.

A tape recorder will be used only to facilitate the recording and analysis of the discussion. All tapes will be destroyed after they have been transcribed.

Permission to tape record the discussion?

Yes \_\_\_\_\_ No \_\_\_\_\_

FGD Discussants

Characteristics of the group

Ser No.	Age	sex	Religion	Educational level
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

## Focus Group Discussion Guide

### Discussion Points

Sexual behavior and selected familial characteristics which includes, parent-adolescent communication about sexual matters, parental-monitoring, parent-adolescent connectedness, family structure and socioeconomic status of parents/family.

#### I. Sexual Behavior

- *Do girls/boys your age have sexual intercourse before marriage?*

##### **Probe**

*What proportion of students your age has sexual intercourse?*

*How common is it for a girl/boy to have sexual intercourse?*

*On the average at what age do these girls/boys have premarital sex?*

- *What are the reasons for having sexual intercourse?*

##### **Probe**

*Why, do you think young people of your age have sex?*

*To what extent do you think that young people your age are pressured to have sex by peers?*

*Have you heard of a boy/girl receiving money or goods for sex, from men /women who are not their husbands/wives or regular partners? Do their partners tend to be the same age, or older?*

- *What safe and high risk behavior patterns are observed?*

##### **Probe**

*Do most boys/girls (young people) have premarital sex? Do these sexual activities tend to be for a long/short term/with the same person or with different people? Is it common for girls/boys to have multiple partners at one time?*

*Do most boys/girls who are sexually active use condom?*

#### II. Family Characteristics

##### A. Communication about sexuality and HIV/AIDS

##### **Probe**

- *Do young people your age talk openly with other people about sex?*

*Whom do Young people prefer to be responsible in passing information about sexual matters?*

- *Do young people your age discuss sex related matters including HIV/AIDS with their parents? Why, Why not?*

- *Do you think that there is difference between sons and daughters in parent -adolescent communication about sexuality? Why, why not?*

- *How do you rate the effect of parental –Adolescent communication about sexual matters on adolescent sexual risk taking? Explain why?*

### **B. Parental Monitoring**

#### **Probe**

- *Do you think that parental monitoring have an impact adolescent's risky sexual behavior? Explain how/ Why/why not?*
- *Do you think that there is difference between sons and daughters in parental monitoring?*

### **C. Parent -Adolescent Connectedness (Closeness)**

#### **Probe**

- *How do you rate the effect of parental closeness (attachment) on adolescent sexual risk taking? Explain why?*
- *Do you think that there is difference between sons and daughters in parent- adolescent connectedness?*

### **D. Family Structure**

#### **Probe**

- *Do you think that living arrangement of adolescents (the presence or absence of one or both parents) have an impact on their risky sexual behavior? Explain Why?*

### **E. Socio Economic Status**

#### **Probe**

- *Do you think that adolescents who come from well educated and high income families differ in their sexual and reproductive health than those who come from low socioeconomic status? Why? Why not?*

# Declaration

I confirm that this thesis is my original work

Name FEBEN DEMISSIE

Signature F. D.

Date of submission 18 June 2005

This thesis has been submitted for examination by my approval as a university advisor.

Name TILAHUN SINESHAU

Signature T. S.

Date of submission 18 June 2005