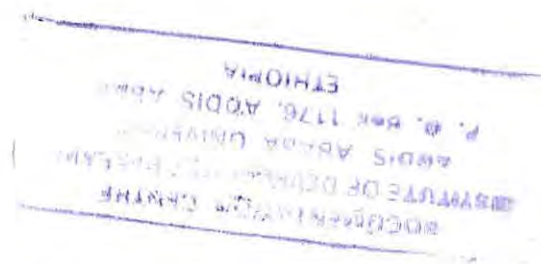


**INSTITUTE OF POPULATION STUDIES
ADDIS ABABA UNIVERSITY
COLLEGE OF DEVELOPMENT STUDIES**



Gender Differentials in Adolescent Sexual Activity and
Reproductive Health Risks in Bahir Dar Town

By: Mohammed Amare



July 2008
Addis Ababa

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**GENDER DIFFERENTIALS IN ADOLESCENT SEXUAL
ACTIVITY AND REPRODUCTIVE HEALTH RISKS IN
BAHIR DAR TOWN**

**By
MOHAMMED AMARE**

**A thesis submitted to the School of Graduate Studies of Addis Ababa
University in partial fulfillment of the requirements for the degree of
Masters of Science in Population Studies**

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**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

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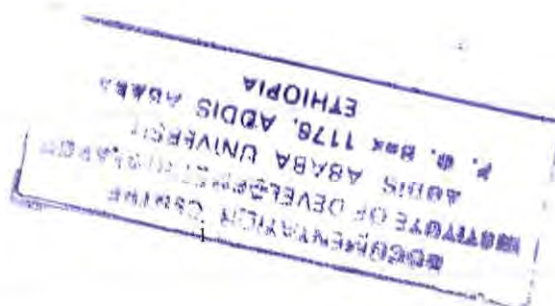
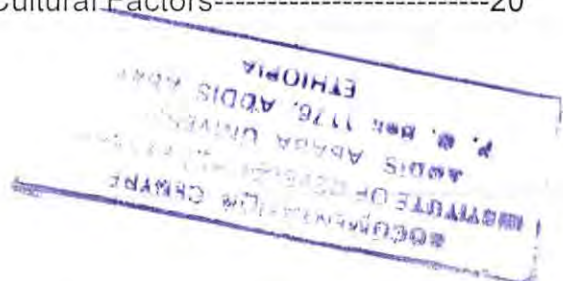


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Lists of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CSA	Central Statistical Agency
EDHS	Ethiopia Demographic and Health Survey
FGD	Focus Group Discussion
FHI	Family Health International
HIV	Human Immune Deficiency Virus
ICPD	International Conference on Population and Development
MOH	Ministry of Health
RH	Reproductive Health
SRH	Sexual and Reproductive Health
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
UNAIDS	United Nation Program on AIDS
UNFPA	United Nation Population Fund
UNICEF	United Nation Children's Fund
WHO	World Health Organization

Abstract

Ethiopia is a developing country with a demographic profile dominated by a young population. Due to biological, socio-cultural and economic factors, young people, particularly those aged 14-19 years, are generally at a high risk of HIV/AIDS and other reproductive health problems. This study is intended to examine gender differences in adolescent sexual behavior and reproductive health risks in Bahir Dar town. A cross-sectional, study was conducted in Bahir Dar town. Both quantitative and qualitative data-collection methods were employed to conduct the study. For quantitative data collection, a household interview survey was conducted among 630 males and 693 female's adolescents, aged 14-19 years, within the 5 randomly selected Kebeles of the town and conducted four focus-group discussions, with 40 participants, to collected qualitative data. Logistic regression analysis was used to examine the influence of the explanatory variable on the dependent variables using the SPSS version 13. The study examined gender differences in sexual initiation, unsafe sexual behavior, condom use, sexually transmitted diseases and abortion. Logistic techniques reveal that younger females were more likely than older females to have become sexually active by early age. Adolescents currently enrolled in school were less likely to have begun early sexual activity, particularly females. Females who discussed sexual issues with friends were more likely to initiate early sexual activity than males. Among sexually experienced adolescents 65.2% of males and 59.1% of females had two or more sexual partners in the previous year. The proportion with multiple partners significantly increased with age. Around 50% of females and 60% of males aged 14-19 years had used condoms at least once, while only 17.9% of females and 26.4% of males used condom during the last intercourse. Risk of having a sexually transmitted disease in the previous year was higher for both females and males who have multiple sexual partners. Because of early and unprotected sexual initiation, and subsequent high risk sexual behaviors characterized by multi-partnered sex and no or inconsistent condom use adolescent in Ethiopia are at significant risk for reproductive health problems, including HIV, STD and unwanted pregnancy. Gender-based interventions for adolescents should be given at earlier age and strategies for delaying sexual initiation as well as effective skills and methods for the prevention of HIV/AIDS/STD and unwanted pregnancy should be adopted.

CHAPTER-ONE

INTRODUCTION

1.1 Background of the Study

Adolescence is defined as the stage of life during which individuals reach sexual maturity; it is the period of transition from puberty to maturity (UN, 1997). Today's generation of adolescents is the largest in history. According to United Nation, (2001), nearly half of the global population is less than 25 years old (the UN uses the term adolescents for people aged 10–19 years). Negative outcomes of early pregnancy and sexually transmitted infections including HIV/AIDS, threaten the health of people in the last two decades of life more than any other age group. At the same time, adolescents are the greatest hope for turning the tide against STIs, AIDS and early pregnancy. Because adolescence is a period of physical, social and emotional transition and development.

Worldwide, young women and men suffer a disproportionate share of unplanned pregnancies, sexually transmitted diseases including HIV, and other serious reproductive health problems (UNFPA, 2002). According to the World Health Organization (2003), about one half of all HIV infections worldwide occur among people below age 25. In industrialized countries, two of every three STD infections occur among people under 24 years of age, and the proportion of infected youth in developing countries is believed to be even higher (Cates, 1997).

Literature on sexual behaviors in sub-Saharan Africa indicates that young men and women often exhibit different patterns of sexual behavior. In many African societies, young men and women have different interests, motivations and strategies for engaging in premarital sexual relationship. Young women enter into sexual relationships for various reasons including the enhancement of their marriage prospects, proving their fertility to their future husbands and for financial benefits (Calves, 1997). Men on the other hand are more likely to engage in sexual

relationships before marriage for sexual experience and sexual satisfaction (Meeker, 1999). Having multiple partners is often a means for a young man to gain social status and respect among his peers. Because of these differences, young men and women have different patterns of sexual behavior, and hence, they are exposed to different reproductive health risks (Calves and Meeker, 1999).

It is important to recognize the growing incidence of premarital sexual activity among adolescents, owing to the widening gap between age at menarche and age at marriage. As most acts of premarital sexual intercourse are unprotected, that means, sexually active adolescents are increasingly at risk of contracting and transmitting sexually transmitted diseases including HIV/AIDS (Ashford, 2001). In addition, young women are particularly vulnerable to coerced sexual intercourse as a result of gender power imbalances. Sexually experienced adolescents are typically unaware of the consequences of unprotected sexual intercourse and are poorly informed of their sexuality and means of protecting themselves, often leading to unwanted pregnancy and abortion (UNFPA, 2002).

In Ethiopia according to Ministry of Health (2004), the number of cases of sexually transmitted infection including HIV/AIDS is also increasing among the youth. The current HIV prevalence in the country indicates that the peak age for new HIV infection is the age of adolescence.

1.2 Statement of the Problem

The sexual and reproductive health issues of young people are of international and national concern as a result of HIV/AIDS pandemic, growing rates of other sexually transmitted infections and complications of early, unplanned or unwanted pregnancy (UNFPA, 2004). More than 10 percent of all births each year are to women ages 15 to 19 (PRB, 2001). Even when pregnancy among young married women is planned, the health risks for teenage mothers and their babies can be serious. Because their bodies are not fully mature, the risk of maternal mortality is two to four times higher for

pregnant adolescents than for pregnant women over 20. Infant mortality is also greater among adolescent mothers typically 30 percent higher for infants born to women ages 15 to 19 than for those born to women 20 or older (PRB, 2001).

Adolescence is a life period of experimentation and frequent risk taking. Key factors for adolescent vulnerability to sexual and reproductive health problems include: lack of awareness and lack of correct information about the risks of unwanted pregnancies and STIs, peer and other social pressures, lack of skills needed to resist such pressures and to practice safe behavior, lack of youth-friendly sexual health and counseling services, poverty, traditional cultural norms that give young women a low social position and little power to resist persuasion or coercion into unwanted sex (Hulton et al, 2000).

A study conducted in Yaoundé Cameroon, shows that among 541 single young men and women, 60 percent of male respondents 15 to 20 years old and 33 percent of their female counterparts declared ever having multiple sexual partners (Calves, 1997). Having multiple sexual partners is common among male adolescents and is perceived as a sign of virility and status among peers (Abega, 1995). As for young women, having multiple sexual partners is often dictated by economic necessity since young women often engage in sexual relationships in exchange for money or gifts (Calves and Meeker, 1999). Although sexual activity, often with multiple sexual partners, is rather common, condom use among unmarried adolescents remains low.

According to Youth Risk Behavior Survey data conducted by Forehand in New York City (2000), over one-half of high school students engage in sexual intercourse prior to graduation. Estimates appear to be higher for males, minority adolescents and adolescents of lower socioeconomic status (Kann et al, 1995). Considering the high rate of sexual activity among adolescents, it is alarming that many engage in behaviors that are considered risky or unsafe, exposing them to possible infection with the human immunodeficiency virus and other sexually transmitted diseases (e.g., syphilis, chlamydia), as well as unintended pregnancy (Aggleton, 1995).

Ethiopia is one of the least-developed countries with multi-faceted reproductive health problems, especially among the youth. Childbearing begins early in life, about 45 percent of total births in the country occurring among adolescent girls and young women. Commercial sex prevails in urban areas and sexual violence against women and young girls is a common phenomenon. The situation is aggravated by the overall poor socioeconomic environment and harmful traditional practices (CSA, 2006).

Furthermore, premarital sexual activity of young Ethiopian men and women is associated with increasingly evident reproductive health problems. First, sexual activity outside marriage and multi-partnership are closely associated with sexually transmitted diseases including HIV. Second, pregnancies that occur in an unstable, socially disapproved sexual union may lead females to seek abortion, which is often performed under unsafe conditions. In such context, more research is needed to gain better insights on gender differences in sexual initiation, number of sexual partner, condom use and STD between adolescents male and female.

1.3 Research Questions

1. Is there difference in the risk of sexually transmitted diseases among adolescent males and females?
2. Is there difference in sexual initiation, condom use and multiple partners among adolescent males and females?

1.4 Objectives of the Study

1.4.1 General Objective

To examine gender differentials in adolescent sexual activity and reproductive health risks.

1.4.2 Specific Objectives

- To examine gender differentials in sexual initiation, number of sexual partners and condom use.
- To examine factors affecting male and female patterns of sexual and reproductive health behaviors.
- To assess the difference in the prevalence of STDs among males and females adolescents.

1.5 Significance of the Study

There was no in-depth study done indicating the differences in adolescent sexual activity and reproductive health risks and the possible determinants of it (Socio-economic and demographic characteristics) in Bahir Dar city. The town is among the fastest growing cities in Ethiopia due to its ecological attraction, natural beauty and strategic importance. But, there are different barriers to the development of the town; among which there is the highest prevalence of adolescent sexual activity and HIV/AIDS.

According to EDHS (2005), Prevalence rate of HIV/AIDS in Bahir Dar town is even higher than the national level. This is because of the high prevalence of early marriage, early sexual activity of adolescents, large influx of people to urban areas associated with the rapid growth of the town, availability of large number of commercial sex workers and low status of women is said to have greatly contributed and contributing for the "high" prevalence rate of HIV/AIDS in Bahir Dar town (MOH, 2000). That is why Bahir Dar has been chosen as a research setting in this study.

Adolescent sexual and reproductive health is a critically important policy and programmatic area in Sub-Saharan Africa. An estimated 4.6 percent of women and 1.7 percent of men aged 15–24 years were living with HIV at the end of 2005 (UNAIDS, 2003). While adolescents constitute part of the "window of hope" with regard to the HIV/AIDS epidemic, about half of all new HIV infections are estimated to occur

among this generation of 10–24 year-old. Given the urgency and scope of addressing the sexual and reproductive health needs of adolescent males and females, it is important to assess their current levels of differences in sexual activity and reproductive health risk. This study is believed to help social researchers and program evaluators to design and improve reproductive health programs.

1.6 Operational Definitions

STDs : a sexually experienced adolescent who has contracted the disease during the past year.

Sexual initiation: refer to the age at first sexual intercourse.

Sexual activity: refer to involvement in sexual intercourse in the last 12 month.

Adolescent: for the purposes of this study, adolescence is considered to encompass approximately ages 14-19, a period in which adolescents engage in risky sexual behavior (UN, 1997).

Multiple partners: the likelihood of having number of sexual partners in the last 12-months before the survey and the previous years.

Ever use of contraceptives: refers to use of contraceptives during every sexual intercourse.

Reproductive health risk: problems related to unwanted pregnancy, abortion (for female only) and STIs including HIV.

CHAPTER-TWO

REVIEW OF RELATED LITERATURE

2.1 Adolescent Sexual Activity and Reproductive Health Problems

Early sexual intercourse is a serious adolescent risk behavior (Moore, Miller and Gleib et al, 1995). Early initiation of sexual intercourse is associated with other behaviors that increase risk, including more frequent intercourse, greater numbers of sexual partners and lower probability of contraceptive use during the adolescent years (Seidman, Mosher and Aral, 1994). Thus, individuals who initiate sexual intercourse relatively early in their adolescence periods are at high risks for sexually transmitted disease and pregnancy involvement for a longer period.

Numerous psychosocial theories of health behavior (Jessor, 1991), as well as previous empirical research (Kirby, 1997), suggest that the timing of first sexual intercourse is influenced by a broad array of socio-environmental and personal factors. Among the most powerful sources of social influence are parents, siblings, sexual partners and friends (Bearman and Bruckner, 1999).

In regard to parental influences, a recent review of empirical research highlights aspects of parent-child relations that are particularly relevant to adolescents' sexual risk behaviors. Key relationship factors include parent-child closeness and connectedness, parents' values about teen sex and parent-child communication about sex (Miller, 1998). Previous studies that focused on sexual debut consistently found that relationships characterized by high levels of closeness and connectedness between parents and children are related to teens' virginity status and delays in first sexual intercourse (Jaccard, Dittus and Gordon, 1996). While fewer studies have examined the role of parents' values in influencing adolescent sexual debut, those that have done so found non-permissive parental values to be associated with lower levels of adolescent sexual experience (Resnick, Bearman and Blum et al, 1997).

Studies about the effects of parent-child communication on timing of first sexual intercourse present mixed findings. While some studies (Leland and Barth, 1993) suggest that open and frequent communication about sex is associated with teens not having sex or postponing sexual debut, other studies (Casper, 1990) have found neither an association between parent-child communication and adolescent sexual activity nor that more frequent parent-child communication is associated with increased risk of adolescent sexual activity. It is not often clear whether communication predates sexual activity or is a consequence of parents learning of their teens' sexual activity.

According to the International Conference on Population and Development held in Cairo, reproductive health is defined as “a state of complete physical and social wellbeing and not merely in the absence of disease or infirmity, in matters relating to reproductive system and to its function and process. Reproductive health problems also mean that problems as related to unwanted pregnancy, unsafe abortion and STIs which encountered youth who are sexually active” (ICPD, 1994).

Adolescence is the time when many people start to engage in sexual activity. While age at marriage is rising in virtually every country, age at first intercourse is falling. A large proportion of adolescents, therefore, are engaging in premarital sexual activity (WHO, 2003). This activity is often not planned and many young people do not use contraceptives or use less effective traditional methods (WHO, 2003). As a result, some 14 million adolescents give birth (within marriage or not) each year and it is estimated that between one-third and two-thirds of these births are unplanned. Many adolescents who experience an unplanned pregnancy resort to abortion, often under unsafe conditions (UNAIDS, 2003).

Adolescent pregnancies and births carry higher risks for both the mother and the newborn: the maternal mortality ratio in this age group is twice that of women in their twenties. More girls aged 15-19 years die from pregnancy-related causes than from any other cause (WHO, 2003). Other important consequences of unprotected intercourse include sexually transmitted infections. Of an estimated 340 million cases

of curable STIs occurring annually in the world, at least one-third is in people under age 25. In addition, half of all new human immunodeficiency virus infections occur among 15-24 year-olds, accounting for about 2.5 million new infections a year (UNAIDS, 2003).

2.1.1 Sexual Initiation

To day's young people are beginning sexual activity at younger ages than previous generations. The sexual and reproductive health crises that young people face arise mainly from the increase of teenage and unsafe premarital sexual practices (WHO, 2004).

Different studies indicate that these days adolescent premarital sexuality, which is characterized as being unanticipated, unpredictable, inconsistent with values and personally uncontrollable is becoming a common feature among adolescents, and has increases in many countries around the world (UNICEF, 2004).

Sexual initiation is an important health and social issue. Previous studies have consistently suggested positive associations between early sexual initiation and subsequent risky sexual behaviors, HIV/STD infection, adolescent pregnancy and substance use (Adamu and Mulatu, 2003). Consequently, reports of trends towards earlier onset of sexual activity in adolescent raise potential health concerns (Stanton, 2001).

In most African countries age of first sexual intercourse among youth has been found to be 10 to 19 years and most youth have been initiated in to sex before or by the age of 15. For instance, in South Africa, Kwazulu Natal study revealed that age at first sexual intercourse ranged from 10 to 19 years old (Mekibib, 2002). In Nigeria, the average age of first sexual intercourse for girls is 16 years (UNAIDS, 2004). In Kenya the adolescent study found that 4 percent were sexually active before the age of 10 years and in Ghana 12 percent of teenagers had sexual relationship by the age of 15

and among adolescents of 15-19 years 59 percent were sexually active (UNAIDS, 2003).

Age at first sexual intercourse is associated with a number of sexual risk taking behaviors. Youth with earlier ages at initiation of sexual intercourse are less likely to have used a contraceptive method at first sexual intercourse and at last sexual intercourse (Abma et al, 2004). They are also more likely to have reported that their first sexual experience was non-voluntary (Abma, Driscoll and Moore, 1998). Early initiation of sexual activity can lead to devastating consequences, such as; sexually active adolescents may experience unwanted pregnancy, contract a sexually transmitted infection and suffer difficulties in relationships with parents or peers.

In Sub-Saharan Africa, the incidence of premarital sex is clearly evident which shows that sexual experience precedes marriage in nearly every country surveyed. In those countries, the proportion of young women who first had sexual intercourse by age 18 is much higher than those women who were married by this age (PRB, 2001).

Survey results on the sexual behaviour of adolescents in Asia suggest that a noticeable percentage of adolescents are sexually experienced. In the Republic of Korea, for example, 24 percent of male and 11 percent of female secondary school students were reported to have had premarital sexual intercourse. Among sexually experienced adolescents, the majority of women had their first sexual intercourse with a steady boyfriend with marriage in mind, while a significant proportion of men had their first experience with a commercial sex worker or a casual friend. In Nepal, the Republic of Korea, Thailand and Viet Nam over half of the adolescent men had sexual intercourse with sex workers. A large number of sexually experienced young men also reported having multiple sexual partners; close to 70 percent of male students in the Republic of Korea and about 30 percent of young men in Thailand had more than two partners (Brown et al, 2001).

However, the motivations for premarital sexual intercourse are likely to be different for adolescent men and women. Young men tend to have the sexual debut out of curiosity

or for the sake of sexual pleasure, but young women are more likely to have premarital sexual intercourse for love and associate it with marriage or a long-term relationship (Isarabhakdi, 2000).

Because of the differences in the nature of premarital sexual intercourse between men and women, the adolescent women often experience negative consequences of premarital sexual relations. A study from Free Trade Zone communities in Sri Lanka (2001), reported cases of single young women who became pregnant after having unprotected premarital sexual intercourse. These women started their sexual relations with their partners who promised to marry her. However, after discovering the partner's pregnancy, the man either disappeared or left for another woman. As a result, these young abandoned women suffered the consequences of unwanted pregnancy including unsafe abortions and the stigmatism of being a single mother (Hettiarachchy et al, 2001).

Likewise, several studies conducted on adolescent fertility and reproductive risk behavior of youth population in Ethiopia disclosed that adolescents begin sexual practice before age of 15 years. The mean age that mostly reported for the first sexual initiation is between 14-19 years (CSA, 2005). Ethiopian DHS (2000), also found out that the median age for the first sexual intercourse was 16.3 years. Moreover, young women initiate sex at an earlier age than young men. Sexual experience for most women is within the context of marriage in contrast to men who initiate sex before marriage.

2.1 2 Unwanted Pregnancy and Abortion

Young age at first sexual intercourse causes concern because it marks the beginning of exposure to the risk of various RH problems, such as, unintended pregnancy, abortion and STIs including HIV. In most cases unwanted and unplanned adolescent pregnancy, which have several negative consequences on the health and total well

being of the girls, is one of the greatest problems they can face due to such early and most often unprotected and unsafe sexual practices (WHO, 2004).

Many young men and women are beginning sexual activity earlier in life. By not choosing abstinence as an option, a larger proportion of adolescents and young people need access to family planning methods to avoid unwanted pregnancies. Due to limited knowledge and guidance, adolescents are less likely to practice safer sex or to use contraception. Contraceptive use is still infrequent in most early sexual experiences. Young women consistently report lower usage rates than men, evidence of their unequal power in negotiating use of family planning with their partner or restrictions on their access to services (due to lack of information, shame, laws, health provider attitudes and practices and social norms)(Population Report, 2004).

For biological, cultural and economic reasons sexual and reproductive risks are higher among adolescent women. Pregnancy is the leading cause of death for young women aged 15 to 19 worldwide with complications of childbirth and unsafe abortion being the major risk factors (WHO, 2004).

Each year, women undergo an estimated 50 million abortions, 20 million of which are unsafe, resulting in the deaths of 78,000 women and the suffering of millions more. At least one fourth of all unsafe abortions are to girls aged 15-19. Increased access to family planning is clearly the best way to reduce abortion. Care for women who have undergone abortion is also an important way to reduce maternal mortality (UNFPA, 2000).

Unwanted pregnancy is one of the serious problems among teenagers especially since early pregnancy is associated with health risks to the mothers during pregnancy and delivery. Pregnancy may put at risk: - her health, her chances for education and marriage and many of her hopes and plans for future and her family may even refuse to acknowledge (UNFPA, 2000). Many adolescents are too young, too poor or too inexperienced to take care for a child. Consequently some young women turn to

abortion where unskilled providers in unsafe condition perform abortions, the risk of serious health complications and death are great (Population Report, 2004).

Some fragmented studies carried out in Ethiopia also indicate that illegal abortion due to unwanted teenage pregnancy places many young women at higher risk, primary because it is usually performed under unsafe conditions (Abubeker, 2004). In most cases abortion is listed among the ten top reasons for Hospital admission, and the clients are usually high school students or young unemployed women. Data obtained from a retrospective study on abortion admission in Jimma Hospital in 1989-1992, showed that 53.8 percent of abortion cases were in those young people less than 25 years (Abdella, 2000).

A very recent report on unsafe abortion made by the Ethiopian Society of Obstetricians and Gynecologists (ESOG), indicates that over 45 percent of cases who visited health facilities because of abortion were adolescents in the age group of 15-19 (Mekbib, 2002).

2.1.3 Sexually Transmitted Diseases (STDs) and HIV/AIDS

Unwanted pregnancies and unsafe illegal abortions aren't the only potential negative outcomes of the early teenage and unsafe sexual practice, but there is also high risk of contracting STIs and HIV, mostly because there are high rates of unprotected sex with multiple partners among the young people. These days the number of cases of STIs is considerably increasing. According to World Health Organization (2004), out of the expected 333 million new cases of STIs excluding HIV, that occur in the world every year, at least over 100 million occur among young people less than 25 years of age.

Adolescents typically engage in short-lived relationships which make them more likely than adults to have sex with multiple partners; this places them at greater risk for contracting STDs. Worldwide, 8 million cases of STDs are reported each year for individuals under the age of 25 and the highest rates of Gonorrhoea, Syphilis and Chlamydia are found among teens aged 15-19 years (WHO, 2004).

STDs have particularly large impact on young women who are more easily infected than older women and who, compared to men, are more frequently asymptomatic, more difficult to diagnose and suffer more serious and long-term complications (Cates, 1997).

According to World Health Organization (2004), the largest number of new cases of curable STIs has occurred in South and Southeast Asia, followed by Sub-Saharan Africa, Latin America and the Caribbean. Data from epidemiological surveys show that within countries and between countries in the same region the prevalence and incidence of STIs can vary widely between urban and rural populations and even similar population groups, reflecting differences in socio-cultural, religious, gender and economic factors.

It has been estimated that at the end of 2001, approximately 40 million people worldwide were living with HIV/AIDS, of which, a total of 6.4 million people belonged to the Asian region (UNAIDS, 2001). Young people bear a special burden in the HIV/AIDS pandemic. Nearly one third of those currently living with HIV/AIDS are aged 15 to 24. Adolescents are more vulnerable than adults to unplanned pregnancies, STDs and HIV/AIDS. Furthermore, younger women are more vulnerable to forced sex and sex in exchange of gifts and money, which increased risks of contracting STDs including HIV/AIDS (Ashford, 2001).

Rates of sexually transmitted infections are very high in the United States, especially among teens. In a comparison of STIs in developed countries, (Panchaud et al, 2000), found that U.S. rates of Gonorrhea and Chlamydia are among the highest in the developed world. Among females, teens have the highest rates of Gonorrhea and Chlamydia. Among males, who report much lower rates of STIs than females, those aged 20-24 has the highest rates (Moore et al, 2001). In a recent literature review, (Meeker, 1999), found that adolescents show a greater concern and awareness of pregnancy prevention than of disease prevention. However, improving contraceptive use and consistency is associated with positive health outcomes.

In Ethiopia, according to the report of Ministry of Health (2003), the highest prevalence of HIV/AIDS infection is the age group 15-24 years. HIV prevalence is estimated to be 6-9 percent among young men aged 15-24 and 10-13 percent among young women in the same age group. The discrepancy observed between females and males may be attributed to early sexual activity among females and the fact that they often have older partners who have high risk of HIV infection. And the prevalence rate of STI among 15-24 age groups is 53.6 percent followed by 25-35 age groups at 26.3 percent (MOH, 2003).

2.1.4 Multiple Partner

Young men often begin sexual activity earlier and have more sexual partners than young women. In Guinea, the mean age for first sexual intercourse among young men is 15.6 and among young women, 16.3. Further, Guinea's sexually active young men report a mean lifetime number of four sexual partners, compared to 2.1 partners among sexually active young women (Gorgen et al, 1998). Adolescents aged 10 to 19 years of age are at a higher risk than adults for acquiring STDs because of the likelihood of having multiple and high-risk sexual partners and because adolescents are more susceptible to infection (Panchaud et al, 2000). According to the 2005 Ethiopian Demographic and Health Survey, 1.4 percent of Ethiopian adults (aged 15-49) were infected with HIV. The prevalence was much higher in urban areas, among women and among adults who had multiple sexual partners and non-regular partners.

In Uganda a substantially larger proportion of adolescent boys than girls have had two or more partners in the past year. These differences might in part be due to cultural pressures on boys to prove their virility. In Malawi, nine out of ten teenage boys (50 percent of who report at least one casual sex partner in the past year) feel vulnerable to HIV. In Nairobi and Abidjan, up to 90 percent of female commercial sex workers are HIV positive and adolescent African males are often clients of commercial sex workers. In Zimbabwe, nearly 16 percent of male high school students report having had sex with prostitutes (UNFPA, 2002).

Studies have consistently found that males are more likely to be sexually experienced, to have more sexual partners both in the past year and in their lifetime and to have sex more frequently than females (Raine et al, 1999). Adolescent females have higher STD rates than males, perhaps because their diseases are more likely to be detected since they more frequently see doctors for reproductive health care than do males. Alternately, their risks might in fact be higher because they often engage in sexual relationships with older males and older partners are more likely to be infected (Panchaud et al, 2000).

In a study conducted in Cameron (1997), it is very common for adolescents to have multiple sexual partners, especially (but not solely) among older adolescents: 67 percent of male respondents aged 19 and older and 38.2 percent of their female counterparts reported having two or more regular partners during the previous year. Furthermore, more than half of sexually active male adolescents (55.1 percent) and about a third of female adolescents (33.8 percent) reported having one or more casual partners during that time period (Meeker, 1999).

2.1.5 Condom Use

A review of the literature on adolescent sexual behavior reveals that condom use is influenced by social and demographic characteristics, knowledge about reproductive health, self-efficacy and attitudes regarding condoms and issues of access and affordability. Behavior patterns appear to differ according to gender, age and educational level, between students and non-students and among non-students depending on their employment status (UNFPA, 2004). Residence and socioeconomic status also appear to influence sexual behavior, as do relationship type and marital status.

Many governments in Sub-Saharan Africa view with concern the region's continued rapid population growth, high birth rates and escalating rates of HIV infection. Unprotected adolescent sexual activity significantly contributes to these numbers. Promoting contraceptive and condom use among youth can lead to decreases in

morbidity and mortality due to unsafe pregnancy, abortion and sexually transmitted diseases including HIV/AIDS and can slow population growth (UNFPA, 2000).

Different measures of contraceptive use show different trends over time. For example, research on contraceptive use among adolescents shows a dramatic increase in contraceptive use at first sex, among males and females. Data from the mid-1990s shows that more than three quarters of female teens (76 percent) use some contraceptive method at first sex, compared with less than half (48 percent) in the late 1980s (Terry and Manlove, 2000). The increase in contraceptive use among teens is due, primarily, to increases in condom use. However, national level estimates show fairly constant rates of current contraceptive use in the past three months and declines in contraceptive use at most recent sex among females (Terry and Manlove, 2000). This suggests that sexually active teens are not always acting on the message that avoiding pregnancy and STIs depends on consistent use of contraception.

According to the study in Senegalese, four percent of adolescent women and seven percent of adolescent men surveyed have ever visited a family planning clinic. Reasons cited for non-use of services include unmarried status (among women), embarrassment, cost, poor reception by clinic staff, lack of knowledge about sexuality, concern about the efficacy and side effects of contraceptives and contradictory social perceptions around premarital sex and contraceptive use (Nare, Katz and Tolley, 1997).

Adolescent women involved in a relationship with someone who is older experience a higher likelihood of engaging in sexual intercourse compared to adolescent women with partners who are the same age. Young women with older partners are less likely to report using a contraceptive method in that relationship; this association has been found for both first and current sexual partners. A negative association of age difference between partners on contraceptive use has also been found for a sample that includes both young men and women (Ford, Sohn and Lepkowski, 2002; Manlove et al, 2001).

The study conducted in Southern Ethiopia also indicated that reported condom used rate during the first sexual intercourse was 13.5 percent, while it was 27.6 percent during their recent one (Taffa et al, 1999).

2.2 Factors Contributing to Adolescent Sexual and Reproductive Health Problems

To day, worldwide, young people constitute a rapidly growing and the largest segment of population in the human history. More than half of the world's population is below the age of 25, and four out of five young people live in developing countries (UNFPA, 2004). In Ethiopia also 46 percent of all populations are younger than 15 year and 30 percent are 15 to 24 years and totally over 65 percent of its population is under 25 years of age (FHI, 2004).

Nevertheless, presently the lives of millions of young people worldwide are at higher risk from broad range of health problems. Above and beyond swift increment in number, the young people found in every country, more particularly those found in the developing countries are vulnerable to various health risks (WHO, 2004). Some of the factors that have contributed to adolescent's sexual and reproductive health risks are the following.

2.2.1 Lack of SRH Information and Guidance

In fact, in the past adolescents are considered, by most societies, as risk free or have no any health problems and have been neglected for many years (WHO, 2002). Health services often regard them as a healthy group who do not need priority action and so provide a minimum subset of health services with no adjustments for their special needs (WHO, 2004).

However, various studies indicated that due to behavioral, cognitive and development insufficiency young people are at risk of critical health problems (Senderowitz, 2003). Particularly at the adolescence period, they face and disproportionately distressed by

multidimensional health problems that are mainly related to sexuality and reproductive health (Friedman, 2002). Most of all, because they engaged in unsafe sexual intercourse at an early teenage, they are vulnerable to unwanted teenage pregnancy, induced abortion and death due to its complication, school dropout and STIs including HIV infection, which predominantly affects adolescents at this time (WHO, 2002).

Youth period is a time when young people face many new situations and the challenges of the second decade of life. At this stage they are curious and receptive to information about themselves and their bodies and they begin to take an active part in decision-making. Because this period presents not only opportunities for progress but also risks to health and well being of the young people, they need correct information and proper guidance about their sexuality and reproductive health. With out appropriate information and guidance they will be at higher risks of various SRH problems. Hence, a little help that provided at this time can go a long way in channeling their behavior towards positive and productive paths (UNFPA, 2002).

In most cases teenage sexuality is characterized over all by lack of information and guidance, by low and inconsistent contraceptive use at first sexual intercourse (UNFPA, 2004). Studies from across the globe have indicated that vast majority of adolescents are vulnerable to SRH and HIV/AIDS problems these days, due to, predominantly, lack of basic information and comprehensive knowledge about SRH and its problems such as risk of teenage pregnancy and unsafe abortion, risk of STI and HIV/AIDS (UNFPA, 2002).

In Ethiopia also same facts observed, adolescent lack of appropriate information communication and guidance in SRH matters (Berhane, 2000). Most Ethiopian parents do not discuss issues of SRH with young people, reluctant to openly inform and communicate with their children about sexual matters. Due to this most adolescent prefer to discuss with peer friends. For instance, in study conducted in Gonder (Seifu, 2001).

It was indicated that about 75 percent of adolescents preferred to discuss about body changes that occurred during adolescence with peers of the same age rather than elders. Apart from this, adequate systems are not yet in place to reach all of the young people needs of information and appropriate guidance and counseling services in the country.

2.2.2 Demographic, Socio- Economic and Cultural Factors

Along with other problems, demographic, socio-economic and cultural factors also the main affecting barriers on adolescent SRH information and services needs. For instance, in many countries, cultural expectations encourage men to express their masculinity by initiating sexual activity at younger age, having multiple partners or visiting commercial sex workers (WHO, 2002). On the other hand, due to gender difference, norms and expectations young females are more at risk to being forced into sexual relationship and sexual abuse, lack of skills or power to negotiate abstinence or condom use, or refuse in case of unsafe sexual intercourse (UNFPA, 2002).

Adolescent sexuality is closely linked to gender issues that root up from the family and societal values and prescription. A girl child in almost all society is less likely to be offered a schooling opportunity compared to boys. Of the 130 million children of primary school age not in school, 70 percent are girls. Despite progress in raising educational enrolment rates in the past three decades, gender inequalities persist due to cultural factors, household responsibilities, early marriage and pregnancy (UNICEF, 2004).

Adolescents, particularly women, are also more susceptible to coercive sexual relationships. There are reports of "sugar daddy" phenomena, which refer to sexual relations between young women and older and wealthier men; young women have sexual intercourse with the older men in exchange for economic gains. In addition to coercion based on the economic power of men, young women have been forced to

have sexual intercourse by a person with authority over them (Upchurch and Kusunoki, 2004).

In the Republic of Korea, 9 percent of female factory workers surveyed had been forced to have their first sexual intercourse with factory supervisors or colleagues (Brown et al, 2001). Moreover, even in the context of dating, young women tend to be coerced to have sexual intercourse with their boyfriends. One fourth of young Thai women had their first sexual intercourse because they could not resist pressure from their boyfriends. These women accepted sexual demands of their boyfriends to please them and to sustain the relationship. Young women in Bangkok also admitted the weak bargaining power of women over the issue of sexual intercourse (Isarabhakdi, 2000).

It is the interplay of biological, cultural and economic factors that make young girls particularly vulnerable to the sexual transmission of HIV. While both girls and boys engage in consensual sex, girls are more likely than boys to be uninformed about HIV; including their own biological vulnerability to infection, if they start having sex very young (UNAIDS, 2001).

Girls are also far more likely than boys to be coerced, raped or enticed into sex by someone older, stronger or richer. Sometimes, the power held over them is mainly that of greater physical strength. Sometimes it is social pressure to acquiesce to elders. In the era of AIDS, the consequences for young girls can be disastrous, male migrants tend to engage in unsafe sexual practices when they are away from the family and young women migrants, on the other hand, may be forced to work as sexual workers as a means of survival (UN, 2001).

There are large differences in the trends and impacts of reproductive and sexual behavior between young men and young women. Many analyses on the role of gender in early initiation of reproductive activities have commented on the differences in societal expectations and norms for females and males (Singh et al, 2000). In most

African societies, women get married at a younger age than men and, in some; premarital sexual activity is common and even favored. An early birth is seen to secure marriage for a woman because it demonstrates her fecundity to the man's family and increases her social standing. Adolescents' contextual surroundings can profoundly affect their reproductive and sexual attitudes and practices. Poverty may be considered a root cause (Singh et al, 2000).

It has further been suggested that economic transactions following intercourse are frequent among both adolescent boys and girls in many countries of Sub-Saharan Africa, and are not necessarily perceived as a source of social condemnation (Calves and Meeker, 1999). Reciprocity of the giving and receiving between girls and boys is common, and characterize a majority of early sexual encounters in some areas. Teenagers whose sexual activities are often accompanied by financial rewards exhibit behaviors that put them at greater risk of HIV/AIDS infection (Meeker, 1999).

In Ethiopia some fragmented studies reported that there is lack of discussion and communication between parents and young people on matters of sexuality and reproductive health because of hampering socio-cultural norms and taboos of the society. Nevertheless, attitudes and perceptions of parents and communities have not intensively investigated and documented so far (Eshetu, 2002).

2.2.3 Programmatic Responses to Adolescent SRH Problems

Promoting holistic and integrated youth friendly SRH programs has several implications for prevention and control of the RH problems. These days, with increased early and unprotected sexual activity among unmarried people, with the absence of specific or integrated youth friendly SRH information and service and service delivering health institutions and the rapid spread of the HIV/AIDS pandemic, great challenges have been developed in every country parts of the world, particularly in developing countries like ours. Young people are at the center of these health challengers in terms of SRH problems (UNAIDS, 2004).

Thus prevention of SRH problems, STI and HIV infection between adolescents through promoting and delivering integrated youth friendly health services remain an important component of an effective national health response. That is, it is imperative that if the quality of life for the Ethiopia youth is to be improved, their RH problems and life threatening HIV/AIDS crises need to be urgently addressed in integrated approach.

2.3 Empirical Findings on Adolescent Sexual Behavior

As it is true in the case of theoretical literature, most empirical studies also show that there is positive and significant relationship between adolescent background characteristics and reproductive health problems. Demographic factors (age, sex), socio-economic status and geographic location many of which are not amenable to programmatic interventions were the most commonly analyzed factors, and adolescents who perceive their friends or peers to be sexually active are significantly more likely to engage in sex themselves, as well as have multiple sexual partners.

Different studies indicate that Demographic and Socio-economic variables have influence adolescent sexual activity and reproductive health. These are described by various studies as follows.

School enrollment: Adolescents who are in school tend to have greater opportunities to interact with others and may get information on sexuality and reproductive health behavior (Meeker, 1999).

Discussion of sexual issues: With parents, peers and other relatives affect adolescent reproductive behavior. Because access to condoms and one's ability to negotiate condom use are likely to affects condom use and communication with parents and other family members concerning sex and reproduction is protective against sexual risk-taking behaviors (Holtzman and Rubinson, 1995). Studies in Ethiopia indicate that those adolescents who mostly discussed with their parents were

not involved in sexual practice as compared to their counterparts who did not (MOH, 2003).

Living arrangement: Studies show that adolescents from intact families are consistently less likely to report sexual intercourse (Sunmola et al, 2003). A number of studies conducted in Ethiopia have also supported the negative relationship between comings from intact families and the risk of involvement in sexual intercourse. For example, Birhanu (1998), found that premarital sexual activity was 1.7 times higher among adolescents from non-intact families as compared to those living with both biological parents.

Religious: Religious affiliation tends to be associated attitudes towards early sexual intercourse (Erickson, 1998).

Marital status: In societies where marriage is early, marriage itself can expose very young adolescents to reproductive health risks. Yet at the same time marriage may reduce one's reproductive health risks, because married persons tend to have one or fewer sexual partners than unmarried persons (Meeker, 1999).

Household economic status: Prior literature highlights the association of household or family economic status with a range of risky behaviors and adverse reproductive health outcomes. The study conducted in Nigeria revealed that, adolescent who reported to have low parental income were more sexually active than those who reported to have high or medium parental income (Odimegmu et al, 2002).

Peer behaviors and influence: Adolescents are susceptible to influence by peers, and reviews of the research indicate that peer behaviors can have both positive and negative influences (Calves, 1997).

Media exposure: Exposure to mass media provides the opportunity to be acquainted with new ideas and knowledge that is useful in preventing reproductive health risks (EDHS, 2005).

Parental education: Adolescent who has educated parents tends to delay their first intercourse (Taffa, 2002).

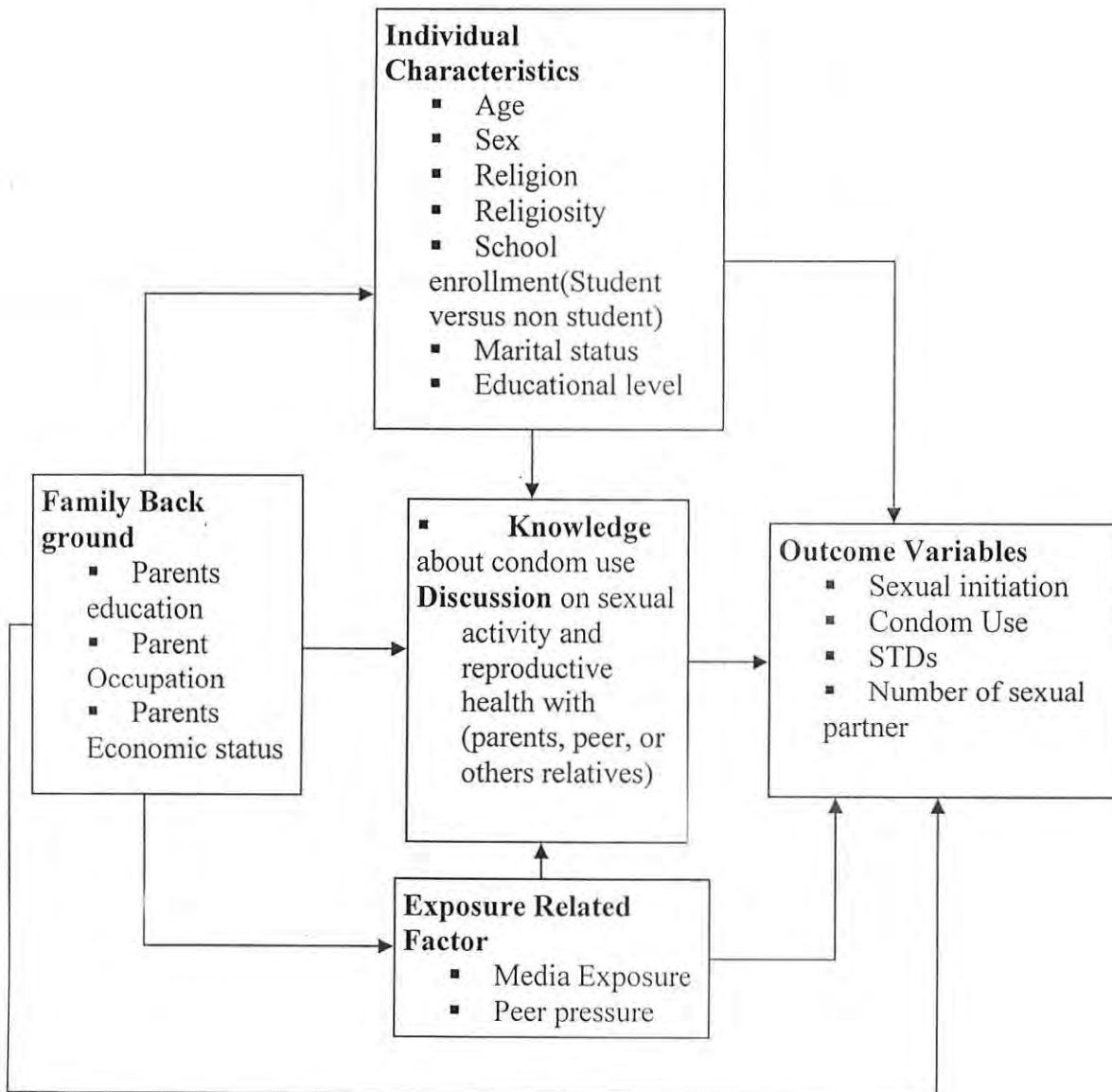
Educational level: Educational level is also affects adolescent reproductive health. The median age at first intercourse for women with no education is three years earlier than women with at least a secondary school education (EDHS, 2000).

2.4 Conceptual Framework

The reproductive health issue is very crucial factor for adolescents. Parent's economic status, Parent education, Respondent knowledge, Discussion with peer, parents or others, Age-sex differences, Living arrangement and other factors affect it differently. We can easily see the link between the dependent and independent variables to the reproductive health problems among adolescents of the study area.

In this study, efforts are, however, made to investigate the direct influence of the aforementioned variables on gender differences in sexual initiation, number of sexual partner, ever-use condom and contracting STD among female and male adolescents in E ahir Dar town.

Figure 1. Conceptual Framework for the Study of Gender Differentials in Adolescent Sexual Activity and Reproductive Health Risk in Bahir Dar Town



Adapted from Yanyi Djamba (1997)

CHAPTER-THREE

METHODOLOGY

3.1 Study Area

Bahir Dar is the capital city of Amhara National Regional State and geographically located on the Southern shore of Lake Tana. Administratively the town is divided in to 17 Kebeles and has a total population of 206,913 (ANRSBOFED, 2007), with 98,530 male and 108,383 female. The town is among the fastest growing cities of Ethiopia due to its ecological attraction, natural beauty and strategic importance. But the town has the highest reported HIV prevalence rate (23.4 percent) among the national antenatal care-based sentinel surveillance (MOH, 2002). These are mainly due to early and un-safe sexual activities of adolescents in the town.

3.2 Study Design, Sources and Study Population

The study was a descriptive cross-sectional survey using both quantitative and qualitative methods for data collection. It was conducted during February-March 2008 in Bahir Dar, a regional town in Northwest Ethiopia. The source population included adolescents (both males and females) residing in the five selected Kebeles of the town at the time of the survey, the inclusion criteria being: aged 14-19 years, while those, who are residing in the randomly selected households of the five Kebeles were the study population.

3.3 Sample Size Determination

The sample size of the study was determined using the formula for two population proportion (male and female) and the following assumption were made; with significance level of 95 percent and 5 percent margin of error (limit of accuracy) was made and 5 percent added to compensate for non response rate.

According to EDHS (2005), the prevalence of early sexual initiation was estimated to be 32 percent for females and 26 percent for male adolescents. Since the prevalence of early sexual initiation are taken as the proportion of adolescent's sexual activity and reproductive health risks. Because early initiation of sexual intercourse is associated with other behaviors that increase risk, including more frequent intercourse and greater numbers of sexual partners and lower probability of contraceptive use during the adolescence years (Seidman, Mosher and Aral, 1994). Thus, individuals who initiate sexual intercourse relatively early in their adolescence periods are at a higher risks for sexually transmitted disease and pregnancy.

According to Mark Woodward (1992) formula

$$n_m = \frac{Z_{\alpha}^2}{e^2} \left[P_m(1 - P_m) + \frac{1}{r} P_f(1 - P_f) \right]$$

and $n_f = rn_m$ (sex ratio)

Where

$Z = 1.96$ Critical value for a 95% confidence interval in a normal probability table

$e = 5\%$ (0.05) the margin of error or limit of accuracy, which the researcher tolerated

n_m - the sample size of males adolescent

n_f - the sample size of females adolescent

$P_m = 0.26$ Proportion of male adolescent who initiate sex early.

$P_f = 0.32$ Proportion of female adolescent who initiate sex early

$r = 1.1$ (110f /100m)

Contingency - 5%

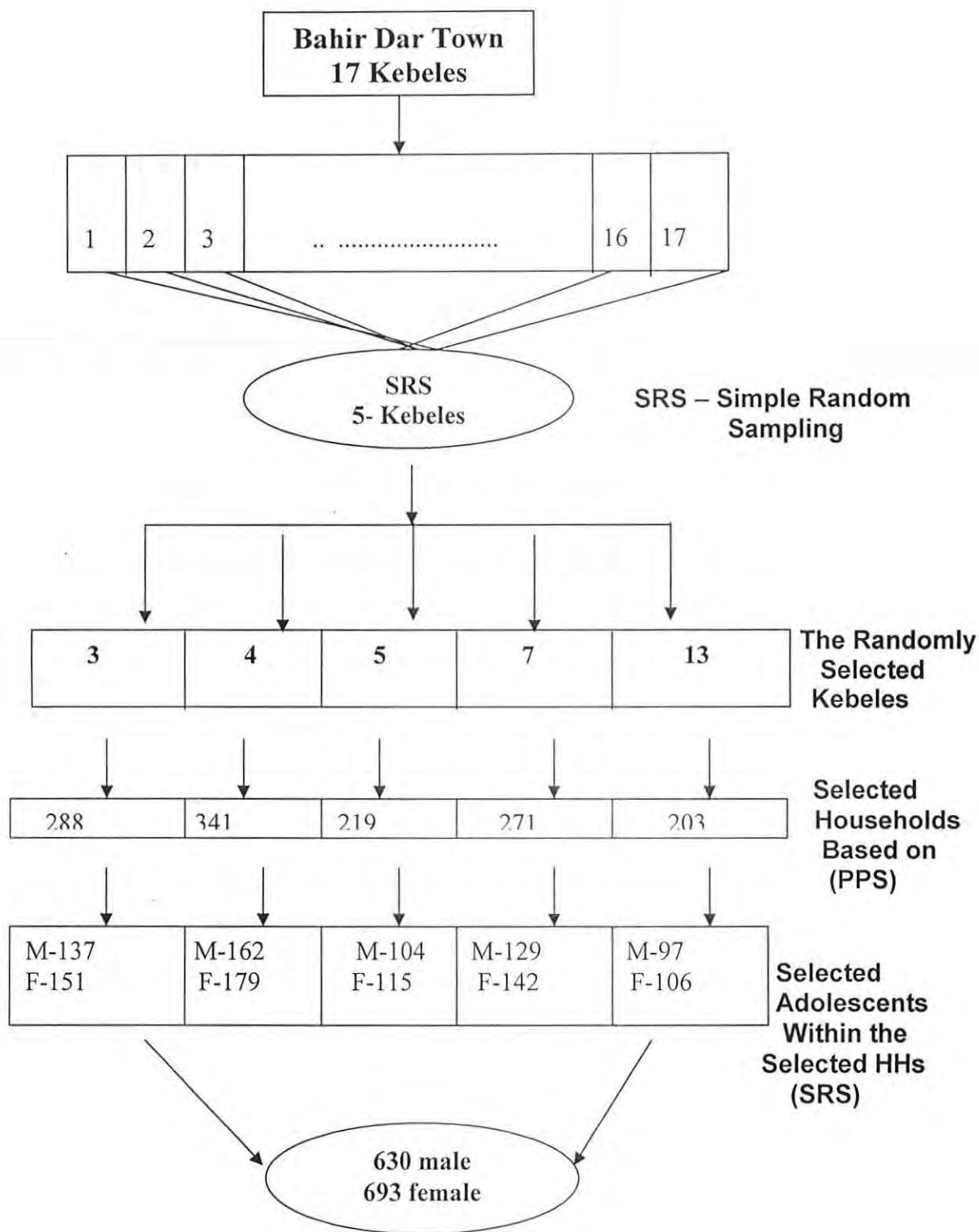
Thus, according to the above assumption and formula, the calculated sample sizes were **630 male** and **693 female**.

3.4 Sampling Technique

To get the study subjects, the respondents were selected using a two-stage sampling design. That means first selecting five Kebeles randomly among the 17 Kebeles and the number of respondents in each selected Kebele was assigned proportional to the size of the Kebele's. Within each of the five randomly selected Kebeles a random sample of household was selecting using a pre determined sampling interval (Systematic Random Sampling Technique). That means, the first household within a Kebele was selected by rolling a stick standing at the centre of that Kebele and following the random direction of the stick.

Once the first household was selected, the consecutive households were systematically picked by adding 'n' to the one previously selected ('n' being the number of households in the Kebele divided by the required number of households from that particular Kebele). Within each of the selecting households, one adolescent in the age group 14-19 were selected for interviewing. If there were more than one adolescent in a household, one of them was selected randomly using a lottery method. And in the absence of adolescent in the selected house or when the house found is closed, we were make a repeated visit up to three times, and then we were go to the next selected household.

Fig. 2 Schematic Presentation of Sampling Design



3.5 Data Collection Procedure

Both quantitative and qualitative data-collection methods were employed to conduct the study. A structured questionnaire was used for the purpose of quantitative data collection. The questionnaire consists of two parts; the first part was designed to collect socio- economic and demographic characteristics while the other contains sexual and reproductive health risks, such as, sexual initiation, multiple partnership, condom use, abortion (for females) and STDs. It was completed by data collectors. This questionnaire was initially developed in English, was translated to Amharic for easy understanding of the respondents and it is a local language of the study area.

For the qualitative part of the study, four focus-group discussions were held with 40 participants (20 males and 20 females) in Bahir Dar town to supplement the results of quantitative information. The FGDs was recorded and analyzed in line with the objectives of the study.

Data collectors were young people who have high school students and were living in the study area. A total of 10 interviewers (both female and male) and two supervisors were recruited. Male interviewers interviewed male respondents while female interviewers talked to female respondents. Supervisors were closely following the day-to-day data collection activities. And the researcher gave three day training. The training includes discussion of each item one by one briefly, explaining the general objective of the study, approaching the respondents and keeping confidentiality and privacy and how to keep close supervision using the prepared guidance and check list.

3.5.1 Pre-test

Pretest of the questionnaire was carried out in Bahir Dar town in a Kebele that was not included in the study. The pre-test helps to ensure its accuracy and flexibility of the questionnaire and then modified accordingly. Pre-test was done with 40 respondents.

Based on the pre test finding the time allocated to complete the questionnaire were adjusted to be 1hr.

3.6 Data Analysis

The data collected from the survey were entered into computer for analysis using Statistical Package for Social Sciences (SPSS version-13) Software. Data were edited, coded and some internal consistency checks were made to assess the quality of data. Differences by age and sex as indicator of sexual and reproductive health behavior were described using bar chart and frequency distribution. Logistic regression analysis was used to examine the influence of the explanatory variable on the dependent variables. The models estimate the odds of an event occurring, that means the odds that an event occurs equals the ratio of the probability that an event will occur, relative to the probability that it will not.

The results of the logistic regression models are expressed as odds ratios representing the effect of a one-unit change in the explanatory variables. Odds ratios larger than one indicate likelihood greater than that for the reference category, odds ratio smaller than one indicate a smaller likelihood compared with the reference category. All analysis was estimated separately for male and female respondents.

Logistic regression modeling is applied when the dependent variable is dichotomous. The results of the model can be expressed as odds ratio, that is $P(x)/(1-p(x))$, where $P(x)$ is the probability that event X occurs while $1-P(x)$ is the probability that event X does not occur (Chan, 2004).

And the corresponding multiplicative model for the odds is

$$\frac{P}{1-P} = e^{\beta_0 + \beta_1 X_1 + \dots + \beta_p X_p}$$

Where β_s = regression coefficients, $s = 1, 2, \dots, n$

X_s = set of independent variables

3.7 Description of Variables

Dependent Variable: There are four reproductive health outcome variable.

Sexual initiation: This variable is labeled as a dummy variable where one, was coded for the respondent, who become sexually active while zero coded for not sexually active.

Number of sexual partners: This variable is coded as a dummy variable where one, was coded for the respondent, who had two or more sexual partners and zero coded for those who had one partners.

Condom use: This variable is coded as a dummy variable where one, was coded for the respondent, who ever used a condom and zero coded for not use of a condom.

Sexually transmitted disease: This variable is coded as a dummy variable where one, was coded for the respondent, who had STD and zero coded for no STD in the last one year.

Independent Variable: The following variables were included in to the study to analysis the dependent variable.

- Age group: 18-19 (late) and 14-17 (early)(Reference category).
- Religiosity: never attends, At least once per week (Reference category).

- Family economic status: Poor family, Medium or Rich family (Reference category).
- Discussion of sexual issues with: Parents, Peers and Others (Reference category).
- Occupation: Student, Others (Reference category).
- Educational level: Illiterate (Reference category), Primary (1-8) and Secondary and above

3.8 Ethical Considerations

Addis Ababa University Institute of Population Studies (IPS) has been given research permission, and before the study was conducted permission was taken from the concerned Bahir Dar Town Administration Office. Households and individuals were enrolled into the study after obtaining their prior consent. Information was provided to all on the objective of the study. Maximum effort was made to maintain privacy during interview and confidentiality of information was assured by omitting names of the study subjects from the questionnaire.

CHAPTER –FOUR

BACKGROUND CHARACTERISTICS OF SAMPLED ADOLESCENTS

This chapter describes some selected background characteristic of the respondents. Adolescent's background characteristic is closely related with their sexual activity and reproductive health behavior. Different studies have indicated that Demographic factors, such as age, sex and Socio-economic status of respondents have an association with adolescent sexual activity and reproductive health behavior. Therefore, discussing the background characteristics of sampled adolescent is quite important to understand their effect on the dependent variable.

4.1 Socio-Economic and Demographic Characteristics of Adolescents

The results of Table 1 show that the sample was roughly distributed between males and females, but the males in the sample were somewhat older than the females. Of 1323 respondents, 55 percent of female and 47 percent of male adolescent in the sample were currently aged 14-17 years, while 45 percent of female and 53 percent of male respondents were aged 18-19 years. The mean age of respondents was 16.4 for females and 17.7 for male adolescent.

The distribution of respondents by religion showed that the majority (79.4 percent) females and 84.1 percent male respondents was Orthodox Christian followed by 16.1 percent females and 13 percent of male Muslim respondents. And 45.3 percent of female and 28.4 percent of male respondents were attended religious program at least once a week. Although 15.3 percent of female adolescents had married, only 3.4 percent were currently living with their husbands. Among the males the pattern was slightly different, even though 9 percent of male had married, only 5.6 percent of them are living with their wives.

Table 1. Percentage Distribution of Respondents by Socio-Economic and Demographic Characteristics, Bahir Dar, 2008.

Socio-Demographic Variable	Sex			
	Female		Male	
	Number	Percent	Number	Percent
Age group				
14-17	381	55	296	47
18-19	312	45	334	53
Total	693	100	630	100
Occupation				
Student	475	68.5	426	67.6
Employed	121	17.5	128	20.3
Others	97	14	76	12.1
Total	693	100	630	100
Religion				
Orthodox	550	79.4	530	84.1
Muslim	112	16.1	82	13
Others	31	4.5	18	2.9
Total	693	100	630	100
Religiosity				
Very often	125	18.2	74	11.7
Often	118	17.1	105	16.7
Not attending	379	54.7	451	71.6
Total	693	100	630	100
Marital status				
Ever married	106	15.3	57	9
Never married	587	84.7	573	91
Total	693	100	630	100
Currently live with				
Mother and father	436	62.9	328	52.1
Mother only	95	13.7	107	17
Father only	31	4.5	31	4.9
Brother and sister	33	4.8	64	10.1
Spouse	24	3.4	35	5.6
Relatives	51	7.4	57	9
Alone	23	3.3	8	1.3
Total	693	100	630	100

This study also tried to assess the living condition of respondents whether they are living with the family or with other individuals. The majority of respondents (84.1 percent) of males and (78.3 percent) of female adolescents were currently living with the family. At the same time 10.7 percent female and 10.3 percent male respondents were living together with their friends and/or alone. And a large proportion of adolescents, that is 68.5 percent of female and 67.6 percent of male respondents were currently enrolled in school. According to the data collected 42.7 percent of respondents were attending a primary education while 56.1 percent were attending a secondary and above education.

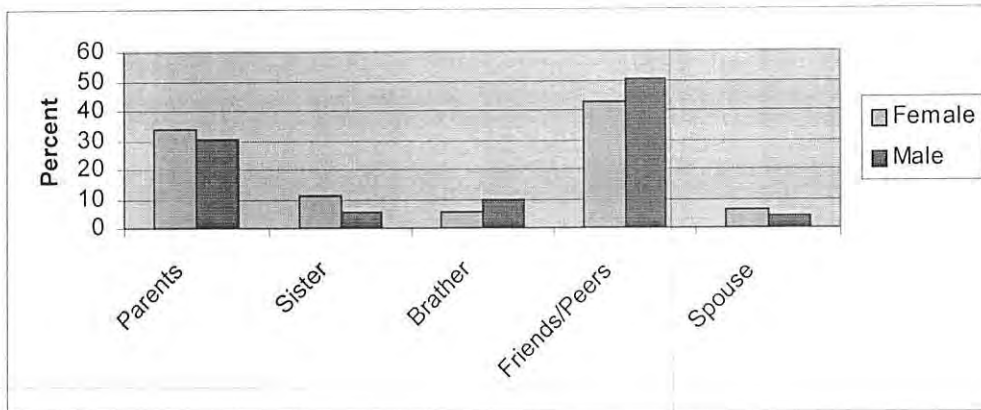
As far as the background characteristics of the respondents the researcher also collected respondents opinion about their family economic status at the time of the survey. The result shows that, 42.2 percent and 45.6 percent of respondents reported as medium and poor respectively.

4.2 Reproductive Health Information and Factors Influencing Utilization of Adolescent Reproductive Health Services

4.2.1. Discussion About Sexual and Reproductive Health Issues

In the study it is found out that 43.1 percent of females and 50.2 percent male respondents were preferred to discuss about their sexual and reproductive health issues with friends/ peers. And 11.1 percent, 5.4 percent and 6.5 percent of female respondents were preferred to discuss with their sisters, brothers and with their spouses respectively. Similarly 5.2 percent, 10 percent and 4.1 percent of male adolescents had preferred to discuss sexual and reproductive health matters with sisters, brothers and spouses respectively. The data also show (Figure 3) that 33.7 percent of female and 30.4 percent of male respondents were preferred to discuss with their parents.

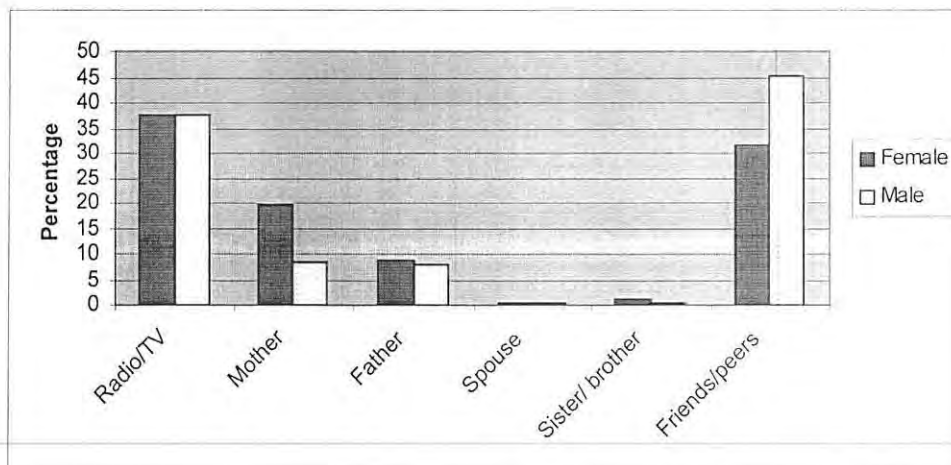
Figure-3. Percentage Distribution of Adolescent's Preference of Discussion About Sexual and Reproductive Health Issues, Bahir Dar: 2008.



4.2.2 Media Exposure of the Respondents in the Study Area

In this study attempts have been made to assess access and sources of information of adolescents regarding sexual and reproductive health issues. As shown in Figure 4, it is interesting that in both sexes equal number (37.5 percent) of respondent had access to radio or television, while, 29.9 percent of female respondents and 17.1 percent of male respondents reported that families had the main source of sexual and reproductive health information. And 31.5 percent of female and 45.1 percent of male respondents used friends/peers as a source of information.

Figure-4 Percentage Distribution of Adolescents Media Exposure on Sexual and RH Issues, Bahir Dar: 2008.



CHAPTER-FIVE

SEXUAL INITIATION, UN-SAFE SEXUAL PRACTICES and CONDOM USE AMONG ADOLESCENTS

This section describes gender differences in adolescent's sexual activity and reproductive health risks with respect to sexual initiation, unsafe sexual behavior and condom use among adolescents in the study area.

5.1 Sexual Initiation

This section describes differences in sexual initiation. Table 2 shows the percentage distribution of male and female adolescents aged 14-19 years, who were sexually experienced by different age group. Of the total 1323 respondents, 44.4 percent of females and 47.5 percent of male respondents had already exposed to sexual intercourse at least once. Mean age of sexual initiation was 15.45 (SD = 2.3) years, for females and 16.7 (SD=1.28) years for males, indicating that girls are debuting earlier than boys. Among those adolescents currently aged 14-17, 42.2 percent of females and 31.4 percent of male adolescents were sexually experienced, and for these currently aged 18-19 years 57.8 percent of female and 68.6 percent of male were sexually experienced at the time of the survey.

The results also show that among sexually experienced adolescents currently aged 14-19 years, 23.7 percent of females were started sex before their 15th birth day while only 1.3 percent of male had done so. Most the adolescents (71.4 percent) of female and (87.3 percent) of male initiated sex at the age of 15 to 17 and only 4.9 percent of female were sexually experienced by age 18 to 19 as opposed to 11.4 percent of male.

With regard to reason to have first sexual intercourse, the respondents reported that 23.7 percent and 34.1 percent of female respondents have had experienced first

sexual intercourse due to love affairs and peer pressure while the rest 27.9 percent, 11.7 percent and 2.6 percent were reported due to marriage, cheated/ raped and to got money respectively. The patterns were similar for male, such that 39.8 percent and 44.1 percent respondents respectively have had first sexual intercourse due to love and peer pressure.

Table 2. Percentage Distribution of Respondents by Sexual Behavior, Bahir Dar: 2008.

Variables	Sex			
	Female		Male	
	Number	Percent (%)	Number	Percent (%)
Ever had sex				
Yes	308	44.4	299	47.5
No	385	55.6	331	52.5
Total	693	100	630	100
Age group				
14-17	130	42.2	94	31.4
18-19	178	57.8	205	68.6
Total	308	100	299	100
Age at first sexual intercourse				
Under age 15	73	23.7	4	1.3
15-17	220	71.4	261	87.3
18-19	15	4.9	34	11.4
Total	308	100	299	100
Reason for first sexual intercourse				
Self interest	73	23.7	119	39.8
Peer pressure	105	34.1	132	44.1
Marriage	86	27.9	48	16.1
Cheated/raped	36	11.7	0	0
To get money	8	2.6	0	0
Total	308	100	299	100

5.2 Binary Logistic Regression Analysis-on Sexual Initiation

The following section describes the results of the logistic regression models estimating the effect of various independent variables on the likelihood that a respondent become sexually active. The variable is labeled as a dummy variable where one, was coded for the respondent, who become sexually active while zero coded for not sexually active.

The findings presented in Table 3 below show that younger female adolescents are more likely, than older females, to have become sexually active, which is 1.24 times more likely and indicating a trend towards earlier sexual initiation among females. For males this trend is not significant.

A second important finding is that adolescents who are currently enrolled in school are less likely to have become sexually active. This effect is particularly strong for females, which are 56 percent less likely than non-students to become sexually active. However, this effect is also significant for males.

The results also show that females (but not males) who report often discussing sexual issues with peers and friends are more than three times more likely as other females to have become sexually active. While it is possible that discussions about sexual issues start after a woman has become sexually active, in males discussing sexual issues with peers and friends are more than twice as likely as other males to have become sexually active, it seems more likely that peer pressure increases the likelihood that women become sexually active.

Females who have married are four and eight times more likely than those who have not married to become sexually active, a finding that partially reflects the relatively young female age at marriage. Among both male and female adolescents aged 14-19 years, those who regularly discuss sexual issues with parents are respectively, 50 percent and 57 percent less likely as others to have become sexually active.

Table 3. Relative Odds of Becoming Sexually Active by Sex and Socio-Demographic Characteristics, Bahir Dar: 2008.

Variables	Male			Female		
	B	S.E	Exp(B)	B	S.E	Exp(B)
Age group						
14-17	-0.108	0.26	0.898	-0.179	0.216	1.241*
18-19			1.000			
Religious attendance						
Not Attend	1.163	0.234	3.20**	0.959	0.871	2.61*
Attend			1.000			1.000
Discuss sex with						
Peers	0.79	0.007	2.204***	1.235	0.002	3.439***
Others			1.000			1.000
Discuss sex with						
Parents	-0.691	0.31	0.501**	-0.849	0.195	0.428**
Others			1.000			1.000
Family economic status						
Poor	0.35	0.271	1.419*	0.904	0.028	2.47***
Others			1.000			1.000
Living arrangement						
With parents	-0.375	0.002	0.687***	-0.772	0.478	0.462*
With others			1.000			1.000
Occupation						
Student	-0.555	0.305	0.574*	-0.826	0.304	0.438**
Others			1.000			1.000
Marital status						
Ever married	1.108	0.2	3.029***	1.571	0.636	4.81***
Never married			1.000			1.000
Constant	0.415	0.171	1.51	0.244	0.21	1.28

N=630

*** P<0.001, ** P<0.01, * P<0.05

N=693

-2LL=306.004

-2LL=323.47

Another finding suggests that both females and males who obtained from poor family are more than twice and one and four times respectively as likely as others to become sexually active. And those respondents who didn't attend religious program are more likely than others to had sex; this is more significant fore males than females.

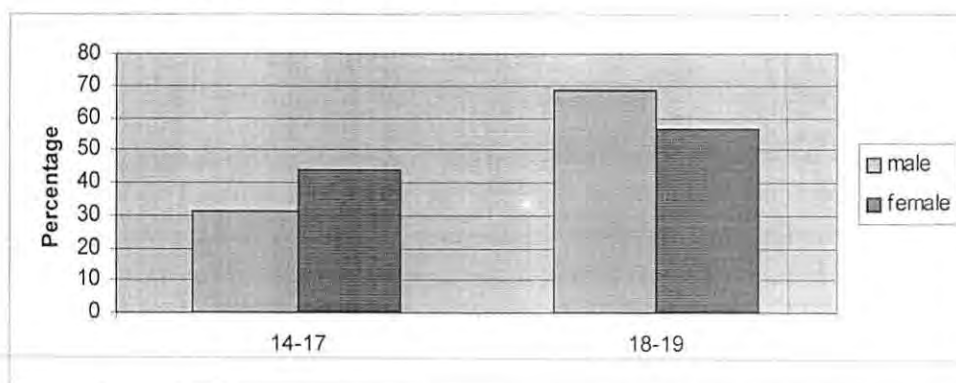
Finally, among both male and female adolescents aged 14-19, who currently living with their parents are a higher chances of avoiding early sex than those who were not living with their parents, this is more significant among females adolescents.

5.3 Un-safe Sexual Practices

The Ethnographic literature noted that sexual relationships often involve the exchange of gifts or money, and that in some cases this transactional component becomes so important that these relationships become a form of semi-prostitution. We asked male adolescents if they ever paid money or gifts in exchange of sex and asked females if they received money or gifts in exchange for sex. The results are presented in Table 4 and Fig.5.

Among adolescents currently aged (14-19), 35.2 percent of females and 47.5 percent of males reported having had sexual relations involving such exchange (males with commercial sex workers). Of 35.2 percent of female and 47.5 percent of male respondents who had sex with such exchange, 43.8 percent females and 31.4 percent males respondents were currently aged 14-17, while, 56.2 percent females and 68.6 percent males were aged 18-19. This transactional aspect of sexual relationships may help to encourage adolescents and young adults to have sexual relationships with multiple partners.

Figure- 5 Percentage Distribution of Adolescent Who had Sex with Exchange of Money or Gifts, Bahir Dar: 2008.



Adolescents and young adult who have multiple partners are expected to have a higher risk of contracting HIV/AIDS. The Table also shows the percentage of female and male adolescents who reported having had two or more partners during the twelve months before the survey and its lifetime. And of the 59.1 percent of females and 65.2 percent of males adolescent reported having two or more sexual partner in the previous year, 61.6 percent of female and 72.8 percent of male respondents reported having two or more sexual partners in the last one-year. In addition 17.9 percent females and 24.7 percent male adolescents had sex with older age.

Table 4. Percentage Distribution of Respondents Number of Sexual Partner, Bahir Dar: 2008

Variables	Sex			
	Female		Male	
	Number	Percent	Number	Percent
Life time sexual partner				
One	126	40.9	104	34.8
2 +	182	59.1	195	65.2
Total	308	100	299	100
Last 12 month sexual partner				
One	66	38.4	50	27.2
2 +	105	61.6	133	72.8
Total	171	100	183	100
Ever had sex with older age				
Yes	55	17.9	74	24.7
No	253	82.1	225	75.3
Total	308	100	299	100
Ever had sex with exchange of money				
Yes	108	35.2	142	47.5
No	200	64.8	157	52.5
Total	308	100	299	100

5.4 Binary Logistic Regression Analysis-on Number of Sexual Partner

The following section describes the results of the logistic regression models estimating the effect of various independent variables on the likelihood that a respondent having two or more sexual partners in the last 12 months before the survey. This variable is coded as a dummy variable where 1 was coded for the respondent, who had two or more sexual partners and 0 coded for those who had one sexual partner.

Table 5 shows the results of binary logistic regression analysis of the effect of independent variables on the likelihood of having had two or more sexual partners during the year before the survey. The results indicate that the likelihood of having had two or more sexual partners significantly increases with age for both males and females, and this is more significant for males.

Among males, those who reported regularly discussing sexual issues with peers and friends are more likely than females to have had multiple sexual partners during the previous year. Among both males and females the likelihood of having had multiple sexual partner's increases with age, and those who regularly discuss sexual matters with friends and peers are twice as likely as others to have had multiple sexual partners.

As expected, those adolescents who have been married are less likely than others to have multiple sexual partners but the effect is strong only for males, which is 59 percent lower and this is also significant for females, which is 20 percent less likely than never married adolescents to have had multiple sexual partners, this may suggests that females may had sex out of the wedlock.

Among males, the likelihood of having multiple sexual partners is significantly 58 percent lower for students than non-students. This is less significant for females (OR=0.786), which may reflects semi prostitution. This finding can be explained by the

fact that men are expected to provide girls they date with gifts and /or money. Since young men who are still in school are less likely to have money than those who are working, the former are less to have multiple sexual partners.

Table 5. Relative Odds of Having Two or More Sexual Partners in the Last 12 Months Among Adolescents, Bahir Dar: 2008.

Variables	Male			Female		
	B	S.E	Exp(B)	B	S.E	Exp(B)
Age group						
18-19	0.385	0.162	1.47**	0.244	0.37	1.276**
14-17			1.000			1.000
Religious attendance						
Attend	-0.766	0.154	0.465**	-0.506	0.34	0.603*
Not attending			1.000			1.000
Discuss sex with						
Peers	0.903	0.507	2.468***	0.685	0.17	1.983***
Others			1.000			1.000
Discuss sex with						
Parents	-0.799	0.092	0.45**	0.013	0.06	1.013
Others			1.000			1.000
Living arrangement						
Living with parents	-1.022	0.32	0.36***	-1.743	0.6	0.175***
Others			1.000			1.000
Occupation						
Student	-0.86	0.28	0.423**	-0.241	0.4	0.786*
Others			1.000			1.000
Marital status						
Ever married	-0.877	0.361	0.416*	-0.228	0.38	0.796*
Never married			1.000			1.000
Sex with exchange of money						
Yes	2.834	0.764	17.02***	2.486	0.72	12.017**
No			1.000			1.000
Constant	0.321	0.653	1.38	-0.667	0.733	0.513
N=299	*** P<0.001, ** P<0.01, * P<0.05			N=308		
-2LL=112.684				-2LL=123.372		

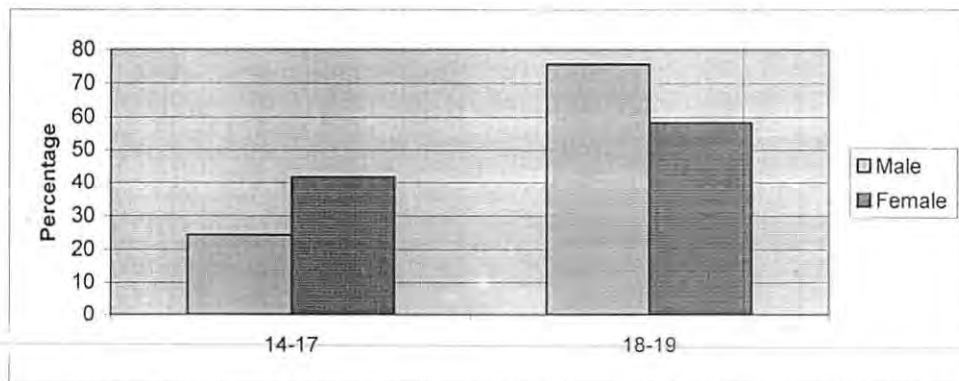
As indicated in the Table males who indicate regularly discussing sexual issues with their parents are only half as other males to have had multiple sexual partners during the previous year (OR=0.45), and this is not significant for females. And adolescent males are more likely than females to engage in risky sexual practices (with sex workers)(OR=17.02, P= 0.000).

Concerning the living arrangement of respondents the Table also show that, both male and female adolescents who live with their parents had less likely as other to had multiple sexual partners (male OR=0.36 and females OR=0.175, P<0.001), which is stronger for females. According to findings of the survey, for both males and females who attending religious program has statistically significant effect on the adolescent's sexual behavior. When adolescents attended religious services were 55 percent and 40 percent respectively less likely than others to have had multiple sexual partners.

5.5 Condom Use among Adolescents

The percentage of sexually experienced adolescents who ever used condom is shown in Table 6 and Figure 6. The results show that a large percentage of sexually experienced adolescents have used condom and this percentage increases with age. Among those sexually experienced adolescents currently aged 14-19 years, 48.7 percent females and 58.9 percent male respondents have used condom at least once.

Figure. 6 Percentage Distribution of Ever-Use Condom Among Sexually Experienced Adolescents, Bahir Dar:2008.



Out of the total respondents who admitted to having initiated sexual intercourse, only 15.3 percent of females and 18.7 percent of male respondents were used condom at first sexual intercourse. Likewise, condom use at last sexual intercourse is quite low. Table 6 also shows that only 17.9 percent of females and about 26 percent of males in the age group 14-19 used condom at last intercourse. This shows that condom use at last intercourse is much lower than ever use may indicate that condom users have high discontinuation rates, that condom use is very irregular, or that condoms are used only with some partners and not with others.

Table 6. Percentage Distribution of Ever-Use Condom Among Sexually Experienced Adolescents, Bahir Dar: 2008.

Variables	Sex			
	Female		Male	
	Number	Percent	Number	Percent
Ever used condom				
Yes	150	48.7	176	58.9
No	158	51.3	123	41.1
Total	308	100	299	100
Condom used during first sexual intercourse (protected)				
Yes	47	15.3	56	18.7
No	261	84.7	243	81.3
Total	308	100	299	100
Condom used during last sexual intercourse				
Yes	55	17.9	79	26.4
No	226	75.4	220	73.6
Total	308	100	299	100
Knows condom source				
Yes	268	87	246	82.3
No	40	13	53	17.7
Total	308	100	299	100
Attitude towards condom use				
Positive (supportive)	186	60.4	170	57
Negative (against)	122	39.6	129	43
Total	308	100	299	100

5.6 Binary Logistic Regression Analysis-on Condom Use

The following section describes the results of the logistic regression models estimating the effect of various independent variables on the likelihood that an adolescent has ever used condom during the previous years. This variable is coded as a dummy variable where 1, was coded for the respondent, who ever used a condom and 0 coded for not use of a condom.

Factors affecting the likelihood that male and female adolescents have ever used condoms are shown in Table 7. The results confirm findings from the binary logistic regression analysis indicating that the likelihood that an adolescent has ever used condom significantly increases with age, for both females and males.

The likelihood of ever use of condom is significantly higher for students than non-students (male OR=2.073 and female OR=3.47and $P < 0.01$).

Among females, women who had multiple sexual partners during the previous year are significantly twice and half times more likely than those who did not have multiple sexual partners to have used condoms. One possible explanation for this finding is that females predominantly use condoms not for the prevention of sexually transmitted disease but for pregnancy prevention. Among males, having multiple sexual partners did not significantly affect condom use.

The results presented in Table 7 also show that respondents who have positive attitude to wards condom use are two and half times more likely than others to have used condoms. These pattern hold for both males and females. Among females, but not males, knowledge of a place to obtain condoms is associated with a much higher likelihood of having used condoms, which are three and seven times more likely than others, this is also hold for males, but its less significant.

**Table 7. Relative Odds of Ever- Use Condom Among Adolescents,
Bahir Dar: 2008**

Variables	Male			Female		
	B	S.E	Exp(B)	B	S.E	Exp(B)
Age group						
18-19	0.279	0.065	1.322 **	0.196	0.349	1.217 **
14-17			1.000			1.000
Discuss sex with						
Peers	0.367	0.146	1.444 **	0.588	0.21	1.801 *
Others			1.000			1.000
Discuss sex with						
Parents	0.204	0.129	1.226 *	0.376	0.385	1.457 *
Others			1.000			1.000
Knows condom Source						
Yes	0.264	0.289	1.302 **	1.311	0.451	3.71 ***
Others			1.000			1.000
Attitude towards condom						
Positive	0.913	0.197	2.491 **	0.957	0.431	2.605 ***
Others			1.000			1.000
Living arrangement						
With parents	0.017	0.304	1.017	-0.136	0.135	0.873
Others			1.000			1.000
Occupation						
Student	0.729	0.218	2.073 **	1.244	0.2	3.47 **
Others			1.000			1.000
Marital status						
Ever married	-1.917	0.357	0.147 ***	-1.604	0.451	0.201 ***
Never married			1.000			1.000
Sex with older Age						
Yes	-1.561	0.441	0.21 **	-1.174	0.286	0.309 ***
No			1.000			1.000
Number of sexual partner						
Two +	0.011	0.35	1.011 **	0.908	0.202	2.48 ***
One			1.000			1.000
Constant	0.948	0.673	2.581	1.195	0.434	3.303
N=299	*** P<0.001, ** P<0.01, * P<0.05			N=308		
-2LL=286.084				-2LL=323.102		

In addition, females who often discuss sexual matters with their peers are more likely than those who do not discuss such issues with their peers to have used condoms (OR=1.801), suggesting that peers may provide females, but not males, with important information.

For both sexes discussion on sexuality and reproductive health matters with their parents increase the likelihood of ever use of condom. This is more significant for females than males (females OR=1.457, $p < 0.05$ and males OR=1.226, $p < 0.05$). And for those adolescents currently living with their parents increase the likelihood of ever-use of condom. This is only significant for males. This may suggests that females were used condoms even they live out of a family to prevent pregnancy.

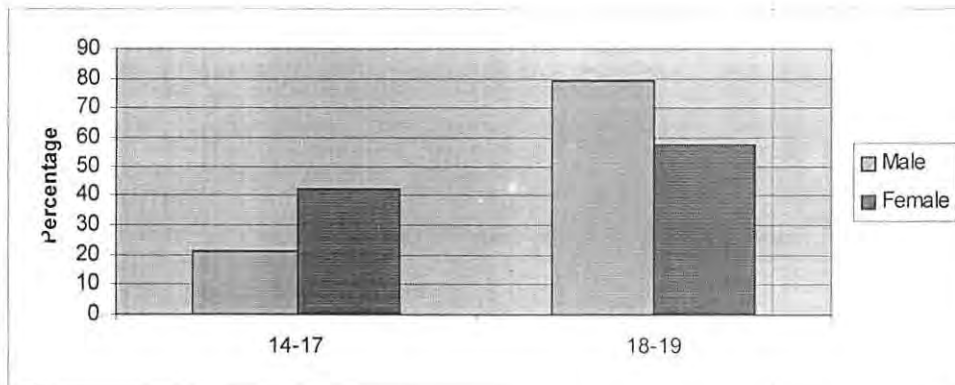
Adolescent who had sex with older age have a lower probability of using condoms, this is true for both males and females that are 79 percent and 70 percent lower than those who did not sex with aged person respectively. Of both male and female respondents, being married was significantly associated with a lack of condom use (OR = 0.147, $p=0.000$, for male and OR = 0.201, $p < 0.05$ for female).

CHAPTER-SIX

ADOLESCENT REPRODUCTIVE HEALTH PROBLEMS

The pattern of adolescent sexual behavior and condom use discussed earlier affect the likelihood of having an unwanted pregnancy and of contracting sexually transmitted disease. Among those females who have been pregnant, 58.8 percent, the percentage of adolescent women currently aged 14-19 who admit having had an abortion is 58 percent, while, 42 percent were reported having live birth in the previous years. Of the 58.8 percent pregnancies, 41.4 percent of the pregnancy were occurred during the last one-year, and of these 35.4 percent were experienced an abortion during that time. The mean age at first pregnancy was estimated to be 16.21 (SD=1.547) years.

Figure 7. Percentage Distribution of Adolescents Who had STD During the Past Year, Bahir Dar: 2008.



Previous research has also indicated that the incidence of sexually transmitted disease is high among sexually experienced adolescents in Ethiopia. Table 8 shows the percentage of adolescents who reported having a sexually transmitted disease during the previous years. Among adolescents currently aged 14-19, who were sexually experienced, 35.5 percent of female and 41.1 percent of male adolescents reported having a sexually transmitted disease during the previous year and of these, 57.3 percent of females and 61.8 percent of males reported having had a sexually transmitted disease during the last one year.

Table 8. Percentage Distribution of Adolescent Reproductive Health Problem, Bahir Dar: 2008.

Variables	Sex			
	Female		Male	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Ever pregnant				
Yes	181	58.8		
No	127	41.2		
Total	308	100		
Pregnancy ended with				
Abortion	118	65.2		
Live birth	63	34.8		
Total	181	100		
Pregnancy in the last 12 month				
Yes	75	41.4		
No	106	58.6		
Total	181	100		
Abortion in the last 12 month				
Yes	64	35.4		
No	117	64.6		
Total	181	100		
Ever had STD				
Yes	110	35.7	123	41.1
No	198	64.3	176	58.9
Total	308	100	299	100
STD in the last 12 month				
Yes	63	57.3	76	61.8
No	47	42.7	47	38.2
Total	110	100	123	100
Problem faced from first intercourse				
STD	27	8.8	75	25.1
Abortion	73	23.7	0	0
Nothing	208	67.5	224	74.9
Total	308	100	299	100

Many adolescents who experience an unplanned pregnancy resort to abortion, often under unsafe conditions. Adolescent pregnancies and births carry higher risks for both the mother and the newborn: the maternal mortality ratio in this age group is twice that

of women in their twenties (WHO, 2003). The Table also shows that among 58.8 percent pregnant adolescents, 34.8 percent of them already became a teenage mother. This indicates that female adolescents are at a higher risk in sexual and reproductive health problems.

Figure 7 also shows that among sexually experienced respondents who had contracted STD, 21.3 percent of male and 42.8 percent of female were aged 14-17 years, while the majority (78.7 percent) of male and (57.2 percent) of female respondents were aged 18-19 years at the time of the survey. Finally 8.8 percent and 23.7 percent of females had ever faced STD and abortion respectively during her first sexual intercourse; at the same time 25.1 percent of male respondents ever had contracted STD during the first intercourse.

6.1 Binary Logistic Regression Analysis-on STD

The following section describes the results of the logistic regression models estimating the effect of various independent variables on the likelihood that an adolescent who was sexually active during the past year had a sexually transmitted disease. This variable is coded as a dummy variable where one, was coded for the respondent, who had STD and zero coded for no STD in the last one year.

Table 9 shows the factors affecting the likelihood of having contracted a sexually transmitted disease during the previous year. As anticipated, having multiple sexual partners is an important risk factor. Among females, those who had multiple sexual partners during the year before the survey are 3.8 times as more likely as those who did not have multiple sexual partners to have contracted an STD. Similarly, males who had multiple sexual partners are two and half times as likely as those who did not to have multiple sexual partners to had a sexually transmitted disease. This implies that females are more vulnerable than males.

In the case of respondents age, the younger males and females have respectively 3 and 4 times as likely as the older adolescents to contracting STD, and ever-married females had 60 percent lower chances of contracting STD than never married females, this is less significant for males.

For both sexes, ever use of condom have 35 percent for males and 11 percent for females lower chances of contracting STD than those who were not used condom. For both male and female the likelihood of having contracting STD is significantly lower for students than non-students (females OR=0.685, $p < 0.05$ and male OR=0.514, $p < 0.05$).

As indicated in Table 9 respondents who discuss sexual and reproductive health matters with their parents were 55 percent for male and 45 percent for female reduced the likelihood of contracting STD than those who have no discussion.

6.2 Focus Group Discussion Among Adolescents in Bahir Dar Town

The group discussion was started with the general question that, what is reproductive health, almost all the participants noted, as they don't know literally the meaning. While, gradually the female group indicated as it's a family planning. What is the major reproductive health problems among youth was another question posed to the group, the group indicated that unwanted pregnancy, early child bearing, sexually transmitted disease and HIV/AIDS as the major reproductive health problems of the adolescents.

The female group comes to consensus that females were invited by well-matured and older men (sugar daddy) and cheated, than have a higher chances than boys to had a sex early and there were also older peer of the same sex usually pressurizes the younger one to commence sex. Both groups indicated as males are a cause for multi partner, because they considered rejecting of the pervious and having other as fame.

They also agreed that almost all women once reached to high school which is around 16-19 had willing to have sexual partners; they also indicated that, males of the same age used to start sex latter than females of the same age, and they justify, this because females are continuously asked for sexual relationship by a number of males ones she reached puberty and some times harassed for delayed and negative reactions.

In general there seems to exist mixed feeling about condom use. Some of the group participants said that condom is not a good option as a prevention method. The other also believed that condom is useful only for sex workers and those people who have multiple sexual partners, and they think that condom encourages adolescent to have sex early.

The reason to low condom use during first sex is female agreed that the males not expect any disease from the girls, who hadn't sex before, and also not willing to taken the verging with condoms. And the majority also says we are not ready during first sex. Most females used condoms to prevent pregnancy rather than STD, but males used condom to fear STD and HIV/AIDS. Most males and females agreed that we don't use condom with a current sexual partners or with a steady boy or girl friend.

Almost half of the focus group discussion noted that the youths are not confidential to purchase condom from shop or clinic, also most of the youths don't use condom particularly at first sexual experience. This is because of mostly the first sex experience started accidentally. The group also noted that since it is embarrassment to discuss about sex within the family, mostly the youth don't get information about reproductive health issues starting from early age. Thus the youth exposed for different reproductive health problems. They also discussed on the source of youth and reproductive health services and information, reported that getting it from mass media and informal information from peers.

All participants of the focus-group discussions agreed that the pattern of the HIV/AIDS epidemic was getting worse over time, as they are observing the disease seriously affecting the young and productive population groups in the town. They further mentioned the minimum age at first sexual commencement as being 14 years or below and the fact that sexual intercourse is usually started because of peer pressure. In addition, most participants said that, respondents did not use a condom during their first sexual encounter and during their current sexual practices. The reasons for not using condoms were: it is not comfortable, it decreases sexual satisfaction and they do not think it is necessary during sexual act with regular sexual partners.

CHAPTER- SEVEN

DISCUSSION

Adolescents and young adults comprise one of the fastest growing segments of the population. As future parents, their health and well-being will largely determine the health and well-being of subsequent generations. Although young people have a capacity for innovative ideas and represent a critical reservoir of labour for national development, their reproductive health needs are usually neglected.

Socio-Economic and Demographic Characteristics Relate with Sexual Initiation

This study has described gender differentials in adolescent sexual activity and reproductive health risks in Bahir Dar town, and has examined the extent to which male and female adolescent sexual and reproductive behavior is affected by the same factors. The study comprises 47.6 percent of males and 652.4 percent of females currently aged 14-19 years. Several important findings emerged from this study. The results of the analysis of sexual initiation show that female tend to become sexually active at an earlier age than males (OR=1.241, P <0.005).

The bivariate analysis further shows a trend among females toward earlier initiation of sexual activity. This finding is consistent with arguments suggesting that the current economic crises encourage girls to become sexually active at an early age for economic reasons, this is mostly due to the result of poor family economy, which forced a women to had sex for money.

According to the study of Ethiopian Demographic and Health Survey (2000), the mean age at first sexual intercourse showed that female adolescent are sexually initiated at earlier age (15.7years) than males (16.5years). In this study the mean age of first sexual intercourse was 15.5 for female and 16.7 for male adolescent.

As expected, peer influences encourage early sexual initiation among both males and females (male OR= 2.204, $P < 0.001$ and female OR= 3.439, $P < 0.001$), this is more strong for females. Concerns about the impact of peer pressure are sometimes interpreted as an indication that being enrolled in school causes early sexual initiation. However, the data show that the net effect of being enrolled in school is to postpone, rather than encourage sexual initiation (male OR= 0.574, $P < 0.05$ and female OR= 0.462, $P < 0.01$).

A study conducted by Taffa et al in Ethiopia indicated that the knowledge of young people on aspects of their sexuality is not sufficient. More than half of the adolescent believed that it is unacceptable to discuss growth changes and sexual matters with parents (Taffa et al, 1999).

Socio-Economic and Demographic Characteristics Relate with Number of Sexual Partner

A significant proportion of adolescents have had a transaction of money and /or gifts in exchange of sex, suggesting that some adolescents engage in relationships that resemble a form of semi-prostitution. Most likely, such explicit transactions in exchange of sex are motivated in part by the harsh economic conditions. The result also shows that 35.2 percent of females and 47.5 percent of male respondents already ever had sex with exchange of money.

It is also very common for adolescents to have multiple sexual partners, especially (but not solely) among older adolescents. Among adolescents and young adults aged 14-19 years, one out of every four women and one out of every three men had two or more sexual partners during the previous year. Further more, among sexually experienced adolescent, one in three females and one in two males in this age group reported having two or more sexual partners during the last 12 month before the survey. The data clearly show that even though both males and females tend to be sexually active by early age, adolescent males are more likely than females to engage in risky sexual practices (OR=22.348, $P = 0.000$). According to EDHS, 2000

adolescents once sexually initiated, a high proportion of male youth (65.8 percent) and significant proportion of female youth (24.6 percent) report two or more sexual partners in the last 12 months.

Socio-Economic and Demographic Characteristics Relate with Ever-Use of Condom and STD

Ever use of condoms is very high among adolescents, for both females 48.7 percent and males 58.9 percent. In both sexes, condom use significantly increases with age, and is higher for those adolescents who have positive attitude to wards condom use (males OR= 2.491, $P < 0.01$ and females OR= 2.605, $P < 0.01$).

Although ever-use of condom is very high, current use has remained low (17.9 percent of females and 26.4 percent of males), indicating that condom use is irregular, or that condom are only used with some partners and not with others. The reported condom use with other sexual partners shows that men are much more likely to use condoms with casual partners (sex workers). Such a pattern suggests that men are using condoms to avoid contracting STD or HIV/AIDS while women are using them to prevent pregnancy.

The study shows that adolescents in Bahir Dar town exhibit high risk sexual behavior evidenced by the high proportion of multiple sexual partners, low condom use rate, and less reliable and infrequent use of contraceptive methods. Sexual behavior of youth varies by socio-demographic features. Studies conducted by EDHS (2000) also confirmed that the proportion of youth using condom during the most recent sexual intercourse was low. Only 22.7 percent of male youth and 10.4 percent of female youth with a history of ever having sexual intercourse used condom during the last sexual act.

As anticipated, these high rates of adolescent sexual activity, combined with low and inconsistent use of condom, lead to fairly high levels of induced abortion and to a high prevalence sexually transmitted disease. In the study population, males have the highest incidence of sexually transmitted disease (61.8 percent) but it is evident that

female adolescents also face considerable sexual and reproductive health risks, even at a very young age. The binary logistic regression also shows that those who had sex with exchange of money have had a higher chance of contracting sexually transmitted diseases (male OR= 8.856, $P < 0.01$ and females OR = 10.029, $P < 0.001$).

According to our study, the mean age of the study group during their first pregnancy was 16.4 years with a standard deviation of 2.8 years. The DHS (Demographic and Health Survey) conducted in 2000 in Ethiopia; indicated that, young women aged 15-24 are more likely to have had sexual intercourse than young men in the same age group. One in every ten births worldwide and one in six births in developing countries are to women aged 15 to 19. Pregnancy related health risks are much higher among women under age 18 years. With girls aged 10 -14, five times more likely to die during pregnancy or childbirth than women aged 20–24 (WHO, 1995).

CHAPTER EIGHT

CONCLUSION AND RECOMMENDATION

Conclusion

This study was conducted among adolescents in Bahir Dar town to explore factors influencing sexual activity and reproductive health risks, hence on the basis of the obtained findings the following conclusions can be drawn.

Considerable proportion of the adolescents exhibited high-risk reproductive behavior that predisposed them for RH problems. The risk behaviors include premarital sex, multiple sexual partners, early sexual activity and inconsistent or non-use of condoms. Younger age group was found to be more at risk as compared to the older age group (unprotected sex). Females were relatively more at risk of reproductive behavior as compared to males of the same age. And adolescents who are living with their friends/partners or alone were initiated sexual activity early and are at a higher risk of RH problems than those who living with the family.

The finding of the study showed that adolescents lack of adequate information and knowledge about sexual and RH leads to initiated to perform risky sexual practices that exposed them to RH problem and they were not capable to take action to protect themselves from various sexual risk exposures. Apart from this, open and free communications and discussion between parents and adolescents on matters of SRH is lacking. So adolescent preferred to discuss with their peers that encourages early sexual activity.

A significant number of sexually active adolescents reported ever experiencing RH problems of which unwanted pregnancy, abortion and STIs were the major once. Which implies HIV/AIDS prevalence in Bahir Dar town will increase in the coming years.

Recommendations

Although the newly emerged Bahir Dar town, demands more detailed and frequent study, on the basis of the present findings it is reasonable to recommend the following points.

1. This study pointed out various gaps that need urgent solutions in order to save the young generations. It is evident that the prevention of adolescent from risk behavior needs immediate response particularly, developing a range of innovative strategies and intervention mechanisms based on gender differences that would convey significant behavioral change among male and female adolescents.
2. The finding that sexual initiation typically occurs at an early age implies that HIV/AIDS prevention and other RH programmes need to target adolescents when they are very young, particularly for females.
3. Adolescents who indicate regularly discussing sexual issues with their parents are only half as likely as others to have had multiple sexual partners during the previous year. This finding suggests parents may be an effective source of family life education.
4. Adolescents who have positive attitude about condom use are two and a half times more likely than others to have used condoms. This indicates that it is important for HIV/AIDS interventions programs to employ information, education and communication (IEC) campaigns to increase acceptability of condom use.
5. Education and schooling were shown to be key factors for not only reducing the risk of early sexual initiation, pregnancy and early child bearing, but also for increasing the likelihood that adolescents will use condoms and contraception when they have sexual intercourse. Programmes and policies that focus on

improving school enrollment, retention and performance among adolescents should, therefore, be given high priority and evaluated for improving adolescents sexual and reproductive health outcomes.

6. Sexual and reproductive health services must not only be made "youth-friendly" but also "male and female-friendly" and "youth participatory" so that both young men and young women gain access to the information and services they need and want.
7. Education on HIV/STIs should be integrated into broader SRH education with a strong gender focus.
8. Programmes for adolescents also need to recognize the vast diversity among this segment of the population. Adolescents include a wide spectrum of categories: in-school and out-of-school; married and unmarried; rural and urban; the employed and the unemployed; those who have been sexually exploited; those in institutions and those who are disabled.
9. Finally, that having been said, one comes from this research with a sense that there is not one factor that explains most adolescent sexual and reproductive health behavior. Thus, there is not one simple or magic solution. The factors that put young people at risk for health compromising sexual health behaviors are multifaceted. So, too, the factors that protect young people from harm are equally complex. The complexity should not and cannot stop us from acting. Rather, this paper should give programme planners and policy makers some clues of where the evidence lies as to what influences sexual and reproductive health outcomes.

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3. Traditional Healers

4. I don't know

223. Have you ever had sex with exchange for money

1. Yes

2. No

224. Which is your major source of information concerning RH service

1. Father/Mother 2. Brother 3. Sister 4 Teacher Friends/peer

5. Spouse 6. Spouse 7 Radio/TV

Open-ended Questions to conduct focus group discussion

1. What do you think is RH about? Explain briefly what you know about it?
2. Do you think that adolescent encountered RH problems? What are the major RH problems that adolescent faced?
3. What is the contributing factor for adolescent SRH problems?
4. In your opinion, what is the ideal age for a female and male adolescent to start sexual intercourse? Who had sex early, male or female? Justify?
5. Did adolescent in this town practice sex before marriage, have more than one sexual partner, changing partners frequently, involved in risky sexual behavior? Who is more involved in such practice, male or female?
6. With whom you discuss about sexual and RH issues? Why?
7. What is your opinion about condom? Justify?
8. What is your recommendation regarding the improvement of SRH situation of adolescents?

DECLARATION

The thesis is my original work, and has not been presented for a degree in any other University and that all sources of materials used for the thesis have been duly acknowledged.

Name - Mohammed Amare

Signature MA

Date-July 2008

I confirm that this thesis has been submitted with my approval as the supervisor of the same.

Advisor- Eshetu Gurmu (Ph.D)

Signature 

Date _____