

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**FACTORS AFFECTING FEMALE ADOLESCENT SEXUAL REPRODUCTIVE
HEALTH AMONG IN SCHOOL ADOLESCENTS IN WORETA TOWN,
SOUTH GONDER**

BY:

ABEBE KELEMEWORK

July, 2007

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Factors Affecting Female Adolescents Sexual Reproductive
Health Among in School Adolescents in Woreta Town,
South Gonder

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By:

Abebe Kelemework

Population Studies and Research Center

Institute of Development Research

Approved by the Examining Boards

Dr. Assefa H/mariam

Chairman, Department Graduate committee

Signature

Dr.Mengistu Asnake

Advisor

Signature

Dr. Hirut Tefera

External examiner

Signature

Dr. Assefa H/mariam

Internal Examiner

Signature

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Acronyms and Abbreviation

AGI	Alan Guttmacher Institute
ANRSBFED	Amhara National Regional State Bureau Finance and Economic Development
AIDS	Acquired Immune Deficiency Syndrome
CSA	Central Statistic Authority
EDHS	Ethiopia Demographic Health Survey
FGAE	Family Guidance association Ethiopia
FGD	Focus Group Discussion
FHI	Family Health International
HIV	Human Immunodeficiency Virus
ICE	Information Communication and Education
RSH	Reproductive and Sexual Health
SPSS	Statistical Package for Social Science
STDs	Sexually Transmitted Diseases
UNAIDS	United Nation Programme on HIV/AIDS
UNFPA	United Nation Population Fund Agency
UNICEF	United Nation Children's Fund
WHO	World Health Organization

ABSTRACT

Adolescents are alarmingly becomes sexually active at younger age. The socioeconomic, family atmosphere, peer pressure, individual life experience and other factors predisposed them to early onset of sexual activity. Premarital sexual activities of adolescent was accompanied with risk of unintended pregnancy, abortion, STDs including HIV/AIDS due to lack of factual information and knowledge of reproductive and sexual health issue.

The major purpose of this study was to investigate factors which influence female adolescent sexuality among in school adolescents in Woreta town. In order to assess the objective of the study cross-sectional survey study design was used which includes quantitative method using a pre-tested written questionnaire and focus group discussion used to collect qualitative data as a supplement of quantitative. The sampling technique employed for this study was stratified sampling procedure. Data were collected from 660 females adolescents aged 12-19 years who are considered as adolescent in this study.

The statistical tools that used to analyze the data include uni-variate, bivariate and multivariate analysis. Univariate used to describe the adolescents and parents variables. The chi-square test (bivariate) was used to establish the association between the independent variables and sexual behavior (dependent variable). Binary logistic regression model was used to analyze the effects of the explanatory variables on the female adolescent sexuality.

The study revealed that 36.1 percent of unmarried female students ever had sex. As reported by respondents the main reason for having sex for the first time was the desire to marry and love affairs. 28.9 per cent of sexually experienced female adolescents were ever use of contraceptive and 21.8 percent used condom at first sexual intercourse. The finding of the study showed that age, education level, religiosity, living arrangement, mother education and occupation, father education, peer pressure, self efficacy, mother-adolescent communication and respondent attitude toward premarital sex were associated to female adolescent ever had sex. At multivariate level, the finding of the study depicted that adolescents discussed with their mother about sexual related issues were less likely to be sexually active than those who had never discussed with their mother about sexual related issue. Female adolescents who have no sexually experienced friends were 15.2 percent less likely to have had sexual intercourse relative to those who have sexually experienced friends.

Adolescents in this study were found to involve in sex at early ages and most of whom do not use contraceptive. Thus, the need to initiate comprehensive sexual and reproductive health programs targeting adolescents and strong information education communication and intervention programs by all concerned bodies will be recommended. It also further noted that the need for parental empowerment have to be emphasized to enable them to cope with the challenge of adolescent life.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Sexuality is among many developmental events of human being that occurs since the onset of adolescence. Adolescence is the period of transition from childhood to adulthood and is characterized by spurt of physical, mental, emotional, social and psychosexual development. This stage is also associated with commencement of puberty, the appearance of secondary sex characteristics, and a pervasive search for identity and increased reliance on peer-group relationship (Conger, 1991).

The world today is experiencing a rapid increase in the number of young people. Of an estimated 1.2 billion young people in the world, 85% live in developing countries. At the beginning of 21th century, about one out of every four persons in sub-Saharan Africa was 10-19 years old (UNFPA, 2005). In Sub-Saharan Africa adolescents constitute 20-30% of the total population. The estimated total population of 42 Sub-Saharan African countries is 610 million and approximately 20 per cent of the populations (120 million) are adolescents aged 10-19 Years (Aklilu and Hailom, 2002). The reproductive and sexual health decisions these young people make today will have a profound effect on the world's population size, health and resources for years to come.

The trends in sexual activity of adolescents at younger ages are increasing alarmingly in the world. In many countries the majority of young people are sexually active before age of 20 and premarital sex is common among 15-19 years old (UNFPA, 1997). In most sub-Saharan African countries, more than 70 per cent of young women begin sexual activity during adolescence period. Males engage in sexual activity younger than females and the age at first sexual intercourse in sub-Saharan Africa ranges from 16-17.6 years (UNICEF, UNAIDS and WHO, 2002 and AGI, 1998).

Young women initiating sexual activity at earlier age based on cultural norms, peer pressure and economic pressure (Hallman, 2004). The early sexual activity of young people can expose them risk of unintended pregnancy, abortion and STDs including HIV/AIDS. According to the

report of Save the children (2004) almost one-third of the 40 million people estimated to be living with HIV/AIDS worldwide are between the ages of 15-24 years. Sub-Saharan Africa is the region where the highest number of victims of HIV/AIDS is found. In 2005 an estimated 3.2 million people in the region became newly infected and among the younger generation (15-24 years) the percentage of HIV infected women and men account for 4.6% and 1.7%, respectively (UNAIDS, 2005). According to MOH (2004) the estimated number of new HIV/AIDS cases in Ethiopia among the adult population (15-24) in 2003 was 98,000 (46% male and 54% female). Both biologically and socially, adolescent girls are more susceptible to risk of STDs including HIV/AIDS than their male peers (Institute of medicine, 1997 and AGI, 1998). On the other hand, pregnancy among unmarried adolescents is serious reproductive health problem in developing countries. More than 14 million adolescents' women give birth each year. A large portion of these pregnancies is unintended and 4.4 million abortions are sought by adolescents (UNFPA, 1999). In many sub-Saharan Africa countries one-third of birth to women aged 15-19 occur among adolescents who have never married (AGI, 1998).

Most adolescents entered sexual practice and cycle of reproduction without adequate reproductive and sexual health knowledge. UNFPA (1997) report revealed that adolescents around the world lack adequate information about reproduction, sexuality, family planning and health care. They also maintain many misconceptions about disease transmission, pregnancy and contraceptive use. Most young adult who enter into a sexual relationship for the first time do not use any means of contraception. A study in Africa revealed that adolescent students had low knowledge of reproductive health. For instance, in a survey of nearly 3,000 adolescent in Senegal, only one-third of these 15-19 years old correctly identify the fertile time in the women menstrual cycle and 80 percent incorrectly thought that oral contraceptive could cause sterility (FHI, 2000). In Kenya from the participants of the study fewer than 8 per cent could identify the fertile period in women's menstrual cycle (Ayo et al, 1991). Another study in Kenya revealed that many adolescents believed that they could avoid pregnancy by such measures as washing their genital after intercourse, jumping up and down after sex and having sex standing up (Gage, 1998). A study in three Ghanaian towns on 15-19 years old respondents reported that only 15 percent of males and 24 percent of females have used a condom during their first sexual encounter (Glover et al, 2003). Therefore, providing accurate and timely sexuality education and information help young people understand sexual changes

as positive and natural aspects of their developments and not to encourage behavior contrary to moral value (UNFPA, 1999).

In Ethiopia, young people constitute one-third of the total population (Aklilu and Fekade, 2001). Adolescent sexuality is still a taboo in most of the society. This left adolescents without the information and counseling they need. There had been few studies conducted in some parts of the country that highlights the extent of adolescent awareness about sexual matter. Among young respondents, a substantial proportion admitted that they did not know about the fertile period of women's menstrual cycle and were misinformed (FGAE, 1998). A study in north Gonder supported that 72.2 per cent of the respondents said that pregnancy was possible with one time sexual intercourse while the rest believed it was impossible (Mesganaw et al, (1995). Regarding to STDs Solomon (1990) found that the majority of the respondents (69 per cent) did not know and /or were uncertain of sexually transmitted diseases. The study from FGAE (1998) showed that knowledge of STDs increased with age and knowledge of contraception differs with sex of respondents. Ninety seven per cent of males were aware of condom while 94.6 percent of female know about pill. Mesganaw et al (1995) revealed that respondents irrespective of their sex, grade level and religion did not have adequate knowledge of STDs. Thus, students low reproductive health knowledge and involvement in risky sexual activities predispose them to undesirable reproductive health outcomes.

1.2. Statement of the Problem

Over the past decade, adolescent sexual and reproductive health concerns have increasingly been on national agendas. This concern has been driven by the high prevalence of HIV/AIDS, early childbearing, early onset of sexual activity among young people in different countries of the world (WHO, 2004).

In many countries young women and men are under strong social, peer, familial and cultural pressure to engage in premarital sex (Population Reference Bureau, 2004 and AGI, 1998). Yet, the onset of puberty is occurring earlier and the age of marriage is rising. These have increased the period of risk of early or non-marital pregnancy, abortion, and exposure STDs of including HIV/AIDS (Temin, *et al*, 1999). Many young populations engage in premarital sex without factual information of reproductive and sexual health. Adolescents engage in sexual

practice at earlier age. A survey conducted in premarital sexual activities in Africa indicated that 70 per cent of male adolescents in 12 countries have premarital sexual intercourse before the age of 20 years while more than 40% of female adolescents in four countries have premarital sexual intercourse before age 20 (Bankole *et al*, 2004). Adolescence early commencement of sexual practice and substance use cause for the loose of their life. According to World Bank (2005) report approximately 70% of premature deaths among adults are associated with their unhealthy adolescent behavior.

In Ethiopia, adolescents involve themselves in sexual relationship before marriage or at earlier age (Negussie, 1996). Traditional mechanisms for coping with and regulating adolescents' sexuality, especially marriage and norms of chastity before marriage are being eroded. Hence, adolescents in Ethiopia are contributing unfavorable indices of SRH ranging from sexually transmitted diseases, unwanted pregnancies, and unsafe abortion to maternal mortality. As per the data from EDHS (2005) unmarried young women and men (15-19) engaged in premarital sex (CSA, 2006). As MOH (2000) report showed that 60 percent of young percent of young women under aged 20 years old are mothers due to early child bearing. Teka (2004) also found that 13 per cent of birth was accounted by age 14-19 females while 14 percent of STDs was accounted by 14-19 age females. The 2005 EDHS report showed that 27.7 percent of girls in 15-19 age had sexual intercourse and 28.8 percent are sexually active (CSA, 2006). According to CSA (2004) report 11.75 percent of young women 15-19 years were pregnant in Amhara region.

Moreover, adolescent were more vulnerable group to HIV/AIDS pandemic. The highest prevalence of HIV (12.1%) is observed among youth whose age belongs to 15-24 years (Family Health International, 2005). Among the estimated number of cases of HIV/AIDS in 2003, 54% was the adult female population (MOH, 2004). School female adolescent encountered aforementioned problem due to incapability to negotiation safer sex as well as less use and little knowledge of protective method. For instance, contraceptive use among adolescent is low at first and last sexual intercourse. The 2005 EDHS revealed that only 4.5 percent of 15-19 years young people used modern contraceptive while 0.8 percent age of 15-19 young women used condom at first sexual intercourse (CSA, 2006).

In Ethiopia, reproductive and sexual health issue of adolescent is a serious problem. So the study of sexual reproductive health in the era of HIV/AIDS pandemic is essential matter for the well being of population in general adolescents in particular. In Ethiopia sexuality has for long been considered as a taboo. This view left them without adequate awareness and then exposed them to various risks.

Given the high rate of HIV/AIDS prevalence and low use of contraceptive method among other things, it is to understand and identify factors that influence sexual behavior of adolescents. The sexuality of adolescent may be influenced by many factors such as family atmosphere, individual life experience and others. In view of identifying factors that affecting female adolescent sexuality, the need for research in this area is very crucial. Therefore, this study insight factors that affect school female adolescent sexuality in Woreta town in the era of HIV/AIDS. This also served as springboard for further investigation in the area of sexual and reproductive health in the study town.

1.3 Research Questions

This research aimed to investigate factors that are affecting school female adolescent sexual reproductive health behaviour. Hence the investigator hoped to answer the following questions:

1. What are the factors that affect sexual behavior of the school female adolescents?
2. What are factors that lead to early sexual practice of the school female adolescents?
3. What is the extent of reproductive health knowledge among female adolescents?
4. What are the sources of information on sexual issue for female adolescents?

1.4. Objectives of the Study

General objectives

The general aim of this study was to investigate factors affecting school female adolescent sexual reproductive health behavior.

Specific objectives:

Given the above broad objective, the study was geared to attain the following specific objectives:

1. To examine the prevalence of premarital sexual practice among school female adolescent.
2. To identify factors that lead school female adolescents towards early sexual practice.
3. To assess their contraceptive knowledge and use among school female adolescents.
4. To examine the impact of peer influence on the sexual behavior of female adolescents.
5. To examine the median age at which female adolescent engages in sexual intercourse.

1.5 Research Hypotheses

To achieve the above stated objectives, the investigator formulated the following leading research hypotheses:-

1. Female adolescent who had discussion with their mother about sex related issue are less likely to have sexual experience.
2. The incidence of ever had sex is higher among female students who have sexually experienced peers.
3. Mother education has a negative relationship with sexual experience of female adolescent.
4. Contraceptive use of school female adolescent varied with partner discussion before sex.

1.6. Definition of Key Terms

Different scholars and researchers differently use concepts during a research work. To overcome the problem the terms must be defined in the context of the study. Therefore, the terms for this study define in the following manner:

Adolescence: - The WHO (1993) has defined adolescence age between 10-19 years. For the purpose of this study adolescent refers to female school adolescent aged 12-19 years.

Sexuality: - refers to the totality of our sexual through feelings, values, belief, action and relation (Conger, 1991). WHO(2002) was also defined as sexuality is experienced and

expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. Sexuality in this study refers to adolescents' sexual practice (ever had sex).

Sexual behavior: - refers to all those activities & behaviors that produce sexual excitation. It includes solidarity activity (like masturbation) & interpersonal activities, such as kissing, touching, sexual intercourse or oral genital stimulation (Steinberg, L, 1985).

Sexually active: - Female students' engage in sexual activities two month prior to survey.

Perceived self-efficacy: Bandura (1992a) defined as it is someone's perception of his/her ability to carry out a behavior and young persons have the ability/Confidence to adopt safer sexual behaviors including abstinence, purchase of contraceptive method and use of contraceptive. For this study, it refers to female adolescents' confidence to abstinence up to marriage.

1.7 Significance of the Study

This study focused on factors affecting female adolescent sexual behavior because they are more vulnerable to risk of reproductive and sexual health issue than their male counterparts for various reasons. Hence, the finding of this study will suggest intervention program for those organization working on reproductive and sexual health. It will also be expected to be useful to ministry of education, ministry of health, ministry of youth, sex education planners, and parents. It is also advantageous for those working in gender and related activities to give especial emphasis on sexual abuse of female adolescents.

1.8. Limitation of the study

The first limitation of the study is that sexuality issue is taboo in the society so some respondents might indeed prefer the socially acceptable answers when replying to some questions rather than accurate information, which introduce social desirability bias. A Second limitation is that the nature of the focus group discussion guidelines many of the questions encouraged short responses. Opportunities were often missed to explore further into experiences adolescents which can yield rich and detailed life stories.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

As research evidence showed that the sexual behavior and attitude of young people have been influenced by demographic, socio-economic, behavioral, cultural and family characteristics. In this section an attempt is made to review the previous work on the issue of socio-cultural context of adolescent sexuality, factors affecting sexual behaviors of adolescent, contraceptive knowledge and use of adolescent.

2.1 Socio-cultural Context of Female Adolescent Sexuality

Every human being reflects sexuality. It involves giving and receiving sexual pleasure as well as reproduction. It is shaped by our values, attitude, behaviors, appearance, beliefs, emotion, personality, spiritual selves as well as the ways in which we have been socialized.

Adolescent sexual activities and initiation decisions depend up on cultural norms and socio-economic condition of the society and country (Adargachew, 1994). Indeed sexual activity pattern seems to vary greatly according to religious, social class, schooling, ethnic group, family situation and individual circumstance (Dehne, and Riedner, 2005). Individual sexual behavior widely varied from one culture to another. Some cultures are restrictive with regard to sexual activity throughout childhood, adolescence even to some extent in adulthood. In society Cuna of the coast of panama, children remained largely ignorant of sexual matters until the last stages of the marriage ceremony. On the contrary, other cultures are thoroughly permissive at all ages. The Chawa of Africa believed that children must have sexual experiences early in their life or they will never beget (Conger, 1991). In Mexico, sexual activity of single women is controlled through social disapproval on the other hand male sexual activity is controlled by means of social encouragement to have many partners and sexual experience. This control seems to be exercised through society's norms, institution, sanctions and groups family and community behavior (Amuchastegui, 1998). A report in coted'Ivoire revealed that society's viewed early marriage as protecting mature young women for sleeping with many men (WHO, 1998). A qualitative study conducted in Jamaica revealed that the sexual attitude and behavior of young Jamaica adolescent age 11-14

have significantly shaped by socio-cultural and gender norms. Society looked in different standard of sexuality of boys and girls. Boys perceive social encouragement and pressure to be sexually active while girls who have sex, particularly if pregnancy reveals their sexual activity, are labeled as having poor moral character (Eggleston.E et al, 1999)

However, modernization brought about changes in gender relations with important implications for the liberation of sexual behavior. Traditional norms that emphasis women's virginity and male sexual prowess are being challenged in the process of modernization (Amuchastegui, 1998). Several studies showed that a large number of adolescents begin sexual activity at very young age in a number of countries (USAIDS, 2002). A study in Botswana depicted that female sexual behavior have been altered by western influence including western religion ,mass education ,mass media ,modern family legislation(Ahamed and Meeker,2000). These changes have led to a new increasing level of sexual permissive. Africa and south Asia girl's sexual experience usually takes places at 15-16 year of age (Dehne, and Riedner, 2005). In South Africa, among a large sample of girls in Kwazulu Natal, almost half had already had first sexual intercourse at age of 16 years (Manzini, 2001). A study in Mozambique revealed that the mean age at first sexual intercourse of girls of both poor and middle class socio economic levels was 15 years old (Machel, 2001). A study conducted on contemporary patterns of adolescent sexuality in urban Botswana showed that sexual initiation typically happens at early age. More than three out of four never married women and nearly half aged 15-17 are sexually experienced (Ahamed and Meckers, 2000).

Ethiopia is a country with diverse culture that display diverse attitude towards the way they socialize the adolescent. Predominantly, the subjects of adolescent sexuality remain taboo (Mesganaw etal, 1995). Adolescents are expected to delay sex until marriage. Situation which encouraged sexual behavior is controlled supervised or are met by negative sanctions (ICDR, 1998). Young people do not receive information about their bodies, menstruation or reproductive process and parents really discusses about birth controls with their teenage daughters (Daniel , 2000). Premarital sex is inhibited. Virginity is highly glorified in the societies. In some societies sexual gratification is postponed until the day of marriage. One can understand from these is that culture has a great influence in shaping adolescent sexual behavior.

However, modernization changes sexual behavior of young people. They are becoming sexually active at younger age. As Alemayhu (2001) cited from Levine (1965) society and individuals have been affected by modernization because numerous changes occurred that become confusion for young people. Adolescent face challenges with regard to premarital preparation for adult sexual function however a double standard does exist. Although public norms require body to be virgin at marriage and one hears it said the “in the old ‘days”, this norms was strictly enforced (Alemayhu, 2001). As per the data from 2005 EDHS premarital sex exists among never married women and men. There is a gender difference in premarital sexual intercourse small proportion of never married young women engage in premarital sex than never married young men. Premarital sexual activity of young men tends to increase with age, education and wealth. The mean age at sexual intercourse is 16 years (CSA, 2006). A study conducted in Kolla Diba revealed that the mean age of male and female sexual commencement was 16.4. In a survey conducted among high school students in Addis Ababa 38 percent reported that they were sexually active. Of these sexually active students 71 percent experienced first sex between the age of 14 and 16 years (Solomon, 1990). Therefore, conducting research on factors affecting adolescent sexuality is important in the era of HIV/AIDS.

2.2. Factors Influencing Adolescent Female Sexual behavior

Due to AIDS pandemic and the 1994 Cairo conference and its program of action, adolescent sexual and reproductive health has become a major focus of research for those in the health and population field. Many studies and international conference conducted regarding to adolescent reproductive and sexual health issue. Adolescent sexual activity is increasing globally with a trend of early onset. Hence, there are factors that lead to the early commencement of sexual activity of adolescents such as socio-demographic factors (religion affiliation, education, and living arrangement), peer behavior and influence, family situations, parent adolescent communication.

2.2.1 Socio- Cultural Factors

A. Religion Affiliation

Research evidence has shown that religion has influenced the sexual behavior and attitude of an individual. As Studer and Thornton (1987) found that the religion doctrine of any church has an influence on adolescent sexual behavior seems to be related to the individuals' exposure and express commitment to the church as evidenced by both behavioral and attitudinal dimension. Frequency of attendance of religious activities has its own influence on sexual experience of adolescent. The empirical evidence showed that young people who attend religious activities frequently are expected to enter later in to sexual intercourse than peer who do not attend regularly (Abraham and Kumar, 1999, Sileshi, 2005 and Dejene, 2005)

B. Educational Level

Many studies have documented significant difference in the involvement of sexual activity with education level. A study conducted in Nigeria indicated that female adolescents with no formal education started sexual activity three years earlier than those with tertiary education (Isiugo.u and Oyediran.K, 2004). Similarly, a study in Botswana depicted that the percentage of sexual active females were much lower for those females who enrolled in school than for those who did not (10 percent vs 26 percent) for age 15-16 years and 51 percent vs 75 percent for age 17-18 years(Ahamed and Meekers,2000)

However, Ahamed and Meekers(2000)also revealed that adolescents with secondary education were more likely sexually experienced than those with lower level of education. In Ethiopia Zubidia(1992),Sileshi(2005)and Dejene(2005) found that with an increase of educational level there is an increase in sexual experience. On the other hand, Tessema's (2003) finding revealed that the premarital sexual activity is negatively associated with the educational attainment of the respondents.

C. Living Arrangement

The living situational of young people has a profound impact on their sexual behavior. A study in Awassa Town showed that adolescents who lived both parents were less likely to enter risk sexual intercourse than only one parent (Dejene, 2005 and Silesi, 2005). Similarly in Zambia

the level of sexual activity seems related to the strictness associated with person living within the household. Girls who were living with both biological parents were some what protected against pregnancy ((Dehne,L and Riedner.G , 2005). Furthermore, a longitudinal study in United Kingdom revealed that young girls from single parents and teenage mother families are more likely to have sex than other families (Bonell, et al, 2006). A study conducted in Ghana revealed that female respondents living with neither parents were more likely than those living with parents household to be sexually experienced (Karim et al , 2003). Adolescents living in single-parent or stepparent households are found to likely engage in premarital sex than those living with their biological parents (Upchurch, et al., 1999). Slap et al. (2003) also highlighted the link between a student's senses of connectedness to their parents, regardless of family structure, which decreased the likelihood of sexual activity. This seems to be confirmed by Odimegwu et al. (2002) who performed a study in northern Nigeria which included data from structured interviews done with 400 adolescents aged 12-24 years old. The study showed that adolescents with whom parents had discussed family issues were less likely to be sexually active than those with whom parents never discussed such issues. The results also showed that there was a negative effect of family instability on adolescents' sexuality. Furthermore, in a prospective study using sub-samples from the American Longitudinal Study of Adolescent Health database 10,000 adolescent perceptions of maternal abstinence attitudes and adolescent/maternal relationship satisfaction and their relationship to adolescent sexual outcomes were investigated. The more disapproving the adolescents perceived their mothers to be toward them engaging in sexual intercourse and the more satisfied they were in their relationship with their mothers the less likely adolescents were to initiate sexual activity and therefore to potentially become pregnant (Dittus,P & Jaccard,J,2000).

D. Peer Behaviour and Influence

Research on peer influence on sexual initiation reflects the idea that adolescent's decisions about whether or not to initiate sexual activity are strongly bound to social context, with peer playing an important role in creating a sense of normative behavior (Hampton.R et al, 2005). So peer norms have been used to explain initiation of sexual activity among adolescent. Empirical research suggested strong relationship between perception of number of friends who had initiated sexual activity and teen's sexual behavior (Romer et al cited in

Hampton, 2005). Youth who report greater peer involvement in sex and more positive sex outcomes expectancies have been found to be more likely to initiate sex at a younger age (O'Donnell et al 2003). Adolescents with large networks and many opposite gender friends are more likely to have a romantic relationships than other adolescents suggesting that same gender and mixed sex function to provide access to heterosexual romantic partners and a context in which dating is initiated.

Moreover, the behavior of individuals and peers are also predictors of sexual involvement of adolescents. As Kirang and Zabin(1993) stated that prior use of illicit drug is the most important predictors of early sexual initiation. Young people who engage in behaviors such as drinking, smoking and attending clubs were more likely to be sexually active than their counter parts controlling others factors. Adolescents with friends who use alcohol and drug increased the chance of them to engage in early sexual activity. A study in Mozambique showed that alcohol and drug use by young people may led to earlier sexual initiation, unprotected sexual intercourse and multiple partners as well as putting young people at risk for STDs, unintended pregnancy and violence (Machel.Z,2001) . Similarly a study in Ghana revealed that youth who perceived that their friends were sexually active were more likely to be sexually experienced than those friends who has not yet initiated intercourse, the effects was longer in female than male. Having sister who had become pregnant before marriage was associated with an increased likelihood of being sexually active (Karim. et al 2003). In India among college students who have had high social interaction with peers almost four times as likely to have sexual intercourse than their counter peers (Abraham and Kumear, 1999) They also found that young people who had been exposed to drawing and movies and read erotic or pornographic literature had high chance to be sexually active than their counter peer.

2.2.2 Family Background Characteristics

Research evidence showed that socio-economic status of family has been credited both as predictive and restrictive for adolescent sexual behavior. A study carried out on Filipino adolescent sexual factors behavior showed that parents' characteristics predict onset of sexual activity, with low educational attainment and low income of parents leading to greater likelihood of early sex among adolescents (Laguna.P, 2001). In Nigeria, Isiugo.U and

Olyediran (2004) found that the house hold socio-economic status is inversely associated with sexual experience. Those from low socio- economic status homes started sexual relation one year earlier than those from medium or high socio- economic status. A study in South Africa also depicted that young woman from disadvantage socio-economic backgrounds may be more likely to practice early sexual intercourse and engage risk sexual behavior than medium and high socio-economic status (Hallman, 2004).

Parental education predicts the sexual behavior of young women. Research studies strongly support the hypothesis that parent education attainment has been presumed to be inversely related to early adolescent sexual activity. A study in US revealed that highly educated parents tend to have higher educational aspiration to their children. These aspiration should to some extent discourage sexual activity and encourage contraceptive use among sexually active (Upchurch.D et al, 2004). Handler.A (1990) stated mother education has a great correlation with sexual initiation of young female adolescent. Those who have primary school attended mother engage sexual activity at earlier age than secondary and above school attended mother. Slieshi(2005) in his study found that adolescent sexual activity reduced as the level of mother education improve from primary to secondary level. Teweldbirhan (1996) in his study stated that daughters of educated parents, especially mothers, are less likely to give birth outside of marriage.

Mother occupation status is directly linked with educational level. Mother employment outside the home may be open up the gate to engage sexual activities of the adolescent. To strengthen this view Tessema, (2003) cited from Thoromont and Camburn (1987), their hypothesis was that since mothers were not at home, the children would be with little supervision during out of school.

2.2.3. Parent- Adolescent Communication on Sexuality

Adolescence as described by WHO is the period of progress from appearance of secondary sexual characteristics to sexual and reproductive maturity (WHO, 1993). Adolescents seek to have timely information about sexuality and reproductive health. Parents and family members can be influential sources of knowledge, beliefs, attitudes and value for adolescents. They can help their adolescents develop a practice responsible sexual behavior and personal decision

making. Communication on sexuality in many African countries culture is defined as a taboo. The difficulties arise from either parents or children alike often are embarrassed to talk about sex. Other parents may not know what to teach their children is associated with a lack of knowledge and skills of communication on the subject of sexual and reproductive health. Sex education may encourage children to be sexually active at earlier ages (Population Report, 2001).

A study conducted in South Africa for instance depicted that adolescent woman afraid to talk to their parents about sex. Evidence from Zimbabwe indicated also that communication with parents about sex was often one sided, with parents mainly warning about the danger of sex (Population Report, 2001). In Uganda 75.8 percent of mothers talked their adolescent daughter about the subject of sexuality and HIV/AIDS (Damalie, 2001). A study carried out in Ethiopia revealed that when communication at family levels takes place, message on sexuality issues are usually ambiguous (Negussie et al, 1999). For example statement such as ‘do not play with boys’ are given by mothers advising their teenage girls on sexuality. When young people raise the topic of sexuality for discussion their parents would interpret it as actual evidence of sexual involvement and parent also feared that if they talked about sex they might make their adolescent more interested in exploring and practicing sex. Other study which was conducted by (Adugn, 2005) found that 76.5 percent and 70.3percent of the sexually at risk males and female were found to be have very low communication with parents on sexual related issue.

However, a study carried out in America suggested that parent-adolescent communication about sexuality appears to play an important role in reducing the onset of sexual activity and among sexually active adolescents increase contraceptive use (Obbo, 1993 cited in Lawage, 2004). Literature showed that parent–child communications have two expectations. First, those teenagers who thought about sex at home would be less likely to engage in sexual practice in which their parents who disapprove. Second, teenager who are guided about sex would be more likely to use contraceptive in case if they do have sexual intercourse (Weisten and Thornton, 1989 cited in Tessema, 2003)

2.3. Contraceptive Knowledge and Use of Adolescent

Reproductive health is a major concern of adolescent period because earlier sexual maturation and late marriage age have increased the period of risk for early or non marital pregnancy, abortion and STDs including HIV/AIDS. Young adolescents have little knowledge about contraception or basic facts of contraceptives. As a result they are exposed to unwanted pregnancy and other reproductive health related problems. As Liskin, 1985 cited in Dagne, 1999 stated that if a boy and girl start having sexual relations they should know that unwanted pregnancy can happen unless contraception is used every time they had sex. For instance in countries like USA, Germany, and Mexico 50-60% of both sexes did not use any preventive method of unwanted pregnancy at their first sex.

Current studies revealed that large proportion of students in Kenya and Nigeria had heard about contraceptives (Population Report, 1995). Ayo et al. (1991) mentioned that in Kenya, the use of contraceptives among sexually active unmarried adolescents revealed that 89 per cent have never used contraceptives. A study carried out in south west Nigeria depicted that predominant proportion of sexually active teenagers students(86.7 percent) did not use contraception at the time of first sexual debut (Esimai, OA and Orji,EO,2005). A study conducted by Karim et al (2003) in three Ghanaian towns on 15-19 years old respondents reported that only15 percent of males and 24 percent of females have used a condom during their first sexual encounter. Eggleston et al. (1999) also demonstrated that the younger adolescents when they begin sexual activity; the less likely they are to practice contraception. In Ethiopia contraceptive prevalence rate approximately reached 15 percent in 2006. Previous study in north Gonder showed that 75.7 percent of female high school students have knowledge of contraceptive (Mesganaw et al, 1995). Filimona and Jyoce (1994) also mentioned that 54 percent of high school students have contraceptive knowledge. Other study conducted by Eshetu et al(1997) in Addis Ababa found that among sexual active students only 43.2 percent use condom at first sexual encounter. A study in Butajira high school students revealed that about 91 percent of unmarried female students did not use modern contraceptive at their last sexual intercourse (Berhane et al, 2002). The 2005 Ethiopia Demographic and Health survey 91.2 percent of sexually active unmarried women knew any method. Sexually active unmarried women widely know injectable (87.7%), pill (86.8%) and condom

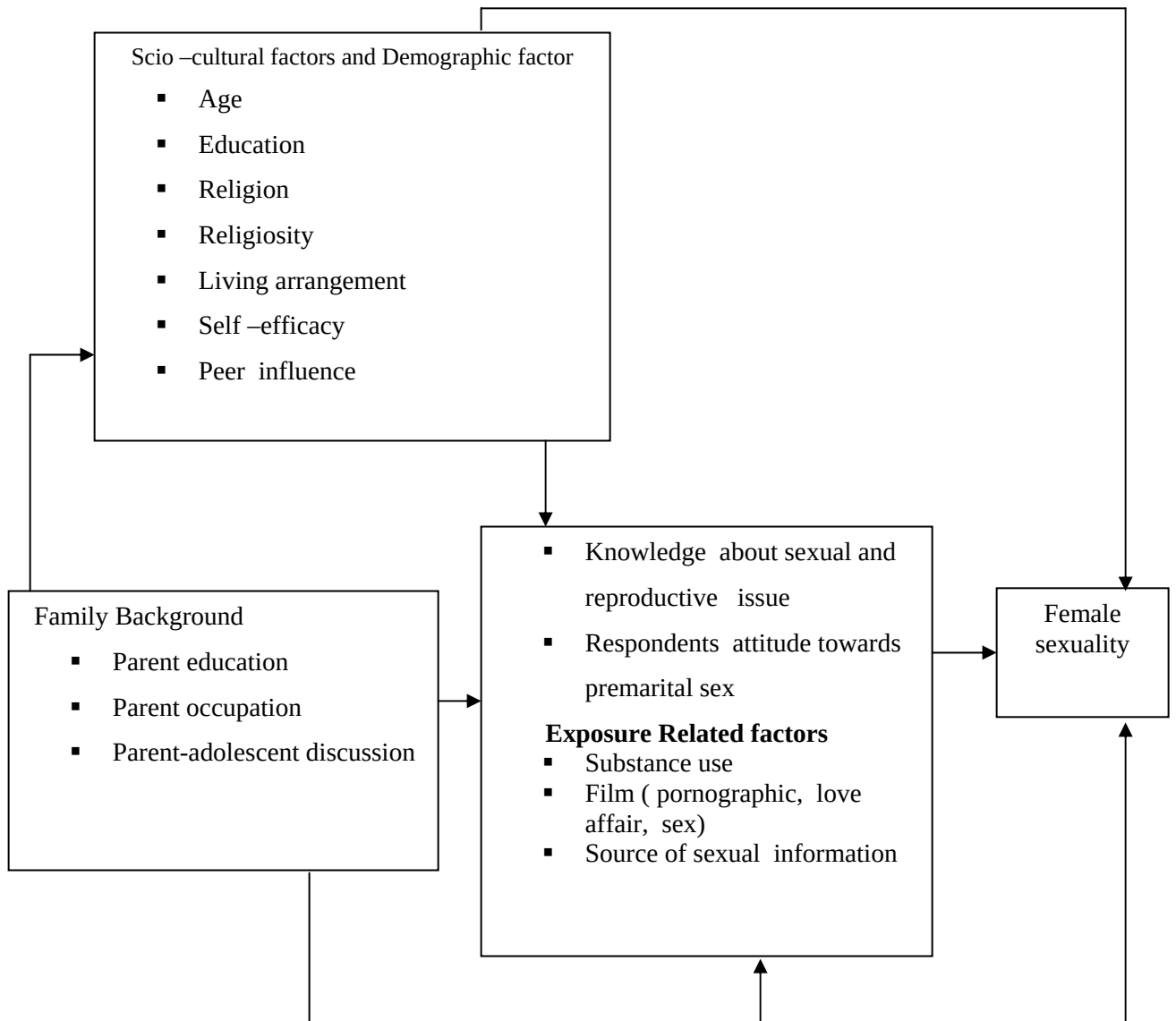
(69.8%). But 45 percent of sexually active unmarried women are not using any contraception (CSA, 2006). In 2005 Ethiopia Demographic and Health Survey also mentioned that at the beginning of sexual exposure, respondents aged 15-24 only one percent used condoms during their first sexual encounter (CSA, 2006). According to Dagne's finding based on high school students in Jimma town showed that condom use is low among the students in the study population and many of them reported having multiple partners (Dagne, 1999). Another study which was conducted by Solomon high school students in Addis Ababa found that 54 percent of the sexually active youths have experienced sex with more than one partner but only 18 percent that they have used condom (Solomon, 1990).

Therefore, research on adolescents' contraceptive behavior suggests a variety of explanation for low levels of contraceptive use. These are less knowledge about contraceptive and the consequences of unprotected sex; fear of side effect inaccessibility and affordability of it.

2.4 Conceptual Framework

The conceptual framework of the study is modified from Yanyi K. Djamba (1997). Initially, he developed the model factors influence female sexual behavior based on three theoretical approaches such as anthropological perspectives, rational adaptation or economic hypothesis and social disorganization. From this the researcher modified concept like human capital, social capital and kinship system. New variables that included in the model are Living arrangement, Self-efficacy, peer influence and source of sexual information. Then, socio-cultural and demographic factor, family background and intermediate factors conceptualized to influence female adolescent sexuality in this study. Socio-cultural and demographic; and family background variables are assumed to have relationship with dependent variable through intermediate variables. Socio-cultural, demographic and family background variables can have also directly influence on the dependent variable.

Figure .1 Conceptual Frameworks of Factors Affecting Female Adolescent Sexuality



Source: Modified from Yanyi K. Djamba (1997)

The study variables of the research are:-

1. Independent variables

- Socio-cultural and demographic characteristics of the respondents such as age, education, religion, religiosity, living arrangement, self-efficacy, and peer influence.
- Family background variables such as mother education and occupation, father education and occupation, and parent –adolescent discussion.

2. Intermediate variables

- Knowledge about sexual and reproductive issue (HIV/AIDS, STDs, conception and contraceptive knowledge and use)
- Respondents' attitude towards premarital sex
- substance use, Film (pornographic, love affair, sex) and source of sexual information

3. Dependent variables

- The dependent variable of this research is female adolescent sexuality.

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1 Description of the Study Area

The study town Woreta is the center of Fogera Woreda in South Gonder administrative zone. It is found 625 kilometers north of Addis Ababa along the main highway to Gonder.

Since the late 1980s Woreta town enjoyed a number of social amenities. Currently, there are two primary schools, one senior secondary school, one preparatory school, one health center, one agriculture College and one private college in the town. The existence of these amenities has led to an influx of many people from the surrounding Woredas and countryside to the town. Due to absence of high school outside Woreta town many students after completing grade five in their kebeles school come to Woreta, as result this high concentration of student population is present in the town.

The estimated population of Woreta town in 2005 was 27,655. Out of which 12721(49.9%) were males and 14,934(50.1%) were females. Among the total population, 3912(14.1 percent) of them are young population aged between 10-24 years and 3390(12.3 percent) of the population are in age range of 15-19(ANRSBFED, 2006). The population comprises Amhara, Tigrian and others ethnic group. Orthodox Christian and Islam have large number of followers. Protestant and others religious follower also exist in the town (CSA, 1995).

3.2 Data Source

Quantitative and qualitative data were used for the materialization of this study. The source of quantitative data was a survey conducted on female school adolescents in Woreta junior and secondary schools while qualitative data was collected from focus group discussion. Besides, secondary sources such as books, Journals, statistical abstract, published and unpublished reports were used for this study.

3.3 Study Population

The study populations for this study were never married school female adolescents that are between the ages 12-19 years in woreta junior and secondary schools. The total numbers of female students enrolled in 2006/7 in the study schools were 1573.

3.4 Study Design

A cross- sectional study design method was employed to undertake this investigation since it was important for collections of information from the respondents and to look the problem at a specific time. It is also appropriate study design because it helps in securing information about evaluative judgments of the respondents regarding factors affecting female adolescent sexuality

3.5 Sample Size Determination

The sample size of the study was determined based on the standard statistical procedures and assumption. Due to the absence of related studies in Woreta town, assumed to be 50 percent of school female adolescents are sexually active [ever had sex].

The formula used to calculate the sample size was proposed by Dougals et al (2006) as follow:-

$$n = \frac{P(1-P)(Z)^2}{E^2} ; n = \frac{0.5(1-0.5)}{(0.04)^2} + 10\% = 660$$

Ten percent contingency added for non-response then the total sample size was 660.

Where

n = sample size

P = estimated of the population proportion (50%) of female school adolescents sexual active

Z^2 = the desired level of confidence (95%) at a value of 1.96

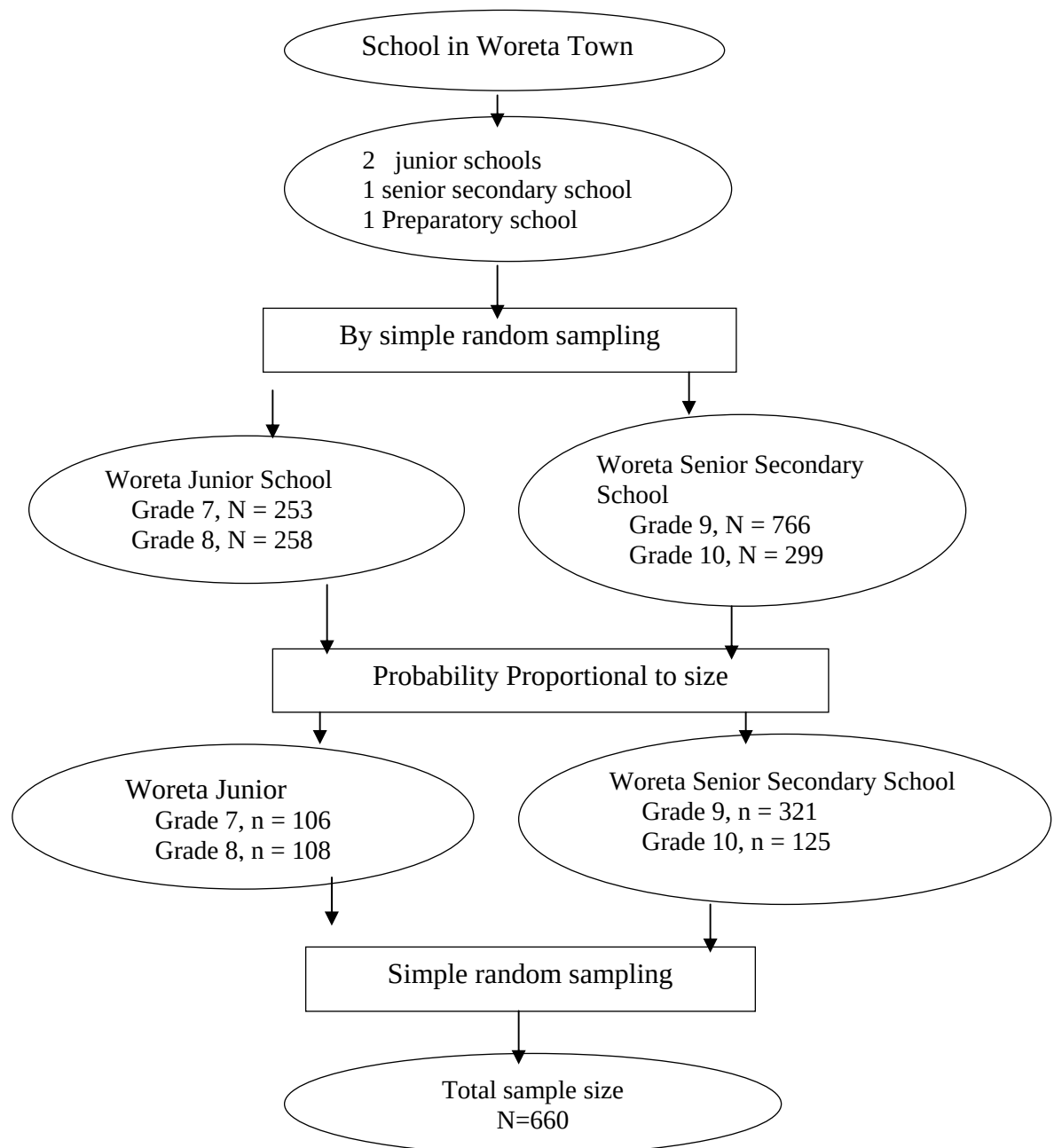
E = Margin of error in the population proportion (4%).

3.6 Sampling Technique

A multi-stage stratified sampling method was used for the selection of the sample. The selections of the study schools were done by simple random sampling technique among four schools in woreta town. Woreta Junior and woreta senior secondary schools were selected as a sample frame of the study. In each of the two schools grades were stratified into four strata, grade 7, grade 8, grade 9 and grade 10. Then allocation of sample size for each grade level was made by proportional probability technique to the size of the number of female students.

To reach up on the desire sample size, female school adolescents were randomly selected from each grade level. Accordingly, a total of 660 female adolescents from grade 7 – 10 were selected for this study. The following diagrammatic expression describes the sampling procedures employed to secure the required sample size.

Fig 2 Diagrammatic scheme of sampling procedure



3.7 Procedure of Data collection

3.7.1 Instruments of Data Collection

Different data collection tools were used to collect relevant information on the basis of the study objectives. The tools were questionnaire and focus group discussion.

Questionnaire was used to gather information from respondents. The questionnaire was first prepared in English and then translated into Amharic language. So as to minimize potential complexities and data defects most of the items are per coded with a great deal of precautions. The questionnaire include female adolescents socio-demographic characteristics, family situation, sexual history, and adolescents attitude towards premarital sex, contraceptive knowledge and use, some selected reproductive health characteristics, peer behaviour and influence and self-efficiency. Female adolescents attitude towards premarital sex questions were designed based on five point liker scale ranging from strongly disagree to strongly agree. The range of liker scale were (strongly disagree =1, disagree=2, neutral =3, agree=4 and strongly agree=5].

To cross-validated and substantiate the study, qualitative data was collected through FGD. The researcher felt that qualitative data could offer important insight to investigate adolescent sexual behaviour. The focus group discussion allowed to collect richer and more detailed information from female adolescent which compensated the limitation of self-reported data due to the sensitivity of the topic regarding sexual behaviour. The FGD were conducted at two study schools. It was held on the identified and guide line questions. A group of eight female adolescents have been participating in the discussion. The participants were recruited from each grade level. A moderator of each focus group discussion was the principal investigator with two trained assistants. In depth discussion were conducted with them on the sex-related issues, and their attitude towards premarital sex and perception of societies on premarital sex. The principal investigators and the research assistant took note the views of the participants and also tape-recorded. Finally, the researcher transcribes the reaction in each focus group and wrote as a supplement of the questionnaire.

3.7.2 Pre-testing instrument

Prior to the start of fieldwork, the questionnaire was pre-tested among respondents who are not part of main study in one junior and secondary school in Woreta town, to make sure that the questions were clear and could be understood by the respondents. As soon as pre-testing of the questionnaire completed, the questions were rearranged (clarity, wording of items, and weakness) based on the feedback that was obtained from the respondents.

3.7.3 Data Collecting Management

The refined and finalized data gathering instrument administered to Woreta senior secondary and Woreta junior school female adolescents. The administration of the questionnaire was done with the help of two supervisors and seven data collector who were trained for two days on how to administer the instrument, the purpose of the study, content of the questionnaire and content of focus group discussion.

Before distribution of the questionnaire the objectives of the study was explained clearly for the respondents. The consent of each respondent was asked and sufficient time was given for the subjects to contemplate on the implication of the item and provide accurate information. Moreover, conducive situation and enough time arranged in order to avoid hurried and unthoughtful responses. Research supervisors made close supervision and checked the completeness of the questionnaire.

To conduct the focus group discussion, appropriate time, place, and situation was arranged for participants. The objectives of the study was explained clearly for the participant and assured that their responses could be kept confidentially. All the focus group discussions were moderated by principal investigator with two trained assistants in whom their main task is tape-recording and taking notes of all discussions.

3.8 Method of Data Analysis

The data collected through self-administered questionnaire was cleaned, edited, and entered into a computer. Then, using Statistical Package for Social Science (SPSS) soft ware version 13 performed the analysis.

Uni-variate analyses were used to describe the socio-cultural, demographic characteristics of the respondents, parent background characteristics, Sexual behaviour of adolescent and intermediate variables of the study. Bi-variate analysis was used to assess the relationship of several independent variables with the dependent variable by using chi-square test. The chi-square test was used to identify independent variables that explain the dependent variables that would be retained for further analysis at the multivariate stage.

Further, multivariate analysis was carried out to explore the net effect of all independent variable on the dependent variables by controlling possible intervening variables. To do multivariate analysis, a binary logistic regression model was used. Binary logistic regression is a form of regression, which is used when the dependent variable is dichotomous and the independent variables are any type.

The dependent variable for this study is sexual behaviour which is a binary or dichotomous (with two outcomes). The value label of the variable is “1” if the respondent ever had sexual intercourse and 0 if the respondents never had sexual intercourse. Binary logistic regression model was used, because it predicts the log of odds of the dependent variable as a linear function of the independent variables and the model is also suitable for multivariate analysis.

3.9. Ethical consideration

This study was done in conformity with the ethical guidelines approval of the population studies and research center department. By the explaining objective of the study and its significance, relevant permission obtained at wereda level from the responsible bodies of the educational department. At individual level after explaining the purpose of the study, verbal and written consent obtained from all participants prior to their participation in this study. Furthermore investigator informed that their participation in the study voluntary and that that they could not obligated to provide to any question(s) with which they are uncomfortable. They also free to withdraw their participation from the study at any time they want. Participants assured that confidentially would be maintained and they completed the questionnaire in separate room and the respondents name not included in the questionnaire.

CHAPTER FOUR

SELECTED BACKGROUND CHARACTERISTICS OF THE SAMPLE POPULATION

This chapter deals about some selected background characteristics of respondents and their parents, sexual behavior of female adolescent and selected reproductive health knowledge in Woreta junior and secondary school.

4.1 Socio-Cultural and Demographic Characteristics of the Respondents

A total of 660 junior and secondary school unmarried female adolescents were included in this study. The socio- cultural and demographic characteristics of these respondents that are presented in Table 4.1 considered as the basis for understanding the sexual behavior of adolescents.

Age is usually expected to be very crucial demographic factor that affect sexual behavior of adolescent. The majority (92.7%) of the respondents were found between in the age 15-19 while the remaining 7.3% were of age between 10-14 years. The mean and median age of the respondents was 16.6 and 17 years old respectively. The youngest participant was 12 years and the oldest was 19 years old.

Table 4.1 Percentage Distribution of Students' by Socio-Cultural and Demographic Characteristics, Woreta Town, 2007

<i>Characteristics (N=660)</i>	<i>Number</i>	<i>Percentage</i>
Age		
10-14	48	7.3
15-19	612	92.7
Educational level		
Junior(7 th &8 th)	214	32.4
Secondary(9 th &10 th)	446	67.6
Religion		
Orthodox Christian	336	81.2
Muslim	97	14.7
Others	27	4.1
Church attendance		
Daily	97	14.7
Occasionally	318	48.2
Accidental	89	13.5
Once per week	156	23.6
Living arrangement		
Both biological parents	277	42
Mother only	89	13.5
Father only	35	5.3
With classmate (Rented house)	195	29.5
Others	64	9.7

The table also shows female students from 7th to 10th grade; constituting 16.1 % (7th) 16.4 % (8th) 48.6% (9th) and 18.9 % (10th) participated in the survey. Education level has a profound effect on adolescent sexuality; either formal or informal education has played a significant role on changing the attitude and behavior of adolescents' on reproductive and sexual health.

Religion can be thought to have an impact on the attitude concerning sexual behavior. The major religious denominations of the respondents were orthodox and Muslim constituting 81.2 % and 14.7% respectively. About 4.1% were also Catholic and protestant followers. Concerning attending religious institutions, approximately half of the respondents attended occasionally, followed by once per week (23.6%), daily (14.7%) and accidental (13.5%).

Adolescent from whom they live determine their sexual activity and can be exposed to deviant behavior. 42% of the respondents were living with both biological parents .29.5% of the respondents were living with classmate friends in rented house. The majority of the respondents (98.5%) were from Amhara ethnic group while the remaining 1.5% was from Tigria and Oromo (not shown in the table).

4.2 Background Characteristics of Respondents Parent

In this survey, respondents were asked about their family socioeconomic status which operationalised as parental education and occupation. Table 4.2 shows the selected socio-economic characteristics of respondents' parent.

Table 4.2 Percentage Distributions of Respondents' Parent by Background Characteristics, Woreta Town 2007

<i>Characteristics (N=660)</i>	<i>Number</i>	<i>Percentage</i>
<i>Mother educational level</i>		
Illiterate	386	58.5
Reading and writing	116	17.6
Primary (1-8 grade)	53	8.0
Secondary (9-12 grade)	33	5.0
Above secondary	22	3.3
Mothers not alive	50	7.6
<i>Mothers occupation</i>		
Housewives	419	63.5
Daily laborer	18	2.7
Farmer	72	10.9
Employed (government & private)	40	6.0
Self employed	61	9.2
Mother not alive	50	7.6
<i>Father educational level</i>		
Illiterate	267	40.5
Reading and writing	170	25.8
Primary (1-8 grade)	93	14.1
Secondary (9-12 grade)	45	6.8
Above secondary	40	6.0
Father not alive	45	6.8
<i>Fathers occupation</i>		
Daily laborer	77	11.7
Farmer	194	29.4
Employed (government & private)	255	28.6
Self employed	89	13.5
Father not alive	45	6.8

As shown in the tables (58.5%) of the respondents' mothers were illiterate. About 3.3% of their mothers had attended above secondary level. Regarding to mother occupation, most of the respondents' mother occupations were housewives (63.5%) and 2.7% of their mothers were daily laborer.

As regard to father educational level 40.5% of the respondents reported that their fathers were illiterate and 6.1% of their father had above secondary education. The majorities of respondents' father were farmer (29.4%), followed by employed workers in government and private organization that accounted 28.6%. The others engaged in daily laborer (11.7%) and self-employed (3.8%). Generally mothers' educational level and occupations were lower than fathers.

4.3. Sexual Behavior of School Female Adolescent

Under this section adolescents were asked about whether they have had sexual intercourse in their life time or not. Due to the sensitivity of sexual issue, respondents' left the question focusing on their own sexual history rather preferred to answering the question related to their friends during the pretest of the questionnaire. Having these things into consideration, the researcher modified some question in the questionnaire. After modifying the questionnaire they have been asked about their friends sexual experience and then they have been asked about their own sexual experience this way make them to be some how open than the previously designed question. Therefore, it was expected in this survey that the respondents were confident to tell the truth about their experience of sexual intercourse.

Table 4.3 Percentage Distribution of Female Respondent by Ever had sex, Age at First Sex, Age of partner, Woreta, 2007

<i>Have ever had sex(N=660)</i>	<i>Number</i>	<i>Percent</i>
Yes	238	36.1
No	422	63.9
<i>Age at first sexual debut(N=238)</i>		
Less than 18 years	220	92.4
Greater or equal 18 years	18	7.6
<i>Age of partner(N=238)</i>		
five years Younger	10	4.2
five years Older	70	29.4
About the same age	99	41.1
I don't know	59	24.8

As table 4.3 shows that among 660 unmarried female junior and secondary students, 36.1% of respondents had ever had sexual intercourse while the remaining 63.9% had never had sexual intercourse. This figure is relatively higher when compared with the result of other studies. In Addis Ababa Konjit (1998) found that 20.3% of female adolescent started sexual intercourse. The finding of Filimona, B and Joyce,P(1994)in Harar revealed that 20% of female adolescent admitted to have sexual experience. A study by Samson.K(1997) found that out of 475 female students ,30.1% has started sex. Wosen (2005) found 39.1% of female adolescent experienced sexual intercourse. The finding of Samson (1997) and Wosen(2005) are comparable with this study.

The mean and the median age of sexual experience of unmarried female adolescents were 16.2 and 16.5 respectively (not shown in the table). The mean age at first sexual debut was 16.2 with a range from 14 to 19 years. In most setting, female sexual practice preceded marriage but large proportion of female adolescents (92.4%) first had sex before age 18. This may indicate that the norm of sexual intercourse during marriage is eroded. Respondents also asked about the age their first sexual partner with relative to their age, the majority of respondent (41.1%) made first sexual intercourse about the same age with their partner and only 4.2% of them made first sexual intercourse five years younger made than their age. The study conducted in Bhair Dar secondary and preparatory school showed that the age at first sexual debut range from 13 to 18 years (Silshi, 2005). A study carried out in Addis Ababa showed that the earliest reported age of onset of sexual intercourse for girls was 14 years with mean age of onset being 15.3 years (Eshetu et al, 1997). Ismaile et al (1997) also found in kola Deba high school the mean age of sexual commencement of female adolescent was 15.5 years.

During FGD most of the participant argued that the ideal age for female sexual debut to either age 18 or above 18 years. Most of them noted that if females start sexual intercourse prior to 18 years, they become pregnant at immature age which exposed fistula. They also faced other reproductive health problem such sexually transmitted disease including HIV/AIDs.

Table 4. 4 Percentage Distribution of Female Respondent by Sexual Experience prior to Two Months the Survey and Number of Sexual partner, Woreta, 2007

<i>Number of sexual partner</i>	<i>Number</i>	<i>Percent</i>
One	207	87
Two	25	10.5
Three	6	2.5
<i>Sexual activity status prior to two month the survey (238)</i>		
Active	75	31.5
Inactive	163	68.5

As can observed in the table, nearly 87% of the respondent practice sex with only one sexual partner in their lifetime followed by two (10.5%) and three (6%). This finding was also supported by FGD participant that expressed their view of limiting oneself to only one sexual partner is important to reduce risk confronted such as for HIV/AIDS. This indicated that adolescents have knowledge of HIV/AIDS a sexually transmitted disease. Table 4.4 also shows 31.5 percent of school female adolescent were sexually active and 68.5 percent of them become sexually inactive in the past two months.

Several study findings showed that there are many motives and reasons young people engage in sexual intercourse. For instance, Adugna(2005) ,Wosen (2005) and Eshetu and his Colleges(1997) found that reason for young female adolescent engagement in the practice of sex for the first time were love affairs, all friends done it, to get money, forced and others. A study conducted in Jamaica revealed that motives and reasons for engaging in sexual intercourse are curiosity and love, see what it was like, gift obtained from friends and obligation. Meharie (2005) found that the most prominent motives for never married young female in Addis Ababa for first sex were desire to have sex which accounted 53%. In this study, the majority of respondents (38.7%) reported that reason for their first sexual intercourse was want to marry the person, followed by love affairs (18.9%), all other have done (11.3%), to get money (9.7%), forced (7.4%) and physical pleasure (5.9).

Table 4. 5 Percentage Distribution school Female Adolescent by Reason for the First Time Involve Sexual Intercourse, Woreta, 2007

<i>Reason for having sex for the first time</i>	<i>Number</i>	<i>Percent</i>
Physical pleasure	14	5.9
Want to marry him	92	38.7
Love affairs	45	18.9
All friends have done	27	11.3
To get boy friends	10	4.2
To get money	23	9.7
Forced	17	7.4
Non response	10	4.2
Total	238	100

During the FGD, the discussants expressed reasons for female adolescent enter sex for the first time. They said that, females enter in to sexual intercourse for the first time to test what it looks like (self-experimentation), economic problem and by peer pressure. They also said that females enter sexual intercourse for the first time by forced and some of their intimate friend encountered this situation.

Table 4. 6 Percentage Distribution of Female Adolescent by Reason not having Sexual Intercourse, Woreta, 2007

<i>Reason not having sexual intercourse</i>	<i>Frequency</i>	<i>Percentage</i>
Fear of HIV/AIDS and STDs	70	16.6
Fear of parents	109	25.8
Wait to until marriage	209	49.5
Wrong to do it	34	8.1
No desire	129	30.6
No opportunities	25	5.9
Religion reason	65	15.4

Table 4.6 shows that the multiple response of respondents by reason not having sexual intercourse. It revealed that wait until marriage (49.5%) was the most important reason for not having sexual intercourse for the sexually inactive female students, followed by no desire to

have sex at this age (30.6%), fear of parents (25.8%), fear of HIV/AIDS and STDs (16.6%) and religious reason (15.4%).

4.4 Sexual and Reproductive Health Knowledge and Sources of Information

4.4.1 Reproductive Health Knowledge of Female Adolescent

To assess the knowledge of respondents on reproductive health issue, the researchers asked a few questions about pregnancy at first sex, unsafe period in menstrual cycle, HIV/AIDS and STDs.

Table 4. 7 Percentage Distribution of Female students by Reproductive Health

Knowledge of Female Adolescent, Woreta, 2007		
<i>Knowledge indicators of reproductive and sexual health(N=660)</i>	Number	Percent
<i>A girl can be pregnant at first sexual intercourse (N=660)</i>		
Yes	259	39.2
No	361	60.8
<i>Knowing unsafe period in menstrual cycle (N=660)</i>		
Correct	241	36.5
Incorrect	149	22.6
I don't know	270	40.9
<i>HIV/AIDS is sexually transmitted disease (N=660)</i>		
Yes	650	98.5
No	10	1.5
<i>Ulcer/sore around genital is a sign of STDs</i>		
Yes	457	69.2
No	203	30.2

Significantly, more school female adolescents (60.8%) believed that a girl could not become pregnant at first sexual experience. On unsafe period in a menstrual cycle, only 36.5% of them knew correctly the exact period (approximately two week after the day of the period begin) while 22.6 wrongly believed that the fertile period is just before her period begins or during her period right after her period ended and the remaining 40.9% said I do not know. The table also shows that large proportion of the respondents (98.5) said HIV/AIDS is a sexually

transmitted disease and incurable one. Regarding sign of STDs, 69.2% of female adolescents reported genital sore /ulcer.

Several studies revealed that students had low level of knowledge on pregnancy at first sex and unsafe period in menstrual cycle. For instance, Negussie et al (1999) found that 13.2% of the students knew the unsafe period during normal menstrual cycle, and females were not better off in this aspect. In Jamaica, only 4.3% of girls could identify the unsafe period (Eggleston, 1999). Only one third knew that pregnancy is possible at first sexual intercourse (ibid). In Kenya 31% of females gave the correct answer (two week after her period begin) of unsafe period which females most likely to become pregnant if they had sex (Kiragu.k and Zabin.S, 1995). Three-fourth of high school students knew that a female could be pregnant even if she had sex only once (ibid). As compared to finding in Jamaica and Kenya, the finding of this study is better regarding to knowledge of the two questions.

4.4.2 Contraceptive Knowledge and Use

Adolescent frequently have little knowledge about contraception or basic fact of contraception. Table 8 represents contraceptive knowledge of the respondents.

Table 4.8. Percentage Distribution of Female Students' Knowledge about Contraceptive Method, Woreta, 2007

<i>Ever heard contraceptive (N=660)</i>	<i>Frequency</i>	<i>Percent</i>
Yes	637	96.5
No	23	3.5
<i>Knowledge of Contraceptive by method</i>		
Pill	300	45.5
IUD	130	19.7
Injectable	488	73.9
Condom	400	60.6
Diaphragm/foam/Jelly	105	15.9
Female sterilization	98	14.8
male sterilization	111	16.8
Norplant	125	18.9
Others	68	10.3
Any method knowledge at least one		77.1

As can be seen from the table 96.5% of the respondent ever heard of contraceptive. The respondents choose more than one method concerning the type of contraceptive method know, majority of the respondents knew injectable contraceptive (73.9%), followed by condom (60.6) and pill (45.5%). Regarding the number of contraceptive method know, 73.9 percent of the respondents knew four to six type of contraceptive, 16.9% knew more than six method, 5.6% knew one to three method and 3.5 percent of them did not knew any method. Even though many of the respondents heard about contraceptive method, 77.1 percent of the respondent reporting that they knew at least one method. A study carried out in high school students in north Gonder revealed that 75% of the high school female students have knowledge of contraceptive. Pill is widely known method by the students (Mesganaw et al 1995). Filimona and Joyce (1994) have also mentioned that 54% of the high school students had contraceptive knowledge. Berhane and his Colleagues (2002) found that 71.1% of high school never married students know at least one contraceptive method. The finding of this research is higher than the other studies.

Hearings about contraceptive dose not mean having detailed knowledge of specific method. Respondents asked about contraceptive use at their first, last sexual encounters and method use.

Table 4. 9 Percentage Distribution of Female Students' Contraceptive Use, Woreta, 2007

<i>Contraceptive ever use (N=238)</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	71	29.8
No	167	70.2
<i>Contraceptive use at last sex (N=238)</i>		
Yes	68	28.6
No	170	71.4
<i>Condom use at first sex (N=238)</i>		
Yes	52	21.8
No	186	78.2
<i>Method used (N=71)</i>		
Pill	17	23.9
IUD	8	11.3
Injectable	20	28.2
Condom	15	21.1
Diaphragm/foam/Jelly	6	9.4
Periodic abstinent	5	7.4

As table 4.9 indicate among 36.1% sexually active female students, only 29.8% of the respondents ever used contraceptive and 28.6% of the respondent use contraceptive at last

sexual intercourse. Regarding condom use at first sex, approximately one fifth of school female adolescents used condom at first sexual intercourse while 78.2 percent of the respondent did not use condom at first sex. Eshetu and his colleagues (1997) found that only 17.6% of the sexually active students used condom on their first sexual encounter. The finding of this study is higher than the above findings. Regarding to type of method they used, the majority of school female adolescent used injectable (28.2%), followed by pill (23.9%) and condom (21.15). The finding of this study is consistent with the finding of (Mesganaw et al, 1995). Ismail et al (1997) found that 34.1% of female high school students have used one of the contraceptive that include used pill (42.3%), rhythm method (59.9%) and condom (43.15%). Due to low use contraceptive and condom, adolescents might encounter problems like unwanted pregnancy, abortion, STDs, HIV/AIDS and others. According to EDHS 2005 the prevalence of contraceptive in the age group 15-19 was 3.5 per cent (CSA, 2006). Therefore, the low use of contraceptive at first sex and last sexual debut may be useful in planning and implementation of information, education, and communication (ICE) activities.

In the focus group discussion (FGD) most of junior and secondary school students said that every school female students at this stage know about contraceptive. “All grade discussants said that all high school students heard about contraceptive method but only few use it. The participant said that the most commonly attributed reasons for low use of contraceptive of school adolescents are lack of detailed knowledge of contraceptive, family influence, shyness and fear to go to pharmacies and buy contraceptive, and shy to use”.

4.4.3 Source of Information about Reproductive and Sexual Health

The information that young people receive regarding their sexual and reproductive health (SRH) is crucial because it influences not only their knowledge and attitudes, but also their abilities to avoid negative outcomes of sexual behavior. Young people have a variety of sources from which they receive information on sexual and reproductive matters and these include the print and electronic media, school, siblings, parents, relatives and friends. Despite the existence of multiple sources, some gaps exist because of incomplete and/or inaccurate information emanating from these sources there by making them unreliable.

Table 4.10 Percentage Distribution of Respondent source of Information of Reproductive and Sexual Health and Preference to Talk

Source of information	Frequency and percentage	Preference to talk(N=660)	Frequency and percentage
Mothers	131(19.8)	Mothers	132(20.0)
Relatives /fathers	76(11.5)	Fathers	26(3.9)
Female friends/peers	304(46)	Relatives	11(1.7)
Partners	93(14.1)	Brothers and sisters	91(13.8)
Health institution	236(35.8)	Boy friends	104(15.8)
School	153(23.2)	Female friends/peers	296(44.8)
Mass media	125(18.9)	Total	660(100.0)
Others	15(2.3)		

*note value in parentheses is percentage

In this section attempts were made to examine respondent's sources of information regarding reproductive and sexual health issue. As table 4.10 indicate that the majority of unmarried female adolescents in the study receive information from female friends/peers (46.0%), followed by health institution (35.8%), school (23.2%), mothers (19.8%), and mass media (18.9) and partner (14.1%). In this study next to female friends/peers, health institutions are by far the most important sources of information on reproductive and sexual health issue.

Respondents were also asked their preferred individuals to talk about reproductive and sexual health issue. Table 4. 10 indicate that 44.4% of female adolescent preferred to talk with their female friends and 20.0% of them preferred to talk with their mothers. Only 3.9% of them preferred to talk with their fathers. This study found that most of the respondent preferred to talk with their female peers. This study is also supplemented by FGD that most of the discussants argued that female friends/peers are the main source of information of RSH and at time their preference. This is consistent with study in Zeway (Negussie et al, 1999).

As many studies showed that there is a gender difference on preference to talk sexual and reproductive health issue. Females always preferred to talk with their mother than fathers. However, Negussie, et al (1999) stated that 75 % of the students preferred to discuss about body changes that occur during adolescence with peers of the same age. On the contrary, Ranim et

al (2003) in Nicaragua found that among young women parents clearly outranked peer friends as the main preferred source of sexual matter with 40% reporting parents and 37% peer friends as source.

4.5 Attitude of Female Adolescent towards Premarital Sex

There are various beliefs in many countries concerning premarital sexual intercourse. Premarital sexual intercourse for boys is accepted in many traditional cultures though there are some societies that disapprove sex before marriage for both boys and girls. In Ethiopia mostly virginity of young women until marriage is much glorified and respected. However, 2005 EDHS data revealed that unmarried young women and men engaged in premarital sex (CSA, 2006).

In this study, respondents were also asked about their attitude towards premarital sex and the ideal age of female adolescents begin sex. Eight-eight percent of the respondents disagreed and 12% of them agreed on the involvement of young unmarried female in sex before marriage. Most of the respondents (85.6%) suggested that the ideal age for female begin sex 17-20 years while the remaining 14.4% suggested 14-16 years. Even though large proportion of the adolescent disapproved premarital sex, greater than nineteen per cent them had sex before the age of 18 years.

As observed from focus group discussion most of junior and secondary school students said our parents and the societies condemned talking about sex related issue openly. “most of them argued that not only openly talking on sex related issue but also participating in clubs working on reproductive health issue is a problem. They believed that open discussion on sexual and reproductive health issue led to sexual intercourse”.

CHAPTER FIVE

FACTORS AFFECTING FEMALE ADOLESCENT SEXUAL BEHAVIOUR

This study attempted to investigate factors that affect sexual behavior of female adolescents in Woreta Junior and secondary school. The over all sexual and reproductive behavior of female adolescents are shaped by socio- cultural and demographic characteristics of adolescents such as age, education level, religion, religiosity, the living situation from whom they live, peer behavior and family situation. Moreover, adolescent's attitude towards premarital sex, adolescent- parent communication on sexual issue, and knowledge of reproductive health influenced the sexual behavior of adolescents. Therefore, this chapter shows the relation of the independent variable with dependent variable.

5.1 Bi-variate Analysis

5.1.1 Differential of Female Ever had Sex

5.1.1.1 Socio-cultural and Demographic Differential of Female Ever had Sex

Adolescent sexual behavior might vary with socio-cultural and demographic characteristics of adolescents. The analysis is performed on the differential of sexual experience of female adolescent by the aforementioned factors by using chi-square test.

The bivariate analysis, based on the Pearson's chi-square statistic, provides a preliminary insight into the association/relationship between all selected independent variables and dependent variable. For all independent variables taking one-at-a-time, a test of association was carried out using the Pearson chi-square. High values of Pearson chi-square test for a given independent variables indicates that there is strong association between each of the given independent variables and the dependent variable keeping the effect of the other factors constant.

Table 5.1 Chi-square result of School Female Adolescent Ever had Sex with Socio-Cultural and demographic Characteristics of Respondents, Woreta, 2007

Variable	Never had sex		Ever had sex		Total		X ² (Df)	P-Val
	Num	Per	Num	Per	Num	per		
Age								
10-14	43	89.6	5	10.4	48	100	14.764	0.000*
15-19	379	61.9	233	38.1	612	100	(1)	
Total	422	63.9	238	36.1	660	100		
Education level								
Junior(7-8)	157	73.4	57	26.6	214	100	12.201	0.000*
Secondary(9-10)	265	59.4	181	40.6	446	100	(1)	
Religion Affiliation								
Orthodox	349	65.1	187	34.9	536	100	1.952	0.377
Muslim	56	57.7	41	42.3	97	100	(2)	
Others	17	63	10	37.0	27	100		
Total	422	63.9	238	36.1	660	100		
Church attendance								
Daily	81	83.5	16	16.5	97	100	18.880	0.000*
Occasionally	341	60.6	222	39.5	563	100	(1)	
Total	422	63.9	238	36.1	660	100		
Living arrangement								
Both biological parents	188	67.9	89	32.1	277	100		0.000*
Only one parent	96	77.4	28	22.6	124	100	31.842	
With school	113	57.9	82	42.1	195	100	(3)	
friends(Rent)	25	39.1	39	60.9	64	100		
Others(alone, partner & relative)								
Total	422	63.9	238	36.1	660	100		

As can be seen from the above table, the chi-square test result indicates that respondents socio-cultural and demographic variables with the dependent variable.

Age shows association with ever had sex of unmarried female adolescents at ($X^2 = 14.764$, $P < 0.001$). The proportion of respondents who were ever had sex increase with age. The table showed that 10.4% of unmarried female respondent's age 10-14 years had ever had sex and about 38.1% of the respondents had ever had sex in the age group 15-19 years. The result of this study indicates that sexual experience increase with age. This trend is supported by others studies. Zubedia(1992), Tewoldebirhan(1996) and Konjit(1998)found that sexual experience increase as age increase.

Education level of the respondent is associated with female school adolescent sexual experience with ($x^2 = 12.201$; $P < 0.001$). The proportion of female adolescent ever had sex increase from 26.6% to 40.6% as their grade increase from primary to secondary level. The data clearly shows that educational attainment is associated with elevated likelihood of being exposed to sexual relation. The school represents an important socialization environment for adolescent behavior. The school is not limited on teaching skills and inculcating values necessary to prepare the adolescent for a responsible adulthood, it also provides opportunities for adolescents to network with their peers. It is while in school when most young adolescents have their first crush and where most relationships are formed.

Religions of the respondents are not statistically associated with female school adolescent ever had sex with ($x^2 = 1.952$, $P = 0.377$). This revealed that those who followed Orthodox, Muslim, Catholic and Protestant had not difference in sexual experience of female adolescents. However, respondents religious institution attendance is associated with sexual experience of female adolescents at ($x^2 = 18.880$; $P < 0.0001$). The sexual experience level of female adolescent increase from 16.5% to 39.5% as church attendance of the respondents from daily to occasionally.

Living arrangement of female adolescent's is also a predictory of sexual experience. The data showed that living arrangement of respondents are associated with sexual experiences of female adolescent at ($x^2 = 31.842$, $P < 0.001$). Those who lived with both biological parents were more sexually active than those lived with only one parents (32.1 percent Vs 22.6 %). Female adolescents lived with school friends in rented house were almost sexually experienced than others (alone, relatives and partners) (42.1% Vs 60.9%).

Even though adolescents lived with both biological parents, they might be involving sexual intercourse more than those who lived with single parents and others. This might be due to internal instability and unsatisfaction in needs in the family. In addition, the behaviour and view of individuals also played pivotal role in engaging in risk. Kiragu and Zain(1993)confirmed that young women who had been living with both parents were sexually active compared with of those living away from both parents. They also found that female from environments that characterized by high parental conflicts were twice as likely to be sexually active than others. This study found that those who lived with single parents were less sexually experienced than who lived with both parents. This finding is also consistent with other similar study findings (Dejene, 2005, Yared and Tsegaye 2005). On contrary, Konjit (1998) found that female adolescents those who lived with both biological parent were less likely to have sexual inter course compared with those who lived with single parents. Therefore, it can be concluded that sexual activity of young women may be indirectly or directly manifestation of family situation.

5.1.1.2 Family Background Characteristics Differential of Female Ever had Sex

Family background has been credited both as predictive and restrictive for adolescent sexual behavior. The table presented mother education and occupation, father education and occupation.

Table 5.2 Chi-square result of School Female Adolescent Sexual Experience with Their Parents Background Characteristics Woreta, 2007

Variables	Never had sex		ever had sex		Total		X ² (Df)	P-val
	Num	Per	Num	Per	Num	Per		
Mother educational level								
Illiterate	226	58.5	160	41.5	386	100	32.814 (2)	0.000*
Primary	106	62.7	64	37.3	170	100		
Secondary & above	41	74.5	14	25.5	55	100		
Mother occupation								
House wife	242	74.4	177	42.2	419	100	9.308 (3)	0.010**
Employed	70	69.3	31	30.7	101	100		
Others	61	67.8	29	32.2	90	100		
Father educational level								
Illiterate	171	64.0	96	36.0	267	100	11.498 (2)	0.003**
Primary	144	54.8	119	45.2	263	100		
Secondary & above	62	74.	23	26,0	85	100		
Father occupation								
Farmer	121	62.4	73	37.6	194	100	0.173 (2)	0.917
Employed	157	61.6	98	38.4	255	100		
Others	100	61.5	66	39.8	166	100		

Significant at $p < 0.001$; ** Significant at $p < 0.05$;

Mother education and occupation:

As table 5.2 displays that the respondents mother education is associated with ever had sex of female adolescents with ($X^2=32.814$; $P < 0.001$). The proportion of female adolescent 41.5 percent ever had sex their mothers were illiterate, 37.3% of them ever had sex their mothers completed primary school, 25.5% of them ever had sex their mother attended secondary and

above level of education. Thus, the proportion of female adolescents who were sexually experienced decrease with educational level of mother increase. The occupation of respondents' mother is associated with school female adolescent ever had sex with ($\chi^2=9.308$, $P=0.010$). 42.2% of the respondent whose mother occupation is housewife sexually experienced, 30.2% of whose mother employed is sexually experienced and 32.2% of their mothers engage others occupation is sexually experienced.

Mother education and occupation might be interrelated with each others. The employment status of mother may depend upon the education level and vise-versa. As literature showed that there are two views on mother education with relation to sexual practice, if their mother educated, she may work out side and there would be little supervision of adolescent during out of school time. This may lead them to involve in sexual activities. On the other hand, mother employments create an exposure to outside world she acquired knowledge of different environment and may freely communicate sexual related issue with their daughter. This environments save the adolescent from risk of unwanted pregnancy, abortion, STDs including HIV/AIDS. Therefore, it can be concluded that mother education is one regulator of adolescent's from numerous risks.

Father education and occupation

Education level of respondents' father is associated with ever had sex of school female adolescents at ($X^2=11.498$, $p=0.003$). The proportion of school female adolescents (36 %) ever had sex their father were illiterate, 45.2% of the respondents sexually experienced their father's attended primary school level and 26% respondents sexually experienced their father's attended of secondary and above level. The education level and occupation of father are interrelated each other. This finding is consistent with a study conducted in Bhair Dar secondary and preparatory school (Slishi; 2005). Father occupation of respondents is not association with sexual experience of school female adolescents with ($X^2=0.173$, $P=0.917$).

5.1.1.3 Peer influence and Self- Efficacy Differential of Female Ever had Sex

The other factors that influence sexual experiences of female are peer influence and self-efficacy of respondents

**Table 5.3 Chi-square Result of School Female Adolescent ever had Sex with peer
Discussion, Influence and self- efficacy, Woreta 2007**

Variables	Never sex	had	Ever had sex		Total		X ² (Df)	P-Val
	Numb	per	Numb	Per	Numb	Per		
Discussion sexual health issue with peer								
Yes	80	46.2	93	53.8	173	100	31.845 (1)	0.000*
No	342	70.2	145	28.8	487	100		
Total	422	63.9	238	36.1	660	100		
peer pressure to have sex								
Yes	92	51.4	87	48.6	179	100	16.759 (1)	0.000*
No	330	68.6	151	31.4	481	100		
Total	422	63.9	238	36.1	660	100		
Sexual experience friends								
Yes	125	43.3	163	56.6	288	100	93.456 (1)	0.000*
No	297	79.8	75	20.2	372	100		
Total	422	63.9	238	36.1	660	100		
Perceived self-efficacy (Resist peer pressure to have sex)								
Yes	209	72.6	79	27.4	288	100	16.505 (1)	0.000*
No	213	57.3	159	42.7	372	100		
Total	422	63.9	238	36.1	660	100		

* Significant at p<0.001; ** Significant at p<0.05

Peer influence

The table also shows that school female adolescent discussion on sex related issue with their peer is associated ever had sex of female adolescent at ($X^2=31.845$; $p<0.001$). The data depicted that school female adolescents who had discussed on sex related issues with their peers were more sexually experience that their counter parts who did not discuss (53.8 % Vs 28.8 %). (Obbo, 1993 cited in Lawage, 2004) confirmed that discussing sexuality with teenagers condone and encourages them to engage in sexual behavior.

Peers pressure is also associated with school female adolescent ever had sex at ($x^2=16.759$, $P<0.001$). The proportion of school female adolescent who were eve sex had decreased from not faced peer pressure to have sex to faced peer pressure to have sex (31.4 percent Vs 48.6

percent). The presence of sexual experienced friends had a profound impact on sexual behavior on school female adolescents. The study depicted that those who had sexually experienced friends were ever had sex than not having sexually active friends (56.6% and 20.2 %). The chi-square statistics showed that having sexual experience friends is association with female adolescent sexual experience at ($\chi^2=93.456$; $P<0.001$). This finding was also supported by focus group discussion; many of them said that female adolescents who have peer begin sexual intercourse greatly impose their friends to engage in sexual activity. A 19 years grade ten students said that most of female adolescent have had sex for the first time due to peer pressure.

As many literature indicated that perceptions what peer think often have a big influence on sexual and other risk taking behavior than the opinion of parents and other adult (Gage, 1998). In this study, peer pressure was identified as one of the very important factors driving the sexual behavior of many female adolescents. The influence peers exert can be indirect or passive. Indeed, young people are sometimes influenced as much by what they think their peers are doing as by what they really are doing. A young person may think that everyone is smoking or everyone is sexually active and may therefore feel pressure to try those behaviors. Some research suggests that peer pressure accounts for 10 to 40 percent of the variations in adolescents' smoking and drinking behavior (Hampton. et al, 2005). Other research has found that susceptibility to peer influence may be higher among younger teenagers than older teenagers and is negatively correlated with their confidence in their social skills (Gage, 1998).

Self-efficacy of adolescent is also a predictor of their sexual behavior. Respondents asked one question know their confidence (resist peer pressure to have sex). School female adolescent perceived to resist peer pressure to have sex had less likely sexual practice than their counterparts (27.4% vs42.7%). The chi-square statistics shows that female adolescents who have confidence resist peer pressure to have sex is association with female adolescent ever had sex at ($\chi^2=16.505$; $P<0.001$).

5.1.1.4 Mother-Adolescent Discussion, Exposure Related Factors and Attitude of Respondent to Premarital Sex Differential of female Ever had sex

Mother adolescent- discussion, exposure related factors and attitude of respondent towards premarital sex is also other predictors of female ever had sex.

Table 5.4 Chi-square Result of School Female Adolescent Ever had Sex with Mother-Adolescent Discussion, Exposure Related Factors and Attitude of Respondent to Premarital sex Woreta 2007

Variables	Never had sex		Ever had sex		Total		X ² Df	P-val
	Num	Per	Num	Perc	Num	Perc		
Ever drink alcohol								
Yes	17	40.5	25	59.5	42	100	10.710 (1)	0.001*
No	405	65.5	213	34.5	618	100		
Total	422	63.9	238	36.1	660	100		
Watching film(sex & pornographic)								
Yes	254	58.5	180	41.1	109	100	16.113 (1)	0.000*
No	168	74.3	58	25.7	551	100		
Total	422	63.9	238	36.1	660	100		
Girls should sex before marriage								
Agree	35	44.3	44	55.7	79	100	15.007 (1)	0.000*
Disagree	387	66.6	194	33.4	581	100		
Total	422	63.9	238	36.1	660	100		
mother-adolescent communication on sex related issue								
Yes	90	84.9	16	15.1	106	100	24.076 (1)	0.000*
No	332	59.9	222	40.1	554	100		
Total	422	63.9	238	36.1	660	100		

* Significant at p<0.001; ** Significant at p<0.05

Ever drinking alcohol

The above chi-square table shows that schools female adolescents who ever had taken alcohol more involved in sexual activity than their counterparts who had not taken alcohol (59.5% Vs 34.5%). The chi-square statistics reveals that ever had taken alcohol was

associated with school female adolescent involvement in sexual activity with ($X^2=10.710$; $P<0.001$). A study conducted in Nazareth is consistent with this finding (Tessema, 2003).

Mother–adolescent communication is significantly associated with female adolescents experience at $p<0.001$. Adolescent who have discussion with their mothers about sex related issues was found to be less sexually experienced than who did not (15.1% vs 40.1%). Here, women education is one of the main decisive factors for dialectical discussion of adolescent – mothers concerning reproductive and sexual health issue which is taboo in Ethiopia societies. Adolescent parent discussion is important to delaying sexual activities of adolescent and also increases contraceptive use.

The table also shows the exposure of school female adolescents to sex film and romantic book is significantly associated with school female adolescent sexual experience at $X^2=16.113$, $p<0.001$. Those who have exposure to sex film and romantic book are more involved sexual practice than not having exposure (41.5% vs 25.7%).

5.1.1.5 Knowledge of Selected Reproductive Health Differential of Female Ever had Sex

Reproductive and sexual health is the major concern of adolescents' period because they are characterized by the period of exploration, experimentation, particularly in relation to sexual activity. Adolescent age is full of emotion and could not suppress their physiological sexual feeling so that they need to explore sexual activities. The earlier sexual maturation and delayed of age at marriage expose them to unwanted pregnancy, abortion and HIV/AIDS. So it is better to see the association between reproductive health knowledge of respondent with ever had sex.

Table 5.5 Chi-square Result of School Female Adolescent Ever had Sex with selected Reproductive Knowledge, Woreta, 2007

<i>knowledge of Reproductive health</i>	Never had sex		Ever had sex		Total		X2 DF	P-value
	Num	Per	Num	Per	Num	Per		
<i>Unsafe period of menstruation cycle</i>								
Correctly knew	142	58.9	99	41.1	241	100	8.284 (2)	0.016**
Incorrect	90	60.4	59	39.6	149	100		
I don't know	190	70.4	80	29.6	270	100		
Total	422	63.9	422	36.1	660	100		
<i>A girl can be pregnant at first sex</i>								
Yes	184	71	75	29	259	100	9.328 (1)	0.002**
No	238	59.8	163	40.6	401	100		
Total	422	63.9	422	36.1	660	100		
<i>Ulcer/sore in genital is symptom of STDs</i>								
Yes	306	67	151	33	457	100	5.874	0.015**
No	116	57.1	87	42.9	203	100		
Total	422	63.9	422	36.1	660	100		
<i>HIV/AIDS is sexually transmitted disease</i>								
Yes	415	63.8	235	36.2	650	100	0.162 (1)	0.688
No	7	70	3	30.0	10	100		
Total	422	63.9	422	36.1	660	100		
<i>Ever heard contraceptive</i>								
Yes	405	63.6	232	36.4	637	100	1.028 (1)	0.331
No	17		6	26.1	23	100		
Total	422	63.9	422	36.1	660	100		

*Significant at $p < 0.001$; ** $P < 0.05$

As can be observed from table 5.5 knowledge of unsafe period in menstrual cycle is significantly associated with sexual behaviour of female adolescent at $p = 0.016$. The proportion of female adolescent who correctly know unsafe period in menstrual cycle is more sexually experienced than those who reported incorrect and I don't know. The table also depicted that school female adolescent who believed girl can be pregnant at first sex is less sexually experienced than their counterparts (30.1% vs 41.1%). This is significant at ($p = 0.002$).

The above table also shows that those who know the symptom of STDs were less likely sexually experienced than the counterparts (33% vs 42.9%). The chi-square result indicates that the knowledge of symptom STDs is significantly associated with sexual behaviour of female adolescent at $p=0.015$. Heard about contraceptive method is not associated with ever had sex of school female adolescent. This indicated that heard about contraceptive or did not affect the sexual behaviour of them. Both of them have the same chance to experience sexual intercourse.

5.1.2 Contraceptive Ever Use Differentials of Female Adolescent

Contraceptive use of adolescent varied with different socio-cultural, demographic and other variables.

Table 5.6 Chi-square Result of School Female Adolescent contraceptive ever use with Selected Variables, Woreta, 2007

Variable	Have contraceptive use		Ever use		had		Total		X ² Df	P-value
	Yes Num	Per	No Num	Per	Num	Per	Num	Per		
Age										
10-14	0	0	5	100	5	100	2.171		(1)	0.141
15-19	71	30.5	162	69.5	233	100				
Total	71	29.8	167	70.2	238	100				
Education level										
Primary	13	22.8	44	77.2	57	100	1.762		(1)	0.184
Secondary	58	32	123	68	181	100				
Total	71	29.8	167	70.2	238	100				
Number of sexual partner										
One	63	30.4	144	69.6	207	100	2.356		(1)	0.308
Two	5	20	20	80	25	100				
Three	3	50	3	50	6	100				
Total	71	29.8	167	70.2	238	100				
HIV/AIDS is sexually transmitted disease										
Yes	70	29.8	165	70.2	235	100	0.018		(1)	0.894
No	1	33.3	2	66.7	3	100				
Total	71	29.8	167	70.2	238	100				
Ever heard contraceptive										
Yes	70	30.2	162	69.8	232	100	1.510		(1)	0.475
No	1	16.7	5	83.3	6	100				
Total	71	29.8	167	70.2	238	100				

Continued									
Girls should sex before marriage									
Agree	15	34.1	29	65.9	44	100	0.468		
Disagree	56	28.9	138	71.1	194	100	(1)	0.494	
Total	71	29.8	167	70.2	238	100			
mother-adolescent discussion about sex related issue									
Yes	5	31.3	11	68.8	16	100	0.016		
No	66	29.7	156	70.3	222	100	(1)	0.898	
Total	71	29.8	167	70.2	238	100			
Discussion with peer									
Yes	46	49.5	47	50.5	93	100	28.102	0.000*	
No	25	17.2	120	82.8	145	100	(1)		
Total	71	29.8	167	70.2	238	100			
Discussion with partner before sex									
Yes	49	50.5	48	49.5	97	100	33.462	0.000*	
No	22	15.6	119	84.4	141	100	(1)		
Total	71	29.8	167	70.2	238	100			

*Significant at $p < 0.001$; **significant at $p < 0.05$

As shown in table 5.6 the age of the respondents and ever use of contraceptive did not show association. Even though it did not show association, the cross-tabulation tell us ever use of contraceptive increase from age categories 10-14 to 15-19 years (20%vs 30%) respectively. The education level of female adolescent is not associated with ever use of contraceptive. But the cross-tabulated result showed that 22.8% and 32% of junior and secondary school female adolescent ever use contraceptive method respectively.

The table also shows that number of sexual partner is not associated with contraceptive ever use. Due to detail knowledge of contraceptive, absence of communication of both partner and other constraints may cause for low use of contraceptive. The result depicted that those respondents who had three partners were used contraceptive compared to those who had two and one. As mentioned in the previous chapter 98.5 % of female adolescents' awareness about HIV/AIDS that said it is sexually transmitted disease. However, it is not associated with ever use of contraceptive.

Awareness of contraceptive might not go with utilization of contraceptive among female adolescent in this study. The finding shows that contraceptive ever use has no association with

ever heard of contraceptive. But the bi-variate result show that those who ever heard of contraceptive used more compared to their counterparts.

As can be seen from table 5.6 attitude of respondents towards premarital sex is not associated with contraceptive ever use of female adolescents. The cross- tabulated result show that 34.1% contraceptive ever users agree on premarital sex while 28.9% of contraceptive ever users disagree on premarital sex. Mother-adolescent discussion concerning sex related issue is not associated with ever use of contraceptive of female adolescents. This finding is inconsistent with other studies. A study carried out in America suggested that parent-adolescent communication about sexuality appears to play an important role in reducing the onset of sexuality and among sexually active adolescents increase contraceptive use (Obbo, 1993 cited in Lawage, 2004). However, in this study large portion of the students live away from their parents and become out of supervision.

Peer discussion on sexual related issue is associated with contraceptive ever use of female adolescents. Almost half of female students those who discussed with their peers ever use contraceptive than their counter parts. This indicates that peer teaching concerning sexual and reproductive health played pivotal role for utilization of contraceptive. Another factor that show relation with contraceptive ever use is partner discussion before sexual mate at ($P=0.000$). The chi-square result shows that 50.5% of those who ever user of contraceptive discussed with their partner than their counterparts.

Due to the small number of cases, it is difficult to run logistic regression for determinant of ever use contraceptive among sexually experienced respondents. So contraceptive ever as a dependent variable is not treated in logistic regression.

5.2. Multi–Variate Analysis Result

In the preceding section, bi-variate analysis was used to asses the association of each independent Variables and dependent variables by using chi-square test. However, this simple cross-tabulated chi-square result may not show the independent variables exact influence on the dependent variables, because the influences of other variables were not controlled. Farther, to assess the net effect of each predictor variables on dependent variables multivariate logistic regression was carried out.

The dependent variable was sexuality of school female adolescent. It is coded as a demy variable 1(ever had sexual intercourse) and 0 (never had sexual intercourse). On the basis of independent variables which have been shown significant association in the chi-square test were entered into logistic regression. The subsequent explanations of findings are based on variables that retained in the final analysis.

The variables entered in the model include age, educational level, church attendance, living arrangement ,mother education and occupation , father education, ever drinking alcohol, discussion with peers about sex related issue, peer pressure to have sex, sexual experience friends, self-efficacy, watching film(sex and pornographic), girl should sex before marriage, and mother-adolescent communication

**Table 5.7 Estimates for the final Logistic Regression Model of sexual experienced
Female Adolescents**

Variable	B	SE	Sig	Exp (B)
Age				
10-14(RC)	-	-	-	1.000
15-19	1.580	0.613	0.01*	4.856
Educational level				
primary (RC)	-	-	-	1.000
Secondary	0.671	0.266	0.012*	1.955
Religiously				
Daily (RC)	-	-	-	1.000
Occasionally	1.246	0.358	0.001**	3.477
Living arrangement				
Both biological parents(RC)	-	-	-	1.000
Single parent	-0.749	0.333	0.024*	0.473
With school friends(Rented house)	0.015	0.262	0.955	1.015
Others(alone, relative & partner)	1.209	0.389	0.002*	3.351

* Significant at $p < 0.001$; ** Significant at $p < 0.05$

Continued**Mother's Educational Level**

Illiterate (RC)	-	-	-	1.000
Primary	0.717	0.253	0.005**	2.048
Secondary and above	0.188	0.379	0.619	1.207

Ever talking alcohol

Yes (RC)	-	-	-	1.000
No	1.031	0.467	0.027*	0.357

Perceived self efficacy: -Resist peer pressure to sex

Yes (RC)	-	-	-	1.00
No	0.706	0.224	0.001	2.025

Having sexual experienced friends

Yes (RC)	-	-	-	1.000
No	1.887	0.229	0.000*	0.152

Peer discussion about sex related issue

Yes(RC)	-	-	-	1.000
No	1.336	0.258	0.000**	0.263

Girls should sex before marriage

Agree (RC)	-	-	-	1.000
Disagree	1.163	0.338	0.001*	0.312

Mother-adolescent communication on sex related issue

Yes (RC)	-	-	-	1.000
No	1.319	0.347	0.000**	3.738

* Significant at $p < 0.001$; ** Significant at $p < 0.05$.

Age of Respondents:-Age of respondents was found to have an influence on ever had sexual intercourse of female adolescents. The result of the analysis showed that adolescent in the age group 15-19 years old were 4.856 times more likely to have sexual intercourse compared with adolescent in the age group 10-14 years old.

Educational level of Respondents:-Education level of female adolescents had an impact on their sexual behavior. The data revealed that female with secondary education were 1.955 times more likely to have had sexual intercourse relative to those with primary education level.

Living arrangement of Respondents:-Living arrangement of female adolescents is one of the social factors which have contribution towards the involvement of adolescents into sexual practices. The odds ratio of adolescents living arrangement confirmed that adolescents who lived with single parents is 52.7 percent more likely ever had sex compared with adolescents lived with both biological parents. Adolescent who lived with others (alone, relatives, partners) were 3.351 times more likely to practice sexual intercourse than those who lived with both biological parents. Adolescents who lived with classmate friends in rented house were 1.015 times more likely ever had sex compared with those who lived both biological parents. However living with classmate friends in rented house were not statistically significant factors on female adolescent ever had sex.

Religiosity of Respondents:-The religious institution attendance of the respondents found to be predictor of female adolescent ever had sexual intercourse. The likely of involvement of adolescents in sexual intercourse who attained religious institution occasionally is 3.477 times more likely compared with those who attended daily.

Mother education level:-Adolescents whose mothers attained primary education had less likely of ever had sexual intercourse than those mother with no education ($p=0.005$). On the contrary adolescent whose mother attained secondary and above education is not statistically significant with female adolescent ever had sexual intercourse ($p=0.619$)

Perceived self –efficacy:-Self efficacy of adolescents has a profound effect on sexual behaviors (whether ever had sex or not). The odds ratio result displayed that adolescents who have not confidence to resist peer influence to have sex is 2.025 time more likely to have had sexual intercourse than those who could resist peer influence to have sex. Adolescents who have not confidence to talk about reproductive and sexual health related issue with any person without fear were less likely to have sexual intercourse relative to their counter parts who have confidence to talk about reproductive and sexual health related issue with any person without

fear. Kirma et al (2003) confirmed that perceived self – efficacy of adolescent's withstand engaging in risk of sexual practice.

Peer influence:- Presence of sexually experienced peer friends was significantly associated for females to have sex. Female adolescents who have no sexually experienced friends were 15.2 percent less likely to have had sexual intercourse relative to their counterparts those who have sexually experienced friends. This indicates that there is a high peer influence to motivate and to make sexual intercourse. In Ecuador, adolescents who thought their peers were sexually active were 2.5 times more likely to have had sex (Park et al. 2002). A Peruvian school-based study also found that boys having some friends who have had sex were twice as likely to have had sex and girls having some friends who have had sex were 2.5 times more likely to have sex to practice sexual intercourse themselves (Magnani et al. 2001).

Adolescents ever use of alcohol is found to be significantly associated with their involvement in sexual practice. Ever drinking alcohol is negatively associated with ever had sex of female students. The data revealed that those who did not take alcohol their practice decreased by 64.3% compared with adolescents ever taken alcohol. This is confirmed by (Wosen 2005, Dejene, 2005). Adolescents who engaged in risk behaviour had a great probability to engage in sexual activities.

Respondents' attitude towards premarital sex:- Attitude of adolescents towards premarital sex is other important predictor that explains the variation in the likelihood of sexual involvement among adolescents. The analysis revealed that adolescents who had agreed towards premarital sex were 31.2% less likely to have had sexual intercourse compared with those who have had disagreed towards premarital sex. Their attitude is also influenced by the environments if females adolescents who lived in societies where discourage premarital sexual activates, they might not involve in premarital sex. In Ethiopia most young women live with family and friends who discourage from having premarital sex and disapprove of sex before marriage. This study found that most of the female students disapproved sex before marriage. The society glorified virginity of female until marriage. This is also supported by the FGD that expressed their view if girls made sex before marriage her parents will be very disappointed and no one wants to marry.

Mother-adolescent communication on sexual matter:-mother-adolescent communication on sex related issues is one of the predictor of sexual behaviour of female adolescents. Those adolescents who did not communicate with their parents regarding sex related issue were 3.738 times more likely to have sex compared with those adolescents communicated sex related issue with their parents. Karofsky et al (2001) confirmed that adolescents (particularly females) who communicated with their parents found to be less likely to engage in sexual intercourse. There is also evidence which suggest that young women who openly communicate about sexual matter with their parents especially with their mothers are less likely to be sexually active or girls could not become pregnant before marriage (Gupta and Weiss, 1995). This is also confirmed by Oduimegw et al (2002). The truth is that adolescents need appropriate information and service to become responsible citizen. Parents are responsible to provide information and education regarding to changes at adolescence period and other sexual and reproductive elements.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This study is aimed at to investigate factors that influence in school female adolescents sexuality in Woreta town. In order to attain this border objective, hypothesis was formulated that used as a guide line. The findings of the study presented using uni-vairate, bivairate and multivariate analysis.

Based on the analysis, the following major results were found in this study.

- The study found that about 36.1% of never married female adolescents admitted to have sexual experienced. Large proportion of female adolescents (92.4 pre cent) first had sex before age 18. This indicated that female sexual practice during marriage in most setting is eroded. Wanted to marry him and love affaire were the most prominent factors that precipitated the first sexual intercourse.
- Friends and /or peers and health institutions were major source of information on reproductive and sexual health for female adolescent. Despite this fact, a large number of respondents have forwarded that peers as their main source of information; and at times, their preference. However, peers can be seen an uncertain source of information because they may have incomplete knowledge. The role of Schools, mass-medias and the family in providing information are very limited.
- Female students have an incomplete understanding of comprehensive reproductive health knowledge concerning unsafe period of menstrual cycle, pregnancy at first sex, sexually transmitted disease.
- Contraceptive use is lower than knowledge of contraceptive method. 77.1% of the respondent reported that they knew at least one method of contraceptive. The pattern of contraceptive use indicated that 29.8 per cent of the respondents had ever used contraceptive and 21.8 per cent of them use condom at first sexual intercourse.

- Mother education and mother-adolescent discussion have found to be significantly associated with female adolescent sexuality. Mother education is tending to positively associated with female adolescent sexuality. Discussion on sexual related issue between mother and adolescents help the adolescents develop a clear personal position regarding their sexuality. Female adolescent who talk with their mother are 3.738 times less likely to engage in sexual activities. However, discussion on sexual matter content is taboo for both adolescents and parents in the study area.
- The study found that presence of sexual experience friends, living situation from whom they live, age and religiosity have found to a significant predictors of female adolescent sexuality. Adolescent in the age group 15-19 years old were 4.856 times more likely to have sexual intercourse compared with adolescent in the age group 10-14 years old. Students who had sexual experienced peers were more likely sexual active than those who did not have sexual active peers.

6.2 Recommendation

Based on the finding of this study the following recommendations are forwarded:-

1. The study found that 92.4% of female adolescents experienced sex before 18 years in the study area, so special attention should be given by the concerned body to catch up with the challenges of early sexual activity that has become widespread among adolescent.
2. The study found that the observed early sexual practices of students could be attributed to day-to-day interactions among themselves. This leads and initiates them to engage in sexual affairs with peers. Thus, these students who are at risk with regard to unintended pregnancy and STDs including HIV/AIDS should get information and services by establishing family life education club with in schools.
3. The study shows that quite a large proportion of sexually active female adolescent were never used contraceptive at first and last sexual intercourse. This implies that most of them exposed to unsafe sex. Hence, it needs an intervention program on promotion of contraceptive use among adolescent girl those working on the issue of family planning.

4. In this era of HIV/AIDS pandemic, moral instructions are important in home, school and religious institution to enable the adolescents make responsible decision with respect to relationship with member of opposite sex.
5. Adolescent-parent communication is low concerning reproductive and sexual health matter. This requires the need to teach adolescents parents about reproductive and sexual health matter at health institution, religious institution and traditional institution by concerned body. This conception of awareness enables parents to take the responsibility of creating conducive atmosphere where by their daughter feel free to discuss issues related to sexuality.
6. Programs should specifically designed by woreda health office in collaboration with woreda educational office to bring behavioral change on communication activities of sexual abstinence and safe sexual behavior through culturally appropriate message for those who did not start sexual intercourse.
7. Gender sensitive programs and interventions are needed to address the issue of gender inequality that is deep rooted in the society and which exposed the female adolescent undeservedly sexual exploitation.
8. Finally, it is recommended that further research would have to be conducted on reproductive health by incorporating both sexes to enlighten factors related to risk behavior of adolescents.

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Appendix A

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF DEVELOPMENT RESEARCH
POULATION STUDIES AND RESEARCH CENTER
A SURVEY OF STRUCTURED QUESTIONER FOR FEMALE
ADOLECENTS IN WORETA TOWN**

Questionnaire Number_____ [To be given by the researcher]

Inclusion Criteria:

Only school female adolescents in the age group 12 -19 years at the time of survey

Questionnaire cover sheet

School name_____

Informed Confidentiality and consent

[Data collector: Please read the following paragraph to the respondent]

Dear Respondent,

Good morning/good afternoon. Thank you for your willing to participate in filling of the questionnaire. I am working with_____.I am a postgraduate students in population studies and research center. The main objective of this study to investigate factors affecting female adolescent sexuality. I am interesting people like you because you are facing many problems related to sexuality matter.

I want to collect relevant information that can assist for better understanding of factors that affect sexuality matter adolescent and order to generate useful information for appropriate planning interventions. Therefore, your genuine participation by responding to the questions is highly appreciated. You have right to skip question which is vague for you and can teminate or stop at any time you want.

Your name will not be written on this form, and will never be used in connection with any of the information you tell me.

Name and signature of Data collector:

Name _____ Signature _____ Date _____

Supervisor's/Editor's Remark:

Supervisor's/Editor's Name and Signature _____

PART I: BACKGROUND CHARACTERISTICS OF THE RESPONDANT			
No	Questions	Coding Categories	Coding
101	Age	Age in completed year_____	
102	Number of family	_____	
103	Grade level	1. Grade 7 3. Grade 9 2. Grade 8 4. Grade 10	
104	Religion	1. Orthodox 4. catholic 2. Muslim 5 Others_____	
105	How often you go to church/mosque	1. Daily 4. Once per week 2. Occasional 5. Other(s)_____	
106	Ethnicity	1. Amhara 3. Oromo 2. Tigrian 4. Other(s)_____	
107	Current living situation (whom they live)	1. Both biological parents 2. Father only 3. Mother only 4. Relatives 5. Boy friend 6. Alone 7. Classmate friend(rented) 8. Other(s)_____	
PART II: FAMILY SITUATION			
201	Is your mother alive	1. Yes 2. No (skip 203&204)	
202	What is your mother education level	1. Illiterate 4. Secondary(9-12) 2. Reading & writing 5. Above secondary 3. Primary (1-8)	
203	What is your mother occupation	1. House wife 2. Daily laborer 3. Farmer 4. Government employed 5. Private employed 6. Self employed 7. Other(s)_____	
204	Is your father alive	1. Yes 2. No (Skip Q 205 and 206)	
205	What is your father education?	1. Illiterate 2. Reading & writing 3. Primary (1-8) 4. Secondary(9-12) 5. Above secondary	
206	What is your father occupation?	1. Daily labourer 4. private Employed 2. Farmer 5. Self employed 3. government Employed 6. others_____	
207	What is your family monthly income?	_____	
208	How do you perceived living status?	1. Rich 2. Medium 3. poor	

PART III: KNOWLEDGE OF REPRODUCTIVE HEALTH CHARACTERISTICS			
301	A girl can become pregnant at first sex	1.Yes 2.No	
302	From one menstrual period to the next, are there certain days when women are more likely to become pregnant if she has sexual intercourse?	1.From the 1 st day of menstruation period to 8 th days of menstruation 2. From the 9 th day of menstruation to 22 nd days of menstruation period 3.From the 23 rd day of menstruation to the coming of the second menstruation period 4. During 1 and 2 5. During 1 and 3 6. During 2 and 3 7. I don't know	
303	Have ever pregnant?	1. Yes 2. No	
304	Have you aborted?	1. Yes 2. No	
305	Is HIV/AIDS A sexually transmitted disease?	1. Yes 2. No	
306	Ulcer/sore around genital area is a sign of STDs?	1. Yes 2. No	
PART IV: SEXUAL BEHAVIOUR			
401	Have ever heard of sexual intercourse?	1. Yes 2. No	
402	Did you have intimate friend/s who has / have started sexual intercourse?	1. Yes 2. No	
403	Did you have boy friends?	1. Yes 2. No	
404	Have ever had sexual intercourse?	1. Yes 2. No	
405	How old were you when you had your first sexual intercourse?	Age _____ years	
406	What is your partner age the first you had sex as compared you?	1.younger 2.about the same age 3.older 4. I don't know	
407	What is your relation with your partner the first time you had sexual intercourse?	1. Fiancé/engage 2. Boy friend 3. classmate 4. School friends 5. teacher 6. forced intercourse 7. others _____	

408	What is your reason for the first time you had sex?	1. physical pleasure 2. to get marry 3. love affairs 4. Friends did it 5. to get boy friends 6. to obtain money 7. forced others_____	
409	During the past two month have you had sexual intercourse?	1. Yes 2. No	
410	Did you use contraceptive method the first time you entered sexual activity?	1. Yes 2. No	
411	Did you use condom the first time you had sexual intercourse?	1. Yes 2. No	
412	Did you use contraceptive method in the recent sexual intercourse?	1. Yes 2. No	
413	Why you never had sexual intercourse?	1.Fear of HIV/AIDS &STDs 2. fear of parents 3.want to wait until marriage 4.Think wrong to do 5.no desire 6.no opportunities 7.religion reason 8 others_____	
414	Have ever use (alcohol and chat) for the first time you had sex?	1. Yes 2. No	
415	A girl should sex before marriage?	1.Agree 4.Disagree 2.Very agree 5.Very disagree 3.not sure	
416	A girl should be virgin until marriage	1.Agree 4.Disagree 2.Very agree 5.Very disagree 3.not sure	
417	What is the ideal age for girl start sexual sex?	Age_____yeras	

PART V: CONTRACEPTIVE KNOWLEDGE AND USE

501	Have you ever heard of contraceptive method?	1. Yes	2. No SkipQ502&503	
502	Which was/were you sources of information about contraceptive? (Multiple response possible)	Yes	No	
	1.public health sectors	1	2	
	2.private health sectors	1	2	
	3.mass media	1	2	
	4 printing	1	2	
	5.School	1	2	
	6.parents	1	2	
	7. boy friend	1	2	
	8.Relative	1	2	
	9.others			

503	Which contraceptive method do you know? (Multiple Response)	Yes No 1.Pill 1 2 2.IUD 1 2 3.Injectable 1 2 4.condom 1 2 5. Diaphragm/foam/ 1 2 6. female sterilization 1 2 7. male sterilization 1 2 8. Nor plant 1 2 9. others_____	
504	Do you know where contraceptive obtain?	1. Yes 2. No(skipQ505)	
505	Where is that?	1. Public heath sectors 2. private heath sectors 3. pharmacies 4. shop others_____	
506	Why do you women use contraceptive?	1.for prevention of unwanted pregnancy 2.for child spacing 3.for prevention of STDs including HIV/AIDS 4. others_____	
507	Have you ever use any contraceptive method?	1.Yes 2.No(skipQ508)	
508	What method you used?	1. Pill 4.condom 2. IUD 5.Diaphragm/foam/Jelly 3. Injectable 6. periodic abstinence 7.others_____	
509	Reason not using contraceptive?	1.Lack of knowledge 2.cultural taboo 3.fear of side effect 4. prohibited by my religion 5.Other(s)_____	
PART VI: PEER INFLUNCE,SELF-EFICACY			
601	Have you ever taken the following substance?	Yes NO 1.Alcohol 1 2 2. chat 1 2 3. cigarette 1 2	
602	Have you ever discussed about sexual matter with your partner?	1. Yes 2. No	
603	Have you obtained advice from your peers to wait until marriage without sexual intercourse?	1. Yes 2. No	
604	Have you faced peer pressure to have sex?	1. Yes 2. No	
605	Can you resist pressure that come from my peer and other person to have sex?	1. Yes 2. No	

606	Can you talk about sexual and reproductive health with others person without fear?	1. Yes 2. No	
607	Have you ever disused about sexual health matter with your partner before you have sex?	1. Yes 2. No	
PART VII: SOURCE OF INFORMATION ON SEXUAL RELATED MATTER			
701	Who/what was the source of information on sexual health matter? (Multiple response possible)	1.Mothers 2. Fathers 3.Relative 4.Boy friends 5. Health institution 6. School 7.mas media 8.Brother/ sister 9. Female friends/peers 10.others_____	
702	Have ever discussed sex related issue with your mother?	1. Yes 2. No	
703	Have ever discussed sex related issue with your father?	1. Yes 2. No	
704	From whom you easily to discuss sex related issue?	1. Yes 2. No	
705	Are you involved in any club in your school	1. Yes 2. No(Skip 706)	
706	In which club you participated?	1.Anti-AIDS club 2.Debate Club 3.Drama Club 4. Sport Club 5.Acadamic 6.Others_____	
707	Is there a special program focus on reproductive health in your school?	1. Yes 2.No	
708	Have ever watching film(sex & Pornographic)	1. Yes 2.No	

Thank you for Your Cooperation

Appendix - B
Addis Ababa University
Population studies and Research Center Department
Questions for Focus group discussion

1. Are there any clubs at the school that work in adolescent's reproductive health?
2. What do you think the reasons for having sex for the first time?
3. In what type of relationship does sexual intercourse occur?
4. At what age do female adolescents generally start sexual intercourse?
5. When do adolescents learn about pregnancy, sexual intercourse, menstruation, HIV/AIDS, Sexually Transmitted diseases etc?
6. With whom do you freely discuss about sex-related issues?
7. What is your attitude and society about sexual activity before marriage?
8. What are your knowledge and use of contraceptive?
9. What are the factors that influence sexual behavior of female adolescents?

Thank you for Your Cooperation