ADDIS ABABA UNIVERSITY,
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MEDIAN AGE AND DETERMINANTS OF SEXUAL INITIATION AMONG YOUTHS IN NORTH EAST ETHIOPIA

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ACRONYMS

AIDS	Acquired Immuno Deficiency Syndrome
EPHA	Ethiopian Public Health Association
HIV	Human Immuno Deficiency Virus
MOH	Ministry of Health
EDHS	Ethiopian demographic and health surveys
RH	Reproductive Health
ARH	Adolescent Reproductive Health
STDs	Sexually transmitted diseases
UNAIDS	United Nations Agency for International Development
WHO	World Health Organization
FGD	Focus Group Discussion
STIs	Sexually transmitted Infections
CDC	Center for Disease Control
ICPD	International Conference on Population and Development
CSW	Commercial Sex Workers
SRH	Sexual and Reproductive Health
ASRH	Adolescent Sexual and Reproductive Health
AHR	Adjusted hazards ratio
OR	Odds Ratio

ABSTRACT

Background: *The very low level of economic development, widespread poverty, very poor and inadequate health services, etc., make the consequences of youth sexuality much more serious in the Ethiopia than those of the developed countries. It is crucial to understand determinants and the surrounding context of early sexual initiation in a broader context for designing and implementing effective interventions targeting youth.*

Objectives: *The aim of this study therefore is to examine the median age and various paths of the commencement of first sex for rural and urban youths*

Methods: *A comparative cross sectional study was conducted between, March 1st -15th in Dessie town and Dessie Zuria Woreda. To draw a total sample of size 1294 (647 urban and 647 rural) a multistage cluster sampling was used. Then, households were selected by random walk method. All youths in the selected households were the study subjects. To collect quantitative data semi-structured, pretested questionnaire & for qualitative FGD was utilized. Eight Trained data collectors and two supervisors collected the data. After data have bean cleaned & coded entered and analyzed using EPI INFO version 2000 and SPSS for Windows version 15.0. Univariate and multivariate analysis were used.*

Result: *About half, 51.3% of the surveyed youths nearly in equal proportion between rural and urban have ever had sex. The Mean & median age of sexual initiation were 16.8 years (SD= 2.25) and 17 years respectively (Range 8-24 years). Rural youths initiate sex at lower age mean and median (16.49±2.11) and 16.00 than their urban counterparts mean and median (17.18±2.32) and 17.00 respectively the hzard was significant (*AHR *[95% CI]* =1.45 *(1.19, 2.55).* Multivariate analysis show that *female by gender OR [95%CI]=1.56(1.11,2.19),* chew *Khat (adj. OR [CI] = 2.05 [1.05–3.96]),who drink alcohol (adj OR [CI] = 2.05 [1.05–3.96),who viewed pornographic materials < 18 years Adj OR= 24.133 (3.28, 177.80) and* less connected with parents adj. 0R=2.30(1.35, 3.91)*were more likely to have early sexual initiation. Nearly two third of the sexual initiations were unprotected and some occur with higher risk groups. Half of the sexually active youths have ≥2 sexual partner in there life time. Furthermore, 14% out of which had sex with a non-regular (causal) sexual partner. Attributed to their early and unprotected sexual initiation a significant number of adolescents face the untoward complication of early sexual initiation. Of the sexually active youths 13%*

report STI 45% of female were pregnant at least once in there sexual life time. Logistic analysis to see the impact of early sexual initiation showed that early initiators were more likely to be exposed to STIs & multiple partnership than late initiators [adj OR 95%CI] =2.08(1.17, 3.72) and [adj OR (95%CI) = 2.33(1.61, 3.37)] respectively.

Conclusion and Recommendation: *Early sexual initiation was prevalent and mostly unexpected and unprotected. Those who initiate early were more likely to have bad reproductive outcomes and risky behaviours like multiple partnership, STIs, unwanted pregnancy and probably HIV. In all aspects the problem prevails in rural youths than urban. Delaying sexual debate is the pillar of HIV & other STIs prevention among youths. This can be achieved through starting well designed sexual education programs at earlier life. Strengthening the norm of virginity is should be advocated & equally ways to access condoms and other contraceptives specially to rural youths should be sought.*

1. INTRODUCTION

1.1 BACKGROUND INFORMATION

Adolescence is transitional period from childhood to adulthood, characterized by significant physiological, psychological and social changes. WHO defines adolescents as those in the age group of 10-19. Our world currently cares for a historic highest number of adolescents; about 1.2 billion adolescents need proper education, health and other life skills to ensure a better future for themselves and their countries. The adolescent population in Ethiopia has been increasing during the last few decades. Currently, adolescents constitute about 24% while young adults 10-24 years constitute about 30% of the total population (1-4).

Young people, having survived all childhood health problems, have been enjoying a relatively low morbidity and mortality period in the past. At present, due to changing conditions due to civilization, urbanization and life style, the health of adolescents is increasingly at stake. Sexually transmitted diseases, HIV/AIDS and other reproductive health problems are the greatest threats to their well-being. However, despite the growing needs, there is no adequate health service or counseling specifically suitable for this specific age group unlike children, mothers or adults. The life style and reactions of adolescents vary from those of adults. Adolescents, who are trying to find their identity and independence, behave and communicate differently than adults when they come to health services (2, 3).

Adolescence is an age-group that undergoes through physical, emotional, mental and social changes that place its life at high risk. Consequently, most of the youth are exposed to casual sexual practices; unwanted pregnancy, child bearing at early age, high risk abortion, HIV/AIDS and other sexually transmitted diseases, rape unemployment, poverty and criminal acts. In addition, the adolescents don’t receive adequate information and services on reproductive health. Even if services are available they don’t utilize them. This situation has made the problems associated with adolescent reproductive health serious and complex. Harmful traditional practices such as early marriage, female genital cutting (FGC), and marriage by abduction affect the health of young women (5).

The problems of youth arise from lack of understanding and proper response to the changes that occur during development, due to emotional behavior, peer pressure and the lack of

experience of the prevailing social system and its interactions. In order to be prepared and respond to problems related to adolescence it is necessary to acquire a comprehensive knowledge concerning adolescence (5).

Young people should be able to differentiate useful and harmful behaviors and practices and feel responsible to protect others from danger. In this respect, families and communities have important roles to play. The transition to sexual intercourse is an important event in one's life trajectory. Two general factors contribute to the timing of that transition: *proximate* and *distal* environments. The proximate environment includes microsystemic influences such as one's attitudes and beliefs, and extends to one's family. The macrosystemic or distal environment extends outward to include one's community and culture. Accordingly, there are forces which influence personal choices and behaviour: At the core is the self, then family and community, and finally an array of networks and cultural influences (6).

A recent policy report on the consequences of later marriage in the developing world asserts that an increase in premarital sex “is the inevitable trade-off for all of the benefits of delayed marriage”. Is this really the case? Where teenage marriage has declined, has the proportion of young women reporting premarital sex risen in turn? If so, is the increase due to the greater period of exposure between puberty and marriage, or is it due to a rise in the likelihood of having sex, that is, to changing norms about the acceptability of having sex before marriage, which may have altered with globalization, in particular with exposure to Western media and popular entertainment? Alternatively, is the concern about an increase in the occurrence of premarital sex unwarranted? Has the decline in the proportion of young women who marry early had little effect on premarital sexual behavior? Even if the proportion of young women engaging in premarital sex is increasing, is one consequence of the postponement of marriage a rise in the overall age of sexual initiation among the current generation of young people? (5,7) The aim of this study therefore is to examine the various paths by which young people becomes sexually active with the hope of tackling this reason will push up the median age at which sex is initiated and by thus tackling HIV/ AIDS.

1.2. STATEMENT OF THE PROBLEM

Adolescence is a period of dynamic change representing the transition from childhood to adulthood that begins at puberty. WHO classifies adolescence as the age group 10-19 years, “young people” as those between the ages of 10-24 years and youth as those between the ages of 15-24 years. Adolescence is a time when many young people experience critical and life-defining challenges such as their first sexual experience, marriage, pregnancy, and parenthood. Adolescent sexual behavior is important not only because of the possible reproductive outcomes, but also because risky sexual behavior is associated with sexually transmitted infections such as HIV/AIDS (1, 3).

More than 1 billion people in the world are between the ages of 15 and 24, and most live in developing countries. Meeting the needs of youth today is critical for a wide range of policies and programs, because the actions of young people will shape the size, health, and prosperity of the world’s future population (3).

Recent trends in youth sexual behavior offer mixed messages. It is very encouraging that teenagers’ overall rates of sexual activity, pregnancy and childbearing are decreasing, and that their rates of contraceptive and condom use are increasing. However, the proportion of young people who have had sex at an early age has increased (6).

For behavioral as well as physiological reasons, early sexual debut increases young peoples' risk for infection with HIV and other STIs. Youth who begin sexual activity early are more likely to have high-risk or multiple partners and are less likely to use condoms. An individual who initiates sexual activity at age 15 will have more exposure to conception over the reproductive span than one who initiates sex at age 21. Early childbearing has been linked to higher rates of maternal and child morbidity and mortality, truncated educational opportunities, and lower future family income. Adolescent fertility has also been associated with larger completed family sizes, which in turn may lead to greater population growth (6, 7, 8).

- One in every 10 births worldwide and 1 in 6 births in developing countries is to women age 15-19.

- Pregnancy-related health risks are much higher among women under age 18; with girls age 10-14, five times more likely to die during pregnancy or childbirth than women age 20-24.
- One in 10 abortions worldwide occur among women age 15-19; more than 4.4 million women in this age group have an abortion every year, and 40 percent of these abortions take place in unsafe conditions.
- Each day half a million young people are infected with a sexually transmitted disease.
- The majority of sexually active males age 15-19 are unmarried whereas two-thirds of sexually active young women in the same age group are married.
- Only 17 percent of sexually active young people use a contraceptive method.
- The highest rate of new cases of HIV transmission occurs among young people age 15-24. Half of all new HIV infections in the world occur in people aged 15–24; nearly 12 million young people are living with HIV/AIDS; and more than 7,000 young people become infected with HIV every day (1, 5, 9, 10, 11).

UN resolutions underline the fact that youth sexual and reproductive health care needs are not being adequately met. This is in part because their needs are not clearly understood within the socio-cultural context of their lives, but also researchers, service providers, and policy makers often avoid the sensitive issue of adolescent sexuality or hold uncompromising attitudes toward adolescent sexual behavior. Hence by endorsing the Cairo Programme of Action at the ICPD, the global community has resolved to "protect and promote the rights of adolescents to sexual and reproductive health information and services" (12).

The young population in Ethiopia has been increasing during the last few decades. Currently, adolescents constitute about 24% while young adults 10-24 years constitute about 30% of the total population. Sexual experience begins early in Ethiopian society. According to Ethiopian DHS 2005; among women age 25-49, 32 % had sexual intercourse before age 15, 65 % before age 18, and by age 25 most Ethiopian women have had sexual intercourse. Traditional practices and poor living conditions often lead young people to engage in sex at an early age. Many young women are forced to practice sex for money. Lack of family support and limited educational opportunities have led many youth to turn to life on the

streets which in turn increases risk of sexual encounter (1, 3**)**.Early sexual debut and limited use of contraceptive methods have been associated with increased risks of unwanted pregnancy, STI/HIV infection, and maternal mortality and morbidity. In Ethiopia, trends in sexual initiation have changed little between 2000 and 2005 EDHS. (13)

The 2007 Epidemiological Synthesis study found that young populations, especially never-married sexually-active females carry the greatest risk of HIV infection in the country, with prevalence rates much higher than the average for both urban and rural areas as well as all women of reproductive age. Girls are at a much greater risk at early ages because of both biological and cultural factors. Young girls in Ethiopia are more vulnerable to HIV than boys because of early age at sexual debut, early marriage, sexual abuse and violence such as rape and abduction. Sexual mixing patterns are more important than the age at sexual debut in putting girls at higher risk of HIV than boys. Many studies have shown that girls in Ethiopia often form sexual relationship with men who are on average ten years older. As well, adolescent girls are at risk because they are unlikely to have had any training or experience in sexual negotiation skills, and are especially vulnerable in situations with older men where age, wealth, physical strength and other power dynamics put them at a disadvantage (14)

The very low level of economic development, widespread poverty, very poor and inadequate health services, etc., make the consequences of adolescent sexuality much more serious in the Ethiopian context than those of the developed countries. This is reflected by the highest HIV prevalence in the group 15-24 years 12.1%, (6% to 9 % among young men aged 15–24, and 10% to 13 % among young women in the same age group); the highest prevalence of sexually transmitted infections in this age group; unintended pregnancy being a serious problem among teenagers; and abortion , which is illegal in Ethiopia, placing many young women at risk, primarily because it is usually conducted under unsafe conditions (11, 13, 14).

HIV prevalence among young pregnant women (15-24 years) attending 82 ANC sites throughout the country is more than four times the national average (9.1% in urban and 2.4% rural). In young males, prevalence rates are lower than 1% in both urban and rural areas. These data suggest the still high burden of new HIV infections concentrated among young women, especially those sexually active, never married, both in the urban and rural areas of

the country. In contrast, the high infection pattern among young women does not hold for men, with the younger men exhibiting lower risk of HIV compared to their older counterparts both in the urban and rural areas. The observed age pattern of HIV infection between males and females signals the fact that gender affects not only the general level of HIV prevalence, but also the shape of the prevalence curve as a function of age(14, 45)

The ensuing high rates of unintended pregnancy, abortion, HIV/AIDS and other sexually transmitted infections (STIs) among teenagers make it imperative that, among other things, we understand and identify the factors that are associated with early or late sexual initiation. Effective implementation of ICPD recommendation on Adolescent sexual and reproductive health also requires an understanding of the causes and consequences of early initiation of reproductive-related behaviors (8).

Even though there have been many studies in the area of adolescent reproductive health in Ethiopia, many of these have largely ignored the determinants and surrounding context of early sexual initiation. It is crucial that an attempt be made to understand determinants and the surrounding context of early sexual initiation in a broader but local context for designing and implementing effective interventions targeting youth. The aim of this study therefore is to examining the various paths of the commencement of first sex.

1.3. JUSTIFICATION OF THE STUDY

Early sexual initiation carries a significant health, socio economic and psychological hazards and that it can set the patterns for subsequent sexual and other bad behaviors, understanding and identifying the factors that are associated with early or late sexual initiation is a basis for improved understanding of sexual and reproductive health problems among youth and designing meaningful strategies to tackle the adverse consequences of adolescent sexual intercourse such us tackling HIV/AIDS, unwanted pregnancy and its sequel:- induced abortion, adolescent fertility, school dropouts etc….

A study in sub-Saharan African countries concluded that declines in HIV prevalence in Uganda and Zambia are probably due primarily to declines in multiple partnerships —though abstinence and delayed sexual initiation among youths.

Young populations, especially never-married sexually active females have the greatest risk of HIV infection in the country. The lack of recent data and research, especially on these high-risk groups, makes further conclusions difficult, and highlights the clear need for more research. Especially in Amhara region, the place chosen to conduct this study, previous researches on the same subject involving youth are very rare while HIV/AIDS and unwanted pregnancy and several other adolescent sexual and reproductive health problems are prevalent.

2. LITERATURE REVIEW

The health of adolescents is greatly determined by their behavior. An important and complex area of adolescent behavioral health is sexuality. Issues of experience and activity include the timing of first intercourse, number of sex partners, contraceptive use, pregnancy, and sexually transmitted infections (STIs). Each of these outcomes vary within and between ages, gender, race, socioeconomic status, and religious groups Complexity is also reflected in the particular influences associated with adolescent sexual activity. Neighborhood (socioeconomic status, joblessness), peer (sexually active friends), familial (family instability, single-parent household, sibling sexual activity), and individual characteristics (race, gender, age, pubertal status) have all been associated with adolescent sexual outcomes. Given the severity of negative consequences associated with sexual activity, ensuring that youth receive sexuality education is important for healthy development (15).

2.1 Early Sexual Debut

The median age at first sex is a general measure of the youthfulness of the start of sexual activity. A national longitudinal survey of youths In USA conducted between 1988 and 1992 among adolescents age 14 at the time of study revealed that about 9% of the children reported that they had been sexually active before age 13. This percentage escalates with increasing age—about 18% before age 14, 31% before age 15 and about 55% before age 16. At the younger ages, the boys in the sample were substantially more likely than the girls to have become sexually active, a pattern that is consistent(16).

A study in USA among 1,287 urban minority adolescents showed that at grade 8, 31% of males and 8% of females reported sexual initiation; by the 10^{th} grade, these figures were 66% and 52%, respectively. Recent intercourse among males increased from 20% at baseline to 39% in eighth grade; 54% reported recent sex and 6% had made a partner pregnant by 10th grade. Among females, recent intercourse tripled from baseline to eighth grade (5% to 15%); 42% reported recent sex and 12% had been pregnant by grade 10. Early initiators had an increased likelihood of having had multiple sex partners, been involved in a pregnancy, forced a partner to have sex, had frequent intercourse and had sex while drunk or high. There

were significant gender differences for all outcomes except frequency of intercourse and being drunk or high during sex (17).

Cross-sectional data collected from a community-based study conducted on a random sample of 723 men and 784 women aged 14-24 years, living in a township in the Carleton Ville district of South Africa reported that Median (IQR) of age at first sex was 17 (15-18) for men and 17 (16-18) for women. Age at first sex is lower among men who have attended secondary school, and among women who were born recently, who lived in squatter settlements and who reached menarche early. Men and women who reported having had first intercourse before age 15 were considered to be early initiators. Early male initiators were more likely to have partners who have other partners, to give money for sex, and to report a higher number of partners. Early female initiators were more likely to have had sexual partner(s) who were married and sexual partner at least 5 years older than themselves. Among those who were sexually active, early age at first sex was not associated with HIV-1 or HSV-2 serostatus but being sexually active was associated with HIV-1 and HSV-2 serostatus among men and women (18).

Among women age 25-49, 32 percent had sexual intercourse before age 15, 65 % before age 18 and by age 25 most Ethiopian women have had sexual intercourse. The median age at first sexual intercourse for women age 25-49 years is 16.1 years, which is identical to the median age at first marriage. This suggests that Ethiopian women generally begin sexual intercourse at the time of their first marriage. The median age at first sexual intercourse has increased over the past two decades, from 15.7 years for women age 45-49 to 18.2 years for women age 20-24. EDHS data show that men initiate sex at a later age than women. The median age at first intercourse for men age 25-59 is 21.2 years. An assessment of the median age at first intercourse across the different age cohorts indicates that there has not been any significant change in age at first sexual intercourse for men over the past 20 years (1, 2, 3)

According to EDHS 2005 16% of young women and 2 % of young men had sex by age 15 while 35 % of young women and 9 % of young men had sex by age 18. Looking at the age patterns for young women, the proportions of young women reporting that they had sex before age 15 are markedly lower among those under age 18 than among older girls. Young

women age 18-19 were less likely than those age 20-24 to say they had initiated sex before age 18. This likely reflects the effect of rising age at marriage because only very small proportions of never-married young women report that they had sex by age 15 (0.2 percent) or by age 18 (2 percent). Other differentials in the indicators for young women reflect the influence of factors that predict delayed marriage, e.g., young women in urban areas are much less likely to have had sex by age 15 or by age 18 than young women in rural areas (4)

A cross-sectional, comparative study which was conducted in East Gojam zone among 1040 out-of-school reported that the mean age at first sexual onset was found to be 13.6 years. About 45% of the participants reported that they had sexual experiences, of whom 141 (31%) were males and controlling for possible confounding variables sexual activity was found to be significantly associated with rural residence, older age, female sex, mother's education, and not living with both parents Significantly higher proportions of rural adolescents were also found to be sexually active (OR =3.0; 95%CI = 1.9, 6.2). About 46% of the sexually active rural adolescents had 2-5 lifetime sexual partners compared to 35.4% of their urban counterparts. However, contraceptive use including condoms was ten times lower among rural adolescents (OR = 0.10; 95%CI =0.04 - 0.3). Only 2% of the rural compared to 35% of the urban sexually active adolescents had ever used condoms. A high divorce rate of 32% in rural and 27% in the urban adolescents was noted (19).

2.2. Determinants of age at sexual initiation

2.2.1. Adolescents socio-demographic characteristics

A cross-sectional survey conducted with 788 adolescent ages 15-19 in Hanover, Jamaica; identified that 62% of the sample reported having had sex and 37% reported never having had sex. Adolescent males reported "curiosity" (26%) and "I wanted to" (13%) as reasons for engaging in sex the first time. Only 2% of males reported engaging in sex for love. Males with no sexual experience reported being "not ready" (22%) as the reason for abstaining. Adolescent females reported being "in love" (15%) as the reason for first sex, followed by "forced sex/rape" (14%) and "curiosity" (12%). Adolescent females report "fear of pregnancy/STI" (22%),"not ready" (21%) and "religious beliefs" (12%) as reasons for abstinence (20).

The national longitudinal survey of youths in USA showed that, sex being Male (OR= 4.34), Substance use score 2.31, Loneliness score 2.41 have significant relation with earlier sexual initiation while residence, age at menarche 0.95 Good school" score 0.98 does not show a significant effect (16).

A cross sectional survey among youths in Addis Ababa revealed that 29% had planned sex while the remaining 71% reportedly had causal sex. Moreover, 22% reported ever use of condoms, while 24% admittedly experienced abortion. With the average age at sex debut (Mean = 16.7 years, SD=1.7), the respondents initiated sex as early as 11 years. Some of the reasons for sexual debut were identified, with 'maintaining relation with male partner's (51%), 'for the sake of passionate love'(45.8%), and 'to overcome loneliness' (40%) as the three most important reasons. Regarding self-restraining capacity, the majority of the respondents (75.4%) indicated that they had 'little or no control over' their sexuality in the face of sexual advances made by male partners (44)

Wellings *et al*. found that among sexually active females, leaving school early (at the minimum school leaving age of 16) was independently associated with pregnancy (resulting in motherhood). Bonell *et al*. found that females who disliked school were significantly more likely to report pregnancy (by age 16) compared with those who liked school. This association remained largely unaffected by adjusting for other factors, including expectations (of parenting and education at age 20), confidence (in rejecting unwanted sex and communicating about sex) or knowledge (about emergency contraception timing and contraception services). In the same study lack of expectation of being in higher education at age 20 was also significantly associated with early pregnancy (21).

Urban women have their first sexual intercourse about two years later than rural women, while urban men have their first intercourse about a year earlier than rural men. Women with at least some secondary education have their first intercourse about five years later than women with no education. On the other hand, highly educated men initiate sex a year earlier than men with no education. Among women, age at first sexual intercourse is lowest in Amhara mean age 14.6 years (3).

2.2.2. Sexual health knowledge

A large UK study demonstrated early age (<16 years) at sexual initiation independently associated with early pregnancy. In the same study, 'sexual competence' at first sex (a composite measure including variables on regret, willingness, autonomy and use of contraceptives), and reporting parents as the main source of information about sex, were not associated with lower early pregnancy rates. Nevertheless, two further descriptive studies reported that, among males, having first date intercourse more than twice, having more than two sexual partners, having had an STI, been a victim of a sexual offence, or non-use of contraceptives, were related to having made their partners pregnant. Five studies examined the relationship between service accessibility and teenage pregnancy. However, the association was only significant in urban areas up to 10 km away from their nearest clinic. The authors noted that specialized clinics are more likely to be located in cities and town centers, while suburbs (further away from cities) may represent a more affluent area with low pregnancy rates (21).

According to the most recent survey findings, at least 90 percent of young men in Côte d'Ivoire, Ghana, Kenya, Senegal, and Zimbabwe know of one or more modern contraceptive methods. The lowest levels of knowledge are found in Tanzania (65 percent) and Mali (75 percent). Among women, the proportion with knowledge of modern contraception reaches at least 90 percent in Côte d'Ivoire, Kenya, and Zimbabwe. Only two-thirds have knowledge in Burkina Faso, Mali, and Tanzania. The greatest intersurvey increase was observed in Mali, where knowledge of modern methods was lowest among the earlier surveys (22).

On the other hand, the study among secondary school youth across Ethiopia found that among males, those who initiated intercourse early were more likely to be currently younger (16-19 yrs vs. 20-24 yrs), in lower grades (9 or 10 vs. 11 and 12), to belong to other than Oromo ethnic groups, and to identify themselves as Muslims. Among females, only lower grade level and Amhara ethnic background were marginally associated with early sexual initiation (23).

The study of sexual experiences and their correlates among 572 Jimma University unmarried students also found that male students were more than twice as likely as female students to be sexually experienced (Odds Ratio, OR 2.4).Students at final year and older ones (22-24 years), respectively had an elevated likelihood of being sexually experienced than their first year and younger (17-19 years old) peers [OR 1.35-1.56] (24).

The study among in and out-of-school youth (15-24 years) in Addis Ababa found that being out-of-school, male, age of > 20 years influenced a decision to engage in sexual activity (25). Another cross-sectional study among 383 secondary school students in Kolla Diba town of North Gondar zone found that females [mean age of sexual commencement of 15.5 years] become sexually active earlier than boys [16.7 years] ($t_{1=}$6.7;p=0.01).Urban students had earlier sex (15.9 years) compared to their rural (17 years) counterparts ($t_{1=}$32.9; p=0.01). Being sexually active was statistically associated with the educational level of the students (χ^2=15.3; p=0.0005) (26).

2.2.3. Non Sexual Risk behaviors

A cross-sectional study among Ethiopian in and out of school by Derege et.al showed that Over 20% of out-of-school youth had unprotected sex during the 12-month period prior to interview compared to 1.4% of in-school youth. Daily Khat intake was also associated with unprotected sex: adjusted OR (95% CI) = 2.26 (1.92, 2.67). There was a significant and linear association between alcohol intake and unprotected sex, with those using alcohol daily having a three fold increased odds compared to those not using it: adj. OR (95% CI) = 3.05 (2.38, 3.91). Use of substances other than Khat was not associated with unprotected sex, but was associated with initiation of sexual activity: adj. OR (95% CI) = 2.54 (1.84, 3.51) (39).

Modern contraceptive use was found to be low (21%) among the sexually active study subjects. Only 44 (12%) of those who were ever married had used modern contraceptives compared to 52 (57%) sexually active adolescents who were never married. Only 2% of the rural compared to 35% of the urban sexually active adolescents had ever used condoms. After controlling for confounders, only place of residence and mother's education remained to be significantly associated with contraceptive use (19).

2.2.4. Parental socio economic characteristics as determinants of age at first sex

Both relationship satisfaction and maternal attitudes toward premarital sex were inversely associated with the initiation of sexual activity. As adolescent satisfaction with the parent-child relationship increased, the probability that the youth had engaged in sexual intercourse decreased. Similarly, as adolescents' perceptions of mothers' emphasis on abstinence increased, the likelihood that the adolescent had engaged in intercourse decreased(r=-0.4069'). In contrast, as reported discussions about birth control increased (r=2.33), the likelihood that the adolescent had initiated intercourse also increased (27).

Three studies in Europe examined whether family disruption influenced the likelihood of teenage pregnancy. Two reported that the likelihood of pregnancy was higher among teenagers who did not live with both parents. One reported no significant difference by family type after adjusting for further sociodemographic factors as well as early age (<16) at first intercourse, which was itself significantly associated with teenage pregnancy(21).

In addition, neither the absence of a father figure nor the presence of grandparents is significantly related to early sexual activity OR=.0.52 And although the results are in the expected direction, they found no association between economic well-being and the likelihood of early sex, possibly because of the relative homogeneity of the sample Percent of surveys mother's partner was present (16).

2.2.5. Mass media and TV

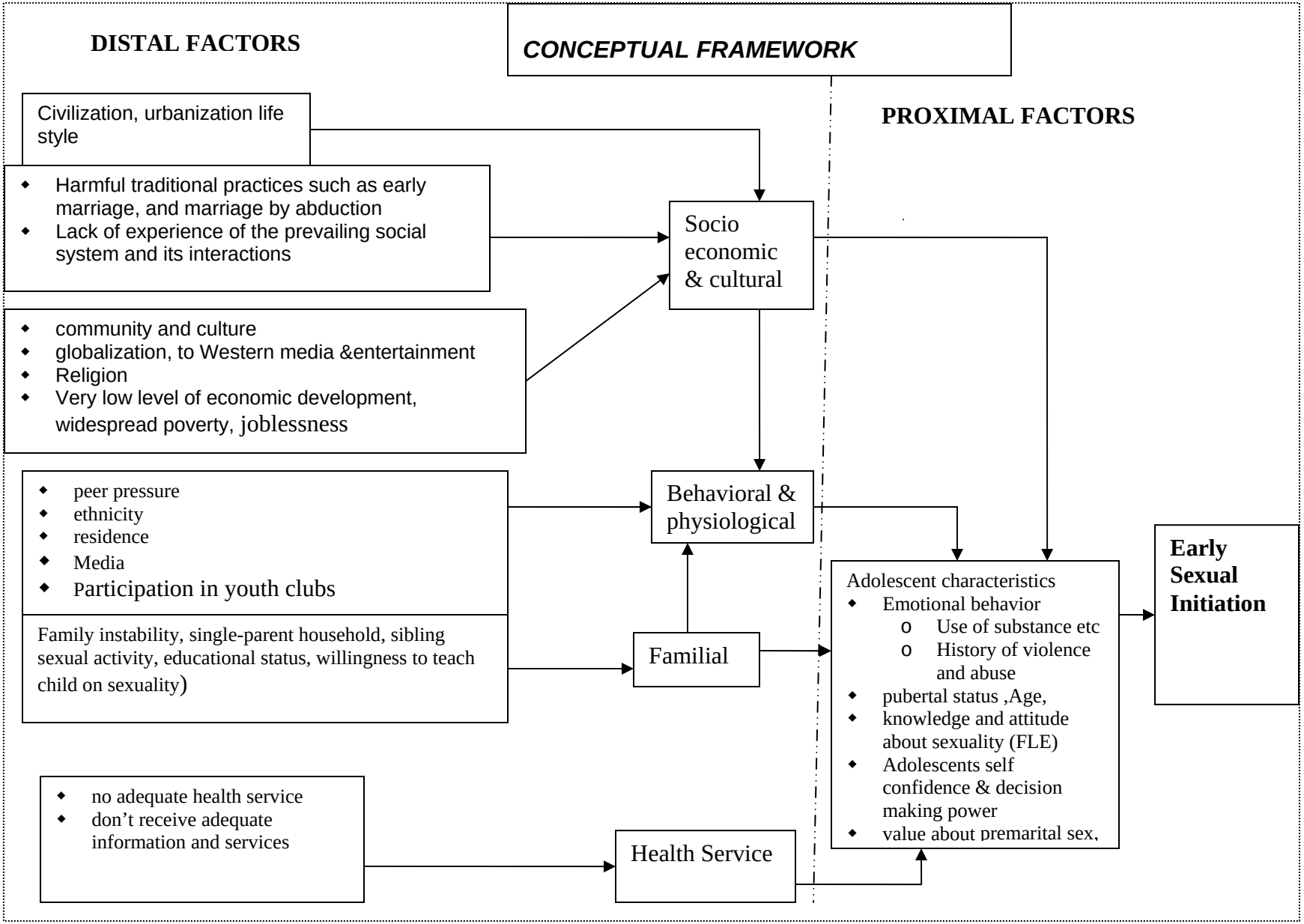
DHS data indicate that Ethiopian youth have very limited exposure to mass media, with more than four in five women and men age 15-24 having no regular exposure to the newspaper, television, or radio (1-3). A study done in rural china about pornographic videos and sexual debut revealed that to gain information on the opposite sex and sexual intercourse more specifically, many Chinese women turned to pornographic magazines and videos. Pornographic films represent an increasingly popular form of entertainment among Chinese youth living in rural settings. Young women in this study stated that they frequently viewed pornographic videos in the company of their boyfriends and were then eager to "try out" what they had observed. Most (33 of the 40) of the women indicated that they either viewed

pornographic videos or read pornographic magazines with classmates, friends, or boyfriends. Viewing was often followed by sexual experimentation. During focus group discussions, both male and female participants indicated that pornographic videos were their main source of "sex education." A history of induced abortion was not a prerequisite for focus group participation, speaking for the more widespread nature of this practice (38).

2.2.6 Socioeconomic status Religiosity and the timing of sexual initiation

The longitudinal study among American youths also identified that Boys and girls who attend church at least twice a month but who do not have any friends attending their church are no different from less frequent churchgoers in their likelihood of early sexual activity. However, children who attend church regularly and have peers attending the same church are less than half as likely to be sexually active by age 14 as their counterparts who do not attend church (16).

Age at sexual debut was obtained for 340 teenage and 295 adult mothers. Of these, 57.1% and 22.7% respectively were sexually active by the age of 15 years (OR= 4.52; 95% CI= 3.15, 6.5). Ten and 14% percent of teenage and adult mothers respectively reported current modern contraceptive use (P>0.05). The two groups were also comparable on such variables as fertility preferences and partner’s attitude towards family planning. About 5% of the 663 teenage mothers were <15 years old at the time of the index pregnancy. As high as 60% of them reported that they wanted this pregnancy (15).


DISTAL FACTORS
CONCEPTUAL FRAMEWORK
PROXIMAL FACTORS
Civilization, urbanization life style
Harmful traditional practices such as early marriage, and marriage by abduction
Lack of experience of the prevailing social system and its interactions
community and culture
globalization, to Western media &entertainment
Religion
Very low level of economic development, widespread poverty, joblessness
Socio economic & cultural
peer pressure
ethnicity
residence
Media
Participation in youth clubs
Family instability, single-parent household, sibling sexual activity, educational status, willingness to teach child on sexuality)
Behavioral & physiological
Familial
Adolescent characteristics
Emotional behavior
Use of substance etc
History of violence and abuse
pubertal status ,Age,
knowledge and attitude about sexuality (FLE)
Adolescents self confidence & decision making power
value about premarital sex,
Early Sexual Initiation
no adequate health service
don't receive adequate information and services
Health Service

3. OBJECTIVES

3.1. General Objective

To determine median age of first sexual intercourse and the determinants of sexual initiation among rural and urban youths (age 15- 24 years) in Dessie town and Dessie Zuria rural Woreda.

3.2. Specific Objectives

1. To determine median age at first sexual intercourse.
2. To identify factors that determines age at first sexual intercourse.
3. To explore the impact of early sexual initiation on reproductive health problems of adolescents and young adults.

4. METHODOLOGY

4.1. Study Design

A comparative analytical cross sectional study was conducted in Dessie town and Dessie Zuria rural Woreda, North East Ethiopia. The study also used qualitative study design (FGDs) to supplement quantitative data.

4.2. Study Area and Period

The study was conducted in Dessie Town and Dessie Zuria rural Woreda, South Wollo Zone in Amhara National Regional State, in Ethiopia. Dessie is the capital town of South Wollo zone located 400 Km away to the north of Addis Ababa and 480 Km away from Bahir Dar, the capital of Amhara Regional state. Based on the 1994 National Population and Housing Census of Ethiopia, the population of the town, in 2007 projected to be 177,116. Dessie town has in 20 Kebeles (small administrative units). The Health system is represented by one regional hospital, one health center and six governmental health posts. In addition, there were five higher clinics, one general hospital, two medium clinics and nine lower clinics owned by private sectors. Youths (age group 15-24) are estimated to be (39,600) 22 % of the total population. Dessie Zuria rural Woreda has 31 rural Kebles and the total population of projected to June 2007 was estimated to be 278,725.

The town has 1 newly established university, one business and management and one health Science College, one technical & vocational school, two preparatory and three high schools, and there are other private owned colleges. The study was conducted between, March 1 to March 15, 2008.

4.3. Source Population

The source population was taken from all young adults in the age group 15 to 24 who resides in Dessie town and Dessie Zuria Woreda at the time of study.

4.4. Study Population

All sampled young adults in the age group 15-24 years who are selected for the study.

4.5. Sample Size and Sampling Technique

4.5.1. Sample Size Determination

A sample size of 1294 (647 urban and 647 rural young adults) is obtained using sample size calculation for comparative cross-sectional study and based on the following formula and assumptions (including 10% non response rate). Residence urban rural is considered as main determinant for early sexual initiation and used for sample size determination.

$$n_1 = \frac{\left[Z_{\frac{\alpha}{2}} \sqrt{\left(1+\frac{1}{r}\right) P(1-P)} + Z_{\beta} \sqrt{P_1(1-P_1) + \frac{P_2(1-P_2)}{r}} \right]^2}{(P_1 - P_2)^2}$$

n = required minimum sample size for the two groups
P1 = Prevalence of early sexual initiation before 18 years for rural youths 60.2 % (19).
P2 = Prevalence of early sexual initiation before 18 for urban youths, 50 % (3).

Pooled population **P= 44.8%= $\frac{(P1+P2)}{2}$**

$Z\alpha_2$ = 1.96 at 95% level of confidence

Zβ = 0.84 for 80% power of the test

Proportion of group 1 to group 2 (Rural to Urban) is taken as equal **1:1**

Allowing for a contingency due to non-response (a rate of 10%) and a design effect of 1.5 the final sample size were 1294 (647 urban and 647 rural young adults)

4.5.2. Sampling Techniques

A multistage cluster sampling was used. A total of 12 Kebeles (6 Kebeles from Dessie town and 6 Kebeles from the rural Dessie Zuria rural Woreda) were randomly selected from urban and rural Kebeles respectively by lottery method. Ten kebeles surrounding Dessie town were purposely excluded to avoid behavioural contamination from rural urban youths. Each kebele have around 5000 population in approximately 1000 households. Assuming that the Kebeles has equal households, and then from each Kebele

108 households were selected. Each rural Kebele is organized in to 6 sub units called villages or Gots and Ketenas for urban Kebeles. To select the households we went to the center of the village (Got/Ketana) and then we spin a bottle to select the direction of the first house hold in the village. Then, after the first household has been selected we went every 10th households (random walk method). All 15-24 in the selected households were studied.

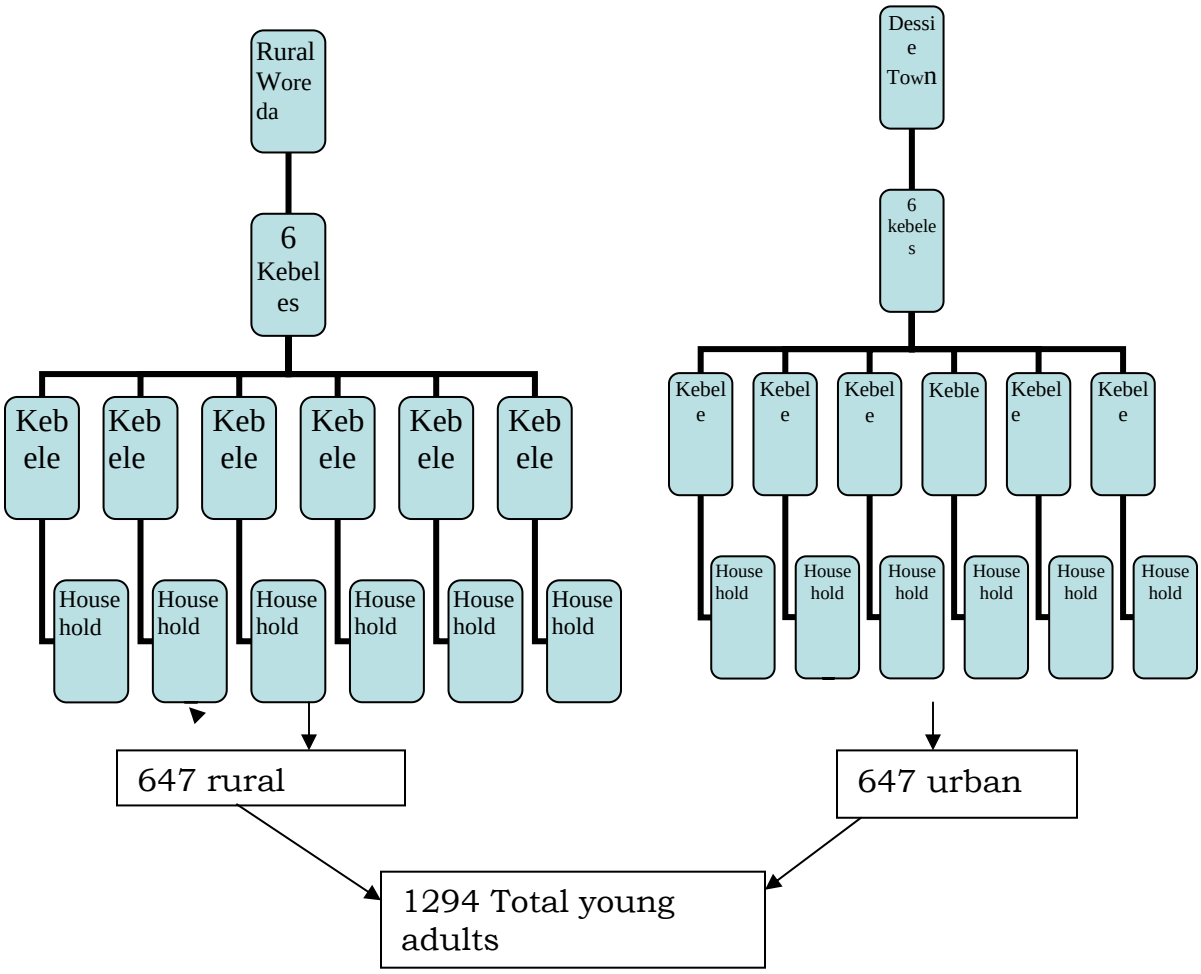


Figure shows schematic presentation of sampling technique

4.6. Variables

Dependent variables: - *S*exual initiation (early/late)

Explanatory variables for the main outcome: -

- Youth Socio demographic characteristics: - Residence, Age, Sex, Marital Status, Religion, Educational status, Availability of paid job and Monthly income.
- Family characteristics:-
    - Parental Socio demographic characteristics:- Parental education and Monthly income
    - Family structure youth were raised until age 14
    - Relationship with parents
    - Parents' values towards sexual relationships of their kids
    - Parental supervision
    - Parent child communication on sexuality and reproductive health
- Peer norms and pressure:- (Level of peer pressure, norms regarding sex)
- Attitude of youth about sex in general and their view on premarital sex
- Knowledge about, STI and HIV/AIDS
- Non-sexual risky behaviors:- (Alcohol use, Drug use, Viewing pornographic materials)
- Knowledge about reproductive functions, puberty. And contraception

4.7. Data Collection Technique and Materials

4.7.1 Quantitative Part

A semi-structured pre-tested standardized but locally adopted questionnaire was utilized for data collection. The standardized questionnaire was first prepared in English. It was translated to Amharic and back to English again order to maintain the validity of the instrument. There were 2 supervisors who were nursing students and extensively trained for one day on how to supervise the data collection. Eight data collectors (Same gender) were assigned. The interviewers were the same gender in order to decrease

embarrassment as some of the questions were about personal sexual lifestyle issues. Data collection was conducted for two weeks starting from March 1st to 15th , 2008. During the data collection respondents were arranged in a manner that can ensure their privacy during the interviews or FGDs.

4.7.2 Qualitative Part

For the focus group study; a total of 32 focus group Participants were purposely selected from all 6 rural and 6 urban Kebeles. Attempts were made to capture participants from all categories of youths in equal proportion in school youths, out of school youths, anti aids clubs, youth leaders, peer educators and religious clubs in equal proportion between male and females. Four successive focus group discussions were held with youths disaggregated by rural 16 (8 in each group) and urban 16 (8 each for in each group). The prime purpose of these focus group discussions was to complement the data that were generated by quantitative survey, elaborate issues that may not be clearly reflected in the survey findings and also to identify the information, knowledge and opinion of the participants about early initiation into sexual intercourse its pattern determinants and sequel and possible prevention methods . The discussion was moderated by the principal investigator and a counselor at Dessie model youth clinic as assistance.

The purpose, aim and rules of the discussion were explained to the participants and verbal consent obtained. All selected youths agreed to participate in discussions. Special attention was paid to maintaining privacy and confidentiality during the discussions. Tape recorded as well as hand in hand notes were taken both by the researcher and an assistant during focus group discussion. . Efforts were made to ensure quality and confidentiality of data obtained. Of course, despite these efforts, limitations to this approach must be acknowledged. Notably, the sensitive nature of the topic did indeed inhibit free and frank discussion of intimate sexual matters and the insights that emerged are likely to reveal broad trends.

4.8. Data Management and Quality Control Measures

The instrument is derived from standard data collection tools prepared by FHI &WHO. It was pre-tested for consistency of responses by taking 5% of the sample size, after selecting one town and one rural Kebeles which were not included in the study. After analyzing the pre-test result necessary modifications were made accordingly before we used it in the actual survey. One day intensive training was given to the data collectors and supervisors before the pretest had been undertaken. The supervisors and principal investigator had closely followed the day-to-day data collection process and ensure completeness and consistency of the collected questionnaire daily. Finally 5% of the samples were re-interviewed by supervisors and principal investigator.

4.9. Data Processing and Analysis

All returned questionnaires have been checked for completeness and consistency of responses manually. After cleaning Data was coded and entered, in to EPI INFO version 2000 and analyzed using both EPI INFO version 2000 SPSS for Windows versions 15.0.

Both descriptive and analytical statistical tests procedures were utilized; univariate and multivariate analysis was used to determine the presence of statistically significant associations between the dependent variable and the independent variables. Kaplan-Meier (KM) and Cox proportional hazard regression model were utilized to estimate age at sexual debut.

4.10. Operational Definitions

- Age at sexual initiation: is age at first intercourse (vaginal penile penetration) other non-intercourse sexual contacts (Kissing, dating & MSM etc…) will not be included. Despite the fact that males may initiate sex through penile anal penetration [male sex with males (MSM)] was also reported in many countries and in a single qualitative study in Ethiopia it wasn't included in this study primary because of fear of genuine answer may not be guaranteed as its associated with strong stigma and secondary just for the scope of the study.

- Early sexual initiation was taken as an experience of first intercourse before 18 years of age.
- Parent teen connectedness: There were twelve statements to measure parent teen connectedness; each had three point Likert scale. Over all attitude score less than 50% of the attitude questions was regarded as less favorable after attitude score was ranked 0 for correct and 1 for incorrect. Further The twelve statements were broken up in to three variables family connectedness, family supervision and family norms accordingly less connectedness were taken as a score of less than mean score and high connectedness will be greater than the mean score.
- Knowledge about pregnancy, STI and HIV/AIDS: for each close ended knowledge question, if respondents responded 3 prevention and three transmission methods of HIV.
- Youths: are those who are in the age group of 15-24 years.

4.10 Ethical Consideration

Ethical clearance was obtained from the Ethical Committee of AAU. Officials at different levels Dessie town municipality and administrative office and selected woredas and kebeles were communicated through formal letters from the SCH, Addis Ababa University. Response to the survey was anonymous. Participants were informed about the purpose and objective of the study also informed that they have full right to discontinue or refuse to participate in the study and a verbal consent were obtained from each study participants. Confidentiality of the information obtained was assured and privacy was maintained.

4.11. Dissemination of Results

Final result of this paper will be given to medical faculty of Addis Ababa University, to South Wollo Zone zonal administrative office and health departments and to Ethiopian Public Health Association and to concerned offices including MOH, FHAPCO and UN agencies.

An Attempt will also be made to present the paper at conferences and to publish on reputable research Journal.

5. RESULT

5.1 Youth and Parental Socio-Demographic Characteristics

From all 12 Kebeles (6 urban and 6 rural) a total of One thousand two hundred and thirty six youths aged 15-24 participated in the study, giving a response rate of 95.5 %. The socio-demographic features of the study subjects are shown in Table-1.Nearly 51 % of the respondents were female with male to female ratio of 0.97:1.02. Fifty one percent of respondents were rural by residents and 57% of youths were between 15-19 years with a mean age of 19.4 years (SD = 2.7). Islam was the dominant religion in rural Kebeles 82.8% while majority urban youths were Christians 58.5%. Only 29.6% of rural youths had had high school and above education while 78.8% of their urban counterparts had. The majority 79.1 % 0f youths weren't ever married. About 37 % of youths are not currently enrolled in school, and 25.4% had some job for pay. Of those who had job for pay 65.0% have income of less than 500 Ethiopian Birr with Mean $\pm$SD income =527$\pm$(487.02) (Table 1).

Table 1: Youth socio demographic characteristics by residence Dessie town and Dessie Zuria Rural Woreda, Ethiopia, March 2008

Variable	Rural n=627 (50.7%)	Urban n=609 (49.3%]	TOTAL n=1236(100%)	
Age				
15–19	404(64.4%)	305(50.1%)	709(57.4%)	Mean age ± SD =19.39±(2.74)
20–24	223(35.6%)	304(49.9%)	527(42.6%)	
Sex				
Male	337(53.7%)	272(44.7%)	609(49.3%)	
Female	290(46.3%)	337(55.3%)	627(50.7%)	
Religion				
Muslim	519(82.8%)	253(41.5%)	772(62.5%)	
Christians	108(17.2%)	356 (58.5%)	464(37.5%)	
Marital status				
Never married	486(77.5%)	492(80.8%)	978(79.1%)	
Ever married	141(22.5%)	117(19.2%)	258(20.9%)	
Education				
Illiterate	84(13.4%)	15(2.5%)	99(8.0%)	
Read & write	89 (14.2%)	25(4.1%)	114(9.2%)	
Primary	268(42.7%)	89(14.6%)	357(28.9%)	
Secondary	162(25.8%)	298(48.9%)	460(37.2%)	
TVT	9(1.4%)	78(12.8%)	87(7.0%)	
College	15(2.4%)	104(17.1%)	119(9.6%)	
Currently in school				
Attending	398(63.5%)	383(62.9%)	781(63.2%)	
Out-of-school	229 (36.5%)	226(37.1%)	455(36.8%)	
Ethnicity				
Amhara	599(95.5%)	565(92.8%)	1164(94.2%)	
Tegrie	12(1.9%)	19(3.1%)	31(2.5%)	
Oromo	8(1.3%)	15(2.5%)	23(1.9%)	
Others	8(1.3%)	10(1.6%)	18(1.5%)	
Have a job for pay				

Yes	129 (20.6%)	185(30.4%)	314(25.4%)	
No	498 (79.4%)	424(69.6%)	922(74.6%)	
Income of youths				Mean ±SD =527(487.02)
Less than 500 ETB	57(71.3%)	97(61.8%)	154(65.0%)	
Greater than 500 ETB	23(28.8%)	60(38.2%)	83(35.0%)	

Concerning family structure, nearly 67% of adolescents grew up in their family with both biological parents up to age 14,while 33 % were raised in families where either or both of the biological parents were absent. Majority 48.1% of the participants had illiterate mothers with rural urban prevalence of 67.5% and 28.2%respectively. Regarding parents occupation housewife were dominant occupation for mothers of both rural & urban respondents while fathers occupation was mainly farmer for rural and merchant for urban adolescents. For those youths who were able to list there family income nearly half of youth parents have income of less than 500 ETB per month (Table 2).

Table: 2 Parental characteristics of respondents by residence Dessie town and Dessie Zuria Rural Woreda, March, 2008

Variable	Rural		Urban		Total
	Male n=337(%)	**Female n=**290(%)	**Male n=**272 **(%)**	**Female n=**337(%)	
With whom you grew up until age 14					
Both Parents	253(75.1%)	185(63.8%)	174(64.0%)	214(63.5%)	826**(**66.8%**)**
Single Parent	63(18.7%)	63(21.7%)	64(23.5%)	88(26.1%)	278**(**22.5%**)**
Grand parents	16(4.7%)	36(12.4%)	19(7.0%)	22(6.5%)	93**(**7.5%**)**
Others	5(1.5%)	6(2.1%)	15 (5.5%)	13(3.9%)	39**(**3.2%**)**
Mothers educational status					
Illiterate	228(67.7%)	195(67.2%)	83(30.5%)	89(26.4%)	595(48.1%)
Read & write	74(22.0%)	71(24.5%)	77(28.3%)	97(28.8%)	319(25.8%)
Grade 1-6	27(8.0%)	13(4.5%)	45(16.5%)	60(17.8%)	145(11.7%)
Grade 7-12	6(1.8%)	10(3.4%)	40(14.7%)	48(14.2%)	104(8.4%)
12 and above	2(.6%)	1(0.3%)	27(9.9%)	43(12.8%)	73(5.9%)
Fathers educational status					
Illiterate	181(53.7%)	150(51.7%)	49(18.0%)	52(15.4%)	432(35.0%)
Read & write	76(22.6%)	81(27.9%)	39(14.3%)	71(21.1%)	267(21.6%)
Grade 1-6	43(12.8%)	28(9.7%)	48(17.6%)	40(11.9%)	159(12.9%)
Grade 7-12	22(6.5%)	13(4.5%)	54(19.9%)	43(12.8%)	132(10.7%)
12 and above	15(4.5%)	18(6.2%)	82(30.1%)	131(38.9%)	246(19.9%)
Mothers occupation					
Civil servant	5(1.5%)	4(1.4%)	31(11.4%)	54(16.0%)	94(7.6%)
House wife	225(66.8%)	170(58.6%)	147(54.0%)	179(53.1%)	721(58.3%)
Merchant	28(8.3%)	38(13.1%)	55(20.2%)	54(16.0%)	175(14.2%)
Farmer	75(22.3%)	68(23.4%)	19(7.0%)	15(4.5%)	177(14.3%)
Daily laborer/house maid	-	4(1.4%)	11(4.0%)	28(8.3%)	43(3.5%)
Others	4(1.2%)	6(2.1%)	9(3.3%)	7(2.1%)	26(2.1%)
Fathers occupation					
civil servant	6(1.8%)	5(1.7%)	81(29.8%)	124(36.8%)	216(17.5%)
Merchant	13(3.9%)	13(4.5%)	76 (27.9%)	82(24.3%)	184(14.9%)
Farmer	301(89.3%)	252(86.9%)	50(18.4%)	35(10.4%)	638(51.6%)
Daily laborer	6(1.8%)	5(1.7%)	19(7.0%)	38(11.3%)	68(5.5%)

Others	11(3.3%)	15(5.2%)	46(16.9%)	58(17.2%)	130(10.5%)
Family income (n=125)					
Less than 500	17(77.3%)	12(75.0%)	21(42.9%)	17(44.7%)	67(53.6%)
More than 500	4(18.2%)	3(18.8%)	14(28.6%)	13(34.2%)	34(27.2%)
Greater than 1000	1(4.5%)	1(6.3%)	14(28.6%)	8(21.0%)	24(19.2%)

5.2 Attitudes of Youths to Parents and Parent-Youth Connectedness

A total of 12 questions were asked to assess respondents' connectedness with family and family supervision or control. Respondents score a range of 0-12 mean $\pm$SD (8.2$\pm$2.96) (Table 3). Then the 12 questions were grouped in to three variables family Connectedness (5), family Control and norms (3), family supervision (4). Table- 4, on t- test for independent sample to understand weather there is a mean difference related to family characteristics between rural and urban parents showed that rural parents have more conservative norms t= 7.4 (P value < 0.001) than urban parents. However there were no significance mean score differences regarding family connectedness and supervision or guidance between rural and urban parents. Table-5 also shows over all attitude After attitude score is grouped in to favorable and unfavorable over all 75 % of youths have favorable attitude on their relationship with parents (77% of rural youths have more favorable attitude than their urban counterparts 73 %).

Table 3: Attitude of youths towards their parents' and parent-youth connectedness in Dessie town and Dessie Zuria Rural Woreda, March 2008.

Attitude score		**Disagree**	**Neutral**	**Agree**
Family Connectedness (n=1236)		**Mean ± SD score for family connectedness =2.6±1.4)**		
She (He) cares about me	**Mother**	62(5.0%)	86(7.0%)	1088(88.0%)
	Father	127 (10.3 %)	170 (13.8%)	939 (76.0%)
I am happy with my relationship with my mother (father)	**Mother**	90(7.3%)	86(7.0%)	1060(85.8%)
	Father	156(12.6%)	156(12.6%)	924(74.8%)
I feel my parents trust me		110(8.9%)	150(12.1%)	976(79.0%)
Family Control and norms (n=1236)		**Mean ± SD score for family norms =1.42± (0.8)**		
My parents have rules about who, when, or how often I can date		408(33.0%)	258 (20.9%)	570(46.1%)
It is unacceptable for my parents if I get engaged with a boy/girl they didn't choose for me		364(29.4%)	285(23.1%)	587(47.5%)
It is against my parents' values for me to have sexual intercourse while I am an unmarried teenager		193(15.6%)	217(17.6%)	826(66.8%)
Family supervision(n=1236)		**Mean ± SD score for family supervision =4.04±(1.44)**		
My parents show interest in my academics		225(18.2%)	90(7.3%)	921(74.5%)
My parents show interest in my manners		261(21.1%)	122(9.9%)	853(69.0%)
My parents show interest in my friends		323(26.1%)	176(14.2%)	737(59.6%)
I should seek approval of my parents to go camping with classmates/friends		412(33.3%)	113(9.1%)	711(57.5%)

Table 4: Analysis of means of child-parent connectedness score distributed by rural and urban youths, Dessie town and rural Woreda, March, 2008

Attitude variables	Residence	number	Mean	Std. Deviation	t	P value
Parental supervision score	Rural	627	2.63	1.43	.244	.523
	Urban	609	2.58	1.33		
	Total	1236	2.61	1.38		
Family norms	Rural	627	1.59	.79	7.4	.000
	Urban	609	1.26	.78		
	Total	1236	1.43	.80		
Family connectedness score	Rural	627	4.04	1.45	.24	.807
	Urban	609	4.02	1.43		
	Total	1236	4.03	1.44		

Table 5: Summary of attitude score by respondents distributed by rural and Urban, Dessie town and rural Woreda, March 2008

Attitude score	Residence		
	Rural	Urban	
Un Favorably(<6/12)	146(23.3%)	160(26.3%)	Mean±SD=(8.2±2.96)
Favorable (>6/12)	481(76.7%)	449(73.7%)	
Total	627(100.0%)	609(100.0%)	

5.3 Peer pressure and attitude about sex

Forty three percent of the respondents have ever been encouraged by their friends to have boy/girl friend. Further more, 18.7% and 23.9 % of rural and urban youths have encountered pressure from their peers to have sexual intercourse respectively. Majority of respondents reported that most of their peers had a boy friend or girl friend. Nearly two third of respondents disapprove premarital sex even if their peers have it. Ten percent of youths were involved in at least one of youth or religious clubs (Table 6).

Table 6: Peer pressure and perceptions of peer norms regarding sexual initiation among youths in Dessie town and Dessie Zuria Woreda, March 2008

Variable	Rural n=627 (%)	Urban n= 609 (%)	Total n=1236 (%)
Ever been Encourage by peers to have a boy or girl friend			
Yes	273(43.5%)	261(42.9%)	534(43.2%)
No	354(56.5%)	348(57.1%)	702(56.8%)
Encountered a pressure by peers to have sexual intercourse			
Yes frequently	150(23.9%)	114(18.7%)	264(21.4%)
Yes occasionally	72(11.5%)	74(12.2%)	146(11.8%)
Not at all	405(64.6%)	421(69.1%)	826(66.8%)
Friends have sex premarital			
None of them	137(21.9%)	93(15.3%)	230(18.6%)
A few of them	110(17.5%)	119(19.5%)	229(18.5%)
Half of them	113(18.0%)	73(12.0%)	186(15.0%)
Most of them	106(16.9%)	120(19.7%)	226(18.3%)
All of them	34(5.4%)	23(3.8%)	57(4.6%)
Don't know	127(20.3%)	181(29.7%)	308(24.9%)
Having sex while I am teenager would just be doing what everybody else is doing			
Disagree	425(67.8%)	403(66.2%)	828(67.0%)
Neutral	76(12.1%)	72(11.8%)	148(12.0%)
Agree	126(20.1%)	134(22.0%)	260(21.0%)
Involved in religious or youth RH clubs			
Yes	68(10.8%)	63((10.3%)	131(10.6%)
No	559(89.2%)	546(89.7%)	1105(89.4%)

5.4. Knowledge of Youths about Pregnancy, STI and HIV

Knowledge about what to do to avoid unwanted pregnancy if unsafe sex occurs is almost non extent. Only 7.7% (12% of urban and 2.6% rural) of youths know about emergency contraception. Awareness about HIV seems universal however, the scope of knowledge of youths about STIs apart from HIV/AIDS was particularly limited only 34% and was apparently worse for rural youths. Misconception about HIV/STI transmission exists despite about 68% of the respondents was able to list the three primary prevention of HIV transmission. Some of the misconceptions were 7%, 3.4%, and 2.1% believe that mosquito bite, sharing items with infected individuals and French kissing will transmit HIV. Furthermore, 9 % respondents believe that douching can prevent both HIV & STIs (Table 7).

Table 7 Knowledge of youths about selected ARH issues in, Dessie town and Dessie Zuria Woreda, Ethiopia, March 2008

Variables	Rural n=627 (%)	Urban n= 609(%)	Total n=1236(%)
What a women can do to avoid unwanted pregnancy after un safe sex			
EOC with in 72 hours	8(2.6%)	41(12.7%)	49(7.7%)
Don't know	304(97.4%)	281(87.3%)	585(92.3%)
Knowledge about STIs			
Knew at least one sign/symptom	270(43.1%)	146(24.0%)	416(33.7%)
Didn't know any sign/symptom	357(56.9%)	463(76.0%)	820(66.3%)
Knowledge about ways of HIV transmission			
Didn't know any ways of transmission	12(1.9%)	0(.0%)	12(1.0%)
Knew at least one or two way of transmission	234(37.3%)	141(23.2%)	375(30.3%)
Knew the 3 or more principal ways of transmission	381(60.8%)	468(76.8%)	849(68.7%)
Knowledge about ways of HIV prevention			
Didn't know the three primary preventive measure	246(39.2%)	141(23.2%)	387(31.3%)
Didn't know the three primary preventive measure	381(60.8%)	468(76.8%)	849(68.7%)
Had misconception about HIV prevention measures			
Insect bite transmit HIV	28(4.5%)	43(7.1%)	71(5.7%)
Sharing items	22(3.5%)	20(3.3%)	42 (3.4%)
French kissing	11(1.8%)	15(2.5%)	26(2.1%)
Douching will prevent HIV/STIs	50(8.0%)	63(10.3%)	113(9.1%)

This study identified that major sexual and reproductive health issues haven't been touched both in school and by parents. Among the respondents only 18.1% of mothers and 12.3 % of fathers will answer to them helpfully if they asked about sexual health questions. The most common SRH topic discussed by parents with youths were HIV/AIDS and unwanted pregnancy while the most common topics discussed in school are menstrual cycle and female and male reproductive organs. Least common topics discussed in school are contraceptives, STIs and unwanted pregnancy (Table 8). As shown in figure-1 most youths prefer to discuss SRH issues with their peers 41% followed by mothers and health personnel respectively. The list preferred resource persons were fathers 1%.

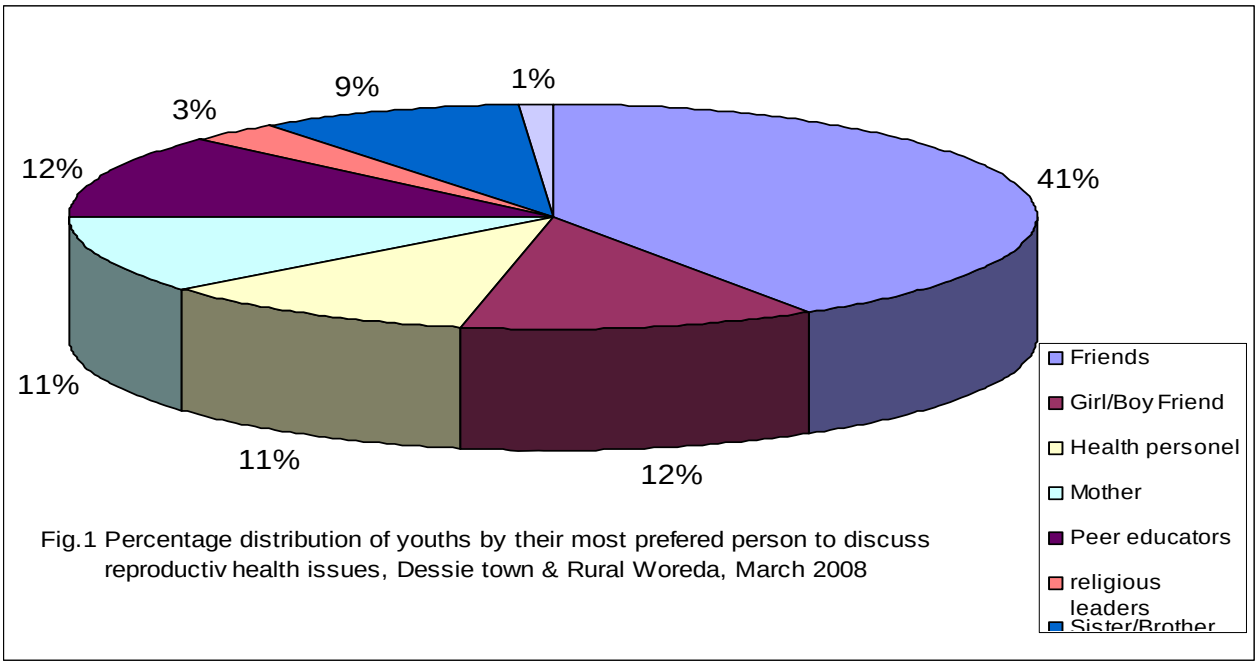


Fig.1 Percentage distribution of youths by their most prefered person to discuss reproductiv health issues, Dessie town & Rural Woreda, March 2008

Table 8: Parent-teen communication on Sexuality and Reproductive health, for rural and urban youths Dessie town and Rural Woreda, 2006

Variables	Rural n=627 (%)	Urban n= 609(%)	Total n=1236(%)
If I asked my parents			
Mother : Will Answer helpfully	100(15.9%)	124(20.4%)	224(18.1%)
Would turn me away	54 (8.6%)	67(11.0%)	121(9.8%)
Would scold me	103(16.4%)	52(8.5%)	155(12.5%)
Response depend on question	76(12.1%)	119(19.5%)	195(15.8%)
Not competent to answer	294(46.9%)	247(40.6%)	541(43.8%)
Father : Will Answer helpfully	56(8.9%)	96(15.8%)	152(12.3%)
Would turn me away	55(8.8%)	74(12.2%)	129(10.4%)
Would scold me	114(18.2%)	78(12.8%)	192(15.5%)
Response depend on question	69(11.0%)	111(18.2%)	180(14.6%)
Not competent to answer	333(53.1%)	250(41.1%)	583(47.2%)
SRH Topics discussed with parents			
Puberty & menstrual cycle	22(3.5%)	60(9.9%)	82(6.6%)
Contraceptive Methods to avoid pregnancy	62(9.9%)	97(15.9%)	159(12.9%)
Pregnancy	86(13.7%)	115 (18.9%)	201(16.3%)
Relation with opposite sex	60(9.6%)	109(17.9%)	169(13.7%)
STIs/ HIV/AIDS	110(17.5%)	169(27.8%)	279(22.6%)
Drug and Alcohol	66(10.5%)	117(19.2%)	183(14.8%)
Rape & Sexual abuse	39(6.2%)	91(14.9%)	130(10.5%)
SRH Topics discussed at school			
Puberty & menstrual cycle	327(55.6%)	484(79.6%)	811(67.8%)
Female reproductive system	344(58.5%)	481(79.1%)	825(69.0%)
Male reproductive system	341(58.0%)	470(77.3%)	811(67.8%)
Pregnancy	135(23.0%)	234(38.5%)	369(30.9%)

Contraceptive/ Methods to avoid pregnancy	135(23.0%)	231(38.0%)	366(30.6%)
HIV/AIDS	463(78.7%)	553(91.0%)	1016(84.9%)
STIs	140(23.8%)	267(43.9%)	407(34.0%)

5.5. Sexual Behavior and Determinants at Sexual Initiation

The median age at first sex is a general measure of the youthfulness of the start of sexual activity, tells us how quickly sexual activity builds up among the youthful population. The Mean & median age of sexual initiation in our finding were 16.8 years (SD= 2.25) and 17 years respectively (Range 8-24 years). Rural youths initiate sex at lower age, mean and median (16.49$\pm$2.11) and 16.00 than their urban counterparts mean and median (17.18$\pm$2.32) and 17.00 respectively. About half, 51.3% of the surveyed youths nearly in equal proportion between rural and urban 49.8%and 51.3 % have ever had sex. For rural youths first sex were initiated mainly with husband 41% or wife while for urban counter parts were with girl or boy friend 32%. A considerable number of high risk sexual initiation were also noted among the study participants 2.4% & 8.7% initiated there first sex with CSW and causal partner respectively. More over significant proportions of first sexual practice were unplanned 39% and unprotected 65%. Among those who reported their first sex was protected; the main methods reported were condom 46.6% followed by injectables 30 %. Nearly 61% youths start there sex before age 18 (Table 9).

Cox proportional hazards model for the survival of not having sex using age as a follow up showed the hazards of starting sex earlier is higher for rural youths than urban Adjusted hazard ratio [(AHR) (95%cI)) =1.447(1.165-1.797) or the Probability of rural

youths to start sex earlier was 60% with CI of (54 %, 71%)]. Further more, we identified that the probability of surviving with out sex up to age 18 is 40%. Figure-2, Plots of the KM curve for female rural urban indicates a wide gap between the rural females and urban females suggests that rural females tend to initiate at younger age than urban counter parts. It may further, indicate still rural females are engaged to marriage at a younger age. Figure-3 KM plot for males however, didn't show a significant difference between rural and urban males. The age at sexual debut is higher among males [(mean [95% CI] = 17.22 [16.98-17.]) than the females (mean [95% CI] = 16.47 (16.22-16.71)] and the difference is significant (P= 0.012) (Fig 2&3).

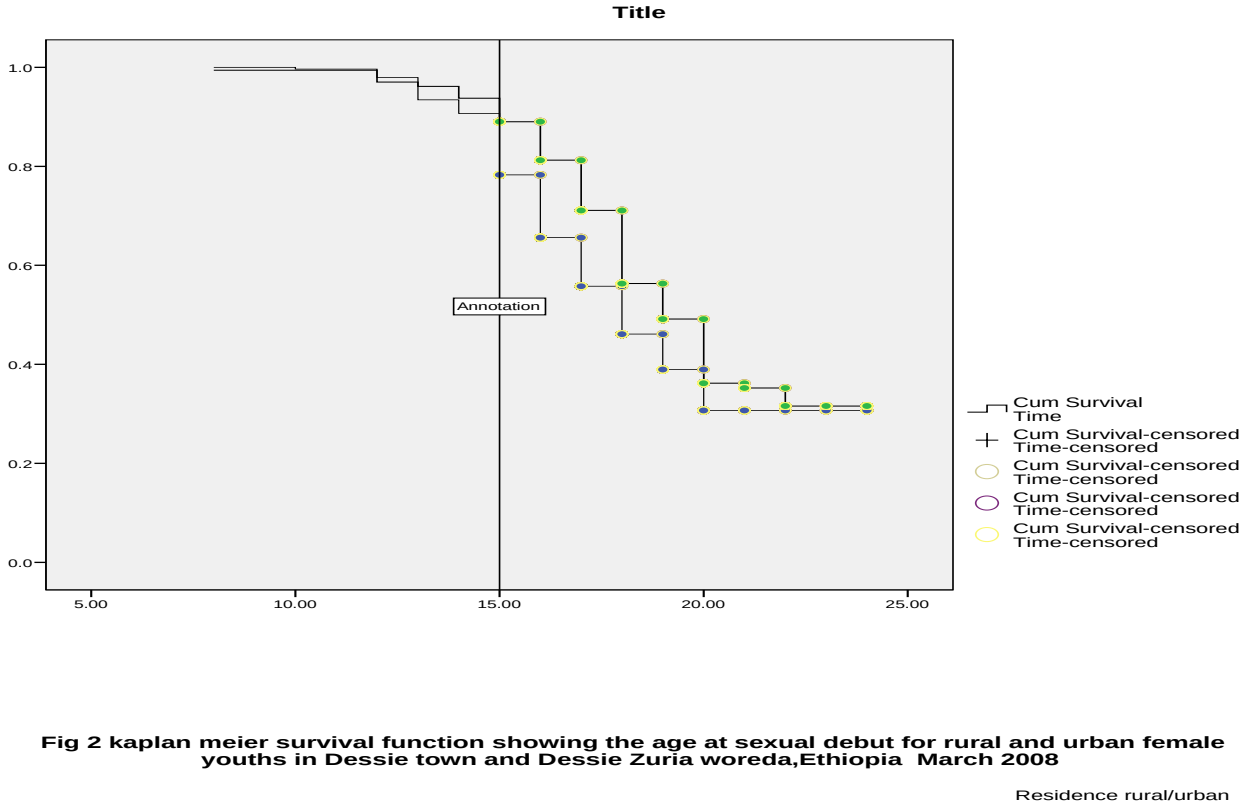


Fig 2 kaplan meier survival function showing the age at sexual debut for rural and urban female youths in Dessie town and Dessie Zuria woreda,Ethiopia March 2008

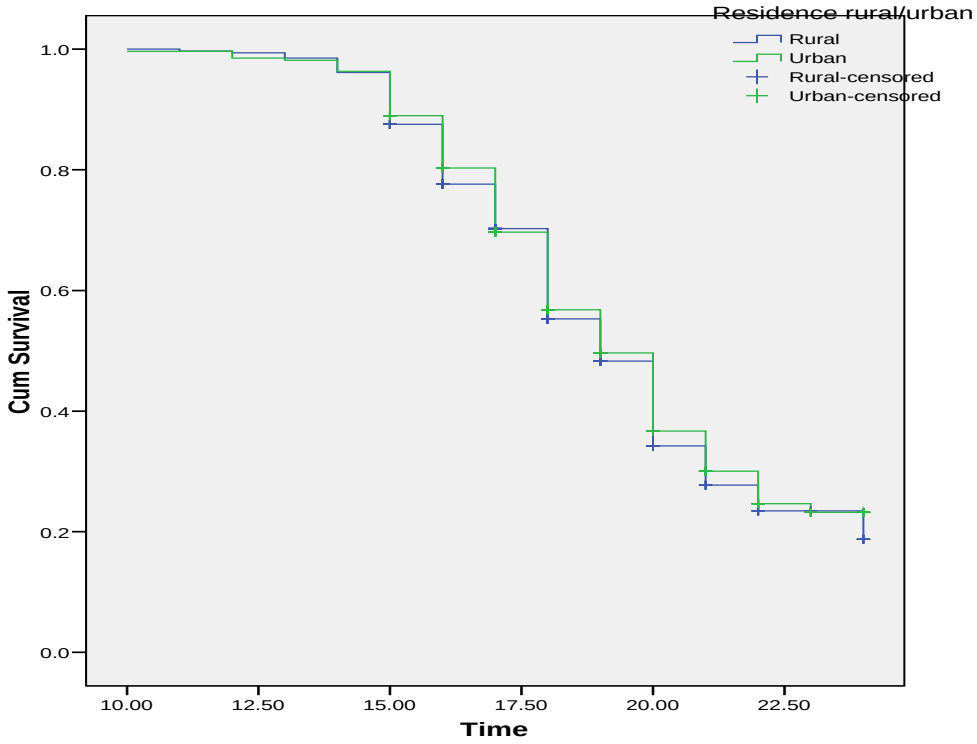


Fig 3 . kaplan maier survival function plot showing age at first debate for rural and urban male youths, dessie town and rural woreda, March 2008

Table 9: Sexual behavior at sexual initiation of youths, Dessie town & Dessie Zuria Rural Woreda, Ethiopia, March 2008

Variable	**Rural n (%)**	**Urban n (%)**	**Total n (%)**	
Ever had sex				
Yes	312(49.8%)	322(52.9%)	634(51.3%)	
No	315(50.2%)	287(47.1%)	602(48.7%)	
Age at first sex (n=634)				**Mean ±SD=** 16.84±(2.25) **Median** =17.00
<=10 years	1(.3%)	3(.9%)	4(.6%)	
10-14 years	39(12.5%)	28(8.7%)	67(10.6%)	
15-19 years	222(71.2%)	210(65.2%)	432(68.1%)	
20-24 years	50(16.0%)	81(25.2%)	131(20.7%)	
Relation of the first partner (n=634)				
Husband/wife	128(41.0%)	78(24.2%)	206(32.5%)	
Girl fried/Boy friend	84(26.9%)	103(32.0%)	187(29.5%)	
Friend	24(7.7%)	38(11.8%)	62(9.8%)	
Cohabitant	27(8.7%)	58(18.0%)	85(13.4%)	
Relative	18(5.8%)	6(1.9%)	24(3.8%)	
Causal	22(7.1%)	33(10.2%)	55(8.7%)	
Commercial sex workers	9(2.9%)	6(1.9%)	15(2.4%)	
First sex was planned (n=634)				

Planned	192(61.5%)	194(60.2%)	386(60.9%)	
Unexpected	120(38.5%)	128(39.8%)	248(39.1%)	
Discuss about contraceptive before sex				
Yes	68(22.9%)	103(32.4%)	171(27.8%)	
No	229(77.1%)	215(67.6%)	444(72.2%)	
Don't remember	15(4.8%)	5(1.6%)	20(3.2%)	
Contraceptive use at first sex				
Yes	77(24.7%)	125(38.8%)	202(31.9%)	
No	220(70.5%)	192(59.6%)	412(65.0%)	
Don't remember	15(4.8%)	5(1.6%)	20(3.2%)	
FP methods at firs sex				
Condom only	35(44.3%)	62(48.1%)	97(46.6%)	
Natural methods	4(5.1%)	9(7.0%)	13(6.3%)	
OCPS	15(19.0%)	20(15.5%)	35(16.8%)	
Injectables	25 (31.6%)	38(29.5%)	63(30.3%)	
Partner age at 1st sex compared with girls age				
Equal or up to 10 years greeter than girls age	96(74.4%)	108(76.6%)	204(75.6%)	
More than 10 years from girls age	33(25.6%)	33(23.4%)	66(24.4%)	

Among those who are sexually active the main reasons for them to engage in sex at the first time were marriage for 41 % of rural and 25 % of urban youths , followed by curiosity for 14.7% of rural and 23.9% of urban youths respectively. Being cheated, after using drugs/alcohol, and rape were accountable for 10.9%, 6.2% and 6.9% of initiations respectively. Among Youths who were not sexually active the main reason for there abstinence were to wait until marriage or not to do it before marriage by 40% of urban and 25 % followed by fear of disease including HIV, to wait until I am older and religious value. On the other hand, for significant number of abstainers hadn't have the opportunity or haven't asked by any one were also reported reasons for not having sex yet

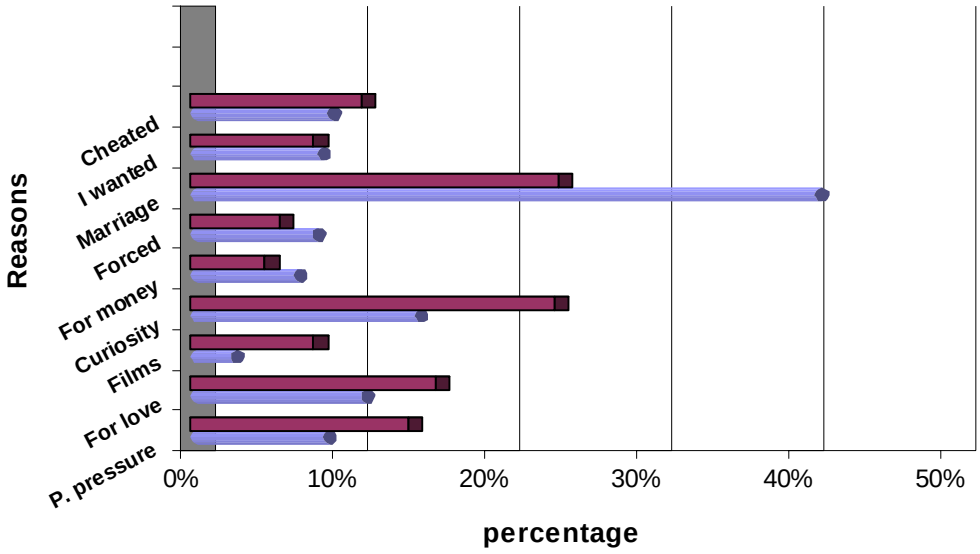


Fig 4 Reasons to start sex by youths in Dessie town and Dessie Zuria woreda march 2008

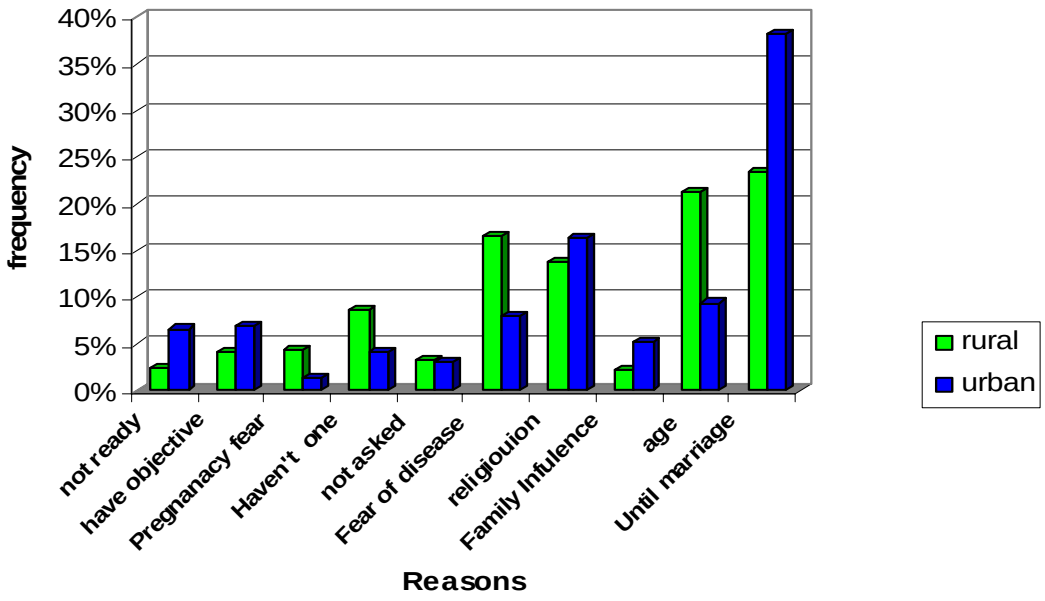


Fig 5 . Reasons to delay sexual initiation by youths in Dessie town and rural woreda, March 2008

5.7. High Risk Sexual Behavior at first sex and following years

Majority 85% of the ever sexually active respondents were also sexually active in the last 12 months prior to the survey. Nearly two third of the sexual initiations were unprotected and some occur with higher risk groups. Half of the sexually active youths have more than one sexual partner in there life time. It was encouraging to note that the proportion of youths who reported to have multiple partners in the last 12 months was dropped to 36% from life time no of multiple partnership 56%. This may be an indication of recent behavioral change. The mean $\pm$ SD no of partners in he last twelve months and in life time were 1.63$\pm$1.7 and 2.55$\pm$ 2.4 respectively. Of the sexually active youths, 14.2% had sex with a non-regular (causal) sexual partner. Although two third of the youth ever used condoms, only 36% of these used it regularly. Twenty nine percent of male respondents had sex with a commercial sex partner in the 12 months period prior to the survey and significant number 37% hadn't use condom consistently. There was significant variation in condom use among rural and urban boys. Seventy seven percent of rural boys use

condom consistently while only 50% of rural counterparts use condom regularly while sex with CSW (Table 10).

Table: 10 High risk sexual behaviors among sexually active youths in Dessie town and Rural Woreda, March 2008

Variables	**Rural n (%)**	**Urban n (%)**	**Total n (%)**	**Mean± SD**
Sex in the past 12 months (n=534**)**				
Yes	268(85.9%)	266(83.1%)	534(84.5%)	
No	44(14.1%)	54(16.9%)	98(15.5%)	
Number sexual partners in the last 12 months (n=534**)**				Mean±SD =1.63±1.17
One sexual partner	175(65.3%)	165(62.0%)	340(63.7%)	Rural=1.55±1.0
Multiple sexual partners	93 (34.7%)	101(38.0%)	194(36.3%)	Urban=1.71±1.3
Number of life time sexual partners(n=630**)***				Mean±SD =2.55±2.4
One sexual partner	142(45.8%)	133(41.6%)	275(43.7%)	Rural=2.3±82.07
Multiple sexual partners	168(54.2%)	187(58.4%)	355(56.3%)	Urban=2.72±2.71
Type of partner in the last 12 months (n= 534**)**				
Husband/wife	139(51.9%)	77(28.9%)	216(40.4%)	
Girl/boy friend living together	20(7.5%)	44(16.5%)	64(12.0%)	
Girl/boy friend not living together	73(27.2%)	103(38.7%)	176(33.0%)	
Causal	36(13.4%)	42(15.8%)	78(14.6%)	
Condom use with causal partner (n=358)				
Always	54(29.7%)	74(42.0%)	128(35.8%)	
Some times	66(36.3%)	71(40.3%)	137(38.3%)	
Never	62(34.1%)	31(17.6%)	93(26.0%)	
Sex with a commercial sex partner(CSW) for males (n=317**)**				
Yes	47(29.6%)	41(25.9%)	88(27.8%)	
No	112(70.4%)	117(74.1%)	229(72.2%)	
Condom use CSW (n=86)				
Always	23(50.0%)	31(77.5%)	54 (62.8%)	
Sometimes to never	23(50.0%)	9(22.5%)	32(37.2%)	

Attributed to their early and unprotected sexual initiation a significant number of youths face the untoward complication and effect of early sexual initiation. Consistent with the perceived level of sexual activity by youths in Dessie town and rural Woreda there is equally high incidence of adolescent pregnancy. Of the 150 female youths surveyed 45% were pregnant at least once in there sexual life time. Among these 68% were unplanned (i.e. in 74%of urban versus 63% of rural residents) and thus youths seek for abortion. Nearly half 41.8 % percent of the unwanted pregnancies ended up with abortion. Accordingly 86 % of the abortions were induced. When asked about the person who performs the abortion youths reported that 47% of the abortion was induced by them selves, 37.7% by health providers and the rest 15.7% by lay providers. In most cases indicate abortion seems unsafe. Thirteen percent of youths report STI at least once in their reproductive life (Table11).

Table 11: Adolescent pregnancy and related outcomes among sexually initiated youths in Dessie town and Rural Woreda, March 2008

Variables	Rural n (%)	Urban n (%)	Total n (%)
Contraceptive use n=54 3			
Yes consistent	142(52.6%)	133(48.7%)	275(50.6%)
No or inconsistent	128(47.4%)	140(51.3%)	268(49.4%)
Pregnancy n=332			
Yes	77(47.2%)	73(43.2%)	150(45.2%)
No	86(52.8%)	96(56.2%)	182(54.8%)
Unplanned pregnancy n=150			
Yes	48(62.3%)	54(74.0%)	102(68.0%)
No	29(37.7%)	19(26.0%)	48(32.0%)
Have abortion n=146			
Yes	33(44.0%)	28(39.4%)	61(41.8%)
No	42(56.0%)	43(60.6%)	82(58.2%)
Abortion induced n =61			
Yes	28(84.8%)	25(89.3%)	53(86.2%)
No	5(15.2%)	3(12.0%)	8(13.8%)
Person who performs the abortion n=61			
Self induced	16(55.2%)	8(36.4%)	24(47.1%)
Health professional/clinic	9. (31.0%)	10(45.5%)	19(37.3%)
lay provider	4(13.8%)	4(18.2%)	8(15.7%)

Sexual Transmitted Infections n= 626			
Yes	52(16.7%)	31(9.8%)	83(13.3%)
No	259(83.3%)	284(90.2%)	543(86.7%)

5.8. Non sexual risk behaviours

Adolescents were asked for their experience of non sexual risky behaviours. Fifteen percent of youths have used drugs. The most abused drug was Khat (86.5%). Significant number but only urban youths 21% have used hashish (unpurified cannabis) with Khat. Seventy-seven (43.3%) of Khat chewers said that they have used khat to enhance their sexual feeling or have a strong desire for sex after chewing khat. Other non sexual risk behaviours are also displayed on table 12.

Table 12: Proportion of non-sexual risk behaviours among rural and urban youths in Dessie town and Dessie Zuria Woreda. March 2008

Variables	Rural n (%)	Urban n (%)	Total n (%)
Used drugs (n=1236)			
Yes	70(11.2%)	122(20.0%)	192(15.5%)
No	557(88.8%)	487(80.0%)	1044(84.5%)
Type of drugs (n=192)			
Khat	70(100.0%)	96(78.7%)	166(86.5%)
Khat and Hashish	0(.0%)	26(21.3%)	26(13.5%)
Have strong desire for sex after chat chewing N=178			
Yes	30(47.6%)	47(40.9%)	77(43.3%)
No	33(52.4%)	68(59.1%)	101(56.7%)
Drink Alcohol (n=1236)			
Yes	92(14.7%)	141(23.2%)	239(19.4%)
No	535(85.3%)	468(76.8%)	997(80.6%)
Usually have sex after drink alcohol(n=239)			
Yes	61(65.6%)	71(48.3%)	132(55.0%)
No	32(34.4%)	75(51.4%)	107(44.8%)
View pornographic materials			
Yes	63(10.0%)	245(40.2%)	308(24.9%)
No	564(90.0%)	364(59.8%)	928(75.1%)
Age at viewing pornographic materials			
Less than 18 years	62(68.1%)	118(5.9%)	172(78.5%)
Greater than 18 years	29(31.9%)	18(14.1%)	47(21.5%)
Type of pornographic materials viewed by			

adolescents			
Magazine &pictures	12(19.0%)	22(9.0%)	34(11.1%)
Movies	39(61.9%)	142(58.2%)	181(59.0%)
Magazine & Movies	12(19.0%)	80(32.8%)	92(30.0%)

5.9. Determinants of Early Sexual Initiation

We try to see the socio-demographic correlates of early sexual initiation. Accordingly, sexual behavior was compared between youth those who initiate sex early versus late. Socio-demographic characteristics, particularly gender, place of residence and age, were significantly correlated with early sexual debut. Rural youths were found to engage in early sexual intercourse earlier than their urban counter parts (Adjusted OR [95% CI] 1.75(1.19, 2.55)). Gender being females Adjusted OR [95%CI] =1.56(1.11, 2.19), and younger age group (Adjusted OR [95%CI] 1.75(1.19, 2.55) were tend to initiate sex earlier. Regarding other socio demographic characteristics, being in marital union and having either less educational status that is both read and write or illiterate at all were more likely to be early initiators. How ever being in school reared in both parents home during childhood and either of maternal and paternal education were not statistically significantly correlated with early or late sexual initiation after adjusted for other socio-demographic factors (Table 13).

Table 13: Socio-demographic correlates of early sexual initiation among youths in Dessie town and Dessie Zuria rural Woreda Ethiopia, March 2008

Determinants	Age at first sex		Crude OR (95% CI)	Adjusted OR (95% CI)
	Early initiation < 18 years	Late initiation ≥ 18years		
Residence				
Rural	212(55.2%)	100(40.0%)	1.85(1.34,2.55)	1.75(1.19, 2.55)
Urban	172(44.8%)	150(60.0%)	1.00	1.00
Age				
15-19	189(49.2%)	62(24.8%)	2.94(2.07, 4.17)	2.82(1.95,4.08)
20-24	195(50.8%)	188(75.2%)	1.00	1.00
Sex				
Male	173(45.1%)	143(57.2%)	1.00	1.00
Female	211(54.9%)	107(42.8%)	1.63(1.18, 2.25\)	1.56(1.11,2.19)
Educational level				
Illiterate	44(11.5%)	27(10.8%)	2.72(1.35 , 5.45)	1.94(.85, 4.44)
Read and write	48(12.5%)	26(10.4%)	3.08(1.54, 6.17)	2.75(1.26,4.51)
Primary (1-8)	113(29.4%)	39(15.6%)	4.83(2.59, 9.01)	3.571(1.79,7.11)
Secondary	125(32.6%)	93(37.2%)	2.24(1.26, 3.97)	1.759(.95,3.23)
TVT and preparatory	30(7.8%)	25(10.0%)	2.00(1.35, 4.16)	2.114(.99,6.02)
College/university	24(6.3%)	40(16.0%)	1.00	1.00
Attending school				
Yes	202(52.6%)	121(48.4%)	1.00	1.00
No	182(47.4%)	129(51.6%)	.84(.61 , 1.16)	.96(.68,1.36)
Marital status				
Never married	257(66.9%)	139(55.6%)	.62(.45,.86)	.111(.02,.69)
Ever married	127(33.1%)	111(44.4%)	1.00	1.00
With whom grew up until age 14				
Both parents	251(65.4%)	168(67.2%)	1.00	1.00
Single parents	83(21.6%)	60(24.0%)	.92(.63, 1.36)	1.01(.66,1.811)
Grand parents	34(8.9%)	15(6.0%)	1.52(.80, 2.87)	1.54(.76,1.978)
Other relatives	16(4.2%)	7(2.8%)	1.53(.62, 3.80)	1.62 (.60, 4.124)
Mothers education				
Illiterate	199(51.8%)	116 (46.4%)	1.82 (.90, 3.66)	1.62(.62,4.23)
Read & write	99(25.8%)	71(28.4%)	1.48 (.71, 3.06)	1.3(.55, 3.36)
Grade 1-6	43(11.2%)	31(12.4%)	1.47 (.66, 3.29)	1.37(.52, 3.62)
Grade 7-12	26(6.8%)	14(5.6%)	1.97 (.78, 4.98)	2.25(.81, 6.26)
12 and above	17(4.4%)	18(7.2%)	1.00	1.00
Fathers education				
Illiterate	146(38.0%)	77(30.8%)	1.28 (.82,2.00)	.972(.485,1.619

Read & write	72(18.8%)	61(24.4%)	.80 (.49,1.30)	.740(.387,1.732
Grade 1-6	54(14.1%)	31(12.4%)	1.18(.67,2.07)	1.157(.580,2.702
Grade 7-12	35(9.1%)	29(11.6%)	.815 (.45,1.49)	.781(.388,3.524
12 and above	77(20.1%)	52(20.8%)	1.00	1.00

Youths with high levels of total external assets (protective factors) in home, school and community environments overall, were significantly less likely to have engaged in early sexual initiation. More specifically, youth with opportunities for meaningful participation in the home with parents and in the community were significantly less likely to engage in early sexual initiation. However in this study very few youths reported having talked to their parents about sex-related matters. Researchers noted that the quality of communication with the respondents' mother in general influenced their self-reported communication on sex-related issues. Participants who didn't found it easy to discuss important matters with their mother were more likely to initiate sex-earlier adjusted OR=2.48(1.48, 4.17). Less family connectedness as measured by less caring attitude and less parent child communication, were an independent predictor of early sexual initiation adjusted 0R=2.30(1.35, 3.91)). However family conservative norms were not found to be a protective factor for early sexual initiation after adjusted for other family socio-demographic and religious factors (Table 14).

Table 14: Correlates of family communication and connectedness with early sexual initiation among youths in Dessie town and Dessie Zuria rural Woreda, Ethiopia March 2008

Determinants	Age at sexual initiation		Crude OR (95% CI)	Adjusted OR (95% CI)
	Early less than 18 years	Late greater than 18 years		
Family connectedness				
Highly connected score =>3	94(24.5%)	127(50.8%)	1.00	1.00
Low connected score=<2	290(75.5%)	123(49.2%)	2.68 (1.686,4.250)	2.30(1.351, 3.908)
Family conservative norms				
Not conservative score =<2	212(55.2%)	127(50.8%)	1.19 (.867, .867)	.852(.581, 1.250)
Conservative score=>2	172(44.8%)	123(49.2%)	1.00	1.00
Family supervision & support				
Less supervision	205(53.4%)	105 (42.0%)	1.58 (1.147, 2.181)	1.426(.852,2.097)
More supervision	179(46.6%)	145(58.0%)	1.00	1.00
Response of mother to sex related questions				
Will answer helpfully	39(10.2%)	50(20.0%)	1.00	1.00
Will not answer	345(89.8%)	200(80.0%)	2.21 (1.405,3.481)	2.483(1.478, 4.172)

****** *Adjusted for family characteristic variables (, family structure, parent teen connectedness, parental supervision and parental value towards kids' sexual r/ship)*

We want to see the effect of do conventionally good friendship groups affect sexual life development positively, as many laypersons and researchers contend? Tables-15 indicate that index; both peers pressure on youths and youths view about their peers' when compared to early and late sexual initiation outcomes. Those youth who are encouraged by their peers to have girl/boy friend were more likely to initiate sex earlier crude OR 1.8(1.30, 2.48) and 1.8(1.26, 2.26) respectively. However, these two variables were not found to be independent predictors of early sexual initiation after adjusted for other

socio-demographic and attitudinal variables. Rather adolescents who perceive premarital sex is just what every one is doing and who perceive most of their friends have premarital sex were more likely to initiate earlier than those who disapprove premarital sex Adj OR (95%CI)=1.82(1.18, 2.81) and Adj OR (95%CI) = 3.66(1.42, 9.36) respectively.

Table 15: The effect of peer pressure on early sexual initiation in rural and urban youths in Dessie town and Dessie Zuria rural Woreda, Ethiopia March 2008

Determinant	Age at sexual initiation		Crude OR (95% CI)	Adjusted OR (95% CI)
	Early less than 18 years	Early less than 18 years		
Encourage by peers to have a boy or girl friend				
Yes	140(36.5%)	123(49.2%)	1.80 (1.30, 2.48)	1.424(.959,2.116)
No	244(63.5%)	127(50.8%)	1.00	1.00
Encountered a pressure by peers to have sexual intercourse				
Yes frequently	143(37.2%)	66(26.4%)	1.82(1.26,2.62)	1.392 (.878, 2.083
Yes occasionally	67(17.4%)	38(15.2%)	1.479 (.939,2.331)	1.256 (.735, 2.170
Not at all	174(45.3%)	146(58.4%)	1.00	1.00
Friends have sex premaritally				
None of them	24(6.3%)	30(12.0%)	1.00	1.00
A few of them	67(17.4%)	45(18.0%)	1.861 (.965, 3.588)	1.871(.857, 2.08)
Half of them	91(23.7%)	43(17.2%)	2.645 (1.384, 5.056)	2.119(.977, 4.597)
Most of them	104(27.1%)	70(28.0%)	1.857 (1.003, 3.44)	2.081(.983,4.407)
All of them	36(9.4%)	16(6.4%)	2.812 (1.268, 6.239)	3.656(1.42, 9.364)
Don't know	62(16.1%)	46(18.4%)	1.685 (.872, 3.255)	1.983(1.921, 4.274
Having sex while I am teenager would just be doing what everybody else is doing				
Disagree	173(45.1%)	151(60.4%)	1.00	1.00
Neutral	59(15.4%)	41(16.4%)	1.256 (.797, 1.978)	1.120(.662, 1.895)
Agree	152(39.6%)	58(23.2%)	2.287 (1.575, 3.322)	1.817(1.175, 2.809)
Involved I religious or RH clubs				
Hadn't involved	190(76.0%)	318(82.8%)	1.522 (1.027, 2.254	1.561(1.004, 2.426)
Have one or more clubs	60(24.0%)	66(17.2%)	1.00	1.00
Religiosity				
Pray/and or go to church/mosque regularly	131(52.4%)	148(38.5%)	1.00	1.00
Didn't Pray/or go to church/ mosque regularly/not at all	119(47.6%)	236(61.5%)	1.755(1.272,2.423)	1.619(1.129, 2.322)

**Adjusted for socio-demographic and parental connectedness variables*

Logistic regression analysis showed that youth who chew Khat were twice more likely to initiate sex before 18 years of age (adjusted OR [95 % CI] = 2.05 [1.05–3.96]). In like manner, those who drink alcohol (adjusted OR [95%CI] = 2.16 [1.12–4.18]). How ever viewing pornographic materials were not associated with early initiation .But when we further analyze the age of sexual initiation with the age viewing pornographic materials it was more than 2.9 times higher for those who view pornographic materials at earlier age (less than 18 years) OR=2.858 (1.47, 5.56) and further when it was adjusted for other variables such as drug abuse and socio-demographic variables it becomes 24 fold, adjusted OR (95%CI) = 24.13 (3.28, 177.83).

Table 16: binary logistic regression showing the risk of nonsexual risk behaviour to early sexual initiation, rural and urban youths in Dessie town and Dessie Zuria rural Woreda, Ethiopia March 2008

Determinant	Age at sexual initiation		Crude OR (95% CI)	Adjusted OR (95% CI)
	Early < 18 years	Late ≥ 18 years		
Used drugs (n=634)				
Yes	263(68.5%)	49(19.6%)	1.887 (1.292,	2.046(1.056, 3.964)
No	121(31.5%)	201(80.4%)	1.00	1.00
Drink Alcohol (n=634)				
Yes	246(64.1%)	183(73.2%	1.532	2.164(1.120, 4.182)
No	138(35.9%)	67(26.8%)	1.00	1.00
Age at Drink Alcohol				
Less than 18 years	115(82.1%)	45 (67.2%)	2.25(1.152,4.389)	3.385(.651,17.597)
Greater than 18 years	25(17.9%)	22(32.8%)	1.00	1.00
View pornographic materials				
Yes	258(67.2%)	89(35.9%)	1.125(.805,1.571)	1.021(.116, 9.023)
No	126(32.8%)	159(64.1%)	1.00	1.00
Age at viewing pornography				
Less than 18 years	110(85.9%)	62(68.1%)	2.858 (1.47, 5.56)	24.13(3.28, 177.83)
Greater than 18 years	47(14.1%)	29 (31.9%)	1.00	1.00
Frequency of viewing				
Once per week	21(16.4%)	11(12.1%)	1.372(.555,3.392)	2.352(.530,10.435)
Once per month	50(39.1%)	31(34.1%)	1.159 .577,2.331)	2.052(.592, 7.105)
Less frequent	25(19.5%)	26(28.6%)	.691 (.321,1.488)	.752(.201, 2.807)
Once in life	32(25.0%)	23(25.3%)	1.00	1.00

5.9 Impact of early sexual initiation on ARH outcomes

As a result of unsafe sexual practices, young women not only got pregnant and had induced abortions, but many also developed of RTIs, such as pelvic and vaginal infections. Multiple partner ship and STIs were two times more likely to occur in early sex initiators than late initiators [adj. OR 95%CI] =2.08(1.17, 3.72) and [adj. OR

(95%CI) = 2.33(1.61, 3.37)]. The likelihood of using contraceptive at first sex and constantly use at subsequent reproductive life were two times less for early initiator than late initiators [adj. OR 95%CI] =2.33(1.61,3.37)) and [adj. OR 95%CI] =2.174(1.449,3.260)]respectively (Table 17).

Table 17: Impact of early sexual initiation to ARH problems in Dessie town and Dessie Zuria rural Woreda

Determinants	Age at first sex		Crude OR (95% CI)	Adjusted OR (95% CI)
	Early initiation < 18 years	Late initiation ≥ 18 years		
Early pregnancy< 18 years				
Yes	40(51.3%)	38(48.7%)	24.211(7.018, 83.517)	34.286(5.57,211.60)
No	3(4.2%)	69(95.8%)	1.00	1.00
Consistent use of Contraceptive				
Yes	176(64.0%)	99(36.0%)	1.00	1.00
No	149(55.6%)	119(44.4%)	1.420 (1.006, 2.004)	2.174(1.449,3.260)
First sex protected				
Yes	89(44.1%)	113 (55.9%)	1.00	1.00
No	295(68.3%)	137(31.7%)	2.734(1.939, 3.856)	2.332(1.614,3.369)
Unwanted pregnancy				
Yes	72(70.6%)	30(29.4%)	.918 (.426,1.978)	4.045(1.823, 8.976)
No	34 (72.3%)	13(27.7%)	1.00	1.00
Multiple partner				
Yes	242(68.2%)	113(31.8%)	2.050 (1.482, 2.838)	2.332(1.614,3.369)
No	140(50.9%)	135 (49.1%)	1.00	1.00
STIs				
Yes	65(78.3%)	18(21.7%)	2.611(1.507, 4.521)	2.082(1.165,3.723)
No	315(41.9%)	227(58.1%)	1.00	1.00
Have abortion				
Yes	39(68.4%)	18(31.6%)	.808(.392, 1.666)	1.605(.726, 3.549)
No	67(72.8%)	25(27.2%)	1.00	1.00
Have induced abortion				
Yes	34(68.0%)	16(32.0%)	.850 (.149, 4.863)	585(.109, 3.128)
No	5(71.4%)	2(28.6%)	1.00	1.00

Youths were asked to list the complications of early sexual initiation they perceive. The result identified was differing. One group come with poor knowledge like 9% said no problem and 0.3% said its good, 2.3 % said adolescent become physically thin and about 29% didn't know any complication. Interesting finding also was noted on the other hand. For those who were able to list unwanted pregnancy 15.7%, followed HIV/AIDS and other STIs 10.6% were the most common complication reported by youths (Figure6).

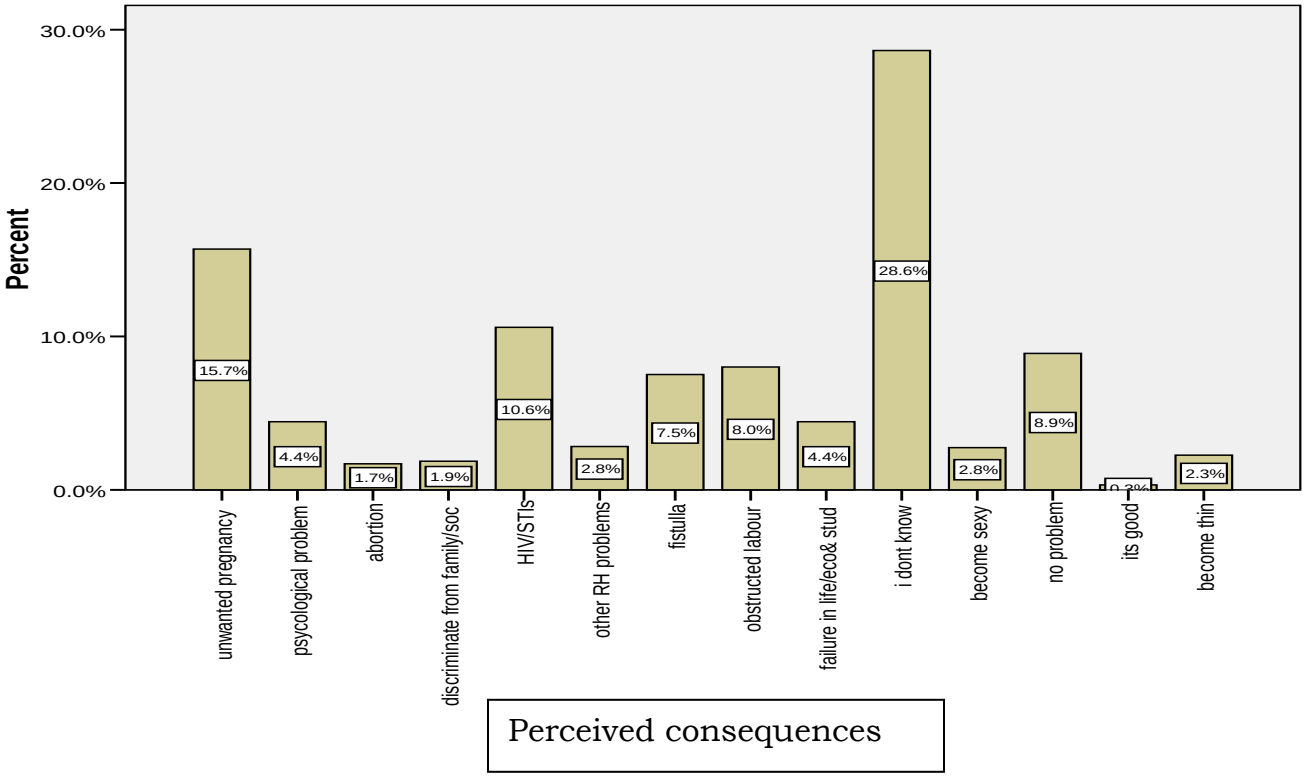


Figure 6- perceived consequences of early sexual initiation as listed by respondents in Dessie town and Dessie Zuria, Woreda March 2008

5.10. FOCUS GROUP DISCUSSION

Thirty two youths purposely selected from schools, out of school and reproductive and anti AIDS clubs divided in to four groups disaggregated by residence rural and urban were participated in the focus group discussion. We try to see youths perception on early sexual initiation, its reasons, consequences, and family and youth connectedness and prevention methods.

Definition and perception of early sexual initiation

Interestingly for nearly half of 15 (46.9%) mainly urban participants replied early sexual initiation were defined as initiating sex before 18 years. While others defined it 12 (37%) youths defined it to be below 16 years. Three participants defined it sex before marriage. Two urban youths from youth RH clubs however said

"Early sexual initiation should not be defined based on age. But even If am greater than 18years if I am not ready mentally or physically such as if I dint achieve my objectives I shouldn't start sex and that is early sexual initiation"

According to all the focus groups participants, the practice of early sexual initiation is not uncommon among adolescents in rural and urban Kebeles.

Reasons of early sexual initiation

For rural youths culture were the main reason described by all participants for early sexual debut most common cultural ritual related to early sexual initiation in rural youths were

- Early marriage: participants noted that parents early marry their child just to preserve their name. The community appreciates the father for marrying his child early. And others fear of there child will be insulted by her friend and discriminated from the society if she has not married till age 18 KUMOKER (you are ugly and unwanted). Fears of loss of virginity and thereby marriageability and family reputation have reinforced traditional

norms among parents' concerning the need to strictly supervise the movement of adolescent daughters and to arrange an early marriage for them.

Some rural participants noted that there is a relatively decrease in early marriage from earlier times because of the recently indorsed legal age at marriage. In spite of the fact that parents are cheating the court for example if their child age is very young they present the old child before court and get approval while they change the name and will wedded the younger one.

- sleeping with brothers or uncles wife (known us "WARSA is one of the reasons for male adolescents to start sex
- 15 days before marriage of their relatives or friends adolescents will be gathered at night for music the will play over night and may sleep together cheating there parents they call it " LEFTLEJII"
- It's culturally practiced in the rural Woreda to have a girl or boy friend just for dating (kissing is allowed) but not for sex known us YEKENFER WODAJII. Previously IT was strictly forbidden to have sex with Yekenfer wodajii how ever now days rural youths acknowledged they are NOT respecting this rule and have premarital sex.
- Abduction and rape were also other reasons listed as a cause for early marriage. In fact the community locally set a punishment of 1500 birr for those who rape or marry girls by abduction and its now decreasing. However if the person is powerful and reach the community just keeps silent. One FGD participant discussed his experience agonizingly saying that recently a 12 years old girl taken out from the school. It was by one powerful man the family fear to accuse him because they fear him. She is pregnant now."
- One male married participant also noted that some parents insist their son to have sex just before marring a girl just for training because they fear that if he is not trained his wife will undermine him. They will pay for CSW to train him.

All participant rural youths generally acknowledged that unlike the previous times premarital sex is now becoming common among rural adolescents. The population movement from rural to urban areas has notably affected traditional culture in rural Ethiopia. Combined with the decline of the traditional extended family, rural people , like urban people , is experiencing the loss of social control over the younger generation at a time in which more liberal attitudes toward sexual behavior have promoted increased premarital sex. Factors raised by adolescents were the raise at first marriage due girls' education and recently indorsed family law, urbanization for example participant replied there are video houses around rural schools and peri-urban areas they have saw sex films. Chat and alcohol are also common among rural adolescents. One FGD participant replied now "*only the Asphalted roads are the main difference between urban and rural"*. Another participant from the same group depicted that, it's usual to see many adolescents in the school compound at passing much of their time in the bush surrounding the school compound.

Most urban youth focus group participants depict that most sexual intercourse in there area is started because of curiosity and peer pressure.

Female school anti-AIDS club member most stress on peer pressure. "*Even if my peer didn't pressurized me to have boy friend but when I see her having a wealthy boy friend and she start to have good cloths and shoes I will start sex Just to not be less than her" KEMAN ANESHE BEMIL FUKIKER". Further more she discussed If I didn't have boy friend while my friends have they will say me "FARA" (you are peasant)."*

Most FGD participants described that peer pressure may also be shown in another way. Our peers may not directly insist us to start sex but the invite us to have Khat together "ESKIMOKEREW" try it. Khat first the ceremony by it self creates opportunity for opposite sex adolescents to meet together in a dark single room. Secondly, in addition to the stimulant effect of Khat it's usually followed by drinking alcohol called CHEBSII" in Amharic. After that adolescents lose self control will be pushed to have sex even females may be raped if they say no because the male counterpart may be intoxicated by alcohol'

Another 18 years old male FGD participant describes that *"youths have immature mind Because of that they will participate easily when they are invited to have alcohol and khat or to view films they simply accept. You can fill them what ever information you have for bad or good. This opportunity is good for others to cheat these youths. As they don't anticipate the consequence of early sexual at that moment they will be pushed to start sex"*.

Other 23 years old female from out of school married youth replied economical reason is main determinant its known that females desire to have fashionable cloths jewelries. For poor females it may be a survival issue special if both or one of the parents died. They said that there are many people who think that virgins are free from HIV so they cheat these females by paying money. There are adolescents in our area who have 3-4 sexual friends one or two for money the other for love they said in Amharic WETAT LEFIKER SHIMAGELIE LE BIRR (youth for love old for money) what we call sexual networking.

Participants made frequent reference to the bad social environment explaining that now a days you find pornographic materials every where. In there spare time you find youths in this houses. Video houses were the main sources for pornography previously but now adolescents are using internets to view pornography. If you just open internet always first pornographic pictures appear. Internet is available at high school for free most adolescents use it to view pornography. After that especially males went to CSWs.

"I started to watch porn magazines and videos when I was 15 After seeing these movies, I started thinking more and more about sex" (male out of school youth)

Two male participants blamed females clothing style. "*Just going the streets you will see female have her breasts and thighs on display. How can I tolerate viewing that* he inquired"? Female FGD participant act irritably "Those who have miniskirts are not who are raped but those who are young even don't know the word fashion". The problem

rather is youths less knowledge of reproductive health and lack of vision and objective to life. She added we youths should not be flood which goes on the line just because it's a line." Another male merchant youth depicted, it's natural for everybody to be attracted by beautiful things. If it was covered and I haven't had the opportunity to see it I will not be attracted. Other female angrily replied you need to know that in Amharic "YAMARE FERE HULU AYBELAM" (all beautiful fruits are not edible) more over it's also globalization you can't avoid fashion rather have objective for your life.

- ***Parenting and the School Environment***

Most rural and urban youths put lack of family connectedness relation and family life education as main reason for initiating sex early. One youth counselor from the urban youths states his experience *"I met one young boy he is from wealthy family he told me he started sex at age 13. he was the only child in his family thus, no body should speak badly to him or control him and he was allowed to do everything he want as a result he started sex at his 13th birth day' he have now multiple partners an his families give money to do so. "*

All rural and urban youths conclude that parent-child communication broke down in general, precipitated by parents' illiteracy poverty, and consumerism and tactical dishonest behaviour on the part of the adolescents. "*It is difficult to approach parents to hold discussions with them as they tend to be autocrat and non trustful to you after that"*. (Male 20 years old 12 grade school youth)

I am Transparent at home about other things but when it comes to sexuality I would be too shy to talk about the boy I liked to my mothers. It is so much easier to share this with friends at school." (Female youth club member)

Our parents are restrictive than educative There are a lot of constraints on girls' movements. But they continue to meet their male friends stealthily.

"*The most irritating is you will be instructed to when wear this dress or go out alone. They place so many restrictions on us sometimes older brothers and sisters are worse*

than our parents However they didn't tell us why they do that. So we try to do things against these rules when we have the chance (female FGD participants)

Discussions with the various focus groups confirmed that sex education courses offered in school clearly do not fill the information void. There was an overwhelming consensus among rural and urban focus group participants that these courses focus on the physiological aspects of sexual development and do not cover contraceptive choices or STIs and unwanted pregnancy.

- ***Perceived Sequel of early sexual initiation***

Young women specially in rural Kebeles indicated that they regularly engaged in sex on the same occasion without taking standard precautions to prevent the transmission of diseases and unwanted pregnancy.

"It happened unexpectedly, and she and her friend never thought of using Contraceptives. In addition they hadn't had condoms on hand at the time, thus they did not use them because her boyfriend told her that she couldn't get pregnant the first time she have sex. Unlucky she was pregnant she told to her boy friend he was not interested to accept the pregnancy he explained he fear to be father finally she told to her mother they accept the child but always they insulted her every day."(17 year old high school student confess her friends experience)

Most of the participants noted that, female youths obviously would be encountered with a great deal of problems than male youths in which they utmost are prone to contract the drastically increasing HIV/AIDS, other STDs and unwanted pregnancies. They went on emphasizing that youths' problems directly or indirectly will affect the families and the nation in general. Adverse consequences be, including unwanted pregnancy and resort to abortion: were reported to common among rural and urban adolescents

"My sister was married at her 15s she didn't know about contraception I told her. She advised her husband but he refuse to use so she become pregnant at her first sex. Her

labour was more than 3 days and she developed fistula he divorced her and now she is with me. (Rural married 24 year old female)

In rural settings, educational levels are lower, as is contraceptive use. Consequently, women in rural areas are even less familiar with the health risks associated with unprotected intercourse than their urban counterparts and have much higher rates of unwanted pregnancies and induced abortions relative to those living in urban areas. Thus female adolescents are caught in a vicious cycle of unsafe sexual behaviours, unwanted pregnancies, and unsafe and painful pregnancy termination methods. Rural youths described there are a lot of unwanted pregnancy in there area, Condoms and contraceptives are difficult to get if they want to use. Some Kebeles have no clinics even if clinics are available they are always closed, there are no shops to buy so sex for rural youths are initiated early and unprotected. As a result unwanted pregnancy and abortion are common. As rural girls have no way to earn money most abortion are undertaken by herbalist the most drugs used by herbalist include "ENDOD", Animal drugs and "YEKULKAL SIR" that claims the life of many adolescents.

Though most participants admitted that it is very difficult to assess the real prevalence of HIV/AIDS in the area due to the associated stigma, they based their estimation on the increasing death rate particularly affecting the youth. The fact that his/her partner and /or their children follow the death of one is another justification, according to most of the participants.

- ***Suggested prevention measures***

Most of them noted that "parental education has got tremendous uses in which some of them are their recognition of their children to educating, advising, leading, communicating with and increasing the relationship existing between their youths and them to overall enabling them to be protected from HIV/AIDS and other STDs to lead healthful life." Thus, they said, these activities of their parents will be indispensable to delay sexual intercourse, which in turn assist them to avoid the emergence of HIV/AIDS

in youths. Though all participants agreed that education on sexuality and problem of early sexual initiation should mainly target adults. Adults can be approached through social institutions and religious leaders and community conversation works.
"Whatever I know becomes less important. If I am under there control I do what they told me to do so education should start from the family."(Female preparatory student)

Rural young adults suggest the following preventive measures the first were establishment of youth reproductive health clubs and peer educators in rural areas. One female grade 8 participant further elaborate *"in our Kebele when Youths have problem like if girls have unwanted pregnancy she will tell to her friend before her mother. If her friend is good enough she will advise the right thing. So peers are very important to educate peers they are the primary source of information."*

Another point raised by rural participants were Some community actions should be strengthened such as in most rural Kebeles the community set a fine of birr 1500 to pay for those who abduct or rape. More over the recently endorsed family law legal age at marriage should be strengthened and community should be educated about the complication of early sexual initiation**.**

Most of the rural and urban male and female focus group participants, stressed that condoms should be freely available from the local family planning clinics and shops at schools, and also from friends and peer educators and other ways of availing condom for rural youths specially should be sought.

Focus group participants agreed that while young people tend to be generally informed about HIV and other diseases they have only patchy in-depth knowledge of issues related to sexuality more over expressed norms conflict with behaviour as a result its common among youth club members to engage in risky behaviour in our area. Thus the education should be started from primary and we should be informed at every level about the consequence of early and unprotected sex. Should

Participants also criticized them selves pointing that we didn't use to make ourselves transparent to friends and families. Thus sexuality should be discussed among friends and families

Most of them told that″ it is if and only if the youths delay sex that they will be fortunate enough to overcome all the prevailing problems of theirs, families' and of the country at large such as HIV/AIDS and poverty to abreast the nation's development with those of other nations and regions all over the world."

6. DISCUSSION

In Ethiopia, a dramatic shift in sexual behaviors among youths coincides with the rapid spread of STIs, including HIV/AIDS. Few would argue that it is developmentally appropriate or healthy for one-third of males to have had sex before they entered middle school, or for one-fifth of females to have done so before they left eighth grade. The concern, however, is not only that some adolescents are beginning to have intercourse too early, but also that they are more likely then others to engage in a pattern of risky sexual behaviors known to be related to a host of negative outcomes. This study focused on sexual initiation the context of sexual initiation and risk-taking behavior, and the consequences of unsafe sexual activities among youths in rural and urban districts, in Dessie town and Dessie Zuria rural Woreda.

The Mean & median age of first sexual initiation in our finding were 16.8 years (SD= 2.25) and 17 years respectively (Range 8-24 years). Rural youths initiate sex at lower than their urban counterparts mean and median (17.18$\pm$2.32) and 17.00 respectively. This is comparable with several previous studies In Ethiopia (1, 3, 29, 30, 33). It is slightly higher from previous studies in kolladuba (15 years) and Gojam (13.5 years)may be explain by the decrease in early marriage which was the main reason for early sexual initiation in rural youths due to the recently endorsed family law(2,19,26). Another

explanation may be AIDS-ravaged countries; campaigns to delay first sexual intercourse may have had an inhibiting effect, particularly among females (31). Even though there is a slight increase in age sexual debut among rural youths still urban youths initiate sex later than there rural counter parts. DHS analysis in five African countries also affirms urban-rural residence had an independent effect on a woman's probability of having sex before age 18. Urban residence reduced the probability of early sexual debut by some 40 to 50 percent in Côte d'Ivoire, Ghana, Mali, Senegal, and Zimbabwe. No interaction effects were found, suggesting that this association did not change between the two surveys (8).

However our result is slightly lower than EDHS 2005 (18 years) report. This difference may be due to EDHS interviews those between 15-59 may be subjected to recall bias and under reporting in EDHS. As many people say, national surveys have usually under reports. In general the median age at first sex is a general measure of the youthfulness of the start of sexual activity, tells us how quickly sexual activity builds up among the youthful population This indication of early entry to sex life has very important implications for the sexual & reproductive health of youth and reaffirms the need to gear the focus of available SRH education programs and services in schools & at the community for out of school youths not only on the transfer of knowledge but also on skills that help youth delay sexual debut (1, 4, 19).

In our study Although most sexual initiation took place among girl and boy friend in urban youths (32%) and husband/wife for rural youths (41%), about 8.7 % 2.7 % and first sex were initiated with causal partner CSW(for males) respectively with, casual or commercial sex. More importantly this study found that some cultural practices are also harmful and may expose adolescents to STIs, including HIV/AIDS. These practices include the engagement of older men to initiate a girl into sexual activity 24.4% the reason for this may be adolescents are engaged in intergenerational sex for getting money to support their families or their school and other fees (In our study for example 5.8% of youths initiate their first sex just for money. Similar study done among high school youth in Amhara region come with slightly higher finding 20 %may be due to the inclusion of

rural youths in our study (23). Another bad cultural practice found in our study is sleeping with older brothers or uncle wife when he is away locally known us “WARSA” (in the rural Dessie Zuria Woreda were identified in this study. Similar cultural practice was also identified in other African countries for instance in Malawi (34).

The existence of risky sexual practice including premarital sex, unprotected sex with non marital partners and sex with female commercial sex workers are reported by both urban and rural adolescents. Reports in previous studies in Ethiopia indicate that the prevalence of multi -sexual partner among youth/adolescents ranges from 25% to 60.2% (19, 23). In our study 55% of urban youths and almost equal 54%of rural sexually active youths have more than one partner. In consistent with this finding a survey done among high school youths in Dessie, Bahardar, Jimma and Deridawa come up with almost similar findings (52%). The studies are done 5 years back showing still there is no significant behavioral change for those who initiated sex (33). Our study also showed that the odds of having multiple partnership were two times higher for those who initiate sex at less than 18 years than late initiators adjusted OR= 2.33(1.61,3.37). The association of HIV status with younger age at first sex was likely due to an increased number of lifetime partners. This increase could result from longer duration of sexual life. Prevention of HIV infection should include efforts to delay age at first sex in young men and women. The expected effect is a decrease in the number of lifetime partners (Auvert et.al. 2002) (18).

Another characteristic feature which makes adolescent sexual activity high risk is their either none or very minimal use of any protective measures, specifically the use of condom. In this study Contraceptive use at first sex was very much low. Nearly two third of sexual initiations were unprotected and some occur with higher risk groups. Although two third of the youth ever used condoms, only 36% of these used them regularly. Twenty nine percent of male respondents had sex with a commercial sex partner in the 12 months period prior to the survey and significant number 37% hadn’t use condom consistently.

There was significant variation in condom use among rural and urban boys. Seventy seven percent of urban boys use condom consistently while only 50% of rural counterparts use condom regularly while sex with CSW. A comparative study done among youths in Gojam revealed contraceptive use including condoms was ten times lower among rural adolescents (OR = 0.10; 95%CI =0.04 - 0.3). Only 2% of the rural compared to 35% of the urban sexually active adolescents had ever used condoms. Another study in two big towns in Amhara region found 48 % youths didn't use condom at first sex and in subsequent years (14, 19, 33, 45). This may be due to the limited accessibility of condom to rural youths and false self susceptibility belief such as HIV is not a rural disease considering CSW and urban residents as high risk group as noted by FGD participants.

Other socio-demographic correlates in our study were sex, girls 54.9% were more likely to initiate early than boys 45.1 %. Findings from most African countries showed similar result (5, 8). Educational level, higher education secondary and above were more protective to early sexual initiation both for rural and urban adolescents. Among those who initiate sex the main reason for them to initiate sex were marriage for 34 % of rural and 20% of urban adolescents, curiosity for 14.7% of rural and 23.9% of urban adolescents. Cheated and after using drugs/alcohol, and rape were accountable for 10.9% 6.2% and 6.9% of initiations respectively. Rape is slightly lower from previous studies in per-urban areas in Ethiopia 10.3 % (13) A study done in Jamaica reported curiosity to be 26% followed by for love 13.% difference from our study may be attributed to cultural difference as marriage for sexual initiation may not be common(20). In contrast with DHS 2005 for Amhara region 14.4 years in ours is slightly higher may be due to the recently endorsed family law (for Amhara region legal age at first age is 18 years). We found interesting finding in FGD that many families are violating this rule by cheating lawyers like presenting the older sister before law while they want to marry the younger one then they will get permission and merry the younger ones that is why still younger age marriage is still exists in-fact there is promising change. However as many scholars agree when there is an increase in age at first marriage the tendency of adolescents to

engage in premarital sex. Thus we need to design ARH educational curricula life skill training for rural youths to prevent rural youths from risky premarital sex (4).

There are multiple reasons why early sexual onset is overlooked and why prevention programs are often started too late. For example, despite the importance of parental communication support and monitoring on reducing early sexual and other risk-taking, parents and teachers often underestimate children's emergent sexual behaviors. As reported in one study of black families with 14–17-year-olds, two factors were at play: Mothers tended to underestimate the sexual activity of their teenagers, and teenagers underestimated the level of parental disapproval of their sexual activity. Unfortunately, adult misperceptions about when youth initiate sex can be interpreted by adolescents as tacit approval (17, 18).

In our study, only 15.9% of rural youths and 20.4% of urban youths think they will have positive answer if they discuss sexuality issues with there mothers the fathers are worse than this. In FGD of parents, they believe that talking sexuality matter is initiating youth to have sex. Similar finding was reported from Ghana (35).This study also identified that schools were not a important source of comprehensive ARH even though most students replied they have got school based education on menstrual cycle and HIV most denied teaching about pregnancy, contraception and STIs evidenced by only about 23% said they have taught about this topics. This was further evidenced by only 34.5% were able to least at least one symptom of STI. Even though students have fairly high knowledge of HIV transmission and prevention there still exists misconceptions about HIV prevention and transmission such as 7%, 3.4%, and 2.1% believe that mosquito bite, sharing items with infected individuals and French kissing will transmit HIV , further more 9.1% respond douching can prevent both HIV & STIs. UNICEF & UNAIDS report affirms Misconceptions about HIV/HIV/AIDS are wide spread among young people. They vary from one culture to another, and particular rumors gain currency in some populations both on how HIV is spread (by mosquito bites or witchcraft, for example) and on how it can be avoided (by eating a certain fish, for example, or having sex with a virgin). Surveys from 40 countries indicate that more than 50 % of young people aged 15 to 24

harbour serious misconceptions about how HIV/AIDS is transmitted (7). Our figure is low when we compare with this data how ever as shown by a number of studies misconceptions and negative attitudes about HIV/AIDS may have implications for behavior change initiatives.

Our study further identifies that family connectedness as measured by parents caring attitude supporting in academic, child manners and trusting child were and willingness of mother to answer sexuality related questions were also found family supervision highly associated with delay at initiating sex OR= 2.68 (1.67,4.25) and 2.21 (1.405,3.481,) how ever parental supervision like selecting friends were associated at bivariate OR=1.58 (1.14, 2.18) But not associated when it adjusted for other socio-demography and parental variables. This study supported by Study in USA among 751 black youths identified. Both relationship satisfaction and maternal attitudes toward premarital sex were inversely associated with the initiation of sexual activity. As adolescent satisfaction with the parent-child relationship increased, the probability that the youth had engaged in sexual intercourse decreased. Similarly, as adolescents' perceptions of mothers' emphasis on abstinence increased, the likelihood that the adolescent had engaged in intercourse decreased (20).

Generally, inborn developmental wisdom that naturally motivates individuals to meet their human needs for love, belonging, respect, identity, power, mastery, challenge and meaning." These human needs are met when adolescents experience home, school and community environments, which are rich in developmental supports and provide opportunities of caring relationships, high expectations and opportunities for meaningful participation. Where these needs are met, youth will in turn develop the individual characteristics that define healthy development and protect against involvement in risk behaviors such as substance use and abuse, early sexual initiation, violence, aggression, depression and suicide.

Consistent with previous reports (31, 37), personal attitude favouring delayed sexual debut was associated with avoiding sexual intercourse among both rural and urban

adolescents. The theory of planned behaviour holds that attitudes constitute one of the determinants of health behaviour. In this study another behavioural factor noted were those who perceive most or all of there Peer initiate premariatally 2-3 fold higher than those who say none of them friends have sex early.

A study in USA, which examines the association between the gender mix of one's friends and early sexual activity, does suggest that having a much greater number of opposite-sex friends at a relatively early age may be related to early intercourse. The transition to adolescence is a period of rapid change, and young adolescents seek peer connections to obtain a stable point of reference during this time (Brown, 1999; Newman & Newman, 2001) (16, 36). Those Youths who are encouraged by their peers to have girl/boy friend were more likely to initiate sex earlier crude OR 1.8(1.30,2.48) and 1.8(1.26, 2.26) respectively how ever this two variable were not found to be an independent predictors of early sexual initiation when adjusted for other attitude and socio-demographic variables.

Substance, alcohol use and viewing pornographic materials were other determinants for early sexual initiation identified by this study. Drug trafficking and drug abuse, although not a problem in the past, are becoming more common in Ethiopia. According to the MOH Department of Pharmacy report for 1993-94, of the 291 drug abusers and traffickers for which age was reported, 223 (77 %)were age 15-25 (1). The majority of these young people were students or unemployed youth. Chewing chat has become a major problem among youth. It is exacerbated by lack of employment opportunities and general feelings of hopelessness. Nearly a quarter of adolescents chew chat. Chat chewers were more than 2-3 times to initiate sex early than non chewers. Alcohol drinking usually follows khat chewing and might be associated with unprotected sex and early initiation. This finding is supported by similar study in Butajera by Metikie et al (30,39).

Ethiopia's increased openness to Western culture has resulted in the influx of pornographic videos, books, and magazines, whose consumers are mostly young people. Western pornography often preceded sexual initiation and helped the couple to "loosen up" a bit. Many young people in our study (25%) including even rural youths (10%)

viewed pornographic videos. Watching porn videos with friends often encouraged couples to behave impulsively and to engage in sex without using condoms. Some imitated risky and unsanitary sexual behaviors viewed in pornographic videos and contracted serious reproductive health problems. Even our finding from FGD in rural youths showed young people view pornographic pictures and videos from internet. Qualitative study among china youths have come with similar finding (38). In our study viewing pornographic materials by it self were not statistically associated as determinant of early sexual initiations But when we further stratify for the age of sexual imitation with the age viewing pornographic those who have viewed erotic materials were 24 fold associated to early sexual initiation adjusted OR 24.133 (3.26, 177.8). A study done in Jimma among university students for those viewed pornography less than 15 were 2 fold more likely to initiate sex less than 16 years. It's difficult to compare our finding with this study due to age taken difference (24).

This finding shows, the use of alcohol, which was significantly associated with early sexual initiation. For those who drink at least once per month were more than two times to initiate sex early than those who didn't drink ADJ OR= 2.16(1.120, 4.18) when we further stratified by age those who drink in less than 18 years were more than 3 fold ADJ OR= 3.39(1.651, 17.597) times more likely to initiate sex than those who didn't drink alcohol or drinks lately. Derege et.al on their study among in and out of school among Ethiopia youths found similar figure OR= 3.81(3.31, 4.39). A study in other SSA countries also revealed this fact. Bear houses usually provide opportunities to have causal partner. Moreover, sex after drinking alcohol is more likely unprotected because alcohol decreases self control and sexual negotiation skill of adolescents (5, 39).

Consistent with the perceived level of sexual activity by youths in Dessie town and rural Woreda there exist high incidence of adolescent pregnancy. Of the 150 female adolescents surveyed 45% of female youths were pregnant at least once in there sexual life time similar with youth net assessment team report 45.7%. It is interesting to note that mean$\pm$ SD and median age 17.70(2.28) and 18.00 (rural median age 17 years for urban 18 years) of this study is higher when compared with youth net assessment team and other findings including DHS. Majority Of pregnancies (68%) were unplanned (i.e.

in 74%of urban versus 63% of rural residents) and thus youths seek for abortion. Nearly half 41.8 % percent of the unwanted pregnancies ended up with abortion. Accordingly 86 % of the abortions were induced. When asked about the person who performs the abortion youths reported that 47% of the abortions were induced by them selves, 37.7% by health providers and the rest 15.7% by lay providers. In most cases indicate prevailing unsafe abortion. Thirteen percent of youths report STI at least once in their reproductive life. The frequency of abortion were higher in our case than previous reports in Addis Ababa on hospital based studies 62 % occurred among women 16-25 and 43.7 %. In this study the proportion is higher may be due to a rise in the proportion of girls who engage in sex before marriage is also likely to lead to a higher rate of induced abortion(5, 41).

Further analysis by Bivariate logistic analysis to see the impact of early sexual initiation showed that teenage pregnancy (more likely to end up with abortion or obstructed labour) was very highly associated with early sexual initiation with OR 24.211 (7.018, 83.517).As nearly half of youth sexual acts were unprotected STIs also were two times more likely to occur in early sex initiators than late initiators. Among early sex initiators contraceptive use were more inconsistent and are highly likely to have multiple partnerships. In consistent with our finding A large UK study demonstrated early age (<16 years) at sexual initiation independently associated with early pregnancy (21).

The untoward outcomes of early sexual initiation in this study, the presence of high risk factors of STIs among the youths is evident these being multiple sexual partners sex with commercial sex partners and failing to have a protected sex. History of ever having STI among ever sexually active respondents was 13.3% (rural 16.7% was much higher compared to urban 9.8%) may be due to the higher rate of inconsistent or no use of condom among rural adolescents. Its a much higher figure compared to 7.4% and 11.5% in the survey of secondary school students across Ethiopia and Kolla Duba town respectively (23, 26). Findings from a number of cross-sectional studies suggest that early initiators may indeed continue with patterns of behavior that place them at higher risk than peers who have delayed first intercourse. In this study we also found that early initiate were more likely to have STIs than late initiators OR= 2.61(1.51, 4.52).

Inconsistent with this finding retrospective reports of early sexual debut in USA showed early initiation have been correlated with a greater number of sexual partners, lower levels of condom use, a greater chance of unintended pregnancy and a higher risk of self-reported STIs, as well as with other risk behaviors, including weapon-carrying and drug use(17,42).

7. CONCLUSION

In view of the above discussion points, the following conclusions are to be drawn and the research has shown; while individual youth characteristics are important, parental school and peer characteristics are critical in determining the patterns of sexual initiation and

subsequent high risk sexual behaviours of youths in their reproductive life. Youths are at significant risk for reproductive health problems, including HIV and unwanted pregnancy

1) The prevalence of early sexual initiation (60.6%) was high more over the first sex were tend to be unplanned 39% and unprotected 65.2%.

2) Early initiators were more likely to be involved in subsequent high risk sexual behaviors characterized by multi-partnered sex and no or inconsistent use of condom, casual partnership, unprotected and a wide sexual network than late initiators.

3) Though there was much awareness about HIV/AIDS among adolescents, this knowledge seemed not to have been reflected in their sexual lifestyles. STI knowledge is low, particularly among rural youths, in addition reported cases of STI were high

4) Some cultural beliefs and practices in the country exacerbate young people's vulnerability to HIV/AIDS.

5) This study identify non sexual risky behaviours like viewing pornographic materials at earlier age , using drugs and drinking alcohol specially at earlier age are an independent predictors of early sexual initiation

6) Three key unmet needs of adolescents emerged from the present research:
    - Sexual and reproductive health information, education and communication;
    - Life skill education at school families and at community to equip youths with the necessary life skill such as communication negotiation and refusal
    - Enabling environment for ARH services specially for rural youths;

8. Recommendation

1. Delaying sexual debate is the pillar of HIV and other STIs prevention among young people. This can be achieved through starting sexual education programs at earlier life as well this sex education programs should be well designed and include

    a. Obvious lack of sex-related knowledge by providing youth with accurate and uncensored information about sexual biology, birth control, and STIs prevention. Curriculum should be geared to emphasize skill transfer and should be in a comprehensive logical and repetitive manner starting from lower grade.

    b. Second, sex education programs should be designed to reach out of school youths. This can be done by arranging Community conversation programs designed to the level of all youths and establishment of rural youth RH, anti-AIDS and peer educator clubs.

    c. Increase the awareness and the participation of parents with the aim of increasing parents' sex-related knowledge(Community Conversation and adult learning programs) should be started and strengthened.

    d. Parents and teachers should be trained in a way that can enable them to acquire their teens with the necessary skill for sexual negotiation.. Programmes are needed also that convince parents of the need to focus on enhancing informed choice among adolescents rather than imposing tight supervision and controls as a more effective strategy of ensuring sexual and reproductive well-being.

2. Strengthening the norm of virginity should be advocated. Equally for those who initiate sex the skills and service to practice safe sexual life should be availed. Such as methods to access to condoms, contraceptives including emergency contraceptive etc… should be sought. Innovative programs should be designed

such as distributing through youth clubs (peer educators) for rural and urban, accessing condom at schools and using coin box machines in towns, strengthing youth friendly ARH clinics etc…

3. The strong association between chat alcohol and viewing pornography entails
    a. A need to teach young peoples, the community, school teachers and parents the linkage and possible consequences of non sexual risky behaviours to sexual and reproductive health of adolescents
    b. government(policy Makers) Should think of setting a legal age for buying alcohol and Khat and restricting Video houses

4. Strengthen and implement the proclamation designed for the age at marriage

5. Involve religious leaders in sexual and reproductive health education specially they are important in convincing parents and enforcing the norm of virginity.

9. Strength and limitations of the study

9.1. Strength of the study

1. Large sample size and appropriate sampling procedure and analysis methods utilized were appropriate to the study and considered as one of the strength of the study.

2. Qualitative data were utilized to complement the survey findings.

3. Interviewers were carefully selected and have got the appropriate training moreover, the same sex interviewer were utilized

9.2. Limitations of the Study

1. This study was based on cross-sectional data, which implies that the direction of causal relationships can not always be determined.

2. Difficulty to discuss sexual matter in face-to face interview. Hence, some sort of social desirability bias may not be eliminated even though the survey was done anonymously by arranging same sex interviewer.

3. There are very few literatures done on determinants of sexual initiation in our country.

10. ANNEXS

ANNEX I: References:

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ANNEX: II INFORMED CONSENT AGREEMENT

How are you, I am----------. I am working in the research team of Addis Ababa University Medical Faculty Department of Community Health

This survey is to know the median age at first sexual initiation and the determinants of early sexual initiation. The research will be helpful to tackle the sexual, reproductive and other problems of youth and also will help us to develop services and educational programs

Thus, your ideas are very essential for us to better understand your problems in relation to sexuality and reproductive health problems. Your participation is voluntary. You don't have to answer any questions that make you feel uncomfortable. Your name will not be on the survey so no one will know your answers. Everything you say will be kept private and confidential.

If you fill discomfort with the interview, please fill free to drop it any time you want. This interview will take about 30 minutes. Could I have your permission to continue?

1. If yes, signature_____, Continue the interview.
2. If no, skip to the next participant by writing reasons for his/her refusal.

Interviewer who Collect the Consent

Name_____

Signature _____

ANNEX III: QUESTIONNAIRE

English Questionnaire

Addis Ababa University, School of Public

Questionnaire to Study mean age at sexual initiation and determinants of Early Sexual Initiation in rural and urban youths of Dessie town and Dessie Zuria Woreda,

INSTRUCTION TO THE RESPONDENT

The questions in this survey represent a wide range of experiences and concerns faced by youth mainly in relation to reproductive health and sexuality. Please read instructions and each question carefully. Some of the questions may not be applicable to participants. Try to ask only those questions which are applicable to participants as indicated by accompanying instructions i.e. you may need to skip some questions. If you have any questions, please don't ever hesitate to ask the supervisors.

It is very important to explain that participants should answer every question truthfully,

Thank You again for Your Help

SECTION 1. RESPONDENT'S BACKGROUND INFORMATION			
S.No	**Questions**	**Alternatives**	**Code**
1	Residence	**1. Rural** **2. Urban**	
2	Sex	1. Male 2. Female	
3	Age in completed years	Age: _____ years	
4	What is your ethnicity?	1. Amhara 2. Tigrie 3. Oromo 4. Others, specify_____	
5	Your educational status	1. Illiterate 2. read and write 3. elementary 1st cycle 1-4 4. elementary 2nd cycle 4-8 5. high school 9=10 6. preparatory 7. TVT 8. college or university	
6	Are you currently attending a school	1. yes 2. no	
7	What is your current religion?	1. Orthodox 2. Catholic 3. Protestant 4. Moslem 5. Other (specify) _____	
8	**What is your current marital status?**	1. Never married 2. Married 3. Divorced 4. Separated 5. Widowed	
9	**Are you currently have a job for pay**	1. Yes→ →to Q 10 2. no→ to Q 11	
10	**What is your monthly income**	_____ Birr	
SECTION 2. FAMILY CHARACTERISTICS			
Parental Socio demographic characteristics			
11	Are your mother and father currently	1. Yes →to Q 13	

	living together?	2. No →to Q 12	
12	With whom did you live until age 14?	1. With both biological parents 2. With my mother only 3. With my father only 4. With my mother and stepfather 5. With my father and stepmother 6. With my grand parents 7. Other, specify _____	
13	What is the educational level of your mother?	1. Illiterate 2. Read and write, no formal education 3. Grades 1-6 4. Grades 7-12 5. 12+ 7. Don't know	
14	What is the educational level of your father?	1. Illiterate 2. Read and write, no formal education 3. Grades 1-6 4. Grades 7-12 5. 12+ 7. Don't know	
15	What is your mother's occupation?	1. Civil servant 2. Teacher 3. Housewife 4. Merchant 5. Driver 6. Farmer 7. Daily laborer 8. Housemaid 9. Others, specify _____	
16	What is your father's occupation?	1. Civil servant 2. Teacher 3. Merchant 4. Driver 5. Farmer 6. Daily laborer Others, specify _____	
17	What is the monthly income of your household?	Per month _____ Birr Don't know _____	

18. Statements asking how youth feel about their relationship with their parents.

S.No	Parent teen Connectedness and Communication		Strongly agree	Agree	Not sure	Disagree	Strongly disagree
18.a	She (He) cares about me	Mother	**5**	**4**	**3**	**2**	**1**
		Father	**5**	**4**	**3**	**2**	**1**

18.b	I am happy with my relationship with my mother (father)	Mother	**5**	**4**	**3**	**2**	**1**
		Father	**5**	**4**	**3**	**2**	**1**
18.c	I feel my parents trust me		**5**	**4**	**3**	**2**	**1**
18.d	I have open communication with my parents		**5**	**4**	**3**	**2**	**1**
18.e	There are times when I would like to leave home		**5**	**4**	**3**	**2**	**1**

19. Statements asking youth about their parents' values towards premarital sexual relationships.

S.No	Parents' values towards premarital sexual relationships	Strongly agree	Agree	Not sure	Disag ree	Strongly disagree
19.a	My parents have rules about who, when, or how often I can date	**5**	**4**	**3**	**2**	**1**
19.b	It is unacceptable for my parents if I get engaged with a boy/girl they didn't choose for me	**5**	**4**	**3**	**2**	**1**
19.c	It is against my parents' values for me to have sexual intercourse while I am an unmarried teenager	**5**	**4**	**3**	**2**	**1**

20. Statements asking youth about parental supervision.

S.No	Parental supervision	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
20.a	My parents show interest in my academics	5	4	3	2	1
20.b	My parents show interest in my manners	5	4	3	2	1
20.d	My parents show interest in my friends	5	4	3	2	1
20.e	I should seek approval of my parents to go camping with classmates/friends	5	4	3	2	1
20.f	I should seek approval of my parents to have a late night outing with classmates	5	4	3	2	1
20.g	I should seek approval of my parents to drink beer and other alcoholic beverages	5	4	3	2	1

SECTION 3. PEER INFLUENCE			
S.No	**Questions**	**Alternatives**	**Code**
21	Have you ever been encouraged by other boys or girls or your friends to play sex with girls or ladies or boys?	1. Yes 2. No	
22	Have you ever encountered pressure from your friends to have sexual intercourse?	1. Not at all 2. Yes frequently 3. Yes occasionally	
23	How many of your friends who are not	1. None of them	

	married have had sexual intercourse?	2. A few of them 3. About half of them 4. Most of them 5. All of them 6. Don't know	
24	Having sex while I'm a teenager would just be doing what everybody else is doing.	1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree 6.	

SECTION 4.CONNECTEDNESS WITH INSTITUTIONS IN THE COMMUNITY

S.No	Questions	Alternatives	Code
25	In the past 12 months, on religious days in which you should attend church/mosque, how often did you go?	1. All of the time 2. Most of the time 3. Sometimes 4. Rarely 5. Never	
26	How often do you pray?	1. Daily 2. At least once a week 3. Rarely 4. Never	
27	How many clubs or groups or societies are you currently a member of? Please specify	_____ _____ _____ _____ _____	

SECTION 6. PARENT CHILD COMMUNICATION ON SEXUALITY AND REPRODUCTIVE HEALTH

S.No	Questions	Alternatives		Code
28	If you asked your father or mother sex-related questions (e.g., nocturnal emission, menstruation, contraception, sexual intercourse), what would be his or her response? ***(Check one.)***	Mother 1. Would answer helpfully 2. Would turn me away without giving an answer 3. Would scold me 4. Response would vary with type of question 5. Not competent enough to give an answer	Father 1. Would answer helpfully 2. Would turn me away without giving an answer 3. Would scold me 4. Response would vary with type of question	
29	**Have you ever discussed about the following with one or both of your parents?**			
29.a	Body changes during puberty/Menstrual cycle	1=Yes	2=No	
29.b	How to avoid getting pregnant	1=Yes	2=No	
29.c	Relationships with the opposite sex	1=Yes	2=No	
29.d	Whether or not to have sex	1=Yes	2=No	
29.e	Unwanted pregnancy	1=Yes	2=No	
29.f	Abortion	1=Yes	2=No	
29.g	STIs or HIV/AIDS	1=Yes	2=No	
29.h	About condoms	1=Yes	2=No	

29.i	Drugs and alcohol	1=Yes	2=No	
29.j	Sexual abuse/coercion		2=No	
30	How did you feel about your talks with a Parent on the topics described above?	1. Very good 2. Good 3. Neutral 4. Bad 5. Very bad 6. Have not talked		

SECTION 7. SOURCES OF INFORMATION ON SEXUALITY AND REPRODUCTIVE HEALTH

S.No	Questions	Alternatives	Code
31	With whom do you most prefer to discuss Sexual matters?	1. Mother 2. Father 3. Brother 4. Sister 5. Relatives 6. Friends 7. Boy friend/Girl friend 8. Husband/Wife 9. Health professional 10. Religious leader 11. Peer educator 12. Other, specify _____ _____	
32. Were you ever been taught at school about the following?			
32.a	Menstrual cycle	1=Yes	2=No	
32.b	Female reproductive system	1=Yes	2=No	
32.c	Male reproductive system	1=Yes	2=No	
32.d	How pregnancy occurs	1=Yes	2=No	
32.e	Contraceptive methods	1=Yes	2=No	
32.f	Sexually transmitted diseases	1=Yes	2=No	
32.g	HIV/AIDS	1=Yes	2=No	
33	Have you ever attended a lesson, course or lecture on sex education outside of school?	1. Yes 2. No		

SECTION 8. KNOWLEDGE ABOUT PREGNANCY STI AND HIV/AIDS

S.No	Questions	Alternatives	Code
34	As far as you know, are there any diseases that can be transmitted through sexual intercourse?	1. Yes →to Q 42 2. No →to Q 44 3. Don't know →to Q 44	
35	What are the signs and symptoms of a sexually transmitted disease in a man/woman? (MULTIPLE ANSWERS ARE ACCEPTABLE)	1. Discharge from penis/vagina 2. Pain during urination 3. Ulcers/sores in genital area 4. Others, specify _____ 5. Don't know any signs	

36	Is there anything a person can do to avoid getting a sexually transmitted disease? (MULTIPLE ANSWERS ARE ACCEPTABLE)	1. Use of condom 2. Washing/douching 3. Avoiding casual partners 4. Abstinence 5. Avoiding commercial sex workers 6. Using herbs 7. Other, specify _____	
37	Have you ever heard of HIV or AIDS?	1. Yes →to Q 38 2. No	
38	If your answer to Q. no 37 is yes, how do people get HIV/AIDS? (MULTIPLE ANSWERS ARE ACCEPTABLE)	1. Unprotected sex 2. From mother to child 3. From sharing of sharp objects 4. From blood transfusion 5. Shaking hand with infected person 6. Kissing infected person 7. Sharing items with infected person 8. From mosquito bites 9. Other, please specify_____ 10. Don't know	
39	If your answer to Q no 38 is yes, do you know how to prevent HIV/AIDS? (MULTIPLE ANSWERS ARE ACCEPTABLE)	1. Abstinence 2. Being faithful 3. To use condoms 4. Do not have sex with multiple partners 5. Do not share sharp items with AIDS-person 6. To use mosquito net 7. To avoid any contact with suspected	
SECTION 9. ABOUT YOUTH'S SEXUAL BEHAVIOR			
40	Have you ever had sexual intercourse?	1. Yes →to Q 49 jump Q48 and continue up to 71 2. No →to Q 48	
41	Are there reasons why you have not chosen to have sexual intercourse? (MARK ALL THAT APPLY)	1. I am not emotionally ready for it 2. I don't want the risk of pregnancy 3. I haven't met anyone I want to do it with 4. I haven't had the opportunity 5. Fear of disease 6. My religious values are against it 7. My parent's values are against it 8. I want to wait until I am older	
Below are some questions about the first time you had sex and d the sexual activity in general, so the following questions up to no 71 is only if the answer to question no 40 is yes.			
42	How old were you the first time you had sexual intercourse?	Age: _____ years	
43	How old was the person with whom you had intercourse for the first time?	1. Older than I was, age: _____ years 2. Younger than I was, age: _____ years 3. The same age as I was, age: _____ years	
44	At the time you had first sexual intercourse, what was your relationship with your partner?	1. Wife/Husband 2. Fiancé 3. Girlfriend/Boyfriend 4. Friend	

		5. Acquaintance 6. Relative 7. Teacher 8. Other, specify _____ 9. Don't remember	
45	Would you say it was planned or unexpected?	1. Planned 2. Unexpected Please specify the condition----------	
46	The first time you had intercourse, were you forced into it against your will?	1. Yes 2. No 3. Don't remember	
47	Do you know any method a women can do to prevent unwanted pregnancy if she had unprotected intercourse	_____ _____ _____	
48	What were the factors that encouraged you for the first sex? (MARK ALL THAT APPLY)	1. forced sex/rape 2. marriage 3. for money/ to support my self and my family 4. curiosity 5. just for love 6. my partner/boy or girl friend insisted me to do so 7. I wanted to/ because of my age 8. cheated/ False premises 9. Films 10. After/during taking of drugs, Alcohol, During Chat chewing 11. Getting gifts 12. because my friends have boy/girl friend 13. please specify your own experience different from the above listed reasons_____ _____	
49	Before you had sex for the first time, did you and your partner talk about using contraception?	1. Yes 2. No 3. Don't remember	
50	At the time you had first sexual intercourse; did you or your partner use any contraceptive method?	1. Yes →to Q 58-59 2. No →to Q 60 3. Don't remember	
51	Which contraceptive method did you or your partner use at first intercourse?	1. Condoms only 2. Natural family planning (specify)_____ 3. Birth control pills 4. Injectables 5. IUD	
52	Did you use this method in order to prevent pregnancy, a sexually transmitted disease or both?	1. Pregnancy 2. STD 3. Both	
53	Have you had sex in the past 12 months?	1. Yes →to Q 54 2. No →to Q 61	

54	Please describe the nature of your relationship with your sex partner for the past 12 months?	1. Spouse 2. Cohabiting (live-in) boy/girl friend 3. Boy friend not living together 4. Girl friend not living together 5. Others, specify _____	
55	How often did you and/or your partner use a contraceptive method in the past 12 months?	1. Always 2. Quite often 3. Sometimes 4. Rarely 5. Never	
56	Which contraceptive methods do you or your partner use? (MARK ALL THAT APPLY)	1. Condoms only 2. Natural family planning (specify) _____ 3. Birth control pills 4. Injectables	
57	How many sexual partners you have had in the past 12 months?	_____ partners Don't know ____	
58	How many people have you had sex with during your life?	_____ people Don't know ____	
59	How often did you have sex with a casual sex partner in the past 12 months?	1. Once or twice 2. Rarely (a few times per year or less) 3. Sometimes (1-4 times a month) 4. Several times per week 5. Not sure 6. Others, specify _____	
60	How often did you and/or your casual sex partner use condom in the past 12 months?	1. Always 2. Quite often 3. Sometimes 4. Rarely 5. Never	
61	**Only for males**: Have you ever had sex with a commercial sex partner?	1. Once 2. More than once 3. Never →to Q 70	
62	**Only for males**: How often did you and/or your commercial sex partner use condom in the past 12 months?	1. Always 2. Quite often 3. Sometimes 4. Rarely 5. Never	
The following questions up to question no 78 are only for females.			
63	FEMALES: Have you ever been pregnant?	1. Yes 2. No →to Q 70	
64	FEMALES: How many times have you been pregnant?	_____ times	
65	FEMALES: What was your age at your first pregnancy?	Age: _____ years Don't know _____	
66	Did you have any unintended/unplanned pregnancy?	1. Yes 2. No	
67	Have you ever had an abortion?	1. Yes No →to Q 70	

68	Was the abortion an induced one or spontaneous?	1. Induced 2. Spontaneous	
69	If the abortion was an induced one, how did it take place?	1. It was self induced 2. by a health professional outside of a health facility 3. It was induced by a lay provider 4. Other, specify _____	
70	Have you ever had a sexually transmitted infection?	1. Once 2. More than once 3. Never	
SECTION 10. NON SEXUAL RISKY BEHAVIORS			
71	Have you ever used any drug to make you feel high?	1. Yes 2. No →to Q 75	
72	What drugs have you used? (MULTIPLE RESPONSES POSSIBLE)	1. Heroin &/or Cocaine 2. « Khat » 3. Marijuana 4. Benzene	
73	Have you ever used a drug to enhance a sexual experience?	1. Yes 2. No	
74	What drugs have you used to enhance a sexual experience? (MULTIPLE RESPONSES POSSIBLE)	1. Heroin 2. "Khat" 3. Cocaine or Marijuana 4. Benzene 5. Other, specify _____	
75	Have you ever drunk beer or spirits?	1. Yes 2. No →to Q 81	
76	How old were you when you first drank beer or spirits?	Age: _____ years Don't know/don't remember _____	
77	Have you been drunk in the past month?	1. Yes 2. No	
78	Did you have sex on that occasion?	1. Yes 2. No	
79	Do you usually have sex after drinking alcohol?	1. Yes 2. No	
80	How frequently do you drink beer or spirits?	1. Always (daily) 2. Often (3-4 times per week) 3. Occasionally (1-4 times per month) 4. Rarely (on holydays)	
Pornographic Material: The term "pornographic material" refers to newspapers, magazines, books, photographs, videotapes, films, etc.			
81	Have you ever viewed pornographic material?	1.Yes 2.No →to Q 85	
82	How old were you when you first	Age: _____ years	

83	Have you viewed pornographic materials in the last six months?	1. No 2. Often (3-4 times per week) 3. Occasionally (1-4 times per month) 4. Rarely (once in months)	
84	What type of pornographic materials did you view the last time? (Multiple answer is possible)	1. Newspaper OR Magazine 2. Movie 3. Photograph 4. Other, specify	
85	What did you think are the consequences of early sexual initiation	_____ _____ _____ _____ _____	

ANNEX IV: Amharic Informed Consent Agreement & Questionnaire

<u>በጥናቱ ለመሰተፍ ስምምነት መግለጫ ቅፅ</u>

ጤና ይስጥልኝ፡ ስሜ _____ ይባላል፡፡ የመጣሁት ከአዲስ አበባ ዩኒቨርስት ሕክምና ፋኩልቲ የሕብረተሠብ ጤና ሳይንስ ትምህርት ቤት ነው፡፡ የመጣሁትም የወጣቶችን የሥነ-ተዎልዳ ጤና በተለይም የሥነ-ፆታን ትኩረት በመስጠት ወጣቶች ካለዕድሜ የሚያደርጉትን ፆታዊ ግንኙነት ምክንያቶች የሚያደርጉበትን አማካኝ ዕድሜ እና ተከትለው የሚመጡትን ችግሮች ለማጥናት ነው፡፡

ጥናቱ የወጣቶችን እና ታዳጊዎችን የሥነ-ተዋልዶ ጤና ችግሮች ለመፍታት በተለይም ቀድመው ግንኙነት በማድረግ የሚመጡ የጤና ችግሮች ማለትም ያልተፈለገ እርግዝና፣ በልጅነት እናትነትን፣ ውርጃና ኤች አይ ቪ የሚያደርሱትን የሞትና የህመም ሁኔታ ለመቀነስ ይረዳል፡፡

ስለሆነም እናንተ የምትሰጡን መረጃ የጠቀስናቸውንና ሌሎችንም የወጣቶችና ታዳጊዎች ችግር ለመፍታት እጅግ በጣም ጠቃሚ ነው፡፡ ተሣትፎአችሁ በፍቃደኝነት ላይ የተመሠረተ ነው፡፡ ስለሆነም ምኞች የማይሰጣችሁን ጥያቄ ወይም ለመመለስ የማትፈልጉትን ጥያቄ አለመመለስ ትችላላችሁ በመሀልም ከጥያቄው አቋርጣችሁ መውጣት ትችላላችሁ፡፡ በዚህ መጠይቅ የምትመልሱት ማንኛውም መልስ በሚስጥር የሚያዝ እና ስለመመለሳችሁም ከእናንተ በስተቀር ማንም እንዳያውቀው ተደርጎ ሚስጥራዊነቱ ይጠበቃል፡፡ ለዚህም ሲባል ስማችሁን ወይም ሌላ መለያ ማስቀመጥ አያስፈልግም፡፡ ስለዚህ በጥናቱ ለመሰተፍ ፈቃደኛ ነሽ/ነህ፡-

☐ አዎ እሳተፋለሁ

☐ አልሳተፍም ካልሽ/ህ ምክንያቱን ባጭሩ ብትገለልጭልኝ/ፅልኝ

_____

አመሠግናለሁ::

ስምምነቱን ያስፈረመው መረጃ ሰብሳቢ

ስም _____

ፊርማ _____

ክፍል 1 አጠቃላይ መረጃ			
ተ.ቁ.	ጥያቄ	አማራጭ	ኮድ
1	የመኖሪያ አድራሻ	1. ገጠር 2. ከተማ	
2	ፆታ	1. ወንድ 2. ሴት	
3	እድሜ	_____ ዓመት	
4	ብሔር	1. አማራ 2. ትግሬ 3. ኦሮሞ 4. ሌላ እባክዎን ይግለፁ_____	
5	የትምህርት ደረጃ	1. ማንበብ መፃፍ የማይችል 2. ማንበብ መፃፍ የሚችል 3. አንደኛ ደረጃ 1ኛ ሳይክል 1-8 4. ከፍተኛ ሁለተኛ ደረጃ 5. ቴክኒክና ሙያ 6. ኮሌጅ/ዩኒቨርስቲ	
6	አሁን ወይም በዚህ የትምህርት ዘመን በትምህርት ላይ ነሥት?	1. አዎ 2. አይደለሁም	
7	ኃይማኖት	1. ኦርቶዶክስ 2. ሙስሊም 3. ካቶሊክ 4. ኘሮቴስታንት 5. ሌላ ካለ ይጠቀስ _____	
8.	የትዳር ሁኔታ	1. ያላገባ /አግብቶ የማያውቅ/ 2. ባለትዳር 3. አግብቶ/ታ/ የፈታ/ች/ 4. የሞተባት	
9.	ሥራ በመሥራት ላይ ነህ/ሽ/	1. አዎ ወደ ቁጥር 10 2. አይደለም /ቁጥር 11/	
10.	የወርሃዊ ገቢ ምን ያህል ነው?	_____ ብር	

ክፍል 2 የቤተሠብ ሁኔታ			
11.	እናት እና አባትህ/ሽ በአንድ ላይ ነው የሚኖሩት?	1. አዎ-በቀጥታ ወደ ጥያቄ ቁ.12 2. አይደለም	
12.	እስከ አሥራ አራት አመትህ/ሽ/ ከማን ጋር አደክ/ሽ/?	1. ከእናቴና አባቴ ጋር 2. ከእናቴ ጋር ብቻ 3. ከአባቴ ጋር ብቻ 4. ከእናቴና እንጀራ አባቴ ጋር 5. ከአባቴና እንጀራ እናቴ ጋር 6. ከአያቶቼ ጋር 7. ሌላ ካለ ይጠቀስ_____	
13.	የእናትህ/ሽ/ የትምህርት ደረጃ	1. ያልተማሩ 2. ማንበብ መፃፍ ብቻ 3. ከ1ኛ-6ኛ ክፍል 4. ከ7ኛ-12ኛ ክፍል 5. ከ12ኛ በላይ 6. አላውቅም	
14.	የአባትህ/ሽ/ የትምህርት ደረጃ	1. ያልተማሩ 2. ማንበብ መፃፍ ብቻ 3. ከ1ኛ-6ኛ ክፍል 4. ከ7ኛ-12ኛ ክፍል 5. ከ12ኛ በላይ 6. አላውቅም	
15.	የእናትህ/ሽ/ ሙያ/ሥራ/	1. የመንግሥት ሠራተኛ 2. የቤት እመቤት 3. ነጋዴ 4. ገበሬ 5. የቀን ሠራተኛ ወይም የቤት ሠራተኛ 6. ሌላ ካለ ይጠቀስ----------	
16.	የአባትህ/ሽ/ ሙያ/ሥራ/	1. የመንግሥት ሠራተኛ 2. ነጋዴ 3. ገበሬ 4. የቀን ሠራተኛ ወይም የቤት ሠራተኛ 5. ሹፌር 6. ሌላ ካለ ይጠቀስ----------	
17.	የቤተሠብ ገቢ	1. _____ ብር በወር 2. አላውቅም	

18. ወጣቶች ከቤተሠባቸው ጋር ስላላቸው ግንኙነት የሚሠማቸውን ስሜት የሚጠየቁ ጥያቄዎች

ተ.ቁ.	ወጣቶችቤተሠባቸው ጋር ስላላቸው ግንኙነት ያላቸዉ አመለካከት	ስለ እኔ በጣም ይጨነቃሉ	በጣም እስማማለሁ	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም	በጣም አልስማማም
18.ሀ/	እናቴ (አባቴ)	እናቴ	5	4	3	2	1
		አባቴ	5	4	3	2	1
18.ለ/	ከእናቴ (አባቴ) ጋር ባለኝ ግንኙነት እጅግ ደስተኛ ነኝ	እናቴ	5	4	3	2	1
		አባቴ	5	4	3	2	1
18.ሐ/	ቤተሠቦቼ ያምኑኛል ብዬ አስባለሁ		5	4	3	2	1

19. ወጣቶችን ቤተሠቦቻቸው ስለ ከጋብቻ በፊት ስለሚደረግ የግብረ-ስጋ ግንኙነት ያላቸውን ዝንባሌ እና አስተሳሰብ የሚጠየቅ መጠይቅ

ተ.ቁ.	የቤተሠቦች ስለ ከ ጋብቻ በፊት ግንኙነት ማደርግ ያላቸዉ አመለካከት	በጣም እስማማለሁ	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም	በጣም አልስማማም
19.ሀ	የእኔ ቤተሠቦች ማንን እና መቸ መቅጠር እንዳለብኝ ሕግ/መመሪያ አላቸው	5	4	3	2	1
19.ለ	ቤተሠቦቼ እኔ የመረጥኩትን የወንድ/ሴት/ ፍቅረኛ ብይዝ ይቀበሉኛል	5	4	3	2	1
19.ሐ	ቤተሠቦች ከጋብቻ በፊት ግንኙነት ባደርግ እጅግ በጣም ይቃወማሉ	5	4	3	2	1

20. የሚቀጥሉት ጥያቄዎች የቤተሠብን ቁጥጥር ይመለከታሉ

ተ.ቁ.	የቤተሠቦች ቁጥጥር	በጣም እስማማለሁ	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም	በጣም አልስማማም
20.ሀ	ቤተሠቦቼ ትምህርቴን ይከታተላሉ	5	4	3	2	1
20.ለ	ቤተሠቦቼ ፀባዬንና አለባበሴን ይቆጣጠራሉ	5	4	3	2	1
20.ሐ	ቤተሠቦቼ ማንን ጓደኛ መያዝ እንዳለብኝ ይከታተላሉ	5	4	3	2	1
20.መ	አልኮል ለመጠጣት እና ጭፈራ ከጓደኞቼ ጋር ለማዘጋጀት የቤተሠቦቼን ፈቃድ ማግኘት አለብኝ	5	4	3	2	1

ክፍል 3 የጓደኛ ተፅዕኖ			
21.	ጓደኞችሽ/ህ/ የፍቅር ጓደኛ እንድትይዥ/ዝ/ ተበረታተሽ/ህ/ ታውቂያለሽ/ታውቃለህ/	1. አዎ 2. የለም	
22.	የግብረ ሥጋ ግንኙነት ከጓደኞችህ ግፊት /ተፅዕኖ/ ተደርጐብህ/ሽ/ ታውቂያለሽ አጋጥሞሽ ያውቃል	1. በፍፁም አያውቅም 2. አዎ 3. አልፎ አልፎ	
23.	ከጓደኞችሽ/ህ/ ውስጥ ምን ያህሉ ከግብረ ሥጋ በፊት ግንኙነት አድርገዋል ብለህ/ሽ/ ታስቢያለሽ	1. ማንም አላደረገም 2. በጣም ትንሾቹ 3. ግማሽ የሚሆኑት 4. ብዙዎች 5. ሁሉም 6. አላውቅም	
24.	በወጣትነት /ልጅነት/ ግንኙነት ባደርግ ወይም ማድረጌ ማንኛውም ሠው የሚያደርገው ስለሆነ እንደጥፋት መቆጠር የለበትም	1. በጣም አልስማማም 2. አልስማማም 3. እርግጠኛ አይደለሁም 4. እስማማለሁ 5. በጣም እስማማለሁ	
ክፍል 4 የኃይማኖት ሁኔታ			
25.	ወደ ቤተክርስቲያን ወይም መስጊድ በአለፈው አንድ ዓመት ውስጥ ስንት ጊዜ ሂደሽ/ህ/ ትከታተያለሽ/ትከታተላለህ	1. ሁልጊዜ 2. ብዙጊዜ 3. አንድ አንድ ጊዜ 4. አልፎ አልፎ	

		5. ሂጂ አላውቅም	
26.	ምን ያህል ጊዜ ትፀልያለሽ/ህ/	1. በየቀኑ 2. በሣምንት አንድ ጊዜ 3. አልፎ አልፎ 4. ፀልዬ አላውቅም	
27.	የምን ያህል ማኅበራት አባል ነህ/ሽ/	ይዘርዝሩ _____ _____	

ክፍል 6 ስለ ሥነ-ፆታና ሥነ-ተዋልዶ ከቤተሠብና ወጣቶች/ልጆች/ ጋር የሚደረግ ውይይት የሚሳዩ መጠየቆች

28.	እናትና አባቱ ስለ ሥነ-ፆታ ምሳሌ የወር አበባ ብትጠይቂ/ቅ/ የሚኖራቸው መልስ	እናቱ	አባቱ	
		1. በደንብ ይመልሱልኛል 2. መልስ ሳይሰጡ ይረሳሉኛል /ፊታቸውን/ ያዞራሉ 3. ይገላምጡኛል 4. በምጠይቀው ጥያቄ ይወሰናል 5. እነሱም ስለማያውቁ በቂ መልስ አይሰጡኝም	1. በደንብ ይመልሱልኛል 2. መልስ ሳይሰጡ ይረሳሉኛል /ፊታቸውን/ ያዞራሉ 3. ይገላምጡኛል 4. በምጠይቀው ጥያቄ ይወሰናል 5. እነሱም ስለማያውቁ በቂ መልስ አይሰጡኝም	
29.	ከቤተሠብ ጋር ስለሚከተሉት ተወያይተሽ/ህ/ ታውቂያለሽ/ታወቃለህ?			
29.ሀ	ስለ የፆታ አንላት ለውጥና የወር አበባ	1. አዎ	2. የለም	
29.ለ	እርግዝናን እንዴት መከላከል እንደሚቻል	1. አዎ	2. የለም	
29.ሐ	ስለ ተቃራኒ ፆታ ግንኙነት	1. አዎ	2. የለም	
29.መ	ግንኙነት ማድረግ እንደሚገባ እና እንደማይገባ	1. አዎ	2. የለም	
29.ሠ	ስለ አልተፈለገ እርግዝና /ውርጃ/	1. አዎ	2. የለም	
29.ረ	ስለ አባለዘር በሽታ /ኤድስ/	1. አዎ	2. የለም	
29.ሸ	ስለ አደንዛዥ ዕፅና አልኮል	1. አዎ	2. የለም	
29.ቀ	ስለ አስገድዶ መድፈር	1. አዎ	2. የለም	
30.	የተሰጠኝ መልስ አጥጋቢ ነበር	1. በጣም ጥሩ ነው 2. መጥፎ ነው 3. በጣም መጥፎ ነው 4. አውርተን አላውቅም 5. መወሠን አልችልም		

ክፍል 7 ስለ ሥነ-ተዋልዶ ጤና የመረጃ ምንጭ የሚጠይቁ ጥያቄዎች

33.	ከማን ጋር ስለ-ፆታዊ ባህሪያት /ሥነ-ፆታና ተዋልዶ/ መወያየትና መረጃ ማግኘት ደስ ይልሻል	1. እናት 2. አባት 3. ወንድም 4. እህት 5. ዘመዶች 6. ጓደኞች 7. የፍቅር ጓደኛዬ 8. ባል/ሚስት 9. የኃይማኖት መሪ 10. የጤና ባለሙያ 11. የተማሩ ጓደኞቼ/ሥነ-ተዋልዶ የተማሩ/ ሌላ ይጠቀስ _____	
34.	በትምህርት ቤት ቀጥሎ ስለተዘረዘሩት ተምረኃል/ተምረሻል		
34.ሀ	ስለ የወር አበባ ኡደት	1. አዎ	2. የለም
34.ለ	ስለ ወንድ/ሴት የመራቢያ አካላት	1. አዎ	2. የለም
34.ሐ	እርግዝና እንዴት ይከሰታል	1) አዎ	2) የለም
34.መ	ስለ የመቆጣጠሪያ /የቤተሰብ	1) አዎ	2) የለም

	ምጣኔ/ ዘዴዎች			
34.ሠ	ስለ አባለዘር በሽታዎች	1) አዎ	2) የለም	
34.ሸ	ስለ ኤች አይ ቪ ኤድስ	1) አዎ	2) የለም	
ክፍል 8 ወጣቶች ስለ እርግዝና የአባለዘር በሽታዎችና ኤች አይ ቪ ኤድስ ያላቸውን እውቀት ለመረዳት የቀረቡ ጥያቄዎች				
35.	በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎችን ልትዘረዝሪልኝ/ርልን ትችያለሽ/ህ/	_____ _____ _____		
36.	የአባለዘር በሽታ ምልክቶች ምን ምን ናቸው?	1. ከብልት የሚወጣ ፈሳሽ 2. ሽንት ሲሸና የሚሠማ ማቃጠል /ህመም/ 3. በብልት አንባቢ የሚታይ ቁስለት 4. ሌላ ይጠቀስ _____ 5. ምንም ምልክት አላውቅም		
37.	አንድ ወጣት የአባለዘር በሽታ እንዳይዘው ለመከላከል የሚያደርገው ነገር ይኖራል?	1) ኮንዶም መጠቀም 2) ብልት መታጠብ /ግብረ ውሃ/ 3) በአንድ መወሰን 4) ግንኙነት አለማድረግ 5) _____ 6) _____		
38.	ስለ ኤች አይ ቪ ኤድስ ሰመተህ/ሽ ታውቂያለሽ/ታወቃለህ	1 አዎ ⇨ ወደ ጥያቄ 39 2 የለም		
39.	ሠዎች እንዴት ኤች አይ ቪ ኤድስ ይያዛሉ /ከአንድ በላይ መልስ ይቻላል/	1) ጥንቃቄ በጎደለ የግብረ ሥጋ ግንኙት 2) ከእናት ወደ ልጅ 3) በስለታማ ነገሮች 4) በደም ዝውውር /ደም ለበሽታ በሚሰጥ ጊዜ/ 5) ቫይረሱ ካለበት ሠው ጋር በሠላምታ 6) በመሣሣም 7) እቃ በመለዋወጥ 8) በትንኝ በመነከስ 9) ሌሎች ጥቀሱ _____ 10. አላውቅም		
40	ወጣቶች እንዴት ራሣቸውን ከኤች አይ ቪ ኤድስ መከላከል ይችላሉ /ከአንድ በላይ መመለስ ይቻላል/	1) መታቀብ 2) አንድ ለአንድ መወሰን 3) ኮንዶም መጠቀም 4) ስለታም ነገሮችን አለመዋዋስ 5) ኤድስ ከያዘው ሠው ጋር ማንኛውንም ግንኙነት መራቅ 6) ሌላ ይጠቀስ _____ 7) አላውቅም		
ክፍል 9 ስለ ወጣቶች ሥነ-ተዋልዶ ባህሪያት				
41.	የግብረ ሥጋ ግንኙነት አድርገህ/ሽ/ ታውቃለህ/ታውቂያለሽ	1) አዎ ⇨ ወደ ጥያቄ 42-72 2) አላደረግኩም /የለም/ ወደ ጥያቄ 73		

42.	**ካላደረግሽ ለምን የግብረ ሥጋ ግንኙነት ሳታደርግ/ጊ/**	**1) ዝግጁ ስላልሆንኩ /በአዕምሮ/** **2) እርግዝና ስለምፈራ** **3) የምፈልገውን ስላላገኘሁ /የጠየቀኝ የለም/** **4) እድሉን አላገኘሁም** **5) በሽታ ስለምፈራ** **6) በኃይማኖት /ዕምነቴ ስለማይፈቅድ/** **7) በቤተሰብ ተፅዕኖ** **8) ዕድሜዬ ገና ነው** **9) ከጋብቻ በፊት ማድረግ ስለሌለብኝ** **ሌላ ይጠቀስ----------** **_____**	
የግብረ ሥጋ ግንኙነት አድርገዉ ለሚያዉቁ ወጣቶች ከጥያቄ 49-78 ያሉት ግንኙነት ለመጀመሪያ ጊዜ ስታደርግ/ጊ የነበሩትን			
43.	**ግንኙነት ለመጀመሪያ ጊዜ ስታደርግ/ጊ/ ስንት ዓመትሽ ነበር**	**_____ዓምት**	
44.	**ለመጀመሪያ ጊዜ ግንኙነት ያደረገሽ/ህ/ ሰው ስንት ዓመቱ/ቷ/ ነበር**	**ከኔ ይበልጣል _____ዓመት** **ከኔ ያንሳል _____ዓመት** **እኩል ነው**	
45.	**በመጀመሪያ ግንኙነት ስታደርጊ/ግ/ የተገናኘሺው/ህት/ ሠው ምንሽ/ምንህ ነበር**	**1. ባሌ/ሚስቴ** **2. እጮኛዬ** **3. ፍቅረኛዬ** **4. ጓደኛዬ** **5. አብረን ነዋሪ /ጎረቤት/** **6. ዘመድ** **7. መምህሬ** **8. ሌላ ይጠቀስ_____** **9. አላስታውሰውም**	
46.	**የመጀመሪያ ግንኙነትሽ/ህ/ ታስቦበት ነው ወይስ ሳይታሰብ**	**1. ታስቦበት** **2. ሳይታሰብ**	
47.	**የመጀመሪያ ግንኙነትሽ በግዴታ ነበር (ሳትፈልጊ/ግ/ ነበር)**	**1) አዎ** **2) አይደለም** **3) አላስታውሰውም**	
48.	**ሳይታሰብ አንዲት ሴት ግንኙነት ብታደርግ ከግንኝ ነት በኋላ ያልተፈለገ እርግዝናን ለመከላከል የሚያስችል ዘዴ እንዳለ ታውቂያለሽ/ህ/**	**ካለ ቢጠቀስ _____** **_____**	
49.	**ምንድን ናቸው መጀመሪያ ግንኙነት እንድታደርግ/ጊ/ ምክንያት የሆኑህ/ሽ/ ወይም ያነሳሱሽ/ህ/**	**1) ተገድጄ /መደፈር/** **2) ጋብቻ** **3) ገንዘብ ለማግኘት /ድህነት/** **4) ለማወቅ ካለኝ ፍላጎት /ለመሞከር/** **5) ለፍቅር /ለፍቅረኛዬ ብዬ/** **6) ፍቅረኛዬ ወይም ቤተሰቦቼ ስለገፋፉኝ** **7) እድሜዬ ነው /ደርሻለሁ/ ብዬ ስላሰብኩ ራሴ ፈልጌ ነው** **8) ተሸውጄ ነው** **9) በማያቸው ፊልሞች ተገፋፍቼ** **10) ጫት ወይም አልኮል ወስጄ ስለነበር** **11) ስጦታ ስለተሠጠኝ** **12) ጓደኞቼ የወንድ ወይም የሴት ፍቅረኛ ስላላቸውና እንደዛ ስለሚያደርጉ** **13) ሌላ ከላይ የተለየ ምክንያት ካለህ/ሽ/ እባክህ/ሽ/ ጥቀስ/ሽ/** **_____**	
50.	**መጀመሪያ ግንኙነት ከማድረጋቸው በፊት ከፍቅረኛ ሽ/ህ/ ጋር ስለ እርግዝና መከላከያ ተወያይታችሁ ነበር**	**1. አዎ** **2. አልተወያየንም** **3. አላስታውስም**	

51.	**ግንኙነት ስታደርጉ ፍቅረኛህ/ሽ/ ወይም አንች/ት/ መቆጣጠሪያ ተጠቅማችሁ ነበር**	**1. አዎ ⇨ ወደ ጥያቄ 52-53** **2. አልተጠቀምንም ⇨ ወደ ጥያቄ 54** **3. አላስታውስም**	
52.	**የትኛውን ዓይነት እርግዝና መከላከያ ዘዴ ነበር አንቺ/ት/ ወይም ጓደኛሽ/ህ/ የተጠቀማችሁት**	**1. ኮንዶም ብቻ** **2. በተፈጥሮ የመከላከያ ዘዴ _____ ይጠቀስ** **3. የሚዋጡ እንክብሎች /ፒልስ ወይም ኘ ሩደንስ/** **4. መርፌ** **5. በማህፀን የሚገባ ሉፕ**	
53.	**መቆጣጠሪያ (መከላከያ) ዘዴውን የተጠቀማችሁት ለምን ነበር**	**1. እርግዝናን ለመከላከል** **2. የአባለዘር በሽታን ለመከላከል** **3. ሁሉንም**	
54.	**ባለፈው አንድ ዓመት (12) ወራት ውስጥ ግንኙነት አድርገህ/አድርገሽ/ ነበር**	**1. አዎ** **2. አላደረኩም ⇨ ወደ ጥያቄ 58**	
55.	**እስኪ ከፍቅረኛህ/ሽ/ ጋር ያለሽን ግንኙነት ግለፅልኝ/ጭልኝ/**	**1. ባለቤቴ** **2. ፍቅረኛ በአንድ ላይ የምንኖር** **3. ፍቅረኛ በአንድ ላይ የማንኖር** **4. ሌላ**	
56.	**አንች/ት/ እና ፍቅረኛህ/ሽ/ ምን ያህል ጊዜ መቆጣጠሪያ ትጠቀማላችሁ**	**1. ሁልጊዜ** **2. ብዙጊዜ** **3. አንድ አንድ ጊዜ** **4. አልፎ አልፎ** **5. ተጠቅመን አናውቅም**	
57.	**የትኛውን የመቆጣጠሪያ ዘዴ ነው አንቺ/ት/ እና ጓደኛ ሽ/ህ/ በአለፈው አንድ ዓመት የተጠቀማችሁት**	**1. ኮንዶም ብቻ** **2. የተፈጥሮ የመከላከያ ዘዴ ይጠቀስ _____** **3. የወሊድ መቆጣጠሪያ እንክብሎች /ፒልስ/** **4. መርፌ** **5. በማህፀን የሚቀበር ሉኘ**	
58.	**በአለፈው አንድ ዓመት ስንት የፍቅር ጓደኞች ነበሩህ/ሽ/**	**1. _____ ፍቅረኞች** **2. አላውቅም**	
59.	**ግንኙነት ከጀመርሽበት/ክበት/ ጀምሮ በአጠቃላይ ስንት የፍቅር ጓደኞች ነበሩሽ/ነበሩህ**	**_____ ዓመት**	
60.	**በአጋጣሚ ከአገኘሺስንት የፍቅር ጓደኞች ነበሩሽ/ነበሩህ**	**1. አንድ አንድ ጊዜ** **2. አልፎ አልፎ** **3. ብዙጊዜ**	
61.	**በአለፈው አንድ ዓመት (12 ወራት) ውስጥ ከእንግዳ ወይም ደግሞ ፍቅረኛህ ካልሆነ ወይም በአጋጣሚ ከተገናኘሽው/ኸው/ ሠው ጋር ምን ያህል ጊዜ ግንኘ ነት አድርገሻል/አድርገህል**	**1. አንድ ጊዜ ወይም ሁለት ጊዜ** **2. በጣም የተወሠነ ጊዜ** **3. አልፎ አልፎ** **4. ብዙጊዜ** **5. አላስታውስም** **6. አድርጌ አላውቅም**	
62.	**አንች/አንተ/ እና በድንገት ተዋውቃችሁ ግንኙነት ያደረጋችሁ ጓደኛህ ምን ያህል ጊዜ ተጠቅማችኋል**	**1. ሁልጊዜ** **2. ከአንድ ጊዜ በላይ** **3. ተጠቅሜ አላውቅም**	
63.	**ለወንዶች** **ብቻ ከሴተኛ አዳሪ ጋር የግብረ ሥጋ ግንኙነት አድርገህ/ገሽ/ ታውቃለህ/ሽ/**	**2. አንድ ጊዜ** **3. ከአንድ ጊዜ በላይ** **4. አድርጌ አላውቅም ⇨ ወደ ጥያቄ 68**	

64.	ለወንዶች ከሴተኛ አዳሪ ጓደኛህ ጋር ግንኙነት ስታደርግ ምን ያህል ጊዜ ኮንዶም ትጠቀማለህ/ሽ/	1. ሁልጊዜ 2. ብዙጊዜ 3. አልፎ አልፎ 4. ተጠቅሜ አላውቅም	
ማሣሠቢያ እስከ ጥያቄ 78 ለሴቶች ብቻ			
65.	ለሴቶች ነፍሰጡር ሁነሽ /እርግዝና አጋጥሞሽ/ ያውቃል	1. አዎ 2. አላውቅም ⇨ ወደ ጥያቄ 72	
66.	ምን ያህል ጊዜ አርግዘሻል	_____ ጊዜ	
67.	እድሜሽ ስንት ነበር ለመጀመሪያ ጊዜ ስታረግዥር	_____	
68.	እርግዝናህ ያልተፈለገ ወይም ያልታሰበ ነበር	1. አዎ 2. የታሠበበት ነበር ⇨ ወደ ጥያቄ 72	
69.	አስወርደሽ ታውቂያለሽ	1. አዎ 2. አላውቅም ⇨ ወደ ጥያቄ 72	
70.	አስወርደሽ ካወቅሽ	1. ተነካክቶ ወይም በህክምና ነበር 2. በራሱ ወይም በተፈጥሮ ነበር	
71.	አስወርደሽ ከነበረ ያስወረደልሽ ሰው	1. ራሴ ነበርኩ /ራሴ መድሀኒት ወስጀ/ 2. በኃኪም ነው 3. ኃኪም ባልሆነ ሠው ነበር 4. ሌላ ካለ ይጠቀስ	
72.	የአባለዘር በሽታ አጋጥሞሽ/ህ/ ያውቃል	1. አዎ አንድ ጊዜ 2. አዎ ከአንድ ጊዜ በላይ 3. አጋጥሞኝ (አሞኝ) አያውቅም	
ክፍል 10 ሌሎች ከግንኙነት ውጪ ያሉ ባህሪያት			
73.	ሱስ የሚያስይዙ መድሀኒቶች ወይም እፆች ተጠቅመሽ/ህ/ ታውቂያለሽ/ህ/	1. አዎ 2. ተጠቅሜ አላውቅም ⇨ ወደ ጥያቄ 77	
74.	የትኞቹን መድሀኒቶች ነበር የተጠቀምከው/ሽው/ (ከአንድ በላይ መልስ ይቻላል)	1. ሔሮይን ወይም ኮኬይን 2. ጫት 3. ሐሺስ ወይም ማሪዋና 4. ሌላ ይጠቀስ_____ 5. ቤንዚን	
75.	መድሀኒት የወሲብ ፍላጐትሽ/ህ/ እንዲጨምር ወይም ጠንካራ ለመሆን ተጠቅመሽ/ህ /ታውቂያለሽ/ህ/	5. አዎ 6. አላዉቅም	
76.	የትኞቹን መድሀኒት ነበር የግንኙነት ፍላጐትህ/ሽ/ እንዲጨምር የተጠቀምከው/ሽው/	1. ሔሮይን ወይም ኮኬይን 2. ጫት 3. ሐሺስ ወይም ማሪዋና 4. ሌላ ይጠቀስ _____ 5. ቤንዚን	
77.	የአልኮል መጠጦችን ተጠቅመሽ/ህ/ ታውቂያለሽ/ታውቃለህ	1. አዎ 2. አላውቅም ⇨ ቀጥታ ወደ ቁጥር 89	
84.	ለመጀመሪያ ጊዜ አልኮል ስትጠጪ/ስትጠጣ ዕድሜሽ ስንት ነበር	_____ዓምት	
87.	አልኮል ከጠጣህ በኋላ ብዙ ጊዜ ግንኙነት ታደርጋለህ/ሽ/	1. አዎ 2. አላደርግም	

88.	በአማካኝ ምን ያህል ጊዜ የአልኮል መጠጦችን ትጠቀማለህ/ሽ	1. ሁልጊዜ (በየቀኑ) 2. ብዙጊዜ (ከ3-4 ጊዜ በሳምንት) 3. አልፎ አልፎ (ከ1-4 ጊዜ በወር) 4. በበአላት ቀን ብቻ (በኢጋጣሚ)	
ወሲብ ነክ የሆኑ ወይም ወሲብ ቀስቃሽ ነገሮችን (ኘሮግራፊክ ማቴሪያልስ የምንላቸው ጋዜጦች፣ ፊልሞች፣ ስዕሎች፣ መፅሐፍትና ቪዲዮን ይመለከታል)			
89.	ወሲብ ቀስቃሽ የሆኑ ሥዕሎችና ፊልሞችን (ከላይ የተጠቀሱትን) በሙሉ አይተሻል/ህ/ ታውቂያለሽ/ታውቃለህ	1. አዎ 2. አይቼ አላውቅም ⇨ በቀጥታ ወደ ቁጥር 93	
90.	እነዚህን ወሲብ ቀስቃሽ ፊልሞችና ስዕሎች (ጋዜጦች) ስታይ ስንት ዓመትሽ/ህ/ ነበር	_____	
91.	በአለፉት 6 ወራት ውስጥ ወሲብ ቀስቃሽ የሆኑ ስዕሎችንና ፊልሞችን ስንት ጊዜ አይተሻል/አይተሃል	1. አላየሁም 2. ብዙጊዜ (ከ3-4 ጊዜ በሳምንት) 3. አልፎ አልፎ (ከ1-4 ጊዜ በወር) 4. በወር አንድ ጊዜ ብቻ	
92.	የትኞቹን ዓይነር ወሲብ ቀስቃሽ ነገሮችን አይተህ ታውቃለህ/ታውቂያለሽ (ከአንድ በላይ መልስ ይቻላል)	1. ጋዜጦች 2. ፊልሞችና ቪዲዮች 3. ፎቶግራፎችና ስዕሎች 4. ሌላ ካለ ይጠቀስ _____	
93.	ቀድሞ (ከ18 ዓመት) በታች የግብረ ሥጋ ግንኙነት መጀመር ያለውን ችግር ምን ምን ናቸው እባክሽን/ህን/ የምታውቂውን/ቀውን/ ያክል ጥቀስ/ሽ/	_____ _____ _____	

ANNEX V: Guide to Focus Group Discussion

My name is _____. My colleague near to me is called_____. We came from Addis Ababa University

Read the following as it is:

“After a brief introduction we will be talking about t sexual initiation and the determinants of early sexual initiation. The research will be helpful to tackle the sexual, reproductive and other problems of youth and also will help us to develop services and educational programs. We will eventually conclude the session by asking for your recommendations on ways to bring about changes in youths to postpone early initiation into sexual intercourse until later age/typically until marriage following the development of certain appropriate interventions basically attributed to your comments and suggestions.

Would you be willing to participate in the discussion?

If yes, proceed.

If no, thank and stop the discussion.

Signature_____

(Signature of the moderator certifies that consent has been obtained verbally).

Date_____Time_____

Topic guideline for focus group discussion:

1. What do you perceive about early sex, its factors (causes, prevention, and its consequences?

2. What are the factors for delaying sex until later age/until marriage?

3. What are the advantages of delay of sex both for youths, family and society?

4. Who will be involved in the adverse effect of early sex? (Probe)

5. How do you relate early sex with HIV/AIDS and other STDs and also with unwanted pregnancies?

6. How do you see role of communication, connectedness between parents and youths, parental education and strict supervision in relation to early sex and delay of sex?

7. What are the things youths do to prevent early sex and the consequences if it happens

Thank you very much for your participation in the discussion

ANNEX VI: DECLARATION

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

Name_____

Signature_____

Place_____

Date of Submission_____

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

Name_____

Signature_____

ADDIS ABABA UNIVERSITY,
SCHOOL OF PUBLIC HEALTH

MEDIAN AGE AND DETERMINANTS OF SEXUAL INITIATION AMONG YOUTHS IN NORTH EAST ETHIOPIA

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Approved by the examining board

_____ _____
Chairman, Department Graduate Committee

Dr Alemayehu Worku(Asso.Prof.) _____
(Advisor)

_____ _____
Examiner

_____ _____

Examiner