HIV AND UNINTENDED PREGNANCY RISK PERCEPTION AND CONTRACEPTIVE USE AMONG YOUTH IN DEBRE BIRHAN DISTRICT, ETHIOPIA

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LIST OF ABBREVATIONS

AOR-Adjusted Odds Ratio
BSS-Behavioral Surveillance Survey
CI-Confidence Interval
DHS-Demographic and Health Survey
FDG-Focus Group Discussion
HIVf-Human Immunodeficiency Virus
MOH-Ministry Of Health
OR-Odds ratio
PLWHA-People Living With HIV/AIDS
SSA-Sub-Saharan Africa
SD-Standard Deviation
SPSS-Statistical Package for Social Studies
STI-Sexually Transmitted Infections
UNAIDS-United Nations Program on AIDS
VCT-Voluntary Counseling and testing for
WHO-World Health Organization

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Abstract

Background --Young people have special sexual and reproductive health needs. Because of their low use of reproductive health service and their relatively high risk of being exposed to inaccurate or incomplete information, they are affected by HIV and other Sexually Transmitted infections (STIs) and experiencing unintended pregnancy.

Objective--to assess HIV and unintended pregnancy risk perception and contraceptive use among youth in Debrebrhan District, Amhara Region.

Methodology--a community based cross-sectional survey of 400 youths aged 15-24 years and 4 FGDs composed of two men and two women groups conducted in Debrebrhan District , in the eastern part of the country, from February 2010 to March 2010. Two-stage cluster sampling technique was employed, out of nine kebeles in the district; five kebeles were selected by simple random sampling. Respondents from each household were selected using a systematic sampling technique. Data analysis for the quantitative part was analyzed using EPI info version 6 and SPSS version 11 for windows and the qualitative part was manually summarized.

Result--About 45% of the respondents were sexually active. The mean age at first sexual intercourse was 19.9± 2.9years. Among the sexually active respondents 36.5% had ever used contraceptives and 35.9% use contraceptives consistently. The leading determinants of contraceptive use were to prevent unwanted pregnancy and HIV (accounting 35.3%) followed by limit births. Risk perception to HIV and unintended pregnancy was 9.8% and 18.2% respectively.

Risk perception to HIV was associated with age of first partner consistent condom use and khat chewing Risk perception to pregnancy was associated with consistent contraceptive use

Conclusion--despite the high knowledge the youths have on HIV and unintended pregnancy and contraception, contraceptive use and risk perception to HIV and unintended pregnancy is still low. Attitude to wards reproductive health services is the barrier to contraceptive use. Peer-based interventions and negotiate contraceptive use are important for promotion contraceptive use.

Introduction

Youth around the world especially young women experience a high risk of unintended pregnancy and HIV because of their limited knowledge about sexual and reproductive health. Sexual behaviors among youth can include positive practices, such as abstinence and contraceptive use, or lead to negative outcomes such as unplanned pregnancy and the spread of sexually transmitted infections (STIs) and HIV/AIDS(1).

Today, some 38.6 million people are living with HIV, which killed 2.8 million in 2006 and over 20 million since the first cases of AIDS were identified in 1981(2).The epidemic remains extremely dynamic growing and changing its character as the virus exploits new opportunities for transmission with virtually no country in the world remaining unaffected.

Today's youth generation is the largest in history: nearly half of the global population being less than 25 years old. They have not known a world without AIDS. Young people are at the center of HIV/AIDS epidemic. An estimated 10 million young people aged 15-24 years are living with HIV/AIDS and more than 6000 contract the virus every year (3).

HIV/AIDS is a major public health concern and cause of death in Africa. Although Africa is inhabited by just over 14.7% of the world's population, it is estimated to have more than 88% of people living with HIV and 92% of all AIDS deaths in 2007(4).

In sub-Saharan Africa, the mode of transmission is heterosexual intercourse. This region contains almost two-thirds of all young people living with HIV/AIDS, approximately 6.2 million people, 75% of whom are female with over 80% of those currently living with HIV/AIDS aged 15-24 live in sub-Saharan Africa (1, 2, 3, 4, 5).

Ethiopia is currently among the countries most seriously affected by HIV/AIDS, with the 6th highest number of infections in the world (2). In Ethiopia, as in many other developing countries, the primary method of HIV transmission is heterosexual intercourse. A large proportion of new HIV infection is occurring in young people less than 25 years old (6). The HIV prevalence for Ethiopia in 2003 is 4.4% (urban 12.6% and rural 2.6%) (7). The highest HIV prevalence still

occurs in the age group 15-24 years. High rate of infection among the youngest population indicates relatively recent infections; meaning new infections are not decreasing.

Unintended pregnancy is a worldwide problem that affects women their families and societies at large. Between 20-40% of all births occurring in developing countries is unwanted (8). According to EDHS 2000, 17% of births are not wanted, while 20% of births are mistimed. Avoiding unintended pregnancy could prevent about one fourth of all maternal deaths in developing countries (9).

Youth, even when aware of HIV and unintended pregnancy risk, often do not consider this risk and stay with multiple partners. Risk perception is difficult to change (10).

In Ethiopia, according to round two National Behavioral Surveillance Survey, significant proportion of the population, particularly the youth were indicated to be at risk of HIV infection despite high level of knowledge about HIV/AIDS. Most youth respondents (93.5%) felt that they were not at risk or were at low risk for HIV infection. Of the in-school youth who had risky sex in the last year (6% of total), only 21% felt to be at moderate or high risk for HIV/AIDS (11).

Knowledge of contraceptives and contraceptive use are important indicators of sexual health among youth. Sexual behaviors and contraceptive use among youth not only vary across countries and regions, but vary within a given country as well (12).

The Ethiopian Demographic and Health Survey 2005 showed that knowledge and access to contraceptives are lower among women age 15-19, ever married women, and uneducated women. Less than 20% of sexually active women aged 15-24 years have used condom during their last sexual intercourse with any person (13).

Dual methods, hormonal and latex condom are the single most efficient available technology to reduce the sexual transmission of HIV and unintended pregnancy. Contraceptive methods are a key component of combination of preventive strategies individuals can choose at different times in their lives to reduce their exposure to unwanted pregnancy (14, 15).These include delay of sexual initiation, abstinence, and correct and consistent use of contraceptives.

Yet, despite clear public health benefits, contraceptive use is still low in many countries. Sexual behaviors and contraceptive use among youth not only vary across countries and regions, but vary within a given country as well (13).

In Nigeria the prevalence for current users for females and males are 17% and 15% respectively. This again shows low utilization of contraceptives (16).

Thus, there is a need to gather information and acquire knowledge on contraceptive use and the kinds of sexual practices which put them at risk of HIV and unintended pregnancy and their feeling about safe sex practice. In general, it is essential to focus on young people in order to stop the spread of the HIV infection and unintended pregnancy.

The outcome of this study will be of help to design appropriate strategies on risk reduction method and promotion of contraceptive use among youth in the study area and other similar areas.

2. Literature review

In many countries, women's ability to control their fertility is limited, even when family Planning methods are available; women may not use them because of financial constraints, personal beliefs, opposition from family members or concerns about perceived adverse effects on health or future fertility. World wide, between 120 and 150 million married women who want to limit or space future pregnancies are not using a contraceptive method. Use of male methods of contraceptive remains low. In Brazil, condoms and vasectomy account for less than 4% of total contraceptive use, in the Islamic republic of Iran; condoms comprise 6% and vasectomy 1% of total contraceptive use.

In sub-Saharan Africa, trends in fertility regulation have favored methods that are controlled by women and can be used without the partner's knowledge, however, these do not protect from HIV and unwanted pregnancy .Individuals and couples have the right to enjoy healthy sexual lives free of unplanned pregnancy and HIV (16).

2.1 Sexual behavior

A first step in reducing the risk of negative outcomes among youths is to understand their sexual behavior**.** Attitudes towards particular aspects of sexuality are always changing. Masturbation and premarital sexes have become more accepted in recent years. There is greater openness about sexual orientations, alternative behavior, and gender identities, although there is a significant degree of debate about their acceptability. Children move from a generalized awareness of their sexual natures to more specific experiences of sexual feelings. Adolescents explor their sexuality through relationships with others and there is evidence that they have become sexually active at increasingly younger ages (17).

Sexuality is a universal phenomenon in all-young people. Psychologically, adolescents become sexually active at earlier age due to peer pressure, avoidance and resistance to behavior changes through various forms of denial and rationalism (18). Initiating sexual activity is a natural transition made nearly by all humans. Nevertheless, it is not the occurrence of this transition, but its timing and the circumstances under which it occurs that has significant implication (19). Globally, unprotected sexual intercourse between men and women is the predominant mode of

transmission of the HIV virus (20). Young peoples in both developing and developed countries in particular begin sexual activity relatively early.

A study conducted on high-risk sexual behavior among youth in Tanzania revealed that (0.3%) girls and (3.2 %) boys had their first sexual debut by the age of 9 years and 10% by the age of 13 years. The lowest median age at first sexual contact in Nigeria is 18 years for females and 17.4 males (18).

In Mali and Burkina Faso, 30% to 40% of young unmarried women reported that they had been sexually active. In contrast, only 4% of unmarried young women in Senegal indicated that they had ever had sex, making it one of the lowest levels in sub-Saharan Africa. The median age at first sexual intercourse was lowest for women in Mali at 15.9 years followed by 17.5 years in Burkina Faso,in Senegal the median age at first sexual intercourse was among the highest in sub-Saharan countries at 19.6 years. As expected, sexual experience increases with age. In Burkina Faso and Mali, women ages 20 to 24 were more likely to have had sex (67% and 68%, respectively), but in Senegal, levels of sexual activity even among the 20 to 24-year-olds was quite low, at only 8%(13).

A study conducted on the determinants of high risk sexual behavior for HIV/AIDS among out-of school youth in Addis Ababa showed that 52.2% of the boys and 47.8% of the girls have had sexual experience, their mean age of sexual commencement being 17.7$\pm$ 2.3 years (21).

Another study conducted by the Family Guidance Association of Ethiopia on adolescent sexuality revealed that 71.9% of boys and 71.4% of girls have had their first sexual contact in the age range of 15 17 years (18). A similar study done in Bahir Dar also showed that 53% of male and 24% of female out- of-school youth were sexually active, the mean age at first sexual contact being 16.9$\pm$2.3 years of age (22).

Another study conducted on sexual activity of out-of-school youth, and their knowledge and attitude about STDs and HIV/AIDS in southern Ethiopia revealed that 49% of the respondents have had their first sexual contact within the mean age 17$\pm$2 years (23). The 2005 Ethiopian DHS also found out that the median age for first sexual intercourse was 16.3 years (24).

The study conducted on the attitudes of students, parents and teachers towards the promotion and provision of condoms for adolescents in Addis Ababa revealed that the earliest reported age of onset of sexual intercourse for girls was 14 years with mean age of onset being 15.3± 5.39 (25). The earliest age of commencement of sexual activity for boys was 12 years with mean age of onset being 16.5 ± 4years. A similar study on adolescent reproductive health revealed that the age at first sexual intercourse was 13 years (77% of males and 76% of females) **(**26). Another study done in Harar revealed that nearly half of

the participating males and one-fifth of females reported that they have experienced sexual intercourse with the mean age of 16.9 years at first intercourse. Males become sexually active earlier than the females (27). A similar study conducted on casual sex-debuts among female adolescents showed that the average age at sex debut was 16.7 years (+ sd 1.7) years, the respondents initiated sex as early as 11 years (28). Some of the reasons for sexual debut were identified, with maintaining relation with male partners, for the sake of passionate love (45.8%), and to overcome loneliness (40%) (29).

A study among secondary school students in Ethiopia showed that one third (33.3%) of the youth reported to have had sexual intercourse. Mean age of sexual initiation was 15.3(+ sd 0.5) year\s (30). Another study among high school students in Kolla Diba Town revealed that the mean age of sexual commencement was 16.4 ± 2.3 years and the mean number of sexual partners in the past six months was around two. Ten (9.3%) had sex with commercial sex workers in the past six months (31). Similarly, a study on school anti-AIDS club members and non members showed that about one third of the club members and a quarter of non-club members admitted to have practiced sexual activity with the mean age at sexual debut of 16.8± 1.9 and 16.8± 2.1 years, respectively (32).

2.2 Risk perception to HIV and unintended pregnancy

Literature on health related behavior emphasizes the perception of being at risk of infection as being one of the necessary conditions for behavioral change. Moreover, the degree of the perceived risk seems to affect individual actual control in adopting preventive measures.

Individual risk perception is dependent on the perception held by other members of her/his personal network. Individual risk perception as well as individual knowledge, is likely to be subjected to social environment influences, as long as social interaction allows information exchange, facilitates common evaluation and definition of the meaning and of its validity. Risk perception depends on the individual perceived control of her/his capability to take preventive measures against the infection. Risk perception is dependent on the capability to assess the relationship between behavior and the mode of transmission of the virus (33). Poverty, underdevelopment, the lack of choices and the inability to determine one's own destiny fuel the epidemic. Vulnerability to HIV is a measure of an individual's or community's inability to control their risk of perception. In both low and high endemic settings, reducing the vulnerability of young people to HIV infection is the principal defense against the epidemics of the future (34). A requirement for translating knowledge in to behavior change is a feeling of personal vulnerability to HIV infection. HIV has been characterized as a disease of' others' from the earliest reports of infection. A review of school based HIV/AIDS risk reduction program for youth in Africa suggests that knowledge and attitudes are easiest to change, but behaviors are much more challenging.

A baseline survey in the Khutsong community indicated that among the young people, there is little perception of their own risk despite high levels of infection. Almost 70% of young men said that there was no chance of their becoming infected or that they didn't t know whether or not they were personally vulnerable, indicating that they didn't connect their own behaviors with HIV risk messages (37).

Another study conducted on high-risk sexual behavior among youth in Tanzania revealed that 11.7% of the participants felt that they were at a high risk of getting HIV/AIDS and STDS, 25% felt that they had a very low risk, while 53.1% felt that they were not at risk at all (21).

A similar study conducted on knowledge, risk perception of AIDS and reported sexual behavior among students in secondary schools and colleges in Tanzania showed that students engaging in risky sexual behavior were aware of the risk, even though they failed to change their behavior .Only 25% of students felt that they themselves were personally at risk of acquiring HIV and

41% thought that friends were at greatest risk than themselves. Sixty-six percent were prepared to take an HIV test. Students seemed to have a good understanding of AIDS as a social problem, but not as an issue in their personal lives (38).

A study done on young Zambian males revealed that their risk perception of sexually transmitted infections (STIs) and HIV/AIDS was low due to misconceptions, folk beliefs and denial (39, 40).

A study conducted on perception of the risks of sexual activities among out of- school adolescents in south Gondar showed that risk perception were 11(5.3%) f or the rural and 13((11.2%) of the urban participants(19, 41). Adolescents are engaged early to practice sex, exposed to high-risk sexual behavior and the perception of risk acquisition is weak.

Another study conducted in Jima revealed that 6.7% of female students and 11.2%of male students were found to have been involved in sexual activity with worst lifetime sexual behavior index (42). A similar study in Kolla Diba Town revealed that only 65(18.6 %/) felt that they could acquire HIV infections (31).

Focus group discussions conducted in Uganda revealed that one of the factors facilitating the spread of AIDS in African societies is having multiple sexual partners (43). Different reasons were given for many sexual partners in the era of AIDS. Peer pressure, a lot of sexual urge, and attraction to beauty, prestige and experimentation were the reasons for many sexual partners reported by adolescents including street children. The responses on risk perception of HIV revealed that participants in all groups perceived people with multiple sexual partners as being highly at risk of contracting HIV/AIDS (42).

2.3 Contraceptive use

Knowledge of contraceptives and contraceptive use are important indicators of sexual health among youth (1). Sexual behaviors and contraceptive use among youth not only vary across countries and regions, but vary within a given country as well (43). Use of modern methods varies considerably among countries from 2% of youth in Pakistan to 44% in Indonesia (12).

Across-sectional survey of sexually active women conducted in South Africa in primary health care clinics found 70% of respondents were aware of condoms for dual risk prevention and 43% were aware that condoms with a non-barrier contraceptive can be used for dual risk prevention and 32% never protected. Qualitative studies on the perspectives of sexually active men and women about the risks of HIV/AIDS in Durban South Africa found that there was a high level of awareness of the risk of unwanted pregnancy and HIV/AIDS. Knowledge of condoms as a method of preventing pregnancy and HIV/AIDS was also relatively good. (44)

Although awareness of contraception is almost universal among youth, knowledge of specific methods and source of supplies is limited. Knowledge of family planning, married adolescents report very limited use of contraceptive methods, fewer than 10% of currently married girls report using any modern methods, and 15% of women aged 20-24 reported using some form of modern contraceptive (18).

The South Africa study of dual protection against HIV and pregnancy found that higher education, were important predictors and the other South Africa study done on condom procurers found increasing level of schooling were positively associated with use of dual methods(45).

A qualitative study in South Africa, respondents believed that the desire to have children because of the availability of child- support grants might be overriding any concerns about contracting HIV/AIDS and unintended pregnancy. One key informant said, “Married couples desire to have children regardless of their HIV status they do it because they want the child grant”. Other respondents stated that fear of HIV infection and leaving a trail of orphans might be diminishing the desire to have children (46).

A study in Nigeria, Awka shows a high perception of HIV/AIDS as a dreadful health condition which most of the respondents will want to avoid and protect themselves against HIV and unwanted pregnancy. A few however do not want to be bothered about protection against AIDS for different reasons (47).

A telephone random sample survey of 371 women in the Pacific Northwest, found women who were younger, reported more than one sexual partner one year prior from the study and those

who were highly motivated to avoid HIV and unintended pregnancy were more likely to use dual methods rather than condoms only or an effective contraceptive method.

2.4 The role of non-sexual risk behaviors for HIV infection and unwanted pregnancy.

Having ever used alcohol and drugs was a risk factor for ever having had sex, having more sexual partners over life time, and having more than one. (18, 45). In Ethiopia, alcohol and drugs like Khat are commonly consumed in both urban and rural areas.

A study conducted on casual sex-debuts among female adolescents in Addis Ababa showed that 'alcohol' and 'khat' use have strong links with the incidence of 'rape' as a factor contributing to early sex initiation (29). As in many societies, there was a feeling of cultural clash between the society and youth that have been exposed to and influenced by modernization.

Khat chewing and alcohol consumption, often in combination provide fertile environment for the execution of pre contemplated ideas on sex. These practices were reported to be common among groups of young people who call themselves ‘modernized’ Students who used alcohol or drugs were more likely than those who did not have intercourse in the previous month reported usually or always using condoms during that period (22). A study conducted on school anti-AIDS club members and non members youth in Jima and Agaro showed that alcohol and khat consumption were shown to have a potentiating effect for risky sexual practice (32).

2.5 Peer influence in sexual behavior

Having sexually experienced friends was associated with a higher probability of ever having had sex and having more lifetime sexual partners .Youth who engaged in high-risk activities (attending parties, going to discos, drinking alcohol) with their first close friend were more likely to ever have had sex, were to have a higher number of sexual partners over their life time and were less likely to have used condom at last sex (45,46). A study conducted on the attitudes of students, parents and teachers towards the promotion and provision of condoms for adolescents in Addis Ababa revealed that Peer pressure was the
frequently reported factor that led to the first sexual encounter accounting for 35.2% of the sexually active respondents followed by being forced (21.6%), alcohol (11.5%) and drugs(10.3%)(26,47). Another study done in Addis Ababa showed that young people were faced

with enormous pressure to engage in sex, especially from peers, exposure to unlicensed erotic video films and the desire for economic gain. Love relationships lacked adequate romantic period from partners to learn more about each other and negotiate condom use. Cultural shaping of young people's sexuality gave privileges for males to be sexually active, be in control of sexual relationships and be less responsible for precaution to prevent HIV/AIDS. The youth in general sensed their excessive vulnerability to HIV/AIDS, but
lacked individual motivation and skills to practice safe sex behavior (48,49.50,51).

3. Objectives

3.1 General objective

To assess HIV and unintended pregnancy risk perception and contraceptive use among youth in Debrebrhan district, N.Shoa, Amhara region.

3.2 Specific objectives

1. To assess the status of contraceptive use among youth
2. To identify determinants of contraceptive use among youth
3. To assess risk perception to HIV and unwanted pregnancy

4. Methods

4.1 Study Design

The study design was cross sectional quantitative survey complemented by qualitative methods.

4.2 Study Area

This study was conducted in Debrebrhan District which is the capital of North Shoa, east Amhara region. Debrebrhan district is 130 km from Addis Ababa, the capital of Ethiopia and 695 km from the capital of the regional state, Bahirdar. The district has 9 urban kebeles (smallest administrative unit) with a projected population of 79,000. 51% are females. According to the housing and population census of 1999 E.C, the proportion of youth in the town constituted 51% of the total residents. The proportion of youth (15-24 years) in the district constituted about 24.4% of the total residents Concerning major infrastructures and social facilities, about 91% of the total population has access to piped water supply, good land transportation services and digital microwave telephone system. In the study area, there are one zonal hospital, a health center and five private clinics and two private pharmacies. The economic potential of Debre Birhan Town includes 2 medium scale industries namely the Debre Brihan Blanket Factory and a Tannery. In the town there are also small-scale industries like grinding mills bakeries and so on. In the study area there are two anti-AIDS clubs, five anti-AIDS Associations and five youth associations. Currently, the Woreda AIDS Coordination Office, Life in Abundance-Ethiopia and the Agency for the Assistance of Refugee, Displaced and Returnees are among the organizations engaged in social services on the fight against HIV/AIDS. The government organizational structure to fight the spread of HIV/AIDS in the woreda includes the Woreda AIDS Council and the kebele AIDS committees. Formal care and support services are not available, except from the Woreda HIV/AIDS Coordination Office, which allocates 100 birr per month for those who are poor and living with the virus.

4.3 Source population

The source population for the study was all youth age 15-24 years residing in Debre Birhan District.

4.4 Study population

The study population consisted of all youth age 15-24 years in 5 randomly selected kebeles of Debre Brihan District.

Inclusion criteria

Those aged 15-24 years who have lived in the selected kebeles for at least one year.

Exclusion criteria

Individuals who stayed in the study area for less than one year.

4.5 Sample size

The sample size was determined using the following assumptions, (level of confidence was taken to be 95% zα/2 1.96): a 5% margin of error (d= 0.05) and a proportion of 13% contraceptive use among youth taken from EDHS 2005.Additional 15% allowance for absenteeism and refusal to participate in the study was considered. Based on this assumption, the actual sample size for the study was computed using one sample population proportion formula as indicated below.

$$\mathbf{n= [(Z\ \alpha\ /2)^2\ p\ (1-p)/d^2]}$$

n is the sample size required

Z is a standard score corresponding to 95% CI, 1.96 critical value

p Contraceptive use among youth which is 0.13(EDHS 2005)

d is the margin of error and taken to be 0.05

With a design effect of 2 and allowance for possible non-response rate of 15 %(0.15)

The required sample size is calculated as follows:

$$\mathbf{n= [1.96^2\ (0.13x0.87)/0.05^2)2= 348}$$

The final sample size to be **348+15%= 400**

4.6 Sampling procedures

Two-stage cluster sampling technique was employed. Out of the nine Kebele 5 Kebele were selected by simple random sampling technique. Then individual kebele household was selected using a systematic sampling technique and the number of households sampled from the selected kebele was determined by sample proportionally allocated.

For households with more than one individual aged 15-24 years in one household, only one person was selected using lottery method. When the selected house was closed during data collection, but it is known that there are persons aged 15-24 years the interviewers revisited the

house three times at different time intervals and when interviewers failed to get that house, the house was excluded from the survey. When the person in the specified age group from the selected household was not available during the data collection the next nearest house was included in the survey.

4.7 Data collection procedures

4.7.1 Quantitative

A structured questionnaire for data collection was prepared in English and translated in to Amharic and back to English to keep its consistency. Actual data collection was conducted using a structured Amharic questionnaire. Five data collectors, who completed grade 10 and one supervisor whose profession was nurse who can speak the local language, Amharic and familiar with local culture were recruited. A two days training was given for data collectors and supervisor on procedures, techniques and ways of collection data and related topics using prepared training manuals. The questionnaire was pre tested and relevant corrections were made. Data were collected between February 2010 and March 2010.

The Principal Investigator (PI) and the supervisors rechecked all filled questionnaires daily to see whether the interviewers have done correctly or not. Anything that was unclear and incomplete was corrected on the next day. The questionnaire was used to collect information on variables such as socio-demographic characteristics, sexual behavior, contraceptive use and risk perception to HIIV and unwanted pregnancy.

4.7.2 Qualitative

Semi-structured questionnaires, which are open ended, were used to guide the discussions. Four focus group discussions (FGD) which consisted of eight individuals in each group was conducted in order to provide more insight into the complex pattern of sexual behavior and motivation to use contraceptives in the study. The members of each FGD were selected on convenient bases by the Principal Investigator. Two of the focus group participants were females. The Principal Investigator moderated the discussion of male group, while a female nurse that was trained by the Principal Investigator moderated the discussion of female group

with the assistance of trained note taker and tape recorder. Every discussion was tape recorded not to miss issue discussed, and finally transcribed.

4.7.3 Data quality assurance

To assure the quality of data, properly designed data collection instruments and training of both data collectors and supervisors were done. The collected data were reviewed and checked for completeness and relevance by the supervisors and Principal Investigator each day.

4.8 Study variables

Dependent variable:

Risk perception to HIV

Risk perception to unintended pregnancy

Independent variables:

Socio demographic characteristics (Age, sex, marital status, occupation, income, education, religion)

Contraceptive use (Yes/No)

Sexual behavior (Hx of sexual activity: number of sexual partner, ever had sex)

Non-sexual risk behaviors (alcohol consumption, Khat chewing, Cigarette smoking)

4.9 Operational definition

Youth: those who are in the age group of 15-24.

Contraceptive use: Use of any modern contraception whether the concern of user is desired to space or limit births and unwanted pregnancy or permanent cessation of child bearing.

Risk perception of youth: Youth's attitude towards perceiving themselves as susceptible to HIV/pregnancy.

Unwanted pregnancy: pregnancy that occurred sooner than wanted or was unwanted any time.

4.10 Data Analysis

Data were entered into EPI info version 6 and analyzed using SPSS version 11 computer software packages. Data cleaning and editing were carried out. Dummy tables that consider

the main research questions were drafted. Analysis of frequencies of different variables were done. Odds ratios were calculated to determine the strength of association of selected variables. Logistic regression analyses were done for controlling confounding variable.

4.11 Ethical considerations

Ethical clearance was obtained from the research Ethics committee and the IRB of the college of Health Sciences at AAU. Official permission was obtained from relevant authorities of the Amhara Regional State. The respondents were informed about the objective and purpose of the study and verbal consent was obtained from each respondent.

For adolescents whose ages were under 18 years, consent was obtained from their family and assent from the study participants. Confidentiality was assured and information was recorded anonymously.

5. Results

5.1 Socio- demographic characteristics of the study participants

A total of 400 youths participated in the study, with 100% response rate. One hundred fifty-five (38.8%) of respondents were males and 245(61.3%) were females. The mean age of the study subjects was 19.9 $\pm$ 2.9 years. Three hundred thirty six (84%) of the participants were never married. Three hundred seventy (92.5%) were orthodox Christian followed by protestant, 15(3.8%). The majority of respondents, 372 (93%) were Amhara by ethnicity. With regard to the level of educational, 37(9.7%) were at elementary level, 191 (50.3 %) were at junior secondary school level, 47(12.2%) at high school level, 105(27.3%) at college and 18(4.7%) were able to write and read and 2(0.5%) were illiterate. Two hundred twenty two (54.9%) were students out of which 89 (57.4%) of males and 133(54.3%) of females were in school and the rest 66(37.1%) of males and 112(62.9%) of females were out of school at the time of the study (Table 1).Concerning monthly income of the respondents, 76(19.5%) earn less than 100 birr, 66(16.8%) earn 200-300 birr, 139(34.5%) earn greater than 300 and 119(28.8%) don't know their family's monthly income. Alcohol consumption in the area is high with 209(52.3%) of respondents reporting alcohol consumption most of the time. Sixty five (16.3%) and 21(5.3%) of the respondents reported consumption of khat and cigarette smoking respectively (Table 1).

Table1. Socio-demographic variables of the youths by schooling, Debrebirhan District, N. Shoa, Amhara Region June 2010.

Variable	Number (400)	in school (n, %)	out school (n, %)
Sex			
Male	155	89(57.4%)	66(42.6%)
Female	245	133(54.3%)	112(45.7%)
Age			
15-19	191	152(79.6%)	39(20.4%)
20-24	209	70(33.5%)	139(66.5%)
Mead ± SD	19.1± 2.5 yrs		
Marital status			
Never married	336	112(33.3%)	224(66.7%)
Married	57	10(17.5%)	47(82.5%)
Divorced	7	0(%)	7(100)
Religion			
Orthodox	370	205(55.4%)	165(44.6%)
Muslim	12	5(41.7%)	7(58.3%)
Protestant	15	10(66.7%)	5(33.3%)
Catholic	1	0(0%)	1(100%)
No religion	2	2(100%)	0(0%)
Ethnicity			
Amhara	372	208(55.9%)	164(44.1%)
Oromo	12	6(50%)	6(50%)
Tigrie	8	3(37.5%)	5(62.5%)
Gurage	6	3(50%)	3(50%)
Other	2	2(100%)	0(05)
Educational status			
Illiterate	18	0(0%)	0(0%)
Able to write and read	2	0(0%)	0(0%)
Elementary	37	12(32.4%)	25(67.6%)
Junior secondary school	191	101(52.9)	90(47.1%)
High school	47	27(57.4%)	20(42.6%)
College	105	79(75.2%)	26(24.8%)
Monthly income			
< 100 birr	76	35(46.1%)	41(53.9%)
200-300 birr	66	27(40.9%)	39(59.1%)
>300 birr	139	72(51.8%)	67(48.2%)
Don't know	119	88(73.9%)	31(26.1%)
Alcohol consumption			
Never drink	201	145(72.1%)	56(28.9%)
Drunk	209	127(60.8%)	82(39.2%)
Cigarette smoking			
Never smoke	371	212(57.1%)	159(42.9%)
Smoke	29	10(34.5%)	19(65.5%)
Khat chewing			
Never chew	335	193(57.6%)	142(42.4%)
Chew	65	29(44.6%)	36(55.4%)
Total	400	222(55.5%)	178(44.5%)

5.2 Sexual characteristics of the study subjects

Out of the 400 respondents, 178(44.5%) reported to have practiced sexual activity in the past, of which 107(60.1%) were females and 71(39.9%) were males(Table 2).The mean age at first sexual intercourse was 17.5±2.7 years and the mean age of sexual commencement for males and females was17.2±2.7 and 17.7±2.4 years respectively. The maximum age of first sexual intercourse for both sexes was 23 years.

The common reason for first sexual encounter was 'falling in love' 115 (28.8%), 'peer pressure'20(5%), to try it 15(3.8%), rape 9(2.3%) and marriage 8 (2%) (Table2). Of those who were sexually active, the first sexual partner includes stable boy/ girl friend 125 (31.3%), casual partner 27(6.8%) unknown person 15 (3.8%) and commercial sex worker8 (2%).One hundred seven (60.1%) of the sexually active respondents committed sex with their counter parts and 71(39.9%) committed sex with their elders at their first sexual encounter. So far, 71(39.9%) of the respondents reported that they have sexual intercourse with two or more partners. Fifty-five (51.4%) female respondents reported to have pregnancy .Of those who become pregnant 20(36.4%) were never married and the pregnancy was not wanted. The mean ages of those who become pregnant were 18.2 ± 2.2 years. Twenty three (32.4%) of males reported to have sex with commercial sex workers.

Table 2: Percent distribution of sexual characteristics by sex, Debre Birhan District, N.Shoa, Amhara Region June 2010.

Variable	Male (n, %)	Female (n, %)	Total (n, %)
Ever practiced sex			
Yes	71(45.8%)	107(43.7%)	178(44.5%)
No	84(54.2%)	138(56.3%)	222(55.5%)
Age at first intercourse			
<15	12(16.9%)	10(9.3%)	22(12.4%)
15-19	44(62%)	71(66.4%)	115(64.6%)
20-24	15(21.1%)	26(24.3%)	41(23%)
Mean age and SD	17.2 ±2.7	17.7 ±2.4	
Rang	13	12	
Reason to have sex			
Falling in love	45 (63.4%)	70(65.4%)	115(64.6%)
To try it	10(14.1%)	5(4.7%)	15(8.4%)
Peer pressure	6 (8.5%)	14(13.1%)	20(11.2%)
Was drunk	7 (9.9%)	2(1.9%)	9(5.1%)
Other reason	3(4.2%)	16(15%)	19(10.7%)
Relation of first sexual partner			
Regular partner	44(62%)	82(76.6%)	126(70.8%)
CSW*	7(9.9%)	NA*	7(9.9%)
Casual partner	14(19.7%)	13(12.1%)	27(15.2%)
Unknown person	6(8.5%)	12(11.1%)	18(10.1%)
Age of first partner			
The same age	48(67.6%)	59(55.1%)	107(60.1%)
5-10 years greater than my age	23(32.4%)	48(44.9%)	71(39.9%)
Number of sexual partner so far			
One	34 (47.9%)	73(68.2%)	107(60.1%)
Two and above	37 (52.1%)	34(31.8%)	71(39.9%)
Ever had pregnancy			
Yes	NA*	55(51.4%)	55(51.4%)
No	NA*	52(48.6%)	52(48.6%)
Had sex with CSW*			
Yes	23(32.4%)	NA*	23(32.4%
No	48(67.6%)	NA*	48(67.6%)
Total	71(45.8%)	107(43.7%)	178(100%)

NA*=*Not Applicable*

5.3 Contraceptive use

Among the sexually experienced respondents, 26(36.6%) of males and 39(36.4%) females had ever used contraceptives (Table3). Twenty-eight (46.7%) the sexually experienced females and 19(26.8%) of sexually active males respondents claimed that they had consistent contraceptive use. Sixty six (26.9%) of sexually experienced female and 19(12.3%) male respondents reported

that they are using contraceptives currently. The most common type of contraceptive methods that female respondents used was injectables 48(72.7%).

Among male respondents, 19 (12.3%) of them reported consistent use of condom when they had sex with commercial sex. Respondent' reason for using contraceptives currently were, to prevent unwanted pregnancy 24(34.8%), to space births15 (22.4%), to limit births18 (26.9%) and to avoid HIV infections and unwanted pregnancy 26(31.7%).The reasons for not using contraceptives currently were 65(69.9%) no sex, 6(6.5%) want to become pregnant, 5(5.4%) partner opposed, 6(6.5%) religious prohibition, 8 (8.6%) no partner and 3(3.2%) knows no sources. Forty one (44.6%) respondents reported that they used contraceptives with friends, 40(43.5%) with their husbands and 11(11.9%) With casual partner. The sources of contraceptives respondents mentioned were health center 34(40%) hospital 31(36.5%), private clinic14 (16.5%).

Table 3: Contraceptive use among youth by sex, Debre Birhan District, N.Shoa, Amhara Region June 2010.

Variable	Male (n, %)	Female (n, %)	Total (n, %)
Ever used contraceptives			
Yes	26(36.6%)*	39(36.4%)	65(36.5%)
No	45(63.4%)	68(63.6%)	113(63.5%)
N	71	107	178
Current Contraceptive use			
Yes	19(26.8%)*	66(61.7%)	85(47.8)
No	52(73.2%)	41(38.3)	93(52.2%)
N	71	107	178(100%)
Consistent contraceptives use			
Yes	19(26.8%) **	28(26.2%)	47(26.4%)
No	52(73.2%)	79(73.8%)	131(73.6%)
N	71	107	178(100%)
Method mix			
Pills	NA*	6(9.1%)	6(6.5%)
Condoms	26(100%)	7(10.6%)	33(35.9%)
Injectables	NA*	50(75.8%)	50(54.3%)
Implants	NA*	3(4.5%)	3(3.3%)
N	26	66	92(100%)
With whom have you used contraceptives			
Friend	16(61.5%)	25(41.7%)	41(44.6%)
Husband/wife	5(19.2%)	35(48.3%)	40(43.5%)
Casual partner	5(19.2%)	6(9.1%)	11(11.9%)
N	26	66	92(100%)
Reason for using contraceptives currently			
Space births	0	14(21.2%)	14 (17.1%)
Limit births	0	18(27.3%	18 (21.9%)
Prevent HIV infection &pregnancy	19(100%)	7(10.6%)	26(31.7%)
Prevent unwanted pregnancy	0	24	24(29.3%)
N	19	63	82(100%)
Reason for not using contraceptives currently			
No sex	45(86.5%)	20(48.8%)	65(69.9%)
Want to become pregnant	NA*	6(14.6%)	6(6.5%)
Partner opposed	0	5(12.2%)	5(5.4%)
Religious prohibition	0	6(14.6%)	6(6.5%)
Knows no sources	0	3(7.3%)	3(3.2%)
No partner	7(13.5%)	1(2.4%)	8(8.6%)
N	52	41	93(100%)
Sources of family planning methods			
Hospital	0	31(47%)	31(36.5%)
Health center	15(79%)	19(28.8%)	34(40%)
CBD worker	0	4(6.1%)	4(4.7%)
Private pharmacy	4(2.1%)	10(15.2%)	14(16.5%)
NGO health facility	0	2(3%)	2(2.4%)
N	19	66	85(100%)

NB*=contraceptive use for males refers to condom use

**= consistent condom use

NA*=Not Applicable

Knowledge of family planning

Seventy six (19%) of youths surveyed knew at least one form of modern contraception and 381(95.3%) knew three and more modern methods and 19(4.8%) knows no family planning methods. The most frequently mentioned source of information for family planning were 130(34.1%) radio, 99(26%) TV, 88(23.15%) health worker and 64(16.8%) text (Table 4).

Table 4: Knowledge of family planning among youths, Debre Brihan District, N.Shoa, Amhara Region June2010.

Variable	Number (n)	Percent
Knowledge of family planning methods		
One preventive method	76	19
Two and more family planning methods.	381	95.3
Knows no family planning methods	19	4.8
Sources of family planning		
Radio	130	34.1
TV	99	26
Health worker	88	23.1
Text	64	16.8

5.4 Knowledge and attitude related to HIV/AIDS

Three hundred ninety eight (99.5%) respondents knew about HIV/AIDS. The most frequently mentioned sources of information for HIV were radio109 (27.3 %) teachers49 (12.3%), health worker 42(10.5%) partner 25(6.3%), leaflets 36(%), TV 24(6%), PLWHA 25(6.3%) and anti AIDS clubs 24(6%) (Figure 1), for the preventive measures, 397(99.3%) respondents reported that HIV/AIDS could be prevented, abstinence 316 (79%), remaining faithful to one sex partner 166(41.5%), avoid contaminated sharp materials 129(32.3%), condom use 193(48.3%), avoid casual sex 53(13.3%) and sex after marriage 15(3.8%).Regarding the attitude of respondents to wards sexual behavior, 77(19.3%) approve sex before marriage, 177(44.3%) approved condom use for HIV prevention(Table 5) .

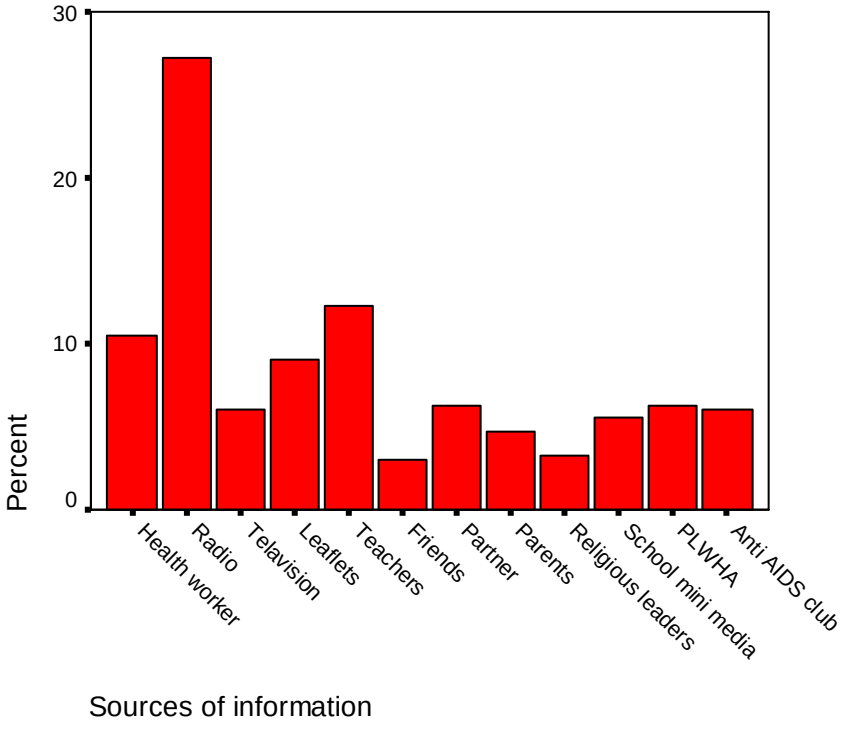


Figure1. Sources of information about HIV among youth in Debre Birhan District, N.Shoa, Amhara Region, June 2010

Table 5: Knowledge, Attitudes and preventive practice towards HIV by sex among Respondents, Debre Brihan District, N.Shoa, Amhara Region June 2010.

Variable	Male (n %)	Female (n %)	Total (n %)
Knowledge of HIV**			
One preventive method	36(23.2%)	62(25.5%)	98(24.6%)
Two or three preventive methods	119(76.8%)	181(74.5%)	300(75.4%)
Approval of sex before Marriage			
Approve	42(27.1%)	35(14.3%)	77(19.35)
Somewhat approve	16(10.3%)	11(4.5%)	27(6.8%)
Disapprove	89(57.4%)	186(75.9%)	275(68.8%)
Don't know	8(5.2%)	13(5.3%)	21(5.3%)
Approval of condom use for HIV prevention			
Approve	79(51%)	98(40%)	177(44.3%)
Somewhat approve	45(29%)	69(28.2%)	114(28.5%)
Disapprove	31(0.2%)	73(29.8%)	104(26%)
Don't know	0	3(1.2%)	3(1.2%)
HIV/AIDS can be prevented			
Yes	153(98.7%)	244(99.6%)	397(99.3%)
No	2(1.3%)	1(0.4%)	3(0.8%)
Preventive methods*			
Abstinence	123(50.2%)	193(78.8%)	316(79%)
Being faithful to one partner	65(41.9%)	101(41.2)	166(41.5%)
Condom use	88(56.8%)	105(42.9%)	193(48.3%)
Avoid casual sex	17(11%)	21(5.6%)	53(13.3%)
Avoid use of sharp materials	46(29.7%)	83(33.9%)	129(32.3%)
PMTCT	4(2.6%)	13(5.3%)	17(4.3%)
Total	155(38.8%)	245(61.2%)	400(100%)

NB. Percents will not add up to 100, as multiple responses are possible*

*** Two female respondents didn't hear of HIV*

5.4.2 Knowledge and attitude related to unintended pregnancy

Two hundred seven (90.5%) female respondents knew about unwanted pregnancy. The most frequently mentioned sources of information for unwanted pregnancy were, radio95 (41.1%), health worker 85(36.8%), TV16 (6.9%), teachers 14(6.1%) and leaflets 14(6.1%), for the preventive measures, 209(90.5%) respondents reported that unintended pregnancy could be prevented. Those preventive measures mentioned frequently were, avoid sexual intercourse 139 (79%), contraceptive use 124(53.7%), avoid casual sex 39(16.9%), condom use 10(4.3%). With

regard to attitudes 215(44.3%) approved contraceptive use for unwanted pregnancy prevention. (Table 6) (Figure 2).

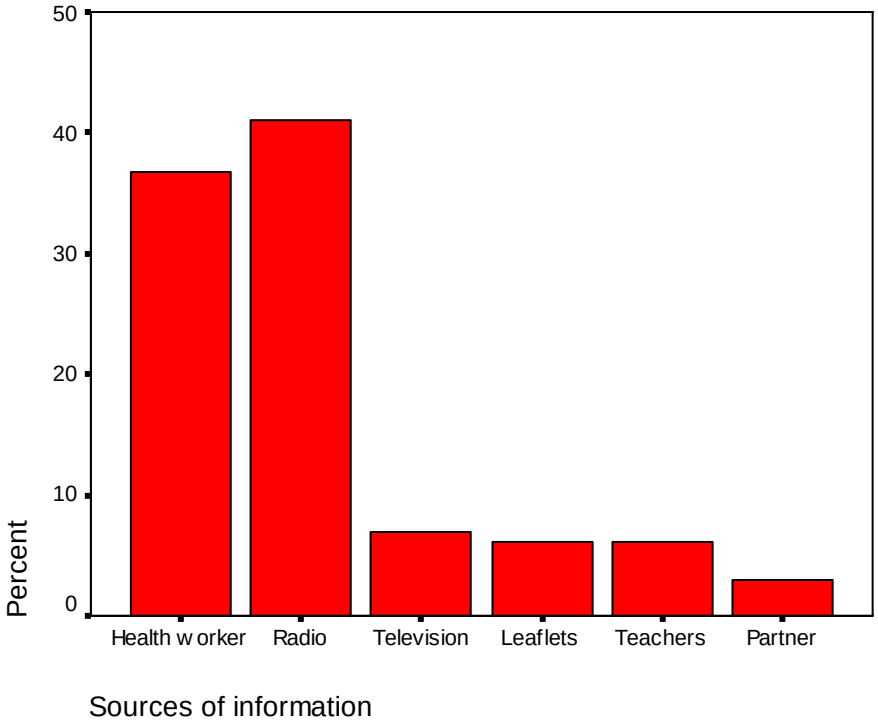


Figure2. Sources of information about unintended pregnancy among female respondents in Debre Birhan District, N.Shoa, Amhara Region, June 2010

Table 6: Knowledge and attitude towards unintended pregnancy among female respondent, Debre Brihan District, N.Shoa, Amhara Region, June 2010

Variable	Number	Percent
Unintended pregnancy		
Can be prevented		
Yes	209	90.5
No	22	9.5
Preventive methods*		
Avoid sexual intercourse	139	56.7
Avoid casual sex	39	15.9
Use of contraceptives	124	50.6
Condom use	28	11.4
Approval of contraceptive use		
For unwanted pregnancy		
Approve	205	83.7
Somewhat approve	18	7.3
Disapprove	8	3.3
Don't know	14	5.75
N	245	

NB. Percents will not add up to 100, as multiple responses are possible*

5.4.3. Risk perception to HIV

The attitude of participants towards perceiving themselves as susceptible to HIV infection response indicated that 361(90.3%) respondents stated that they are not at risk of acquiring HIV. Of those respondents who reported unprotected sexual intercourse 11(26.2%) were perceived that they are at risk of HIV infection and 31(73.8%) were not at risk of HIV infection. Among those who perceived themselves at risk 11(28.2%) reported to have sex with out condom, 11(16.7%) reported injury with contaminated sharp materials, 8(20.5%) past history, 6(15.4%) mistrust partner and 3(7.7%) reported had sex with CSW. The frequently mentioned reason by those who did not perceive themselves at risk were 361(90.3%) never had sexual contact, followed by being faithful to one partner 43 (11.9%) abstinence from sex 33(9.2%),consistent condom use 19(19.1%) and didn't use sharp materials 31(8.6%) (Table 7).

Age of first partner, consistent condom use and khat chewing were significantly associated with HIV risk perception. Those youths who reported having sexual intercourse with their peers perceived themselves at low risk of getting HIV than those having sexual intercourse with their older partners (AOR=0.28(0.12, 0.64). Youths who didn't use condoms consistently perceive

them selves at high risk of getting HIV than those who use condom consistently (AOR=4.68(1.39, 15.7) Youth who are chewing khat feels they are at higher risk of getting HIV than those who are not (AOR=6.23(3.14, 15.56) (Tables 8).

Table 7: Percent distributions of HIV risk perception by sex, Debre Brihan District, N.Shoa, Amhara Region, June2010

Variable	Male n (%)	Female n (%)	Total n (%)
Do you think you are at risk of HIV infection			
Yes	19(12.3%)	20(8.2%)	39(9.8%)
No	136(87.7%)	225(91.8%)	361(90.3%)
Unprotected sexual intercourse			
Perceived at risk of HIV infection	5(50%)	6(18.8%)	11(26.2%)
No perceived risk of HIV infection	5(50%)	26(81.2%)	31(73.8%)
Why at risk*			
Injury with contaminated Sharps material	5(26.3%)	6(30%)	11(28.2%)
Had sex without condom	5(26.3%)	6(30%)	11(28.2%)
Past history	3(15.8%)	5(25%)	8(20.5%)
Mistrust partner	3(15.8%)	3(15%)	6(15.4%)
Had sex with CSWs	3(15.8%)	NA*	3(7.7%)
Why not at risk			
Never had sexual intercourse	88(64.7%)	138(61.3%)	226(62.6%)
Didn't use sharp materials	11(8.1%)	20(8.9%)	31(8.6%)
Faithful to one partner	10(7.4%)	33(14.7%)	43(11.9%)
Abstain from sex	8(5.9%)	25(11.1%)	33(9.1%)
Consistent use condoms	19(14%)	9(4%)	28(7.8%)

NA*=*Not Applicable*

Table 8: Comparison of selected variables and HIV risk perception among youth in Debre Brihan District, N.Shoa, Amhara Region, June 2010

Variables	Risk perception		OR (95% CI)	
	Yes (n, %)	No (n, %)	Crude	Adjusted*
Sex				
Male	19(46.3%)	136(37.9%)	1.00	1.00
Female	22(53.7%)	223(62.1%)	1.5(0.8, 3.02)	1.43(0.45, 4.53)
Age				
15-19	12(29.3%)	179(49.95)	1.00	1.00
20-24	29(70.7 %)	180(50.1%)	1.6(0.92, 4.02)	0.88(0.24, 3.16)
Educational status				
Primary and junior secondary	19(46.3%)	209(58.2%)	1.00	1.00
Secondary and above	22(53.7%)	150(41.9%)	0.53(0.11, 2.52)	0.53(0.11, 2.52)
Marital status				
Never married	34(82.9%)	302(84.1%)	1.00	1.00
Married	7(17.1%)	57(15.9%)	0.86(0.36, 2.05)	0.86(0.24, 3.13)
Life time number of Sexual partners				
One	3(10%)	104(70.3%)	1.00	1.00
Two or more	27(90%)	44(29.7%)	20.5(6.2, 71)	0.09(0.17, 0.62)
Age of first partner				
5-10 years greater	20(66.7%)	51(34.5%)	1.00	1.00
The same age	10(33.3%)	97(65.5%)	**0.28(0.12, 0.64)**	**0.9(0.02, 2.12) ****
Consistent condom use				
Yes	8(53.3%)	11(19.6%)	1.00	1.00
No	7(46.7%)	45(80.4%)	0.62 (0.13, 3.88)	**4.68 (1.39, 15.7) ****
Alcohol				
No	15(36.6%)	194(54%)	1.00	1.00
Yes	26(63.4%)	165(46%)	1.15(0.14, 9.48)	3.92(0.1, 162.15)
Khat				
No	20(48.8%)	44(12.3%)	1.00	1.00
Yes	21(51.2%)	315(87.7%)	**8.35(4.1, 16.9)**	**6.23(3.14, 15.56) ****
Knowledge of HIV				
One preventive method	6(15.4%)	92(25.6%)	1.00	1.00
Two or more preventive methods	33(84.6%)	267(74.4%)	1.89(0.77, 4.67)	0.39(0.04, 3.48)

NB**=*significant*

Adjusted: for sex, age, education, marital status, number of sexual partner, age of first partner, consistent condom use, alcohol, Khat and knowledge of HIV*

5.4.4. Risk perception and unintended pregnancy

One hundred eighty nine (81.8%) of respondents reported that they are not at risk of getting unwanted pregnancy. Of those who had unprotected sexual intercourse 24(88.9%) were not perceived that they at risk of pregnancy. Among those who perceived themselves at risk 25(59.5%) had perceived a threat of non-consensual sex, 11(26.2%) not using contraceptives by the time they had sex and 6 (14.3%) had experience of having sex with casual partner. The frequently mentioned reason by those who did not perceive themselves at risk of unintended pregnancy were having no sexual intercourse 136 (72%), consistent use contraceptives 28(14.8%), faithful to partner 11(5.8%), abstain from sex 5(2.6%) and always use condom 7(3.7%) (Table 8).

Age, educational status, marital status, number of reported sexual partner, khat chewing and alcohol didn't show significant association with risk perception to unwanted pregnancy ($p>0.05$).Consistent use of contraceptives was significantly associated with risk perception to unintended pregnancy (AOR=0.24(0.07, 0.85) (Table 9).Those youths who used contraceptives consistently perceived themselves at low risk of getting unwanted pregnancy than those who do not use contraceptives consistently.

Table 9: Percent distributions of female respondents by unintended pregnancy risk Perception, Debre Brihan District, N. Shoa, Amhara Region, June 2010

Variable	Number	Percent
Do you think you are at risk of unintended pregnancy		
Yes	42	18.2
No	189	81.8
N	231	
Unprotected sexual intercourse		
Perceived risk of pregnancy	3	11.1
No perceived risk of pregnancy	24	88.9
N	27	
Why at risk		
No use of contraceptives	11	26.2
Having casual sex	6	14.3
Threat of non consensual sex	25	59.5
N	42	
Why not at risk		
Never had sexual intercourse	136	72
Consistent contraceptives use	28	14.8
Faithful to partner	11	5.8
Abstain from sex	5	2.6
Consistent use condoms	7	3.7
N	189	

Table 10: Comparison of selected variables and unintended pregnancy risk perception among Female respondents Debre Brihan District, N. Shoa, Amhara Region, June 2010

Variable	Risk perception		OR (95% CI)	
	Yes (n, %)	No (n, %)	Crude	Adjusted*
Age				
15-19	18(42.9%)	106(56.1%)	1.00	1.00
20-24	24(57.1%)	83(43.9%)	0.59(0.29, 1.15)	1.46(0.04, 5.31)
Educational status				
Primary and junior secondary	20(47.6%)	123(65.1%)	1.00	1.00
Secondary and above	22(52.4%)	66(34.9%)	2.05(1.1, 4.03)	0.35(0.1, 1.21)
Marital status				
Never married	33(78.6%)	148(78.3%)	1.00	1.00
Married	9(21.4%)	41(21.7%)	0.98(0.44, 2.22)	0.72(0.21, 2.5)
Number of sexual partners				
One	10(55.6%)	57(69.5%)	1.00	1.00
Two or more	8(44.4%)	25(30.5%)	1.82(0.64, 5.17)	0.99(0.26, 3.71)
Consistent use of contraceptive				
No	10(55.5%)	28(34.1%)	1.00	1.00
Yes	8(44.4%)	54(65.9%)	**0.42(0.14, 0.98)***	**0.24(0.07, 0.85)**
****				
Khat				
No	34(80.9%)	172(91%)	1.00	1.00
Yes	8(19.1%)	17(9%)	1.72(0.81, 5.23)	1.21(0.47, 4.53)
Alcohol				
No	24(67.1%)	117(61.9%)	1.00	1.00
Yes	18(42.9%)	72(38.1%)	1.23(0.62, 2.4)	1.62(0.48, 5.48)

NB**=*significant*
Adjusted: for, age, education, marital status, number of sexual partner consistent contraceptive use Khat and alcohol consumption.*

Focus group discussion summary result

Four focus group discussion each containing eight discussants were conducted. Two of the FGDs were females. The discussion concentrated on youths' knowledge on HIV and unwanted pregnancy, sexuality such as causes and consequences of early sex and multiple sexual partners, youths' risk perception of HIV and unwanted pregnancy, contraceptive use and prevention methods for HIV and unwanted pregnancy practiced by the youth were explored.

5.5.1. Knowledge of HIV/AIDS

The group discussion began with question on the meaning of HIV/AIDS. According to the participants, AIDS is a fatal and hidden pandemic, a disability resulting from behavioral problem and cause of early death. Furthermore, the participants demonstrated good level of knowledge about transmission HIV. Almost all discussants knew that the main mode of transmission of HIV is through unsafe sexual intercourse, use of contaminated sharp materials, multiple sexual activity, through donation of blood that contains the virus, mothers to child transmission, those mothers who have the virus in their blood transmits to their children during pregnancy, child births and breast feeding. Most of the respondents asserted that abstinence, being faithful to one partner, use of condoms; voluntary counseling and testing before marriage are the methods of prevention methods for HIV. A male discussant said, "*the youth should not consider sexual intercourse as a means of recreation if HIV is to be controlled"*

Knowledge of unwanted pregnancy

Female focus group discussants were asked about the meaning of unwanted pregnancy and causes and consequences of it. As the participants outlined unwanted pregnancy, as the name implies is it pregnancy that is not wanted and mistimed that that ends with illegal abortion. The participants showed good understanding of how unwanted pregnancy could happen. As a cause they mentioned not using contraceptives, casual sex, substance abuses such as drinking alcohol and khat chewing and economic dependence on males. As a consequence those who sustain abortion will face many challenge such as abortion, drop out from school, disagreement with parents unable to grow up their child and finally forced to lead street life. As the participants, outlined most of our sisters are misinformed about how to protect themselves from unwanted pregnancy. Some of them think that taking drugs such as ampicillin at higher dose prevents unwanted pregnancy. Some of them think that taking pills before and after intercourse can prevent unwanted pregnancy. Nineteen years old female discussants said "*after taking my 'bullet' I enjoy sexual intercourse*".

5.5.2. Current sexual behavior

The participants in the focus group were asked about causes and consequences of early sex. Both FGDs agreed that the common age at first sexual debut is 13 years and above for girls and 14 years and above for males. The discussants declared that girls start sex earlier than boys. According to the participants, the main reasons for early sex are early marriage especially in the rural areas, peer pressure, watching sex films, rape and abduction, and economic dependence.

The participants also stated that due to early sex females are exposed to unwanted pregnancy, abortion and delivery related complications like obstructed labor and fistula. Generally, the participants agreed that early sex predisposes to HIV/AIDS, disability and finally death. Most of the participants stated that sexual intercourse should be started after marriage and if possible the couples should get VCT services.

The spread of HIV is fueled by having multiple sexual partners. To explore this, the participants were asked why people engage in sexual behavior such as having multiple sexual partners and reasons for this behavior. The discussants forwarded different reason for multiple sexual partners. Sign of modernization, peer pressures and economic problems (unemployment) were mentioned as a cause for many sexual partners. A female discussant said "there *is no place for the youth to spend time, so that we are engaging in sex related activities as a means of entertainment"*.

5.5.3. Risk perception to HIV

The participants in the focus groups were asked about what they perceive to be at risk of contracting HIV/AIDS. The majority of participants in the groups perceived that people with multiple sexual partners are at high risk of acquiring HIV/AIDS. According to the discussants, the youth didn't seem to fear HIV/AIDS, so engaged in risky sexual practice.

Risk perception to unwanted pregnancy

Female discussants were asked about risk perception to unwanted pregnancy. As they outlined they perceive unwanted pregnancy more risky than HIV/AIDS because, the out come of pregnancy is seen with a short period of time and the problem is coming soon ,every one can

identify pregnant girl but HIV can give time and no one knows whether a women acquire HIV or not. Male are also asked about whether or not they perceive unwanted pregnancy as a threat for males. Surprisingly they replied that God gave this responsibility to women so that there is no reason to worry about pregnancy. It is the business of females.

Most of the participants stated that the reasons why youth do not perceive themselves at risk of HIV and unwanted pregnancy are the widespread use of alcohol and khat. Alcohol and khat are stimulant and give courage so not to think of risk perception According to participants, even though youth have high knowledge on HIV and unwanted pregnancy they didn't bring behavior change because of different reasons such as peer pressure, poverty, absence of entertainment place, widespread use of khat and drug abuse.

5.5.4. Contraceptive use

Female discussants were asked about contraceptive use as means of prevention of HIV and unwanted pregnancy. From their experience they use contraceptives predominantly to avoid the risks of unwanted pregnancy, they don't think of HIV. The reason for this is that they give priority for unwanted pregnancy as it is not time giving as compared to HIV, as HIV gives more time and the method they use also influence their perception with this regard. Females think that the methods available for them prevent HIV besides unwanted pregnancy, barrier methods such as IUCDs and diaphragms. Females are also asked about which methods they prefer. The preferred methods of contraception are injectables. This is because it is long acting, no need to take a pill every day and minimal side effects. Once they take injection they think that they are protected against pregnancy. They are also asked about use condom. As they stated, condom use is the responsibility of males. As use of pills, injectables, and loop are the responsibility of females condom use is the responsibility of males. It is manufactured for males. So it is up to them to use condoms we cannot force them to use it as we have no power to oblige them. They are also asked about the decline in use of pills. The reasons for non-use pills is taking a pill daily is boring and has discomforts such as nausea and vomiting sometimes visiting a health facility every month is tiresome. Males are also asked about the use of condoms as a means of "dual protection against HIV and unwanted pregnancy". They stated that use of condom is their responsibility but they are not motivated to use it. The reason mentioned for this is it reduces pleasure and a sign of mistrust between the couples. A male discussant said"*sex with condoms is*

like eating a banana with its cover" With regard to availability of contraceptives, the discussants answered the sources of contraceptives are health institution, hotels, pharmacy and shops. Both groups are asked about where contraceptive methods should be available. Almost all participants agreed that the methods should be distributed in recreation area, meeting places, schools, public offices and a health worker should give information as how to take the contraceptive methods.

Discussion

This study showed nearly half of the study group admitted having sexual experience .Sexual experience of males is a little bit higher for males as compared to their females counterparts.

These figures are higher when compared to results of similar studies. In Mali the figure is 37%and in Burkina Faso 31% for both sexes. In Nigeria the figure is 41%. In Tanzania the figure is even higher and was (36). In contrast, only 4% of unmarried young women in Senegal indicated that they had ever had sex, making it one of the lowest levels in sub-Saharan Africa. When compared with similar studies done in other parts of Ethiopia is compatible. In Addis Ababa 52% for boys and 47.8% for girls (22), in Bahir Dar 53% for males and 24% for females (23), in southern Ethiopia 49% for both sexes (24), in Harar 50% for males and 20% for females (27), in Gondar the figure ranged from 42% to 56.1% for both sexes (18,43,47) in Agaro 25% for both sexes, this is the lowest as compared to this study and other studies done in country.(42).

In this study, the mean age at first sexual intercourse was 17.2 $\pm$2.7 years for males and 17.7$\pm$ 2.4 years for females. When compared with previous similar studies, the figure is higher. In Nigeria it was 15 years for men (17), in Tanzania 3.2% had sexual intercourse at 9 years and 10% by the age of 13 years (16). In other studies in Ethiopia the figures were 14-19 years (15, 17, 22-31). In our study, the mean age of first sexual intercourse is relatively higher than the other studies. This may be encouraging to reduce the spread of HIV and cases of unwanted pregnancy.

One fourth of the sexually active youths reported that they had multiple sexual partners. This finding clearly indicates the prevalence of high-risk behavior that predisposes to HIV and unwanted pregnancy. Various other similar studies also showed similar findings (18, 30, 31, 36, 38, 44, and 48). Despite adequate knowledge about HIV/AIDS and unwanted pregnancy, a high proportion of youth continue to practice high-risk behavior. This might be due to low risk perception of the youth that predisposes to high-risk sexual activity.

Before using a contraceptive, youth must first have knowledge of different methods. In this study more than three fourth of respondents knew two or more modern methods. This figure is higher

when compared to studies done in Senegal and Burkina Faso more than 67% and 66% of young adults knew two or more methods respectively (1, 2).

This relatively high level of knowledge of contraceptive methods may be encouraging to youth's contraceptive use their by preventing them for the risks of HIV and unwanted pregnancy.

Among sexually active youths, more than one fourth of unmarried and married young women use modern contraception. This figure low when compare with studies in Burkina Faso the figure is 56% for unmarried young women and only 8% for married young women. When compared with studies done in Mali and Senegal it is higher 6% among married young women and 20% among unmarried young women. In Senegal 6% of young married women use family planning methods. Figure is not available for unmarried Senegalese young women (3).

The figure in risk perception to HIV was relatively low when compared with other studies. In Tanzania the figure is between 11.7% and 25% (20, 38) in South Africa 30% of respondents perceive they are at risk of HIV (34). But is higher when compared to studies done in Debrabrhan 4.5%, Gondar 5.3% of the rural and 11.2% of the urban perceive they are at risk of HIV (44). Risk perception to HIV was found to be associated with age of first partner; consistent condom use and khat chewing. These figures are also consistent with other similar studies (36, 37).Risk perception to unwanted pregnancy was found to be associated with consistent contraceptive use. Data is not available to compare this finding to other studies.

Finally, these findings suggest that programs designed to improve family planning programs should consider the youths risk perception and dual use of contraceptives especially as they engage in sexual intercourse. The key issue should be to improve the risk perception in all youths and ensure appropriate and consistent use of contraceptives. The study also suggested that agencies providing reproductive health programs for youths should put emphasis on developing life skills and counseling to bring change of attitudes and to initiate income generating activities at a small scale to empower youths. Youths must be equipped with the skills of avoiding multiple sexual partners and use condom in different situations. Further, as many of the youths do not properly utilize the existing health institutions, the government and other NGOs should attempt to make youth-friendly reproductive health services available.

Strength and limitation of the study

7.1 Strength

-Using non-health professional data collectors in the cross-sectional survey.

-Complementing the cross-sectional survey with qualitative study.

-Using male and female moderator and raporter in conducting male and female FGDs respectively. Being, of the same sex helps participants to discuss freely

7.2 Limitations

The main limitation of this study is that, it was difficult to discuss sexuality matter in face-to face interview. Hence, some sort of social desirability bias may not be eliminated even though the survey was done anonymously.

Lack of similar studies to compare results.

Conclusions and Recommendations

Conclusions

Despite high knowledge the youths have on HIV and unintended pregnancy, they still engage in high-risk sexual behavior and have low risk perception .The age at first sexual debut is very young. They had sexual intercourse with two or more partners and some had casual sex. The reasons given for not perceiving the risk may not allow them to protect themselves from HIV and unintended pregnancy. There is a low utilization of contraceptives among youth. The reported low utilization of contraceptives in this study is an indication of the fact that high-risk behaviors are still widely practiced in the area.

The result of the focus group discussion also indicated that, all the youth seemed to fear HIV and unintended pregnancy, but still a significant proportion those to participated in unprotected sex because of peer pressure, absence of recreation area, khat and drug abuse, generally they don’t give attention due to their young age.

Recommendations

To youths

1. Youths should not initiate sexual debut as early as possible. These may expose them to HIV and unintended pregnancy. To achieve these they have to use the knowledge they already have and discuss sexuality matters openly with their peers, parents, teachers, health workers and the community.
2. Youths should improve their contraceptive utilization and risk perception to HIV and unintended pregnancy through IEC.
3. Youths should spend their part time by reading books, watching soccer sports and involve in income generating activity.

To the programealth service)

Family planning providers should discuses key aspects of HIV and unintended pregnancy prevention with youths such as conducting sexual risk assessment, promoting barrier method of contraception such as condoms for prevention of HIV and unintended pregnancy, and counseling on safe sex.

To community members

Members of the community should advice their youths to avoid risky sexual behaviors and encourage using reproductive health services.

References

1. The Allen Guttmacher Institute, *Adolescents in Burkina Faso: Sexual and Reproductive Health*, and Research in Brief Series, No. 3, accessed online at www.guttmacher.org, on Feb. 13, 2009.
2. UNAIDS, 2006 Report on the global AIDS epidemic
3. UNAIDS. Report on the global HIV/AIDS epidemic, 2004
4. UNAIDS. "2008 report on the global AIDS epidemic". http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008/2008_Global_report.aspRetrieved March 1, 2010. UNFPA.
5. Preventing HIV infections in young people. December 2006 http://www.unfpa.org/aids/index.htm
6. Ministry of Health. AIDS in Ethiopia, 4th edition. Disease Prevention and Control Department, Oct. 2002.
7. Ministry of Health. AIDS in Ethiopia, 5th edition. Disease Prevention and Control Department, June 2004.
8. Federal Democratic Republic of Ethiopia, MOH. Health and Health Related Indicators 1995 E.C Addis Ababa. February 2004
9. Ministry of Health. AIDS in Ethiopia, 3rd edition. Disease Prevention and Control Department, Nov. 2000.
10. Proceedings of the consultative workshop for the development of national advocacy Guideline/implementation manual (tools) for HIV/aids intervention in Ethiopia. Addis Ababa, Feb 2004.
11. Elizabeth T. Robinson, "Programs for Adolescents: Neighborhood Peer Educators in Mali," *Network* 20, no. 3 (2000), accessed online at www.fhi.org, on Feb. 11, 2009.
12. Condoms and sexually active youth. Youth lens on reproductive health and HIV/AIDS
13. HIV/AIDS Behavioral Surveillance Survey (BSS). Condoms and sexually active youth. Youth lens on reproductive health and HIV/AIDS one. Ethiopia, 2002

14. Nafissatou Diop and Anta Fall Diagne, "Mainstreaming Adolescent Health in Senegal: Enhancing Utilization of the Findings from the Youth Reproductive Health Project," FRONTIERS Report (Dakar: Population Council, 2007), accessed online at www.pcdc.org, on Feb. 11, 2009; and The Centre for Development and Population Activities, *Reproductive Health for Youth in Mali Project: End of Project Report*, (Washington, DC: The Centre forDevelopment and Population Activities, 2003), accessed online at www.cedpa.org, on Feb. 11, 2009.
15. Demographic and Health Survey 2005.
16. Gypi-Garbrah, Benjamin, Douglas Nicholas, and Gottlieb M.K kpedekpo.1985,Adolescent Fertility in Sub Saharan Africa: An overview. Boston: The pathfinder
17. WHO: 1998; Progress in human reproductive health research; *family planning in the era of HIV/AIDS*, WHO, 1998; no.48, part (1).
18. Kelly Gary F. Sexuality today the human perspective 6th edition. United States, 1998.
19. Adolescent reproductive health global and national initiatives and lessons learned EPHA. Adolescent Reproductive Health Task Force, August 2003
20. Dawud A. Perception of the risks of sexual activities among out-of-school Adolescents in south Gondar administrative zone, Amhara Region, (thesis) Department of Community Health, Faculty of Medicine, Addis Ababa University.2002.
21. WHO. The World Health Report. Changing history. 2004
22. Abate S. Determinants of high- risk sexual behaviour for HIV/AIDS among outof-school youth in Addis Ababa, Ethiopia,(thesis)Department of Community Health, Faculty of Medicine, Addis Ababa University. Dec.1999
23. Fantahun M. and Chala F. Sexual behaviour, and knowledge and attitude towards HIV/AIDS among out-of-school youth in Bahir Dar Town, Northwest Ethiopia. Ethiop. Med. J.1996; 34(4): 233-242
24. Taffa N. Sexuality of out-of-school youth, and their knowledge and Attitude about STDs and HIV/AIDS in Southern Ethiopia. Ethiop. J. Health Dev. 1998; 12(1):17-22.

25. Ethiopian Demographic and Health Survey (EDHS), 2005
26. Eshetu F Zakus D and Kebede D. The attitudes of students, parents and teachers towards the promotion and provision of condoms for adolescents in Addis Ababa. Ethiop. J. Health Dev. 1997, 11(1): 7-1
27. Tadesse E, Gudunfa A, and Mengistu G. A survey of adolescent reproductive health in the city of Addis Ababa. Ethiop. J. Health Dev. 1996; 10(1): 35-39
28. Karra A. and Haile M. Sexual behavior and level of awareness on reproductive health among youths: evidence from Harar, Eastern Ethiopia. Ethiop. J. Health Dev. 1999; 13(2): 107-113
29. Fekadu Z. Casual sex debuts among female adolescents in Addis Ababa, Ethiopia. Ethiop. J. Health Dev. 2001; 15(2): 109-116

30. Adamu R, Samuel M and Ingidushet S. Patterns and correlates of sexual initiation, sexual risk behaviors, and condom use among secondary school students in Ethiopia. Ethiop. Med. J. 2003; 41(2): 163-177
31. Ismail S, Bitsuamlak H, and Alemu D. High-risk sexual behaviors for STD/HIV pregnancies and contraception among high school students in a rural town Northwestern Ethiopia. Ethiop. J. Health Dev. 1997; (1): 29-36
32. Yazachew M. Assessment of sexual risk behaviour for HIV infection between out of school anti-AIDS club members and non-club member youth in Jima and Agaro ,(thesis) Department of Community Health, Faculty of Medicine, Addis Ababa University. 2003
33. Lavra B. Determinant of individual AIDS risk perception: knowledge, behavioral control and social influence. MPIDR working paper, July 2002 http://www. Demogr. mpg. de. /papers/ working /wp-2002-029 7/9/2004.
34. UNAIDS. The global strategy framework on HIV/AIDS.June, 2001
35. Melanie G. and Eleanor M.T. School-based HIV prevention programmes for African youth. Social science and medicine 2004; 58(7): 1337-1355
36. Z.Zebideru .Assessment of HIV risk perception and condom use among youth in Debre Birhan Town, Amhara region, 2005 MHP thesis
37. Ahimbisibwe E.,Odwee J.and Ayiga N. Risk perception and condom use in Uganda. African population studies vol. 18 (1): 68-806.

38. Catherine M. and Catherine C. Condom use coming adolescents and young people in a southern African township. Social Science and Medicine 2001; 52(11): 1613-1627.

39. Masulanya E, Moji K I Hariguchi, et.al. Knowledge, risk perception of AIDS and reported AIDS and reported sexual behavior among students in secondary schools and colleges in Tanzania. Health education research theory and practice 1999; 14(2): 185 –196

40. Stoner B. WLH Whittington Aral S, et.al. Avoiding risky sex, partner perception of partners' risks vs partners' self reported risks. Sex transm infect 2003; 79:197-201

41. Misconceptions, folk beliefs, denial hinder risk perception among young Zambian men: a research brief Sept 2003 no. 3 http://www. Psi. Org

42. Kidane A. Sexuality, perception of risk of HIV/STIs and condom use among high school adolescents in south Gondar, Amhara Region, (thesis) Department of Community Health, Faculty of Medicine, Addis Ababa University. 2004.

43.Lemma E. Predictors of HIV/AIDS related sexual behaviour of high- school adolescents based on the classical health behaviour models, Jimma Town, Southwest Ethiopia, (thesis) Department of Community Health, Faculty of Medicine, Addis Ababa University. 2000.

44. Has HIV/AIDS Epidemic Changed Sexual Behavior of High Risk Groups in Uganda. A paper to be presented to the conference of the International Union for scientific study of population, to be held in Salvador, Brazil 18-24 August 2001.

45. Sexual behavior,Reproductive knowledge And Contraceptive use Among Young urban Nigerian.Paulina Makinwa-Adebusoye

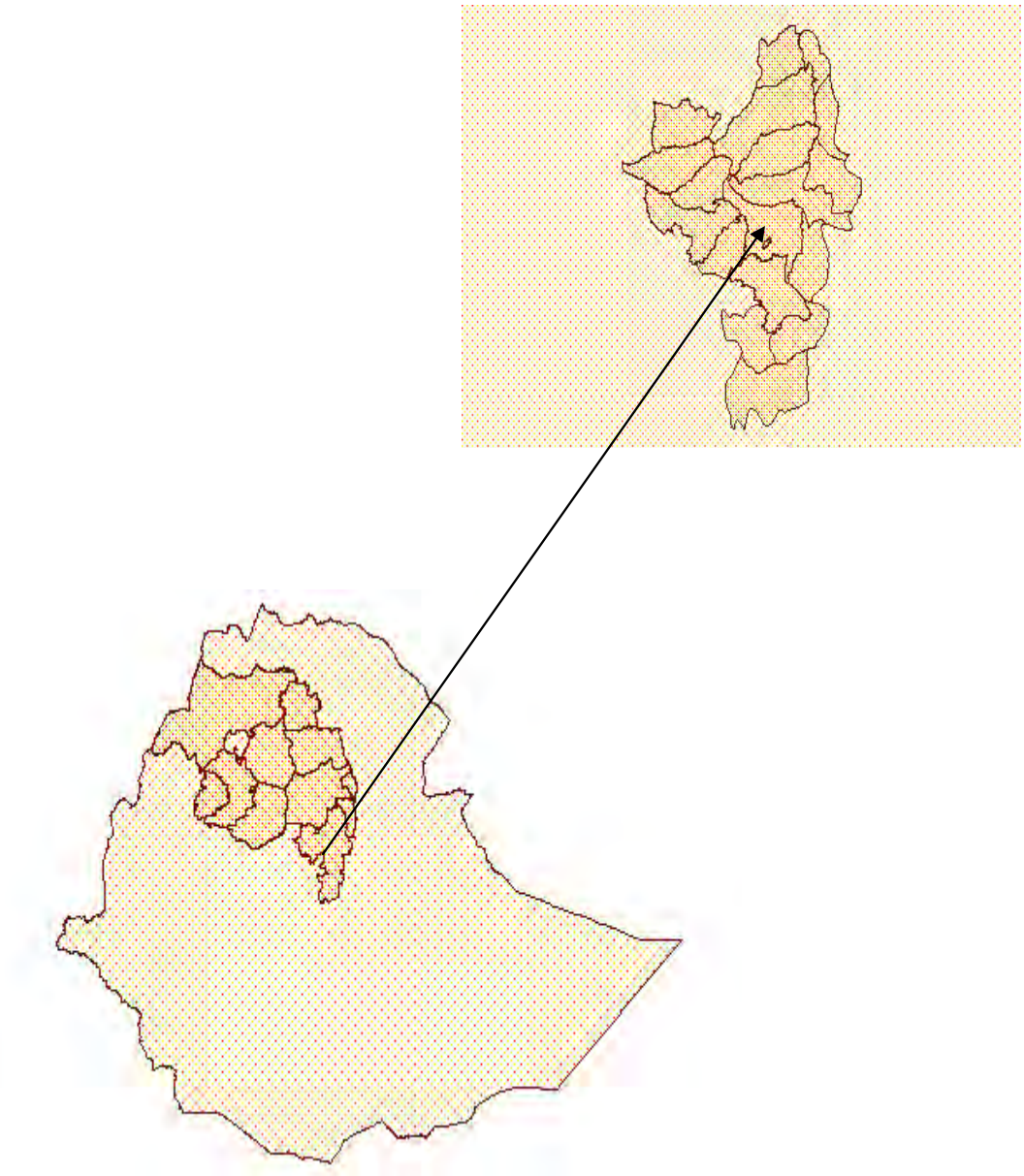
46. Fertility and contraceptive use Among Young adults in Harare Zimbabwe.Esther Boohe ,et,al

47. Landon Myer, Chelsea Morroni, Catherine Mathews and Francesca Little: *Dual method Use In South Africa;* international family planning perspectives, 2002, 28(2): 119-121

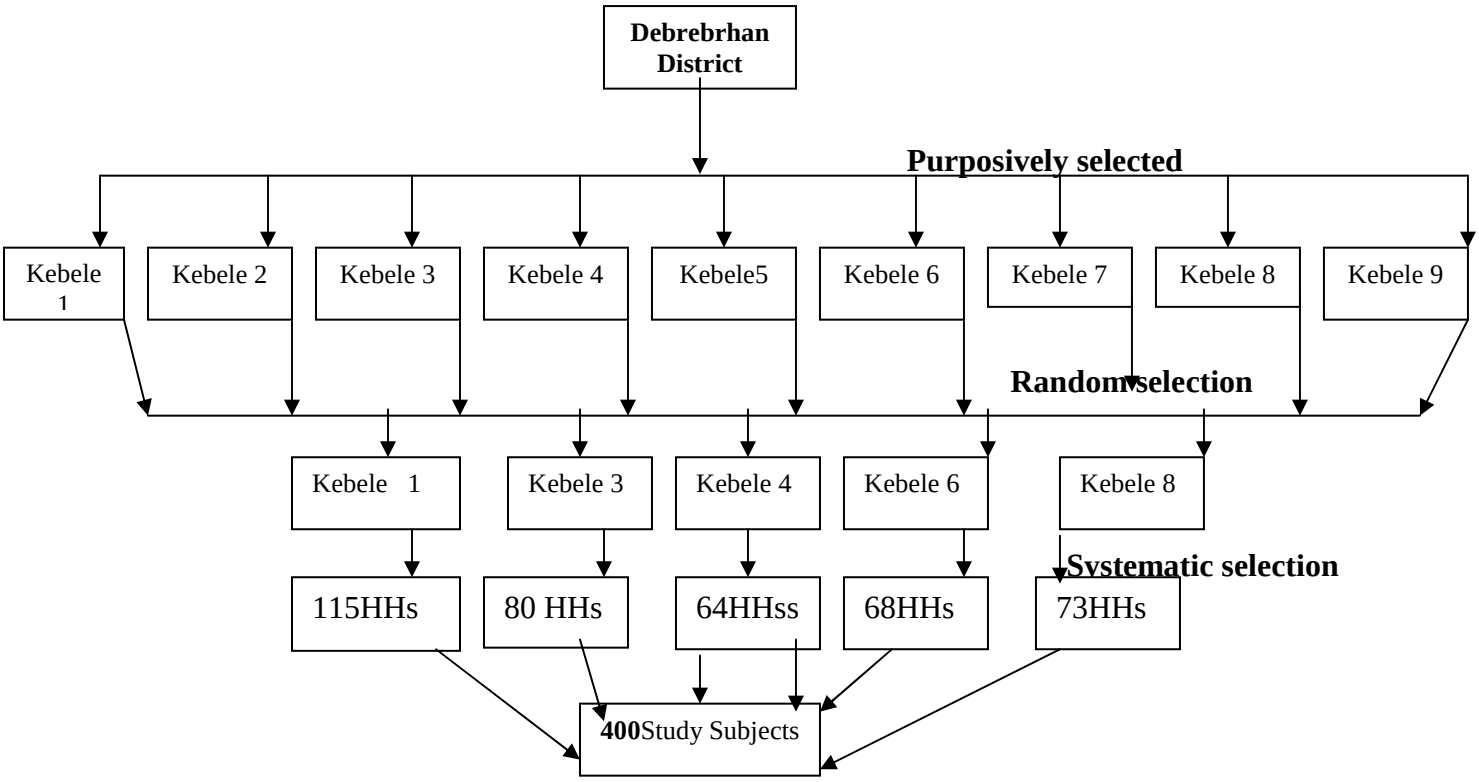
48. Pierrie Ngom, R Wilcher, Maureen Kuyoh, H. Dube, Sanja Martin, J.Kinani, T. Nutley, *F/P needs in the context of the HIV/AIDS epidemic; findings from a 3-country ass't covering Kenya; South Africa & Zimbabwe,* XXV IUSSP international conference, France, 18-23 July 2005.

49. Robert J, Ali M, Lisa A, Katherine C, Musonda L, and Gwendolyn T.Reproductive Health Risk and Protective Factors among Youth in Lusaka, Zambia. August 2000
50. Joseph Chukwidi Okeibunor, department of sociology & anthropology university of Nigeria*; threats of AIDS and condom use in a Nigerian urban community: implication for Fertility regulation inNigeria*, summary report no 36-1999
51. Taffa N, Johanne S, Carolo H.H and Gunnar B. HIV prevalence and socio cultural contexts of sexuality among young youth in Addis Ababa, Ethiopia. Ethiop. J. Health Dev. 2002; 16(2): 139-145

Annex 1. Map of the study area. (North Shoa, East Amhara Region)



Annex 2. Schematic presentation of sampling procedures (Two stages)



Annex 3. Structured English questionnaire

Part one. Socio-demographic characteristics			
No	Questions and filter	Coding category	Skip to
101	Sex of the respondent	01. Male 02. Female	
102	How old are you?	_____ years 88. Don't know 99. No response	
103	What is your marital status?	01. Never married 02. Married 03. Divorced 04. Married but living in different place 05. Cohabiting partner	
104	Which religion do you follow?	01. Orthodox 02. Muslim 03. Protestant 04. Catholic 05. No religion	
105	To which ethnic group do you belong?	01. Amhara 02. Oromo 03. Tigrie 04. Gurage 05. Other(specify)	
106	What is your educational status?	01. Illiterate 02. Able to write and read 03. Elementary(1-6)	

		04. Junior secondary(7-8) 05. High school(9-12) 06. College and above(12+)	
107	What is your main occupation?	01. Student 02. Housewife 03. Civil servant 04. Daily laborer 05. Jobless 06. CSW 07. House maid 08. Merchant 09. Private work	
108	How much is your family's total monthly income?	01. < 100 02. 200-300 03. > 300 04. No income 88. Don't know	
109	How often do you drink alcohol?	01. Never drank 02. Drunk one or two times 03. Drunk sometimes 04. Drunk always	
110	How often do you chew khat?	01.Never chew 02. Chew one or two times 03. Chew sometimes 04. Chew daily	
111	How often do you smoke?	01.Never smoke 02.Smoke one or two times	

		03.Smoke some times 04.Smoke daily	
112	Do substance abuse predisposes to HIV and Unwanted pregnancy?	01.Yes 02.No 88.Don't know	
No	Question and filter	Coding category	Skip to
201	Have you ever had sexual intercourse?	01. Yes 02. No---------- 99. No response	210
202	At what age first you have sexual intercourse?	_____ years 88. Don't know 99. No response	
203	What did make you to have sexual intercourse at that time?	01. fail in love 02. To try it 03. Peer pressure 04. Was drunk 05. To get money/gift 06.Marriage 07.Raped 88.Don't know 99. No response	
204	With whom you had sexual intercourse?	01. Regular partner 02. Commercial sex worker 03. Casual partner 04. Unknown person 05. Husband 88. Don't know 99. No response	

205	What is the age of the first partner as compared to your age?	01.The same age 02.5-10 years greater 03.Less than my age 88.Don't know	
206	What is the number of partners you had so far?	01. One person 02. Two and above 88. Don't know 99. No response	
207	Have you ever had sex in the last 3 months?	01. Yes 02. NO 99. No response	
208	How many partners did you have during the last 3 months?	01. One person 02. Two person 03. Above two 88. Don't know 99. No response	
209	Have you ha sex after taking alcohol?	01.Yes 02.No 99.No response	
210	Have you ever heard about contraceptives?	01. Yes 02. .No	
211	From which sources you hear about contraceptives? (One option)	01. Health worker 02. Radio 03. Television 04. Leaflets 05. Teachers 06. Partner 07. Parents 08. Religious leaders	

		09. School mini media 10. Friends 11. Training 12. Anti AIDS clubs 99.No response	
212	What type of methods do you know? (circle possible responses)	01. Pills 02. Condoms 03. Injectables 04. Implants 05. IUDs 06. Surgical methods 07. Calendar methods 08. Diaphragm 88. Don't know 99. No response	
213	What is the advantage of contraceptives? (circle possible responses)	01. To space births 02. To limit births 03. To avoid HIV infection 04. To prevent unwanted pregnancy 05. To terminate births 06. To prevent STIs 07. To control pop growth	
214	Do you approve sex before marriage?	01. Approve 02. Some what approve 03. Disapprove	
215	Do you approve condom use for HIV prevention?	01. Approve 02. Some what approve 03. Disapprove	
216	Do you approve contraceptive use for unwanted pregnancy?	01. Approve 02. Some what approve	

		03. Disapprove	
217	*(From question 217-235 For females only)* Did you use contraceptives when you had sex for the first time?	01. Yes 02. No 88 Don't know 99. No response.	
218	Have you ever used contraceptives in the last 12 months?	01. Yes 02. No---------- 99.No response	221
219	How often did you use contraceptives in the last 12 months?	01. Sometimes 02. Most of the time 03. Always	
220	With whom did you use contraceptives?	01. Partner 02. Husband/wife 03. Casual partner 04. CSW	
221	Did you use contraceptives in the last 3 months?	01. Yes 02. No	
222	Did you use contraceptives in the last sex?	01. Yes 02. No----------	227
223	For what reason you are using current contraceptives?	01. To space births 02. To limit births 03. To avoid HIV infection 04. To prevent unwanted pregnancy 05. To prevent STIs 06. For health reason 07. Other(specify)	
224	Which methods you are using currently?	01. Pills 02. Condoms 03. Injectables 04. IUDs	

		05. Implants 06. Diaphragm 07. Calendar methods 08. Other(specify)	
225	Why did you use the above mentioned methods frequently?	01. Safe for my health 02. Long acting 03. Prevents HIV 04. Prevents unwanted pregnancy 05. Suitable for use 06. Easily available 07. Other(specify)	
226	From which source do you get contraceptives?	01. Hospital 02. Health center 03. CBD worker 04. Private pharmacy 05. NGO health facility 06. Private clinic 07. Shop 08. Friends 09. Relatives 10. Other (specify)	
227	What is the reason for not using contraceptives?	01. No sexual intercourse 02. Fear of side effects 03. I don't like it 04. Want to become pregnant 05. Partner opposed 06. Religious prohibition 07. Knows no methods 08. Partner live in other place 09. I am pregnant	

		10. Knows no source 11. Lack of access 12. Method not available 13. No partner 14. I use calendar methods 15. Divorced	
228	Have you ever had pregnancy?	01. Yes 02. No----------	301
229	At what age you become pregnant?	_____ years 88. Don't know	
230	What is the number of times you become pregnant?	_____ times	
231	How many of it was unplanned?	_____	
232	Did you decided to abort?	01. Yes 02. No----------	301
233	How many times you abort?	_____	
234	Why did you abort?	01. Fear of parents 02. Not to interrupt education 03. Was unwanted 04. Was illegitimate 05. Unable to rear up 06. Other(specify)	
235	From where you abort?	01. Government health facility 02. NGO health facility 03. Private clinic 04. Illegal individuals 05. Other(specify)	
236	*(From question 236-239 for males only)* In the last 12 months have you ever had sex with CSW?	01. Yes 02. No 99. No response	

237	During the last 12 months did you use condom when you had sex with CSW?	01. Yes 02. No 99. No response	
238	When you had sex with CSW how often did you use condoms?	01. Sometimes 02. Most of the time 03. Always	
239	When you had sex with spouse/friends how often did you use condoms?	04. Sometimes 05. Most of the time 06. Always	
Part three Knowledge and risk perception to HIV and unwanted pregnancy			
No	Question and filter	Coding category	Skip to
301	Have you ever heard of HIV?	01. Yes 02. No---------- 99. No response	
302	What was the source of the information? (**one option)**	01. Health worker 02. Radio 03. television 04. Leaflets/brochures 05. Teachers 06. Friends 07. Partner 08. Parents 09. Religious leaders Others(specify)	
303	What are the mode of transmission of HIV? (**Circle all his/her answers**)	01. Unprotected sex 02. Not using condom 03. Blood contact 04. Mother to child 05. Use of sharp materials 06. Substance use	

		07. Blood donation 08. Other(specify)	
304	It it possible to prevent HIV?	01. Yes 02. NO 88. Don't know 99. No response	
305	How can some one protect him self from HIV? (**Circle all his/her answers)**	01. Abstinence 02. Avoiding casual sex 03. Condom use 04. Staying faithful to partner 05. Sex after marriage 06. Avoid use of sharp materials 07. Prevent mother to child transmission 88. Don't know 99. No response	
306	Do you perceive your self susceptible to HIV	01. Yes 02. No 99. No response	
307	Why at risk	01. Injured with contaminated sharp materials 02. Had multiple sexual partner 03. Had sex without condom 04. Past HX 05. Mistrust partner 06. Had sex with CSW	
308	Why not at risk	01. Never had sexual intercourse 02. Didn't use contaminated sharp materials 03. Faithful to one partner 04. Abstain from sex	

		05. Always use condom	
309	*(From question 307-313 for females only)* Did you heard of unwanted pregnancy?	01. Yes 02. No 99. No response	
310	From which source you hear about unwanted pregnancy? (Circle one option)	01. Health worker 02. Radio 03. television 04. Leaflets/brochures 05. Teachers 06. Friends 07. Partner 08. Parents 09. Religious leaders 10. Others(specify)	
311	How a woman contract unwanted pregnancy?	01. Not using contraceptives 02. Rape 03. Casual sex 04. Substance abuse 05. Other(specify) 88. Don't know 99. No response	
312	Is it possible to prevent unwanted pregnancy?	01. Yes 02. No 99. No response	
313	How do you prevent yourself from unwanted pregnancy?	01. Avoid sexual intercourse 02. Avoid casual sex 03. Use of contraceptives 04. Faithful to partner 05. sex after marriage 06. Use of condom	

		07. Use of calendar methods	
314	Do you perceive yourself susceptible to unwanted pregnancy?	01. Yes 02. No---------- 99. No response	316
315	Why at risk?		
316	Why not at risk?		

Annex 4. Structured Amharic questionnaire

ክፍል አንድ መሰረታዊ የግል መረጃዎች			
ተቁ	ጥያቄዎች	አማራጭ መልሶች	እለፍ
101	ፆታ	01 ወንድ 02 ሴቴ	
102	ዕድሜ	ዓመት	
103	የጋብቻ ሁኔታ	01 ያላገባች 02 ያገባች 03 የፈታች 04 የተጋቡ ነገር ግን በተለያየ ቦታ የሚኖሩ 05 አብረው የሚኖሩ ጓደኞች	
104	ሐይማኖት	01 ኦርቶዶክስ 02 ሙስሊም 03 ፕሮቴስታንት 04 ካቶሊክ 05 እምነት የለኝም	
105	ብሄረሰብ	01 አማራ 02 ኦሮሞ 03 ትግሬ 04 ጉራጌ 05 ሌላ	
106	የትምህርት ደረጃ	01 ማንበብና መፃፍ አልችልም 02 ማንብበና መጻፍ ብቻ 03 ከ16 ክፍል 04 ከ710 05 1112 06 ኮሌጅና ከዚያ በላይ	
107	ስራ	01 ተማሪ 02 የቤት እመቤት 03 የመንግስት ሰራተኛ	

		04 የቀን ሰራተኛ 05 ስራ አጥ 06 ሴተኛ አዳሪ 07 የቤት ሰራተኛ 08 ነጋ 09 የግ ስረራ 10 ሌላ ካለ ይገለፅ	
108	የወር ገቢ(የራስ ወይንም የቤተሰብ)	01 100 02 200 300 03 300 88 አላውቅም	
109	መጠጥ ተጠጣለህ/ሽ	01 ጠጥቼ አላውቅም 02 አንዴ ወይንም ሁለቴ ጠጥቼአለሁ 03 እልፎአልፎ እጠጣለሁ 04 በየቀኑ እጠጣለሁ	
110	ሲጋራ ታጨሳለህሽ	01 አጭሼ አላውቅም 02 አንዴ ወይንም ሁለቴ አጭሼአለሁ 03 እልፎአልፎ አጨሳለሁ 04 በየቀኑ አጨሳለሁ	
111	ጫት ቅመህ ታውቃለህሽ	01 ቅሜ አላውቅም 02 አንዴ ወይንም ሁለቴ ቅሜአለሁ 03 እልፎአልፎ እቅማለሁ 04 በየቀኑ እቅማለሁ	
112	ሱስ አስያዥ ነገሮች ለኤች አይ ቪና ላላተፈለገ እርግዝና ያጋልጣሉ?	01 አዎ 02 የለም 88 አላውቅም	
ክፍል የግብረስጋ ግንኙት እና የወሊድ መከላከያ አጠቃቀም ሁኔታ			
ተቁ	ጥያቄዎች	አማራጭ መልሶች	እለፍ

201	የግብረ ስጋ ግንኙነት አድርገህሽ ታውቃለህሽ?	01 አዎ 02 የለም ----------	210
202	መጀመሪያ የግብረ ስጋ ግንኙነት የፈፀምከው /ሽው በስንት አመትህ /ሽ ነው?	_____ዓመት 88 አላውቀውም	
203	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት ለማድረግ የተነሳሳህበት /ሽበት ምክንያት ምንድን ነው?	01 ፍቅር ይዞኝ 02 ለመሞከር 03 በጓደኛ ግፊት 04 በመጠጥ ተደፋፍሬ 05 ለመሞከር 06 ገንዘብና ሌሎች ስጦታዎችን ለማግኘት 99 ምላሽ የለም	
204	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት የፈፀምከው /ሽው ከማን ጋር ነበር?	01 ከፍቅር ጓደኛዬ ጋር 02 ከሴተኛ አዳሪ ጋር 03 የድንገተኛ ትውውቅ ጓደኛ 04 ከማላውቀው ሰው ጋር 05 አላውቅም 06 ምላሽ የለም	
205	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት የፈፀምሽከው /ሽው ግለሰብ ዕድሜ ከአንተ ች ዐድማ አንፃር ሲታይ እዴት ነበር?	01 እኩያዬ ናትነው 02 ከ510 ዓመት ይበልጠኛል 03 ከእኔ ታንሳለች ያንሳል 88 አላውቅም	
206	እስካሁን ድረስ ከመንያያል ሰዎች ጋር ወሲብ ፈፅመሃል/ ሻል?	01 ከአንድ ሰው ጋር 02 ከሁለት ስው ጋር 03 ከሁለት በላይ ሰው ጋር 88 አልውቅም 99 ምላሽ የለም	
207	ባለፉት 3 ወራት ከጓደኛህ/ ሽ ጋር ወሲብ ፈፅመህ /ሽ ነበር?	01 አዎ 02 የለም 99 ምላስ የለም	

208	ባለፉት 3 ወራት ምን ያህል የወሲብ ጓደኞች ነበሩህ/ ሽ?	01 አንድ 02 ሁለት 03 ከሁለት በላይ ሰው ጋር	
209	አልኮሆል ከወሰድክ / በኋላ የግብር ስጋ ግንኙነት አድርገህ /ሽ ታውቃለህ /ሽ	01 አዎ 02 የለም 99 ምላሽ የለም	
210	ስለ ወሊድ መከላከያ ሰምተህ /ሽ ታውቃለህ /ሽ?	01 አዎ 02 የለም	 214
211	ከየት ሰማህ ሽ?	01 ከጤና ባለሙያ 02 ከሬድዮ 03 ከቴሌቪዥን 04 ኩበራራ ፅሁፍ 05 ከመምህራን 06 ከጓደኛ 07 ከቤተሰብ 08 ከሀይማኖት አባት 09 ሌላ ካለ ይገለፅ	
212	ምን አይነት የወሊድ መከላከያዎችን ታውቃለህ /ሽ? (አማራጮችን ክበብ)	01 ፒልስ 02 ኮንዶም 03 በመርፌ የሚሰጥ 04 በክንድ የሚቀበር 05 በማህፀን የሚቀመጥ 06 በቀዶ ጥገና 07 በቀን መቁጠር	
213	የወሊድ መከላከያ ጥቅሙ ምንድን ነው? (አማራጮችን ክበብ)	01 አራርቆ ለወምለድ 02 ቤተሰብን ለመመጠን 03 ኤች አይ ቪን ለመከላከል 04 ያልተፈለገ እርግዝናን ለመከላከል 05 ወሊድን ለማቆም 06 ሌላ ካለ ይገለፅ	

214	የግብረ ስጋ ግንኙነት ከጋብቻ በፊት ቢደርግ ትስማማለህ/ ሽ	01 እስማማለሁ 02 በተወሰነ ደረጃ እስማማለሁ 03 አልስማማም	
215	ኮንዶም መጠቀም ከ ኤች አይ ቪ ይከላከላል በመለው ሀሳብ ትስማማለህ /ሽ?	01 እስማማለሁ 02 በተወሰነ ደረጃ እስማማለሁ 03 አልስማማም	
216	የወሊድ መከላከያ መጠቀም ካልተፈለገ እርግዝና ይከላከላል በሚው ሀሳብ ትስማማለህ /ሽ?	01 እስማማለሁ 02 በተወሰነ ደረጃ እስማማለሁ 03 አልስማማም	
217	(ከጥያቄ 217 እስከ በመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት ስታደርጊ የወሊድ መከላከያ ተጠቅመሽ ነበር?	01 አዎ 02 የለም	
218	ባለፉት 12 ወራት የወሊድ መከላከያ ተጠቅመሽ ነበር?	01 አዎ 02 የለም	221
219	ባለፉት 12 ወራት የግብረ ስጋ ግንኙነት ባደረግሽበት ጊዜ የወሊድ መከላከያ ምን ያህል ተጠቅመሽ ነበር?	01 አንዳንድ ጊዜ 02 አብዛኛውን ገዜ 03 ሁለጊዜ	
220	ባለፉት 12 ወራት የግብረስጋ ግንኙነት ባደረግሽበት ጊዜ የወሊድ መከላከያ ከማን ጋር ተጠቀምሽ?	01 ከፍቅር ጓደኛዬ ጋር 02 ከትዳር ጓደኛዬ ጋር 03 ከድንገተኛ ትውውቅ ጓደኛ ጋር 04 ከሴተኛ አዳሪ ጋር	
221	ባለፉት 3 ወራት የወሊድ መከላከያ ተጠቅመሻል?	01 አዎ 02 የለም	
222	ለመጨረሻ ጊዜ የግብረ ስጋ ግንኙነት ባደረግሽበት ጊዜ የወሊድመከላከያ ተጠቅመሽ ነበር?	01 አዎ 02 የለም	227
223	የወሊድ መከላከያ የምትጠቀሚበት ምክንያት ምንድን ነወ?	01 አራርቄ ለመውለድ 02 ቤተሰብ ለመመጠን	

	(አንድ መልስ ብቻ)	03 ኤች አይ ቪን ለመከላከል 04 ያልተፈለገ እርግዘናን ለመከላከል 05 የአባለዘር በሽታን ለመከላከል 06 በጤና ምክንያት 07 ሌላ ካለ ይገለፅ	
224	በአሁኑ ሰአት የወሊድ መከላከያ ተጠቀሚያለሽ?	01 አዎ 02 የለም	
225	በአሁኑ ሰዓት የምትጠቀሚው የምትጠቀሚው የተኛውን ዘዴ ነው?	01 ፒልስ 02 ኮንዶም 03 በመርፌ የሚሰጥ 04 በክንድ የሚቀበር 05 በማህፀን የሚቀመጥ 06 በቀዶ ጥገና 07 በቀን መቁጠር	
226	ከላይ የገለፅሺውን የወሊድ መከላከያ የምታገኝው ከየት ነው?	01 ከሆስፒታል 02 ከጤጤና ጣቢያ 03 ከቤተሰብ ምጣኔ ሰራተኛ 04 ከግልፋርማሲ 05 ከመያድ የጤነና ድርጅት 06 ከክሊኒክ 07 ከሱቅ 08 ከጓደኛ 09 ከዘመድ	
227	የወሊድ መከላከይ ያልተጠቀምሽበት ምክንያት ምንድን ነው? (አንድ መልስ ብቻ)	01 የግብረ ስጋ ግንኙነት ስለማላደርግ 02 መድሃኒቱ የሚያመጣውን ችግር ስለምፈራ 03 ስለማልወደው 04 ማርገዝ ስለምፈልግ 05 የጓደኛ ተቃሞ 06 ሀይማኖቴ ስለማይፈቅድልኝ 06 ዘዴውን ስለማላውቀው	

		07 ቦታውን ስለማላውቀው 08 አገልግሎቱ በአካባቢዬ ስለሌለ 09 ሌላ ካለ ይገለጽ	
228	ከዚህ በፊት አርግዘሽ ታውቂያለሽ?	01 አዎ 02 የለም	 301
229	ለመጀመሪያ ጊዜ ያረገዝስውበስንት ዓመትሽ ነው?	_____ዓመት	
230	በአጠቃላይ ስንት ጊዜ አርግዘሻል?	_____ጊዜ	
231	ያለ እቅድ ያረገዝሽው ስንት ነበር?	_____ጊዜ	
232	አስወርደሽ ታውቂያለሽ?	01 አዎ 02 የለም	 301
233	ስንት ጊዜ እሰወርደሻል?	_____ጊዜ	
234	ለምን አስወረድሽ?	01 ቤተሰቦቼን በመፍራት 02 ትምህርቴ እንዳይቋረጥ 03 ያልተፈለገ ስለነበር 04 ከጋብቻ ውጭ ስለነበር 05 ለማሳደግ አቅም ሰለሌለኝ 06 ለሌ ካለ ይገለፅ	
235	ያስወረድሽው የት ነበር?	01 ከመንግስት ጤና ተቋም 02 መንግስታዊ ካልሆነ ድርጅት 03 ከግል የጤና ተቋም 04 በልምድ ከሚያስወርዱ ሰዎች ጋር 05 ሌላ ካለ ይገለጽ	
236	(ከጥያቄ ቁጥር 236 239 ወንዶችን ብቻ የሚመለከት ጥያቄ) ባለፉት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረስጋ ግንኙነት አድርገህ ታውቃለህ?	01 አዎ 02 የለም 99 ምላሽ የለም	
237	ባለፉት 12 ወራት ከሴተኛ አዳሪ ጋር የግብረ ስጋ ግንኙነት ሰታደርግ ኮንዶም ተጠቅመህ ነበር?	01 አዎ 02 የለም 99 ምላሽ የለም	

238	ከሴተኛ አዳሪ ጋር የግብረ ስጋ ግንኙነት ስታደርግ ኮንዶም ምን ያህል አዘውትረህ ትጠቀም ነበር?	01 አንዳንድ ጊዜ 02 አብዛኛውን ጊዜ 03 ሁልጊዜ	
239	ከቅረኛህ ወይንም ከባለቤትህ ጋር የግብረስጋ ግንኙነት ስታደርግ ኮንዶም ተጠቅመህ ነበር?	01 አዎን 02 የለም 99 ምላሽ የለም	
ክፍል ሶስት ስለ ኤች አይ ቪ ና ያልተፈለገ እርግዝና ዕውቀትና እንደዚሁም ለእነዚህ ነገሮች የመጋለጥ ስጋት የሚለከቱ ጥያቄዎች			
ተቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ አማራጮች	እለፍ
301	ስለ ኤች አይ ቪ ሰምተህ /ሽ ታውቃለህ /ሽ?	01አዎ 02የለም 99 ምላሽ የለም	
302	ስለ ኤች አይ ቪ መረጃ የምታገኘው /ኝው ከየት ነው? (አንድ መልስ ብቻ)	01 ከጤና ባለሙያ 02 ከሬድዮ 03 ከቴሌቪዥን 04 ኩበራራ ዕሁፍ 05 ከመምህራን 06 ከጓደኛ 07 ከቤተሰብ 08 ከሀይማኖት አባት 09 ሌላ ካለ ይገለፅ	
303	የኤች አይ ቪ መተላለፊያ መንገዶች ምን ምን ናቸው?	01 ልቅ በሆነ ወሲብ 02 ኮንዶም ባለመጠቀም 03 በደም ንኪኪ 04 ከእናት ወደ ልጅ 05 በስለታም መሳሪያዎች በመጠቀም 06 የሱስ ተገዥ በመሆን 07 በደም ልገሳ 08 ሌላ ካካ ይገለፅ	
304	ኤች አይ ቪን መከላከል ይቻላል?	01 አዎ 02 የለም	

305	አንድ ሰው ራሱን ከኤች አይ ቪ ራሱን እንዴት ሊጠብቅ ይችላል?	01 ከግብረ ስጋ ግንኙነት በመታቀብ 02 ባጋጣሚ ከሚደረግ የግብረ ስጋ ግንኙነት በመታቀብ 03 ኮንዶም በመጠቀም 04 ለፍቅረኛ ታማኝ በመሆን 05 ወሲብ ከጋብቻ በሁዋላ መፈጸ 06 በስለታም ነገር አለመጠቀም 07 በእርግዝና ጊዜ ከእናት ወደ ልጅ እንዳይተላለፍ በማድረግ	
306	እስካሁን ባለው ጊዜ ለኤች አይ ቪ ተጋለጫለሁ ብለህ /ሽ ትሰጋለህ/ሽ?	01 አዎ 02 የለም 99 ምላሽ የለም	
307	ለምንድን ነው የምትሰጋው /ጊው?		
308	ለምንድን ነው የማትሰጋው /ጊው?		
309	(ከጥያቄ ቁጥር 309 እስከ ስለ ያልተፈለገ እርግዝና ሰምተሽ ታውቂያለሽ?	01 አዎ 02 የለም	312
310	ስለ ያልተፈለገ እርግዝና መረጃ የምታገኝው ከየት ነው?	01 ከጤና ባለሙያ 02 ከሬድዮ 03 ከቴሌቪዥን 04 ኩበራራ ፅሁፍ 05 ከመምህራን 06 ከጓደኛ 07 ከፍቅረኛዬ 08 ከቤተሰቦቸቼ 09 ከሀይማኖት አባትች 10 ሌላ ካለ ይገለፅ	
311	አንድ ሴት ያልተፈለገ እርግዝና የሚያጋጥማት እዴት ነው? (አማራጮችን ሁሉ ክበብ)	01 የወሊድ መከላከያ አለመጠቀም 02 አስገድዶ በመደፈር 03 በአጋጣሚ ግብረስጋ ግንኙነት	

		04 ሌላ ካለ ይገለፅ	
312	ያልተፈለገ እርግዝናን መከላከል ይቻላል?	01አዎ 02 የለም	
313	አንድ ሴት ራሷን ካካተፈለገ እርግዝና ረሷን ልትጠብቅ ትችላለች?	01 ከግብረስጋ ግንኙነት በመታቀብ 02 ባጋጣሚ የሚደረግ የግብረስጋ ግኙነት ማስወገድ 03 የወሊድ መከላከያ መጠቀም 04 ለፍቅረኛ ታማኝ መሆን 05 ወሲብ ከጋብቻ በሁዋላ መፈፀም 99 ምላሽ የለም	
314	ያልተፈለገ እርግዝና ያጋጥመኛል በለሽ ተሰጊያለሽ?	01 አዎ 02 የለም	
315	ለምድን ነው የምትሰጊው?	01 የወሊድ መከላከያ ስለማልጠቀም 02 በአጋጣሚ የግብረ ስጋ ግንኙነት ስለማደርግ 03 ያለፍላጎቴ የግብረስጋ ግንኙነት እንዳደርግልገደድ ስለምችል 04 ሌላ ካለ ይገለፅ	
316	ለምንድን ነው የማትሰጊው?		

Annex 5. Focus group discussion guide
Qualitative Date collection

1. Guideline for focus group discussion

The group will have 8 members based on sex, age, marital status, and educational status. The principal investigator will moderate the discussion and some one will manage the tape recorder.

Introduction

Good morning! Well come to our group discussion. I am _____. I came from AAU, SPH. I am here today to discuss about reproductive health service. The discussion will take no more than one and half an hour. There is no right and wrong answer. All comments, both positive and negative, have an input for the discussion. So you need not wait for me to call on you. In order not to miss any points of the discussion I will be using a tape recorder. Please speak one at a time to conform to you that all your comments are confidential and used for research purpose only. Your name will not be recorded to maintain confidentiality.

Focus group discussion guideline.

Questions

1. What are the most important health issues affecting youth in their area?
   (Note: ask men about men, women about women; make sure that we are not interested in questioning children or old people
2. Now let's talk about family planning. What is meant by family planning, what kinds of people use family planning in this area? How big a problem is unwanted/ mistimed pregnancy in this area? Are Contraceptives known and accepted in this area? When is it acceptable to use it?
   What are the problems with using Contraceptives? Is it (ever) acceptable for a married couple to use contraceptives/unmarried couples?
3. For example, the women is having modern contraceptive methods to space or limit births; she fears that her partner is having, affairs with other women and she fears especially that he will bring her HIV/AIDS. If this happened in this community, what could she do to protect herself if she fears being infected by her partner? Prob.
   - Can she ask him to use a condom? What is the consequence? Can she refuse to have sex with him?

4. We would like to hear a little about your experience or knowledge about

Contraceptive methods

4.1.Tell us what is what type of methods do you know?

4.2.We would like you tell us how women get HIV/AIDS & unwanted pregnancy?

5. Now we would like to ask you about sexuality, HIV risk perception and Contraceptive use

5.1. Why do you use contraceptives?

5.2. Which once is more feasible and acceptable method of prevention for the youth?

5.3. What do you perceive about early sex, its determinates (causes, Prevention and its consequences?)

Probe What is the usual age of commencement of sexual practice (for female? For male?)

In your opinion, till when should sex practice be delayed? (Till marriage? Until physical and psychological maturity? For male and female.

5.2. How do you relate early sex and multiple sexual partners with Contraceptive use and HIV & unwanted pregnancies?

Probe. Would you give me an example?

Has any one else had similar experience?

What do you understand by contraceptive use?

Probe. Would you give me an example?

Has any one else had similar experience

5. What are the most important preventive measures for HIV & unwanted pregnancy? being taken by the youth?

Prob. Reduce party? Avoid commercial sex? Delay sex? Use contraceptive such as pill, condom, injection, IUDS, implants.

5.5. How do you perceive contraceptive use and factors for its non-utilization?

Prob. Do you have the intention to ask your partner to use contraceptives

Would you explain further?

Is there any thing else?

6. What kinds of things can a (woman /man) do if (she /he/wants to have sex but doesn't want to (become pregnant /make his partner pregnant)? Prob. Any thing else?

7. Do you know how to prevent dual risk of HIV infection and unintended pregnancy?

8. **Annex 6. Conceptual frame on HIV and unintended pregnancy risk perception and Contraceptive use**