

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES



**ASSESSMENT OF SEXUAL BEHAVIOUR AND CONDOM USE AMONG
MARRIED OR COHABITING COUPLES IN NEKEMTE TOWN, EAST
WOLLEGA, ETHIOPIA**

BY

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LIST OF ACRONYMS

HIV	Human Immunodeficiency Virus
AIDS	Acquired Immuno Deficiency Syndrome
EDHS	Ethiopia Demography and Health Survey
PLWHA	People Living With HIV/AIDS
STD	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
FGD	Focus Group Discussion
VCT	Voluntary Counseling And Testing For HIV
EPI info	Epidemiological Information
SPSS	Statistical Package For Social Science
IDIs	In-Depth Interviews
OR	Odds Ratio
CI	Confidence Interval

ABSTRACT

BACKGROUND: Rates of human immunodeficiency virus (HIV) infection among married women or those in committed partnerships are increasing rapidly. Most HIV infection in sub-Saharan Africa occurs during heterosexual intercourse between couples in a relationship. The primary mode of HIV transmission in Ethiopia is via heterosexual contact. Over 90% of adult cases of HIV in Ethiopia are attributable to heterosexual activity.

OBJECTIVE: The objective of this study was to assess sexual behavior and condom use among married / cohabiting couples in Nekemte town.

METHODS: A community based cross sectional survey was conducted from February to March, 2010 in Nekemte town. The data was collected through quantitative and qualitative methods. Two multistage sampling techniques were used. In the first stage, simple random sampling technique was used to select the kebeles. In the second stage, systematic random sampling was used to select 768 couples (768 males and 768 females) and 1536 individuals from 768 households were interviewed.

RESULTS: The prevalence of premarital sexual intercourse was 30.6% among married/cohabiting men and 19.7% among women. However, the transition of premarital sex to marriage among those who had premarital sex (235 men Vs 151 women) was low, 40 (17.0%) among men and 40 (26.5%) among women. About seven percent of males and 2.1% of females' respondents reported that they had extramarital partners and about 4% of males reported having had more than one sexual partner in last 12 months. Despite this the prevalence of ever use of condoms was 5.4% (95% CI 4.3, 6.5%) and 4% (95% CI 3.0, 5%) in the past 12 months. In multivariate analysis, number of life time sexual partners, perceived risk of HIV infection, suspecting spouse having extramarital partner and discussion about condom had significant association with condom use in both sexes.

CONCLUSION: Despite the fact that some married /cohabiting people engaged in risky sexual behaviors or extramarital partner, condom use among couples has remained very low.

1. BACK GROUND REVIEW AND STATEMENT OF THE PROBLEM

Rates of human immunodeficiency virus (HIV) infection among married women or those in committed partnerships are increasing rapidly. In sub-Saharan Africa, where women have been hardest hit by the acquired immunodeficiency syndrome (AIDS) pandemic, 57% of those who test positive are women and at least one third of these women were married (1). Marriage and long term, monogamous relationships do not protect women from HIV. Sub-Saharan Africa is one region of the world where the majority of HIV transmission occurs during heterosexual contact (2).

HIV/ AIDS remain one of the key challenges for the overall development in Ethiopia. The primary mode of HIV transmission in Ethiopia is via heterosexual contact (3). Over 90% of adult cases of HIV in Ethiopia are attributable to heterosexual activity (4). In Ethiopia, the major determinants for the rapid spread of HIV/AIDS epidemic include behavioral factors such as unprotected sexual intercourse and multiple sexual partners. Knowledge of sexual transmission is wide spread (98%) while use of safe practice is low (5).

A study found conducted in Butajira found that married women are vulnerable to HIV and other sexually transmitted infections (STIs) because of risky sexual behaviors among their husbands. Married men were twice more likely to have multiple sexual partners than their female counter parts. Married females were less likely to engage in risky sexual behaviors than married males. Both married and never married young males similarly engaged in risky sexual behaviors. Condom use in marriage was rare for both married females and males (6). Married women reported STI symptoms more than did the never married, which could be due to unprotected sex with unfaithful husbands. The qualitative findings also showed husbands with STIs having unsafe sex with their wives without notifying their STI status (7).

The optimum role of condom promotion in a comprehensive AIDS prevention programme depends on several factors including local epidemiology, the populations being targeted and the socio-cultural context (8). Greater condom use remains one of the most effective ways of checking the human immunodeficiency virus (HIV) pandemic in developing countries. The major emphasis has been on their use outside marriage (9). However, in countries with generalized heterosexual epidemics, almost exclusive emphasis on condom use for non-marital sexual contacts/ high risk group is no longer adequate and may even be counterproductive by reinforcing its association with illicit sex.

In such settings, marriage and cohabitation cannot be regarded as a safe haven since many individuals acquire HIV because of prior infection or infidelity (10).

A number of research studies on condom use among young single people have been conducted and published, the needs of the married and cohabiting population have been neglected by researchers and programme staff alike, despite the fact that more than half of HIV infections in the severe epidemics of Southern and East Africa are occurring in married and cohabiting couples (11). The purpose of this study is to assess sexual behavior and condom use within marital or cohabiting relationships; because in this country the twin risk of unintended pregnancy and HIV are Very high which result in extensive health problems.

RATIONALE OF THE STUDY

HIV/AIDS is becoming one of the leading causes of death in the world. Rates of HIV infection among married women or those in committed partnerships are increasing rapidly and more than half of HIV infections in the severe epidemics of Southern and East Africa occurring in married and cohabiting couples (2, 11).

Most HIV infection in sub-Saharan Africa occurs during heterosexual intercourse between couples in a relationship. Ethiopia has high prevalence of HIV and the mode of transmission is mainly through unsafe heterosexual sex (2, 12). Multiple sexual partners and sexually transmitted infections (STIs) are the most important contributing factors to the transmission of HIV in the country (13). The 2005 EDHS report showed that 9% of men and 3% of women aged 15-49 years had sex with someone other than their spouse /cohabiting partner a year before the survey. Urban residents of both sexes were engaged in risky sex more than were their rural counterparts (12).

A number of research studies on condom use among young single people have been conducted and published, the needs of the married and cohabiting population have been neglected by researchers and programme staff alike, despite the fact that more than half of HIV infections in the severe epidemics of Southern and East Africa are occurring in married and cohabiting couples (11). Though most studies have focused on men and women separately, it is becoming increasingly evident that the dynamics of sexual negotiation cannot be accurately understood unless researchers consider the attitudes and behavior of both partners (14). The collection of cognitive, attitudinal and behavioral data for partners in marital or cohabiting relationships allows a more complete understanding of a couple's contraceptive use (15).

This study can contribute an insight on HIV/AIDS and condom knowledge, patterns of sexual activity and condom use among married or cohabiting couples. The findings may assist the AIDS control program in Ethiopia to identify factors encouraging and discouraging condom use in marriage and risky sexual behaviors lead to HIV infection.

2. LITERATURE REVIEW

A high proportion of HIV transmission takes place between steady partners. Therefore, not using condoms or using condoms inconsistently can be a problem, which is particularly true in settings with high HIV prevalence, where the likelihood that a partner may be infected is raised. There are barriers, of course, to using condoms with steady partners or in stable relationships. Trust, power inequalities and the desire for children are common issues among married couples which can discourage condom use (16).

HIV-negative partners of people living with HIV/ AIDS (PLWHA) are perhaps the group at greatest risk of contracting HIV in Ethiopia, and couple counseling services in the country are either non-existent or rudimentary (17). Over 2,674 cohabiting couples were tested for HIV in the 2005 EDHS, in 97.9 percent of the cases, both partners tested negative for HIV. Of the remainder, 85% (1.8% of the total, 2.1%) are discordant. HIV prevalence among cohabiting individuals is notably high in the urban areas (10.9%); of whom about 72% (i.e. 7.8% of the total) of the cohabiting couples are discordant (12). There is conclusive evidence from studies of sero-discordant couple's shows that using a condom reduces the probability of HIV transmission during penetrative sex by about 90% (8). Family planning falls within the realm of traditional reproductive health services and is an important strategy for preventing HIV infection (18). Despite the potential contribution of family planning to the prevention of HIV infections and transmission, contraception use in Sub-Saharan Africa, including condoms remain low (19).

In sub-Saharan Africa, trends in fertility regulation have favored methods that are controlled by women and can be used without the partners' knowledge; however, these do not protect from Sexually transmitted diseases (STD) /HIV (20). Individuals and couples have the right to enjoy healthy sexual lives free of unplanned pregnancy and sexually transmitted infections (STIs) including HIV. Dual protection is one means through which this goal can be achieved (21).

Dual protection is the prevention of two unplanned and undesirable outcomes –unintended pregnancy and HIV infection. Dual protection can be achieved through-

- a. Use of contraception in a long term mutual monogamous relationship or
- b. The use of a condom plus another non-barrier contraceptive method or
- c. The use of a condom alone (including during pregnancy) or
- d. Abstinence or
- e. Avoidance of all types of penetrative sex (22).

Interventions to prevent HIV infection in pregnant women, as for non-pregnant women focus on counseling about potentially risky behaviors of the woman or her partner & strategy to reduce HIV risk. Because pregnant women also focus on condom use. Regardless of their HIV status, “Safer sex counseling must be provided to women in the antenatal setting. If they are unaware of their partner’s HIV status or feel that they may be at risk from HIV infection, they should encourage their partner to use condoms.” (19). In many countries women are less likely to be able to negotiate condom use and are more likely to be subjected to nonconsensual sex (23).

Knowledge about HIV/AIDS

EDHS 2005 found that the knowledge of AIDS is widespread in Ethiopia; 90% of women 15-49 years and 97% of men 15-49 years and in Oromia, 94.7% men and 98.4% of women have heard of AIDS (12).

A study carried out in Dar-es-Salaam, Tanzania, to assess knowledge and use of condoms among women of reproductive age, at 3 representative family planning clinics indicated that knowledge of sexual transmission of AIDS was very high (24).

Sexual behavior

A study conducted in Tigray, Ethiopia revealed that 70% of respondents, (61.2% of men and 82.6% of women,) reported one lifetime sexual partner. About two percent of men and 6.6% of women reported that their spouse or partner had another sexual partner (25). A study done in Tanzania by Kapiga SH revealed that nearly fifteen percent (14.8%) of women reported having more than one sex partner in the last year (24).

Knowledge about condom

A study carried out in Dar-es-Salaam, Tanzania, to assess knowledge and use of condoms among women of reproductive age, at 3 representative family planning clinics, 42.8% mentioned use of condoms as an AIDS preventive measure (24). A study on threats of AIDS and condom use in a Nigerian urban community showed that 27.7% of respondents cited that three uses of condom usage i.e. protect against AIDS, STI, unwanted pregnancy as well as a combination of all these uses (26).

A study conducted in KwaZulu-Natal, South Africa found that the knowledge of condoms as an effective method of dual protection against the risk of pregnancy and disease was found to be high, 70% (27). Another study conducted in kwazulu-natal, South Africa found that couples' knowledge of condoms and where to obtain them was very high, 73.7% (28). A study conducted in Tigray, Ethiopia revealed that only 8.3% (3% of men and 22.2% of women) knew that condoms on their own could be used for dual protection (25).

EDHS, 2005 showed that the knowledge of currently married men and women recognizing condom as family planning was 41% and 84% respectively (12).

Condom use

A study carried out in Dar-es-Salaam, Tanzania, to assess knowledge and use of condoms among women of reproductive age, at 3 representative family planning clinics showed that only 4.6% of women interviewed were regular users of condoms, while 19.8% were occasional users (24). A study on threats of AIDS and condom use in a Nigerian urban community showed that 32% males & 32.5% females are currently using the condom for family planning (26).

A study undertaken in South Africa, interviewed women and men procuring condoms from 12 public health facilities found that 51% participants reported having used a condom during their most recent sexual encounter, and 34% reported having used a contraceptive other than a condom. Sixteen percent had used both a condom and another method of contraception during their last sexual encounter (29).

Another cross-sectional survey of sexually active women, aged 15–49 years, conducted in 89 public primary health care clinics, found 12% of women were protected from both STIs and pregnancy, of these 7.5% used double method, 4.5% condom alone and one third no method (30). A study conducted in Uganda, revealed that ever use of condoms was at 46% among males and 27% among females (31).

A qualitative and quantitative study in Kenya showed that 696 people married or cohabiting with a partner were using family planning method. Out of this number, 14% were using condoms; 74% of non-users of condoms were married. The level of condom use for the unmarried was more than double that of the married respondents. So there was limited use of condoms in marriage. Of the respondents currently using condoms, for the married it was 15% males vs. 4 % females. Although 39% of the respondents agreed that it is acceptable for a married couple to use condoms, only 8% of them were currently using condoms and 26% had ever used it with non-regular partners (32).

A study conducted in KwaZulu-Natal, South Africa found that only 14 % of men and 17% of women reported consistent or "occasional" condom use (27). Another study in South Africa also reported a low proportion of respondents who reported that they consistently or occasionally used condoms with their spouse or partner (15% of men and 18% of women) of these only 5% men &12% women said that they always used condoms, with the rest of the respondents indicating occasional use. The level of use was 29% and 34% among men and women in urban, more educated couples. In 77% of couples, both partners said they were not using condoms, while in 10%, both said they were using condoms always or occasionally. Because most of the women reporting condom use were also using another method of contraception (94%) typically injectable, there is little doubt that condom were being used by women primarily for disease prevention (28).

A study conducted in Ethiopia revealed that only 5.1% of the respondents had used a condom in the last time they had sex (5.9% dual methods and 0.6% condoms alone (25). EDHS, 2005 indicated that 5% married men have used at some time but in Oromia 0.1% (12).

Factors affecting condom use among married or cohabiting couples

There are barriers, of course, to using condoms with steady partners or in stable relationships. Trust, power inequalities and the desire for children are common issues among married couples which can discourage condom use (16).

A study conducted in Tanzania found that the majority (57.5%) of women who had never used a condom reported not using condoms because 'men did not like them' (24). A study on threats of AIDS and condom use in a Nigerian urban community showed that condom is perceived in various ways that discourage its

usage some of such ways in which it is perceived is that “it can kill”, increased sexual urge in girls and thus increases promiscuity (26).

A study conducted in South Africa found that widespread disapproval of condom use within marriage (27). A study conducted in Kenya indicated that three quarters of the focus groups said that condoms rupture in the process of sexual intercourse, condoms reduce sexual pleasure for both men and women, others stigmatization. The person using condom is also considered as promiscuous (32).

A study conducted in Ethiopia revealed that most respondents stated that they approved the use of condoms within marriage, but nearly 30% disapproved. About fifty four percent said that condom use was a sign of mistrust and 46% believed that someone who used condoms was promiscuous. About twenty three percent considered themselves at no risk of HIV infection or unintended pregnancy. One hundred fourteen (13.1%) respondents (109 women) feared social stigma if they used dual prevention methods, and 10% of respondents, (3% of men and 16.9% of women) said their spouse or partner would not allow them to use dual protection. Focus group participants emphasized the negative community perceptions associated with condom use within marriage (25). However, there were many real and perceived barriers to condom use especially in stable sexual relationships. In stable long-term relationships, resistance to condom use was found to be strongly related to its association with STIs (including HIV/AIDS). Men and women did not see the need for condoms in stable, ongoing sexual relationships if a more effective method was used for pregnancy prevention. Condom use in such relationships may be seen as a clear sign of infidelity. These attitudes represent a major obstacle to the use of condoms as a dual method of protection (33).

Predictors of or factors associated with condom use

A study conducted in Tanzania revealed that condom use was positively associated with increasing level of education and increasing number of sexual partners (24).

A study carried out in Tigray found that male sex, being literate, being employed, approval of condom use within marriage, and discussion of dual protection were predictors of condom use (25).

A study conducted in KwaZulu-Natal, South Africa found that condom use is much higher among more-educated individuals than less-educated counterparts. Apart from education, perceived risk of HIV infection from the partner is the most powerful determinant of use within marital and cohabiting partnerships, particularly for women (27). Another study conducted in kwazulu-natal, South Africa found that a woman's perceived risk of HIV infection from her partner was the most powerful predictor of condom use (28).

A study conducted in Uganda, revealed that HIV risk perception was found to be associated with condom use, religion, educational attainment, marital status, residence, number of sexual partners and having contracted an STD. Predictors of high HIV risk perception were non use of condoms, rural residence, having ever engaged in sex for gain and ever discussed sex. Respondents who do not consider themselves at risk of contracting HIV and those who have never contracted STDs are less likely to use condoms (31).

3. OBJECTIVES

3.1. General objective

- To assess sexual behavior and factors affecting condom use among married or cohabiting couples in Nekemte town.

3.2. Specific Objectives

- To assess risky sexual activities that place couples at risk getting HIV among married or cohabiting couples in Nekemte town.
- To assess the level of condom use among married or cohabiting couples in Nekemte town.
- To assess factors affecting condom use among married or cohabiting couples in Nekemte town.

4. METHODS AND MATERIALS

4.1. Study area

The study was conducted in Nekemte town, Eastern Wollega Zone, Oromia Regional state that is located at 331 km away to the West of the capital city of Ethiopia, Addis Ababa. The town has four town administrations and 12 kebeles.

4.2. Study design and Study period

A community based cross-sectional design was conducted between 28, February and 28, March, 2010.

4.3. Source population

Couples, aged 15-49 years old women and 15-59 years old men who were married or in cohabiting union lived in the town.

4.4. Study population

Couples, aged 15-49 years old women and 15-59 years old men who were married or in cohabiting union lived in those randomly selected kebeles.

4.5. Inclusion criteria

Couples who were married or cohabiting who lived in the town for more than six months where both the wife and husband were sexually active (age group 15- 49 years for women and 15-59 years for men) and live together in Nekemte town.

Women who were pregnant included in the study.

4.6. Exclusion criteria

Couples who were married or in consensual union who resided in the town for less than six months, separated or don't live together in same place , those who were not in specified ages and mentally ill or couldn't communicate at the time of the study were excluded from the study.

4.7. Sample size determination

4.7.1. Quantitative

A single population proportion formula was used to determine the sample size for the quantitative survey. To our knowledge there are no studies conducted on proportion of condom use among marital/ cohabiting partnership in the study area, so 50% expected condom use (p =50%) was considered in the assumption of sample size determination to obtain large sample size. The number of participants interviewed for each of the male and female partners was calculated using the formula

$$n = \frac{Z^2_{\frac{\alpha}{2}} * P(1 - P)}{d^2}$$

Accordingly the sample size was calculated to be 384 and considering design effect =2, (384 X 2) = 768 couples. The total sample size required comes to 768 for each male and female respondent.

Where P= 50% α =0.05 level of significance d = 5% margin of error and design effect = 2

4.8. Sampling techniques

4.8.1. Quantitative

Two multistage sampling techniques were used to select kebeles and participants or households. In the first stage, simple random sampling technique was used to select the primary study unit, kebeles. In the second stage, systematic random sampling was used to select the secondary study unit, households.

Accordingly, from a total of 12 kebeles, 4 kebeles were selected randomly using a lottery method. The sample size/numbers of households were allocated to each randomly selected kebele according to proportional size of their households. Both partners (couples) from each household were interviewed separately.

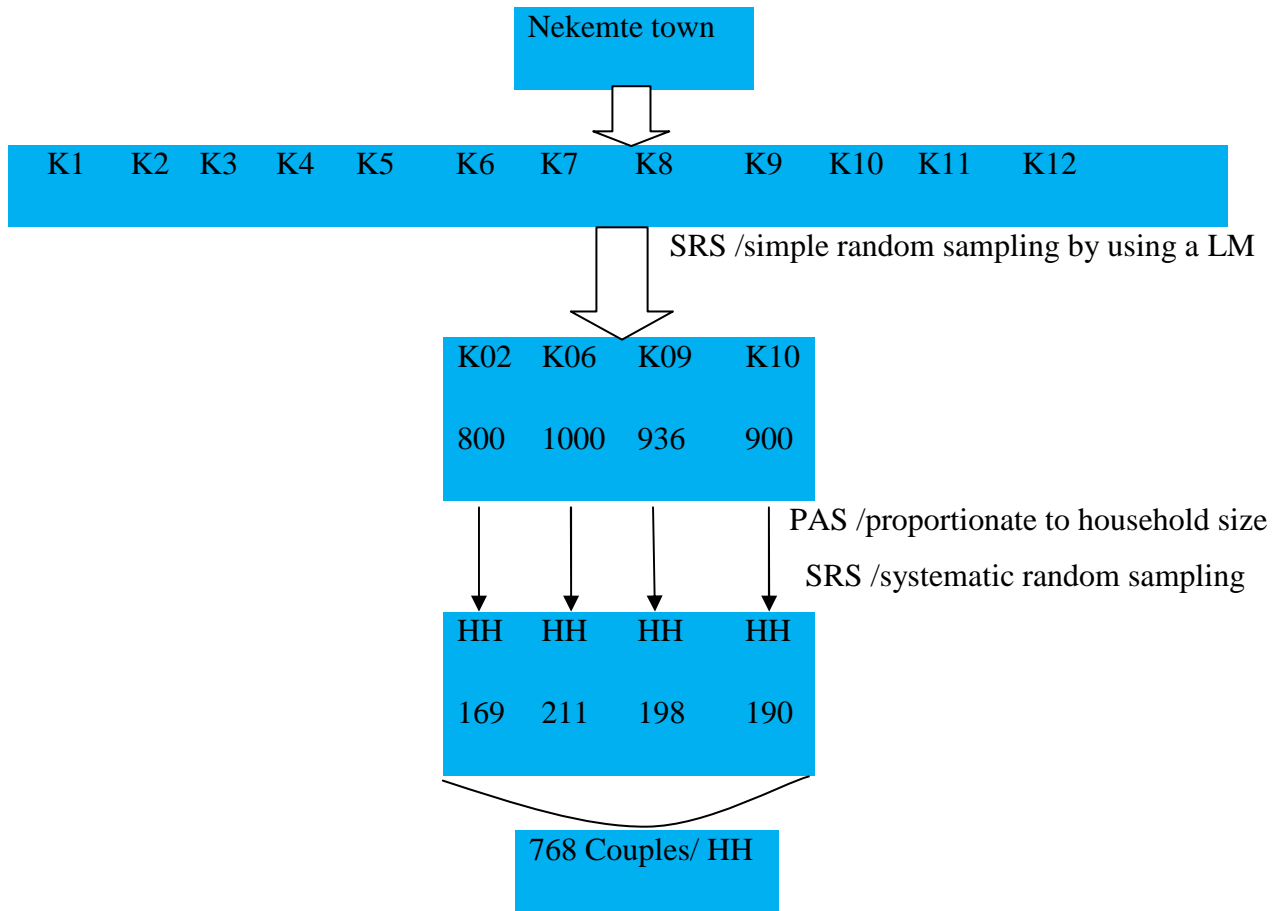


Figure 1: Schematic presentation of the sampling procedures for quantitative data

Key

K1-12 = number of kebeles in Nekemte town

K02, k06, k09 and k10 are kebeles that were selected by simple random sampling using a lottery method.

Proportionate allocation to size (PAS) was used to assign a total eligible households having eligible population for each randomly selected kebele by using the following formula:

$HH_k = n_k / N \times HH$, where

HH_k - Sample of household that allocated for each kebele proportionately

HH - Final sample size calculated of house holds

n_k - Total eligible households of each randomly selected kebele

N - Total eligible households of the randomly selected kebele

At last a total of 768 households were involved and both man and woman from each house hold were interviewed.

4.9. Qualitative sampling

Purposive sampling method was used for the Focus group discussions (FGDs) and in depth interviews (IDIs). Focus group discussions (FGDs) were conducted to gain insight into the main themes for each topic of interest. Four focus group discussions/FGDs (Two FGDs for men and two FGDs for women) were held. Each FGD was composed of 8 participants; therefore a total of 32 people (16 women and 16 men) were participated in the FGDs. Each FGD composed an age stratum: men and women who were 15–24 years old, 25–34 years, and those from 35 to 49 years old. Four separate hour-long FGDs were conducted with eight participants each.

In-depth interviews (IDIs) were conducted among 10 individuals (5 men and 5 women) to explore further emergent FGD themes. The FGDs and IDIs were continued up to point of saturation of idea.

4.10. Study Variables

4.10.1. Independent variable

- Socio demographic variables
- Knowledge about HIV/AIDS and willingness to voluntary HIV counseling and testing (VCT)
- Sexual behavior
- Knowledge about condom and partner attitude towards condom
- HIV risk perception

4.10.2. Dependent variable

- Condom use

4.11.Operational definition

Risk perception of couples is couple' s attitude towards perceiving themselves as susceptible to HIV infection.

Knowledgeable about HIV/AIDS prevention methods if the respondents able to mention at least three or more and if not, not knowledgeable; abstinence, condom use, being faithful and avoid sharing sharp objects.

4.12. Data collection

Data collection were undertaken through pre-tested structured questionnaires' complimented by qualitative methods i.e. focus group discussion and in-depth interviews. To complement the data that was generated by the quantitative survey and to elaborate issues that not have been clearly reflected in the quantitative findings, the qualitative method was used to triangulate the findings.

4.12.1. Data collection Instruments

The structured questionnaire, which was first prepared in English and translated in to Afan Oromo then back to English prior to baseline survey to assure consistency. The structured questionnaire was pre-tested on similar population (5 men and 5 women), in one kebele that was not included in the randomly selected and based on the pretest minor modifications were made on the questionnaire. A pre-tested structured questionnaire in Afan Oromo was used for the main data collection. A semi structured guideline was used for FGDs and IDIs. A tape recorder was used to record the FGDs.

4.12.2. Selection and training of data collectors

Two field teams were established. Each team included: Six females and six males who had completed grade 12 and had experience on data collection were recruited from the town for male and female respondents respectively. Male and female moderator and rapporter were used for men and women FGDs, respectively. The principal investigator and one female conducted the in-depth interview. Two day training was given to team members on the objectives of the study, introducing themselves, systematic sample selection, administering the questionnaire and interviewing. If the participants were not at home after four appointment visits, a house next to the selected house was visited to select a substitute participant. The FGDs were conducted at each of kebele's hall.

4.13. Data Quality Assurance

The structured questionnaire was pretested and assessed for its clarity, understandability and completeness, the sensitivity of the subject matter and pattern of response of questionnaire then minor corrections taken accordingly. Each data collector was taken adequate time for interviewing and was capable enough to get the honest response of the respondent. Each supervisor examined the performance

of the data collectors and corrected any problems encountered together with the principal investigator accordingly. The filled questionnaire submitted to their respective supervisor daily, and then all the collected data were checked for completeness, accuracy and consistency by both the supervisor and principal investigator. The principal investigator collected the completed questionnaires every day and checked each questionnaire for inconsistencies and omissions. Formats with problem were sent back to interviewers for re-interview. The principal investigator and supervisors reinterviewed few selected households to check validity of the data. The principal investigator was responsible for coordination and supervision of the overall data collection. Interview was conducted separately by an interviewer of the same sex. Therefore, by doing so, data contamination was assumed to be minimized. For focus group discussions note was taken by the rapporteur and tape recorded cassette was cross checked at the end of each discussion by the moderator, rapporteur and principal investigator for data completeness and missed data, were recorded in a note book. Interviews were conducted in Afan Oromo, with the moderator and rapporteur fluent in a local language. FGDs were audio-recorded and translated in to English. IDIs were approximately 45 min each, conducted in Afan Oromo language. Interview notes were translated from the local languages to English.

4.14. Data processing and analysis

The collected data were entered and cleaned using epidemiological information (EPI info) version 3.5.1 and analysis was carried using SPSS 15 software statistical package.

After categorizing and defining variables, frequencies and proportions of different variables were computed for description as appropriate. Knowledge about HIV/AIDS prevention methods was categorized as knowledgeable if the respondents able to mention at least three or more and not knowledgeable if unable to mention at least three prevention methods. I.e. abstinence, condom use, being faithful and avoid sharing sharp objects.

Binary logistic regression and odds ratio with 95% CI was computed to assess the presence and degree of association between independent variables and main outcome variable. All variables that were found to be associated with the main outcome variable by having odds ratios that reached statistical significance in the Bivariate model were included in the multivariate model at 95% C.I (P-value< 0.05) to control confounding variables. Qualitative data were transcribed & summarized in to themes and analyzed manually /thematic analysis.

4.15. Ethical considerations

The research was conducted in full accord with principal ethical principles, including: Ethical approval and clearance was obtained from Institutional Review Board, Faculty of Medicine, School of Public Health. Written cooperation letter was submitted to all concerned bodies in the study area. Written permission letter was obtained from the concerned bodies. Each interviewer was given an information sheet to read for participant before deciding whether to participate. Interviewers obtained free and informed consent of all participants. The questionnaires and samples were identified only by numbers. The interview was conducted anonymously and privately. The interview was conducted by interviewer of the same sex. They were informed that the talk was recorded on tape recorder. Scientific accountability was observed as much as possible proper cross referencing and by listing all sources used at the end. The merit of the study was providing knowledge on the dual protection of sexually transmitted diseases and unintended pregnancy. The harm might be psychological painful.

4.16. Dissemination of results: the findings of this study will be disseminated to Oromia regional health bureau, and zonal health bureau of Eastern Wollega. It will be presented to any other stake holders working in this area, to Addis Ababa University.

5. RESULTS

Socio- demographic characteristics of the study participants

A total of 768 households were visited and from these households 1536 individuals (768 couples) were participated in the study, with response rate of 100%. The median age of the study population was 32 years. Female respondents ranged in age from 16 to 49 years (median age of 30 years) and male respondents from 16 to 59 years (median age of 35 years).

Ninety six percent of the study couples were married and 4% were cohabiting. The overwhelming majority of the respondents in the town were ethnically Oromo, 1382(90%) and 804(52.3%) were protestant followed by orthodox, 412(26.8%).

Most of the respondents 1364(88.8%) had some formal education, with 41.4% of men and 37.6% of women having completed grade 7-12 education. About 172(11.2%) of participants had no formal education, more women 52(6.8%) than men 27(3.5%) were illiterate, and fewer women than men (20.6% Vs 33.9%) had been educated beyond secondary school level.

Regarding the occupational status, 273(35.5%) of men were government employed where as 154 (20.1%) of women were government employed. About 44% women were house wives. The median monthly income among those reported, 750 birr for men and 500 birr for women, but 148 (19.3%) of men and 388 (50.5%) of women were not replied their or no monthly income.

Table 1: Socio demographic characteristics of married/ cohabiting couples in Nekemte town, Ethiopia, March, 2010

Characteristics	Men n (%) n=768	Women n (%) n=768	Total n (%) n=1536	
Age	16- 30 years	261 (34.0)	482 (62.8)	743 (48.4)
	30-44years	339 (44.1)	233 (30.3)	572 (37.2)
	≥ 45 years	168 (21.9)	53 (6.9)	221 (14.4)
	Median	35 years	30 years	32 years
Marital status	Married	737 (96.0)	737 (96.0)	1474 (96.0)
	Cohabit	31 (4.0)	31 (4.0)	62 (4.0)
Ethnicity	Oromo	691 (90.0)	691 (90.0)	1382 (90.0)
	Amhara	54 (7.0)	49 (6.4)	103 (6.7)
	Gurage	19 (2.5)	23 (2.9)	42 (2.7)
	Tigre	4 (0.5)	5 (0.7)	9 (0.6)
Religion	Protestant	402 (52.3)	402 (52.3)	804 (52.3)
	Orthodox	206 (26.8)	206 (26.8)	412 (26.8)
	Muslim	130 (16.9)	130 (16.9)	260 (16.9)
	Catholic	30 (4.0)	30 (4.0)	60 (4.0)
Educational status	Illiterate/read & write	70 (9.1)	102 (13.3)	172 (11.2)
	Grade1 -6	120 (15.6)	219 (28.5)	339 (22.1)
	Grade7-12	318 (41.4)	289 (37.6)	607 (39.5)
	College students	9 (1.2)	9 (1.2)	18 (1.2)
	TTI & above	251 (32.7)	149 (19.4)	400 (26.0)
Employment status	Government	273 (35.5)	154 (20.1)	427 (27.8)
	Private	138 (18.0)	45 (5.9)	183 (11.9)
	Merchant	118 (15.4)	123 (16.0)	241 (15.7)
	NGO	92 (12.0)	24 (3.1)	116 (7.6)
	Unemployed	137 (17.8)	78 (10.1)	215 (14.0)
	Students	10 (1.3)	9 (1.2)	19 (1.2)
	House wife	-----	335 (43.6)	335 (21.8)
Individual monthly income	≤ 150 birr	52 (6.8)	71 (9.3)	123 (8.0)
	151-650 birr	229 (29.8)	147 (19.1)	376 (24.5)
	> 650 birr	339 (44.1)	162 (21.1)	501 (32.6)
	Not respond/no income	148 (19.3)	388 (50.5)	536 (34.9)

Knowledge about HIV/AIDS among married or cohabiting men and women in Nekemte town

All respondents reported to have heard of HIV/AIDS. All respondents believed that multiple sexual intercourse leads to contracting STIs including HIV/AIDS. Also they believed that there are prevention methods to avoid HIV acquiring. The proportion who knew about the three or more prevention methods including condom was 97.3 (98.8% men and 95.7% women).

Overwhelming majority of the FGD participants defined ‘*HIV /AIDS as a disease caused by a virus and non curable.*’ They also mentioned how one acquires HIV such as via **sexual intercourse, blood transfusion and sharing sharp materials.**

One man from the second FGD believed that ‘*HIV/AIDS is a supernatural cause so no prevention method is effective.*’ (28 years old, Grade 6 completed)

Majority of FGD respondents stated that the knowledge of HIV/AIDS is become more increasing from time to time that people know *how HIV/AIDS can be transmitted and how to prevent HIV/AIDS* but the major problem is because we are **negligent**, ‘*HIV is only on media, TV and there is no HIV after 12 hours.*’

The most common reported source of information on HIV/AIDS was television/radio (81.2%) and health institutions (80.7%). Posters, religious leaders, friends and spouse were relatively infrequent sources of information.

All the women and men FGD participants agreed that there is no direct discussion about HIV/AIDS among married or cohabiting partners. Majority of the respondents reiterated that the reason for not talking directly is that, if there is direct talk about HIV within marriage or people living together in a stable relationship: some think as they had extramarital sexual affairs, people are shy to talk about sexual matters, infidelity, they mistrust each other and fears that leads to disagreement.

Table 2: HIV/AIDS knowledge among married/ cohabiting couples in Nekemte town, Ethiopia, March, 2010

Question	Men n (%) n=768	Women n(%) n=768	Total n (%) n=1536
Ever heard about STIs & HIV/AIDS			
Yes	768 (100)	768 (100)	1536 (100)
Source of information on HIV/AIDS			
Radio/ TV	630 (82.0)	617 (80.30)	1247 (81.2)
Health institution	617 (80.3)	623 (81.1)	1240 (80.7)
News paper/poster	357 (46.5)	243 (31.6)	600 (39.1)
Religious leaders	335 (43.6)	252 (32.8)	587 (38.2)
Spouse / partner	253 (32.9)	213 (27.7)	466 (30.3)
Friends	249 (32.4)	166 (21.6)	415 (27.0)
People can prevent STIs and HIV/AIDS			
Yes	768 (100)	768 (100)	1536 (100)
Looking carefully, know if someone has HIV			
Yes	91 (11.9)	101 (13.2)	192 (12.5)
No	607 (79.0)	600 (78.1)	1207 (78.6)
Don t know	70 (9.1)	67 (8.7)	137 (8.9)
Multiple sexual contact leads to HIV infection			
Yes	768 (100)	768 (100)	1536 (100)
Knowledge about HIV prevention			
Knowledgeable	759 (98.8)	735 (95.7)	1494 (97.3)
Not knowledgeable	9 (1.2)	33 (4.3)	42 (2.7)
Alcohol consumption and drug abuse can predispose to HIV infection			
Yes	487 (63.4)	548 (71.4)	1035 (67.4)
No	218 (36.6)	220 (28.6)	501 (32.6)

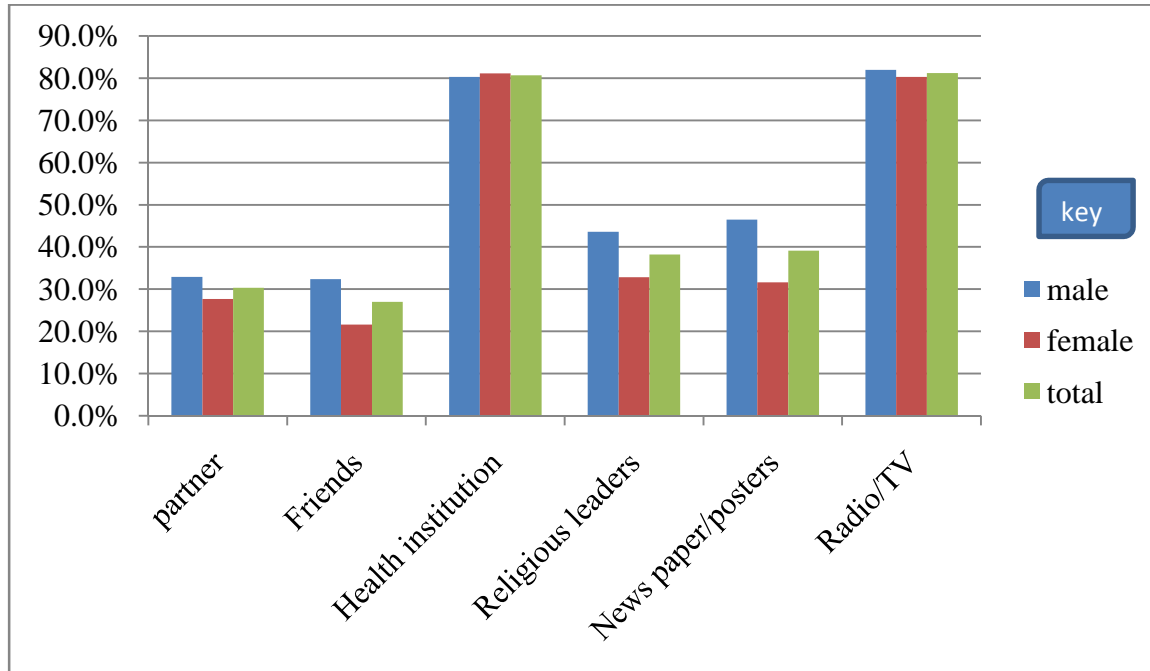


Figure 2: Sources of information on HIV/AIDS among couples in Nekemte Town, Ethiopia, March 2010

Awareness about VCT

All participants reported having heard about voluntary and counseling test for HIV. The proportions of men and women who reported ever being tested for HIV among the couples, 448 (58.3%) and 524 (68.2%), respectively. Among those not ever being tested for HIV, most men 295 (92.2%) and women 234 (96%) were volunteer to undergo HIV test while 25(7.8%) husbands and 10(4%) wives were not volunteer.

Concerning their disclosure status among who reported ever being tested for HIV, out of 68.2% wives tested, 60.8% of men reported that they knew their wives' HIV status and out of 58.3% husbands tested, 58.7% of women reported that they knew their husband's HIV status. But information on HIV status was not asked and obtained due to ethical consideration.

Table 3: Awareness about VCT, ever being HIV tested and disclosure status among married/cohabiting couples in Nekemte town, Ethiopia, March, 2010

Characteristics	Men n (%) n=768	Women n (%) n=768	Total n (%) n=1536
Had heard about VCT			
Yes	768 (100)	768 (100)	1536 (100)
Ever being HIV tested			
Yes	448 (58.3)	524 (68.2)	972 (63.3)
No	320 (41.7)	244 (31.8)	564 (36.7)
Willingness to HIV test			
	n=320	n=244	n=564
Yes	295(92.2)	234(96)	529 (93.8)
No	25(7.8)	10 (4)	35(6.2)
Knew their partner HIV status			
Yes	467 (60.8)	434 (56.5)	901 (58.7)
No	301 (39.2)	334 (43.5)	635 (41.3)

Sexual behavior of the respondents

Out of 768 couples, 69.4% of men and 80.3% of women had not reported engagement in premarital sex. The proportions of married men who reported having had sexual intercourse before marriage were 30.6% and among the women the proportions were 19.7%.

Out of those who had engaged in premarital sex and that they reported married to his/ her first sexual partner was 17.1% and 26.7% husbands and wives respectively. One thousand thirty three (68.8%), of these 605 (81.2%) men and 428 (56.5%) women, of the respondents had first sex at 18 years or age greater than 18 years where as the remainder 469, 31.2% (18.8% men & 43.5% women) had first sex at age less than 18 years. Thirty four (2.3%) of them respond do not knew 1st age at they had sex.

The mean (SD) age at first sexual intercourse of the respondents was 20.62(3.83) and the mean (SD) age of sexual debut for males and females were 21.92 (4.05) and 19.34(3.1) respectively.

Majority of husbands 533 (69.4%) and wives 617 (80.3%) had mentioned that the main reason for first sexual encounter was 'got married'. Other marriage before the current one was reported by 11(1.4%) of males and 9 (1.2%) of females respondents. Fifty (6.5%) husbands and 16 (2.1%) wives reported that they had non marital partner(s). About 42(5.5%) of men and 48(6.3%) of women reported that they knew/suspected their spouse or partner had another sexual partner(s). Polygamous marriage in the study population was very rare. In the household survey, only three men reported having more than one wife.

The proportion of married /cohabit respondents who had had more than one sexual partners was 21.7%, (27.5% of men and 16.0% of women). The proportion who had had sex with someone other than their regular sexual partner (spouse or cohabit partner) in the last 12 months was (2.2%). However, higher among men about 4% than among women (0.5%).

Majority of the FGD discussants agreed that actually there were some people while in marriage engaged in extra marital sexual activities due to negligence, being unfaithful, revenging (lack of transparency and not thinking for others), shyness of discussing the problem among partner, traditional culture like 'Warsa', alcohol drinking, peer pressure, working areas (spouse separation due to job), social as well as economic factors...and premarital sexual intercourse is common today despite HIV/AIDS Wide spread.

A man from the second FGD participants said that "*people are dating many young girls by providing '3m'- money, mobile and mood even if they are married.*" (32 years old, teacher)

Alcohol consumption, consumption of khat and cigarette ever reported in the area, higher among husbands as compared to their wives, 276(35.9%), 150(19.5%), 104(13.5%) and 157(20.4%), 66(8.6%), 5(0.7%) respectively.

Table 4: Couple's reported sexual behavior, Nekemte town, Ethiopia, March, 2010

Variables	Men n (%) n=768	Women n(%) n=768	Total n (%) n=768
Had engaged in premarital sex			
Yes	235 (30.6)	151 (19.7)	386 (25.1)
No	533 (69.4)	617 (80.3)	1150 (74.9)
Age at first sexual intercourse			
Did not know	23 (3.0)	11 (1.4)	34 (2.2)
Less than 18 years	140 (18.2)	329 (42.8)	469 (30.5)
equal or above 18 years	605 (78.8)	428 (55.7)	1033 (67.3)
Reported first sexual partner			
Steady/ causal partner	235 (30.6)	151 (19.7)	386 (25.1)
Husband/ wife	533 (69.4)	617 (80.3)	1150 (74.9)
Reason to had sex the first time			
Married	533 (69.4)	617 (80.3)	1150 (74.9)
Felled in love	107 (13.9)	79(10.3)	186(12.1)
Had desire	110 (14.3)	62 (8.1)	172 (11.2)
Peer pressure/raped/drunk or Got money & others	18 (2.4)	10 (1.3)	28 (1.8)
Married to /cohabit with first sexual partner			
	n=235	n=151	n=386
Yes	40 (17.0)	40 (26.5)	80 (20.7)
No	195 (83.0)	111(73.5)	306 (79.3)
Married to another previously			
Yes	11 (1.4)	9 (1.2)	20 (1.3)
No	757 (98.6)	759 (98.8)	1516 (98.7)
Had non marital partner			
Yes	50 (6.5)	16 (2.1)	66 (4.3)
No	718 (93.5)	752 (97.9)	1470 (95.7)
Life time number of sexual partner			
One/ only spouse	557 (72.5)	645 (84.0)	1202 (78.3)
More than one partners	211 (27.5)	123 (16.0)	334 (21.7)
Number of sexual partner in last 12 months			
One/ only spouse	738 (96.1)	764 (99.5)	1502 (97.8)
More than one partners	30 (3.9)	4 (0.5)	34 (2.2)
suspect/ know that her husband or his wife having another sexual partner			
Yes /suspect	42 (5.5)	48 (6.3)	90 (5.9)
Can t know what s/he does	79 (10.3)	38 (4.9)	117 (7.6)
No	647 (84.2)	682 (88.8)	1329 (86.5)

Respondents self assessment for risk of contracting HIV/AIDS

Concerning respondents' subjective chances of contracting HIV, from a total of 1536, 1214 (79.0%) of them considered themselves at low risk and nil risk for HIV infection. The main reasons mentioned for low risk and nil risk were having faithful partner 86.5% (89.7% of men and 83.3% of women).

Only ninety six (6.3%) of the respondents put their risk of HIV infection at middle or high. More males 59(7.7%) than females 37(4.8%) felt at risk of HIV infection themselves.

Having multiple sexual partner 75% (78% of men and 70.3% of women) and unfaithful partner 62.5% were the main reasons why people consider themselves at risk of contracting HIV.

Table 5: Percentage distributions of couples by HIV risk and reason for risk perception of the respondents, Nekemte town, Ethiopia, March, 2010

Variables	Male n (%)	Female n (%)	Total n (%)
HIV risk perception	n=768	n=768	n=1536
Yes	59 (7.7)	37 (4.8)	96 (6.3)
No	679 (88.4)	697 (90.8)	1376 (89.6)
Don t know	30 (3.9)	34 (4.4)	64 (4.1)
Chance of acquiring HIV	n=768	n=768	n=1536
None/low	574 (74.7)	640 (83.3)	1214 (79.0)
Medium/high	59 (7.7)	37 (4.8)	96 (6.3)
Don t know	135 (17.6)	91 (11.9)	226 (14.7)
Reason for at risk *	n=59	n=37	n=96
Multiple sexual partner (>1)	46 (78.0)	26 (70.3)	72 (75.0)
Mistrust/unfaithful	31 (52.5)	29 (78.4)	60 (62.5)
Unprotected sex	27 (45.8)	12 (32.4)	39 (40.6)
Injury with contaminated sharp	9 (15.3)	5 (13.5)	14 (14.6)
Blood transfusion	7 (11.9)	1 (2.7)	8 (8.3)
Reason for not at risk*	n=709	n=731	n=1440
Faithful	636 (89.7)	609 (83.3)	1245 (86.5)
One partner	316 (44.7)	321 (43.9)	637 (44.2)
Didn t share sharp materials	147 (20.7)	221 (30.2)	368 (25.6)
protected sex	8 (1.1)	3 (0.4)	11 (0.7)

* the sum % is not 100% due to multiple response

Knowledge, attitude toward and condom use among married or cohabiting couples

All respondents reported having heard about condom and knew at least one potential source of condoms. Of whom, 1132(73.7%) of respondents knew that condom can prevent STIs including HIV infection and unintended pregnancy. Nearly three fourth of couples, 583(75.9%) men Vs 549 (71.5%) women recognized the dual protection of condom. There was a significant difference about condom knowledge between men and women (p-value = 0.049).

All FGD group participants reported that they ever heard about condom and they knew that condoms could be used for dual risk prevention.

The proportion who reported that they had ever used condom was low (5.4%), 6.1% males compared to 4.7% females whether consistently or occasionally. This might be with their spouse or other partner (with non marital partner or before marriage /cohabitation).

Only 25(3.3%) of both married/cohabiting partners reported that they had ever used condoms consistently or occasionally with their spouse or cohabiting partner.

Concerning condom use during the last sexual intercourse in the past 12 months, married/cohabit males reported 34 (4.4%) condom use irrespective of type of partner and 23 (3.0%) condom use with cohabiting or married partner either regularly or occasionally. The corresponding proportion of condom use during the last sexual intercourse in the past 12 months for married or cohabiting females was 27(3.5%) irrespective of type of partner and 23 (3.0%) with married/cohabit partner irrespective of consistence use. This suggests that 1.4% (simply implying that 4.4% minus 3%) condom use in last 12 months by married or cohabit males involved non-regular partners as compared to 0.5% of females. It is not conclusively clear who a non regular partner is. He or she could be a marriage/cohabiting partner, or any person with a regular sexual

relationship. Whereas condom use in last 12 months by married females was almost confined to regular partners.

Out of 61(4.0%) currently using condom, 26(42.6%) of couples (38.2% men and 48.1% women) reported consistent use of condom while the rest 35(57.4%) of the respondents, 21(61.8%) of men and 14(51.9%) of women reported occasional use.

For both married/cohabiting male and female respondents, there was a little change between ever use and current use: from 6.1 % to 4.4% for males and from 4.7% to 3.3% for females. This indicates that condoms are not adopted or used among married or cohabitation couple. There was no significant difference about ever use of condom in both sexes (p-value= 0.216)

In general, consistency of reporting within couples was good because 96.7% of couples, both partners said they had not ever used condoms with their spouse, while 3.3%; both said they had ever used condoms. Also 97.0% of couples, both partners said they currently not using condoms with their spouse, while 3.0%; both said they were using condoms regularly or occasionally.

Table 6: Knowledge and condom use among couples in Nekemte town, Ethiopia, March, 2010

Variables	Men n (%) n=768	Women n (%) n=768	Total n (%) n=1536
Ever heard about condom			
Yes	768 (100)	768 (100)	1536 (100)
Potential source of condom			
Health facility	679 (88.4)	674 (87.8)	1353 (88.1)
Private pharmacy	491 (63.9)	417 (54.3)	908 (59.1)
Shops	525 (68.4)	508 (66.1)	1033 (67.3)
Hotels/bars	191 (24.9)	81 (10.5)	272 (17.7)
know condom as dual protection			
Yes	583 (75.9)	549 (71.5)	1132 (73.7)
No	185 (24.1)	219 (28.5)	404 (26.3)
Ever used condom			
Yes	47 (6.1) (95% CI 4.4, 7.8%)	36 (4.7) (95% CI 3.2, 6.2%)	83 (5.4) (95% CI 4.3, 6.5%)
No	721 (93.9)	732 (95.3)	1453 (94.6)
Used condom with spouse			
Yes	25 (3.3)	25 (3.3)	50 (3.3)
No	743 (96.7)	743 (96.7)	1486 (96.7)
Condom use in last 12 months			
Yes	34 (4.4) (95% CI 2.9, 5.9%)	27 (3.5) (95% CI 2.2, 4.8%)	61 (4.0) (95% CI 3.0, 5.0%)
No	734 (95.6)	741 (96.5)	1475 (96.0)
Frequency of use in last 12 months			
Always	n=34 13 (38.2)	n=27 13 (48.1)	n=61 26 (42.6)
Occasional	21 (61.8)	14 (51.9)	35 (57.4)

Respondents were mentioned different sources of condom including health institution, 1353(88.1%), shops, 1033 (67.3%), pharmacy 908(59.0%).

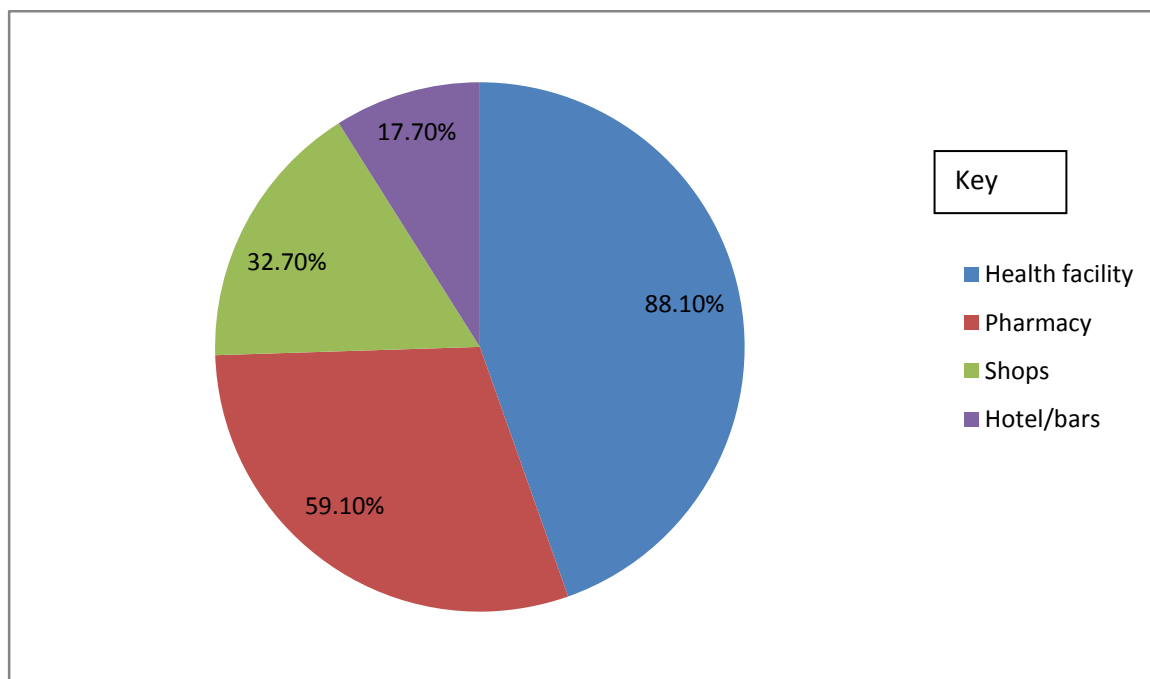


Figure 3: Source of condom mentioned by couples in Nekemte town, Ethiopia, March 2010

Factors affecting uptake of condom use

Among those who used condom, the reasons for condom use were HIV/AIDS prevention 38(45.8%), to prevent both HIV infection and pregnancy 33(39.8%), to prevent pregnancy 12(14.4%).

Most of FGD respondents agreed that to use condom in marriage there should be a reason like one is positive and other is negative or for child spacing if doctors recommend.

“I never use condoms for pregnancy prevention, my wife can use modern contraceptive for prevention of unintended pregnancy but I can use condoms for HIV prevention because I do not have other alternative.”

a man from the third FGD participant. (30 years old, 12 grades completed)

“ I am HIV positive so I use condom with my husband always to prevent HIV transmission. But I faced a great challenge to adopt it because my husband refused and unable to belief.” (24 years old woman, house wife and grade 4 completed)

The reasons for non use of condom or inconsistent use were trusting partner 1189(78.7%), use of other contraceptive 549(36.4%), dislike 316(20.9%), negligence 225 (14.9%), religion prohibition 144(9.5%) and decrease sexual pleasure 86(5.7%).

Majority of the FGD participants mentioned that many married or cohabiting people don't accept /approve condom use within marriage because condom use within marriage or stable sexual relationship is considered as a sign of mistrust; being unfaithful with one partner, killing a human being, using modern contraceptives like pills and injections to prevent unintended pregnancy, as well as relate condom use with prostitution and commercial sex workers, promiscuity but not to prevent unintended pregnancy, condoms decrease sexual pleasure; do not like it.

Out of 10 respondents of in-depth interview, 7 of them respond that using condom with spouse: one not trusting partner, unfaithful, she is not a prostitute and perceiving as free of STIs and HIV/AIDS as well as using other family planning method for preventing unwanted pregnancy.

“There is no need of using condoms with my wife. I am a married man and I do not support the use of condoms forever because I trust my wife, she is not a prostitutes and using it is a sign, killing generation.” (58 years old Man, Married, teacher).

‘‘I have used condom with my spouse to prevent pregnancy. However, I didn’t feel comfortable because no flesh to flesh contact.’’ (25 years old man, Grade 7 completed).

A woman from the first FGD and a man from the second FGD said *‘‘ marriage itself not only grant to prevent HIV transmission but also having a regular test is needed because everybody can make a mistakes due to peer pressure, alcohol drinking, journey, working at distances from family ... and marriage without blood test is so common. So using condom always is a best way.’’*

Table 7: Common reasons mentioned for non use of condom / inconsistent use among couples in**Nekemte town, Ethiopia, March 2010**

Reasons mentioned for non use or inconsistency use *	Male n=755 n (%)	Female n=755 n (%)	Total n=1510 n (%)
Trust /faithful partner	609 (80.7)	580 (76.8)	1189 (78.7)
used other contraceptive	229 (30.3)	320 (42.4)	549 (36.4)
Don't like it	198 (26.2)	118 (15.6)	316 (20.9)
Negligence	110 (14.6)	115 (15.2)	225 (14.9)
Religion prohibition	69 (9.1)	75 (9.9)	144 (9.5)
Decrease sexual pleasure	52 (6.9)	34 (4.5)	86 (5.7)
Ashamed to ask partner	26 (3.4)	41 (5.4)	67 (4.4)
To have child	15 (2.0)	48 (6.4)	63 (4.2)
Not know how to use	30 (3.9)	32 (4.2)	62 (4.1)
Partner objected	28 (3.7)	15 (2.0)	43 (2.8)
Ashamed to buy	24 (3.1)	11 (1.5)	35 (2.3)
Reasons reported for use	N=47	N=36	N=83
To prevent unintended pregnancy	5 (10.6)	7 (19.4)	12 (14.4)
To prevent HIV infection	22 (46.8)	16 (44.5)	38 (45.8)
To prevent HIV infection and unwanted pregnancy	20 (42.6)	13 (36.1)	33 (39.8)

* sum of the % is greater than 100% because of multiple responses

Attitude of couples toward condom

Most of the respondents had some negative attitudes towards condom use. About 88% of the married/cohabiting respondents not had ever discussed about condoms as a contraceptive method.

All the women and men FGD participants agreed that there is no discussion about condom among married or cohabiting partners but family planning for birth spacing.

The majority of the participants mentioned that the reason for not discussing about condom within marriage or people living together in a stable relationship they mistrust each other, people are shy to talk about sexual matters, some think as they had extramarital sexual affairs, being unfaithful.

About 73% of married/cohabiting respondents agreed that the reason to use a condom is because one does not trust the partner. Females are more to agree than males that the reason to use a condom is because one does not trust his/her partner (76.7% of women Vs 67.9% of men).

Even with the generalization of the HIV epidemic to the general population HIV/AIDS, only 16.7% (20.6% males and 12.9% females) of the married/cohabiting respondents agreed that a married/cohabit couple can use condoms every time they have sex to protect themselves, but only 4% currently using condom and 5.4% had ever used.

A few of married /cohabiting participants (16.1%) agreed that it is acceptable for a married/cohabiting couple to use condoms. Similarly, only 17.2% of married/cohabiting respondents agreed that it is acceptable for a married woman to ask her husband to use a condom. This resistance, even in the face of a death threat, is a clear manifestation of how strong they are opposed to condom use in marriage. But half of respondents (52.9% males and 47.1% females) not agreed that there is nothing to do to protect themselves,

probably if either sex contract HIV/STIs from outside or before marriage.

However, about half of men 405(52.7%) and women 477(62.1%) not believed that condom use is a practical protective option against HIV/AIDS in marriage.

The suggestion of using condoms as, prevention of unwanted pregnancy and STI or HIV/AIDS, was not supported by most of women and men in the groups.

“Condom use among marriage is not as such common and highly stigmatized. I have tested for HIV and the counselor also advice me to bring my husband but he refused. His [partner] first wife was died even though I don’t know the cause. Therefore, I suspect him and asked one day to use condom; however, he is not accepted rather than asking me why do you suspect me, if you want, you can separate.... I cannot ask him to use a condom again and that is so hard.....”(35 years old woman, house wife)

Table 8: Response of respondents on specific statements about condoms, by couples in Nekemte town, Ethiopia, March 2010

Statement	Men n (%) n=768	Women n (%) n=768	Total n (%) n=1536
Partner ever discussion about condom			
Yes	95 (12.4)	88 (11.5)	183 (11.9)
No	673 (87.6)	680(88.5)	1353 (88.1)
Married/cohabit couple can use condom every time they have sex			
Agree	158 (20.6)	99 (12.9)	257 (16.7)
Not sure	70 (9.1)	68 (8.9)	138 (9.0)
Disagree	540 (70.3)	601 (78.2)	1141 (74.3)
Acceptable to use condom with spouse			
Yes	144 (18.8)	103 (13.4)	247 (16.1)
No	557 (72.5)	603 (78.5)	1160 (75.5)
Don't know	67 (8.7)	62 (8.1)	129 (8.4)
Using condom with spouse is a sign of mistrusting partner			
Agree	535 (69.7)	589 (76.7)	1124 (73.2)
Not sure	65 (8.5)	51 (6.6)	116 (7.6)
Disagree	168 (21.8)	128 (16.7)	296 (19.2)
Acceptable for a married /cohabit woman to ask her husband to use a condom			
Yes	154 (20.0)	109 (14.2)	263 (17.1)
No	552 (71.9)	579 (75.4)	1131 (73.6)
Don't know	62 (8.1)	80 (10.4)	142 (9.3)
There is nothing to do if one got HIV /STIs from outside the marriage			
Agree	253 (32.9)	294 (38.3)	547 (35.6)
Not sure	109 (14.2)	112 (14.6)	221(14.4)
Disagree	406 (52.9)	362 (47.1)	768 (50.0)
Condom use is a practical protective option against HIV/AIDS			
Yes	363 (47.3)	291 (37.9)	654 (42.6)
No	405 (52.7)	477 (62.1)	882 (57.4)

In bivariate analysis; age, marital status, number of life time sexual partners, Perceived risk of HIV infection, suspecting husband/wife having another sexual partner, discussion about condom and approval of condom use within marriage were significantly associated with condom use in both sexes. However, in multivariate analysis, number of life time sexual partners, perceived risk of HIV infection, suspecting his/her partner having another sexual partner and discussion about condom had significant association with condom use in both sexes. (Table 9 and 10)

Male respondents who approved condom use within marriage and suspecting spouse having another partner were found to be more likely to use condom. (AOR= 4.3 (95% CI, 1.06-17.6 and 4.6 (95% CI, 1.06-20) respectively. (Table 10)

Cohabiting women were found to be more likely to use condom. AOR= 8.2 (95%CI, 1.7-39.1) (Table 9)

Married men were more likely to have premarital sex, multiple sexual partners [extramarital partners, number of life time sexual partners, more than one and number of (more than one) sexual partners in last 12 months] than their female counter parts. Married men were three times more likely to have extra marital partners than their female counter parts (COR= 3.27 (95%CI, 1.84-5.80). Married females were less likely to engage in risky sexual behaviors than married males. (Table 11)

Table 9: Factors associated with condom use in females, Nekemte town, Ethiopia, March, 2010

Characteristics	Condom use (n= 768)			
	Yes	No	Crude OR (95% CI)	AOR (95%CI)
Age in years				
< 35	33	562	3.3 (1.01-10.9)*	0.7 (0.2-2.3)
≥ 35	3	170	1	1
Marital status				
Married	24	713	1	1
Cohabiting	12	19	18.7 (8.1-43.0)*	8.2 (1.7-39.1)*
Educational status				
Illiterate/read & write	5	97	1	1
Literate	31	635	0.9(0.3-2.4)	0.917 (0.2-3.1)
Number of life time sexual partner				
One	10	635	1	1
More than one	26	97	17.0 (9.9-36.3)*	6.3 (2.2-17.5)*
Perceived risk of HIV				
Yes	17	20	31.8 (14.4-70.2)*	9.5 (2.6-34.5)*
No	19	712	1	1
Suspect spouse				
Yes	18	86	9.7 (4.8-19.6)*	0.6 (0.1-2.4)
No	18	664	1	1
Knew condom as dual protec				
Yes	36	513	-----	-----
No	0	219	1	1
Discussion about condom				
Yes	25	63	24.1 (11.3-51.3)*	14.3 (5.1-40.0)*
No	11	669	1	1
Approval of condom within marriage				
Agree	23	80	4.7 (2.5-8.6)*	1.1 (0.3-3.5)
mixed/disagree	13	652	1	1

* statistically significant at P-value < 0.05

Table 10: Factors associated with condom use in males, Nekemte town, Ethiopia, March, 2010

Characteristics	condom use		(n=768)	
	Yes	No	Crude OR (95% CI)	AOR (95% CI)
Age in years				
< 35	40	351	6.0(2.6-13.6)*	2.7 (0.5-13.1)
≥ 35	7	370	1	1
Marital status				
Married	32	705	1	1
Cohabiting	15	16	20.6 (9.3-45.4)*	3.3 (0.3 -36.0)
Educational status				
Illiterate/read & write	4	66	1	1
Literate	43	655	1.08 (0.3-3.1)	0.3 (0.03-2.9)
Number of life time sexual partner				
One	5	552	1	1
More than one	42	169	27.4 (10.6-70.4)*	236.8 (30.7-1824.7)*
Perceived risk of HIV				
Yes	32	27	54.8 (26.5-113.0)*	26.6 (6.2-113.5)*
No	15	694	1	1
Suspect spouse				
Yes	25	96	7.3 (4.0-13.6)*	4.6 (1.06-20.0)*
No	22	625	1	1
Knew condom as dual protec				
Yes	46	537	15.7 (2.1-115.0)*	32.9 (0.1-6943.6)
No	1	184	1	1
Discussion about condom				
Yes	33	62	25.0 (12.7-49.3)*	427 (56.1-32446.6)*
No	14	659	1	1
Approval of condom within marriage				
Agree	23	121	14.4 (7.0-29.5)*	4.3 (1.06-17.6)*
mixed/disagree	24	600	1	1

* statistically significant at P-value < 0.05

Table 11: Comparison of men and women on risky sexual behaviors of couples in Nekemte town, Ethiopia, March, 2010

Characteristics	Men (n)	Women(n)	COR (95% CI)	P-value
Premarital sex				
Yes	235	151	1.80 (1.42-2.27)	0.000
No	533	617		
Extra marital partner				
Yes	50	16	3.27 (1.84-5.80)	0.000
No	718	752		
No of life time sexual partner				
One	557	645	1.98 (1.54-2.55)	0.000
More than one	211	123		
No of sexual partner in 12 months				
One	738	764	7.76 (2.72-22.14)	0.000
More than one	30	4		
Other marriage before the current one reported				
Yes	11	9	1.22 (0.50-2.94)	0.653
No	757	759		

6. DISCUSSION

The prevalence of premarital sex was (25.1%) and extramarital partners (4.3%) was high as compared to the level of condom use reported among the respondents which was (5.4%) low. The frequency of premarital sex (30.6%) and extra marital partner (6.5%) were higher among men than women, with the corresponding frequency 19.7% and 2.1%. Reported number of sexual partner in last 12 months prior to the study was more in men than women (about 4% Vs 0.5%). The 2005 EDHS report showed that 9% of men and 3% of women aged 15-49 years had sex with someone other than their spouse /cohabiting partner a year before the survey (12). Although this figures is lower than EDHS report, the findings indicate that risky sexual behaviors within marriage.

The cumulative effect of physiological vulnerability of young women, their early age at marriage and sexual debut, the inability of many women to ask their partners to use a condom, and the high risk behavior of their male partners make women more vulnerable to infection than men (12). This study also found that married women are vulnerable to HIV and other sexually transmitted infections (STIs) because of risky sexual behaviors among their husbands. Married men were three times more likely to have extra marital sexual behaviors than their female counter parts (COR= 3.27 (95%CI, 1.84-5.80). Married females were less likely to engage in risky sexual behaviors than married males. Yet, in this study wives *perceive* themselves to be at much lower risk than their husbands (4.8% Vs 7.7%). This may indicate that much of women's worry about HIV is driven by their uncertainty regarding their spouses' extra-marital sexual relationships and the potential risks they pose. One study found that "men [were] twice as likely as women to bring HIV infection into the marriage, presumably through extra-marital sexual behaviors" (34).

This study revealed that the knowledge of HIV/AIDS among couples is widespread and all respondents reported to have heard about HIV/AIDS. This finding is almost similar with EDHS 2005; knowledge of AIDS is widespread in Ethiopia; 90 percent of women 15-49 years and 97 percent of men 15-49 years have heard of AIDS and 94.7% of men and 98.4% of women in Oromia (12).

The study also found that the proportion of study population that knew condom as a method of dual protection against the risk of pregnancy and HIV infection was high (73.7%). Men are more knowledgeable about condoms than women. Despite this, only 3.0% of both partners reported that they had used condom with their married or cohabiting partner in the past 12 months regularly or occasionally. Knowing that condoms protect against pregnancy and HIV/AIDS is a necessary precondition for their acceptance and use; though, such knowledge is a necessary, it not sufficient condition for use.

Out of 61(4.0%) currently using condom, 26(42.6%) of couples (38.2% men and 48.1% women) reported consistent use of condom while the rest 35(57.4%) of the respondents, 21(61.8%) of men and 14(51.9%) of women reported occasional use. Condom use is an important tool in the fight to curtail the spread of HIV/AIDS, although truly effective protection would require condom use at every sexual encounter.

In some ways these findings are supported by other studies conducted in Southern and Eastern Africa: Knowledge of condoms is widespread while its use within marriage remains very low and attitudes toward condoms were negative (26, 27, 32). In South Africa, where 70% of study participants knew of condoms for dual risk prevention but 7.5% used dual methods and 4.5% condoms alone (26) and in Kenya , only 8% of married or cohabiting with a partner were currently using condoms (32). However, a study conducted in North Ethiopia, Tigray showed that only 41.7% of respondents had heard of dual prevention methods, and this study also showed only 5.1% of the respondents had used a condom in the last time they had sex, 5.9% dual methods or 0.6% use condoms alone (25). This prevalence is almost lower than those found in above studies. Because condoms are not a popular method of protection, especially within the

primary sexual relationship and there is change from time to time or place to place. In South Africa, 10% of both partners reported had used condom with their spouse which is much higher than 3.3% in this study (28). This difference might be South Africa has high HIV prevalence and condom use highly promoted.

Even with the generalization wide spread of the HIV epidemic to the general population HIV/AIDS, only 16.7% of the married/cohabiting respondents agreed that a married/cohabiting couple can use condoms every time they have sex to protect themselves. Sixteen percent of the survey respondents approved of condom use within marriage or stable relationship which is smaller than in Tigray (70.3%), South Africa (42%) and Kenya (39%) (25, 27, 32). Similarly, only 17.2% married/cohabiting respondents agreed that it is acceptable for a married woman to ask her husband to use a condom. This resistance, even in the face of a death threat, is a clear indication of how strong they are opposed to condom use in marriage, although condoms are the most effective barrier method because they can be used for disease prevention in conjunction with other methods, or alone for the dual purpose of protecting against pregnancy and disease transmission (18).

Most FGD participants don't want to use condoms within marriage. So there was clear opposition to the use of condoms within marriage. In this setting, condom use within marriage is not just neglected (10), it is highly stigmatized.

The predominantly mentioned reasons for non-use of condom/ inconsistency use were 78.7% trusting partner, 36.4% use of other contraceptive, 20.9% dislike, 14.9% negligence, 9.5% religion prohibition and 5.7% decrease sexual pleasure.

The findings from FGD, barriers to use condoms was identified as its association with unfaithfulness, not trusting partners, promiscuous and used with commercial sex workers or prostitutes, leading to a consequence of suspension and hence a potential cause for break up. Therefore, the adoption of condom

use in a long-term relationship, where they have not been previously used, threatens the trust that is implied (whether it exists or not) in most of such relationships.

These findings were consistent with numerous other FGD studies, revealed different barriers to use condom among marriage/cohabitation such as condoms associated with unfaithfulness, infidelity, lack of trusting partners, creating suspension, promiscuous and lead to disagreement (25, 27, 32). Condoms are considered to be signs of mistrust, resulting in disagreement, suspicion and mistrust, just as in South Africa (26).

The majority of FGD participants agreed that few people would discuss HIV directly for fear of suspicion or relationship conflict. This was consistent with focus group discussions conducted in four countries (24, 27, 31 & 32). Participants in these agreed that discussing sex, condom and STDs especially HIV/AIDS was difficult within couples.

7. STRENGTHS AND LIMITATIONS OF THE STUDY

STRENGTHS

- It was community based study
- Study based on data collected from both the husband and the wife. The results of survey are from both the husband and wife ideas on couples condom use, because men play an important role in the realization of reproductive goals.
- The study was supported by qualitative data, which used to explore the societal cultural norms and values that shape the influence on couple's condom use behavior.
- Participants and interviewers were of the same sex
- HIV status were not asked

LIMITATIONS

- Since the study touches very sensitive and intimate issues, may mask some truth information, the possibility of underestimation or over report cannot be ruled out.
- Surveys of sexual behavior or asking sensitive questions are always subject to presentation bias (that is, participants giving socially desirable responses rather than truthful ones). Nonetheless, there was probably at least some presentation bias even though the survey was done anonymously i.e. interviewer and respondents of the same sex and privately.
- Condom use with extramarital partners was not asked.

8. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Knowledge of HIV/AIDS as well as knowledge about the role of condoms in preventing unintended pregnancy and STIs, including HIV/AIDS is wide spread. Yet some married/cohabit partner still engage in multiple sexual partners and unprotected sex. Despite this the levels of condom use have remained low even among high-risk groups such as those with multiple sex partners. Spouse communication about a potential risky behavior and HIV risk was low.

The main reason for the low level use of condoms among married and cohabitation couples is the negative perceived association of condom use with promiscuity, a behavior that leads to mistrust and suspension within relationships and stretching them almost to a breaking point. They contend that the reason to use a condom, other than for preventing a pregnancy is because you do not trust your sexual partner.

Low levels of condom use within marriage do not necessarily imply high risk of HIV/AIDS or other STIs. If both members of a married couple are free of infection and the couple remains monogamous, their risk of contracting an STI is virtually nil, and other modern contraceptives are available for family planning. Therefore, married couples or cohabiting partners must protect themselves from HIV/AIDS by adopting preventive and practical measures which they accept and are comfortable with.

RECOMMENDATIONS

- ❖ Condom promotion should target both the husband and wife to strength and encourage condom use within marriage. Greater male involvement is needed in order to improve and protect the sexual and reproductive well being of both men and women. Both partners should be targeted for community based family planning counseling by involving men at community based services and designing appropriate FP IEC/BCC strategies, counseling and service to reach men.
- ❖ Spouse communication should be promoted through educating & encouraging women to communicate with their partners on RH issues and involving men at community based reproductive health counseling & services.
- ❖ Effort to promote condoms to the population needs to be accompanied with a mix interventions targeted to address sexual behavior, socio-cultural norms and values of the community.
- ❖ There is a need to do further research on determinants of condom use among couples.

9. REFERENCES

1. Worley H. Obstacles remain to wide adoption of female condom. Population Reference Bureau Nov. 2003.
2. UNAIDS 'Women and girls'.
<http://www.unaids.org/en/policyAndpractice/keypopulations/WomenGirls/default.asp> (accessed August 30/2009)
3. The president's Emergency plan for AIDS Relief; 2008 country profile, Ethiopia.
<http://2006-2009.pepfar.gov/press/81577.htm> (cited 2009 August 08)
4. Ethiopian public health association: Identifying HIV/AIDS, STI & TB research gaps & Priority setting agenda in Ethiopia, March 2005.
5. FMOH, HAPCO, AAU, CSA and EPHA. HIV/AIDS Behavioral surveillance survey of Ethiopia, 2001.
6. Molla M, Berhane Y, Lindtjon B. Traditional values of virginity and sexual behavior in a rural Ethiopian youth: Results from a cross sectional study: BMC public health, 2008, Jan. 9;8(1):9
7. Molla M, Emmelin M, Berhane Y, Lindtjon B. Readiness of youth in rural Ethiopia to seek health services for sexually transmitted infections, AJA, 2009, 8(2):135-146.
8. UNAIDS: making condoms work for HIV prevention Cutting-edge Perspectives, June 2004.
<http://www.unaids.org> (accessed August 09/2009)
9. Gardner R, Blackburn R, Upadhyay U. Closing the condom gap. Population Report Health Series, Number 9. Baltimore: Johns Hopkins Population Information Program, Johns Hopkins School of Public Health; 1999.

10. Ali M, Cleland J, Shah I. Condom use within marriage: A neglected HIV intervention, bulletin of the WHO.2004; 82(3):180-186.
11. Cleland J, Ali M, Shah I. Trends in protective behaviour among single vs. married young women in Sub-Saharan Africa. The big picture- Reproductive Health Matters. 2006; 14(28):17–22.
12. Central Statistics Authority, ORC Macro, Ethiopia DHS, 2005, Addis Ababa Ethiopia, Calverton, Maryland, USA, September 2006.
13. MOH of Ethiopia, first report, 1996.
14. Bankole A, Desired fertility and fertility behaviour among the Yoruba of Nigeria: a study of couple preferences and subsequent fertility, Population Studies, 1995, 49(2):317–328.
15. Becker S and Costenbader E, Husbands 'and wives 'reports of contraceptive use, Studies in Family Planning, 2001, 32(2):111–128.
16. Santos NJS et al. HIV-positive women, reproduction and sexuality. Rev. Saude Publica. 2002; 36(4 suppl):12–23.
17. Federal Ministry of Health: Single Point HIV Prevalence Estimate, June 2007.
18. Kim Best: Family planning & the prevention of mother-to- child transmission of HIV, A Review of the Literature, No, WP04-01, Family health international, 2004.
19. 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.
20. WHO: 1998; Progress in human reproductive health research; family planning in the era of HIV/AIDS, WHO, 1998; no.48, part (1).
21. USAID: interagency gender working group, subcommittee on men and reproductive health; theme statement Dual protection (from a gender perspective), 2006
22. USAID: FP/HIV integration technical guidance USAID supported field programs, 2003.

23. UNAIDS: Report on the global AIDS epidemic. 2008
<http://www.unaids.org/en/knowledgecentre/HIVData/GlobalReport/2008/2008-Global-report.asp>
(accessed August 28/2009)
24. Kapiga SH, Lwihula GK, Shao JF, Hunter DJ. Predictors of AIDS knowledge, condom use and high-risk sexual behaviour among women in Dar-es-Salaam, Tanzania. *International journal of STD & AIDS*. 1995; 6(3):175-83.
25. 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 in Nigeria, summary report no 36-1999.
26. Myer L, Morroni C, Mathews C, Little F. Dual Method Use in South Africa. *International Family Planning Perspectives*. 2002; 28(2):119–121.
27. Morroni C, Smit J, McFadyen L, Mqhayi M, Beksinska M. Dual Protection against Sexually Transmitted Infections and Pregnancy in South Africa. *AJRH* 2003; 7(2) abstract.
<http://ajol.info/index.php/ajrh/index> (accessed August 28/2009)
28. Innocent NM, James N, Fred AE, Jonathan O, Natal A. Risk Perception and Condom Use in Uganda. *African Population Studies*. 2003; 18 (1): 67-80.
29. Bauni EK, Jarabi BO. The Low Acceptability and Use of Condoms within Marriage: Evidence from Nakuru District, Kenya. *Family Health International Kenya, African population studies*. 2003; 18(1): 51-56.
30. Maharaj P, Cleland J. Condom Use within Marital and Cohabiting partnerships in KwaZulu-Natal, South Africa. *Studies in family planning*. 2004; 35(2): 116–124.

31. Maharaj P, Cleland J. Risk Perception and Condom Use among Married or Cohabiting Couples in KwaZulu-Natal, South Africa. *International Family Planning Perspectives*. 2005; 31(1): 24-29.
32. Teklu T, Davey G. Which factors influence North Ethiopian adults' use of dual protection from unintended pregnancy and HIV/AIDS? *Ethiop. J. Health. Dev.* 2008; 22(3): 226-231.
33. Maharaja P., school of development studies, university of Natal, Durban: Obstacles to negotiating dual protection: perspectives of men and women. *African journal of reproductive health*, Dec 2001; 5(3):150-161.
34. Carpenter LM, Kamali A, Rubrantwari A, Malamba SS, Whitworth JA. "Rates of HIV-1 transmission within marriage in rural Uganda in relation to HIV sero-status of the partners." *AIDS*; 1999; 13:1083-1089.

10. ANNEXES

Annex 1. Information sheet

My name is ----- and I am recruited to collect data. Can you allow me to share your time?

Thank you for allowing me to share your precious time for a brief discussion about a study to be conducted among married/cohabiting couples in this town. You are randomly selected to participate in the study. Before I go to the interview, I will request you to listen carefully to what I am going to read to you about the purpose and general condition of the study and I will like you to tell me whether you agree or disagree to participate in this study.

The purpose of this study is to assess sexual behavior and condom use among married/cohabiting couples living in this town. The information you gave us could help to design appropriate risk reduction methods for HIV. The interview involves intimate and private life questions. So private setting is needed in which you and I will carry out the interview for 30 minutes. I would like to assure you that this privacy should strictly be maintained throughout. A code/household number will identify every participant and no need to write the name/address of respondent. No reports of the study will ever identify you. A report of the results is only information about the total group. You have a full right to participate throughout if voluntary or right to discontinue (withdraw) at any time or never participate (refuse) in the study without consequence to subsequent care. For further information you can contact the investigator through cell phone 0912040614; e-mail: tolragodhuga@gmail.com and AAU, IRB Tel: 0111553873; e-mail:aaumfirb@yahoo.com.

Are you willing to participate in the study?

Yes ----- No-----

Signature of the interviewer -----

(Signature of the interviewer certifying that informed consent has been given by the respondent/on behalf of one)

Questionnaire identification number (house hold number _____ and kebele number _____)

Interviewer code /_____/ Name _____

Date of interview /____/____/____ Time at the beginning of interview-----

Informed consent form

I the undersigned have been informed that the purpose of this particular research project is to assess sexual behavior and condom use among married/ cohabiting couples in Nekemte town. I have been informed that I am going to respond to this question by answering what I know concerning the issue. I have been informed that the information I give will be used only for the purpose of this study; my identity, the information I give will be treated confidentially. I have also been informed that I can refuse to participate in the study or not to respond to questions I am not interested. Furthermore I have been informed that I can stop responding to the questions at any time in the process. For detail information you can contact the investigator through cell phone 0912040614; e-mail: tolragodhuga@gmail.com and AAU, IRB Tel: 0111553873;

e-mail:aaumfirb@yahoo.com.

Based on the above information I agree to participate in the research voluntarily with the hope of contributing (on behalf of one) to the effort of knowing sexual behavior and condom use among married/ cohabiting couples in Nekemte town.

Signature: _____

Date: _____

Questionnaire

Structured English Questionnaire			
Part one: Socio demographic information			
NO	QUESTIONS	RESPONSES AND CODING	SKIP TO
101	How old are you?	-----years	
102	Sex	1,men (husband) 2,women (wife)	
103	What is your religion?	1, Protestant 2, Muslim 3, Orthodox 4, Catholic 82, Other, specify.....	
104	What is your ethnic group?	1, Oromo 2, Amhara 3, Tigre 4, Gurage 82, Others, specify	
105	What is your employment status?	1, Government 2, Non government 3, Unemployed 4, private employment 5, Merchant 6, House wife 82, others specify.....	
106	What is your educational status?	1, Can't read and write 2, Can read and write 3, Grade 1-6 4, Grade 7-12 5, Diploma and above 82, Other specify	
107	What is your current marital status?	1, Married 2, cohabiting partner	
108	Have you ever drunk alcohol like Tella, Areki, Tej, Beer etc?	1, Yes 2, No	
109	Have you ever smoked cigarettes?	1, Yes 2, No	

110	Have you ever chewed khat?	1, Yes 2, No																									
111	What is your (individual) average monthly income?	-----birr 1.No income 88, No response 96,Don' t know																									
Part two : HIV/AIDS awareness (knowledge and risk perception)																											
201	Have you ever heard about STIs or HIV/AIDS?	1, Yes 2, No	If No, skip to 301																								
202	If yes from which person or from where do you get more information about HIV/AIDS?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>1. Sexual partner (husband/wife).....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2. Friends.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>3. Health institutions.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>4. Religious leaders.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>5. Newspapers, posters,/ pamphlets.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>6. Radio/television</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>82.Others, specify.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	1. Sexual partner (husband/wife).....	1	2	2. Friends.....	1	2	3. Health institutions.....	1	2	4. Religious leaders.....	1	2	5. Newspapers, posters,/ pamphlets.....	1	2	6. Radio/television	1	2	82.Others, specify.....	1	2	
	Yes	No																									
1. Sexual partner (husband/wife).....	1	2																									
2. Friends.....	1	2																									
3. Health institutions.....	1	2																									
4. Religious leaders.....	1	2																									
5. Newspapers, posters,/ pamphlets.....	1	2																									
6. Radio/television	1	2																									
82.Others, specify.....	1	2																									
203	Is there anything a person can do to avoid getting STIs and HIV/AIDS?	1, Yes 2, No 96, Don' t know																									
204	If you look carefully, you can know if someone has HIV?	1, Yes 2, No 96, Don' t know																									
205	Do you believe having multiple sexual contact leads to HIV accusation?	1, Yes 2, No																									
206	How can people prevent themselves from getting HIV/ AIDS? (multiple responses possible)	1, Advise spouse to take care 2, Using condoms 3, Avoid having sex (abstinence) 4, Avoid having sex with multiple partners except spouse 5, Using sterile (disposable) needles 6, Avoid sharing blades(sharp materials) 7, Nothing 82, other, specify..... 96, Don t know																									
207	Do you believe alcohol consumption	1, yes																									

	and drug abuse can predispose to HIV acquisition?	2, No																									
208	Do you believe you have done anything that may have put you at risk of getting the HIV virus?	1, Yes 2, No 96, Don't know	If No/don't know skip to 211																								
209	If yes, why at risk? (multiple response possible)	<table style="width: 100%; border: none;"> <thead> <tr> <th></th> <th style="text-align: right;">Yes</th> <th style="text-align: right;">No</th> </tr> </thead> <tbody> <tr> <td>1, More than one sexual partner.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>2. My partner is unfaithful....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>3. Have had sex without Condom.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>4. Have had sexual intercourse with CSW.</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>5. Injuries with contaminated sharps...</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>6. Blood transfusion.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82. Others specify.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </tbody> </table>		Yes	No	1, More than one sexual partner.....	1	2	2. My partner is unfaithful....	1	2	3. Have had sex without Condom.....	1	2	4. Have had sexual intercourse with CSW.	1	2	5. Injuries with contaminated sharps...	1	2	6. Blood transfusion.....	1	2	82. Others specify.....	1	2	Skip to 212
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210	If no, why not at risk? (multiple answer possible)	<table style="width: 100%; border: none;"> <thead> <tr> <th></th> <th style="text-align: right;">Yes</th> <th style="text-align: right;">No</th> </tr> </thead> <tbody> <tr> <td>1, I have abstained from sex.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>2. Faithful.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>3. One partner.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>4. used condoms.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>5. I did not share injection.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82. Other, specify.....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </tbody> </table>		Yes	No	1, I have abstained from sex.....	1	2	2. Faithful.....	1	2	3. One partner.....	1	2	4. used condoms.....	1	2	5. I did not share injection.....	1	2	82. Other, specify.....	1	2				
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211	Where do you put your subjective HIV risk status?	1, None 2, Low 3, Medium 4, High 96, I don't know																									
212	Have you ever heard about voluntary Counseling and testing for HIV?	1, Yes 2, No	If No skip to 301																								
213	Did you undergo HIV test?	1, Yes 2, No	If Yes skip to 215																								
214	Are you volunteer to undergo voluntary counseling and testing for HIV?	1, Yes 2, No																									
215	Did you know your spouse/partner HIV status?	1, Yes 2, No																									
Part three : Sexual history																											
301	Have you had engaged in premarital sex?	1, Yes 2, No																									

		88, No response	
302	At what age did you first have Sexual intercourse?years 96, Don't know/remember	
303	With whom did you make your first sexual intercourse?	1, With a steady boy/ girl 2, With casual boy/girl friend 3, With husband/wife 82, Other, specify	
304	Why did you decide to have Sexual intercourse the first time?	1, Fell in love 2, Had desire 3, I got married 4, Raped 5, To got money and other gifts 6, Peer pressure 7, Was drunk and stoned 82, Other, specify	
305	Have you been married to another person previously?	1, Yes 2, No 88, No response	
306	Are you married to/cohabit with your first sexual partner?	1, Yes 2, No 88, No response	
307	Have you had non marital partner?	1, Yes 2, No 88, No response	
308	How many people in total have You ever had sexual intercourse (including the Current one)?	1, With spouse only 2, With two people 3, With three people 82, Others specify	
309	How many people in total have you ever had sexual intercourse with during the last 12 months (including the current one)?	1, With spouse only 2, With two people 3, With three people 82, Others specify.....	
310	Do you suspect/ know that your husband/ wife has had sexual relationship with other women /men apart from you since you were married?	1, Yes 2, suspect him/her 3, can't know what he/she does 4, No	

311	Do you (your husband) have another wife?	1, Yes 2, No 88, No response																												
NO	Part Four: knowledge, attitude and condom use		Skip to																											
401	Have you ever heard about condoms	1, yes 2, no	If NO skip to 410																											
402	Where do you think one can get condom if she/he wants to use?(multiple answer possible)	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>1, Health facility.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>2,Pharmacy.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>3,Hotel/bars.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>4, Shops.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>82. Others specify.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>96. I don' t know.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> </table>		Yes	No	1, Health facility.....	1	2	2,Pharmacy.....	1	2	3,Hotel/bars.....	1	2	4, Shops.....	1	2	82. Others specify.....	1	2	96. I don' t know.....	1	2							
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403	Do you know that condom prevent unintended Pregnancy and HIV infection?	1, Yes 2, No																												
404	Have you ever used condom?	1, Yes 2, No	If no, skip to 410																											
405	If yes, for what purpose did you use?	1, To prevent unintended pregnancy 2, To prevent HIV infection 3, Both																												
406	Have you used condoms with your spouse?	1, Yes 2, No																												
407	Did you use a condom during the last 12 months you had sexual intercourse?	1, Yes 2, No	If no, skip to 410																											
408	How often did you use condom in the last 12 months?	1, Always 2, Most of the time 3, Sometimes	If always, skip to 411																											
409	If you have not used condom at all or have not used it consistently what was the reason?(Multiple response possible)	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>1. Trust partner.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>2. Don' t think of it.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>3. Used other contraceptive.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>4. Don' t like it</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>5. Ashamed to ask partner</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>6. Ashamed to buy</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>7. partner objected</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>8. Not know how to use it.....</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> </table>		Yes	No	1. Trust partner.....	1	2	2. Don' t think of it.....	1	2	3. Used other contraceptive.....	1	2	4. Don' t like it	1	2	5. Ashamed to ask partner	1	2	6. Ashamed to buy	1	2	7. partner objected	1	2	8. Not know how to use it.....	1	2	
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		9. It decreases satisfaction/pleasure...1 2 10. To have child.....1 2 11, My religion prohibit..... 1 2 82, Other specify.....1 2	
410	Have you and your partner ever discussed condom as the method of contraceptive to use?	1, Yes 2, No	
411	To protect themselves against HIV and STIs, a married /cohabit couple can use condoms every time they have sex.	1, Agree 2, Not sure 3, Disagree	
412	Using condom is a sign of not trusting your partner.	1, Agree 2, Not sure 3, Disagree	
413	Do you think it is acceptable to use a condom with a spouse/ partner to Protect against AIDS?	1, Yes 2, No 96, Don' t know	
414	Is it acceptable for a married woman to ask her husband to use condoms?	1, Yes 2, No 96, Don' t know	
415	If a wife/husband gets HIV or STIs from outside the marriage, there is nothing the husband/wife can do to avoid getting infected him/herself.	1, Agree 2, Not sure 3, Disagree	
416	Do you believe condom use is a practical protective option against AIDS?	1, Yes 2, No	

This is the end of interview, Thank you very much!

Focus Group discussion/In-depth interview protocol and topic guide

Focus group discussion (In-depth interview) protocol

Good morning/afternoon and thank you all for coming.

My name is ----- . Our colleagues called -----, -----, ----.

We came from Addis Ababa University.

“After we conduct some brief introduction, we will be talking about several different issues.

We will be asking you questions about your overall experience with HIV/AIDS and questions related to the issue of sexuality, HIV risk perception and Condom use. We will conclude the session by asking you for your recommendations on how such program might be implemented in your community in the future.”

Potential use of data

The gathering of this information is to gain further insight in those aspects of HIV risk reduction intervention among married.

Major rules

Please assure that any information collected here will be strictly kept confidential. The staff of the research group and other participants will not directly share the information in a way that would reveal an individual's personal identity. We request your voluntarily agreement to participate in this discussion program. You have the right to refuse to answer any questions and to end the discussion if you find it necessary to do so.”

In this group everybody should feel free to talk. Each and every opinion is important and wanted. It is very important that all the people in the group get a chance to express their opinions.

In this group there are no right and wrong answers. Everybody should express the opinions or attitude pertinent to him or her. When you express your opinions you are encouraged to be honest in your views of

the HIV/AIDS risk reduction and preventive programs especially condom use. We want you to focus your comments on the program not towards each other.

Role of moderator/ note taker

The moderator will be in charge of facilitating the discussion. The moderator will not give any indication (verbal or physical) that would encourage certain types of comments or discourage other types of comment. In short, the moderator will guide the discussion when necessary, being careful not to lead the discussion. The note taker will have the sole responsibility of capturing the sessions as accurately as possible. This will include not only participant's responses, but also nonverbal action.

Guide for FGDs/ IDIs

1. We would like to hear a little about your experience or knowledge about AIDS
 - 1.1. Tell us what is HIV/AIDS?
 - 1.2. Would you like to tell us how people get HIV/AIDS?
 - 1.3. Spouse could discuss about HIV/AIDS? (If not, why)
2. Now we would like to ask you about sexuality, and condom use
 - 2.1. Though knowledge seems high, and marriage seen as safe, risk behavior reduction among people is said to be low (because HIV infection increasing). What do you think are the main reasons?
 - 2.2. How do you relate multiple sexual partners with HIV/AIDS and other STIs and also with unwanted pregnancies? Probe (polygamy, sexual relations outside marriage/cohabit)
 - 2.3. Have you ever heard about condom?
 - 2.4. How people prevent both unwanted pregnancy and HIV infection? (Condom, other family planning)
 - 2.5. Have ever talked with your partner about condom as family planning? (If not, why)

2.6. What are the most important preventive measures being taken by married/cohabiting partner? Probe (Reduce partners? Avoid commercial sex? Using condom every time they have sex ? being faithful?)

Which one is more feasible and acceptable method of prevention for married/ cohabiting couples?

2.7. How do you perceive condom use and factors for its non- utilization?

2.8. Do you suggest anything, comment on and recommend mechanisms from your own opinion to avert the existing multiple sexual activities so that the emergence of new HIV infection and other STIs in married/cohabiting partners will be reduced?

This is the end of our discussion. Thank you very much for your participation.

Annex 2. Waraqaa odeeffannoon ittiin funaanamuu

Gaaffiilee waa' ee qorannoo haala walqunnamti saalaa fi fayyadamuu kondoomii warra walfuudhanii ykn waliin jiraatan magalaa Naqamtee. Maqaan koo.....jedhama. Odeeffannoo qorannoo kanaa funaanuufin qacarameen. Yeroo xiqqoo naaf keennuu ni dandeessuu?

Fayiidaan qorannoo kanaa waa' ee haala walqunnamti saalaa fi fayyadamuu kondoomii warra walfuudhanii ykn waliin jiraatan magalaa kanaa sakata' uufidha. Odeeffannoon isin nuuf kenniitan kun tarii baalaa HIV hir' isuuf gargaara. Gaaffiin afaaniiffaa kun waa' ee jaalallee fi jireenya nama dhuunfaa of keessatti qabata. Kanaafuu daqiiqaa 30f iddoon isinii fi ani gaaffii afaaniiffaa kana itti gaggeesinu nu barbaachiisa. Kan ani isin hubachiisuu barbaadu, icciitiin kun of eeggannoodhaan ni qabama. Maqaa ykn bakka jireenya keessanii barreessuun/himuun hin barbaachiisu. Kanaafuu lakkoofsa manaa akka kooddiitti fayyadamuun hirmaattoota hunda addaan baassan jechuudha. Riipoortiin/bu' aan qorannoo kanaa odeeffannoo waliigalaa argachuuf / funaanuf malee eenyummaa ykn maalummaa nama dhuunfaa addaan hin baasu. Namoonni odeeffannoo kana laattan hirmaachuu, yeroo isiniif mijachuu baatutti addaan kutuu fi hirmaachuu dhiisuu mirga guutuu ni qabdu. Odeeffannoo naa kennuuf fedha ni qabda/u?

Eeyyee----- lakki-----

Mallattoo nama gaaffii gaafatuu -----

Mallattoon nama gaaffii gaafatuu kanaa namni gaaffii afaaniiffaa kennu kun fedha qabachuu isaa/ishii ni mirkaneessa.

Lakkoofsa gaaffiiwwan ittiin adda baafaman (lakk. Mana _____ lakk. Gandaa-----

Kooddii gaaffii gaafataa/tuu /_____/ Maqaa _____

Guyyaa gaaffiin gaafatame /_____/____/ sa'a gaffiin jalqabame-----

Unkaa walii galtee

Ani mallattoo kiyya armaan gadiitti kanan kaaye fayiidaa qo' annoo kana ifa waan naa godhaniiru yoo ta' u, mata dureen qo' annoo kanaas haala walqunnamti saalaa fi fayyadamuu kondoomii warra walfuudhanii ykn waliin jiraatan magalaa Naqamtee. Anis gaaffiin beekuufi na ilallatu akka deebiisuuf ifa naa godhaniiru. Kana malees odeeffannoo ani keennu qo' annaa kana qofaaf akka itti fayyadaman, icciitiin akka ta' u natti himameera. Gaaffii fi deebii dhiisuu akka danda' u, gaaffii deebisuu hin barbaadne akka irra darbuu danda' us natti himameera. Yeroon barbaadettis gaaffii gidduutti dhiisuu mirga akkan qabu naaf ibsameera. Odeeffannoo gad fageenyaaf qoraticha karaalee kana (bil: 0912040614 fi imeelii: tolragodhuga@gmail.com) ykn AAU, IRB, bil: 0111553873; imeelii:aaumfirb@yahoo.com qunnamuu ni dandeessu.

Odeeffannoo armaan olii irratti hunda' uudhaan, qo' annoo kana keessatti fedhii kiyyaan qo' annoo mata dureen isaa haala walqunnamti saalaa fi fayyadamuu kondoomii warra walfuudhanii ykn waliin jiraatan magalaa Naqamtee irratti hirmaachuuf walii gaaluu nan mirkaneessa.

Malattoo_____

Guyyaa_____

Bar- Gaaffiilee Afaan Oromoo

kutaa 1^{ffaa} : Odeeffannoo haawasaa fi uummataa			
T.lak	Gaaffiilee	Deebiiwwanii fi koodiiwwan	Kan aanutti
101	Umuriin keessan meeqa?	Waggaa.....	
102	Saala	1, Abbaa manaa 2, Haadha manaa	
103	Amantaa maal hordoftaa?	1, Proteestantii 2, Musliima 3, Ortodoksii 4, kaatoliikii 82, ka biraa, ibsi.....	
104	Sabni ke maadha?	1, Oromoo 2, Amaaraa 3, Tigree 4, Guraagee 82, ka biraa, ibsi.....	
105	Haalli qacarrii hojii kee maal?	1, kan mootummaa 2, kan miti mootummaa 3, Hin qacaramnee 4, kan dhuunfaa 5, daldalaa 6, Haadha mana 82, ka biraa, ibsi.....	
106	Sadarkaan barumsa ke maal?	1, Barreessuu fi dubbisuu hin danda' u 2, Barreessuu fi dubbisuu nan danda' a 3, Kutaa 1-6 4, Kutaa 7-12 5, Diploomaa fi isaa ol 82, Ka biraa, ibsi.....	
107	Haalli fuudha /heeruma kee akkam?	1, Cidhaan fuudheera/ heerumeera 2, Cidha malee walfuunee waliin jiraanna	
108	Dhugaatii alkoolii qaban kan akka farsoo, araqee fi k.k.f dhugdee beektaa?	1, Eeyyee 2, Lakki	
109	Sijaaraa xuuxxee beektaa?	1, Eeyyee 2, Lakki	
110	Jimaa qamaatee beektaa?	1, Eeyyee 2, Lakki	
111	Gaaliin ke ji' aa gidduu galeessaan meeqa?	Qarshii..... 1, hin qabu 88, deebii hin kenniine 96, hin beekuu	

T.lak	Kutaa 2 ^{ffaa} : Gaaffiilee waa'ee HIV/ Eedsii (beekumsaa fi hubannoo balaa)		
201	Waa' ee dhukkaba walquunnamtii saalaan daddarbanii ykn HIV/Eedsii dhageesee beektaa?	1, Eeyyee 2, Lakki	Lakki, yoo ta' e gara 301
202	Dhageesee beekta yoo ta' e odeeffannoo isaa eessaa argatte? (deebii baay' een ni danda' ama)	Eeyyee Lakki 1, Abbaa manaa/ haadha manaa irraa..... 1 2 2, Hiriyyaa irraa..... 1 2 3, Dhaabbilee fayyaa irraa.....1 2 4, Abbootii amantaa irraa.....1 2 5, Gaazeexaa fi barreeffama adda addaa irraa..1 2 6, Raadiyoo / Televisionii irraa.....1 2 82, Kan biraa, ibsi.....1 2	
203	Nam-tokko dhibee walquunnamtii saalaan daddarbanii fi HIV/Eedsii hin qabamneef wanta godhu qabaa?	1, Eeyyee 2, Lakki 96, Hin beeku	
204	Ijaan ilaaluudhaan namni tokko dhibee HIV tiin qabamuu isaa/ishii beekuun ni danda' amaa?	1, Eeyyee 2, Lakki 96, Hin beeku	
205	Sagaagalummaan dhibee HIVtiin qabamuuf nama saaxila jettee amantaa?	1, Eeyyee 2, Lakki	
206	Namni tokko akkamitti akka HIVtiin hin qabamne ittisuu danda' a? (deebii baay' een ni danda' ama)	1, Of eeggannoo gochuurratti waliin marii' achuu 2, Kondoomii fayyadamuu 3, Haadha manaa fi abbaa manaa ofiirraa kan hafee hiriyyaa kamiyyuu waliin walquunnamtii saalaa raawwachuu dhiisuu /Sagaagalummaa dhiisuu 4, wal quunnamtii saalaa raawwachuu dhiisuu 5, Marfee qulqillina qabu fayyadamuu 6, Marfee/wanta qara qabu waliin fayyadamuu dhiisuu 7, Waatakka gochuun hin danda' amuu 82, Kan biraa, ibsi..... 96, Hin beeku	
207	Alkoolii dhuguunii fi qoricha dhibee malee fayyadamuun dhukkuba HIVtiin qabamuuf nama ni saaxila jettee amantaa?	1, Eeyyee 2, Lakki	
208	Baalaa dhukkuba HIViif kan si saaxilu waan raawwate qabdaa?	1, Eeyyee 2, Lakki 96, Hin beeku	Yoo lakki ta' e gara 210
209	Eeyyee yoo jette baalaan isaa maal? (deebii baay' een ni danda' ama)	Eeyyee lakki 1, hiriyyaan waliin walquunnamtii saalaa raawwadhe tokkoo ol.....1 2 2. Hiriyyaan ko amanamaa miti.....1 2 3. Walquunnamtii saalaa kondoomii maleen raawwadheera.....1 2	Gara 211

		4. walquunnamtii saalaa warra namoota hojii wal quunnamtii saalaan bulan waliin raawwadheera..1 2 5. Meeshaalee qara qabaniin madaa' uu.....1 2 6. Dhiiga walii keennuu.....1 2 82. Kan biraa, ibsi.....1 2	
210	Lakki yoo jette, maaliif? (deebii baay' een ni danda' ama)	eeyyee lakki 1, walquunnamtii hin raawwanne.....1 2 2. wal amanna.....1 2 3. hiriyyaa tokko qofa.....1 2 4. kondomii fayyadama.....1 2 5. marfee waliin hin fayyadamne.....1 2 82. ka biraa ibsi.....1 2	
211	Sadarkaa HIViif saaxilamuukee eessatti ramaddaa?	1, homayyuu 2, Gad aanaa 3, Gidduu galeessa 4, Ol aanaa 96, Hin beeku	
212	Odeeffannoo waa' ee gorsaa fi qorannoo dhiigaa HIV fedharratti hundaa' e dhageesse beekta?	1, Eeyyee 2, lakki	Lakki yoo ta' e gara 301
213	Qarannoo HIV taasisteetta?	1, Eeyyee 2, Lakki	Eeyyee yoo ta' e, gara 215
214	Gorsaa fi qorannoo HIV taasiisuuf feedha qabdaa?	1, Eeyyee 2, lakki	
215	Haala HIV ilaichisee waa' ee abbaa manaa kee /haadha manaa kee ni beekta?	1, Eeyyee 2, Lakki	
T.lak. Kutaa 3^{flaa} : Haala walquunnamtii saalaa kan itti aanu			
301	Gaa' ela dura walquunnamtii saalaa raawwattee beekta?	1, Eeyyee 2, Lakki 88. Deebii hin kenniine	
302	Yeroo jalqabaatiif walquunnamtii saalaa kan raawwatte umurii waggaa meeqatti?	Waggaa..... 96, Hin yaadadhu	
303	Eenyu waliin walquunnamtii saalaa eegalte?	1, Hiriyyaa ke yeroo dheeraa turte waliin 2, Hiriyyaa ke alatti 3, Abbaa manaa/ haadha manaa ke waliin 82, Kan biraa ibsi.....	
304	Jalqaba walquunnamtii saalaa raawwachuuf maaltu si kakaase?	1, Jaalalatu na qabe 2, Feedhii godheen 3, Nan fuudhe/heerume 4, Dirqiin gudeedame 5, Qarshii fi fayyidaa adda addaatiif 6, Kaka' umsa hiriyyootaatiin 7, Dhugaatii dhuguudhaan 82, Ka biraa, ibsi	

305	Kanaan dura nama biraa fuutee (biraatti heerumtee) turtee?	1, Eeyyee 2, Lakki 88, Deebiin hinjiru																						
306	Kan fuute/heerumte ykn kan waliin jirtan nama jalqaba waliin walquunnamtii saalaa raawwateedhaa?	1, Eeyyee 2, Lakki 88, Deebiin hin jiru																						
307	Abbaa manaa/haadha manaa ke alatti nama biraa deemtee ni beektaa?	1, Eeyyee 2, Lakki 88, Deebiin hin jiru																						
308	Hanga ammaatti nama meeqa waliin walquunnamtii saalaa raawwateetta?	1, Abbaa manaa/haadha manaa qofa waliin 2, Nama lama waliin 3, Nama sadii waliin 82, Ka biraa ibsi																						
309	Waggaa kana keessatti nama meeqa waliin walquunnamtii saalaa raawwateetta?	1, Abbaa manaa/haadha manaa qofa waliin 2, Nama lama waliin 3, Nama sadii waliin 82, Ka biraa ibsi.....																						
310	Abbaan manaa/haati manaa kee nama biraa beekaa/ tti jettee ni yaadda iddoo wal fuutanii asitti?	1, Eeyyee 2, Nan shakka 3, maal akka ishiin/inni raawwat(t)u hin beeku 4, Lakki																						
311	Haadha manaa biraa qabda /abbaan manaa kee haadha manaa biraa qabaa/?	1, Yes 2, No 88, Deebiin hin jiru																						
T.Ja	Kutaa 4^{ffaa} : Beekumsa, ilaalcha fi fayyadamina kondomii		Kan aanutti																					
401	Waa' ee kondomii dhageessee beektaa?	1, Eeyyee 2, Lakki	Lakki yoo ta' e gara 410																					
402	namni kondoomii fayyadamuu yoo barbaadee, eessaa argata jettee yaadda? (deebii baay' een ni danda' ama)	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: center;">Eeyyee</td> <td style="text-align: center;">Lakki</td> </tr> <tr> <td>1, Tajaajila fayyaatii.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2, Faarmaasiitii.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>3, Hootelaa</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>4, suuqiiitii.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>82, Kan biraa, ibsi.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>96, Hin beeku.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		Eeyyee	Lakki	1, Tajaajila fayyaatii.....	1	2	2, Faarmaasiitii.....	1	2	3, Hootelaa	1	2	4, suuqiiitii.....	1	2	82, Kan biraa, ibsi.....	1	2	96, Hin beeku.....	1	2	
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1, Tajaajila fayyaatii.....	1	2																						
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96, Hin beeku.....	1	2																						
403	Kondoomii fayyadamuun ulfa hin barbaachifnee fi daddarbina dhibee HIV akka ittisu ni beektaa?	1, Eeyyee 2, Lakki																						
404	Kondoomii fayyadamtani beektuu?	1, Eeyyee 2, Lakki	Lakki yoo ta' e gara 410																					
405	Fayyadamtani beektu yoo ta' e, sababni fayyadamtaniif maal?	1, Ulfa hin barbaachifnee ittisuuf 2, Daddarba dhibee HIV ittisuuf 3, Lamaanuu ittisuuf																						

406	Abbaa manaa/haadha manaa kee waliin kondomii fayyadamtanii beektuu?	1, Eeyyee 2, Lakki	
407	Ji' oota 12 darban keessatti yeroo wal quunnamtii saalaa raawwattaniitti kondoomii fayyadamtaniittuu?	1, Eeyyee 2, Lakki	Lakki yoo ta'e gara 410
408	Ji' oota 12 darban keessatti yeroo hundaa walquunnamtii saalaa raawwattanitti haalli fayyadamna kondoomii keessanii akkam?	1, Yeroo hundaa fayyadamna 2, Yeroo baay' ee fayyadamna 3, Darbee darbee fayyadamna	Yoo 1 ta'e gara 411
409	walumaagalatti/ yeroo hundaa walquunnamtii saalaa rawwaattutti hin fayyadamtu yoo ta'e sababni isaa maal? (deebii baay' een ni danda' ama)	Eeyyee lakki 1. wal amanna.....1 2 2. waa' ee isaa yaadee hin beeku.....1 2 3. qusannoo maatii biraatti fayyadamu...1 2 4. hin fedhu..... 1 2 5. wal gaafachuu qaanoofna.....1 2 6. bituuf qaanoofna.....1 2 7. isa/ isheetu dida.....1 2 8. akkataa itti fayyadamina isaa hin beeku...1 2 9. feedha foonii /gammachuu hir' isa.....1 2 10, mucaa godhachuuf.....1 2 11. Amantiin koo hin heyyemu.....1 2 82, Ka biraa, ibsi.....1 2	
410	Waa' ee kondoomii akka qusannoo maatii irratti waliin marii' attanii ni beektuu?	1, Eeyyee 2, Lakki	
411	Haati manaa fi abbaa manaa dhibee wal quunnamtii saalaan daddarbanii fi HIV waliirraa ittisuuf yeroo walquunnamtii raawwatan mara kondoomii fayyadamuu ni danda' u.	1, Nan deeggara 2, kanadha sinjichuu hindanda' u 3, Hin deeggaru	
412	Abbaan manaa fi haati manaa kondomii waliin fayyadamuun wal amantaa dhabuu mul' isa.	1, Nan deeggara 2, kanadha sinjichuu hindanda' u 3, Hin deeggaru	
413	Dhibee HIV ittisuuf abbaan manaa fi haati manaa kondomii fayyadamuun fudhatama ni qaba jettee yaaddaa?	1, Eeyyee 2, Lakki 96, Hin beeku	
414	Haati manaa abbaa manaa ishii kondomii akka fayyadamuu gaafachuun fudhatama qabaa?	1, Eeyyee 2, Lakki 96, Hin beeku	
415	Tarii haati manaa/abbaan manaa dhibee walquunnamtii saalaan daddarban/HIV gaa' ilaan ala yoo qabaman, dhibeen kun akka walitti hin dabarfee wanti isaan godhan tokkollee hin jiru.	1, Nan deeggara 2, kanadha sinjichuu hindanda' u 3, Hindeeggaru	
416	Kondoomii fayyadamuun filannoo qixa sirrii ittiin HIV/Eedsiin ittisamudha jettee amantaa?	1, Eeyyee 2, Lakki	

Gaaffii ko asumarrattin xumura. Hirmaanna keessaniif Baay' ee Galatooma!

Qajeelcha mata duree fi marii namoota murtaa'e waliin ykn gad fageenyaa

Pirootokoolii marii namoota murtaa'e waliin

Akkam bultan/ ooltan. Hundi keessan bakka kanatti na argamuu keessaniif galatooma.

Maqaan ko..... hiriyyoon ko.....

Nuyi Addis Abaabaa yuuniveersiitiirraa dhufen. Ergaan faayidaa qorannicha baninsa gabaabaa taasisee booda, waa'ee muxannoo walii gala HIV/Eedsii irratti, waa'ee waalquunnamtii saalaa, ilaalcha balaa HIV fi fayyadama kondoomiirratti waliin marii ni adeemsifna.

Hubannoo

Odeffannoon funaanamuu kun iciitiidhaan qabama. waa'ee eenyummaa namoota marii kanarratti hirmaatanii addaan baasee hin ibsu. Marii kana gageessuuf duraan dursinee feedha keessan isin gaafanna. Mirga gaaffii gaafatamee deebisuu dhiisuu fi maricha addaan kutuu qabdu. Namni kamiyyuu yaadasaa akka barbaadeetti ibsachuu ni danda'a. Namni marii kanarratti hirmatuu hundumtuu yaada isaa ibsuuf carraa walqixxee qaba. Deebii marii kanaa sirrii /dogogora jechuun hin danda'amu. Yeroo yaada keessan ibsitan amantummaa fi haqummaan akka nu ibstan isin gaafanna.

Gahee mariisaa/ barreessaa

Mariisaa maricha si'oomsuu dha. Mariisaa yaada/ malattoo deeggaruu/ mormuu kamiyyuu kennuu ykn agarsiisuun irra hin eegamu. Gaheen barreessaa yaada hirmaatootaa hanga danda' ametti akka jirutti kaayudha.

Qajeelcha marii namoota murtaa'ee waliin

1. Waa'ee Eedsii ilaalchisee muxannoo/ beekumsa isin qabdan waliin mari'ana

1.1. Eedsii maal akka ta'e nutti himaa?

1.2. Namootni akkamitti HIV/Eedsii qabamu?

2. Amma immoo waa'ee walquunnamtii saalaa, ilaalcha balaa HIV fi kondomii fayyadamuu irratti mari'ana

2.1. sagaagalummaa akkamitti dhibee HIV/Eedsii fi walquunnamtii saalaan daddarban ilaalta?

2.2. Ilaalcha balaa HIV akkamitti hubatta? (gaa'elaan alatti sagaagaluu, haadha manaa tokko ol)

2.3. karaa sirrii dhibee HIV ittisuuf warri wal fudhanii fi waliin jiraatan gargaraman maal faadha

Bakka barbaachisuutti gaafdu(hiriyyaa hir' isuu, hojjeetoota bunaa waliin raawwachuu dhiisuu, yeroo hundaa kondomii fayyadamu)

Isa kamtu caalmaatti salphaa fi fudhatama qaba?

2.4. kondomii fayyadamuu fi sababii fayyadamuu dhiisuu akkamitti ilaalta?

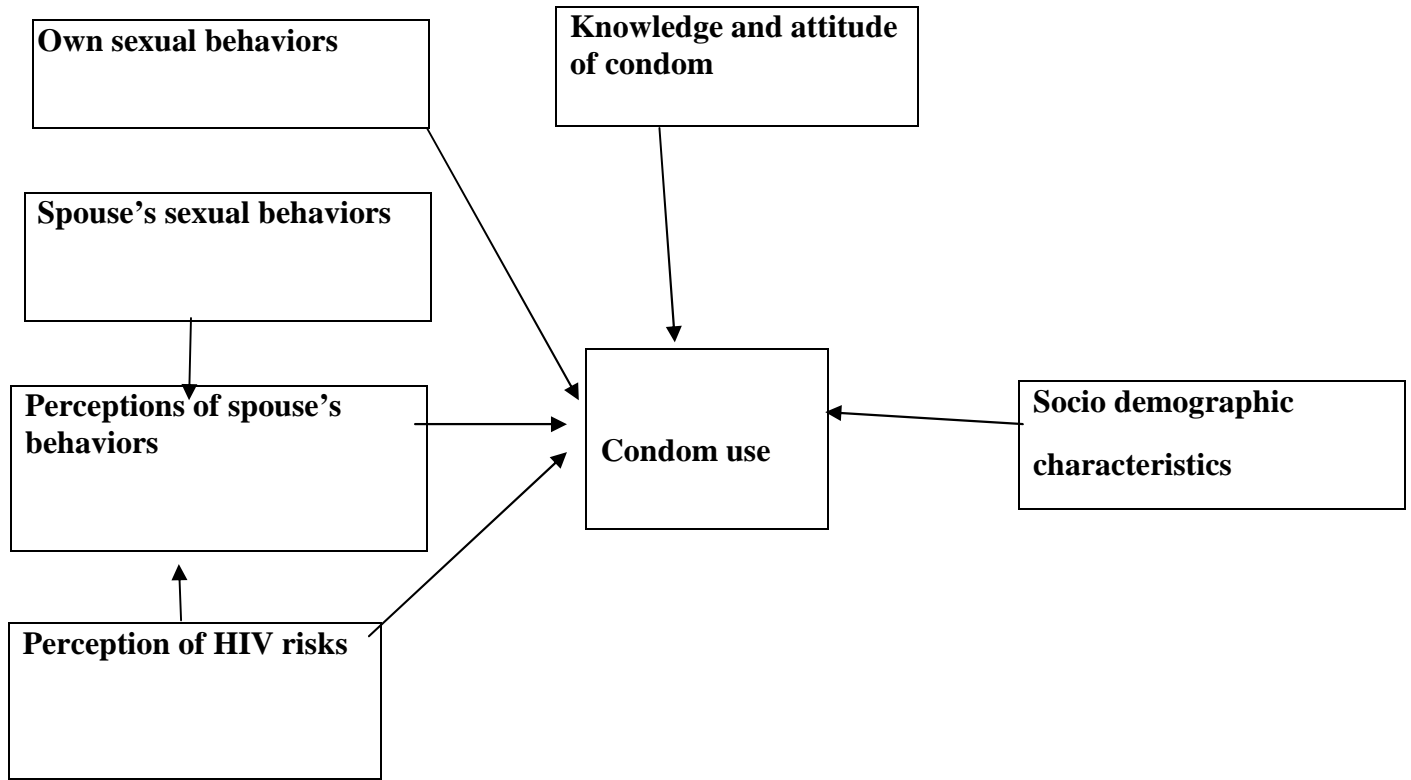
2.5 beekumsi wa'ee HIV guddaadha akkasumas ga'eelli akka wan daddarbinsa ittisuutti fudhatama. Haa ta'u malee dhiibeen HIV namoota walfudhaanii jiran giddutti dabalaa jira sababni isaa maaliif isinitti fakkataa?

2.6. Wa'ee qorannoo HIV waliin marii'attanii beektuu? bakki isaa Eessaa? Deebiin keesan eeyyee yoo ta'e, qoratamtanii beektuu? maaliif?

2.7. Yaada, koomii dabalataa dhiibeen HIV/dhukkuboota wal qunnamtii saalaan daddarban kan biroo dhaabamsisuuf/hir' isuu maal goochuun nurraa eegama jettuu?

Dhuma gaaffii fi deebiiti. Waan qorannoo kana keessatti hirmaataniif Guddaa Galatoomaa!

Annex 3: conceptual framework on perceptions of HIV risk and condom use



Source: modified from understanding perceptions of HIV risks among married couples in

Malawi

DECLARATION

I the undersigned, declare that this thesis is my original work has never been presented in this or any other university, and that all resources and materials used in here, have been duly acknowledged.

Name Tolesa Regasa

Signature _____

Place: Addis Ababa university, Ethiopia

Date of submission: _____

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

Name Dr. Assefa Seme

Signature _____