

ASSESSMENT OF RISKY SEXUAL BEHAVIOUR FOR HIV/AIDS AMONG MALE DAILY LABORERS IN KOMBOLCHA TOWN, SOUTH WOLLO ZONE, AMHARA NATIONAL REGIONAL STATE, NORTH EAST ETHIOPIA.

By Endris Belay (BSc)

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Dedications

This paper is dedicated to my wife, S/r Emawayish Ababu and our daughters Dinishu and Pomishu.

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List of Acronyms

AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted Odds Ratio
BCC	Behavioral Change Communication
BSS	Behavioral surveillance survey
CI	Confidence interval
COR	Crud Odds Ratio
CSWs	Commercial Sex Workers
DHS	Demographic and Health Survey
HIV	Human Immuno Deficiency Virus
IEC	Information Education Communication
IOM	International Organization for Migration
MOH	Ministry of Health
OR	Odds ratio
PLWHA	People Living With HIV/AIDS
PAS	Proportional Allocation to Population Size
RWM	Random Walk Method
SPSS	Statistical Package for Social Science
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
UNAIDS	Joint United Nations Program on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization
VCT	Voluntary Counseling and Blood Testing

ABSTRACT

Different studies in Africa and elsewhere show that the epidemiology of HIV/AIDS is highly related to the process of migration. In most sub-Saharan African countries mobility and HIV/AIDS are linked to heterosexual transmission; fueled by rampant STDs, multiple and commercial sexual relations, low condom use, poor access to health services and other socio-cultural & economic factors related to population movement.

In Ethiopia, though various researches have been made to assess the sexual behaviors of different population groups, still there is lack of studies that address the sexual behaviors of transient rural migrants. This cross-sectional survey conducted from May to June 2006, tried to investigate the magnitude and determinants of risky sexual behaviors for HIV/AIDS among male migrant daily laborers in Kombolcha town, North east Ethiopia.

A total of 420 daily laborers with a response rate of 99.5% for the quantitative and 36 discussants for the qualitative part participated in the study. More than a third (36.2%) of daily laborers was found to be currently sexually active. Among the currently sexually active respondents, 43.4% and 55.9% admitted practicing sex with multiple sexual partners and commercial sex workers respectively. Having multiple sexual partners was positively associated with longer duration of stay in the town [AOR (95% CI) = 2.34(1.04, 5.27) and chewing khat 2.30(1.02, 5.16) . Whereas practicing sex with commercial sex workers was associated with longer duration of stay in the town [AOR (95% CI) = 2.33(1.06, 5.13)], drinking alcohols 2.60(1.12, 6.02)] and chewing khat 4.16(1.46, 11.8)].

Although 57.9% of the currently sexually active respondents had experience of condom use during their stay in the town, only 34.9% were consistent users. Better educational level [AOR (95% CI) = 2.88(1.05, 7.94), not drinking alcohols 2.57(1.10, 6.00), full time accessibility of condom 3.22(1.18, 8.82) and self HIV/AIDS risk perception 3.58(1.29, 9.98)] were factors associated with consistent condom use.

In conclusion, the prevalence of high risk sexual behaviors among the study population was high. There was a gap between knowledge on HIV/AIDS and sexual behavior of respondents. Therefore, urgent health education program that aimed at bringing behavioral change (BCC) should be planned and implemented by giving more emphasis on the identified risky sexual behaviors.

1. Introduction

Acquired Immune Deficiency Syndrome (AIDS) has killed more than 25 million people since it was first recognized in 1981 [1]. Despite recent improved access to antiretroviral treatment and care in many regions of the world, the AIDS epidemic claimed 2.9 million lives in 2006. Globally an estimated 39.5 million people were living with Human Immune Deficiency virus (HIV) and close to 4.3 million people were newly infected with the virus in 2006 [1,2].

Sub-Saharan Africa is the region of the world most affected by HIV/AIDS with an adult prevalence of 5.9%. An estimated 24.7 million people were living with HIV at the end of 2006 and approximately 2.8 million new infections occurred that year. In the same year the epidemic has claimed the lives of 2.1 million people in the region and 12 million children have been orphaned by AIDS [1,3].

Ethiopia is among the highly HIV/AIDS affected countries in the world with an estimated 1.32 million people living with HIV/AIDS at the end of 2005. The HIV/AIDS situation in Ethiopia has evolved from two reported AIDS cases in 1986 to 128,922 new HIV infections, 137,499 new AIDS cases and 134,450 deaths by 2005. Moreover, AIDS accounted for 744,100 orphans, 32.0% of TB cases and 34.0% of all young adult deaths in the country during the same year [4,5]. The adjusted HIV adult prevalence for Ethiopia in 2005 was 3.5% (urban 10.5% and rural 1.9%) and the estimated adult

prevalence for the year 2006 was 4.8%. As observed from different studies, the trend of the national and rural HIV prevalence has stabilized while the urban epidemic is declining [4,5,6].

As to the 2005/06 annual report of Kombolcha town health office, a total of 3,756 blood samples were tested through Voluntary Counselling, and 16.0% of the samples tested positive for HIV [7].

In sub-Saharan Africa the main risk factors for high HIV transmission include population movement, poverty and/or unequal distribution of wealth, gender inequality and various cultural influences [8,9].

United Nations Educational, Scientific and Cultural Organization (UNESCO) and Joint United Nations Program on HIV/AIDS (UNAIDS) report on Migrant Population and HIV/AIDS stated that mobile people are in a greater risk of poor health in general and HIV/AIDS in particular [4]. However, different researchers demonstrated that mobility alone does not account for risk taking behaviour by migrants, rather various socio-cultural and economic factors link migration to the spread of HIV/AIDS [10,11]. The most significant socio-cultural and economic factors which place migrants in a high risk situation are the movement of people from their rural areas without a stable sexual partner, fragmented social networks, reduced availability and accessibility of health services, economic transitions and an urban lifestyle which exposes migrants to participate in sexual risk-taking behaviour [4,12,13]. Similarly, studies carried out in Africa, certain Asian

countries, and in the United States have documented that migrant workers are at greater risk for HIV/AIDS and other STDs than the non-migrants [14,15,16]. Moreover, STDs are known to facilitate the transmission of HIV while HIV/AIDS prolongs the duration of symptoms and the infectiousness of STDs [17].

Although armed conflicts, political instability, economic crises, natural disasters and environmental degradation have forced many millions to flee their homes, poverty and lack of employment opportunities in the rural areas have driven the majority of male migrants to town in order to escape rural poverty and search for employment [18,19].

In Africa the largely seasonal or temporary character of migration, with migrants returning home to their families on a regular basis has facilitated the rapid spread of the virus [18].

The study area, South Wollo, is one of the food insecure Zones in the Amhara Regional State, and hence many young adult male farm workers migrate transiently to the near by towns until the next harvest time searching for work opportunity and employment. Since these farmers have low or no formal education and/or specific skills to accomplish in the urban setting, most of the time they will be obliged to involve in some labour based activities–usually working as daily labourers [20].

Currently, as Kombolcha is relatively one of the fastest growing industrial towns in the region with different large and small scale industries that

demands a large pool of human labour, many young people from surrounding rural areas prefer migrating to this town in order to have better work opportunity and employment.

In Ethiopia, though various studies have been made both at national and local levels to assess the sexual behaviors of different population groups considered to be potentially high risk (youth, female sex workers, transport workers, factory workers, militaries), the researcher couldn't find any study that specifically address transient rural migrants. However, studies conducted in other parts of the world demonstrated a high level of risky sexual behaviors among this segment of population.

Efforts to reduce the spread and impact of HIV/AIDS are very much related to changing high-risk sexual behaviors and environments facilitating high-risk sexual behaviours. This can be done successfully if these efforts are supported by relevant studies that aimed at analysis of sexual behaviours among the potentially risk groups [18].

Thus, this study tried to investigate the magnitude and determinants of risky sexual behaviors for HIV/AIDS and condom use among male migrant daily labourers in Kombolcha town so as to recommend appropriate intervention strategies based on the findings.

2. Literature Review

2.1 Migration and HIV/AIDS

Migration is usually defined as the movement of people from one place to another temporarily, seasonally or permanently, for a host of voluntary or involuntary reasons [18].

Migration can play a significant role in transmitting infectious diseases and migrants are more vulnerable to HIV infection than their non-migrant counterparts. Different studies in Africa and elsewhere show that the epidemiology of HIV/AIDS is closely linked to the process of migration and mobile Populations in general have played a significant role in the initial spread of HIV in Africa [18, 19].

A study on HIV and migration in Uganda demonstrated the existence of strong correlation between HIV infection and migration. People who have moved within the past five years were three times more likely to have been infected with HIV than whose residence had been stable for more than ten years [21].

Other study done to assess the impact of migration on the transmission of HIV-I among couples of South African adults revealed a 25.9% versus 12.7% rate of sero-positivity for the migrant and non-migrant group respectively [(p= 0.029 OR= 2.4(1.1, 5.3)] [19].

Related study conducted in Mexico showed that there is a three times higher rate of HIV infection among migrants when compared with the general population [22]. Similarly, 28.0% of people living with HIV/AIDS in Filipinos are workers who have returned home after working in some other countries and 41.0% of the HIV positive Bangladeshian was found to be migrant workers [23].

Other studies done in Kwa Zulu-Natal revealed that all the HIV cases detected were either migrants or partners of migrants and people who had recently changed their residence were three times as likely to be HIV infected than those who had not [24,25].

According to Dadson B. and J.Crush, there are at least four ways in which mobility is tied to the spread of HIV [26].

1. Mobility per se can encourage or make people vulnerable to high risk sexual behaviour;
2. Mobility makes people more difficult to reach, whether for prevention education, condom provision, HIV testing, or post infection treatment and care;
3. Migrants' multi-local social networks create opportunities for sexual networking; and
4. There is a higher rate of HIV infection in “communities of the mobile”, which often include socially, economically and politically marginalized people.

2.2 Sexual Behavior of Migrants

Migrants' risk to HIV infection is largely determined by their sexual behaviors. High-risk sexual behaviours among migrants are usually attributed to changes as a result of migration. As stated by Brockerhoff et.al.1999, there are three factors related to migrants' sexual behaviour: pre-migration individual characteristics, changes in individual characteristics due to migration, and exposure to a new physical and social environment. These factors play a part in the construction of certain perceptions of risk, and eventually have an effect on the actual sexual behaviour of migrants [27].

The pre-migration individual characteristics include sex, age, marital status, educational level, ethnicity, social status, and economic prospects. These characteristics influence the decision to migrate and migrants' perceptions of risk of HIV infection [27].

The most commonly cited Post-migration characteristic is separation from a regular sexual partner and family. Furthermore, migrants' income is likely to increase in the case of labour migration and decrease in the case of involuntary migration [27, 28].

The other most important mechanism that links migration with sexual behaviour is the change of environment. The milieu in which migrants are living is likely to differ from the social and cultural environment at home and migrants may not have access to good health services [27,29]. Moreover,

a new social environment can result in a lack of social support, which has been linked to risk-taking behaviours [30].

A research done on HIV/AIDS vulnerability among migrant farm workers on the South African-Mozambican boarder revealed that 36.0% of the respondents admit to having two or more concurrent sexual relation ships [18]. Another study done on sexual networking and multi-partner sex among migrant mine labourers in Malawi showed that 94.5% of migrants had multiple sexual partners in the first 6-18 months [31]. Similarly in a study on male factory workers in Zimbabwe, HIV positive men were more likely to live apart from their wives and have multiple sexual partners than HIV negative men [32].

An anthropological assessment of health care and risk behaviour in north-western Namibia identified that having multiple sexual partners and alcohol abuse as factors attributed to high incidence of HIV infection among male migrants [12]. Forty percent of Kenyan male migrant tea plantation workers reported practicing sex exchanged for money. Drinking alcohols and lower educational status were predictors of sex exchanged for money in this study [33].

2.3 Migrants' vulnerability to HIV/AIDS

Vulnerability refers to the social, cultural, economic and political environment of individuals, families, communities and societies, and occurs

in situations where people are limited in their ability to make free and informed decisions [34].

The International Organization for Migration (IOM) has defined a process framework for HIV/AIDS based on four stages of mobility [18]:

Source: where people come from, why they leave and the relation hip they maintain at home while away.

Transit: the places people pass through, how they travel and their behaviour while they travel.

Destination: where people go, the attitude they encounter and their new living and working conditions.

Return: the changes that have occurred in the people's lives and the condition they find upon their return.

Thus, mobile people are vulnerable to HIV/AIDS often related to a particular stage of the mobility process. For example, men who work far from home, such as mine workers, farm workers and military personnel are most vulnerable at their destination. For others, the greatest risk occurs in transit, as in the case of female informal traders that might have sex in order to complete their journey etc [19].

Migrants are more vulnerable to HIV infection than are people who do not move but this vulnerability is not the direct result of mobility. In other

words: 'being mobile in and of itself is not a risk factor for HIV/AIDS; it is the situations encountered and the behaviors possibly engaged in during mobility or migrations that increase vulnerability and risk regarding HIV/AIDS. Some of the factors that make mobile population more vulnerable to HIV infection are [19]:

- Isolation resulting from stigma, discrimination & difference in language and culture,
- Separation from regular sexual partner,
- Lack of support and friendship,
- Sense of anonymity or lack of socio-cultural norms that regulate behaviour in stable communities,
- Difficult and dangerous working conditions, with high risk physical injury,
- Work in isolated environments with limited recreation and easy access to CSWs, drugs and alcohols,
- Lack of legal rights and legal protection and
- Lack of access to health and social services.

2.4 Barriers to behavioral change towards the prevention of HIV/AIDS

The most difficult areas of HIV/AIDS prevention lies in the area of behaviour change. Behavioural changes are difficult to inspire and extremely hard to measure. Furthermore, the theoretical bases for the behaviour have been difficult to characterize. There are many factors that

influence the practice of health behaviour related to HIV/AIDS including social, emotional, cognitive, perceived symptoms and factors related to access to health services. In addition behavioural change does not occur in an over night. To address multiple factors influencing risks and vulnerability requires careful planning time and a lot of other resources that will help in tracing behaviours [35, 36].

In study done to identify barriers to behavioural change towards HIV prevention in Ethiopia; 31.3% reports that the barriers to HIV prevention related to low IEC intervention, 29.5% related to increased rate of un employment, 28.7% associate the problem with an increased illegal video showing and khat houses and 22.5% with low involvement of the community in the prevention and control of the disease, traditional practice 10.8%, stigma and discrimination 10.1%, in adequate number of recreational areas 8.1% and low involvement of religious institutions 7.0% [37].

2.5 Condom Use

As early as 1000 BC, the ancient Egyptians used a linen sheath for protection against disease, while the Chinese are known to have used oiled silk paper. The mass production of "rubbers" began after 1844 and the reservoir tip on latex condom was introduced in early, 1950's, while

textured condoms in 1973. In 1994 polyurethane emerged as an alternative to latex leading to the development of both male and female condoms [38].

Male and female condoms are an essential component of such efforts and improving condom promotion and distribution is vital to success in the fight against the spread of AIDS. Effective HIV/ AIDS prevention programmers must include a range and mix of intervention tailored to the specific needs of various groups of localities especially to those at high risk of infection [38].

Despite this fact, HIV continues to spread mainly because not enough people are practicing safer sex. It is therefore essential that everyone should have access to the information and tools that enable them to have safe and responsible sexual relations and to negotiate safer sex, including condom use.

Condom is the simple, affordable and cost effective technology available in the prevention and control of sex related HIV/AIDS. However; misinformation associated with its use, like illicit sexual promiscuity, a reduction in sexual spontaneity and pleasures are still major barriers to condom utilization [38].

A study done in Southern Africa showed that although the majority (93.0%) of migrants know where to find condoms and how to gain access them, only 63.0% of them believe that condoms always prevent HIV/AIDS. The same study revealed that about 75.0% of female migrant farm workers report

never using a condom with their primary partner, only 4.0% of men and women report consistent use of condom [18].

In a study done among migrant tea plantation workers in Kenya, 20.0% of females and 35.0% of males reported condom use while having sex with extra marital sexual partner. In the same study the three main reasons for non use of condom during the last or most recent sexual encounters given by male respondents were: Condom diminish sexual pleasure 55.0%, sexual encounter had not been planned 25% and thrusting partners 10.0%. Whereas reasons cited by female respondents were: Partners disapproval 70.0%, partners drunk during intercourse 15.0%, and reduction of sexual pleasure 5.0% [33].

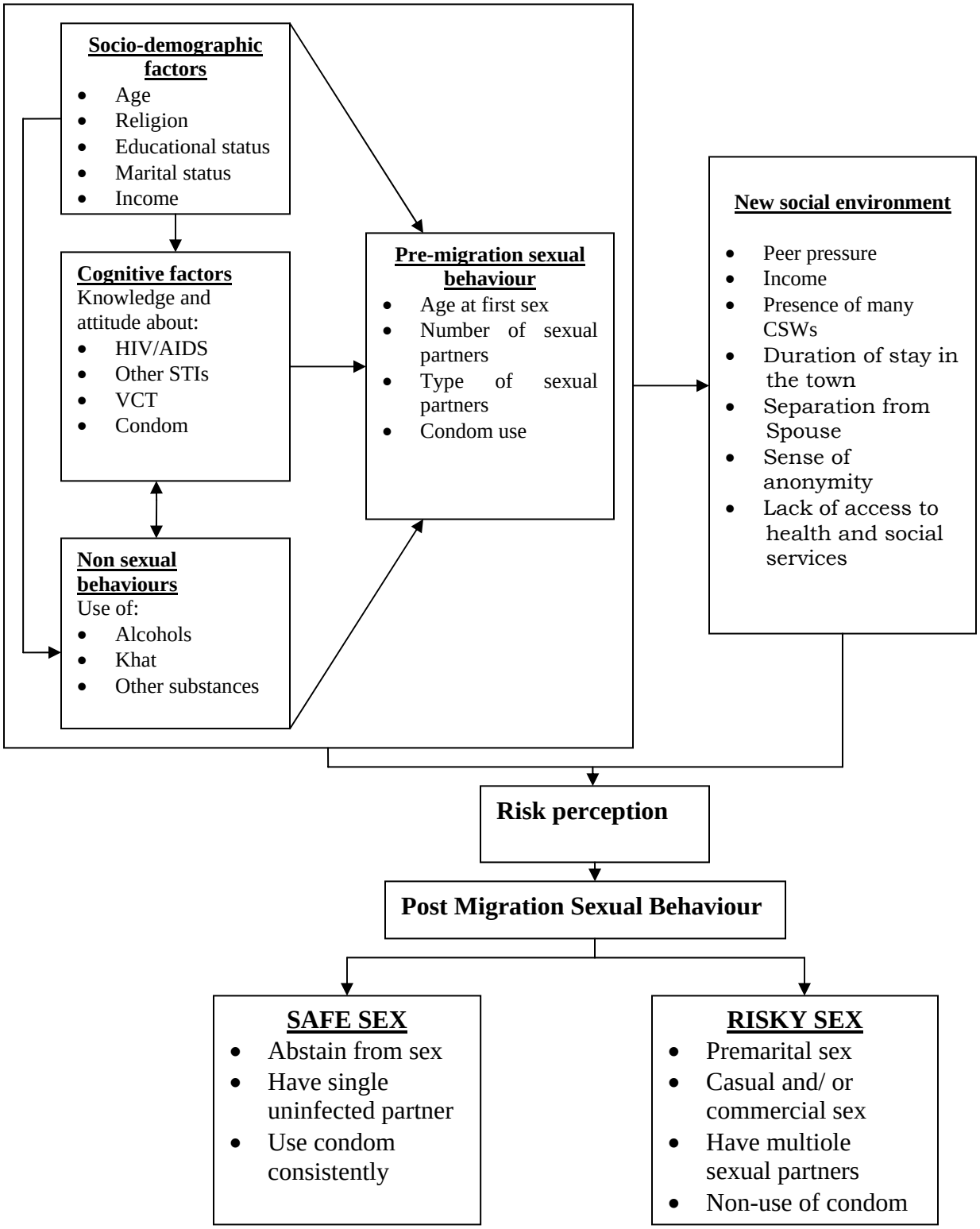
Another study done in Bahir Dar to assess perceived barriers to behavioural change to words the prevention of HIV/AIDS among age groups 15 to 49 years revealed that of those who had sex in the past 12 months only 16.4 percent used condoms. The main reason for not using condom was attributed to: having interest in one partner 86.9%, followed by disliking condom 6.4%, religious disapproval 4.9%, partner objection 1.8%, and unavailability of condoms 0.6% [39, 40].

The 2002 Ethiopian Behavioural Surveillance Survey also demonstrated high rate of inconsistent condom use among the high risk population group across the country, 34.0% and 20.0% of ground force group, 40.0% and 21.0% of air force group and 27.0% and 16.0% of the truck drivers, use

condom inconsistently while having sex with non-regular and commercial sex partners during the last one year preceding the survey respectively [41].

The 2005 Ethiopian Demographic and Health Survey also documented a rate of 23.6% and 51.7% condom use during the last high risk sex among women and men respondents of age group 15 to 49 years respectively. The same study revealed condom use rate of 28.4% and 50.2% at last high risk sexual intercourse among female and male youths of age 15 to 24 years respectively [42].

Figure 1*: Conceptual framework for risky sexual behaviour on migrant daily labourers.*



3. Objectives of the study

3.1 General objective

- To assess risky sexual behaviours for HIV/AIDS among male daily labourers in Kombolcha town, North East Ethiopia.

3.2 Specific objectives

- To assess magnitude of risky sexual behaviours among male daily labourers in Komblcha town.
- To identify factors associated with risky sexual behaviours among male daily labourers in Kombolcha town.

4. Methodology

4.1 Study area

The study area, Kombolcha town, is found in South Wollo Zone of Amhara Regional State. It is located to the North East of Addis Ababa and the South East of Bahir Dar at a distance of 375 and 503 Kms, respectively.

Administratively, the town is divided into 12 urban kebeles. Based on health profile of Kombolcha town health office, the town has a total population of 64, 401, (30,997 males and 33, 404 females) for the year 2005/06 [7]. The main road that runs from the capital (Addis Ababa) to the north as well as from east (Djibouti and Afar Region) to the north or central Ethiopia passes crossing the town. There are different large and small-scale industries like textile, metal and steel, meat processing and brewery in the town.

There are one health centre, two health posts and 12 different level private clinics which deliver routine health services to the community. The health centre and two non governmental organizations are currently providing voluntary counseling and blood testing service for HIV/AIDS on daily basis.

4.2 Study design

The study design was primarily cross-sectional quantitative survey supplemented by qualitative methods.

4.3 Source population

The source population was all male daily laborers in Kombolcha town.

4.4 Study population

The study populations were male transient migrant daily laborers residing in Kombolcha town at the time of the survey and fulfilling the inclusion criteria.

4.4.1 Inclusion criteria

Subjects included in this study were those transient male migrant daily laborers of age fifteen years or above, able to communicate in Amharic and stayed in the town for less than twelve months continuously.

4.4.2 Exclusion criteria

Those daily laborers under the age of fifteen years, not able to communicate in Amharic and/or stayed in the town for longer than twelve months continuously were excluded from this study.

4.5 Sample size determination

The sample size for quantitative study was determined using the following assumptions: level of confidence taken to be 95%, 5% margin of error, and 50.0% prevalence of condom use. P, assumed to be 50.0% as there was no existing previous data which can serve as base line in this specific study

population so as to obtain maximum sample size. Based on the above assumptions the actual sample size for the study was computed employing the formula for single population proportion.

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

Where, n= sample size

Z α/2= Critical value=1.96

P= Prevalence of high risk sexual behaviour

d= precisión (marginal error) =0.05

$$n = \frac{(1.96)2\ (0.5*0.5)}{(0.05)2} = 384$$

Thus by adding 10% for possible non-response, a total sample size of **422** was obtained.

4.6 Sampling procedure

The total 422 samples were distributed to all the 12 kebeles in the town proportionate to their population size. After proportionally allocating the required sample size to each kebele, study participants were selected (approached) by a random walking method. In each kebele, four data collectors continue interviewing eligible subjects starting from the center towards four opposite direction simultaneously till the required sample for that specific kebele was obtained. We preferred proportional allocation of samples to the size of population and random walking method of data collection procedure for two reasons:

- We were not successful, even after repeated trials to enumerate or register all eligible for the development of sampling frame so as to use simple random sampling technique for the selection study participants because of their unstable nature and lack of co-operation from the house owners to tell us honestly whether these subjects were living in their home or not.
- Considering that the study subjects would be distributed across the town homogenously with the general population. This idea was evidenced by expert suggestion (professional guess) from municipal labor office and other responsible administrative officials in the town.

4.7 Data collection procedures

4.7.1 Quantitative data

Data for the quantitative section was collected using an anonymous structured Amharic questionnaire. Eight 12 grade complete male enumerators with previous experience of data collection were recruited from the town. We preferred only male data collectors to make study subjects relatively comfortable while responding to some sensitive sexual behaviour questions. Two supervisors with first degree in public and environmental health science were recruited from Kombolcha town health office. A two days training was given for data collectors and supervisors on how to collect the data and other related procedures by the principal investigator.

A standard questionnaire comprising of 70 multiple choice items that address the objectives of the study under investigation was developed and adopted from other related behavioral studies. The questionnaire was initially prepared in English and then translated in to Amharic. The Amharic version was again translated back to English to check for consistency of meaning. The translated Amharic version questionnaire was pre-tested prior to the actual data collection on 20 respondents out side of the study area, at Dessie town in similar population group. Modification of some questions was made based on findings from the pre-test.

Actual data for the study was collected early in the morning and late in the afternoon, because this time was identified to be more favorable for the study participants, as evidenced during the time of pre-test.

Continuous follow up and supervision was made by supervisors and the principal investigator throughout the data collection period. Data collection in each kebele was accomplished within one or two days to minimize and/or avoid possible contamination of information.

4.7.2 Qualitative data

In order to supplement the quantitative data, qualitative data was collected through focus group discussions. A total of four focus group discussions were conducted among purposively selected daily laborers and commercial sex workers (two sessions among each discussant group). A range of eight

to ten discussants were participated in each focus group discussion session, with a total of 36 participants.

The main purpose of conducting discussions with commercial sex workers was to indirectly assess or investigate the sexual behaviors of daily laborers, with special emphasis on the attitude and practice of condom use.

Daily laborers for focus group discussions were selected from those who didn't participate in the questionnaire interview, whereas commercial sex worker discussants selected from bars and hotels where by the study subjects could potentially go to exchange sex for money. Emphasis was made to have matched discussant groups for some socio-demographic characteristics like age, marital status, duration of stay and educational status. Each focus group discussion took an average time of 60-90 minutes. A semi-structured open ended discussion guide was used to facilitate the discussion and all discussions were moderated by the principal investigator. Every discussion was tape recorded, transcribed, translated and finally summarized for write up.

4.8 Data quality assurance

To assure data quality, enumerators with previous experience of data collection were recruited and a two days training given both for the enumerators and supervisors. Moreover questionnaire was pre-tested and necessary amendment was considered. The collected data were reviewed and checked for completeness and consistency by supervisors and principal

investigator on daily bases at the spot during the field work. Double entry was made for 10.0% of the data to assure consistency.

4.9 Data entry and analysis

The quantitative data was entered in to EPI-INFO version 6 and analyzed using SPSS version 11 software statistical packages. Frequencies, proportion and summary statistics were used to describe the study population in relation to relevant variables. Odds ratio was computed to assess statistical association, and significance of statistical association was assured using 95% confidence interval and P-value. Bivariate analysis was employed to examine the relationship between the out come variable and selected independent variables. Those variables with observed association on bivariate analysis were further treated by multivariate analysis in order to adjust for possible confounders.

Analysis of data from qualitative source was made by summarizing the concepts after recording, transcribing and translating all discussion points.

4.10 Study variables

4.10.1 Independent variables

- Socio-demographic characteristics: age, religion, marital status, educational status and income.
- Non- sexual risk behavior: use of alcohols and khat.

- Cognitive factors: knowledge and attitude about HIV/AIDS, STIs, condom and VCT.
- Pre-migration Sexual behaviors: age at first sexual intercourse, number of sexual partners, type of sexual partners and condom use.
- New social environment: peer influence, duration of stay as migrant in the town, presence of many commercial sex workers, lack of access to health and social services, separation from spouse and sense of anonymity.

4.10.2 Dependent variables

- Risky sexual behaviors: Premarital sexual practice, having more than one sexual partner, practicing sex with commercial and/or casual partners.
- Condom use

4.11 Ethical consideration

Ethical clearance was secured from the ethical committee of Department of Community Health, Faculty of Medicine, Addis Ababa University. Official permissions were obtained from Amhara Regional State Health Bureau, South Wollo Zone Administrative Council and Zonal Health Desk, Kombolcha town Administrative Council and Woreda Health Office. Respondents were informed about the purpose of the study and information collected after obtaining verbal consent from each participant. Respondents

were allowed to refuse or discontinue participation at any time they want. Information was recorded anonymously and confidentiality assured through out the study period.

4.12 Operational definitions

Daily laborer: - a person who engaged in heavy, unskilled, labor based activities on daily basis to earn money.

Transient migrant: - individual who migrate from rural area and live in the town for not longer than one year continuously during the survey time.

Risky sex: - any unprotected penetrative sexual intercourse with any partner other than marital partner during their stay in the town.

Commercial sex workers: - women who sell sex for money or other gift.

Multiple sexual partners: - having more than one sexual partner.

Regular partner: - cohabiting (live-in) sexual partner but had never married.

Casual partner: - any partner other than marital, commercial or regular partner.

Currently sexually active: - a person engaged in penetrative sexual intercourse after departing from his permanent residence with a woman other than marital partner.

Consistent condom use: - use of condom in every act of penetrative sexual intercourse, except with marital partner during current sexual practice.

Knowledge about HIV prevention: - correctly knowing the three major ways to prevent HIV transmission i.e. abstinence, being faithful to one uninfected partners and condom use.

Comprehensive knowledge about HIV/AIDS: - Know the three major preventive methods and had no incorrect belief about its transmission.

4.13 Communication of the results

The results of this study will be communicated to the Ministry of Health, Ethiopian Public Health Association, Amhara Regional State Health Bureau, South Wollo Zone Health Desk, Kombolcha town Health Office and other concerned bodies accordingly. Moreover, efforts will be made to publish the paper in scientific journals.

5. Result

5.1 Socio-demographic characteristics

A total of 420 male daily laborers completed the questionnaire and included in the analysis. Two respondents were excluded from the analysis for gross incompleteness and inconsistency of responses, making a response rate of 99.5 %.

The majority of the study participants 308 (73.3%) were in the age group 15 to 24 years with a mean age of 22.4 (± 7.0) years. Most of the respondents were orthodox Christian 254 (60.5%) by religion and Amhara 415(98.8%) by ethnicity. A significant number 193 (46.0%) of the respondents didn't attend formal education. Three hundred thirty nine (80.7%) of respondents were single currently. The mean age at first marriage was 21.4 (± 3.2) years and only 82(19.6%) of them had children.

Three hundred forty nine (83.1%) of the study subjects came to the town from sixteen rural woredas of South and North Wollo Zones. The main reason for migration to the town was economic problem (90.5%), followed by conflicts with individuals (7.9%). The mean duration of stay in the town was 3.82 (± 2.0) months. The vast majority 404 (96.2%) migrate without their family and many of them 372 (88.5%) wish to return to their permanent residential place within six months time. Three hundred and seventy eight (90.0%) of the respondents claimed to earn an income of less than two hundred birr a month currently [See table 1].

Table-1: Socio-demographic characteristics of male daily laborers in Kombolcha town, South Wollo Zone, Amhara Region, June 2006.

Variables	Number	Percent
Age in Years		
15-24	308	73.3
25-34	80	19.0
35-44	24	5.7
≥ 45	8	1.9
Religion		
Orthodox	254	60.5
Muslim	165	39.3
Protestant	1	0.2
Ethnicity		
Amhara	414	98.5
Oromo	4	1.0
Argoba	2	0.5
Educational status		
No formal education	193	45.9
Grade 1-6	145	34.5
Grade 7-12	80	19.0
Others	2	1.5
Duration of stay in the town		
≤ 2 months	190	45.2
3-6 months	155	36.9
≥ 7 months	75	17.9
Reason for displacement		
Economic problem	380	90.5
Conflict with individuals	33	7.9
Others	7	1.6
Current marital status		
Never married	304	72.4
Married	81	19.3
Divorced	32	19.3
Widowed	3	0.7
Have children		
Yes	82	19.5
No	338	80.5
Migrated with family		
Yes	16	3.8
No	404	96.2
Current monthly income		
< 100 Birr	200	47.6
100-199 Birr	178	42.4
200-299 Birr	30	7.1
≥ 300 Birr	12	2.9

5.2 Sexual practice

A total of 230 (54.8%) daily laborers reported to have sexual intercourse prior to the survey. Of those who were sexually active, 44 (19.1%) engaged in first sexual practice before the age of 18 years and the minimum age of first sexual debut reported was 15.0 years. The mean and median ages of first sexual experience were 19.2 (± 2.5) and 19.0 years respectively.

Marital, casual, regular and commercial sex partners were described by respondents as first sexual partners at a proportion of 30.9%, 27.8%, 23.9% and 17.4% respectively. In other words 159(69.1%) of respondents were engaged in premarital sex or had non-marital first sexual relations.

Seventy (72.9%) of the Muslims, 98 (79.7%) of those attended formal education, 110 (78.0%) of those used to drink alcohols and 68 (73.1%) of those used to chew khat were found to be engaged in premarital sexual relations [See table 2].

On statistical tests to assess the association of some selected variables with the practice of having non-marital first sexual partner, attending formal education and drinking alcohols showed a statistically significant association. Those who used to drink alcohols and attended formal education were found to have a three and two fold risk of non-marital first sexual partner relation when compared with those who didn't [AOR (95%) CI = 2.65 (1.46, 4.82) and 2.50 (1.36, 4.58)] respectively.

Table-2: Association of selected variables with Premarital sex among male daily laborers in kombolcha town, South Wollo Zone, Amhara Region, June 2006.

Variable	Premarital sex		OR (95%) CI	
	YES	NO		
	N0 [%]	N0 [%]	Crude	Adjusted
Religion				
Christian	89[66.4]	45[33.6]	0.73(0.41, 1.30)	-
Muslim	70[72.9]	26[27.1]	1	
Educational status				
Formal education	98[79.7]	25[20.3]	**2.95(1.65, 5.29)**	**2.50(1.36, 4.58) ****
No formal education	61[57.0]	46[43.0]	**1**	**1**
Monthly income				
< 100 birr	58[72.5]	22[27.5]	1	
≥ 100 birr	101[67.3]	49[32.7]	0.78(0.43, 1.42)	-
Age at first sex				
< 18 Years	37[84.1]	7[15.9]	**2.77(1.17,6.57)**	2.31(0.94, 5.68)
≥18 Years	122[65.6]	64[34.4]	**1**	1
Drunk Alcohols				
Yes	110[78.0]	31[22.0]	**2.89(1.62, 5.16)**	**2.65(1.46, 4.82) ****
No	49[55.1]	40[44.9]	**1**	**1**
Chew Khat				
Yes	68[73.1]	25[26.9]	1.37(0.77, 2.45)	-
No	91[66.4]	46[33.6]	1	

* = $p < 0.05$ ** = $p < 0.01$

Among the 230 daily laborers who have reported experience of sexual intercourse, 152 (66.1%) admitted to be currently sexually active.

Ninety six (78.0%) of respondents who attended formal education, 89 (74.8%) of the age group 15 to 24 years, 67 (69.8%) of the Muslims, 92 (73.0%) of those stayed in the town for longer than three months, 103 (68.7%) of those who earn more than one hundred birr a month were sexually active during their stay in the town.

Among the currently sexually active respondents, a considerable proportion of daily laborers reported drinking alcohol 106 (69.7%) and chewing khat

69 (45.4%) during their stay in the town. Of whom 56.0% of the chewers and 75.2% of the drinkers were found to be currently sexually active.

The majority of currently sexually active respondents have ever heard about HIV/AIDS, other sexually transmitted infections, and voluntary counseling and testing at a proportion of 99.3%, 90.1% and 88.2% respectively. Moreover, 89 (58.9%) were found to have knowledge about HIV/AIDS prevention and 102 (67.1%) perceived themselves at no risk of HIV/AIDS.

When the variable currently sexually active was analyzed for statistical association with the above socio-demographic and knowledge related factors, age, educational status, duration of stay in the town and self HIV/AIDS risk perception showed a statistically significant association.

Daily laborers in the age group 15 to 19 years and those attended formal education were about five and two times more likely to be engaged in sexual practice during their stay in the town when compared with their counter parts [AOR (95% CI) = 4.92 (1.42, 16.94) and 2.44 (1.27, 4.68)] respectively. Similarly those respondents who stayed in the town for longer than three months and perceived themselves at risk for HIV/AIDS, were found to be sexually active currently [AOR (95% CI) = 2.10 (1.11, 3.97) and 2.83 (1.19, 6.74)].

Table-3: Association of selected socio-demographic and knowledge variables with current sexual practice among male daily laborers in Kombolcha town, South Wollo zone, Amhara Region, June 2006.

Variable	Currently sexually active		OR (95% CI)	
	Yes [%]	No [%]	Crude	Adjusted
Age				
15-19 years	23[85.2]	4[14.8]	**4.38(1.42, 13.50)**	**4.92(1.42, 16.94) ***
20-24 years	66[71.7]	26[28.9]	**1.93(1.07, 3.48)**	1.91(0.95, 3.84)
≥ 25 years	63[56.8]	48[43.2]	**1**	**1**
Religion				
Orthodox	85[63.4]	49[36.6]	0.75(0.42, 1.31)	-
Muslim	67[69.8]	29[30.2]	1	
Educational Status				
Formal education	96]78.0]	27[22.0]	**3.24(1.82, 5.73)**	**2.44(1.27, 4.68) ****
No formal education	56[52.3]	51[47.7]	**1**	**1**
Chewing Khat				
Yes	69[74.2]	24[25.8]	**1.87(1.05, 3.33)**	1.55(0.77, 3.09)
No	83[60.6]	54[39.4]	**1**	
Drinking Alcohols				
Yes	106[75.2]	35[24.8]	**2.83(1.61, 4.97)**	1.86(0.95, 3.64)
No	46[51.7]	43[48.3]	**1**	1
Duration of stay				
> 3 months	92[73.0]	34[27.0]	**1.98(1.14, 3.45)**	**2.10(1.11, 3.97) ***
≤3 months	60[57.7]	44[42.3]	**1**	**1**
Monthly income				
≥100 Birr	103[68.7]	47[31.3]	1.38(0.78, 2.44)	-
<100 Birr	49[61.3]	31[38.7]	1	
Self HIV/AIDS risk perception				
Yes	50[86.2]	8[13.8]	**4.28(1.91, 9.60)**	**2.83(1.19, 6.74) ***
No	102[12.5]	70[87.5]	**1**	**1**
Heard about STIs				
Yes	137[68.8]	62[31.2]	**2.36(1.09, 5.06)**	1.29(0.54, 3.10)
No	15[48.4]	16[51.6]	**1**	1
knowledge about HIV/AIDS prevention				
Knowledgeable	62[68.1]	29[31.9]	1.17(0.67, 2.06)	-
Not knowledgeable	89[64.5]	49[35.5]	1	

* = $p < 0.05$ ** = $p < 0.01$

5.3. Knowledge and utilization of condom

Three hundred eighty five (91.7%) of the total study subjects, 222 (96.5%) of those who had sexual experience and 150 (98.7%) of those currently sexually active respondents reported to have ever heard about condom. Health institutions, mass media and community gathering were the three most common sources of information cited by respondents at a proportion of 75.6%, 55.3%, and 44.2% respectively. Accordingly, of those who ever heard about condom, 303 (78.7%) of them knew different sources where they can obtain condom and 251 (65.2%) responded that they had a potential access at any time they wanted to have it.

The three most common sources of condom mentioned by respondents were shops 236 (77.9%), government health institutions 235 (77.6%) and Private pharmacies 100 (33.0%). Similarly of the 152 currently sexually active respondents, 134 (88.2%) knew from where to obtain condom and 106 (69.7%) have a full time access at least to one potential sources of condom.

Among the currently sexually active respondents, 88 (57.9%) had experience of condom use during their stay in the town, of whom only 53 (34.9%) of them were found to use condom consistently. The remaining 99 (65.1%) were either non-user [64 (42.1%)] or used condom inconsistently [35 (23.0%)].

Forty percent of the Muslims in contrast to 30.6% of the Christians and 36.3% of the currently unmarried as compared to 28.6% of the married respondents used condom consistently.

Regarding the educational status, 41.7% of respondents with formal education use condom consistently as compared to 23.2% among the non-formal educational background groups.

The proportion of having multiple sexual partner relationships and positive self HIV/AIDS risk perception among consistent condom users were 39.6% and 11.3% respectively. Of whom only 31.8% of those with multiple sexual relations and 12.0% of respondents with a positive self HIV/AIDS risk perception use condom consistently.

Education status, drinking alcohols, full time accessibility of condom and self HIV/AIDS risk perception showed statistically significant associations with consistent condom use.

Respondents who used to drink alcohols were not consistent condom users when compared with those non-drinkers [AOR (95% CI) = 0.31 (0.08, 0.74)] and daily laborers who identified them selves at no risk for HIV/AIDS were found to use condom about four times consistently than who perceived them selves at risk of HIV/AIDS [AOR (95% CI) = 3.58 (1.29, 9.89)]. Respondents above grade seven and with full time condom access use condom about three times more consistently [AOR (95% CI) = 2.88 (1.05, 7.94) and 3.22 (1.18, 8.82)].

Daily laborers were also asked to mention their reasons for inconsistent or non-use of condom. Generally drinking alcohols, interference in sexual pleasure, trusting partners, easy breakage and unavailability of condom were among the main reasons described by respondents for the overall inconsistent or non-use of condom at a proportion of 37.5%, 34.4%, 31.2%, 23.4% and 17.2% respectively [See table 4].

5.3.1. Utilization of condom across different sexual partners

a. Regular Partners

Among 44 respondents who claimed to have had sex with regular partners during their stay in the town, 22 (50%) of them used condom the last time they had sex. A considerable portion 10 (45.5%) of decisions to use condom the last time they had sex with those partners were made jointly by both partners, followed by male 9 (40.9%) and female partner 3 (13.6%) decisions. On assessment of condom use pattern while having sex with these partners, only 9 (20.5%) of them use condom consistently. The three most common reasons described for non or inconsistent use of condom while having sex with regular partners were trusting partners, partners objection and unavailability of condom as reported by 71.4%, 22.9%, and 14.3% respondents respectively.

b. Commercial Sex Workers

From a total of 85 respondents who reported having had sex with CSWs during their stay in the town, 48 (56.5%) of them use condom the last time they had sex with those partners. The majority of decisions 20 (41.7%) to use condom were made by female partners followed by joint decisions 18 (37.5%). Only 10 (20.8%) of the decisions to use condom was suggested by male partner. Among those who had sex with these partners only one third (35.3%) of them were consistent condom users. Drunken alcohol reduced sexual pleasure and feeling uncomfortable were three main reasons mentioned by respondents for none or inconsistent use of condom while having sex with CSWs at a proportion of 65.5%, 32.7% and 21.8% respectively.

c. Casual Partners

Among 48 daily laborers who reported having sex with casual partners during their stay in the town, one third (33.3%) of them use condom the last time they had sex with those partners. Most decisions (41.2%) to use condom were suggested by both partners jointly. Only fourteen (29.2%) of those who had sex with casual partners were consistent condom users. The three most common reasons described by respondents for none or inconsistent use of condom were drunken alcohols (60.6%), reduce sexual pleasure (45.5%) and unavailability of condom (33.3%).

Table-4: Association of selected variables with consistent condom use among male daily laborers in Kombolcha town, South Wollo Zone, Amhara Region, June 2006.

Variables	Consistent Condom use		OR (95%) CI	
	Yes	No	Crude	Adjusted
Age in years				
15-18	9[39.1]	14[60.9]	1	
19-24	23[34.8]	43[65.2]	0.83(0.31, 2.21)	-
≥ 25	21[33.3]	42[66.7]	0.78(0.29, 2.09)	-
Religion				
Orthodox Christian	26[30.6]	59[69.4]	0.65(0.33, 1.27)	-
Muslim	27[40.3]	40[59.7]	1	
Educational Status				
Grade 7-12	18[56.2]	14[43.8]	**4.25(1.67, 10.82)**	**2.88(1.05, 7.94) ***
Grade 1-6	22[34.4]	42[65.6]	1.73(0.77, 3.88)	1.32(0.49, 3.55)
No Formal education	13[23.2]	43[76.8]	**1**	**1**
Current marital status				
Not married	45[36.3]	79[63.7]	1.42(0.58, 3.49)	-
Married	8[28.6]	20[71.4]	1	
Khat chewing				
Yes	21[30.4]	48[69.6]	1	
No	32[38.6]	51[61.4]	1.43(0.72, 2.82)	-
Alcohol drinking				
Yes	29[27.4]	77[72.6]	**0.34(0.17, 0.71)**	**0.31(0.08, 0.74)**
No	24[52.2]	22[47.8]	**1**	**1**
Duration of stay				
>3 months	29[31.5]	63[68.5]	1	
≤ 3 months	24[40.0]	36[60.0]	0.69(0.35, 1.36)	-
Condom always accessible				
Yes	46[43.4]	60[56.6]	**4.27(1.75, 10.41)**	**3.22(1.18, 8.82) ***
No	7[15.2]	39[84.8]	**1**	**1**
Multiple sexual partner				
Yes	21[31.8]	45[68.2]	1	
No	32[37.2]	54[62.8]	0.78(0.40, 1.55)	-
Sex with CSWs				
Yes	30[35.3]	55[64.7]	1	
No	23[34.3]	44[65.7]	1.04(0.53, 2.04)	-
Self HIV risk perception				
No	47[46.1]	55[53.9]	**6.27(2.45, 16.0)**	**3.58(1.29, 9.89) ***
Yes	6[12.0]	44[88.0]	**1**	**1**
knowledge about HIV /AIDS prevention				
Not Knowledgeable	17[27.4]	45[72.6]	1	
Knowledgeable	35[39.3]	54[60.7]	0.58(0.29, 1.18)	-

$\star = p < 0.05$ $\star\star = p < 0.01$

Table-5: Three most common reasons for inconsistent or non use of condom with different sexual partners among male daily labourers in Kombolcha town, South Wollo Zone, Amhara Region, June 2006.

Reasons for inconsistent or non-use of Condom	Commercial sex workers		Regular partners		Casual partners	
	No	%	No	%	No	%
Alcohol intoxication	35	65.5	-	-	20	58.8
Reduce sexual pleasure	18	32.7	-	-	15	44.1
Trusting partners	-	-	25	71.4	-	-
Partner disapproval	-	-	8	22.9	-	-
Easy breakage	12	21.8	-	-	-	-
Unavailability of condom	-	-	5	14.3	11	33.3

✶Total will not add up to 100%, as multiple responses were possible.

5.4. Knowledge about HIV/AIDS

Among the total 420 respondents, 415 (98.8%) ever heard about HIV/AIDS. The three most common source of information mentioned by respondents were health institutions, mass media and community gathering at a proportion of 75.4%, 64.8% and 54.2% respectively.

Respondents who ever heard about HIV/AIDS were also asked for the knowledge they had about transmission of the virus. The vast majority 410 (98.8%) responded to sexual route followed by sharing contaminated sharps 349 (84.1%) and receiving blood donated from HIV infected person 171(41.2%). Vertical transmission (mother to fetus or child transmission) is cited only by 101 (24.1%) of the respondents.

On the other hand 45 (10.7%) and 37 (8.8%) of the respondents agreed that HIV can be transmitted by insect bites and eating uncooked chicken or egg that had swallowed used condoms respectively.

Generally among 415 respondents who ever heard about HIV/AIDS, 257 (61.2%) have reasonable knowledge about its prevention (Knew the three major HIV prevention methods), 253 (60.2%) reported that they knew someone who was infected with HIV and/or died of AIDS and 194 (46.2%) knew that a healthy looking person could be HIV infected. One hundred forty seven (35.0%) had comprehensive knowledge about HIV/AIDS (knew the three major preventive methods and had no incorrect belief about its transmission).

5.5. HIV/AIDS risk perception

The attitude of those who ever heard about HIV/AIDS was also assessed for self HIV/AIDS risk perception. Of the 415 study subjects responded to this question quite many, 313 (75.4%) reported that they perceived themselves to be at no risk for HIV/AIDS.

Reasons mentioned for no risk to HIV/AIDS includes being abstain from sex 191 (61.0%), avoid sharing of sharps 161 (51.4%), trusting partners 71(22.7%) and condom use 44 (14.1%).

On the other hand 67 (16.1%) considered themselves at risk for HIV /AIDS and the remaining 35(8.4%) either didn't estimate their risk or failed to respond to this question. The two main reasons for a positive HIV/AIDS self risk perceptions were, unsafe sexual practice 50 (74.6%) followed by exposure to contaminated sharps 25 (37.3%).

Individual behaviors like drinking alcohols and ever had sex were found to have statistically significant association with self risk perception to HIV. Those who used to drink alcohol and ever had sex perceived them selves at high risk for HIV/AIDS when compared with those who didn't [AOR (95% CI) = 3.63 (1.83, 7.19) and 3.21 (1.32, 7.78)] respectively.

Table-6: Association of selected variables with self HIV/AIDS risk perception among male daily laborers in kombolcha town, S.wollo Zone, Amhara Region, June 2006.

Variables	Self HIV/AIDS risk perception		OR (95% CI)	
	Yes No[%]	No No[%]	Crude	Adjusted
Age				
≥18 years	63[19.1]	267[80.9]	**4.77(1.68, 13.45)**	0.73(0.22, 2.86)
< 18 Years	4[4.7]	81[95.3]	**1**	1
Religion				
Orthodox	40[15.9]	211[84.1]	0.96(0,56, 1.64)	-
Muslim	27[16.5]	137[85.5]	1	
Educational Status				
No formal education	25[13.2]	164[86.8]	0.66(0.38, 1.13)	-
Formal education	42[18.6]	184[81.4]	1	
Duration of stay in the town				
>3 months	41[23.4]	134[76.6]	**2.51(1.47, 4.30)**	0.67(0.38, 1.27)
≤3 months	26[10.8]	214[89.2]	**1**	1
Khat chewing				
Yes	34[30.4]	78[69.6]	**3.56(2.07, 6.12)**	1.67(0.91, 3.06)
No	33[10.9]	270[89.1]	1	1
Current marital status				
Not married	52[15.6]	282[84.4]	0.81(0.42, 1.52)	-
Married	15[18.5]	66[81.5]	1	
Alcohol drinking				
Yes	54[27.3]	144[72.7]	**5.88(3.03, 11.18)**	**3.63(1.83, 7.19) *****
No	13[6.0]	204[94.0]	**1**	**1**
Ever had sex				
Yes	58[25.2]	171[74.8]	**6.67(3.20, 13.88)**	**3.21(1.32, 7.78) ****
No	9[4.9]	177[95.1]	**1**	**1**

**= p < 0.01 ***= p < 0.001

Self-risk perception for HIV/AIDS was also assessed with respect to current sexual behaviors of respondents. Among the total 67 respondents who perceived them selves at risk for HIV/AIDS, 50 (74.6%) were currently sexually active.

About 45.5%, 44.7% and 13.6% of respondents with a positive history of multiple, commercial, and regular sexual relation were found to perceive themselves at risk of HIV/AIDS.

Only inconsistent condom use showed a statistically significant association with self HIV/AIDS risk perception [AOR (95% CI) = 5.19 (2.08, 16.84)].

Table-7: Association of selected sexual behavior variables with self HIV/AIDS risk perception among male daily laborers in kombolcha town, South wollo Zone, Amhara Region, June 2006.

Variables	Self HIV/AIDS risk perception		OR (95% CI)	
	Yes[%]	No[%]	Crude	Adjusted
Consistent condom use				
No	44[44.4]	55[55.5]	**6.26(2.45, 16.00)**	**5.91(2.08, 16.84)** **
Yes	6[11.3]	47[88.8]	**1**	**1**
multiple sexual relation				
Yes	30[45.5]	36[54.5]	**2.75(1.37, 5.51)**	1.28(0.50, 3.28)
No	20[23.3]	66[76.7]	**1**	1
Sex with CSWs				
Yes	38[44.7]	47[55.3]	**3.70(1.73, 7.89)**	2.37(0.84, 6.69)
No	12[17.9]	55[82.1]	1	1
Sex with casual partner				
Yes	16[33.3]	32[66.7]	1	
No	34[32.3]	70[67.3]	1.02(0.49, 2.12)	
Sex with RP				
No	44[40.7]	64[59.3]	**4.35(1.69, 11.16)**	2.82(0.92, 8.64)
Yes	6[13.6]	38[86.4]	**1**	1
Had Hx of STIs				
Yes	29[53.7%]	25[46.3%]	**4.50(2.11, 9.57)**	2.17(0.91, 5.17)
No	17[20.5%]	66[79.5%]	**1**	1

** = $p < 0.01$

5.6. Voluntary counseling and testing

From a total of 415 study subjects who responded to questions that are related to VCT, 333 (80.2%) of them were aware of the existence of the service and of those who ever heard about VCT, the majority 301 (90.5%) had good attitude towards the service.

Even though the majority of respondents had high level of awareness and attitude about the service, only 50 (15.0%) of them have ever had tested their blood to know their status before the survey. Among those undergone to VCT 31 (62.0%) were Christian by religion, 37 (74.0%) age above 18 years, 35 (70.0%) attend formal education and 38 (76.0%) have perceived them selves at no risk for HIV/AIDS.

Regarding reasons for not counseled and blood tested, more than half (53.2%) of the study subjects claimed unavailability of the service in or around their permanent residential area. Fear for positive results, stigma & discrimination and not yet started sex were among the other reasons mentioned by respondents at a proportion of 31.0%, 13.4% and 13.4% respectively.

5.7. Multiple sexual partners

Among 152 currently sexually active respondents, 66 (43.4%) of them practiced sex with two or more sexual partners during their stay in the town preceding the survey.

The proportion of multiple sexual relation were more among the Muslims 50.7% as compared to Christians 37.6%, the married 53.6% than single 41.1%, those with child 57.9% than with no child 38.6% and those stayed in the town for longer than three months 53.3% than less than three months 28.3%. Similarly, 60.9% of the khat chewers versus 28.9% of the non-chewers, and 50.9% of the alcohol drinkers versus 26.9% of the non-drinkers were engaged in multiple sexual practices during their stay in the town. Sixty and 66.7% of respondents with a positive self HIV/AIDS risk perception and history of sexually transmitted infections admitted practicing sex with more than one partners during their stay in the town, respectively.

A statistically significant association was observed between duration of stay in the town and having sex with multiple sexual partners. Daily laborers who stayed in the town for longer than three months were about two times more likely to have multiple sexual relation ship when compared with those stayed for less or equal to three months [AOR (95% CI) = 2.34 (1.04, 5.27)].

Among the total 66 respondents who reported history of multiple sexual relations, all (100%) and 61(92.4%) of them reported that they have ever heard about HIV/AIDS and sexually transmitted infections respectively.

A considerable portion of daily laborers 47(71.2%) who reported to have two or more sexual partners were neither counseled nor tested for HIV/AIDS. No statistically significant association was observed between respondents' knowledge of HIV/AIDS prevention methods and the practice of multiple sexual partner relation ship [OR (95% CI) = 1.54 (0.82, 2.97)].

Those who used to chew khat were about three times more likely to engage in multiple sexual relation ships compared to those who didn't chew khat [AOR (95% CI) = 2.30 (1.02, 5.16)].

Despite having multiple sexual partners, only 21 (31.8%) of them were consistent condom users and 36(54.5%) identified them selves at no risk of HIV/AIDS.

Table-8: Association of selected variables with sex with multiple sexual partners among male daily laborers in kombolcha town, South wollo Zone, Amhara Region, June 2006.

Variables	Multiple sexual partners		OR (95% CI)	
	Yes[%]	No[%]	Crude	Adjusted
Religion				
Christian	32[37.6]	53[62.4]	0.58(0.30, 1.12)	-
Muslim	34[50.7]	33[49.3]	1	
Educational status				
No formal education	23[41.1]	33[58.9]	0.85(0.44, 1.67)	-
Formal education	43[44.8]	53[55.2]	1	
Duration of stay in the town				
> 3 months	49[53.3]	43[46.7]	**2.88(1.43, 5.77)**	**2.34(1.04, 5.27)** ⋆
≤ 3 months	17[28.3]	43[71.7]	**1**	**1**
Current marital status				
Not married	51[41.1]	73[58.9]	0.60(0.26, 1.38)	-
Married	15[53.6]	13[46.4]	1	
Have children				
Yes	22[57.9]	16[42.1]	**2.18(1.03, 4.61)**	1.89(0.72, 4.93)
No	44[38.6]	70[61.4]	**1**	1
Monthly income				
< 100 birr	19[38.8]	30[61.2]	0.75(0.37, 1.50)	-
≥100 birr	47[45.6]	56[54.4]	1	
Chewing Khat				
Yes	42[60.9]	27[39.1]	**3.82(1.94, 7.52)**	**2.30(1.02, 5.16)** ⋆
No	24[28.9]	59[71.1]	**1**	**1**
Drinking Alcohol				
Yes	54[50.9]	52[49.1]	**2.94(1.37, 6.29)**	1.32(0.54, 3.21)
No	12[26.1]	34[73.9]	**1**	1
Consistent Condom use				
Yes	21[39.6]	32[60.4]	0.78(0.40, 1.55)	-
No	45[45.5]	54[54.5]	1	
knowledge about HIV/AIDS prevention				
Not knowledgeable	31[50.0]	31[50.0]	1.54(0.80, 2.97)	-
Knowledgeable	35[39.3]	54[60.7]	1	
Self HIV risk perception				
Yes	30[60.0]	20[40.0]	**2.70(1.34, 5.43)**	1.37(0.60, 3.10)
No	36[35.6]	65[64.4]	**1**	1
Ever had VCT				
Yes	8[29.6]	19[70.4]	0.52(0.20, 1.29)	-
No	47[44.8]	58[55.2]	1	

⋆= p < 0.05 ⋆⋆= p < 0.01

5.8. Sex with commercial sex workers

Among the total 152 currently sexually active respondents, 85(55.9%) had sex with commercial sex workers during their stay in the town.

The proportion of daily laborers engaged in commercial sex was high among those with relatively longer duration of stay 67.4% as compared to those stayed for shorter duration 38.3%. Commercial sex was more prevalent among respondents with non-formal educational back ground 58.9, better current income earner 56.3%, and those who didn't under gone to VCT 60.2%.

Moreover, 64.2% of alcohol and 69.6% of khat consumers were found to practice sex with commercial sex workers as compared to 37.0% and 44.6% among non-consumers respectively.

All of the respondents who had sex with CSWs heard about HIV/AIDS and 45(52.9%) of them had knowledge about HIV/AIDS prevention. Seventy four (87.1%) and 47(55.3%) of those who had sex with CSWs were aware of voluntary counseling and testing, and had perceived themselves at no risk for HIV/AIDS respectively. Forty one (48.2%) of them also admitted that they had either problem of genital discharge or ulcer during their stay in the town.

On statistical tests to assess the effect of these socio demographic and knowledge related variables to the practice of having sex with CSWs, only

duration of stay in the town, chewing Khat and drinking alcohols showed statistically significant association [AOR (95% CI) = 2.33 (1.06, 5.13), 4.16 (1.46, 11.85) and 2.60 (1.12, 6.02)] respectively.

Daily laborers who stayed in the town for longer than three months, used to chew Khat and drink alcohols were more likely to engage in practicing sex with commercial sex workers.

Table-9: Association of selected variables with having sex with CSWs among male daily laborers in kombolcha town, South wollo Zone, Amhara Region, June 2006.

Variable	Sex with CSWs		OR (95% CI)	
	YES No[%]	NO No[%]	Crude	Adjusted
Age in Years				
15-18 Years	12[52.2]	11[47.8]	0.58(0.22, 1.54)	-
19-24 Years	32[48.5]	34[51.5]	1.15(0.44, 2.99)	-
≥ 25 Years	41[65.1]	22[34.9]	1	
Religion				
Orthodox	50[58.8]	35[41.1]	1.30(0.68, 2.49)	-
Muslims	35[52.2]	32[47.8]	1	
Duration of stay in town				
>3 months	62[67.4]	30[32.6]	**3.32(1.68, 6.55)**	**2.33(1.06, 5.13)** ⋆
≤3 months	23[38.3]	37[61.7]	**1**	**1**
Educational Status				
No formal education	33[58.9]	23[41.1]	1.21(0.62, 2.36)	-
Formal education	52[54.2]	44[45.8]	1	
Current marital status				
Not married	67[54.0]	57[46.0]	0.65(0.27, 1.52)	-
Married	18[64.3]	10[35.7]	1	
Have children				
Yes	24[63.2]	14[36.8]	1.48(0.70, 3.16)	-
No	61[53.5]	53[46.5]	1	
Monthly income				
<=100 birr	27[55.1]	22[44.9]	0.95(0.48, 1.88)	-
>= 100 birr	58[56.3]	45[43.7]	1	
Chewing Khat				
Yes	48[69.6]	21[30.4]	**2.84(1.45, 5.55)**	**4.16(1.46, 11.8)** ⋆⋆
No	37[44.6]	46[55.4]	**1**	**1**
Drinking Alcohol				
Yes	68[64.2]	38[35.8]	**3.05(1.48, 6.26)**	**2.60(1.12, 6.02)** ⋆
No	17[37.0]	29[63.0]	**1**	**1**
Ever had VCT				
No	74[60.2]	49[39.8]	**2.47(1.07, 5.68)**	2.18(0.78, 6.09)
Yes	11[37.9]	18[62.1]	**1**	1
knowledge about HIV/AIDS prevention				
Not knowledgeable	40[64.5]	22[35.5]	1.77(0.91, 3.46)	-
Knowledgeable	45[50.6]	44[49.4]	1	
Self HIV risk perception				
Yes	38[76.0]	12[24.0]	**3.70(1.73, 7.89)**	1.92(0.78, 4.27)
No	47[46.1]	55[53.9]	**1**	1

⋆= p < 0.05 ⋆⋆= p < 0.01

5.9. Sexually transmitted infections

Among 420 total study participants, 322 (76.7%) reported to have ever heard about sexually transmitted infections. Accordingly, of the 230 who ever had sex, 199 (86.5%) and from those currently sexually active, 137 (90.1%) of respondents were aware about STIs.

Those who ever heard about STIs were also asked to mention any of the sexually transmitted infections that they knew. Nearly two-third (64.3%) of the respondents was able to mention four of the commonly occurring STIs by name. The commonly known sexually transmitted infections mentioned by most of the respondents were Gonorrhea to be followed by Syphilis, Chancroids and Lympho-granuloma Venorum at a proportion of 95.3%, 91.9%, 65.9%, and 64.3% respectively. Moreover, fifty four (35.5%) of the currently sexually active respondents were diseased by either of the STDs during their stay in the town.

Self reported sexually transmitted disease occurrence among currently sexually active respondents who practiced sex with regular, casual, commercial and multiple sexual partners verses their counterparts were 47.4% Vs 21.4%, 50.0% Vs 34.7%, 54.7% Vs 21.0%, and 59.0% Vs 23.7% respectively.

The prevalence of self reported STIs among khat chewers were 47.6% as compared to 32.4% for non-chewers and 47.5% among alcohol drinkers in contrast to 18.4% for non-drinkers. The proportion of respondents with

sexually transmitted diseases was also high among subjects with longer duration of stay in the town 47.6% when compared with those stayed for shorter period of time 32.7%.

The occurrence of sexually transmitted diseases among participants during their stay in the town was also assessed for statistical association with respect to socio-demographic variables, the number and type of sexual partners they had and the pattern or frequency of condom use they were accustomed to. With this regard the occurrence of sexually transmitted disease were found to be statistically associated with the practice of multiple sexual partner relation ship and consistent condom use. Practicing sex with two or more sexual partners was a risk while consistent condom use was protective [AOR (95% CI) = 2.86 (1.19, 6.89) and 0.24 (0.09, 0.61)] for the occurrence of sexually transmitted diseases.

Among those who had symptom complex of STDs, 52 (96.2%) seek for treatment. As to the respondents first preference of institution for seeking treatment, 44 (84.6%) of them claimed to have visited health facilities as their first treatment options (both government and private health facilities equally at a proportion of 42.3%) and the remaining 8 (15.4%) seek for traditional medicine.

The main reason described by respondents for not seeking modern treatment was lack of money 7 (70.0%) followed by thinking that these diseases are self limited 4 (40.0%).

Table-10: Association of selected variables with history of self reported STIs among male daily laborers in kombolcha town, South wollo Zone, Amhara Region, June 2006.

Variables	STIs		OR (95% CI)	
	Yes[%]	No[%]	Crude	Adjusted
Educational Status				
No Formal Education	21[43.8]	27[56.2]	1.32(0.64, 2.69)	-
Formal Education	33[37.1]	56[62.9]	1	
Duration of Stay				
> 3 Months	36[43.9]	46[56.1]	1.60(0.78, 3.27)	-
< 3 Months	18[32.7]	37[667.3]	1	
Chewing Khat				
Yes	30[47.6]	33[52.4]	1.89(0.4, 3.79)	-
No	24[32.4]	50[67.6]	1	
Drinking Alcohol				
Yes	47[47.5]	52[52.5]	**4.00(1.61, 9.94)**	1.81(0.65, 5.04)
No	7[18.4]	31[81.6]	**1**	1
Sex with Regular Partners				
No	45[47.4]	50[52.6]	**3.30(1.42, 7.64)**	1.51(0.14, 15.93)
Yes	9[21.4]	33[78.6]	**1**	1
Sex with casual Partner				
Yes	21[50.0]	21[50.0]	1.87(0.89, 3.92)	-
No	33[34.7]	62[65.3]	1	
Sex with CSWs				
Yes	41[54.7]	34[45.3]	**4.54(2.12, 9.73)**	2.37(0.88, 6.37)
No	13[21.0]	49[79.0]	**1**	1
Multiple Sexual Partners				
Yes	36[59.0]	25[41.0]	**4.64(2.25, 9.67)**	**2.86(1.19, 6.89)** *
No	18[23.7]	58[76.3]	**1**	**1**
Consistent Condom Use				
Yes	10[21.3]	37[78.7]	**0.28(0.12, 0.63)**	**0.24(0.09, 0.61)** **
No	44[48.9]	46[51.1]	**1**	**1**

*= P < 0.05 ** = p < 0.01

5.10. Substance use

Among the total 420 daily laborers participated in the study, 201 (47.9%), 112 (26.7%) and 28 (6.7%) reported consumption of alcohols, khat and cigarette at least occasionally during their stay in the town respectively. Of the 152 currently sexually active respondents, 87 (57.2%) and 44 (28.9%) claimed to had practice sex motivated by either ingestion of alcohols and/or Khat during their stay in the town, respectively.

As already documented in the previous sections, the proportions of daily laborers engaged in risky sexual behaviors were very high among respondents who used to drink alcohol and/or chew khat. Moreover, on statistical tests employed to asses the associations of substance use with the practice of risky sexual behaviors, both chewing khat and drinking alcohols were significantly associated with most risky sexual behaviors among the study subjects.

Drinking alcohols was found to have statistically significant association with commencing sex with non-marital first sexual partner (AOR = 2.65, $p < 0.01$), having sex with commercial sex workers (AOR = 2.60, $p < 0.05$), non or inconsistent condom use (AOR = 2.57, $p < 0.05$), and Self HIV/AIDS risk perception (AOR = 3.63, $p < 0.001$).

Similarly chewing khat was also statistically significantly associated with engaging in multiple sexual relation ship (AOR = 2.30, $p < 0.05$) and having sex with commercial sex workers (AOR = 4.16, $p < 0.001$).

5.11. Male having sex with male

Among the total 420 study subjects, 113 (26.9%) of them have heard about the issue of male having sex with male. Of those who have ever heard about male homosexual, only one daily laborer admitted to practice sex with his male sexual partner during his stay in the town.

5.12. Qualitative Result

A total of four focus group discussions with 36 discussants were made among purposively selected male daily laborers and CSWs [two with each discussant groups].

The discussions with male discussants were mainly focusing on assessing daily laborers':

- Awareness and knowledge about HIV/AIDS and its magnitude in their permanent residential area as well as in Kombolcha town,
- The type of sexual relation ship they used to practice specially during their stay in the town,
- Asses' factors that initiate or influence their sexual desire, and measures to be taken to protect themselves from any sexually transmitted infections.

Where as the purpose of discussion with commercial sex workers was mainly, to indirectly assess the sexual behaviors of daily laborers, with special emphasis on attitude and practice of condom use.

5.12.1. Knowledge about HIV/AIDS and its impact

All male daily laborers discussants mentioned that they knew or are aware about the existence of HIV/AIDS in their locality as well as in Kombolcha town. They heard about it from every where like in school, anti-HIV/AIDS clubs, community gathering, health institutions and friends.

One discussant from Akesta woreda described AIDS as:

"a non curable and deadly disease, with no drugs to cure, that human kind ever experienced in history".

Other discussant added that AIDS is *"a very dangers and difficult disease".* Because of its very long incubation period, a person can infect many others; including giving birth to HIV infected babies.

The group also agreed that the impact of HIV/AIDS is not only limited to individuals, groups or certain localities, it rather highly influence and harm the whole nation and the community at large. Participants were also able to mention the main mode of transmissions like: unsafe sexual practice, sharing sharps contaminated with HIV virus and mother to child transmissions.

5.12.2. Factors that increase vulnerability of daily laborers to HIV infection.

The discussants mentioned many factors that predispose them to high risk sexual behaviors. These factors are either, economical, environmental and/or knowledge related, associated with their pre and post migration individual characteristics. The group agreed that:

- Those daily laborers who didn't attend formal education have very limited knowledge about HIV/AIDS.
- Establishing marriage with out pre-marital HIV counseling and blood testing.

- Parental influence on marriage process. The discussant agreed that marriage process in the rural community is almost completely under the influence of parents and elderly. Besides parents don't give attention for HIV due to the limited knowledge they have about the problem, and rather give more emphasis to the cultures and norms.
- Relatively better income in the town predisposes them to substance use. "*They said while we are here because we earn some money which is completely ours (no family interference about its management), we used to chew khat and drink alcohols which may push or motivate us to look for sex exchanged for money*". Here also no one will blame us for such unwanted behaviors, because neither family nor elderly are around, rather some of our friends encourage or motivate us to do so.
- Some of routine daily work can also predispose them to HIV. They said that they may acquire HIV secondary to cutting wounds that occur as a result of sharp injury contaminated by HIV, while doing their routine activity, such as digging or cleaning.
- Another environmental factor cited by respondents for the increased risk to HIV was the presence of many khat houses, local groceries and illegal video houses in the town fuelled by peer influence.
- They also claimed the presence of many commercial sex workers, especially at one corner of the town called *"Borchellie"* as a potential

risk factor. They said, since these commercial sex workers are here to do some business they would approach us in different ways by grooming them selves. So we would enjoy sex with them, especially at times when we are intoxicated with alcohols and agitated by our friends.

5.12.3. Current sexual practice

Most of the discussants denied practicing sex while being in the town. But they knew that many of their friends did sex mostly with commercial sex workers, followed by casual partners. The casual partners cited were those ladies from rural areas calling them as "*yagerachin lejoch*" when they came to the town searching for work, like housemaid.

5.12.4. Knowledge about condom and its utilizations

All discussants were aware of condom. Two discussants said that, they knew about it but didn't ever use. The other said that, condom has many advantages including prevention of HIV/AIDS, other sexually transmitted infections and unwanted pregnancy. He even told us the whole process of proper application of condom. They also explain the potential sources of condom. Sources from government and private health institutions as well as anti-AIDS clubs were approved to be of best quality. Other wise, other sources, especially from shops, peddlers and super markets are not good alternatives for reasons like problem of expiry date and storage, as agreed by discussants.

They agreed using condom while they are engaged in extra marital sexual activity but never with regular partners or wives in their home. Interference with sexual pleasure and trusting partners or to be trusted by partners was the two common reasons for non-use of condom while having sex with regular partners.

Although they knew consistent condom use in every act of extra marital sexual practice is mandatory, there are conditions that motivate them not to use condom, as in the case of alcohol intoxication.

5.12.5. Prevention and control measures

The agreed up on opinions described by the majority of discussants as preventive and control measures were:

- Consistent and appropriate use of condom.
- Abstain from sex before marriage and/or have premarital VCT.
- Be faith full to one partner and avoid multiple sexual relations.
- Avoid sharing sharps.

5.12.6. Summary of FGD results with commercial sex workers

The purpose of conducting the focus group discussion with this group of population was mainly to assess or know whether daily laborers are their clients or not and indirectly assess the knowledge, attitude and practice of condom use among those daily laborers. Having this general purpose two

focus group discussions were conducted among 18 purposively selected commercial sex workers in two discussion sessions.

They said that, most of their clients are those who came from rural areas for meeting and other work related activities. They admitted migrant rural daily laborers are their regular clients. They also said, those clients from the countryside (rural area) didn't know much about condom or want to use it, especially after they joined us for two or three occasions. One discussant said that, they use condom while practicing sex with us because we forced them to do so. But what we observed while they had sex with those ladies from the rural area is that they didn't use condom, because we couldn't find any used condom or cases of condom in the garbage when they leave the bed rooms.

They also described that, some of them used to chew khat, drunken alcohol and even other substances, which we couldn't really know **….,** one of them said, may be "Hashish" in the bar.

They also agreed that, most clients who want to have sex with out condom would try to encourage us to do so by giving more prices and inviting too much alcohol. They justify this idea by saying: when we had too much alcohol we got intoxicated, so that, it will be an opportunity to them to had sex with out condom.

As mentioned by the discussants, the most common reason thought for non-use of condom by these clients was lack of sexual satisfaction. The other possible reason they speculate was that those who knew their HIV status can also do so (those HIV positive) just for revenge, some thing like "*Ene kemotku serdo Aibkel*", as described by one discussant.

Discussants were also asked to suggest when daily laborers started to enjoy them. They said that, rural clients start to practice sex not just immediately they came; they rather start to have sex with us after some months stay. Reasons mentioned for this were:

- They should know and adapt the new environment.
- They should have (made) some money and even know the amount to be paid for us.
- They should get relatively clean and even should know how to approach us for us.

5.12.7. suggested preventive and control measures

Suggested ideas and comments given by discussants to prevent the transmission of HIV by this group of daily laborers to rural community were: they should not be returned home and government should arrange some thing for them to do here. Other wise they will infect many others in the countryside because those rural women do believe that individuals who stayed in the town have money, and at the same time rural women knew little about HIV/AIDS

6. Discussion

In Ethiopia, there is limited information about the sexual behavior of transient migrants and their contribution on the spread of HIV/AIDS, especially to the rural community. Thus this study has tried to assess the magnitude of high risk sexual behaviors and condom use among transient migrant male daily laborers in Kombolcha town, North East Ethiopia.

In this study the majority of subjects 73.3% were found to be in the age group 15 to 24 years and 93.2% under the age of 35 years. Economic problem was the main reason that forced them to migrate in to the town.

This finding is in agreement with studies done elsewhere in Africa [43,44]. A study done to explore mobility pattern and HIV/AIDS in a rural Tanzania revealed that 80 to 90 percent of house holds had revenue below the poverty line and migration of youth was the most important form of migration identified [31,45]. This may indicate that young rural adults are the one who migrate to the town searching for work opportunity so as to make money and cope with the economic problem encountered in the rural community.

Because of lack of similar studies on the same study population, we made some comparisons with other potentially risky groups from EBSS, EDHS and other studies whenever appropriate.

Behavioral science researchers agreed that, abstinence from sex before marriage and delay of sexual debut are among the important strategies that help to reduce spread of HIV, especially among the youths.

Two hundred thirty (54.8%) of the daily laborers in this study reported to have ever practice sex prior to the survey and 19.1% of them had their first sex before the age of 18 years. This rate of sexual activity is higher than most studies done in Ethiopia, Agaro 25.0% for both sexes [46], Addis Ababa 38.0% [47], and east Gojam 45.0% [48], but almost similar with other studies done in some African countries; Uganda 52.2% [49], Tanzania 54.0% for both sexes [45] and Zambia 60.0% [50].

The mean and median age at first sexual debut in this study is 19.2 (± 2.5) years and 19.0 years respectively. This finding (mean age) is in agreement with studies done in Addis Ababa 20.0 years [51], uniformed service 18.8 years [41], transport workers (18.5 – 20.1) years [41] and Ghana 19.5 years [52], but higher than other studies done in east Gojam 13.6 years [48], Bahir Dar 16.9 years [53] and South Ethiopia 17.0 years [54].

The relatively higher age of sexual commencement in this study could be because; our study includes only male individuals above the age of 15.0 years. Thus those male daily laborers who might start sex before the age of 15.0 years and girls who would engage in sexual debut at earlier age are already excluded from this study [55].

The 2005 Ethiopian Demographic and Health survey report revealed that 15.7% of women and 1.7% of men had commenced sex before the age of 15.0 years [42]. The 2002 Behavioral Surveillance Survey of Ethiopia also documented, 33.0% of the out of school and 25.0% of the in school youths commenced sex before the age of 15.0 years [41].

The other risky sexual behavior observed in this study is the alarmingly very high rate of non-marital fist sexual partners. Among 230 respondents who ever had history of sexual intercourse, 159 (69.1%) had commenced their first sex with non-marital sexual partners.

Drinking alcohols and attending formal education were found to be predisposing factors which push daily laborers to engage in pre-marital sexual activity. This could be because school is one of the conducive environmental factor which favors sexual relations among students and does increase the motive to commence sex. A study done in young people of USA revealed that 18.0% of first sex was associated with ingestion of alcohols [56].

From the above findings we can understand that more than half (54.8%) of the study subjects already started sexual intercourse (69.1% of which were pre-marital and 19.1% before the age of 18.0 years) which is against the rule of abstaining from sex before marriage and delaying sexual debut.

Thus, we can conclude that a considerable portion daily laborer already engaged in some risky sexual behaviors that might predisposes them to sexually transmitted infections including HIV/AIDS.

Moreover, 152 (66.1%) of those ever had sex admitted history of sexual practice after departing from their permanent residence. Current sexual practice was more prevalent among respondents who used to chew khat and drink alcohols, 74.2% and 75.2% respectively.

To belong in the age group 15 to 19 years, attending formal education, staying in the town for longer than three months and self risk perception were found to be factors associated with current sexual practice among respondents. This could be because, this age group is the time when the inherent sexual desire of human being reaches to its peak and hence adolescents try to experiment or test their sexual maturity and also it is the time when peer pressure predominates a lot on sexual behavior of individuals [57]. Whereas living for longer duration in the town may predispose daily laborers for substance use and increased peer pressure that influences sexual behavior, to commence sex and at the same time may favors them to make more money (so that they may change money for sex).

It is believed that knowledge on HIV/AIDS and other sexually transmitted infections should be translated in to safe behavior so as to prevent and

control the dissemination of these diseases among the target populations and to the community at large in the long run.

In this study, there is high level of awareness about HIV/AIDS and other sexually transmitted infection. Moreover, of those who were aware about HIV/AIDS, 98.8% knew that HIV can be transmitted through sexual intercourse, 61.2% knew the three major preventive methods and 35.0% have comprehensive knowledge about HIV/AIDS.

The above knowledge related findings from this study are almost comparable with other recently conducted surveys in Ethiopia. The 2005 Ethiopian Demographic and Health survey documented that, among the age group 15 to 49 years male respondents, 97.0% and 30.0% of them had awareness and comprehensive knowledge about HIV/AIDS respectively. Whereas the preliminary findings of the 2005 Ethiopian Behavioral Surveillance Survey revealed that, among the general population, more than 98.0% were aware about HIV/AIDS, 55.0% knew all the three preventive methods and 20.0% had a comprehensive knowledge about HIV/AIDS [(5)]. This may signify that awareness and knowledge about HIV/AIDS is created to most segment of the population.

Voluntary counseling and blood testing is one of the prevention and control strategies advocated and implemented as part of the expanded response to the HIV/AIDS pandemic across the globe [(58)].

In this study, though 80.2% of the respondents had awareness about VCT only 15.0% of them utilized the service. This rate of VCT uptake was encouraging when compared with findings for male respondents of the 2005 EDHS (6.0%) and the Kenyan migrant tea plantation workers (10.0%). Whereas the preliminary report of second round Behavioral Surveillance Survey of Ethiopia documented a higher rate of VCT utilization among some population groups, 26.0% for female sex workers and 50.8% for uniformed service [(5)].

The relatively lower rate service utilization in our study when compared with the second round BSS of Ethiopia could be: as a result of unavailability of the service around the locality in our study population (53.2% of the respondents cited unavailability of the service as a reason for not using the service). And there might be some responsible bodies and/or special program that promote and access the service to those population described in the BSS groups or as a result of differences in other socio-demographic characteristics.

Unprotected sexual intercourse is one of the major risk factor that predisposes individuals to HIV/AIDS and sexually transmitted infections [(59)]. In this study, only 53 (34.9%) of those who were currently sexually active use condom consistently. The rate of condom use at last sexual intercourse with different types of risk group sexual partners is also very low, 33.3% and 56.5% for casual and commercial sex partners respectively.

In other words nearly two-third (65.1%) of daily laborers who practiced sex currently didn't use condom at all or use inconsistently.

The rate of consistent condom use 34.9%, in this study is similar with findings from Kenya 35.0%, Uganda and Benin (both 34.0%), but very low when compared with other related studies in Ethiopia and else where [33,60,61]. A study done among members of the Ethiopian army and male clients of female sex workers in Nigeria revealed a 71.2 % and 71.0% consistent condom use respectively [62,63]. Similarly the first round Ethiopian behavioral surveillance survey report revealed consistent condom use rate of 66.0 and 80.0 percent for non-regular and commercial sexual partners respectively amongst the ground forces. The same study documented an overall condom use rate of greater than 95.0% during the last sex with commercial sex partner in the majority of adult population groups. The rate of condom use at last sex with commercial (56.5%) and casual partners (33.3%) in this study was also very low when compared with the above findings. The 2000 African Development Forum report on condom use during recent sexual intercourse with non-regular partners among men, showed a rate of 71.7%, 47.9, 28.0% and 6.6% for Djibouti, Ethiopia, Guinea and Cameroon respectively [23].

Variables positively associated with consistent condom use in our study were increased level of educational status, accessibility of condom, drinking alcohols and self HIV/AIDS risk perception. These factors were also cited by

other studies [33,61,60,42,51,64,65]. This may indicate that currently schools are integrating the issue of HIV/AIDS in their curriculum and/or students have better access to media information so as to make a positive change on their sexual behaviors.

As supported by findings from focus group discussion conducted with commercial sex workers and other studies, the most common reasons for non or inconsistent use of condom in this study were drinking alcohols, interference with sexual pleasure, and trusting partners [33,66].

In conclusion, findings from this study implies, despite the high level of knowledge on HIV transmission and condom use, only a few proportion of daily laborers declared consistent condom use. This may indicate that relatively good knowledge about HIV/AIDS alone is not sufficient enough to bring about behavioral change in the study population. Therefore there is an urgent need to promote condom use among daily laborers by giving emphasis to the basic assumption of using condom during all acts of sexual intercourse out side marriage.

Many literatures suggested that both the number and type of sexual partners can either positively or negatively influence susceptibility (risk) of individuals for acquisition of sexually transmitted infections including HIV/AIDS. The Practice of multiple and/or extra marital sexual relationship are among the major predisposing risk factors for the transmission of HIV/AIDS [67,68].

In our study 66 (43.4%) of the currently sexually active daily laborers admitted to have more than one sexual partners during their stay in the town. Despite the high rate of multiple sexual relations, only 31.9% of the daily laborers with a positive history of multiple sexual relation ship reported using condom consistently.

The rate of multiple sexual relationships (43.4%), in this study is very high when compared with recent studies done in Bahir Dar and Addis Ababa of 5.4 and 13.2 percent respectively [37,51]. The 2002 Ethiopian Behavioral Surveillance Survey documented a rate of about 33.0% for the adult population with a wide variation among different population groups ranging from 5.8% for factory workers to 63.5% for ground forces.

Chewing khat and staying for longer duration in the town were the two factors found to predispose daily laborers to have multiple sexual relation ship. This finding was in agreement with other studies in Ethiopia and elsewhere [51,69,70,71,72].

Sexually transmitted diseases are known to facilitate the transmission of HIV while HIV/AIDS prolonging the duration of symptoms and the infectiousness of STDs [17]. It is estimated that people with STDs are two to seven times more likely to become infected with HIV than people who have not had STDs [73].

The rate of self reported sexually transmitted diseases among the currently sexually active respondents in this study is 35.5%. This finding is very high when compared with other related studies in Ethiopia and elsewhere. The 2002 Ethiopian behavioral surveillance survey reported a prevalence of less than five percent even in the so called high risk population groups [41]. Related studies conducted in metropolitan male migrants of eastern China and migrant tea plantation workers of Kenya documented a rate of 4.7% and 25% respectively [67,33].

Consistent with other studies, having sex with multiple sexual partners and consistent condom use were a risk and preventive factors associated with acquisition of STDs among the study subjects, respectively [67].

Thus, the high rate of self reported sexually transmitted diseases in this study amplify the prevalence of high risk sexual behaviors among the study population. However, an encouraging finding from this study with respect to sexually transmitted infections is that 84.6% of all daily labourers with self reported STDs seek for modern treatment.

7. Strengths and Limitations of the study

7.1 Strength

- The use both quantitative and qualitative methods of data collection enable us to have better information and triangulation of findings.
- Use of contextually adopted standardized questionnaire.
- High response rate.
- Since there is no similar study conducted in the area (country), it can contribute a lot as baseline information for future studies.

7.2 Limitations

- Social desirability bias due to sensitive and personal question related to sexuality.
- There was a possibility of recall biases during determination of some sexual behavior.
- Limitation of related literatures to compare and discuss some of the findings.
- Because the data are cross-sectional, the direction of causal relationship between variables can't always be determined.

8. Conclusion

Taking the limitations in to consideration, this study has revealed some important findings related to sexual behavior of daily laborers in Kombolcha town. From these findings it is possible to conclude that:

1. The majority of respondents have high level of knowledge about HIV/AIDS, other sexually transmitted infections and condom use.
2. Despite the high level of knowledge, considerable proportions of daily laborers were exposed to high risk sexual behaviors during their stay in the town. Some of the risky sexual behaviors identified were: Commencing first sex with non-marital sexual partner (69.1%), practicing sex with causal partners (31.5%), multiple sexual partners (43.4%) and CSWs (55.9%).
3. The rate of self reported sexually transmitted diseases is also very high among currently sexually active respondents (35.5%). This finding indirectly showed the extent of unprotected sex that favors exposure to HIV/AIDS.
4. Generally there is a gap between knowledge about condom and its utilization; which is evidenced by: Knowledge about condom among the currently sexually active respondents (98.7%), consistent condom use among respondents with multiple sexual relations (31.8%), condom use during last sex with CSWs (56.5%), with causal partners (33.3%) and over all consistent condom use (34.9%).

5. In spite of high level of risky sexual behaviors, self risk perception to HIV/AIDS among the daily laborers is very low 24.6%.

6. Educational status, drinking alcohols, chewing khat, duration of stay in the town, comprehensive knowledge about HIV/AIDS, peer pressure and presence many CSWs in the town were found to be factors associated with risky sexual behaviors daily laborers.

9. Recommendations

Findings from this study indicate that migrant daily laborers are practicing risky sexual behaviors that demands both short and long term interventions. Therefore, based on the main findings the following recommendations are forwarded:

1. Urgent behavioral change communication (BCC) activities should be done by Woreda health office, woreda HAPCO and other organizations working on HIV/AIDS in a sustainable and organized manner to educate migrant daily laborers on the identified high risky sexual behaviors, so as to fill the gap between knowledge and actual behavior of the study subjects.
2. Enhance condom promotion activities using different approaches like youth clubs, community volunteers, condom machines, peer groups and work place distribution.
3. Assure full time availability of condom in bars and hotels frequently visited by these daily laborers.

4. Consider work place intervention like mobile VCT and STIs case management.
5. Identify economic alternatives for commercial sex workers, because the presence of many CSWs was found as one of the factor that predisposes daily laborers to high risk sexual situation for HIV/AIDS.
6. National level or large scale surveys, like the Ethiopian behavioral surveillance survey and other related surveys should consider this segment of population in their future study.
7. Household poverty alleviation and promotion of education for all as a long term intervention, because poverty is the whole mark of HIV/AIDS and schools are entry points for behavioral changes.

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11. Annex 1: structured English questionnaire

Questionnaire on assessment of risky sexual behavior for HIV/AIDS and condom use among male daily laborers in Combolcha town.

001 Questionnaire identification number /____/_____/

002 District---Kombolcha

003 Zone---South Wollo

004 Site (kebele) ----------

005 House No /____/____/

The study team is from Addis Ababa University. Thank you for allowing us to share your time for a brief discussion about a study to be conducted in Kombolcha. This study is being conducted among male daily laborers. You are selected to participate in the study. The purpose of this study is to assess risky sexual behavior and condom use among male daily laborers living in Kombolcha town. The information you give us will help to design HIV risk reduction strategies among daily laborers. The study will be conducted through interview. The interview will take approximately thirty minutes. The interview involves intimate and private life questions and hence will be conducted in private setting. We would like to assure you that this privacy should strictly be maintained throughout and your answers are completely confidential. A code number will identify every participant and no name will be used. No reports of the study will ever identify you. You have a full right to participate throughout, or to discontinue at any time, or never participate in the study. However, your honest answers to these questions will help us better understand what people think, say and do about certain kinds of behaviors.

Are you willing to participate in the study?

Yes [ ] No [ ]

Signature of interviewer_____

(Signature of interviewer certifying that informed consent has been given verbally by respondent)

Interview Visit

	Visit 1	**Visit 2**	**Visit 3**
Date			
Result			

006 Result codes: Completed=1, Respondent not available = 2, Refused = 3, Partially completed = 4.

007 Interviewer code /____/___/ Name _____

008 Date of interview /___/_____/_____/

Checked by supervisor: Name_____Signature _____ Date _____

Instruction: - the following are interview questions in order to assess risky sexual behaviors for HIV/AIDS and condom utilization, please give your honest and truthful answer to each question from the indicated choices.

Part I - Socio-demographic Characteristics

No	Questions	Alternative responses	Skip to	Code
101	How old are you?	_____years		[ ]
102	What is your religion?	Orthodox----------1 Muslim----------2 Protestant----------3 Catholic----------4 Others (specify)----------6		[ ]
103	To which ethnic group do you belong?	Amhara----------1 Agaw----------2 Tigre----------3 Oromo----------4 Other (specify) ----------5		[ ]
104	What is the highest level of school you have completed?	Can not read and write--------1 Can read and write----------2 Grade 1-6----------3 Grade 7-12----------4 Other (specify) ----------5		[ ]
105	When did you come here?	No of months (----------) Do not know ----------88 No response ----------99		[ ]
106	When will you return?	No of months or years (----------) Do not know----------88 No response----------99		[ ]
107	Where is your permanent residence (by woreda)?	Specify(----------) No response----------99		[ ]
108	Why did you come here?	Economic problem----------1 Conflicts with individual--------2 Political (security) problem-----3 Other specify----------4 No response----------99		[ ]

No	Questions	Alternative responses	Skip to	Code
109	Did you come with your family?	Yes----------1 No---------- No response----------99		[ ]
110	Have you ever married?	Yes---------- 1 No----------2 No response------99		[ ]
111	What is your current marital status?	Never married----------1 Married----------2 Divorced----------3 Widower----------4	**→Q-114**	[ ]
112	How old were you when you first married?	Age in year ---------- Do not know----------88 No response----------99		[ ]
113	If married, Do you have more than one wife?	Yes--- ----------1 No ----------2 No response---99		[ ]
114	Do you have children?	Yes ----------1 No ----------2 No response ----------3	**→Q -116**	[ ]
115	How many children do you have?	Specify ---------- No response----------99		[ ]
116	What is your current income per month?	Less than 100----------1 100-199 birr----------2 200-299 birr----------3 300 birr and above----------4 Refused to answer----------5 I do not know----------88 No response----------99		[ ]

Part II: - Sexual behavior related for HIV prevention

Now I would like to ask you some question that may be difficult and too personal to answer. How ever, like I said in the begging your answers to these questions are confidential and will not be linked to you in any way. The questions that follow are about sexual life.

No	Questions	Alternative responses	Skip to	Code
201	Have you ever had sexual intercourse?	Yes----------1 No----------2 No response----------99	→**Q-210**	[ ]
202	With whom did you have first time sexual intercourse?	Wife ----------1 Commercial sex worker---2 Casual partner ----------3 Regular partner----------4 No response ----------99		[ ]
203	At what age did you first have sexual intercourse?	(---------- years) I do not know----------88 No response----------99		[ ]
204	Have you had sexual intercourse during your stay in the town(other than your marital partner)?	Yes----------1 No----------2 I do not remember --------77 No response----------99	→**Q-210**	[ ]
205	If your response to Q-204 is"yes" With whom?	Regular partner (spouse)------1 Commercial sex workers -----2 Casual partners ----------3 No response ----------99		[ ]
206	If your response to Q -203 is "yes" how many sexual partners did you have during your stay in the town?	Only one partner----------1 More than one partner--------2 I do not know----------88 No response----------99		[ ]
207	How many of them were regular partners?	(----------) I do not know---------88 No response----------99		[ ]
208	How many of them were casual partners?	---------- I do not know--------88 No response----------99		[ ]
209	How many of them were commercial sex workers?	(----------) I do not know------88 No response--------99		[ ]
210	Have you ever heard of Condom?	Yes----------1 No----------2 No response--------99	→**Q-301**	[ ]

No	Questions	Alternative responses	Skip to	Code
211	If your response to Q- 210 is yes from where have you heard?	Yes No Health institutions----1 2 Mass media ----------1 2 Friends/Neighbors----1 2 Family ----------1 2 Agricultural development agents----------1 2 Community gathering--- 1 2 Religious leaders --------1 2 Other specify ----------3		[ ]
212	Do you know where to get or obtain condom?	Yes----------1 No ----------2 No response-------99	→**Q-214**	[ ]
213	If yes to Q- 212 would you tell me please?	Yes No Shop----------1 2 Pharmacy----------1 2 Market----------1 2 Health Institution--1 2 Hotels or bars------1 2 Condom machine---1 2 Other specify----------3 No response----------99		[ ] [ ] [ ] [ ] [ ] [ ] [ ]
214	Do you get condom at any time you want to have it?	Yes ----------1 No ----------2 No response --------99		[ ]
215	In the sexual intercourse you had in the town, did you and your partner(other than marital partner) ever used condom?	Yes----------1 No----------2 I do not remember-----77 No response----------99	→ **Q-217**	[ ]
216	If your response to Q-215 is "yes" at what frequency did you and your partner (s), use condom?	Every time----------1 Some times ----------2 Do not remember ----------88 No response ----------99	→ **Q-218** → **Q-217**	[ ]
217	Why you did not use condom at all or use it inconsistently?	Yes No Not available----------1 2 Partner refused----------1 2 Not comfortable----------1 2 Do not thrust condom—-1 2 Too expensive---------- 1 2 Religious disapproval-----1 2 Reduce sexual pleasure--- 1 2 Have trust in the partner – 1 2 It breaks easily---------- 1 2 I was drunk---------- 1 2 Others (specify) ---------- 3 No response---------- -99		[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

No	Questions	Alternative responses	Skip to	Code
218	The last time you had sex with a regular partner; did you and your partner use a condom?	Yes----------1 No ----------2 Do not remember ---------88 No response ----------99	→**Q-220**	[ ]
219	Who suggested condom use that time?	My self ----------1 My partner ----------2 Joint decision ----------3 Do not remember ----------77 No response ----------99		[ ]
220	With what frequency did you and your regular partner(s) use condom during your stay in the town?	Every time----------1 Some times ----------2 Never ----------3 Do not remember ----------77 No response ----------99		[ ]
221	Why did not you and your regular partner use condom at all or use it inconsistently?	Yes No Not available----------1 2 Partner refused----------1 2 Not comfortable----------1 2 Do not thrust condom---1 2 Too expensive---------- 1 2 Religious disapproval-----1 2 Reduce sexual pleasure--- 1 2 Have trust in the partner – 1 2 It breaks easily---------- 1 2 I was drunk---------- 1 2 Others (specify) ---------- 3 No response---------- --99		[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
222	The last time you had sex with commercial sex workers; did you and your partner use condom?	Yes----------1 No----------2 Do not remember ----------77 No response ----------99	→**Q-224**	[ ]
223	Who suggested condom use that time?	My self----------1 My partner ----------2 Joint decision ----------3 Do not remember ----------88 No response ----------99		[ ]
224	With what frequency did you and your commercial sex partner(s) use condom during your stay in the towns?	Every time----------1 Some times ----------2 Never ----------3 Do not remember ----------77 No response ----------99		[ ]

No	Questions	Alternative responses	Skip to	Code
225	Why did not you and your commercial sex partner use condom at all or use it inconsistently?	Yes No Not available----------1 2 Partner refused----------1 2 Not comfortable----------1 2 Do not thrust condom----1 2 Too expensive---------- 1 2 Religious disapproval-----1 2 Reduce sexual pleasure--- 1 2 Have trust in the partner – 1 2 It breaks easily---------- 1 2 I was drunk----------1 2 Others (specify) ----------3 No response----------99		[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
226	The last time you had sex with casual partner did you and your partner use condom?	Yes----------1 No ----------2 Do not remember --------77 No response ----------99	**→Q-228**	[ ]
227	Who suggested condom use that time?	My self----------1 My partner ----------2 Joint decision ----------3 Do not remember -----77 No response ----------99		[ ]
228	With what frequency did you and your casual sex partner(s) use condom during your stay in the town?	Every time----------1 Some times ----------2 Never ----------3 Do not remember ------77 No response ----------99		[ ]
229	Why did not you and your casual partner use condom at all or use it inconsistently?	Yes No Not available----------1 2 Partner refused----------1 2 Not comfortable----------1 2 Do not thrust condom—1 2 Too expensive---------- 1 2 Religious disapproval-----1 2 Reduce sexual pleasure--- 1 2 Have trust in the partner – 1 2 It breaks easily---------- 1 2 I was drunk----------1 2 Others (specify) ----------3 No response----------99		[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Part III Question related to HIV/AIDS

No	Questions	Alternative responses	Skip to	Code
301	Have you ever heard about HIV/AIDS?	Yes----------1 No----------2 No response----------99	**→Q-308**	[ ]
302	From where did you hear about HIV/AIDS?	Yes No Health worker/facility--------1 2 Mass media ----------1 2 Neighbors(friends)------ -----1 2 Family ---------- ------1 2 Agricultural Dev't Agents---1 2 Social gathering ----------1 2 Religious leaders ----------1 2 Other (specify)----------		[ ] [ ] [ ] [ ] [ ] [ ] [ ]
303	How is HIV/AIDS transmitted?	Yes No Sexual intercourse----------1 2 Mother to child ----------1 2 Transfusion of infected blood--1 2 By sharing sharps ----------1 2 By eating together---------1 2 By insect bites----------1 2 By eating uncooked egg or chicken that had swallowed used condoms ----------1 2 Other specify----------3 Do not know ----------88		[ ] [ ] [ ] [ ] [ ] [ ]
304	How do you prevent your self from HIV/AIDS infection?	Yes No Abstaining from sex -------1 2 Having one uninfected faithful sexual partner----------1 2 Correct and consistent condom use in every act of sex ------1 2 Avoiding direct contact with Contaminated blood ---------1 2 Others(specify) ----------3		[ ] [ ] [ ]
305	Do you perceive that you are exposed to HIV/AIDS?	Yes ----------1 No ----------2 I do't know----------88 NO response ----------99	**→Q-307**	[ ]
306	If yes how?	Yes No Un-safe sex ----------1 2 Contaminated sharps--------1 2 Through blood transfusion -1 2 Other (specify) ----------3 I don't know ----------88 No response ---------- 99		[ ] [ ] [ ]

No	Questions	Alternative responses	Skip to	Code
307	If no why?	Yes No I am faithful to one partner----1 2 I avoid sex (abstinence)-------1 2 I use condom ----------1 2 Avoid sharing sharps ----------1 2 I believe God ----------1 2 Other specify--------- ----------3 No response ----- ----------99		[ ] [ ] [ ] [ ] [ ]
308	Do you know diseases that are transmitted sexually other than HIV/AIDS?	Yes ----------1 No ----------2 Do not know ----------88 No response ----------99	**→Q-314**	[ ]
309	If yes mention?	Yes No Gonorrhea----------1 2 Syphilis ----------1 2 Chancroid ----------1 2 LGV----------1 2 OtherSpecify-- ----------3		[ ] [ ] [ ] [ ]
310	Did you have problem of genital discharge and/or ulcer during your stay in the town?	Yes ----------1 No ----------2 No response --------99	**→Q-314**	[ ]
311	If yes, have you been treated?	Yes----------1 No ----------2 No response --------99	**→Q-313**	[ ]
312	If treated, where you first treated?	Government health institutions -----1 Private clinic ----------2 Private pharmacy ----------3 Traditional/medicine healers --------4 Other (specify) ----------5 No response----------99		[ ]
313	If not treated or has gone to traditional healers why?	Yes No There is no H/Institution near by-1 2 I do not have money----------1 2 STI's are self limited ----------1 2 Other specify ----------3 No response ----------99		[ ] [ ] [ ] [ ]
314	How should information related to HIV/AIDS be communicated in order to bring about significant behavioral change?	Yes No Songs----------1 2 Drama----------1 2 News----------1 2 Speeches----------1 2 Discussions--------1 2 Other specify------1 2 Don't know----------88 No response ----------99		[ ]

No	Questions	Alternative responses	Skip to	Code
315	Do you know people who are infected with HIV or have died of AIDS?	Yes----------1 No----------2 Do not know----------88 No response----------99		[ ]
316	Do you think that a healthy looking person can be infected with HIV?	Yes----------1 No----------2 Do not know----------88 No response----------99		[ ]
317	Have you heard about VCT?	Yes----------1 No----------2 No response ----------99	→**Q-401**	[ ]
318	If your answer to Q-315 is "Yes" what is your attitude towards the VCT?	Good----------1 Bad----------2 I do not know----------88		[ ]
319	If your response to Q-315 is yes, have you undergone to VCT?	Yes----------1 No----------2 No response---------- 99	→**Q-401**	[ ]
320	If your response to Q-317 is" no" Why?	Yes No Service is not accessible-----1 2 Cost is high----------1 2 Fear of positive results-------1 2 Fear of stigma /discrimination---1 2 Because I did't start sex -------1 2 Other specify ----------3 No response----------99		[ ] [ ] [ ] [ ] [ ]

Part IV-Questions related to behavioral factors.

No	Questions	Alternative responses	Skip to	Code
401	During your stay in the town have you ever use the following substance?	Yes No Chew Khat ---------1 2 Drink Alcohol------1 2 Smoke Cigarette --- 1 2 Use drug use--------1 2 Use other substances ---1 2 No response----------99		[ ] [ ] [ ] [ ] [ ]
402	Have you have had unsafe sex influenced by these drugs?	Yes No Chewing khat ----------1 2 Drinking alcohol--------1 2 Cigarette smoking-------1 2 Use of drugs ----------1 2 Use of other substances-1 2 No response ----------99		[ ] [ ] [ ] [ ] [ ]

No	Questions	Alternative responses	Skip to	Code
403	Have you ever heard about male having sex with male?	Yes ----------1 No ----------2 No response ----------99	→ **Stop**	
404	Have you ever have male sexual partner?	Yes ----------1 No ----------2 No response ----------99	→ **Stop**	
405	Have you practiced sex with your male sex partner during your stay in the town?	Yes----------1 No ----------2 No response ----------3		

This is the end of the interview. I thank you very much for your answering the questions.

Assurance of Completeness

S.No	Certified by (Name and responsibility)	Complete/ Incomplete	Signature	Date
1	**Interviewer -**			
2	**Supervisor -**			

Annex 2: Amharic Version Questionnaire

ለኤች አይ ቪ/ኤድስ አጋላጭ ባህሪያትን ለማዎቅ በአዲስ አበባ ዩኒቨርሰቲ የጎ/ጤ/ሳይንስ ትምህርት ክፍል በኩል ለሚደረገው ጥናት ዕድሚያቸው ከ15 ዓመት በላይ ለሆኑ ወንድ የቀን ሠራተኞች የተዘጋጀ መጠይቅ::

<u>የስምምነት (ፈቃደኝነት) ማረጋገጫ ቅጽ</u>

ሥሜ ..... ይባላል:: የአዲስ አበባ ዩኒቨርሰቲ የጎ/ጤ/ሳይንስ ትምህርት ክፍል በኮምቦልቻ ከተማ በሚያካሂደው ጥናት ላይ የመረጃ ሰብሳቢ ሠራተኛ ነኝ:: ጥነናቱ የሚካሄደው በከተማው በሚገኙ ወንድ የቀን ሠራተኞት ላይ ሲሆን ዓላማውም መረጃ ሰጪዎች በኤች አይ ቪ/ኤድስ ላይ ያላቸውን ዕውቀት፣ አመለካከትና በተለይም ለበሽታው ሊያጋልጡ የሚችሉ ባህሪያትን የሚዳስሱ መረጃውችን በማሰባሰብ ለወደፊት የቫረሱን ስርጭት ለመገደብ ዕቅድ ለመንደፍ እንዲያስችል ነው::

በመጠይቁ የግል ባህሪዎን የተመለከቱ ጥያቄዎች እጠይቀዎታለሁ:: ይሁንና ሥምዎም ሆነ ሌሎች የእርስዎን ማንነት የሚገልጹ መረጃዎች አይመዘገቡም ፤ ሚስጥርነታቸውም እስከ ጥናቱ መጨረሻ ድረስ የተጠበቀ የሆናል:: በተጭማሪም በመጠይቁ ወቅት መመለስ ማይፈልጉትን ማንኛ ውንም ጥያቄ አለመመለስ፣ መጠይቁን በፈለጉት ሠዓት ማቋረጥ ወይም ሙሉ ለሙሉ አለመሳተፍ ይችላሉ :: ሆኖም የሚሰጡን መረጃ ወደፊት በሽታውን ለመከላከልና ለመቆጣጠር ለሚደረገው ማንኛውም እንቅስቃሴ የጎላ አስተዋጽኦ እንዳለው ተገንዝበው ጥያቄውን በመመለስ ለሚያደርጉልን ትብብር ከልብ እናመሰግናለን::

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት? አዎ ☐ አይደለሁም ☐
ፍቃደኛ ካልሆኑ አመስግነህ አሰናብት:: ፈቃደኛ ከሆኑ ቀጥል::

ፈቃደኝነታቸውን ያረጋገጠው መረጃ ሰብሳቢ ሥም.....ፊርማ .....

001. የመጠይቅ መለያ ቁጥር ☐☐☐

002. ወረዳ .....

003. ቀበሌ ☐☐

004. የቤት ቁጥር ☐☐☐☐

005. መረጃ ሰብሳቢው ..... ፊረማ .....

006. መረጃው የተሞላበት ቀን ☐☐☐

007. መጠይቁ መሞላት የጀመረበት ሰዓት .....

008. መጠይቁ ተሞልቶ የተጠናቀቀበት ሰዓት .....

009. የተቆጣጣሪው ሥም ..... ፊርማ .....

ክፍል አንድ፡ የመልስ ሰጪ አጠቃላይ መረጃ

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
101	ዕድሜዎ ስንት ነው?	ዕድሜ በሙሉ ዓመት		
102	ሐይማኖትዎ ምንድን ነው?	ኦርተዶክስ .....1 እስልም .....2 ፕሮቴስታንት .....3 ካቶሊክ .....4 ሌላ (ይገለጽ) 5		
103	የየትኛው ብሔረሰብ አባል ነዎት?	አማራ .....1 አገው .....2 ትግሬ .....3 ኦሮሞ.....4 ሌላ (የገለጽ) 5		
104	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው?	ማንበብና መጻፍ አልችልም.....1 ከ 1 - 6 ክፍል .....2 ከ 7 - 12 ክፍል .....3 ሌላ ይገለጽ		
105	ወደዚህ ቦታ (ኮመቦልቻ) መቼ መጡ?	ጊዜ በወራት .....1 መልስ የለም 2		
106	ቋሚ የመኖሪያ ቦታዎ የት ነው?	በወረዳ ደረጃ ይገለጽ		
107	ወደ ቋሚ መኖሪያዎት መቼ የመለሳሉ?	ከ .....ወራት/ዓመት በኃላ አላውቅም .....88 መልስ የለም.....99		
108	ወደዚህ ቦታ የመጡበት ዋና ምክነያት ምንድን ነው?	የኢኮኖሚ ችግር (ሥራ ፍለጋ) .....1 ከግለሰቦች ጋር ባለመግባባት .....2 የደህንነት ችግር .....3 ሌላ (ይገለጽ) .....4 መልስ የለም 99		
109	ወደዚህ ቦታ የመጡት ከሙሉ ቤተሰብዎ ጋር ነው?	አዎ .....1 አየደለም.....2 መልስ የለም.....99		
110	ትዳር የዘው ያውቃሉ?	አዎ .....1 አላውቅም .....2 መልስ የለም 99		
111	ባሁኑ ወቅት የጋብቻ ሁኔታዎ ምን ይመስላል?	አግብቼ አላውቅም .....1 በትዳር ላይ ነኝ .....2 ተፋትቻለሁ .....3 ባለቤቱ በህይወት የለችም 4	→Q114	
112	መጀመሪያ ትዳር ሲይዙ ዕድሜዎ ስንት ነበር?	ዕድሜ በሙሉ ዓመት ..... አላስታውስም.....77 መልስ የለም 99		
113	ባለትዳር ከሆኑ ሌላ ሚስት አለዎት?	አዎ .....1 የለኝም .....2 መልስ የለም 99		
114	ልጅ (ልጆች) አለዎት?	አዎ .....1 የለኝም .....2 መልስ የለም 99	→Q116	
115	ምን ያህል ልጆች አለዎት	የልጆች ብዛት በቁጥር..... መልስ የለም 99		
116	በከተማ ቆይታዎ አጠቃላይ የወር ገቢዎ ምን ያሂል ነው?	ከአንድ መቶ ብር በታች .....1 ከ 100 - 199 ብር .....2 ከ 200 - 299 ብር .....3 300 እና ከዚያ በላይ .....4 አላውቅም .....88 መልስ የለም 99		

ክፍል 2፡ የሥነ-ወሲብና ኮንዶም አጠቃቀምን የተመለከተ መጠይቅ

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
201	የግብረ-ሥጋ ግንኙነት ፈጽመው ያውቃሉ?	አዎ .....1 የለም .....2 መልስ የለም	→Q210	
202	ለመጀመሪያ ጊዜ የግብረ-ሥጋ ግንኙነት የፈጸሙት ከማን ጋር ነበር?	ከትዳር ጎደኛ ጋር .....1 ከሴተኛ አዳሪ ጋር .....2 ከድንገተኛ ጎደኛጋር.....3 ከመደበኛ ጎደኛ ጋር .....4 መልስ የለም 99		
203	ለመጀመሪያ ጊዜ የግብረ-ሥጋ ግንኙነት በስንት ዓመትዎ ጀመሩ?	ዕድሜ በሙሉ ዓመት ..... አላውቅም .....88 መልስ የለም 99		
204	ወደዚህ ከመጡ በኃላ ከትዳር ጎደኛ ውጪ የግብረ-ሥጋ ግንኙነት ፈጽመው ነበርን?	አዎ .....1 የለም .....2 አላስታውስም .....77 መልስ የለም 99	→Q210	
205	መልስዎ አዎን ከሆነ ከማን ጋር?	ከመደበኛ ጎደኛ ጋር .....1 ከድንገተኛ ጎደኛ ጋር.....2 ከሴተኛ አዳሪ ጋር .....3 መልስ የለም.....99		
206	ኮመቦልቻ ከተማ በቆዩበት ጊዜ ዉስጥ ከምን ያህል ሴቶች ጋር የግብረ-ሥጋ ግንኙነት ፈጽመዋል?	ከአንድ ሴት ጋር ብቻ.....1 ከአንድ በላይ ሴቶች ጋር .....2 አላለታውስም .....77 መልስ የለም 99		
207	ምን ያህሎቹ መደበኛ ጎደኛዎት ነበሩ?	የመደበኛ ጎደኛ ብዛት .....1 አላስታውስም .....77 መልስ የለም 99		
208	ምን ያህሎቹ ድንገተኛ ጎደኛዎት ነበሩ?	የድንገተኛ ጎደኛ ብዛት .....1 አላስታውስም .....77 መልስ የለም 99		
209	ምን ያህሎቹ የሴተኛ አዳሪዎች ነበሩ?	የሴተኛ አዳሪ ጎደኛ ብዛት.....1 አላስታውስም .....77 መልስ የለም 99		
210	ስለ ኮንዶም ሰምተው ያውቃሉ?	አውቃልሁ .....1 አላውቅም .....2 መልስ የለም 99	→Q301	
211	መልስዎ አዎን ከሆነ ከየት ሰሙ? (ከአንድ በላይ መልስ ይቻላል)	አዎ የለም ከጤና ድርት/በለሙያ.....1 2 ከብዙሃን መገናኛ .....1 2 ከጎደኛ/ጎረቤት .....1 2 ከቤተሰብ.....1 2 ከግብርና ልማት ሠራተኛ.....1 2 ከህብረተሰብ ስብሰባ .....1 2 ከሀይማኖት መሪውች.....1 2 ሌላ ይገለጽ 3		
212	ኮንዶም የሚገኝበትን ቦታ ያውቃሉን?	አውቃልሁ .....1 አላውቅም .....2 መልስ የለም 99	→Q214	
213	አዎን ካሉ ከየት እንደሚያገኙ ይግለጹ?	አዎ የለም ከሱቅ.....1 2 ከፋርማሲ .....1 2 ከገበያ .....1 2 ከጤና ድርጅት.....1 2 ከምግብና መጠጥ ቤት.....1 2 ሌላ ይግለጹ 3		

ተ.ቁ.	መጠይቅ	መልስ	መ.መለያ	ይለፉ
214	ኮንደሙን በፈለጉ ጊዜ ሁሉ ያገኛሉን?	አገኛለሁ .....1 አላገኝም .....1 መልስ የለም.....99		
215	ወደ ከተማ ከመጡ ወዲህ ባደረጉት የግብረ-ሥጋ ግንኙነት ወቅት ኮንዶም ተጠቅመዋልን (ከትዳር ጎደኛ ውጭ)?	አዎ .....1 አልተጠቀምኩም .....2 አላስታውስም .....77 መልስ የለም 99	→Q218 →Q217	
216	መልስዎ አዎን ከሆነ ኮንዶም አጠቃቀማችሁ እንዴት ነበር?	ሁልጊዜ .....1 አንዳንድ ጊዜ .....2 አላስታውስም .....77 መልስ የለም. 99		
217	ኮንደም በፍጹም ወይም ሁልጊዜ ካልተጠቀማችሁ ምክነያቱ ምንድን ነው?	አዎ የለም ሥለማናገኝ .....1 2 የሴት ጎደኛየ ስላልፈለገች.....1 2 ስለማይመቸን .....1 2 ስለማናምንበት .....1 2 ውድ ስለሆነ .....1 2 ሀይማኖታችን ስለሚከለክል ..1 2 ስሜት ስለሚቀንስ .....1 2 ስለምንተማመን .....1 2 በቀላሉ/ቶሎ ስለሚቀደድ .....1 2 አልኮል ጠጥትን ስለነበር .....1 2 ሌላ ይገለጽ.....3 መልስ የለም 99		
218	በመጨረሻ ጊዜ ከመደበኛ የግብረ-ሥጋ ጎደኛዎ ጋር ግንኙነት ሲፈጽሙ ኮንዶም ተጠቅመዋል?	አዎ .....1 አልተጠቀምኩም .....2 አላስታውስም .....77 መልስ የለም 99	→Q220	
219	ኮንዶም ለመጠቀም ሃሳቡን ያቀረበው ማን ነው?	እኔ እራሴ .....1 የሴት ጎደኛዮ .....2 እኔና ጎደዮ በጋራ .....3 አላስታውስም .....4 መልስ የለም 99		
220	በከተማ ቆይታዎ ወቅት ከመደበኛ የግብረ-ሥጋ ጎደኛዎ ጋር ኮንዶም አጠቃቀማችሁ እንዴት ነበር?	ሁልጊዜ .....1 አንዳንድ ጊዜ .....2 ተጠቅመን አናውቅም.....3 አላስታውስም .....77 መልስ የለም. 99		
221	ኮንደም በፍጹም ወይም ሁልጊዜ ካልተጠቀማችሁ ምክነያቱ ምንድን ነው?	አዎ የለም ሥለማናገኝ .....1 2 የሴት ጎደኛየ ስላልፈለገች.....1 2 ስለማይመቸን .....1 2 ስለማናምንበት .....1 2 ውድ ስለሆነ .....1 2 ሀይማኖታችን ስለሚከለክል ..1 2 ስሜት ስለሚቀንስ .....1 2 ስለምንተማመን .....1 2 በቀላሉ/ቶሎ ስለሚቀደድ .....1 2 አልኮል ጠጥትን ስለነበር .....1 2 ሌላ ይገለጽ.....3 መልስ የለም 99		
222	በመጨረሻ ጊዜ ከሴተኛ አዳሪ ጋር የግብረ-ሥጋ ግንኙነት ሲፈጽሙ ኮንዶም ተጠቅመዋል?	አዎ .....1 አልተጠቀምኩም .....2 አላስታውስም .....77 መልስ የለም 99	→Q224	
223	ኮንዶም ለመጠቀም ሃሳቡን ያቀረበው ማን ነው?	እኔ እራሴ .....1 የሴት ጎደኛዮ .....2 እኔና ጎደኛዮ በጋራ .....3 አላስታውስም .....77 መልስ የለም 99		

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
224	በከተማ ቆይታዎ ወቅት ከሴተኛ አደሪ ጋር ባደረጉት የግብረ-ሥጋ ግንኙነት ኮንዶም አጠቃቀማችሁ እንዴት ነበር?	ሁልጊዜ .....1 አንዳንድ ጊዜ .....2 ተጠቅመን አናውቅም.....3 አላስታውስም .....77 መልስ የለም፡ 99		
225	ኮንደም በፍጹም ወይም ሁልጊዜ ካልተጠቀማችሁ ምክነያቱ ምንድን ነው?	አዎ የለም ሥለማናገኝ .....1 2 የሴት ጎደኛየ ስላልፈለገች.....1 2 ስለማይመቸን .....1 2 ስለማናምንበት .....1 2 ውድ ስለሆነ .....1 2 ሀይማኖታችን ስለሚከለክል ..1 2 ስሜት ስለሚቀንስ .....1 2 ስለምንተማመን .....1 2 በቀላሉ/ቶሎ ስለሚቀደድ .....1 2 አልኮል ጠጥትን ስለነበር .....1 2 ሌላ ይገለጽ.....3 መልስ የለም 99		
226	በመጨረሻ ጊዜ ከድንገተኛ የግብረ-ሥጋ ጉደኛዎ ጋር ግንኙነት ስትፈጽሙ ኮንዶም ተጠቅማችሁ ነበር?	አዎ .....1 አልተጠቀምኩም .....2 አላስታውስም .....77 መልስ የለም 99	→Q228	
227	ኮንዶም ለመጠቀም ሃሳቡን ያቀረበው ማን ነው?	እኔ እራሴ .....1 የሴት ጎደኛዮ .....2 እኔና ጎደኛዮ በጋራ .....3 አላስታውስም .....77 መልስ የለም 99		
228	በከተማ ቆይታዎ ወቅት ከድንገተኛ የግብረ-ሥጋ ጎደኛዎ ጋር ባደረጉት ግንኝ ነት ኮንዶም አጠቃቀማችሁ እንዴት ነበር?	ሁልጊዜ .....1 አንዳንድ ጊዜ .....2 ተጠቅመን አናውቅም.....3 አላስታውስም .....77 መልስ የለም፡ 99		
229	ኮንደም በፍጹም ወይም ሁልጊዜ ካልተጠቀማችሁ ምክነያቱ ምንድን ነው?	አዎ የለም ሥለማናገኝ .....1 2 የሴት ጎደኛየ ስላልፈለገች.....1 2 ስለማይመቸን .....1 2 ስለማናምንበት .....1 2 ውድ ስለሆነ .....1 2 ሀይማኖታችን ስለሚከለክል ..1 2 ስሜት ስለሚቀንስ .....1 2 ስለምንተማመን .....1 2 በቀላሉ/ቶሎ ስለሚቀደድ .....1 2 አልኮል ጠጥትን ስለነበር .....1 2 ሌላ ይገለጽ.....3 መልስ የለም 99		

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ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
301	ኤድስ የተባለ በሽታ እንዳለ ሰምተው ያውቃሉ?	አዎ .....1 አልሰማሁም .....2 መልስ የለም 99	→Q308	
302	ከየት ሰሙ?	አዎ የለም ከጤና ባለሙያ .....1 2 ከህዝብ መገናኛ ብዙሃን .....1 2 ከጎለቤት/ጎደኛ .....1 2 ከግብርና ልማት ሠራተኛ...1 2 ከህብረተሰብ ሥብሰባ .....1 2 ከሃይማኖት መሪዎች.....1 2 ሌላ ይገለጽ 99		
303	ኤች አይ ቪ እንዴት/በምን ይተላለፋል?	አዎ የለም በግብረ-ሥጋ ግንኙነት .....1 2 ከእናት ወደ ጽንስ/ልጅ .....1 2 በተበከለ ደም ልገሳ .....1 2 ስለት ነገሮችን በጋራ በመጠቀም..1 2 አብሮ በመመገብ ታታ.....1 2 በትንኝ/ነፍሳት ንክሻ .....1 2 ኮንዶም የዋጠች ዶሮን ያልበሰለ ስጋ / እንቁላል በመመገብ----------1 2 ሌላ ይገለጽ .....2 አላውቅም .....88 መልስ የለም 99		
304	ኤች አይ ቪ/ኤድስን እንዴት መከላከል ይቻላል?	አዎ የለም ከግብረ-ሥጋ ግንኙነት በመታቀብ .....1 2 በአንድ ጤነኛ የግብረ-ሥጋ ግንኙነት ጎደኛ በመወሰን .....1 2 ኮንዶምን ሁልጊዜና በአግባቡ በመጠቀም.....1 2 ስለታምና ከደም ጋር ንክኪ ያላቸውን ነገሮች በጋራ ባለመጠቀም.....1 2 ሌላ የገለጽ ..... መልስ የለም 99		
305	ለኤች አይ ቪ/ኤድስ ተጋልጫለሁ ብለው ይገምታሉ?	አዎ .....1 አይመስለኝም .....1 አላውቅም .....1 መልስ የለም 1	→Q307	
306	አዎ ከሆነ በምን ?	አዎ የለም ጥንቃቄ በጎደለው ግብረ-ሥጋ ግንኙነት.....1 2 በተበከለ ስለት ነገር .....1 2 በተበከለ ደም ልገሳ .....1 2 ሌላ ይገለጽ ..... መልስ የለም 99		
307	የለም ከሆነ እንዴት?	አዎ የለም አንድ ለአንድ ስለተወሰንኩ .....1 2 ከግብረ-ሥጋ ግንኙነት ስለታቀብኩ.....1 2 ኮንዶም ስለምጠቀም .....1 2 ስለታም ነገሮችን በጋራ ስለማልጠቀም.1 2 እግዚአብሄር ስለሚጠብቀኝ .....1 2 ሌላ ይገለጽ .....3 መልስ የለም 99		
308	ከኤች አይ ቪ/አድስ ሌላ በግብረ-ሥጋ ግንኙነት የሚተላለፍ በሽታ ያውቃሉን?	አዎ .....1 አላውቅም .....2 መልስ የለም 99	→Q314	

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
309	አዎ ከሆነ ምን ምን ያውቃሉ?	አዎ የለም ጨብጥ .....1 2 ቂጥኝ .....1 2 ከርክር .....1 2 ባምቡሌ .....1 2 ሌላ ይገለጽ 3		
310	በከተማ ቆይታዎ ወቅት የብልት ፈሳሽ ወይም መቁሰል ችግር አጋጥሞዎት ነበር?	አዎ .....1 አልታመምኩም .....2 መልስ የለም.....99	→Q314	
311	ታመው ከሆነ ታክመውት ነበር?	አዎ .....1 አልታከምኩም .....2 መልስ የለም 99	→Q313	
312	ታክመው ከነበር መጀመሪያ የት ታከሙ?	ከመንግስት ጤና ድርጅት ....1 ከግል ክሊኒክ .....2 ከግል መድሀኒት ቤት .....3 ከባህል ህክምና ቦታ .....4 ሌላ ይገለጽ .....5 መልስ የለም 99		
313	ካልታከሙ ወይም ወደ ግል ህክምና ከሄዱ ለምን?	አዎ የለም በአቅራቢዮ ጤና ድርጅት ስለሌለ.....1 2 ገንዘብ ስለሌለኝ .....1 2 በሽታው በራሱ ስለሚድን .....1 2 ሌላ ይገለጽ .....3 መልስ የለም 99		
314	ተገቢውን የባህሪ ለውጥ ለማምጣት ሲባል ኤችአይቪ/ኤድስን የተመለከቱ መረጃዎች (ትምህርት) በምን መልኩ መሰጠት አለበት?	አዎ የለም በዘፈን (መዝሙር) .....1 2 በድራማ .....1 2 በዜና.....1 2 በውይይት .....1 2 ሌላ ይገለጽ ..... አላውቅም .....88 መልስ የለም 99		
315	በኤችአይቪ ቫይረስ የተያዘ ወይም በኤድስ በሽታ የሞተ እርስዎ የሚያውቁት ሰው አለ?	አዎ .....1 አላውቅም .....2 መልስ የለም 99		
316	አንድ ጤነኛ የሚመስል ሰው በኤች አይ ቪ ቫይረስ የተያዘ ሊሆን ይችላል?	አዎ .....1 አይችልም .....2 አለውቅም.....88 መልስ የለም 99		
317	በፈቃደኝነት ላይ ስለሚደረግ የደም ምርመራና የምክር አገልግሎት ሰምተው ያውቃሉ?	አዎ .....1 አለውቅም.....88 መልስ የለም 99	→Q401	
318	ሰምተው የሚያውቁ ከሆነ ስለአገልግሎቱ ምን አይነት አመለካከት አለዎት?	ጥሩ ነው .....1 ጥሩ አይደለም .....2 መልስ የለም 99		
319	ውጤቱን አይንገሩኝ እርስዎ የኤች አይ ቪ ቫይረስ ደም ምርመራ አድርገዋል?	አዎ .....1 አላደረኩም.....88 መልስ የለም 99	→Q401	

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
320	ካልተመረመሩ ለምን?	አገልግሎቱ በአካባቢዮ ስለማይሰጥ .....1 ዋጋው ውድ ስለሆነ .....2 አለብህ ብባል ውጤቱን በመፍራት .....3 አድሎና መገለልን በመፍራት .....4 ሌላ ይገለጽ ..... መልስ የለም 99		

ክፍል 4: ተዛማጅ የሥነ-ወሲብ ባህሪ ጥያቄዎች

ተ.ቁ.	መጠይቅ	መልስ	የመልስ መለያ	ይለፉ
401	በከተማ ቆይታዎ ወቅት የትኞቹን አደንዛዥ ወይም አነቃቂ ምድሃኒቶች/ ዕጽ ነገሮች ተጠቅመዋል?	አዎ የለም ጫት .....1 2 አልኮል መጠጥ .....1 2 ሲ.ጋራ .....1 2 ሽሻ .....1 2 ሀሽሽ .....1 2 በአፍ/በመርፌ የሚወሰድ መድሃኒት .....1 2 ሌላ ይገለጽ ..... መልስ የለም		
402	በተራ ቁጥር 401 የተጠቀሱትን መድሃኒቶች / ዕጾች ወዘተ በመጠቀምዎ ምክንያት የፈጸሙት ጥንቃቄ የጎደለው የገብረ-ሥጋ ግንኙነት አለን?	አዎ የለም ጫት .....1 2 አልኮል መጠጥ .....1 2 ሲ.ጋራ .....1 2 ሽሻ .....1 2 በአፍ/በመርፌ የሚወሰድ መድሃኒት .....1 2 ሌላ ይገለጽ .....3 መልስ የለም		
403	ወንዶች ከወንዶች ጋር የግብረ-ሥጋ ግንኙነት እንደሚፈጽሙ ሰምተው ያውቃሉ?	አውቃለሁ .....1 አላውቅም .....2 መልስ የለም 99	→ተጠናቋል	
404	እርስዎ ወንድ የግብረ-ሥጋ ግንኙነት ጎደኛ ኖሮዎት ያውቃል?	አዎ .....1 አያውቅም .....2 መልስ የለም 1	→ተጠናቋል	
405	በከተማ ቆይታዎ ወቅት ከወንድ ጎደኛዎ ጋር የግብረ-ሥጋ ግንኙነት ፈጽመው ያውቃሉ?	አዎ .....1 የለም.....2 መልስ የለም 99		

ይህ የመጠይቁ የመጨረሻ ክፍል ነው:: ጊዜዎን ወስደው ጥያቄዎቹን በመመለስ ስለተባበሩኝ ከልብ አመሰግናለሁ::

መጠይቁ በትክክል ስለመጠናቀቁ ማረጋገጫ:-

ተ.ቁ.	ያረጋገጠው ሠራተኛ የሥራ ድርሻና ሥም	ተጠናቋል/አልተጠናቀቀም	ፊርማ	ቀን
1	መረጃ ሰብሳቢ			
2	ተቆጣጣሪ			

Annex 3: Focus group Discussion Guide

Good morning/afternoon; welcome to our group discussion, I am----------, I came from Addis Ababa University. We are here today to discuss about the sexual behavior which was practiced in your community and the method of prevention you are taking to prevent yourself from HIV/AIDS. All comments, both positive and negative are welcome. We expect all of you to participate in the discussion. We will use a tape recorder and please speak one at a time in order the tape recorder can pick up everything. We would like to confirm to you that all your comments are confidential and used for research purpose only. Are you willing to participate in the discussion? Thank you for participation and genuine discussion once again

Topic for Discussion: General issue about HIV/AIDS and Condom Use

Date ---------- /----------/----------.

Type of participants: ----------

Time FGD started: ----------

No of participants: ---------- Male: ----------: Female: ----------

Time FGD ended: ----------

Venue of the FGD: ----------

I= Guide for discussion with Commercial sex workers

1. Currently, do you think HIV/AIDS is a major health problem in this area? Why? How? Why not?
2. Are there Categories of men who are known to have many sexual partners?
3. What Categories are they?
4. Are daily laborers your clients?
5. How widespread is the risky behavior for HIV infection in mobile people (migrants)?
6. What are the types of activities that fuel risk behavior in this area in relation to mobile people? Do they use alcohols, Khat, or other substances?
7. What do this people do to protect themselves from HIV/AIDS?
8. Do this people know Condoms?
9. What is their problem to use condom in this group of people?

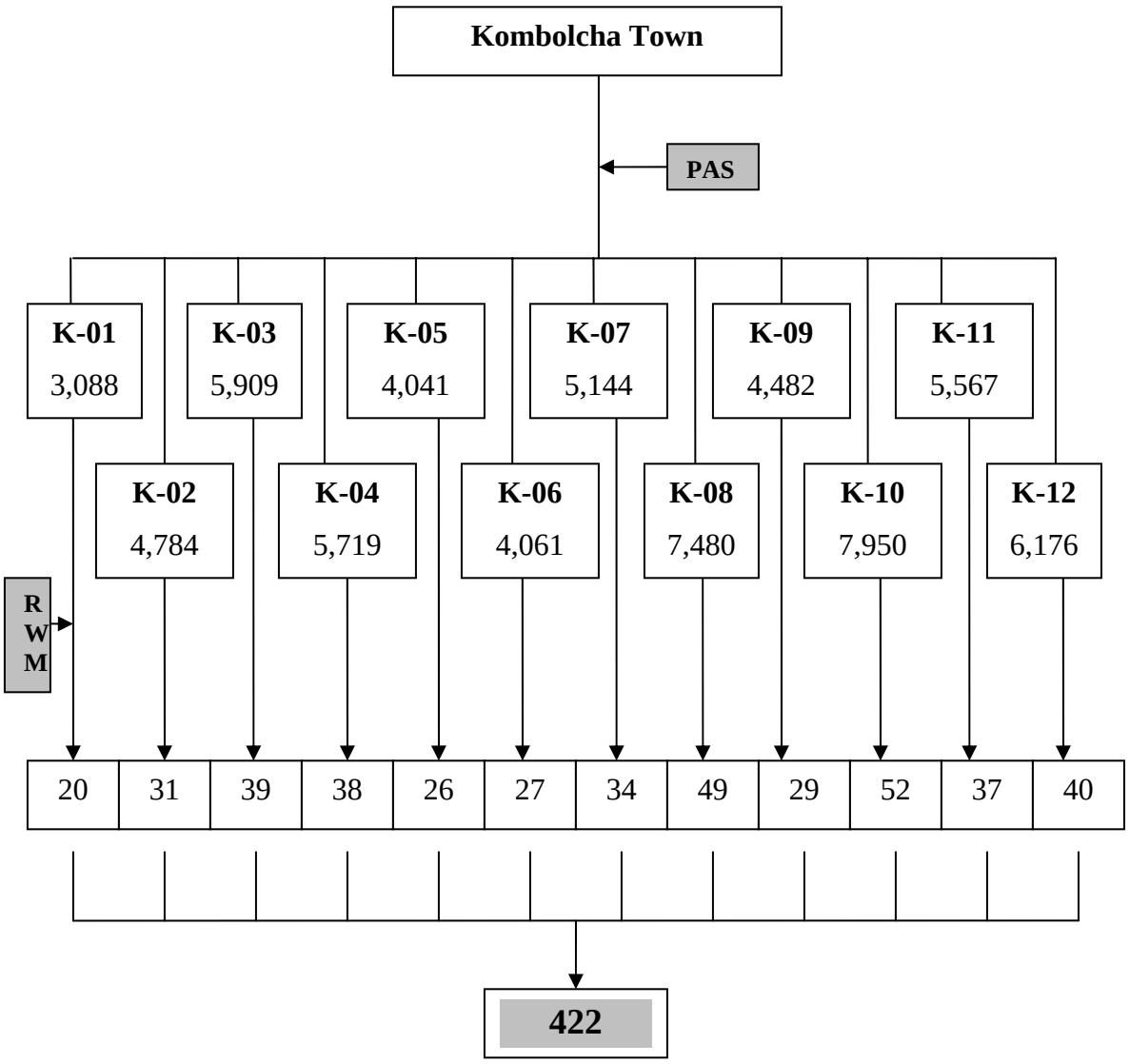
II=Guide for discussion with male Daily Laborers

1. Currently, do you think HIV/AIDS is a major health problem in this area? Why? How? Why not?
2. What kind of sexual relationships are contributing most to HIV/AIDS transmission in this area?w Why?
3. Are sex workers common in this town?
3. Who are your sexual clients?
4. What do you do to protect yourself from HIV/AIDS?
5. Do you know Condom?
6. Do you use it when ever you have sex with: CSWs, Regular partners, or irregular partners?
7. What is your problem to use condom?
8. What are the factors that initiate your sexual desire most, may be after taking alcohol, Khat, or substances like…what?

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

Annex 4:

Figure 2: ***Schematic presentation of sampling procedure.***



Key: PAS [Proportional Allocation to population Size]
RWM [Random Walk Methods]

Annex 5: DECLARATION

I, the undersigned, declared that this thesis is my original work in partial fulfillment of the requirements for the degree of master of public health. All the sources of the materials used for this thesis and all people and institutions who gave support for this work are fully acknowledged.

Name - Endris Belay Shume

Signiture - _____

Place of submission –DCH, MF, AAU

Date of submission _____

Approval of the Primary Advisor

This thesis work has been submitted for examination with my approval as university advisor.

Advisor's name – Mesfin Addisse (MD, MPH)

Signiture - _____