

**ASSESSMENT OF SUBSTANCE USE AND RISKY SEXUAL BEHAVIOUR  
AMONG PUBLIC COLLEGE STUDENTS IN BONGA TOWN,  
SOUTHWEST ETHIOPIA**



**BY**

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**JUNE, 2014  
JIMMA, ETHIOPIA**

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AMONG PUBLIC COLLEGE STUDENTS IN BONGA TOWN,  
SOUTHWEST ETHIOPIA**

**A THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF  
JIMMA UNIVERSITY, IN PARTIAL FULFILLMENT FOR THE  
REQUIREMENTS OF THE DEGREE OF MASTER IN MEDICAL  
PHYSIOLOGY**

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**JIMMA, ETHIOPIA**

## **Abstract**

**Background:** Substance use and problems arising from it are increasing all over the world, and currently together with HIV/AIDS epidemic, become one of the most threatening and challenging social and public health problems. College students are more vulnerable to wider sexual and reproductive health and HIV/AIDS problems due to new environment with poor protection, age and the need to explore life, peer pressure and absence of proactive programs(5).

**OBJECTIVE:** The main objective of this study was to assess the magnitude of risky sexual behavior and its association with substance use among Bonga town public college students.

**Methods:** A cross-sectional study was conducted among 396 Bonga town public college students from March 2014 to April 2014 using multi-stage stratified sampling technique and a self-administered questionnaire was used. Descriptive statistics was used to describe the study population, prevalence, and to check the missing values, outliers, and inconsistencies. Logistic regressions to determine independent predictors of risky sexual behaviors and the p- value of 0.05 was used as cut off point for the presence of statistical significance.

**Results:** Among 396 participants 72.7% reported having used at least one substance in their life time. Commonly used substances were: alcohol (51.3%) followed by khat (15.4%), cigarette (3.6%) and other illicit substances (2.5%). From total respondents 38.1% admitted having sexual experience. Among sexually experienced males 4.6% have had sexual intercourse with commercial sex workers and 4.6% had sexual intercourse with more than one person. Condom use rate was 64.9% but, its consistency was 58.3%. Sex, educational status, income and ever use of khat were statistically associated with risky sexual behavior with AOR (95%CI) of 4.5(1.7, 12), 4.7(1.6, 12.9), 3.7(1.4, 10), 2.5(1.1, 6.5) respectively.

**Conclusion:** The prevalence of substance use among Bonga college students was high (72.7%). The study also showed that many of the students who were sexually active engaged in unsafe and risky sexual practices. Awareness rising about safer sex and consequences of substance use for college students is necessary measure that should be taken.

### **Key words**

Risky sexual behavior, Reproductive health, Substance use, College students, Ethiopia

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## Acronyms and Abbreviations

<b>AOR</b>	Adjusted Odds Ratio
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>COR</b>	Crude Odds Ratio
<b>CSW</b>	Commercial Sex workers
<b>DALYs</b>	Disability Adjusted Life Years
<b>DHS</b>	Demographic Health Survey
<b>EDHS</b>	Ethiopian Demographic and Health Survey
<b>ESSDP</b>	Ethiopian Social Security and Development Policy
<b>ETB</b>	Ethiopian Birr
<b>FHD</b>	Family Health Department
<b>HIV</b>	Human Immunodeficiency Virus
<b>MOH</b>	Ministry of Health
<b>M. Sc.</b>	Master of Science
<b>MSP</b>	Multiple Sexual Partner
<b>NCHRBS</b>	National College Health Risk Behavior Survey
<b>PhD</b>	Doctor of Philosophy
<b>SRH</b>	Sexual and Reproductive Health
<b>STI</b>	Sexually Transmitted Infections
<b>STD</b>	Sexually Transmitted Disease
<b>TTC</b>	Teachers training college
<b>TVET</b>	Technical and Vocational Education Training
<b>UN</b>	United Nation
<b>VIF</b>	Variance inflation factor
<b>VCT</b>	Voluntary Counseling and Testing
<b>WHO</b>	World Health Organization

# **1. INTRODUCTION**

## **1.1. BACKGROUND**

The local definition of youth as it is a cultural phenomenon differs among societies and culture. However, United Nation (UN) defines youth as those in the age group between 15 to 24 years, which is having the same definition as it is used by the Ethiopian Social Security and Development Policy (ESSDP). This segment of the population constitutes more than one billion of the world population, with four out of five living in the developing countries (1).

In Ethiopia, according to the Ministry of Health as cited in Govindasamy et al., youth represent a significant proportion of the society. Currently, it is estimated that young people between ages 10-24 constitute more than one third of the total population which is roughly more than 21 million (2).

World Health Organization reported in 2011 that unsafe sex was second among the top ten risk factors in the global burden of all diseases caused globally. There is little information on the incidence and prevalence of STIs in Ethiopia. The prevalence of syphilis is thought to be about 2.7% (3). There is no actual information or estimate on other STIs in Ethiopia. This is because reports often under-represent the true number of people infected with STIs. Major contributing factor is that people with STIs who have minor or no symptoms do not seek treatment at public health facilities. They usually tend to take self-prescribed drugs or go to private pharmacies to buy treatment without consulting trained health workers.

According to The Joint United Nations Program on HIV/AIDS (UNAIDS), in 2009 young people aged 15-24 years accounted for 42% of new HIV infections in people aged 15 and older and nearly 80% of this live in sub-Saharan Africa (4).

Ethiopia is one of the sub-Saharan countries worst affected by the HIV/AIDS pandemic. According to the Ministry of Health of Ethiopia report in 2008, approximately 1,345,970 people were living with HIV. In 2008, the national adult HIV prevalence was estimated to be 2.1% (5).

Physical sexual arousal (e.g., erection of the penis in the male, swelling of the clitoris and genital engorgement in the female) involves increased blood flow to the genital area. Anything that alters the cardio-vascular system's ability to pump blood to the genitals can slow down or reduce the

intensity of this genital response. Alcohol consumption increases sexual desire and arousal, although it lowers physiological arousal (6). Effects of khat on the chewer include increased levels of energy, increased self-esteem, euphoria, increased libido, excitement, and increased proclivity for social interaction. The effect of khat chewing on sexual arousal is due to the use of alcohol after khat chewing (7). Cigarette smoking has been shown to reduce sexual arousal by impeding the circulatory system's delivery of oxygenated blood throughout the body (8).

DHS (Demographic Health Surveys) in many of the developing countries have shown that today, boys and girls experience puberty at younger ages than the previous generations; most of these changes are attributed to better health and nutrition (9).

As a result, the transition period from childhood to adulthood increases, rapid reproductive maturity will be marked, which could involve them in early and non-marital sexual activity, most of it being unsafe, with the reluctance to use contraceptive and exposing them to all its consequences, such as, unwanted pregnancy, abortion and (STD) Sexually Transmitted Diseases including HIV/AIDS . As far as youths are exposed to high risk activities /behavior like alcohol drinking and addictive substances like chat chewing and shisha smoking, it is obviously associated with reproductive health risks (10).

Based on the study conducted in 2008 in North East Ethiopia by Fekadu Mazengia and Alemayehu Worku about half, 51.3% of the youths have ever had sex. The median age at sexual debut was 16 years for rural and 17 years for urban. Multivariate analysis showed that being female by gender, chewing Khat, drinking alcohol, watching pornographic materials at age < 18 years and being less connected with parents were associated with early sexual initiation (11).

## **1.2. STATEMENT OF THE PROBLEM**

Risky sexual behaviors, including early sexual debut, unprotected sexual intercourse, and multiple sexual partners, occur in a broader context. The intensity of involvement in sexual risk behavior ranges from no sexual relationship to unprotected sexual intercourse with multiple partners and prostitution. Sexual risk behaviors often cluster with other risk behaviors including substance use. Adolescents who engage in sexual intercourse at young ages are at higher risk for outcomes that can compromise their health. Sexually active teens who exhibit few positive or prosocial behaviors, such as involvement in organized actions at school or in the community, are at higher risk for outcomes such as early sexual activity and pregnancy during their teenage years (12). According to Ethiopian Health and Demographic survey risky sexual behaviors is having multiple sexual partners, inconsistent condom use and commencing sex with commercial sex workers. Risky sexual behaviors can result in sexually transmitted diseases and unintended pregnancies.

Colleges are institutions of higher learning providing education to undergraduates and award diplomas and degrees in specific academic fields. Students of higher learning institutions are people with multiple socio-cultural grounds begin autonomous life at younger age for first time. Study findings reveal most of students of higher education rush to range of maladaptive high-risk extracurricular activities like alcohol use, substance and sexual abuse (13).

Substance use has been documented as a contributing factor to sexual risk-taking, whereby substance use impairs individual judgment and decision-making and increases a one's risk for a sexually transmitted infection (STI). Several major observations were emerged from a study done in America on adolescent students. It showed that both casual and chronic substance users are more likely to engage in high-risk behaviors such as unprotected sex when they are under the influence of drugs or alcohol. This study further revealed that substance use was significantly associated with unprotected sexual behaviors (14).

According to the work of Lori-Ann, Edward A. in South Africa in 2009 about Transitions to Substance Use and Sexual Intercourse Among South African High School Students result showed that students in the sample were most likely to initiate substance use as their first risk behavior, before moving on to sexual intercourse at a later time point. The potential explanations for this sequencing fall into two categories. The initiation of substance use may be a direct or indirect

cause of sexual initiation. Alternatively, substance use may precede sex because of an outside factor or process (15).

A study done on cigarette smoking and khat chewing among college students in North West Ethiopia revealed 13.1 % lifetime prevalence of cigarette smoking and 26.7 % life time prevalence rate of khat chewing. In the study, prevalence of cigarette smoking was found to be 8.1 %. Forty six (31.7 %) of the life time smokers and 134 (45.6 %) of the life time chewers started smoking and chewing while they were senior secondary school students (16).

Another study done on substance use and risky sexual behavior among Haromaya University students reveal that use of khat, alcohol and cigarette was significantly and independently associated with risky sexual activities (17).

The study done on substance use and risky sexual behavior in Southern Ethiopia, Hossana Health Science College reveal that Practicing sex with multiple partners, inconsistent condom use and commencing sex with female commercial sex workers, which were highly risky sexual behaviors for HIV infection transmission among study participants, were commonly practiced (18-22).

The rapid economic, social, and cultural transitions that most countries in sub-Saharan Africa are now experiencing have created a breeding ground for increased and socially disruptive use of alcohol and drugs. Given the high prevalence of HIV/AIDS (human immune deficiency virus/acquired immune deficiency syndrome) in the region and the increasing number of adolescents infected with HIV, an understanding of the role of substance use plays in the spread of HIV/AIDS is crucial to prevention efforts of the disease among adolescent population (23).

Students at higher institutions are considered to be fully aware of HIV /AIDS risks/preventive mechanisms and RH (reproductive health) issues. As a result, they are neglected of HIV/AIDS and RH interventions. However, on arrival at college, many students encounter new independence and freedom life and are at risk of HIV infection (24).

The aim of this study was to assess the magnitude of risky sexual behavior (no condom use, having sexual intercourse at age <18, sexual intercourse with multiple partners and sex with commercial sex workers) and its association with substance use (alcohol, khat, cigarette and illicit drugs) among Bonga public college students.

## **2. LITERATURE REVIEW**

### **2.1. OVERVIEW**

Risky sexual behaviors is having multiple sexual partners, inconsistent condom use and commencing sex with commercial sex workers. Risky sexual behaviors can result in sexually transmitted diseases and unintended pregnancies (EDHS). The design of all reviewed articles in this study is cross-sectional. Cross-sectional design is important because it is relatively quick and inexpensive and it shows relative distribution of conditions.

Small sample size on some of reviewed literatures, high non response rate on others and both selection and measurement bias are some of the limitations of reviewed literatures.

### **2.2 PREVALENCE OF RISKY SEXUAL BEHAVIOR**

Based on the work of Elizabeth Wildsmith and others in USA in 2008 about STDS Prevalence, Perceived Risk, and Risk-Taking Behaviors among young reveals, the prevalence of sexually transmitted infections is high among young adults in the United States (25).

According to the study conducted in 2011 on Prevalence and Correlates of Sexual Risk Behaviors Among Jamaican Adolescents, in the year prior to the survey, 32% of females and 54% of males had had sexual intercourse; of those, 12% and 52%, respectively, had had more than one sexual partner, and 49% and 46% had used condoms inconsistently or not at all (26).

The EDHS 2005 reported that condom use during last sexual intercourse in the last 4 months with a non-regular partner was 51.9% and 23.6% among 15-49 years old males and females respectively. The 2005 EDHS also showed that condom use with a non-regular partner in the 12 months preceding the survey is much greater in 15-24-year-old men (50.2%) than women (28.4%). Between the 2000 and 2005 EDHS, condom use has increased from 30.3% to 51.9% among males, whereas a smaller increase was observed among females (13.4% to 23.6%). Use of condoms in sexual episodes involving non-regular partners was higher in the urban areas than in the rural areas for both males and females in both 2000 and 2005(27-28).

A study conducted among high school students in Gondar, Northwest Ethiopia indicated that 14.9% reported to have had sexual intercourse at least once in the past. 11.9% of the sexually

active respondents had sex with commercial sex workers (CSW) in the past six months and 10.7% had contracted sexually transmitted diseases (STDs). Out of the sexually active respondents, 54.8% did not use condoms. From the respondents who used condoms, only 68.4% used always while the other 31.5%) reported that they use condoms only sometimes (29).

Self reported STIs prevalence in the past 12 months prior to the survey on Wolaita Sodo University students about Prevalence and Associated Factors of STI, was 19.5% among students. Out of the 158(35.3%) students who were sexually active: 46.0% used condom infrequently, 24.8% had sex with casual sexual partners and 13.9% had sexual intercourse with commercial sex workers. Among 103 who reported the most recent STI syndrome, 43 (41.7%) study subjects had not got treatments for the syndrome they had. Students who had sexual contact with commercial sex workers in the last 12 months were at increased odds of developing sexually transmitted infections (Adjusted OR=4.7,95% CI: 1.2, 8.6) (30).

## **2.3 FACTORS ASSOCIATED WITH RISKY SEXUAL BEHAVIOR**

### ***2.3.1 Socio-demographic and economic factors***

We expected that students would misperceive the risky sexual behavior of their peers and that these perceptions would positively relate to their sexual behavior. Undergraduate students from the United States (N=687; 57.6% female) completed measures assessing perceived sexual behavior, and other behaviors (e.g., marijuana use, alcohol consumption). Findings demonstrated that students perceived that others engaged in more risky sexual behavior than they do and that perceived norms were positively associated with one's own behavior. The incorporation of personalized normative feedback regarding risky sexual behavior into brief interventions aimed at reducing risky sexual behavior is discussed (31).

Through time with progressive civilization, urbanization and migration, the parental role gets affected by socio-economic factors like increasing women working, both parents working, breakage of families results in single parenthood, which have got influence on weakening traditional structures and reducing sources of social support. Thus loose family and community connectedness results in peers to play more significant roles which may have more influence on youths' initial sexual behavior and recourse for adolescents and youth with sexual health questions and leading to increasing sexual risks. Normally media can reach different large audiences at a low

cost, raise awareness, disseminate information and have the potential to change behavior. However, exposure to western media mainly explicit sex scenes could play a significant role in molding youth sexual activity (32).

### **2.3.2 SUBSTANCE AND RISKY SEXUAL BEHAVIOR**

Increased alcohol use seems to be associated with an increased likelihood of sexual activity. When men aged 18 to 30 were asked to report their episode of heaviest drinking in the last year, 35 % said that they had sex after consuming five to eight drinks and 45 % had sex after consuming eight or more drinks, compared with 17 % of those who had one or two drinks. Among women aged 18 to 30, 39 % had sex while consuming five to eight drinks and 57 % had sex when consuming eight or more drinks, compared with 14 % of women who had one or two drinks (33).

Research done on Slovak students showed that the risk of multiple sexual partners was associated with more psychological factors among females. It also showed that males reporting having been drunk at least once in the preceding month or reporting sexual experience before age 16 were more likely to have had more than three sexual partners in their life time. It also added that one behavioral factor in males (being drunk) and one in female (smoking) was associated with inconsistent condom use (34).

For instance, in the extract of the 1995 National College Health Risk Behavior Survey (NCHRBS) analyzed here, 23% of four-year college students who ever had sex admitted using alcohol or drugs before their last episode of sexual intercourse. Given that past month use is reported by 71% of respondents for alcohol compared with only 17% for marijuana, by far the most popular illegal drug, and some students separately report using drugs in combination with drinking, it is likely that most of the reported pre-sex substance use involves alcohol.

Research conducted on Binge drinking among college students at University of Texas at Arlington Binge drinking significantly predicts all four types of sexual behaviors at the 1% level. Relative to sample means, binge drinkers are more likely to have sex by 25%, sex without a condom by 20%, and multiple recent sex partners, both unconditionally and without always using a condom, by 94% (35).



According to the result of Alcohol Use and Risky Sexual Behavior among College Students and Youth in University of Missouri-Columbia, drinking was strongly related to the decision to have sex and to indiscriminate forms of risky sex (e.g., having multiple or casual sex partners), but was inconsistently related to protective behaviors (e.g., condom use) (36-37).

As the study on Pattern of risky sexual behavior and associated factors among undergraduate students of the University of Port Harcourt, Rivers State, Nigeria reveals, 61% of the respondents had ever taken alcohol beverage with 36.1% of them were current users. More than half (52.0%) the respondents had either boy/girlfriend and a total of 144 (52.0%) had ever had sexual intercourse; of these 13% reportedly had only one sexual partner in their lifetime; girl/boy friend topped the list of their sexual partner; 48.6% respondents were currently sexually active and 32% used a form of protection during their last sexual activity. Few (13.4%) have had sex in exchange for gifts and 5.1% of these were with a friend ( $p < 0.005$ ) (38).

The research conducted on Khat and alcohol use and risky sex behavior among in-school and out-of-school youth in Ethiopia in 2005 reveals, there was a significant and linear association between alcohol intake and early initiation of sex, with those using alcohol daily having a three-fold increased odds compared to those not using alcohol. Use of substances other than khat was also strongly associated with sex initiation (39).

Another study done on substance use and risky sexual behavior among Haromaya University students reveal that among 725 participants, 390 (53.8%) reported having used at least one substance in their lifetime. The most commonly used substance was alcohol (41.7%), followed by khat (30.3%), cigarette (11.3%) and illicit drugs (3.9%). This study revealed that use of khat, alcohol and cigarette was significantly associated with risky sexual activities (17).

# CONCEPTUAL FRAME WORK

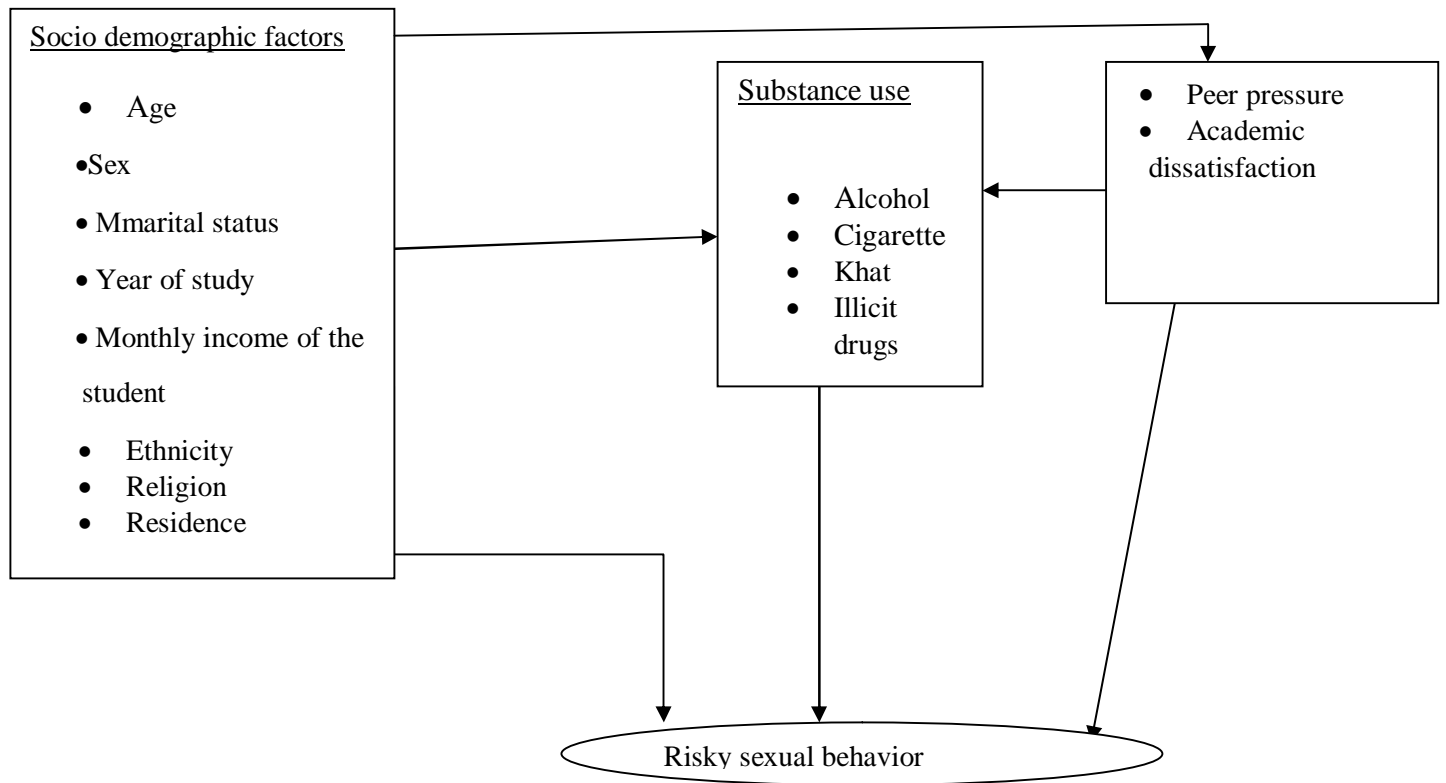


Figure 1 : CONCEPTUAL FRAMEWORK FOR FACTORS AFFECTING RISKY SEXUAL BEHAVIOR

## **2.4. SIGNIFICANCE OF THE STUDY**

In Ethiopia to date, though it is indicated in the health policy that, addressing the health problems and needs of adolescents and youths as an issue, and the FHD (family health department) of MOH (Ministry of health) is undertaking some initiatives, still practical activities are not yet visible at public health service delivery points. In light of the previous findings and the magnitude of the problem, reduction of the number of people exposed to HIV/AIDS and other consequences of youth sexual behavior is found to be necessary. The purpose of this study is therefore to generate information on risk and protective factors that are likely to influence the sexual behavior of youth; therefore the outcome of this study is believed to provide insight to identify who is at risk and realize why youths are engaged in risk sexual behavior. The other outcome will be to develop their knowledge and skills towards self-efficacy and recognize the need for sex education which is the area of primary prevention that enables young people to adapt safe sexual behavior. It is also intended to come up with recommendations that enable the responsible bodies and policy environment which could bring changes in youth's sexual behavior. On the other hand it can provide valuable information for more extensive research in the area.

### **3. OBJECTIVES**

#### **3.1. GENERAL OBJECTIVE**

The main objective of the present study is to determine the magnitude of risky sexual behavior and its association with substance use among public College students in Bonga town 2014.

#### **3.2 SPECIFIC OBJECTIVES**

The specific objectives of the study are:

- To assess the magnitude of substance use among Teachers Training College and Technical and Vocational Education Training College students in Bonga town.
- To assess the magnitude of risky sexual behavior among Teachers Training College and Technical and Vocational Education Training College students in Bonga town.
- To determine the effect of socio-demographic factors on risky sexual behavior.
- To assess the association between substance use and risky sexual behavior among Teachers Training College and Technical and Vocational Education Training College students in Bonga town.

## **4. MATERIALS AND METHODS**

### **4.1. STUDY AREA AND PERIOD**

The study site was in SNNPR State, Kafa Zone, Bonga town on two public colleges. Kafa Zone is located in the South west of SNNP Region; about 449Kms from Addis Ababa and 115 kms from Jimma University with a total population about 1,011,781, in which 49.36% are male and 50.64% are female population (by 2010 senses). About 929,523(91.87 %) people are living in rural area while only 82,258 (8.13 %) people are living in Urban. Majority of the population live on agricultural economy. It has one district Hospital, 32 Health Centers and 246 Health Posts. These make geographical health coverage of the zone 80%.

Bonga town is the capital city of Kafa Zone with two public colleges. One is Bonga College of Teachers Education and the other is TVET (Technical and Vocational Education Training) College. In both colleges there is 2586 number of students attending their regular education. In Bonga College of Teachers Education there is 1904 number of students. In TVET College there are 682 numbers of students. Like other parts of the SNNPR HIV/AIDS is one of the major health problems in Kafa Zone with huge social and economic consequences. Based on the data of Kafa Zone Health Office about 3,224 people are living with HIV/AIDS in Kafa Zone.

Data were collected in March 2014.

### **4.2 STUDY DESIGN**

A cross-sectional study was conducted.

### **4.3 POPULATION**

#### ***4.3.1 SOURCE POPULATION***

All public college students attending their regular education in Bonga town were the source population of the study.

### 4.3.2 STUDY POPULATION

All students who were randomly selected fulfilling the inclusion criteria were found to be study population

**Inclusion criteria:**-Regular Bonga town college students, who were currently attending their class during data collection period, were included in the study.

**Exclusion criteria:** - Regular Bonga town college students who are critically sick during the time of data collection.

### 4.4 SAMPLE SIZE DETERMINATION

Sample size was determined using single population proportion formula for cross-sectional study. Taking non condom use rate 44.3% (17) sample size at 95 % certainty and a discrepancy of  $\pm 5$  % between the sample and the population, an additional 10 % was added to the sample size as a contingency for non response. The following formula was used to calculate the sample size:

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

**Where;** n=the desired sample size

p= non condom use rate of Haromaya University students (44.3 %)

Z $\alpha/2$ = critical value at 95% confidence level of certainty (1.96)

d= the margin of error between the sample and the population = 5%

Using the above formula, sample size for the single population proportion was 379 and after adding 10% non response rate (contingency) the total sample size became 417.

### 4.5 SAMPLING PROCEDURES

First, students were divided into TTC and TVET colleges. Then, they were further stratified based on year of study. Finally, stratified random sampling technique was applied to select individuals in each year of study from the list of students name in their respective batch. Students for each year

of study were allocated proportionally to their class size based on the inclusion criteria and were selected randomly using computer generated method.

**Schematic representation of sampling procedure**

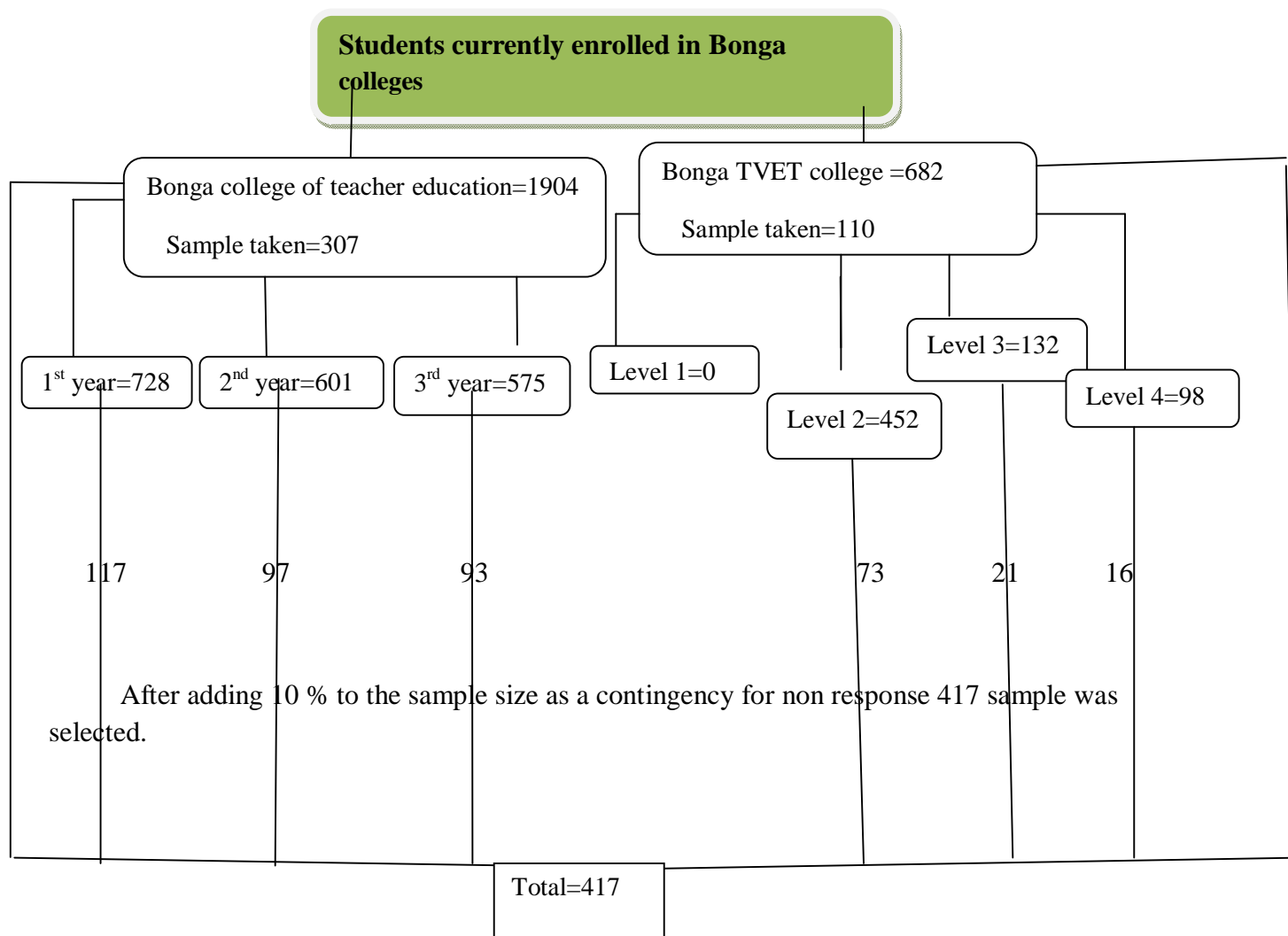


Figure 2: Schematic representation of sampling procedure

**4.6 STUDY VARIABLES**

**4.6.1 Independent variables**

Socio-demographic characteristics: age, sex, year of enrolment, residence of the parents of the study participants, religion, religiosity, ethnicity, marital status and monthly income of the students

as well as substance uses (khat, alcohol, cigarette or other illicit drugs) and peer pressure were independent variables of the study.

#### **4.6. 2 Dependent variable**

Risky sexual behavior status and substance use behavior status

### **4.7 OPERATIONAL DEFINITIONS**

**Substances:** Any non-medical drugs used by study participants such as alcohol, khat, tobacco, cannabis, heroin, cocaine, and marijuana to alter their mood or behavior.

**Life time prevalence of smoking:** the proportion of participants who had ever smoked at least one cigarette in his/her life time

**Alcoholic drinks:** any drink like” Tela”, “tej”, “katicala/areke”, beer, wine or other drinks that can cause intoxication

**Lifetime prevalence of alcohol drinking:** the proportion of participants who had ever used alcoholic drinks in their life time irrespective of the amount and type

**Life time prevalence of khat chewing:** the proportion of participants who had ever chewed khat in their life time

**Current prevalence of cigarette smoking:** the proportion of participants who are smoking cigarettes within 3 months preceding the study

**Current prevalence of Khat chewing:** the proportion of participants who are chewing khat within 3 months preceding the study

**Current prevalence of alcohol drinking:** the proportion of participants who are drinking alcohol within 3 months preceding the study

**Illicit (illegal) drugs:** Drugs which are forbidden by law such as cocaine, heroin, hashish, cannabis, ganja, and marijuana.

**Ever users of illicit drugs:** the number of participants who ever used any substances like hashish, pat, kaya, cannabis, ganja, heroin or others



**Current users of illicit drugs:** the number of participants who use any substances like hashish, pat, kaya, cannabis, ganja, heroin or others within 3 months preceding the study 14

**Ever smoker:** One is considered as ever smoker even if he/she had smoked only once in his/her life time

**Ever khat chewer:** An individual is considered as ever khat chewer even if he/she had chewed khat only once in his/her life time

**Ever illicit drug user:** An individual is considered as ever illicit drug user even if he/she had used only once in his/her life time

**Sexual risk behavior:** is practicing one of the following: not using condom (inconsistent use of condoms), having multiple sexual partner, starting sex before age 18 years and sex with commercial sex workers.

**Consistent condom use:** use of a condom during every sexual encounter

#### **4.8 DATA COLLECTION TOOLS AND TECHNIQUES**

Data were collected by using structured self-administered questionnaire prepared in English and translated to Amharic and retranslated to English to ensure its consistency. The questionnaire had three parts: socio-demographic variables, substance use behaviors (Alcohol, Cigarette, Khat and Illicit drugs) and sexual behavior questions. Participation was on voluntary basis and confidentiality was maintained to encourage accurate and honest self-disclosure. The questionnaire was distributed to selected students in the classroom and collected on the same day to avoid information diffusion. Instructors allowed the students to complete the questionnaire in the classroom and then the filled questionnaires were collected immediately.

#### **4.9 DATA PROCESSING AND ANALYSIS**

Data were checked for completeness before entry and then entered and cleaned using Epi-Info version 3.1. SPSS version 16 was used for statistical analysis. Bi-variate analysis was used to know the crude association between independent variable with outcome variable. Multi-collinearity was checked by VIF and goodness of fit of the model was checked via Hosmer and

Lemeshow test. All variables significance at  $p\text{-value} < 0.25$  on bi-variate analysis was candidate for multi-variable logistic regression to know independent predictors of outcome variables. Odds ratio with 95% confidence interval was computed to assess the level of association and statistical significance.

#### **4.10 DATA QUALITY ASSURANCE**

In order to assure data quality, due emphasis was given to minimize errors using the following strategies: Ten data collectors and two supervisors were involved in data collection. All of the data collectors and supervisors are college teachers with second degree. One day training was given to data collectors and supervisors; questionnaire was pretested on 5% of the sample on non-selected College students and subsequent correction and modification was done. The collected data were reviewed and checked for completeness before data entry. Data were double-entered in order to check missing value during data entry.

#### **4.11. ETHICAL CONSIDERATIONS**

Ethical clearance was obtained from Ethical Committee of Jimma University, College of Public Health and Medical Sciences. Permission will be sought from Bonga College of Teachers Education and Bonga TVET College. Similarly after clear discussion about the actual study or explaining the purpose of the study, verbal informed consent was obtained from each study participant, while informing the study participants that it was their right to refuse participating or quit at any time. For students' age less than 18, written consent was taken from student's guardian. Identification of study participants by name was avoided to assure the confidentiality of the information obtained.

#### **4.12. DISSEMINATION OF FINDINGS**

The findings of this study were presented in a college of Public Health and Medical Sciences Graduate School. The findings were also disseminated to Bonga College of Teachers Education and Bonga Technical and Vocational Education College that have contribution while conducting this research.

## **5. RESULTS**

### **5.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS**

Out of the total 417 students participated in the study, questionnaires from 396 respondents were considered for analysis making the response rate 95%. Of the total 396 respondents, most 315(79.5%) were youths, 271 (68.4%) were males, 139(35.1%) were first year students who stayed one year in the town. Majority of the study participants, 63.9% (253) were followers of orthodox religion followed by protestants 115(29%). About 88.6% were never married including single and cohabitating while the remaining 45(11.4) were ever married. Considering the ethnicity of the study participants majority are Kafa 260 (65.7%) followed by Bench 40 (10.1%) and Sheka 33 (8.3%). In looking at income of respondents 51.5%(204) of the students reported a monthly pocket money of <100 and the remaining 32.8% (130) and 15.9% (63) of the students reported a monthly pocket money of 100 to 299 birr and above 300 respectively (Table 1).

**TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF BONGA PUBLIC COLLEGE STUDENTS, 2014**

Variables	Level	N=396	%
Age	15-18	73	18.4
	19-24	315	79.5
	>24	8	2.0
Sex	male	271	68.4
	female	125	31.6
Educational status	First year and level 1	139	35.1
	Second year and level 2	143	36.1
	3 <sup>rd</sup> year and level 3 and 4	114	28.8
Religion	Orthodox	253	63.9
	Muslim	19	4.8
	Protestant	115	29.0
	Catholic	8	2.0
	Others	1	0.3
Marital status	Never married	351	88.6
	Ever married	45	11.4
Ethnicity	Kafa	260	65.7
	Sheka	33	8.3
	Bench	40	10.1
	Amhara	28	7.1
	Oromo	16	4.0
	Others	19	4.8
Place lived before	Urban	179	45.2
	Rural	217	54.8
School type	Government school	395	99.7
	Private school	1	0.3
Income	<100	204	51.5
	100-299	129	32.6
	>=300	63	15.9

## **5.2 Prevalence of substance use behavior**

The study revealed that 61(15.4%) of the students chew khat at least once in their lifetime and 45(11.4%) reported that they were current khat chewers (in the last 3 months). The prevalence among males 54(19.9%) was higher compared to females 7(5.6%). The respondents were further asked their chewing pattern. The response indicated that about 41(4.5%) chew khat occasionally (2-3 times per week), 19 (4.5%) of them used to chew khat but not now and 1(0.3%) of them claimed chewing khat always (everyday).

Concerning alcohol drinking habits, 203 (51.3%) reported that they drank alcohol at least once in their lifetime while 178 (44.9%) said that they drank alcohol in the last three months. Among alcohol users, the majority (50.5%) were using alcoholic drinks occasionally. (Tables 2 and 3)

Respondents used cigarette at least once in their life time were 14 (3.6%). The current prevalence of cigarette smoking was 1.5% and all of the smokers were occasional smokers. Furthermore, 10(2.5%) of the study participants used illicit substances like hashish at least once, with all of them being occasional users.

Among the participants, 288 (72.7%) reported having used at least one substance in their lifetime. From those who used at least one substance in their life time, 196 (68%) started using the drugs before joining the college while 92 (32%) started after joining college.

**TABLE 2:PREVALENCE OF SUBSTANCE USE AMONG BONGA PUBLIC COLLEGE STUDENTS, 2014**

<b>Type of substance</b>	<b>(N=396)</b>	<b>Percent</b>
Khat	61	15.4%
Alcoholic	203	51.3%
Cigarette	14	3.6%
Illicit drugs	10	2.5%

**TABLE 3: PREVALENCE OF CURRENT SUBSTANCE USE (IN THE LAST 3 MONTHS) AMONG BONGA PUBLIC COLLEGE STUDENTS, 2014**

<b>Type of substance</b>	<b>( N=396)</b>	<b>Percent</b>
Khat	45	11.4
Alcohol	178	44.9
Cigarette	6	1.5
Illicit drugs	6	1.5

### **5.3 REASON FOR SUBSTANCE USE**

Different reasons were mentioned by students for the use of drugs. The reasons mentioned for khat ever use were: To increase work performance 25 (40.1%), due to peer influence (19.4%), to be sociable (9.7%), to get relief from tension (8.1%), to get acceptance by others (8.1%), to get personal pleasure during sexual intercourse (6.4%), and other reasons (4.8%). Among 203 students who reported taking alcohol, 34.7% used alcohol to get personal pleasure, 17.6% took it due to peer influence, 11.1% to get relief from tension, 9% to be sociable and 19% for other reasons . Reasons for cigarette smoking were: to get relief from tension (28.6%), peer influence (28.6%), to get personal pleasure (21.4%), to stay awoke (14.3%) and to get acceptance by others (7.1%). Reasons for illicit drug use were: to get relief from tension 3(30%), to increase pleasure during sexual intercourse 7(70%). Prevalence of cigarette smoking and illicit drug use were low. This may be due to small sample size and fear of respondents to give genuine response for the given questions due to illegality of illicit drug use.

**TABLE 4: REASON FOR SUBSTANCE USE, BONGA COLLEGE STUDENTS, 2014**

Variables	Level	N	%
Reason for chewing chat (N=61)	To work /study hard	25	40.1
	To get relief from tension	5	8.2
	To be alert	4	6.5
	To get acceptance from others	5	8.2
	To be sociable	6	9.8
	To get pleasure during sexual intercourse	3	4.9
	Due to peer influence	13	21.3
Reason for drinking (N=203)	To work/ study hard	17	8.4
	To get relief from tension	22	10.8
	To be alert	16	7.9
	To get acceptance from others	15	7.4
	To be sociable	18	8.8
	To get personal pleasure	69	34.0
	To get pleasure during sexual intercourse	5	2.4
	Due to peer influence	35	17.2
Reason for smoking (N=14)	To get relief from tension	4	28.6
	To be alert	2	14.3
	To get personal pleasure	3	21.4
	Due to peer influence	4	28.6
Reason for using of illicit drugs (N=10)	To get relief from tension	3	30
	To get pleasure during sexual intercourse	7	70



## 5.4 SEXUAL BEHAVIORS OF RESPONDENTS

Out of the total respondents, 151 (38.1%) of students had sexual experience. Of the 151 sexually active students, 103 (68.2%) were males and 48 (31.8%) were females. A total of 84(55.6%) participants had their first sex before joining the college. The main reasons for initiating sex were related to personal interest or curiosity 57(37.7%), promising word from partner for marriage 56(37.2%), peer pressure 18(11.9%), marriage 15(9.9%) and other reasons such as forced sex and for passing examination 5(3.3%). Majority of the sexually experienced students 124(82.1%) had their first sex with their girlfriends/ boyfriends, 21(13.9%) with their spouse, 3(2.0%) with stranger and 4(2.5%) of the respondents had their first sex with their teachers (Table 5).

**TABLE 5: RESPONDENTS SEXUAL PRACTICE, BONGA PUBLIC COLLEGE STUDENTS, 2014**

<b>Characteristics</b>	<b>N%</b>
Ever had sex (n=396)	
Yes	151(38.1)
No	245(61.9)
Start of sex(n=151)	
Before joining college	84(55.6)
After joining college	67(44.4)
Sex(n=151)	
Male	103(68.2)
Female	48(31.8)
Age at first sex(n=151)	
<18 year	57(37.7)
>18 year	94(62.3)
Reason for start of sex(n=151)	
Marriage	15(9.9)
Personal desire	57(37.7)
Peer pressure	18(11.9)
Promise from partner	56(37.2)
First sex with whom(n=151)	
Spouse	21(13.9)
With boy/girl friend	124(82.1)
With teacher	3(1.9)
With stranger	4(2.5)
Consistent use of condom(n=151)	
Yes	88(58.3)
No	10(6.6)

From 151 sexually active students, 83 (54.96%) had at least one of the risky sexual behaviors. i.e. 7(4.6%) had sexual intercourse with multiple sexual partners in the last three months, 7(6.8%) of males had sex with commercial sex workers, 53 (35.1%) respondents do not use condom, 10(6.6%) use condom inconsistently and 57 (37.7%) had started sexual intercourse before the age of 18 years and 51 of them are victims of the above risky sexual behaviors. The most common reason cited for not using condom was in love with partner (29.8%), followed by trust of partner (19.2%) and no reason (12.5%). Among the sexually active students who were asked if they had symptoms of STI (genital discharge or ulceration), 21(13.9%) responded that they had the symptoms. From these students that had these symptoms, only 3 sought medical care for the symptom they had and 18 of them ignored it. Regarding use of contraceptive methods last time they had sexual intercourse, majority, 98(64.9%) had used and the remaining 53(35.1 %) had not use any. Pertaining the type of contraceptive methods, 35(23.2%), 37(24.5%) used pills and 26(17.2%) used Depo-Provera. Among 48 sexually active female students, 18(37.5%) had once been pregnant and 4 students became pregnant twice. Concerning the outcome of pregnancy, 15(68.2%) ended in abortion whilst the rest 7(31.8%) gave birth (Table 6).

**Table 6: RESPONDENTS RISKY SEXUAL CHARACTERISTICS, CONTRACEPTIVE USE AND RELATED CONSEQUENCES, BONGA PUBLIC COLLEGE STUDENTS, 2014**

Characteristics	N%
Number of sexual partners (n=151)	
1 person	144(95.4)
2 and above person	7(4.6)
Contraceptive method used(n=151)	
None	30(18.8)
pills	37(24.5)
Inject able	26(17.2)
Not sure	23(15.2)
Number of pregnancy(n=48)	
Never	26(54.2)
1 and above	22(45.8)
Result of pregnancy(n=22)	
Aborted	15(68.2)
Give birth	7(31.8)
STI symptoms(n=151)	
Yes	21(13.9)
No	130(86.1)
Sex with causal partner(n=151)	
Yes	16(10.6)
No	135(89.4)
Sex with commercial sex workers(n=103)	
Yes	7(6.8)
No	96(93.2)
Sex for economic benefit(n=48)	
Yes	4(8.3)
No	44(91.7)

## 5.5 FACTORS ASSOCIATED WITH RISKY SEXUAL BEHAVIOR

### 5.5.1 ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS AND RISKY SEXUAL BEHAVIOR

In bi-variate association among different variables included, year of study, marital status, place lived before and income were associated with risky sexual behavior.

**Table 7: BI-VARIATE ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS AND RISKY SEXUAL BEHAVIOR AMONG BONGA PUBLIC COLLEGE STUDENTS, 2014**

Variables	Level	Risky sexual behavior		COR(95% CI)
		No N (%)	Yes N (%)	
Sex	male	50(73.5)	53(63.9)	1
	female	18(26.5)	30(36.1)	1.5(0.8,3.1)
Place lived before	Urban	31(45.6)	54(65.1)	2(1.1, 4)*
	Rural	37(54.4)	29(34.9)	1
Educational status	1 <sup>st</sup> year and level 1	26(38.2)	10(12.0)	1
	2 <sup>nd</sup> year and level 2	23(33.8)	32(38.6)	3.6(1.4, 8.9)*
	3 <sup>rd</sup> year, level 3 and 4	19(27.9)	41(49.4)	5.6(2.2, 13.9)*
Marital status	Never married	46(67.6)	73(88.0)	3.1(1.4, 7)*
	Ever married	22(32.4)	10(12.0)	1
Income	<100	34(50.0)	15(18.1)	1
	100-299	23(33.8)	30(36.1)	2.7(1.2, 6.1)*
	>=300	11(16.2)	38(45.8)	7.6(3, 18.8)*

\*Statistically significant at 95% CI

### 5.5.2 ASSOCIATION BETWEEN SUBSTANCE USE AND RISKY SEXUAL BEHAVIOR

In bi-variate association use of substances such as Khat and alcohol were found to be significantly associated with having risky sexual behavior (Table8).

**Table 8: ASSOCIATION BETWEEN SUBSTANCE USE AND RISKY SEXUAL BEHAVIOR AMONG BONGA PUBLIC COLLEGE STUDENTS, 2014**

Used substances		Risky sexual behavior		COR(95% CI)
		No N (%)	Yes N (%)	
Ever use of khat	Yes	11(16.2)	28(33.7)	2.6(1.2, 5.8)*
	No	57(83.8)	55(66.3)	1
Ever use of alcohol	Yes	46(67.6)	72(86.7)	2.8(1.2, 6.2)*
	No	22(32.4)	11(13.3)	1
Ever use of tobacco	Yes	5(7.4)	9(10.8)	1.5(0.5,4.8)
	No	63(92.6)	74(89.2)	1
Ever use of illicit drugs	Yes	3(4.4)	7(8.4)	1.9(0.5, 8)
	No	65(95.6)	76(91.6)	1

**\*Statistically significant at 95% CI**

### ***5.5.3 INDEPENDENT PREDICTORS OF RISKY SEXUAL BEHAVIOR***

After controlling for the effects of potentially confounding variables using multivariate logistic regression sex, educational status, income and ever use of khat were found to be significantly associated with risky sexual behavior. The odds of performing risky sexual behavior among females were about four and half times higher than that of males (AOR=4.5, 95% CI=1.7, 12). There was also significant association between risky sexual behavior and other socio-demographic variables such as educational status and income. While comparing the exposure to risky sexual behavior of respondents, second year were about three times exposed to risky sexual behavior than first year students and third year and above respondents were about five times exposed to risky sexual behavior than first year students with odds of (AOR=2.8, 95% CI=1, 7.9) and (AOR=4.7, 95% CI=1.6, 12.9) respectively. From ever use of substances only khat chewing was independently associated with risky sexual behavior with (AOR=2.5, 95% CI=1.1, 7.9) (Table9).

**Table 9: INDEPENDENT PREDICTORS OF RISKY SEXUAL BEHAVIOR AMONG BONGA PUBLIC COLLEGE STUDENTS, 2014**

Variables	Level	<u>Risky sexual behavior</u>		COR(95%CI)	AOR(95% CI)
		No N (%)	Yes N (%)		
Sex	male	50(73.5)	53(63.9)	1	1
	female	18(26.5)	30(36.1)	1.5(0.8, 3.1)	4.5(1.7, 12)*
Educational status	1 <sup>st</sup> year and level1	26(38.2)	10(12.0)	1	1
	2 <sup>nd</sup> year and level 2	23(33.8)	32(38.6)	3.6(1.4, 8.9)	2.8(1, 7.9)*
	3 <sup>rd</sup> year & level 3- 4	19(27.9)	41(49.4)	5.6(2.2, 13.9)	4.7(1.6, 12.9)*
Income	<100	34(50.0)	15(18.1)	1	1
	100-299	23(33.8)	30(36.1)	2.7(1.2, 6.1)	3.7(1.4, 10)*
	>=300	11(16.2)	38(45.8)	7.6(3, 18.8)	13.7(4, 42)*
Ever use of khat	Yes	11(16.2)	28(33.7)	2.6(1.2, 5.8)	2.5(1.1, 6.5)*
	No	57(83.8)	55(66.3)	1	1

**\*Statistically significant at 95% CI**

## **6. DISCUSSION**

Present study revealed the magnitude of risky sexual behaviors and the association between risky sexual behavior and substance use.

### **6.1. SUBSTANCE USE**

The overall prevalence of "ever used substance" for at least one "substance" is 72.7%. The most commonly used substances in descending order are: alcohol (51.3%), khat (15.4%), cigarette (3.6%) and other illicit substances (2.5%). This is higher than a similar study on Haromaya University students which was 53.8% but the sequence of used substances is similar (17).

In this study the current prevalence of khat chewing was found to be 11.4%, which is lower than with study done among university students in North West Ethiopia, which was 17.5% and the study done among Hosanna Health Science College students which was 27.7% (16, 22). The difference might be due to the availability of khat in the towns where these institutions are found.

The reasons given by the study participants for chewing khat were to increase academic (work) performance, to get personal pleasure, to stay awake and due to peer pressure. This is in line with other researches done in Haromaya University, Gondar University and Hosanna Health Science College. (13-14, 20)

The lifetime prevalence of khat chewing was 15.4%. This result is lower than the result of study done on Haromaya university students which was 30.3% (13). The possible reason for this discrepancy may be university students can get more income from families and relatives than college students.

The prevalence rate of lifetime alcohol use in this study was 51.3%, which is higher than rate of lifetime alcohol use in Hosanna health science students which was 21.7% (20) and lower than Nigerian students which was 61% (34). The possible reason for this difference can be the income difference among Ethiopian and Nigerian families of the students. According to this study finding very few respondents 14 (3.6%) only were using cigarette in their life time and



10 (2.5%) had tried illicit drugs. This might be due to students didn't get these illicit drugs easily, and the possession and use of these drugs results in penalty under the law of the country.

## **6.2. RISKY SEXUAL BEHAVIORS**

In this study, 38.1% of the participating students admitted having sexual experience which accounts 38% for males and 38.4% for females. This result is higher with the study done in Haromaya university students which was 33.5% and the study on high school students in Dessie town which was 27.3% and lower than the study on Uganda university students which was 59% (13, 17 and 36). The result difference is slight among studies conducted in Ethiopia and it is lower from the study conducted in Uganda. This might be due to the difference in cultures, attitudes and life style which lead students towards sexual debut.

While looking at unprotected sexual intercourse only 58.3% of respondents with sexual experience use condom always, 6.6% used condom inconsistently and the remaining 35.1% do not use condom. This is lower when compared to the study in China selected high school students which was 42.1% unprotected sexual intercourse (sexual intercourse without condom) (35).

The condom use rate during last intercourse among those sexually active students was 64.9%, but consistent condom use was reported by 58.3%. The result is consistent with similar study done among students of Haromaya university which was 55.7% (13).

In this study about 4.6% of sexually experienced participants have had sexual intercourse with two or more partners and this is very low when compared to the study in China selected high school students which was 49.4% and to the study on Jamaican adolescents which was 12% for females and 52% for males (35, 24).

Sex with commercial sex workers was reported by 7(6.8%) of male students, which is lower than the study among high school students in northwest Ethiopia which was 11.9% and the study among Wolayta Sodo university students of 13.9% (27, 28). This might be due to the difference in cultures, attitudes and income status which lead male sexually experienced students towards commencing sex with commercial sex workers.

There was a significant and linear association between alcohol intake and risky sexual

behavior with those using alcohol having about three times higher odds compared to those not using it. This might be due to the nature of alcohol in decreasing inhibitions, altering rational decision making and increasing risk taking behavior. This result is consistent with the study done among Haromaya university students which was 2.4 (13, 37). Use of khat was significantly associated with risky sexual activities. This result is similar to the findings of similar studies done in different setup (13, 31-37). Studies showed that there is a strong association between khat chewing and alcohol consumption, and the combined use of both drugs had an amplifying effect on sexual risk behaviors that predispose to HIV and other STIs (13, 15). The association between cigarette and illicit substance use and risky sexual behavior disappears in the bi-variate and multivariate analysis. The relationship of risky sexual behavior and these substances use was strong in many literatures (8, 9, and 37). But absence of relationship between these drugs use and sexual behavior in this study could be as a result of small sample size which leads to small number of users of these substances or under-reporting of the use of these substances by students because of cultural or legal issues. About 21(13.9%) of sexually experienced respondents had seen genital symptoms of STIs and almost all did not go to health care center. This result is higher than the study conducted on Haromaya university students which were 4.1%.

## **7. LIMITATION OF THE STUDY**

Some students might not give genuine answers to the questions they were asked. This might underestimate the prevalence of both substance use and risky sexual behaviors.

It is difficult to assure causality due to the nature of the study

## **8. CONCLUSIONS AND RECOMMENDATIONS**

### **8.1. CONCLUSIONS**

The prevalence of substance use among Bonga college students is high. Reasons forwarded for substance use from respondents include: to work/study hard from chewers and to get personal pleasure from drinkers. The study also showed that the majority of the students who were sexually active engaged in unsafe and risky sexual practices. Sex, year of study, income and ever use of khat were independently associated with risky sexual behavior.

### **8.2. RECOMMENDATIONS**

Based on the findings of the study the following recommendations are made:

High schools should inform adolescents about the health problems associated with substance use.

Colleges should inform their students about the health and socioeconomic problems associated with substance use.

Regular programs should be adjusted to freely talk about the effect of risky sexual behavior on the health, education and aim of students.

Intervention activities to bring about behavioral changes among the students on the danger of use of Khat, alcohol and other drugs are recommended.

Students should be encouraged to practice premarital abstinence and safe sex.

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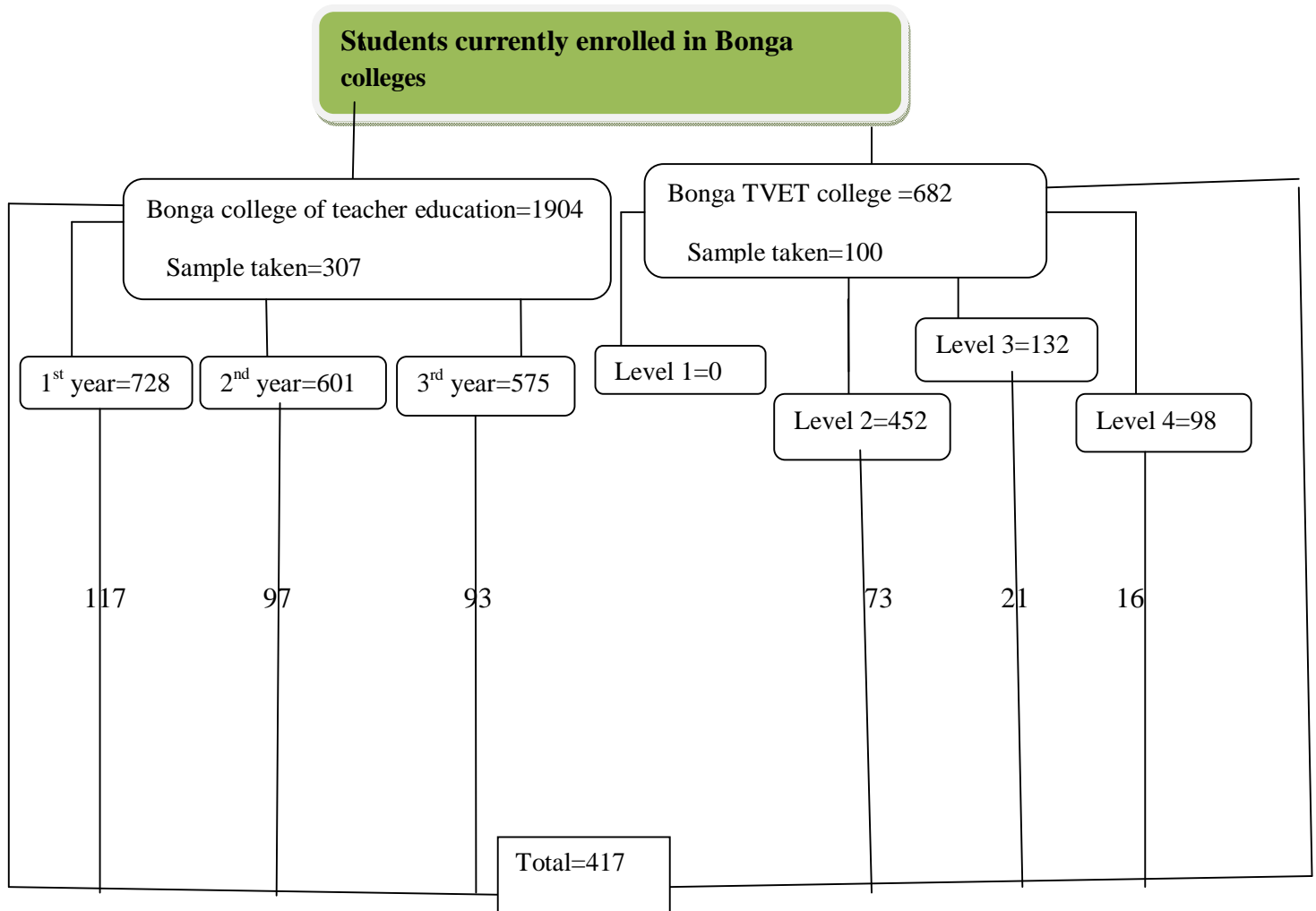
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## Annex One

### Schematic representation of sampling procedure



After adding 10 % to the sample size as a contingency for non response 417 sample was selected.

Figure 3: Schematic representation of sampling procedure



## Annex Two: Questionnaire (English)

### I. Study Information sheet

In ensuring the health of adolescents the understanding of existing problems and related behaviors of this group of the population is important. You are cordially invited to participate in the study entitled “Assessment of substance use and risky sexual behaviors among Bonga college students”. The study attempts to assess prevalence of substance use and its association with sexual risk behavior. The research will help us understand the magnitude and relationship between substance use and sexual risk behaviors.

**Title:** Assessment of substance use and risky sexual behavior among Bonga public College students

**Purpose of the study:** This study is planned to generate information on substance use and risky sexual behavior of the college students that can be used to design effective health intervention programs.

**Procedure:** The choice is made randomly using lottery method. If you are willing to participate in this study, you will fill the attached questionnaire. We would expect you to complete the questionnaire yourself, during your class hour. The completion time is about 20 to 30 minutes and you may find some of the questions asked sensitive in nature.

**Risks and benefits of the study:** By participating in this study, and answering our questions, you will not receive any direct benefit. However, you will help to increase our understanding of the needs of the College adolescents in terms of sexual and reproductive health. We hope that the results of the study will improve and make more acceptable the services currently available to you. Your participation in this study will not involve any risks to you.

**Rights:** Your participation in this study is voluntary and you have the right to refuse to participate or to answer any questions that you feel uncomfortable with. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision to not to participate or to withdraw will not affect any aspects of your College life, any future medical care you should require or any other benefits to which you would be entitled. If there is anything that is unclear or you need further information, we shall be delighted to provide it.

**Confidentiality:** Please do not write your name and provide as sincere answers as you possibly could. The information that you provide during the study will be kept confidential. Only the researchers will have access to the questionnaires and the information that you provide.

If you have any question you can contact the principal investigator at any time convenient for you using the following address:

Name: Agegnehu Alemu Phone number: 0913-39 93 32

Address: Bonga, Ethiopia E-mail: aagegnew@ymail.com

## **II. Informed consent form**

### **Students self-reporting questionnaire**

I have got sufficient information through description of the study entitled “Assessment of substance use and risky sexual behaviors among Bonga College students” by reading the information sheet.

I know that I can refuse to participate in the study without penalty or loss of benefit to which I would have been otherwise entitled. I have the right to withdraw from this study any time I want, without any negative impact on me. Hereby, I voluntarily participate in this study.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **III. Questionnaire for Cross-sectional assessment**

### **Assessment of substance use and risky sexual behaviors among BCTE and TVET students in Bonga**

Questionnaire SN \_\_\_\_\_ Name of data collector \_\_\_\_\_

Date of data collection \_\_\_\_\_ Department \_\_\_\_\_

Please read the following questions very carefully and then answer them by circling the code.

Part I: SOCIO DEMOGRAPHIC INFORMATIN

N No.	Questions	Coding categories	Code
Q101	How old are you?		Age in years _____
Q102	Sex of the respondent	Male Female	1 2
Q103	What is your current level of study year?	1st year/Level 1 2nd year/Level 2 3rd year/ Level 3 Level 4	1 2 3 4
Q104	What is your religion?	Orthodox Islam Protestant Catholic I have no religion Others _____	1 2 3 4 5
Q105	How often do you go to church or mosque?	Everyday At least once a week At least once a month At least once in a year Never	1 2 3 4 5

Q106	How important is religion in your life?	Very important Somewhat important Not important	1 2 3
Q107	What is your marital status now?	Never married Married Cohabiting Divorced Widowed Separated	1 2 3 4 5 6
Q108	What is your ethnicity?	Kafa Sheka Bench Amhara Oromo Tigre Wolaita Gurage Others	1 2 3 4 5 6 7 8 9
Q109	Residence (where you lived before):	Urban Rural	1 2
Q110	Where did you attend	Public/governmental high school	1

	your high school?	Private high school Religious/missionary high school Others(specify)_____	2 3
Q111	What is your average monthly pocket money you get from family/relatives in Birr? (excluding expenditure for food item)	None <100 100-299 300-499 >500	1 2 3 4 5

**Part II: SUBSTANCE USE**

The following questions focuses on khat chewing practice, alcohol drinking, cigarette smoking and other substance use like hashish, so you are requested to give answers genuinely about your personal behavior on the use of these substances and circle on your choice.

No	Questions	Yes	No
<b>1. The following three questions are specific to khat chewing practice</b>			
201	Have you ever used khat in your life?	Yes	No, Go to Q 206
202	How often do you chew khat? Never Occasionally Always I used to (but not now)	1 2 3 4	
203	Have you used khat in the last 3 months?	Yes	No
204	If your answer is yes for Q201 or Q203, when did you start chewing khat?	1.Before joining the College 2.After joining the College	
205	If your answer is yes for Q203, what was your reason(s) to use khat? (Multiple answers are possible)		

	a. To increase work or academic performance	1	
	b. To get relief from tension	2	
	c. To stay awake	3	
	d. Due to religious practice	4	
	e. To get acceptance from others (to be like others)	5	
	f. To be sociable	6	
	g. To get personal pleasure	7	
	h. To increase pleasure during sexual practice	8	
	i. Due to peer influence	9	
	j. Due to academic dissatisfaction	10	
<b>2. The following five questions are specific to Alcohol drinking habits</b>			
206	Have you ever used alcoholic drinks (like “areke”, ”tela”, “tej”, beer, draft, wine or other alcohol drinks) in your life?	Yes	No, Go to Q211
207	How often do you drink alcoholic drinks? Never Occasionally Always I used to (but not now)	1 2 3 4	
208	Have you used any kind of alcoholic drinks in the last 3 months?	Yes	No
209	If your answer is yes for Q208, when did you start drinking alcohol	1.Before joining the College 2.After joining the College	
210	If your answer is yes for Q208, what was your reason(s) to use alcohol? (Multiple answers are possible)		
	a. To increase work or academic performance	1	
	b. To get relief from tension	2	
	c. To stay awake	3	
	d. Due to religious practice	4	
	e. To get acceptance from others (to be like others)	5	
	f. To be sociable	6	

	g. To get personal pleasure	7	
	h. To increase pleasure during sexual practice	8	
	i. Due to peer influence	9	
	j. Due to academic dissatisfaction	10	
The following five questions are specific to cigarette (tobacco) use			
211	Have you ever used tobacco products such as cigarette, wrapped tobacco leaf, pipa or chewable tobacco products in your life?	Yes	No, Go to Q216
212	How often do you use tobacco products?		
	Never	1	
	Occasionally	2	
	Always	3	
	I used to (but not now)	4	
213	Have you used any kind of tobacco products in the last 3 months?	Yes	No
214	If your answer is yes for Q213, when did you start using tobacco products?	1.Before joining the College 2.After joining the College	
215	If your answer is yes for Q213, what was your reason(s) to use tobacco products? (Multiple answers are possible)		
	a. To increase work or academic performance	1	
	b. To get relief from tension	2	
	c. To stay awake	3	
	d. Due to religious practice	4	
	e. To get acceptance from others (to be like others)	5	
	f. To be sociable	6	
	g. To get personal pleasure	7	
	h. To increase pleasure during sexual practice	8	
	i. Due to peer influence	9	
	j. Due to academic dissatisfaction	10	
	k. Other (specify) _____		
The following five questions are specific to illicit substances such as Hashish and others			

216	Have you ever used illicit substances like hashish, pat, gaya, cannabis, ganja, heroin or others in your life?	Yes	No
217	How often do you use substances like hashish, cannabis etc? Never Occasionally Always I used to (but not now)	1 2 3 4	
218	Have you used such illicit substances in the last 3 months?	Yes	No
219	If your answer is yes for Q216, when did you start using substances like hashish?	1.Before joining the College 2.After joining the College	
220	If your answer is yes for Q216, what was your reason(s) to use these substances? (Multiple answers are possible)		
	a. To increase work or academic performance	1	
	b. To get relief from tension	2	
	c. To stay awake	3	
	d. Due to religious practice	4	
	e. To get acceptance from others (to be like others)	5	
	f. To be sociable	6	
	g. To get personal pleasure	7	
	h. To increase pleasure during sexual practice	8	
	i. Due to peer influence	9	
	j. Due to academic dissatisfaction	10	
	k. Other (specify) _____		



Part III: The following questions assess the sexual risk behaviors

No	Question	Coding categories	Code
301	Have you ever had sexual intercourse?	Yes No	1 2
302	If your answer is yes for Q301, when did you have your first sexual intercourse?	1.Before joining the College 2.After joining the College	1 2
303	How old were you when you had sexual intercourse for the first time?	I have never had sexual intercourse _____ years of age	1 2
304	What was the reason for your first sex?	1. I have never had sexual intercourse 2. In a marriage 3. Personal desire (curiosity) 4. Peer pressure 5. Promising word from partner(for marriage) 6. To get money 7. For grade 8.By force against my will 9.Others(specify)_____	1 2 3 4 5 6 7 8
305	With whom did you make your first sexual intercourse?	1. I have never had sexual intercourse 2. Spouse 3. Boy/girl friend 4. Teacher 5. Stranger 6. Commercial sex worker 7. Other(specify)_____	1 2 3 4 5 6 7
306	During your life, with how many	I have never had sexual intercourse	1

	people have you had sexual intercourse?	_____ number of partners	2
307	During the past <b>3 months</b> , with how many people did you have sexual intercourse?	I have never had sexual intercourse	1
		I have had sexual intercourse, but not during the past 3 months	2
		1 person	3
		2 people	4
		3 or more people	5
308	Did you use alcohol, before you had sexual intercourse the last time?	I have never had sexual intercourse	1
		Yes	2
		No	3
309	Did you use khat, before you had sexual intercourse the last time?	I have never had sexual intercourse	1
		Yes	2
		No	3
310	Did you use cigarette, before you had sexual intercourse the last time?	I have never had sexual intercourse	1
		Yes	2
		No	3
311	Did you use illicit drugs like hashish, ganja, heroin etc before you had sexual intercourse the last time?	I have never had sexual intercourse	1
		Yes	2
		No	3
312	The last time you had sexual intercourse did you or your partner use a condom?	I have never had sexual intercourse	1
		Yes	2
		No	3

313	What were the reasons for you not to use condom during sexual intercourse?	1. I used condoms always 2. I was intoxicated with drugs 3. Dislike condoms 4. Couldn't find condom 5. I was in love with my partner 6. I have trusted my partner 7. My partner didn't like condom to be used 8. Didn't have reason to use 9. Others (specify)	1 2 3 4 5 6 7 8
314	The last time you had sexual intercourse, what one method did you or your partner used to prevent pregnancy? (Select only one response.)	I have never had sexual intercourse No method was used Birth control pills, Condoms Depo-Provera (inject able birth control) Withdrawal Some other method(specify)_____ Not sure	1 2 3 4 5
315	How many times have you been pregnant? (FOR FEMALE RESPONDENTS ONLY)	0 times 1 time 2 or more times	1 2 3
316	What was the outcome of the pregnancy?	I have never been pregnant Currently pregnant Abortion Live birth	1 2 3 4
317	Have you ever experienced forced sexual intercourse?	Yes No	1 2
318	Have you ever forced someone to engage in sexual intercourse with you?	Yes No	1 2

319	Have you ever had genital symptoms of STIs (ulceration or discharge from your genitalia)	Yes No	1 2
320	If yes for Q315, did you seek medical care from a health institution	Yes No	1 2
321	Have you ever had sex with the Person you have known for a period of less than 3 weeks (casual partner)?	Yes No	1 2
322	Do you always use condom for sex with casual partner (person you have known for less than 3 weeks)?	Yes No	1 2
323	<b>Males only:</b> Have you ever had sex with commercial sex worker?	Yes No	1 2
324	Have you ever had sex in exchange for economic or other benefit?	Yes No	1 2
325	If you have never had sex, what was the reason for not practicing sex?	1. Haven't get sexual partner 2. Religion prohibition 3. Fearing pregnancy 4. Fearing Sexually transmitted disease 5. Not mature 6. Others(specify) _____	1 2 3 4 5

**ANNEX THREE: Amharic Questionnaire**

የአደንዛዥ እፅ አጠቃቀምን እና ለኤች አይ ቪ የሚያጋልጡ ወሲባዊ ባህርያትን ለመዳሰስ የተዘጋጀ መጠይቅ

ይህ ጥናት ጠቃሚ እንዲሆን እያንዳንዱ ጥያቄ በጥንቃቄ መመለስ አለበት። የሚመልሱት መልሶች በአስተማማኝ ሁኔታ በሚስጥር ይጠበቃሉ። በመጠይቁ ላይ ስም አይጻፍም። ለእያንዳንዱ ጥያቄ መልስ ከመስጠትዎ በፊት መመሪያውን በትክክል ስለማንበብዎ እርግጠኛ ይሁኑ።

ይህ መጠይቅ ፈተና አይደለም። ትክክለኛ ወይም ስህተት መልሶች የሉትም። ነገርግን እያንዳንዱን ጥያቄ በጥንቃቄ በማንበብ ለእርስዎ ትክክለኛ የመሰልዎትን ቁጥር በማክበብ መልስ ይስጡ።

የመጠይቅ መ.ቁ \_\_\_\_\_ የመረጃ ሰብሳቢው ስም \_\_\_\_\_

መረጃው የተሰበሰበበት ቀን \_\_\_\_\_ የት/ት ክፍል (Department) \_\_\_\_\_

**ክፍል 1:- ማህበራዊና ዲሞግራፊያዊ ሁኔታ**

ከዚህ በታች ያሉትን ስለእርስዎ ማህበራዊና ዲሞግራፊያዊ ሁኔታ የሚጠይቁ 11 ጥያቄዎችን በጥንቃቄ በማንበብ ለእያንዳንዱ መልስ ይስጡ።

ተ.ቁ	ጥያቄዎች	የኮድ ክፍፍሎች	ኮድ
101	ዕድሜ	_____ ዓመት	
102	ፆታ	ወንድ ሴት	1 2
103	ስንተኛ ዓመት ተማሪ ነህ/ሽ?	1ኛ ዓመት /ደረጃ1 2ኛ ዓመት /ደረጃ2 3ኛ ዓመት /ደረጃ3 ደረጃ4	1 2 3 4
104	ሃይማኖት	አርቶዶክስ እስላም ፕሮቴስታንት	1 2 3

		ካቶሊክ	4
		ሃይማኖት የለለው	5
		ሌላ(ይጠቀስ)_____	
105	ወደ ቤተክርስቲያን ወይም መስጅድቃ መቼ መቼ ትሄዳለህ/ሽ?	በየቀኑ	1
		ቢያንስ በሳምንት አንዴ	2
		ቢያንስ በወር አንዴ	3
		ቢያንስ በዓመት አንዴ	4
		በፍጹም ሄጄ አላወቅም	5
106	በህይወትህ/ሽ ዉስጥ ሃይማኖት ምን ያህል ጠቃሚ ነዉ?	በጣም ጠቃሚ	1
		በመጠኑ ይጠቅማል	2
		ምንም አይጠቅምም	3
107	ባሁኑ ጊዜ የጋብቻ ሁኔታ	ያላገባ /ያላገባች	1
		ያገባ /ያገባች	2
		ሳይጋቡ አብረዉ በመኖር ላይ ያሉ	3
		በፍቺ የተሆነዋል	4
		አግብቶ በሞት የተለያዩ	5
108	ብሔር	ከፋ	1
		ሸካ	2
		በንች	3
		አሮሞ	4
		አማራ	5
		ትግሬ	6
		ወሊይታ	7
		ጉራጌ	8
		ሌላ (ይገለፅ)_____	
109	ወደ ኮሌጅ ከመግባትዎ በፊት የኖሩበት ቦታ	ከተማ	1

		ገጠር	2
110	የከፍተኛ ሁለተኛ ደረጃ ትምህርት	በህዝብ/በመንግስት ት/ቤት	1
	የተከታተልከዉ/የተከታተልሸዉ በምን አይነት	በግል ት/ቤት	2
	ትምህርት ቤት ነዉ?	በሃይማኖታዊ/missionary ት/ቤት	3
		በሌላ (ይገለጽ) _____	
111	ከቤተሰብ/ከዘመድ የምታገኘዉ/የምታገኚዉ ወርሃዊ ገቢ ምን ያህል ነዉ?	ምንም የለም	1
	(የምግብ ወጪን ሳይጨምር)	ከመቶ ብር በታች	2
		ከ100 እስከ 299 ብር	3
		ከ300 እስከ 499 ብር	4
		500 ብር እና ከዛ በሊይ	5

**ክፍል ሁለት:- (Substance use)**

ከዚህ ቀጥሎ ስለ ጫት አልኮል መጠጦች ሲጋራ እናአደንዛዥ ዕቃዎች አጠቃቀምን የሚመለከቱ ጥያቄዎች ቀርበዋል። ስለእርስዎ ትክክል ከሆነው ምርጫ ፊት ለፊት ምልክት ያድርጉ።

ተ.ቁ	ጥያቄዎች	አዎ	አይደለም
1. ቀጥሎ ያሉት አምስት ጠያቂዎች የጫት አጠቃቀምን ይመለከታሉ			
201	በህይወት ዘመንዎ ጫት ቅመው ያውቃሉ?	አዎ	አይደለም
202	ጫት በምን ያህል ጊዜ ትቅማለህ/ትቅሚያለሽ? - በጭራሽ ጫት ቅሜ አላዉቅም - አልፎ አልፎ - ሁል ጊዜ - በፊት እቅም ነበር (አሁን ግን አቁሜያለሁ)	1 2 3 4	
203	ባለፉት 30 ቀናት ጫት ቅመው ያውቃለ?	አዎ	አይደለም
204	ለጥያቄ ቁጥር 201 መልስህ/ሽ አዎ ከሆነ ጫት መቃም የጀመርከዉ/የጀመርሽዉ መቼ ነዉ?	ከልጅ ከመግባቴ በፊት ከልጅ ከገባሁ በኋላ	
205	ለጥያቄ ቁጥር 201 መልስህ/ሽ አዎ ከሆነ ጫት ለመጠቀም ምክንያትዎ ምን ነበር? (ከአንድ በላይ መልስ በመክበብ መስጠት ይቻላል)		

	ሀ. የሥራ ወይም የጥናት ትጋትን ለመጨመር	1	
	ለ. ከመንፈስ ጭንቀት ለማረፍ	2	
	ሐ. ንቁ ሆኖ ለመቆየት	3	
	መ. የሃይማኖት ልማድ ስለሆነ	4	
	ሠ. በለሎች ተቀባይነት ለማግኘት/ ለሎችን ለመምሰል	5	
	ረ. ተግባቢ ለመሆን	6	
	ሰ. ለመደሰት	7	
	ሸ. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለመጨመር	8	
	ቀ. በጓደኛ ግፊት	9	
	በ. በትምህርት ዉጤት ባለመርካት ምክንያት	10	
	ተ. ልላ ካለ ይጠቀስ	11	
2. የሚከተሉት አምስት ጥያቄዎች የአልኮል መጠጦች አጠቃቀምን የሚመለከቱ ናቸው፡፡			
206	በህይወት ዘመንዎ የአልኮል መጠጥ ጠጥተው ያውቃሉ? (ማለትም አረቄ፣ ጠላ፣ ጠጅ፣ ቢራ ወይን የመሳሰሉትን)	አዎ	አይደለም
207	የአልኮል መጠጥ በምን ያህል ጊዜ ትጠጣለህ/ትጠጭያለሽ? - በጭራሽ የአልኮል መጠጥ ጠጥቼ አላዉቅም - አልፎ አልፎ - ሁል ጊዜ - በፊት የአልኮል መጠጥ አጠጣ ነበር (አሁን ግን አቁሜያለሁ)	1 2 3 4	
208	ባለፈት 30 ቀናት የአልኮል መጠጥ ጠጥተው ያውቃሉ?	አዎ	አይደለም
209	ለጥያቄ ቁጥር 206 መልስህ/ሽ አዎ ከሆነ አልኮል መጠጣት የጀመርከዉ/የጀመርሽዉ መቼ ነዉ?	ኮልጅ ከመግባቴ በፊት ኮልጅ ከገባሁ በኋላ	
210	ለጥያቄ ቁጥር 206 መልስህ/ሽ አዎ ከሆነ የአልኮል መጠጥ ለመጠቀም ምክንያትህ/ሽ ምን ነበር? (ከአንድ በላይ መልስ በማክበብ መስጠት ይቻላል) ሀ. የሥራ ወይም የጥናት ትጋትን ለመጨመር ለ. ከመንፈስ ጭንቀት ለማረፍ	1 2	



	ሐ. ንቁ ሆኖ ለመቆየት	3	
	መ. የሃይማኖት ልማድ ስለሆነ	4	
	ሠ. በለሎች ዘንድ ተቀባይነት ለማግኘት/ ለሎችን ለመምሰል	5	
	ረ. ተግባቢ ለመሆን	6	
	ሰ. ለመደሰት	7	
	ሸ. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለመጨመር	8	
	ቀ. በጓደኛ ግፊት	9	
	በ. በትምህርት ውጤት ባለመርካት ምክንያት	10	
	ተ. ሌላ ካለ ይጠቀስ		
3. የሚከተሉት አምስት ጥያቄዎች የትምህርት ውጤቶች አጠቃቀምን የሚመለከቱ ናቸው፡፡			
211	በህይወት ዘመንዎ የትንባሆ ውጤት የሆነ ነገር ማለትም ሲጋራ፣ ጥቅል ትንባሆ፣ ፒፓ ወይም የሚታኘክ ትንባሆ አጭሰው ወይም አላምጠው ያውቃሉ?	አዎ	አላወቅም
212	የትንባሆ ውጤት የሆነ ነገር በምን ያህል ጊዜ ትቅማለህ/ትቅሚያለሽ? - በጭራሽ የትንባሆ ውጤት የሆነ ነገር ተጠቅሜ አላወቅም - አልፎ አልፎ - ሁል ጊዜ - በፊት እጠቀም ነበር (አሁን ግን አቁሜያለሁ)	1 2 3 4	
213	ባለፉት 30 ቀናት የትንባሆ ውጤት የሆነ ነገር ተጠቅመዉ ያውቃሉ?	አዎ	አላወቅም
214	ለጥያቄ ቁጥር 211 መልስህ/ሽ አዎ ከሆነ የትንባሆ ውጤት የሆነ ነገር መጠቀም የጀመርከዉ/የጀመርሽዉ መቼ ነዉ?	ኮልጅ ከመግባቴ በፊት ኮልጅ ከገባሁ በኋላ	
215	ለጥያቄ ቁጥር 211 መልስህ/ሽ አዎ ከሆነ የትንባሆ ውጤት ለመጠቀም ምክንያትህ/ሽ ምን ነበር? (ከአንድ በላይ መልስ መስጠት ይቻላል) ሀ. የሥራ ወይም የጥናት ትጋትን ለመጨመር ለ. ከመንፈስ ጭንቀት ለማረፍ	1 2 3	

ሐ. ንቁ ሆኖ ለመቆየት	4
መ. የሃይማኖት ልማድ ስለሆነ	5
ሠ. በለሎች ተቀባይነት ለማግኘት/ ለሎችን ለመምሰል	6
ረ. ተግባቢ ለመሆን	7
ሰ. ለመደሰት	8
ሸ. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለመጨመር	9
ቀ. በጓደኛ ግፊት	10
በ. በትምህርት ባለመርካት ምክንያት	
ተ. ሌላ ካለ ይጠቀስ	

4. የሚከተሉት ጥያቄዎች ስለ አደንዛዥ ዕቃዎች አጠቃቀምን የሚመለከቱ ናቸው፡፡

216	በህይወት ዘመንዎ አደንዛዥ ዕቃዎችን ማለትም ሃሺሽ፣ ሀይት፣ ካናቢስ፣ ጋንጃ ወይም ሄሮይንና የመሳሰሉትን ተጠቅመው ያውቃሉ?	አዎ	አላወቅም
217	አደንዛዥ ዕቃዎችን በምን ያህል ጊዜ ትቅማለህ/ትቅሚያለሽ? - በጭራሽ አደንዛዥ ዕቃዎችን ተጠቅሜ አላወቅም - አልፎ አልፎ - ሁል ጊዜ - በፊት አደንዛዥ ዕቃዎችን እጠቀም ነበር (አሁን ግን አቁሜያለሁ)	1 2 3 4	
218	ባለፉት 30 ቀናት አደንዛዥ ዕቃዎችን ተጠቅመው ያውቃሉ?	አዎ	አላወቅም
219	ለጥያቄ ቁጥር 216 መልስህ/ሽ አዎ ከሆነ አደንዛዥ ዕቃዎችን መጠቀም የጀመርከው/የጀመርሽዉ መቼ ነዉ?	ኮልጅ ከመግባቴ በፊት ኮልጅ ከገባሁ በኋላ	

220	ለጥያቄ ቁጥር 211 መልስህ/ሽ አዎ ከሆነ አደንዛዥ ዕዳችን ለመጠቀም ምክንያትዎ ምን ነበር? (ከአንድ በላይ መልስ መስጠት ይቻላል)	
	ሀ. የሥራ ወይም የጥናት ትጋትን ለመጨመር	1
	ለ. ከመንፈስ ጭንቀት ለማረፍ	2
	ሐ. ንቁ ሆኖ ለመቆየት	3
	መ. የሃይማኖት ልማድ ስለሆነ	4
	ሠ. በለሎችተቀባይነት ለማግኘት/ ለሎችን ለመምሰል	5
	ረ. ተግባቢ ለመሆን	6
	ሰ. ለመደሰት	7
	ሸ. በግብረሰጋ ግንኙነት ጊዜደ ስታን ለመጨመር	8
	ቀ. በጓደኛ ግፊት	9
	በ. በትምህርት ባለመርካትምክንያት	10
	ተ. ሌላ ካሌ ይጠቀስ	

ክፍል ሦስት:- Risky sexual behaviors (ለHIV/AIDS የሚያጋልጡ ወሲብ ነክ ባህሪያትን የሚመለከቱ ጠያቂዎች)

ተ.ቁ	ጥያቄዎች	የኮድ ክፍሎች	ከድ
301	የግብረሰጋ ግንኙነት አድርገህ/ሽ ታውቃህህ/ሽ?	አዎ አድርጌ አላውቅም	1 2
302	ለጥያቄ ቁጥር 301 መልስህ/ሽ አዎ ከሆነ፤ ለመጀመሪያ ጊዜ የግብረ ሰጋ ግንኙነት የጀመርከው/የጀመርሽው መቼ ነው?	ኮልጅ ከመግባቴ በፊት ኮልጅ ከገባሁ በኋላ	1 2
303	ለመጀመሪያ ጊዜ የግብረሰጋ ግንኙነት ሲያደርጉ እድሜዎ ሥንት ነበር?	የግብረሰጋ ግንኙነት አድርጌ አላውቅም ?? _____ ዓመት	1 2

304	የግብረሥጋ ግንኙነት ለመጀመር ምክንያትህ/ሽ ምን ነበር?	<p>የግብረሥጋ ግንኙነት አድርጌ አላውቅም</p> <ul style="list-style-type: none"> <li>- ባል/ሚስት ሳገባ 2</li> <li>- በግል ፍላጎት(ለማወቅ ) 3</li> <li>- በጓደኛ ግፊት 4</li> <li>- በፍቅር ጓደኛዬ ለጋብቻ ቃል ስለተገባልኝ 5</li> <li>- ገንዘብ ለማግኘት ስል 6</li> <li>- በፈተና ለማለፍ (ለግሬድ ብዬ) 7</li> <li>- ከፍላጎቴ ዉጪ ተገድጄ</li> <li>- ሌላ</li> </ul> <p>(ይጠቀስ)_____</p>	
305	ለመጀመሪያ ጊዜ የግብረሥጋ ግንኙነት ያደረግከዉ/ያደረሰኝዉ ከማን ጋር ነበር?	<ol style="list-style-type: none"> <li>1. የግብረሥጋ ግንኙነት አድርጌ አላውቅም 1</li> <li>2. ከባል/ሚስት ጋር 2</li> <li>3. Boyfriend/Girlfriend ጋር 3</li> <li>4. ከአስተማሪዬ ጋር 4</li> <li>5. ከማላወቀዉ ሰዉ ጋር 5</li> <li>6. ከቡና ቤት ሴት ጋር 6</li> <li>7. ሌላ</li> </ol> <p>(ይገለጽ)_____</p>	
306	በህይወት ዘመንዎ ከምን ያህል ሰዎች ጋር የግብረሥጋ ግንኙነት አድርገዋል?	<p>የግብረሥጋ ግንኙነት አድርጌ አላውቅም _____ ሰዎች ጋር</p>	<p>1</p> <p>2</p>
307	ባለፉት 3 ወራት ከስንት ሰዎች ጋር ግብረ ስጋ ግንኙነት አድርገዋል?	<ul style="list-style-type: none"> <li>- ግንኙነት አድርጌ አላውቅም 1</li> <li>- ግንኙነት አድርጌ አውቃለሁ ነገር ግን ባለፉት 3 ወራት አይደለም 2</li> <li>3</li> </ul>	<p>1</p> <p>2</p> <p>3</p>

		- ከ 1 ሰው ጋር - ከ 2 ሰው ጋር - ከ 3 እና ከዛም በላይ ሰዎች ጋር	4 5
308	በቅርብ ጊዜ (ለመጨረሻ ጊዜ) ግንኙነት ከማድረግዎ በፊት ጫት ቅመው ነበር?	- ግንኙነት አድርጎ አላውቅም - አዎ ቅመኔ ነበር - አይ አልቃምኩም	1 2 3
309	ለመጨረሻ ጊዜ የግብረሰጋ ግንኙነት ከማድረግዎ በፊት አልኮል ነክ መጠጦችን ማለትም ጠላ፡ አረቄ፡ ጠጅ፡ ቢራ፡ ወይን የመሳሰሉትን ጠጥተው ነበር?	- ግንኙነት አድርጎ አላውቅም - አዎ ጠጥቼ ነበር - አይ አልጠጣሁም	1 2 3
310	ለመጨረሻ ጊዜ የግብረሰጋ ግንኙነት ከማድረግዎ በፊት ሲጋራ ተጠቅመዉ ነበር?	- ግንኙነት አድርጎ አላውቅም - ተጠቅመኔ ነበር - አይ አልተጠከምኩም	1 2 3
311	ለመጨረሻ ጊዜ የግብረሰጋ ግንኙነት ከማድረግዎ በፊት አደንዛዥዎቻችን ማለትም ሃሺሽ፣ጋንጃ፣ሄሮይን የመሳሰሉትን ተጠቅመዉ ነበር?	- ግንኙነት አድርጎ አላውቅም -ተጠቅመኔ ነበር -አይ አልተጠከምኩም	1 2 3
312	ለመጨረሻ ጊዜ የግብረሰጋ ግንኙነት ሲያደርጉ እርስዎ ወይም የፍቅር ጓደኛዎ ኮንዶም ተጠቅመው ነበር?	- ግንኙነት አድርጎ አላውቅም - አዎ ተጠቅመኔ ነበር - አይ አልተጠቀምኩም	1 2 3
313	በግብረሰጋ ግንኙነት ጊዜ ኮንዶም ላለመጠቀም ምክንያቱ ምን ነበር? (ከአንድ በላይ መልስ ይቻላል)	1. ሁሌጊዜ ኮንዶም አጠቀማለሁ 2. ግንኙነት አድርጎ አላውቅም 3. ኮንዶም ስለምጠላ ነው 4. ኮንዶም በቀላሉ ማግኘት ስላልቻልኩ	1 2 3 4 5

		5. ጓደኛየን ስለማፈቅረው/ራት ነው	6
		6. ጓደኛየን ስለማምነው/ናት ነው	7
		7. ጓደኛየ ኮንዶም እንድጠቀም ስለማይፈልግ / ስለማትፈልግ ነው	8
		8. ላለመጠቀም ምክንያት አልነበረኝም	
		9. ሌላ (ይገለፅ)_____	
314	ለመጨረሻ ጊዜ ግንኙነት ሲያደርጉ እርስዎ ወይም የፍቅር ጓደኛዎ ተጠቅመውት የነበረዉ የእርግዝና መከላከያ ዘዴ ምን ነበር? ( አንዱን ብቻ ይምረጡ)	1. ግንኙነት አድርጌ አላውቅም 2. ምንም አይነት የእርግዝና መከላከያ አልተጠቀምኩም 3. የወሊድ መቆጣጠሪያ ኪኒን 4. ኮንዶም 5. በመርፌ የሚሰጥ የወሉድ መቆጣጠሪያ 6. ምን እንደተጠቀምኩ እርግጠኛ አይደለሁም 7. ሌላ (ይገለፅ)_____	1 2 3 4 5 6
315	<u>ለሴት ተማሪዎች ብቻ</u>  1. ስንት ጊዜ አርግዘሽ ታውቂያለሽ?	አርግዠ አላውቅም 1 ጊዜ 2 እና ከዚያ በላይ	1 2 3
	2. የእርግዝናዉ ዉጤት ምን ነበረ?	አርግዠ አላውቅም አሁንም ነፍሰጡር ነኝ አስወርጄአለሁ ወልጄአለሁ	1 2 3 4
316	በህይወት ዘመንዎ አስገድደው የግብረሰጋ ግንኙነት አድርገው ያውቃሉ?	አዎ አይ / አላውቅም	1 2

317	በህይወት ዘመንዎ ተገደው የግብረሰጋ ግንኙነት አድርገው ያውቃሉ?	አዎ አይ	1 2
318	በህይወት ዘመንዎ የአባላዘር በሽታ ምሌክቶች (የብልት አካባቢ ቁስል ወይም ከብልት ሽታ ያለው ፈሳሽ መውጣት) አጋጥሞህ/ሽ ያወቃል?	አዎ አይ	1 2
319	ለጥያቄ ቁጥር 318 መልስህ/ሽ አዎ ከሆነ፣ ለህመሙ ወደ ህክምና ተቋም በመሄድ ታከመሃል/ታከመሻል?	አዎ አይ	1 2
320	በህይወት ዘመንዎ ከ 3 ሳምንት ላነሰ ጊዜ ከሚያውቁት ሰው ጋር የግብረ ሥጋ ግንኙነት አድርገው ያወቃሉ?	አዎ አይ	1 2
321	ከ 3 ሳምንት ላነሰ ጊዜ ከሚያውቁት ሰው ጋር የግብረ ሥጋ ግንኙነት ባደረጉ ጊዜ ሁለ ኮንዶም ተጠቅመው ነበር?	አዎ አይ	1 2
322	በህይወት ዘመንህ ከቡና ቤት ሴት ጋር የግብረሰጋ ግንኙነት አድርገህ ታወቃለህ?	አዎ አይ	1 2
323	የገንዘብ ጥቅም ለማግኘት ብለህ/ሽ የግብረሰጋ ግንኙነት አድርገህ/ሽ ታወቃለህ/ታወቁያለሽ?	አዎ አይ	1 2
324	የግብረሰጋ ግንኙነት አድርገህ/ሽ የማታወቅ/ቂ ከሆነ፣ ላለማድረግህ/ሽ ምክንያትህ/ሽ ምን ነበር?	1. የሚስማማኝን ተጣማሪ ስላላገኘሁ 2. በሃይማኖት ስለሚከለክል 3. እርግዝናን በመፍራት 4. የአባላዘር በሽታ በመፍራት 5. ለአካለመጠን ስላልደረሰኩ 6. ሌላ (ይገለጽ)_____	1 2 3 4 5

## Declaration

As an examiner I certify that I have read and evaluated the paper prepared by *Agegnehu Alemu* and examined the candidate. We recommended that the thesis be accepted as fulfilling the thesis requirement for the degree of Master of Science in Medical Physiology.

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Examiner's name	Signature	Date
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I, the undersigned senior Medical Physiology student, declare that this thesis is my original work in partial fulfillment for the requirements for the degree of master in Medical Physiology. 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: \_\_\_\_\_

Signature \_\_\_\_\_

Date of submission \_\_\_\_\_

**Place of submission:** Department Biomedical Sciences

College of Public Health and Medical Sciences

Jimma University