

RISKY SEXUAL BEHAVIOR AND ASSOCIATED FACTORS AMONG  
COLLEGE STUDENTS IN ARBA MINCH TOWN, SOUTH ETHIOPIA:  
A CROSS-SECTIONAL STUDY.



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A THESIS SUBMITTED TO DEPARTMENT OF POPULATION AND FAMILY HEALTH,  
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## Abstract

**Background:** Risky sexual behavior has been worsened by college students living on their rental houses, lack of facilities for sexual and reproductive health services and coupled with khat chewing. However, association between khat chewing and risky sexual behavior is not well studied among college students.

**Objective:** To assess the magnitude of khat chewing, magnitude and associated factors of risky sexual behavior among college students in Arba Minch town 2015.

**Methods:** Institution-based cross-sectional study was conducted. The sample size 1211 was determined by Epi Info V.7.1 using the formula of two population proportion and simple random sampling technique was employed to select the respondents. Data were collected on March 11, 2015 by using structured self administered questionnaire and analyzed using SPSS V.20. Binary logistic regression was used to see the associations between dependent and independent variables.

**Result:** The prevalence of life time and current khat chewing was 19.2% and 16.8% respectively. Life time and current prevalence of risky sexual behavior was 40.8% and 36.5% respectively. The prevalence of life time risky sexual behavior among khat chewer was 82.2% and significantly higher than non chewer 30.9% (P-value=0.001). Similarly, current risky sexual behavior among khat chewer was 74.2%, significantly higher than non chewer 27.6% (p-value=0.001). Male sex (AOR=1.82; 95% CI: (1.28- 2.6), Previous urban residents (AOR=1.63; 95% CI: 1.17- 2.28), age increase by one year (AOR=1.18; 95% CI: 1.09-1.28), living away from family (AOR= 2.45 95% CI=1.62- 3.7), having high peer pressure (AOR=2.58; 95% CI: 1.85- 3.59), average grade increase by one (AOR 0.98; 95% CI: 0.96-0.99), regular attending religious institution (AOR =0.24; 95% CI: 12- 0.42), watched pornographic movies (AOR=2.51 95% CI=1.79- 3.51), khat chewing (AOR= 3.02, 95% CI: 1.91-4.76), alcohol drinking (AOR=2.26, 95% CI=1.54- 3.35) were factors associated with risky sexual behavior.

**Conclusion:** Considerable proportion of students engaged in khat chewing and risky sexual behavior. Risky sexual behavior among khat chewers was significantly higher as compared to non chewers. Age, sex resident, living arrangement, peer pressure, academic performance, religiosity, watching movies, khat chewing & alcohol drinking were associated factors of risky sexual behavior. Colleges and local health bodies should work together to address the identified risky behaviors.

**Keywords:** Khat chewing, risky sexual behavior, college students, south Ethiopia

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## Acronyms and Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
BSc	Bachelor of Science
BSS	Behavioral Surveillance Survey
CSA	Central Statistics Agency
CSW	Commercial Sex Worker
CDC	Centre for Disease Control
CI	Confidence Interval
DHS	Demographic and Health Survey
EC	Ethiopian Calendar
HIV	Human Immune Deficiency Virus
Id	Identification
JU	Jimma University
MOH	Ministry of Health
N <sub>0</sub>	Number
OR	Odds Ratio
OSSA	Organization for Support Services for AIDS
PFH	Population and Family Health
PI	Principal Investigator
PPS	Probability Proportional to Size
RH	Reproductive Health
SNNPR	Southern Nations and Nationalities Peoples Region
SRH	Sexual and reproductive Health
SRS	Simple Random Sampling
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
SPSS	Statistical Package for Social Science
TVET	Technique, Vocation, Education Training
VCT	Voluntary Counseling and Testing
WHO	World Health Organization



## Chapter one- Introduction

### 1.1 Back ground

Khat (*Catha edulis*) is a flowering plant native to the Horn of Africa (Djibouti, Eritrea, Ethiopia, Somalia) and the Arabian Peninsula. In these countries, khat-chewing has a long history as social custom dating back thousands of years (1). khat is a controlled substance in some countries, such as Canada, Germany, the United Kingdom, and the United States, while in other nations, including Djibouti, Ethiopia, Somalia, and Yemen its production, sale, and consumption are legal (2,3). In 1980, WHO classified it as a drug of abuse that can produce mild-to-moderate psychological dependence less than alcohol although does not consider khat to be seriously addictive (1, 4).

Khat chewing has serious health, social and economic consequences (1,2). Physiological effects of khat and its active constituent amphetamine and amphetamine-like substances such as khat bring about negative physical and physiological effects by causing the sustained release of neurotransmitters, like norepinephrine and especially dopamine (5). The physiological effect of khat includes euphoria, intellectual efficiency, alertness, dysphoria and mild sedation.

Excess of Khat chewing affects male reproductive system like reduced sperm motility, spermatorrhoea, spermatozoa malformations, impotence, libido change that may lead to failure of sexual intercourse. Khat chewing also effect on family disintegration due to the chewer spends much of the time away from home and due to failure of sexual intercourse (1,2). In the contrary, Norepinephrine brings about increased sympathetic nervous system activities, which initiating sex drive and also increase sexual arousal in women through increase in vaginal pulse amplitude and vaginal blood volume (5-8).

Risky sexual behaviors are behaviors which increase risk of a negative reproductive outcome (9). Risky sexual behaviors includes early initiation of sexual intercourse, having more than one sexual partner, changing sexual partners frequently, having oral or vaginal or anal sexual contact without a condom, using unreliable methods of birth control, or using birth control inconsistently or sex with commercial sex worker (9, 10). People who engage in these risky sexual behaviors are vulnerable to negative reproductive health outcomes like HIV/AIDS or STI, unwanted pregnancy and abortion (11). HIV pandemic remains the most serious infectious disease. Globally there were 35 million people living with HIV. Out of that four million young people 15–24 years old living with HIV. In sub-Saharan Africa, 24.7 million people living with HIV, nearly 71% of the global total. Ten countries including Ethiopia, accounts 81% of all people living with HIV in the region. In Ethiopia there were 793,700 people living with HIV (12-14).

## 1.2. Problem Statement

Khat is natural chemical stimulant have long been used by people. Globally an estimated 10 million people use khat on a daily basis (15). Khat consumption is one of the common problems among youths; especially high school, college and university students (1). In Yemen 54% of college students has chewing khat (16) and in Ethiopia 24.2% college students chewing khat (17).

Majority of students are youth and they are at risk of khat chewing and risky sexual behavior due to individual, biological and cultural factors (9,14, 18 ). In United states out of sexual active high school students 6% has sexual intercourse for the first time before age 13 years, 15% has sexual intercourse with four or more persons during their life and 41% did not use a condom during last sexual intercourse (19).This figure exceeds in countries lack of access to quality of reproductive health care services (20). In Cambodia out of those sexually active high students, 34.6% having two or more sex partners and 52.6% did not use a condom during their last sexual intercourse (21).

Colleges in Ethiopia do not have accommodations for their students unlike universities. Majority of the students come from rural areas and living in their rental houses away from their supervising families and this could open a door for risky sexual practices and khat chewing (22-24).In Ethiopia 50.7-60.9% college students have sexual intercourse in their life time and also this sexual practice is not safe. Risky sexual behavior among khat chewer is higher 50.52% with compare to non chewer 37.5% (24-27). Out of sexually active college students, 69.0 % have their first sexual intercourse under the age of 18, 74.1% have sex with more than one sexual partner, 41.0% not use or inconsistent use of condom and 11.4% having sex with commercial sex workers(24,27).

. This high prevalence of risky sexual behavior among khat chewer may be due to khat use. khat is the psychotropic and mind altering drug type whose use could possibly altering rational decision making, increasing risk taking and sensation-seeking behavior, as a result it induce risky sexual behavior(1). In addition to khat chewing, 43.5% and 33.3% of students drink alcohol and smoking cigarette respectively. This combined use of khat and additional substance increases the risk of risky sexual behavior (6, 17, 18).

Some college students face financial problem to cover primary human needs. To compensate this, students have been engaging in sex for money. In South Ethiopia out of the total sexual active female students' 22 % committed sexes as a means of generates income (28).

Ethiopia is in a concerted effort to enhance the sexual behavior of youths using different policies, strategies and activities. Reproductive health activities implemented within schools (primary, secondary and higher education institutions) include: school community conversation, peer education, life skill education, strengthening and supporting anti AIDS clubs and AIDS resource centers(12). In Arba Minch town only one youth center serves thousand youths (29). Risky sexual behavior and its consequence STI epidemic and unwanted pregnancy still continues in educational setting claiming the lives of the most productive segments of the Ethiopian society that can lead to high social and economic costs, both immediately and in the years ahead (14, 20,30,31). Current self reported STIs prevalence among students is 19.5%. It is seven fold of national rate of each Ethiopian women and men reproductive age group (13, 14). Among female college students 8.5% are pregnant out of these 76.9% pregnancy is unwanted and this leading to unsafe abortion and death (30).

This figure may be exceeds in Arba Minch town because, Arba Minch is one of the common tourist destiny towns in Ethiopia and an estimated 128,025 tourists joining the town in a year. This large number of tourists and other factors changes the khat chewing and sexual behavior culture of the area. In Arba Minch town khat selling houses 76 in 2008 increase more than twice 163 in 2014. In Arba Minch Hospital 104 new HIV positive cases age 15-24 year and 268 abortions reported in 2014(29).This large number of negative reproductive outcome and increment of khat selling house in the area urges me to see factors associated with risky sexual behavior including khat chewing in the study area.

Different studies consider risky sexual behavior only multiple sexual partner and unprotected sex while it includes sex with commercial sex worker and early initiation of sexual practice (9, 10). Such inclusive types of studies are limited in the country as well as in the study area. Thus this study is mainly intended to determine the association of khat chewing and risky sexual behavior and factors affecting risky sexual behavior by considering risky sexual behavior as a composite variable of multiple sexual partner, sexual contact without condom, early initiation of sexual practice and sex with commercial sex worker. The study is crucial for initiating and strengthening interventional programs on khat chewing and risky sexual behaviors among college students.

## **Chapter Two- Literature review**

The literature review focuses on status of khat chewing practice, magnitude of risky sexual behavior, comparison of risky sexual behavior among khat chewer and non chewer, and associated factors of risky sexual behaviors.

### **2.1 Status of khat chewing**

Globally an estimated 10 million people use khat on a daily basis (15). Study done in Jazan Region (Saudi Arabia) among college and secondary school students, lifetime and current prevalence of khat chewing was 21.4% and 20.5% respectively (32). Study conducted in Aden university medical students in Yemen 54% of college students were chewing khat (16).

There is wide variation of khat chewing prevalence among students in different regions of Ethiopia. Studies done in Eastern Ethiopia Harar, Bahir Dar city, Dire Dawa and Debre Markos college, the current prevalence was 24.2%, 12.6%, 10.9% and 6.3% and khat use in their lifetime was 30.3%, 18.4%, 19.6% and 13.4% respectively (17, 23, 33, 34). Study done in Jimma Zone preparatory students, South West Ethiopia, and current prevalence of khat chewing was 35.5% (26). Khat commonly used by farmers and laborers for reducing physical fatigue or hunger and by drivers and students for improving attention (1, 7). Most students use khat for enjoyment, to get relief from tension, to improve their academic performance by stay awake/alert for long period of time (35, 36). But study conducted in Jimma University, cumulative GPA of non-chewers was significantly higher than that of chewers (37).

### **2.2 Magnitude of Risky sexual behavior**

During adolescence and early young adults' period the rapid mental, social, and cultural transitions. In this transition period most youths are now experiencing have an increased interest in the opposite sex, highly concerned with physical and sexual attractiveness, and are frequently changing relationships (8, 18). Thus students were high risk for risky sexual behavior. Studies conducted in Cambodia, Chinese and Jamaican high school students showed that 12.7%, 5.1% and, 43% sexual intercourse during last three months respectively. Out of those sexually active 52.6%, 42.1%, and 47.5% had had unprotected sexual intercourse and 34.6%, 49.4% and 32% had had intercourse with two or more partners in the same period respectively (21, 38,39). Studies conducted among students in Dares Salaam, Tanzania secondary school (30.3%) being sexually active out of them 41.7% had multiple sexual partners and 41.1% did not use a condom at last sexual intercourse and

adolescents in Burkina Faso 11% of males had sexual intercourse with more than two partners but did not use condoms(40, 41)

Young people in Ethiopia face various sexual and reproductive health (SRH) problems (42). Study conducted among high school students in Humera and Gonadar North West Ethiopia, life time prevalence of risky sexual behavior was 13.7% and 25% respectively(31 ,43). Two or more sexual partner is one of the common problem in school & out-of- school youths. Study done in Jimma zone youths, 37.1% of in-school youths had more than one lifetime sexual partners compared to 32.6% of out-of-school youths (44). Studies conducted college students in Bahir Dar, and Addis Ababa 52.2% and 43.2% reports they had two or more sexual partners respectively (24,26, 27).

Ensuring the safety by availing necessary services like availing condom together with behavior modification are important way of improving consistent use of condom(13). Consistent condom use with non regular partner is one way of preventing unwanted pregnancy and sexual transmitted infection including HIV/AIDS. Study done in Jimma University, Bahir Dar, Addis Ababa college and Gondar preparatory 69.1%, 59%, 17.5% and 61% student consistent condom use with non-regular partner (11, 24, 27, 43).

Early initiation of sexual activity prolongs the period of exposure to risk of pregnancy and risk of contacting STDs, including HIV infection during the reproductive span(45). In Ethiopia 50% of young women and 14% of young men had had sexual intercourse before age 18(13). Studies conducted among students in Arba Minch, Addis Ababa Alkan college and West Gojam high school, out of sexual active 72.5%, 69% and 59.7% engaged in sexual relationship before celebrating their 18th birthday (25,27, 45). Similarly studies conducted in students of Jimma University and Gondar preparatory, the mean age at first sexual intercourse among students was less than18 years (11, 43).

Assessment on sex with commercial sex workers is one of key component indicator of behavioral surveillance in HIV prevention program. Studies done in Addis Ababa Alkan College, Gondar preparatory and Haramaya university students, 6.7% and 5% reported having sex with commercial sex worker (27,43, 46).

### **2.3 Comparison of risky sexual behavior among khat chewer and non chewer**

The active constituent of khat release nor epinephrine that brings about increased sympathetic nervous system activities, which initiating sex drive and also increase sexual arousal in women through increase in vaginal pulse amplitude and vaginal blood volume(5). Studies done in Jimma

University, Humera North West Ethiopia high school, and Bahir Dar college; risky sexual behavior among chewers (51%, 61.1%, and 52.5%) significantly higher than non chewers (19.8%, 9.3% and 16.5%) respectively (11, 31,24). However studies done Haramaya University, among khat chewer 68.4% slightly higher than non chewer 62.7% (46).

## **2.3 Factors associated with risky sexual behavior**

**Socio-demographic factors** - Sexual behavior of students influenced by social, environment and physiological change. Cultural background in Ethiopia that males can ask females for sex, better access for resource and powerful for decision since easily access females for sexual practice (47). Studies done in Humera high school, Gondar preparatory and Haramaya university, male students were more likely to had risky sexual behavior (31, 43,46). Study conducted in Boditti South Ethiopia high school and West Gojam students age greater than 20years were more likely of practice sexual intercourse (28,45). From different reasons for practiced sexual intercourse, sex for exchange of money and passing the examination were some of them. Studies conducted in Addis Ababa school and Haramaya University 20% and 8.5% practice sex for money (51, 22). However there were no significant association between amount of pocket money and perceived family economic status with sexual behavior (11,24, 28 31).

**Behavioral Factors**:-Attending in religious services identifies moral, values and religious beliefs that affect their decision to practice risky sexual behaviors. Studies done in Jimma zone preparatory, Humera high school, and Haramaya university students who didn't visit religious institution were more likely to be at risk for risky sexual behaviors (26, 31,46). But study conducted students in Bahir Dar College and Jimma Zone preparatory, revealed that there were no association between frequencies of visiting religious site with risky sexual behavior (24, 48). Students attending night club for recreation purpose but it expose for sexual intercourse. Study conducted in Jimma university showed that students who attending night club in the last three months were about two times more likely to ever have sexual intercourse as compared to non attendants(11). However study done in Bahir Dar college declared a negative association between unprotected sex and frequency of visiting night clubs; respondents who visited night clubs sometimes and at least once a week were 75% and 55% less likely to have unprotected sexual intercourse compared to those who never visited night clubs(24). Involvement in anti AIDs club is important to change the attitude and practice of risky sexual behavior by getting information relating with sexual behavior. Study conducted youths in Western Ethiopia students who had participate in anti AIDS club more likely

perceived risks. However there were no statistically significant association between membership of anti-AIDS club and sexual practice (44). Prolonged exposure to pornographic movies leads to exaggerated perception of sexual activity in the populace. It also fosters cynical attitudes about love, and sexual pleasures are considered attainable without affection toward partners(49,50). Study conducted in Addis Ababa Alkan College and Humera high school students watching pornographic movies 4 times more likely practice sexual intercourse (27,31).

**Family and Peer Factors:** - Parental and social environment influences young people tend to imitate and practice whatever they observe from their friends, elders and parents. Peer pressure is one of a positive or negative influencing factor for risky sexual behavior. Study done in West Gojam and school adolescents in Addis Ababa, students having high peer pressure had more likely to having multiple sexual partners (45, 51). However studies conducted students in Jimma: there were no association between risky sexual practices and peer pressure (26). Studies showed that parent adolescent close supervision can help protective factor for the prevention of a variety of health and social problems by avoidance or lower practice of risky sexual behavior, lower multiple sexual partners and reduced adolescent pregnancy risk through teens remaining sexually abstinent, postponing intercourse, having fewer sexual partners, or using contraception more consistently(26,31). Students who were living in rental house away from family member pass most of their time with intimate friend but this could have result to share bad behavior such as alcohol and khat use, in turn substance use could initiate sexual desire and result to have risky sexual behavior (24). Studies done in Boditti South Ethiopia, Hummera and Jimma high school, students living away from their parents were more likely to practice risky sexual intercourse (28, 31, 44). Female students whose mothers were illiterate were more at sexual risk than students whose mothers' education status was secondary school and above. Male students whose mothers and fathers were illiterate were more likely to be at sexual risk than male students from parents with secondary education and above(48). However study conducted in Jimma University there were no association maternal educational status with sexual behavior(11,24).

**Educational Factors:** - Educational environment also affects sexual behavior. Students focus on their academic performance during freshman and tend to engage in love and sexual practice after assuring their academic survival. Studies done in Jimma University, second year students were more likely have sexual intercourse as compared to freshman students (11). Academic poor students practice sexual intercourse with teachers and relatives to pass examination. Study conducted Haramaya 1.2% students practice sexual intercourse to pass the examination(46). However there

were no studies include academic performance as a one factor. Haramaya University there is significance difference in risky sexual behavior among main and Harar campus (46).

**Substance use Factors:-** Many substance particularly alcohol decreasing inhibitions, altering rational decision making, increasing risk taking behavior and sensation-seeking behavior (26,52). During the hypo manic phase, khat chewers may not be capable of rational judgment and they also may not be able to predict the serious consequences of their actions. Thus, the chewers could walk into the most dangerous situations feeling that there is no danger and being unaware of the possible dangers to their lives or well-being, they get motivated to have unplanned and early sexual initiation(53).

Studies done in Jimma and Haramaya university, students drunk alcohol and chewing khat more likely to had risky sexual practice with compared to non user (11, 46,). Studies done in Gammo Goffa Zone the proportion of khat use is more than twice HIV infection cases compare with controls and khat users were more likely to initiate sex earlier than their counterparts (53,54).However a cross-sectional studies conducted in Jimma preparatory and Bahir Dar college revealed that there were no association between khat chewing and risky sexual behavior(26, 24). Study done in Humera high school, and Alkan College Addis Ababa, revealed that there were no association between smoking cigarette, khat chewing and alcohol drinking with risky sexual behavior (31, 27).

Study conducted in Harar about 43.5% and 33.3% high school students drank alcohol and smoked cigarettes respectively in addition to khat chewing and once chewers spent the afternoon chewing, in the evening they commonly go out to drink alcohol in bars (17,18).This indicates that there is clustering of substance use behaviors among students with khat chewing habit. This combined use of both drugs and substance use had an amplifying effect on sexual risk behaviors that predispose to HIV and other STIs (46).

From these studies we can understand that numerous pressures arise for students to engage in risky sexual activity, not only being their emerging desire, but biological, individual, substance use, social and economic pressures may also enforce students to engage risky sexual behavior. Khat chewing and risky sexual practice is common among college students and can expose them to reproductive health, social and economical problems. The quality of the research evidence in the area of khat chewing and risky sexual behavior is generally not strong and it is difficult to conclude the association. Moreover, high levels of alcohol drinking are frequently associated with chewing khat and this complicates the relation of khat chewing and risky sexual behavior.



## 2.4. Conceptual framework

Conceptual framework was developed from different studies of khat chewing and risky sexual behavior. In general risky sexual behavior affected by different factors. For this study according to the literature reviewed the main factors were identified as socio-demographic, behavioral, family and peer pressure, educational and substance use factors. Independent variables will be assumed to have relationship with dependent variable of risky sexual practice directly. Conceptual frame work helps to summarize the determinant factors and to analyze the association between dependent and independent variables.

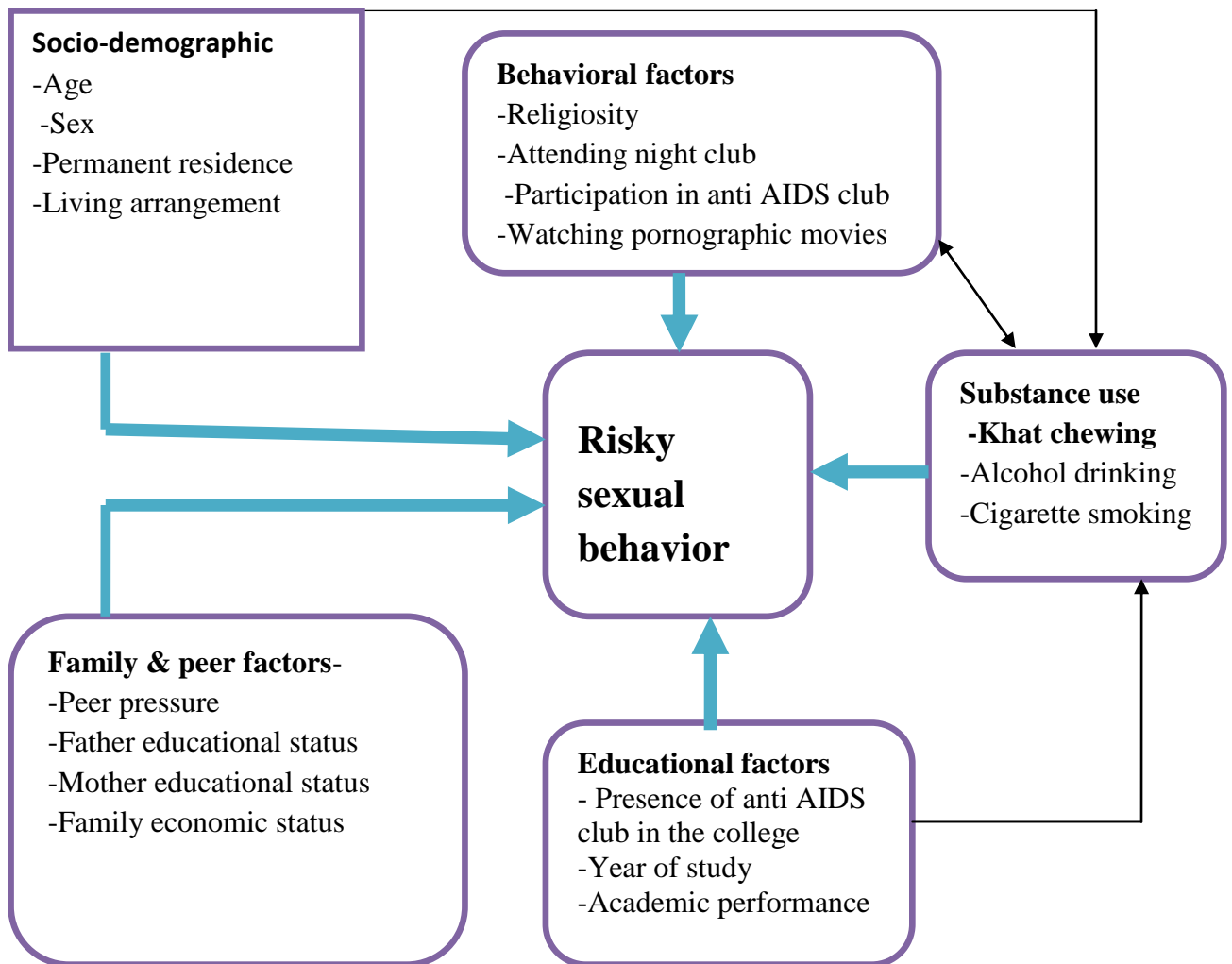


Figure 1 Conceptual frame work of the study (source:-Adapted from literatures)

## **2.5 Significance of the study**

College students are at risk of both khat chewing and risky sexual behavior. Therefore assessing of the factors associated with sexual behavior among college student have important role to control negative reproductive outcomes. However there is a little study conducted on association between khat chewing and risky sexual behavior and associated factors of risky sexual behavior. Therefore, the finding of this study is expected to contribute in filling the information gap to control risky sexual behavior in the study area. Specifically the finding is crucial for community to enhance awareness about preventive and risk factors of risky sexual behavior to shape children's and youth, for students to use protective mechanism and reduce risk factors, for college managers to analyze the extent of the problem to conduct appropriate intervention and for nongovernmental organizations to understand extent of the problem to strengthen existed and initiate new strategies. Additionally the finding is important for Regional and local concerned bodies to make appropriate strategies and strengthening proper interventional programs on sexual behavior in college students. Moreover, information is important as a source of information for researchers who interested in the field of khat chewing and sexual behaviors of students.

## **Chapter Three- Objectives**

### **3.1. General Objective**

To assess the magnitude of khat chewing, magnitude and associated factors of risky sexual behavior among college students in Arba Minch town, 2015

### **3.2. Specific Objectives**

1. To determine the magnitude of khat chewing among college students in Arba Minch town.
2. To determine the magnitude of risky sexual behavior among college students in Arba Minch town.
3. To compare the magnitude of risky sexual behavior among khat chewer and non chewer college students in Arba Minch town.
4. To identify factors associated with risky sexual behavior among college students in Arba Minch town.

## **Chapter Four - Methods and Materials**

### **4.1 Study area and period**

The study was conducted March 11, 2015 in Arba Minch town. Arba Minch town is located 505km in south from Addis Ababa capital city of Ethiopia. According to the data obtained from Arba Minch town Administration; three public and five private colleges providing educational service from level I –V in TVET curriculum. In 2014/15, according to the data obtained from the office of registrar of all colleges, a total of 8563 (year first- 3604, second-2721 and third -2238) (male-4375 and female-4188) have been attending in regular programs. More than 128,025 tourists joined the town in 2013/2014 and currently only one youth center in the town (29).

### **4.2 Study design**

Institution based cross-sectional study design was employed.

### **4.3 Population**

#### **4.3.1 Source population**

Source population was all regular college (Diploma in TVET curriculum) students in Arba Minch town who registered in 2014/15 fiscal year.

#### **4.3.2 Study population**

Study population was all selected regular college students in Arba Minch town who registered in 2014/15 fiscal year and present during data collection time.

#### **4.3.3 Inclusion**

All regular college students without considering age and marital status were eligible for this study.

#### **4.3.4 Exclusion criteria**

Those who were unable to see and difficulty of hearing and speaking students were excluded.

### **4.4 Sampling**

#### **4.4.1. Sample size**

The sample size was determined by using Epi Info 7.1 statistical software by using two population proportion based on the following assumptions. The proportion of khat chewer college students who were sexually at risk = 50%, the proportion of non chewer college students who were sexually at risk =40% (55), level of confidence of 95%, power = 80%, ratio of non chewer to khat chewer 4(23). Sample size calculated was 1264. Then used finite population correction formula because the source population was 8563 it was less than 10, 000.

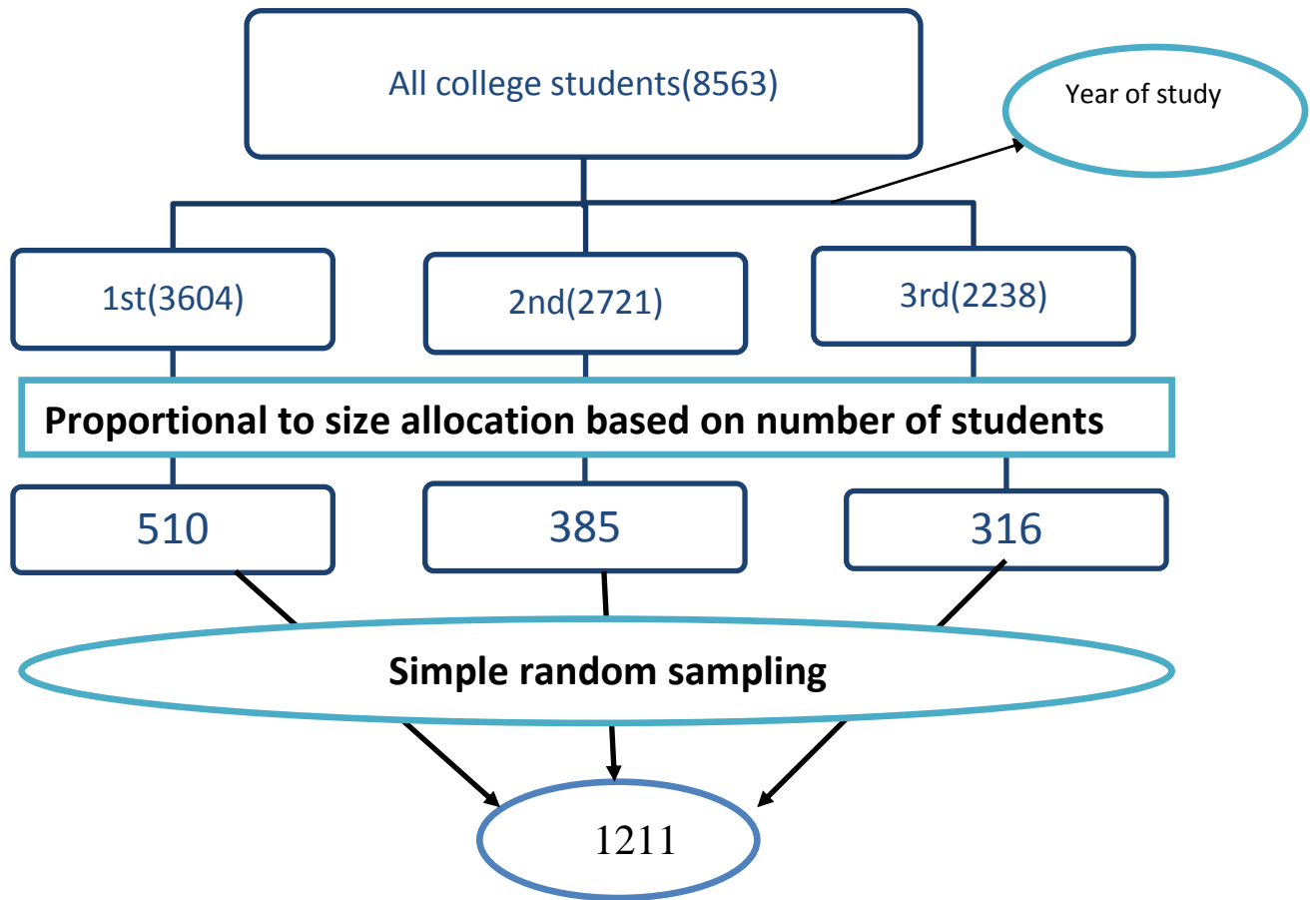
$$Nf = no/(1 + no/N)$$

Where  $n_f$  =desired sample size (with population < 10,000),  $n$ =desired sample size (when population > 10,000),  $N$ = population size

$n_f = 1264/(1 + \frac{1264}{8563}) = 1101$ . Non response rate was 10% (110). The final sample size was **1211**

#### 4.4.2 Sampling Technique

List of students name by year of study were prepared from all eight colleges and used as a sampling frame. Students stratified by the year of study (first, second and third year). Sample size was allocated for each strata based on proportional allocation to their size of students. Finally students were selected from each stratum by simple random sampling through SPSS software by inserting students and college name (**Figure 2**).



**Figure 2** Diagrammatic presentation of sampling procedure Arba Minch, 2015

#### **4.5. Data Collection Instrument and Procedures**

Data were collected by using self administered pre-tested structured questionnaire on March 11/2015. The questionnaire originally developed from various khat chewing and risky sexual behavior studies in English and translated into Amharic language and retranslated back to English to check the consistency, was used to collect the required data (23-31). The Questionnaire includes Socio-demographic and education related, family related, khat chewing and related practice and sexual behavior related questions. Pre-test of questionnaire was conducted in 57 students in Kemba TVET college students to identify the clarity and sequence of question then minor necessary correction was made based on the result of the pre-test. Data was collected in one day by six trained data collection facilitators who had first degree and three public health professionals were participated in supervision of the data collection process. One day training was given for facilitators and supervisors on objective of the study, method of facilitating respondents and context of questionnaire by principal investigator.

Randomly selected students were invited to participate by posting the name of the students in notice board in their respective colleges one day before data collection. Then participants were collected in hall by facilitators and selected instructors in the college in the morning session. Then orientation about objective, content of questionnaire & confidentiality was given for students by facilitator and supervisors. After given orientation immediately respondents read and fill their response in the questionnaire. At the end, the respondents put the completed questionnaires by themselves in the box ready for collection.

#### **4.6 Data quality assurance**

One day training was given to all facilitators & supervisors. The questionnaire was translated and retranslated back by another person and pre-tested .Sitting arrangement of the student was well organized and orientation was given for students. Data were collected from all selected students from one college simultaneously and from all students in one day to prevent information contamination. Overall activity was monitored carefully by the supervisors and the principal investigator during data collection.

## 4.7 Variables

### 4.7.1 Dependent Variable

Risky sexual behavior

### 4.7.2 Independent Variables

**Socio-demographic factors-** Age, sex, living arrangement, permanent residence

**Behavioral factors** – Religiosity, attending night club, participation in anti AIDS club and watching pornographic movies

**Family and peer factors-** Peer pressure, and father and mother educational status and perceived family economic status

**Educational factors** – Presence of anti AIDS club in the college, year of study class, and academic performance.

**Substance use factor-** Khat chewing, alcohol drinking and cigarette smoking

## 4.8 Operational Definition

- **Academic performance:** It was measured using recent cumulative average grade in the college (as it was reported by the students).
- **Regularly:** respondents who attend/participate more than one day per week(24)
- **Attend often:** respondents who attend/participate one to two days in two weeks;
- **Attend occasionally:** respondents who attend/participate less than one day in two weeks;
- **Life time khat chewer:** respondents who had ever chewing khat in their life time;
- **Current khat chewer :** respondents who had history of khat chewing in the past 6 months;
- **Habitual khat chewer:** respondents who had history of khat chewing more than 3 days per week (23);
- **Chronic khat chewer:** respondents who had history of khat chewing more than two years(23);
- **Risky sexual behavior:** respondents having more than one sexual partner or performing sexual intercourse with non-regular partner without condom or starting sexual intercourse before age 18 years or sexual intercourse with commercial sex workers(9,10).
- **Life time risky sexual behavior:** respondents having more than one sexual partner or performing sexual intercourse with non-regular partner without condom or starting sexual intercourse before age 18 years or sexual intercourse with commercial sex workers in their life time.

- **Current risky sexual behavior:** respondents having more than one sexual partner or performing sexual intercourse with non-regular partner without condom or starting sexual intercourse before age 18 years or sexual intercourse with commercial sex workers in the past 6 months;.
- **Consistent condom use:** respondents use of a condom during every sexual encounter with non-regular partner
- **Non-regular partner:** sexual partner out-off marital union
- **High peer pressure for risky sexual behavior-:** respondents respond yes at least 2 out of 3 Yes/No questions (18).

#### **4.9 Data entry and analysis**

Data were edited, coded and entered into Epi data version 3.1 and exported to SPSS 21 statistical software for analysis. After cleaning data for inconsistencies and missing value in SPSS, descriptive statistics such as mean, SD, percent and frequency was done. Multicollinearity was checked by using tolerance statistics and variance inflation factor. Bivariate logistic regression analysis was done and all explanatory variables which have association with the outcome variable at p value <0.25 was selected for multi-variable logistic regression analysis. Then multi-variable logistic regression analysis enter method at P value < 0.05 and AOR with 95% CI was used to measure the degree of association between independent and dependent variable. Model fitness was checked by Hosmer and Lemeshow goodness of fit test. Finally the result was presented by texts, tables and figures.

#### **4.10 Ethical Considerations**

Ethical clearance was obtained from the Ethical Review Committee of Jimma University. Formal letter was obtained from Family Health and population department, College of Public Health and Medical Sciences, Jimma University. An official letter of co-operation was taken to the respective colleges. Participation was voluntary and they can withdraw from the study at any time without explanation. Written informed consent was obtained from each participant. In order to protect confidentiality, name of respondents and college identification number was not included in the questionnaire. Data was used only for research purpose.



#### **4.11 Dissemination plan**

The finding of this study will be presented to Population & Family Health Department, College of Public Health and Medical Sciences, Jimma University. Then distributed to all colleges, Arba Minch Town Health Office, Arba Minch Town Women, Child & Youths Office, Gammu Goffa Zonal Health Department, Regional Health Bureau and NGOS (Ethiopian Red cross Society, OSSA, Maries topes, DKT...). The finding also may be present in different seminars, meetings and workshops and publish in peer reviewed scientific journal.

## Chapter Five-Result

### 5.1 Socio-demographic characteristics of the respondents

A total of 1109 students participated in the study, making a response rate to be 91.6%. One hundred thirty seven (73.7%) of chewer and 450(48.8%) of non chewer respondents were males. More than half of the respondents 101 (54.6%) of chewer and 480(52%) non chewer were in the age group of 20-25 years. The mean age of the study participants was 19.8 years with standard deviation of 2.0. Fifty four (29%) of chewer and 544(58.9%) of non chewer were protestant by religion. Regarding marital status, majority 163 (87.6%) of chewer and 837(90.7%) of non chewer of the respondents were single. Fifty six (30.1%) of chewer and 513 (55.6%) of non chewer of the study participants were rural resident. One hundred forty three (76.9%) of chewer and 709(76.8%) of non chewer of the respondents were living away from family in rental houses. Sixty eight (36.6%) of khat chewer and 497(54.5%) of non chewer of the study participants average monthly income were less than 400 Birr (*Table 1*).

**Table 1-Socio-demographic characteristics of respondents among college students in Arba Minch Town, March 2015**

Variables (N=1109)		Total No (%)	Life time khat chewing status	
			chewer No (%)	Non chewer No (%)
Sex	Male	587(52.9)	137(73.7)	450(48.8)
	Female	522(47.1)	49(26.3)	473(51.2)
Age	≤19	527(47.5)	84(45.4)	443(48)
	20-25	581(52.5)	101(54.6)	480(52)
Religion	Protestant	598(53.9)	54(29)	544(58.9)
	Orthodox	455(41.0)	111(59.7)	344(37.3)
	Muslim	43(3.9)	21(11.3)	22(22.4)
	Others	13(1.2)	0	13(1.4)
Marital status	Single	1000(90.2)	163(87.6)	837(90.7)
	Ever married	109(9.2)	23(12.4)	86(9.3)
Permanent residence	Rural	569(51.3)	56(30.1)	513(55.6)
	Urban	540(48.7)	130(69.9)	410(44.4)
Living arrangement	Away from family	852(76.8)	143(76.9)	709(76.8)
	With family	257(23.2)	43(23.1)	214(23.2)
Average monthly income	≤400	565(50.9)	68(36.6)	497(54.5)
	>400	544(49.1)	118(63.4)	415(45.5)

## 5.2 Educational and family characteristics of the respondents

Regarding year of study 58 (31.2%) of chewer and 405(43.9%) of non chewer of the respondents were first year. Majority 151 (81.2%) and 779(84.4) of khat chewer and non chewer were attending in public college respectively. Regarding preference of reading place 90 (48.4%) and 591(64%) of chewer and non chewer were they preferred home for reading respectively. Regarding average grade point, 89(47.8%) and 395(42.8) of khat chewer and non chewer were less than 65% respectively. One hundred forty two (76.3%) of khat chewer and 714(77.4%) of non chewer were medium in perceived family economic status. Fifty one (27.4%) and 344(37.3%) of khat chewers and non chewers mother were not attended formal education respectively. Similarly 18(9.7%) of chewers and 203(22%) of non chewers father were not attended formal education (*Table 2*).

**Table 2 Educational and family characteristics of respondents among college students in Arba Minch Town, March 2015**

Variables (N=1109)		Total	Life time khat chewing status	
			Chewer	Non chewer
		No_(%)	No_(%)	No_(%)
Year of study	1 <sup>st</sup>	463(41.7)	58(31.2)	405(43.9)
	2 <sup>nd</sup>	357(32.2)	65(34.9)	292(31.6)
	3 <sup>rd</sup>	289(26.1)	63(33.9)	226(24.5)
Type of college	Public	930(83.9)	151(81.2)	779(84.4)
	Private	179(16.1)	35(18.8)	144(15.6)
Preference of reading place	Home	681(61.4)	90(48.4)	591(64)
	Library	313(28.2)	47(25.3)	266(28.8)
	Relative home	115(10.4)	49(26.3)	66(7.2)
Average grade point	<71	284(25.6)	46(21.6)	238(26.6)
	71.01-80	294(26.5)	55(25.8)	239(26.7)
	80.01-89	256(23.1)	59(27.7)	197(22.0)
	>=89.01	275(24.8)	53(24.9)	222(24.8)
Perceived family economic status	Poor	193(17.4)	25(13.4)	168(18.2)
	Medium	856(77.2)	142(76.3)	714(77.4)
	Rich	60(5.4)	19(10.2)	41(4.4)
Mother educational status	No formal education	395(35.6)	51(27.4)	344(37.3)
	Primary	402(36.3)	60(32.3)	342(37.1)
	Secondary & above	312(28.1)	75(40.3)	237(25.7)
Father educational status	No formal education	221(19.9)	18(9.7)	203(22)
	Primary	404(36.4)	57(30.6)	347(37.6)
	Secondary & above	484(43.7)	111(59.7)	373(40.4)

### 5.3. Behavioral Factors of the respondents

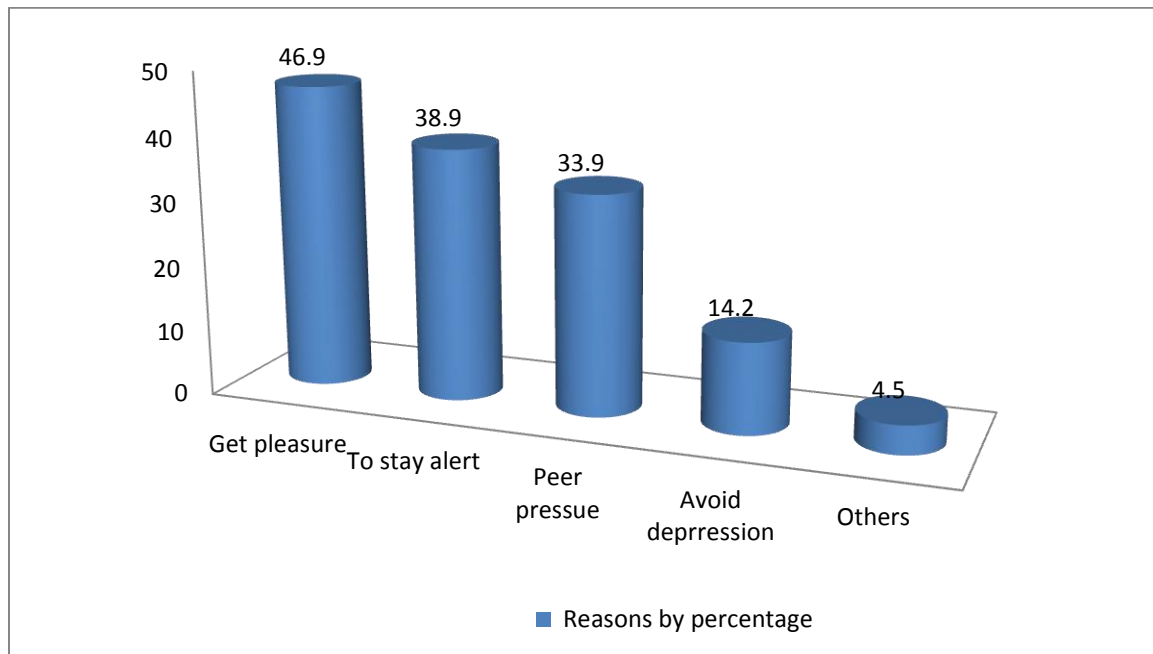
Forty five (24.2%) of khat chewer and seven (0.8%) of non chewer respondents reported that they were smoking cigarette. Similarly 145(78%) of khat chewer and 178(19.3%) of non chewer were drinking alcohol in the last six months. Fourteen (7.5%) and 272(7.8%) of khat chewer and non chewer respondents regularly participate in anti AIDS club respectively. Thirty four (18.3%) of khat chewer and 310(33.6%) non chewer respondents attend regularly in religious institution. Almost six in ten 113 (60.8%) of chewer and 121(13.1%) non chewer respondents were attending night club. Majority (82.8%) chewer and 425(46%) non chewer respondents were watching pornographic movies in the last six month (*Table 3*).

**Table3 Behavioral factors among respondents of college students in Arba Minch Town, March 2015 (N=1109)**

Variables		Total	Life time khat chewing status	
			Khat chewer	Non chewer
		No (%)	No (%)	No (%)
Smoking cigarette	Yes	52(4.7)	45(24.2)	7(0.8)
	No	1057(95.3)	141(75.8)	916(99.2)
Alcohol drinking	Yes	323(29.1)	145(78)	178(19.3)
	No	786(70.9)	41(22)	745(80.7)
Participation in the anti AIDS club	Regularly	86(7.7)	14(7.5)	72(7.8)
	Often	153(14)	9(4.8)	144(15.6)
	Occasionally	284(25.5)	52(28)	232(25.1)
	Never	586(52.8)	111(59.7)	475(51.5)
Attending religious institution	Regularly	344(31)	34(18.3)	310(33.6)
	Often	553(49.9)	79(42.5)	474(51.4)
	Occasionally	116(10.4)	45(24.2)	71(7.7)
	Never	96(8.7)	28(15.1)	68(7.4)
Attending night club	Yes	234(21.1)	113(60.8)	121(13.1)
	No	875(78.9)	73(39.2)	802(86.9)
Watching pornographic movies	Yes	579(52.2)	154(82.8)	425(46)
	No	530(47.8)	32(17.2)	498(54)

## 5.4 Khat chewing practice of the respondents

The study revealed that **213(19.2%)** of the respondents were chewed khat at least once in their lifetime and **186(16.8%)** reported that they had currently chewing khat. More than nine in ten, 185(91.1%), were chewing khat less than 3 times per week. More than half 123(57.7%) started khat chewing during study in high school. One hundred eighteen (55.4%) of respondents were chronic (more than 2 year) khat chewer. Almost three in ten 327(29.5%), one of their family member of the respondents were chewing khat. Many reasons mentioned for khat chewing (**Figure 3**).



**Others-** Relief from tension, improve work performance

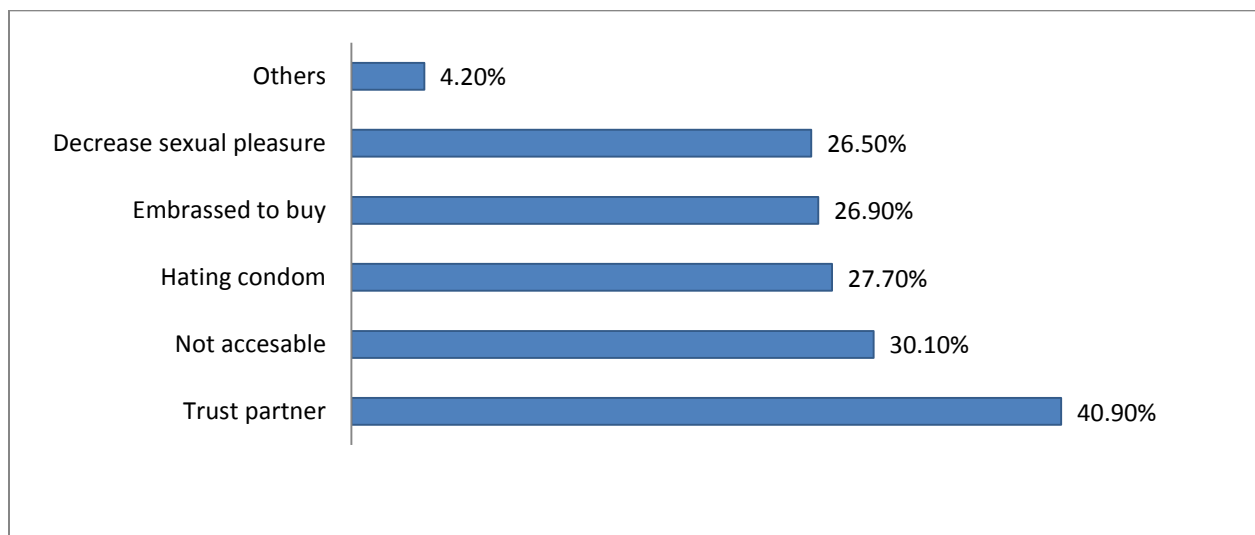
**Figure 3** Mentioned reasons for khat chewing among respondents of college students in Arba Minch Town, March 2015

## 5.5 Sexual behavior of the respondents

More than four in ten, 466 (42%) respondents had ever practiced sexual intercourse. The age of first sexual intercourse ranges from 14 to 24years and a mean age of 17.6 year with standard deviation of 1.73. Out of the 466 sexually active respondents, 266(57%) had their first sex before joining the college. The main reasons for first sexual intercourse were related to sexual desire 197(42.4%), peer pressure 143(30.8%), maintain relationship 61(13.1%), sex for exchange of money 15(3.2%), to pass examination 26(5.6%) and other reasons 22(4.7%). From the total 1109 respondents, **452(40.8%)** had risky sexual behaviors in their lifetime. Out of 466 sexually active

respondents 307(65.9%) had multiple sexual partners, majority 409(89.3%) respondents were used condom inconsistently, 260 (56.9%) were started sexual intercourse before the age of 18 years and 33(12.1%) of males had sex with commercial sex workers in their lifetime.

Regarding current sexual behavior, 444(40.1%) of respondents were engaged in sexual intercourse in the last six months. **More than one third, 405 (36.5%) of the respondents had risky sexual behaviors in the last six month.** Out of 444 sexually active respondents, 136(30.6%) had multiple sexual partner, 377(88.7%) respondents were never use condom and use inconsistently and 12(4.4%) of males had sex with commercial sex workers in the last six months. The most common reasons cited for inconsistent use of condom was trust on partner 171(40.9) (**figure 4**). Respondents know different places to obtain condom. The known place explained 867(78.2 %) in health institution, 312(28.1%) in shop, 473(42.7%) anti AIDS club 636(57.3%) and 27(2.5) other places (surrounding campus).



**Figure 4 Reasons for inconsistant use condom among respondents of college student in Arba Minch town, 2015**

### 5.6 Comparison of risky sexual behavior among khat chewer and non chewer

Majority 178 (83.6%) khat chewer and almost one third 288(32.1%) of non chewer respondents ever had practiced sexual intercourse. The prevalence of life time risky sexual behaviors among khat chewers was 82.2% and among non chewers 30.9%, P-value (0.001). Majority 154 (82.8%) current khat chewer and 290(31.5%) of current non chewer respondents had practiced sexual intercourse in the last six months. Current risky sexual behavior among current khat chewers was76.3% and among non chewers 28.5%,P-value (0.001).

**Table 4 Comparison of sexual behavior among respondents of khat chewer and non chewer college students in Arba Minch town, March 2015**

Life time sexual behavior		Total	Life time khat chewing		P-value
		No (%)	Yes No (%)	No No (%)	
Life time sexual intercourse(1109)	Yes	466(42)	178(83.6)	288(32.1)	0.001
	No	643(58)	35(16.4)	608(67.9)	
Age of first sexual intercourse(466)	<18	260(56.9)	94(53.7)	166(58.9)	0.28
	>=18	197(43.1)	81(46.3)	116(41.1)	
No sexual partner (466)	One	159(34.1)	36(20.2)	123(42.7)	0.01
	more than one	307(65.9)	142(79.8)	165(57.3)	
Condom use with other than husband/wife(458)	Regular	49(10.7)	23(12.9)	26(9.3)	0.34
	Sometimes	299(65.3)	114(64.0)	185(66.1)	
	Never	110(24)	41(23.0)	69(24.6)	
Sexual intercourse with CSW(272)	Yes	33(12.1)	19(15.2)	14(9.5)	0.12
	No	239(87.9)	106(84.8)	133(90.5)	
<b>Current sexual behavior</b>			<b>Current khat chewing</b>		
Sex in the last 6 month (1109)	Yes	444(40.1)	154(82.8)	290(31.5)	0.001
	No	664(59.9)	32(17.2)	632(68.5)	
Age of first sexual intercourse(444)	<18	16(3.6)	11(7.1)	5(1.7)	0.01
	>=18	428(96.4)	143(92.9)	285(98.3)	
No of sexual partner in the past 6 month(444)	One	308(69.4)	82(53.2)	226(77.9)	0.001
	more than one	136(30.6)	72(46.8)	64(22.1)	
Condom utilization with non regular partner in the last 6 month(425)	Regular	48(11.3)	24(16.1)	24(8.7)	0.13
	Sometimes	252(59.3)	87(58.4)	165(59.8)	
	Never	125(29.4)	38(25.5)	87(31.5)	
Sexual intercourse with CSW in the last 6 month(260)	Yes	12(4.7)	5(4.4)	7(4.8)	0.67
	No	248(95.3)	109(95.6)	139(95.1)	

## 5.7 Factors Associated with Risky Sexual Behavior

To identify statistically significant factors binary logistic regression was done in bivariate and multi-variable. First, bivariate analysis was done among independent variables and dependent variable risky sexual behavior. Sex, age, residence, living arrangement, father educational status, peer pressure, type of college, year of study, average grade, attending religious institution, attending night club, watching pornographic movies, khat chewing status, alcohol drinking and cigarette smoking were variables which had association (at significance level of 0.25) with current risky sexual behavior. However mother educational status, perceived family economic status and participation of anti AIDS club were not association in bivariate analysis. All the variables having significant association at  $p < 0.25$  were included in the multivariable logistic regression model.

The odds of current risky sexual behavior among males were 1.82 times higher than that of females (AOR=1.82; 95% CI: (1.28- 2.6). Students' age increase by one year the odds of current risky sexual behavior increase by 1.18 (AOR=1.18; 95% CI: 1.09-1.28). Urban resident 1.63 times higher odds of risky sexual behavior than rural residents with (AOR=1.63; 95% CI: 1.17- 2.28). Students living away from family were found to be 2.45 times (AOR= 2.45 95% CI=1.62- 3.7) higher odds of risky sexual behavior than those who were living with their family.

Students who had high peer pressure were found to be two times (AOR=2.58; 95% CI: 1.85- 3.59) higher odds of risky sexual behavior than students who had low peer pressure. Average grade increase by one odds of risky sexual behavior decrease with 0.98 (AOR 0.98; 95% CI: 0.96-0.99).

Those who attending religious institution regularly were 0.23 times (AOR =0.24; 95% CI: .12- 0.42), lower odds of risky sexual behavior than those who were not attending religious institution.

Students who watching pornographic movies 2.5 times (AOR=2.51 95% CI=1.79- 3.51) higher odds of risky sexual behavior than those who never watching pornographic movies. Students who had chewing khat were more than three times higher odds of risky sexual behavior with (AOR= 3.02, 95% CI: 1.91-4.76) and also drinking alcohol two times higher odds of risky sexual behavior (AOR=2.26, 95% CI=1.54- 3.35) compare to non users. Father educational status, type of college, year of study, attending night club and smoking cigarette were not statistically significant association with risky sexual behavior after controlling confounders.



**Table 5: Factors associated with current risky sexual behavior among respondents of college students in Arba Minch Town, March 2015**

Variables		Current risky sexual b/re		COR (95% CI)	AOR(95% C.I)
		Yes	No		
		No (%)	No (%)		
Age		405 (36.5)	704 (63.5)	1.17(1.10-1.25)	<b>1.18(1.09-1.28)*</b>
Sex»	Male	236(40.2)	351(59.8)	1.40(1.10- 1.80)	<b>1.82(1.28- 2.6)*</b>
	Female	169(32.4)	353(67.6)	1	1
Previous residence	Urban	245(45.4)	295(54.6)	2.12(1.66-2.72)	<b>1.63(1.17- 2.28)*</b>
	Rural	160(28.1)	409(71.9)	1	1
Living arrangement	Away from family	333(39)	519(61)	1.65(1.22-2.24)	<b>2.45(1.62- 3.7)*</b>
	Family	72(28)	185(72)	1	1
Peer pressure	High	116(19.6)	477(80.4)	5.24(4.01- 6.84)	<b>2.58(1.85- 3.59)*</b>
	Low	289(56)	227(44)	1	1
	No formal edu.	87(39.4)	134(60.6)	0.93(0.67-1.29)	1.48(.96- 2.31)
Father educational status	Primary	119(29.5)	285(70.5)	0.60(0.45-0.79)	.74(.51- 1.07)
	2dry & above	199(41.1)	285(58.9)	1	1
Type of college	Private	73(40.8)	106(59.2)	1.24(0.90- 1.72)	.91(.59- 1.42)
	Public	332(35.7)	598(64.3)	1	1
	Year three	132(45.7)	157(54.3)	1.81(1.34- 2.45)	1.27(.85-1.9)
Year of study	Year two	126(35.3)	231(64.7)	1.73(0.88-1.57)	1.06(.74- 1.54)
	Year one	147(31.7)	316(68.3)	1	1
Average grade»	Average grade	405(36.5)	704(63.5)	0.06(0.98-1.00)	<b>0.98(0.96-0.99)*</b>
Attending religious institution	Regularly	69(20.1)	275(79.9)	0.78(0.11-0.29)	<b>0.23(.12- 0.42)*</b>
	Often	211(38.2)	342(61.8)	0.4(0.28-0.69)	0.59(0.34-1.05)
	Occasionally	69(59.5)	47(40.5)	1.05(0.61-1.82)	0.81(0.38-1.65)
	Never	56(58.3)	40(41.7)	1	1
Attending nightclub	Yes	152(65)	82(35)	4.56(3.36-6.19)	1.42(0.93- 2.16)
	No	252(28.8)	623(71.2)	1	1
Watching movies	Yes	307(53)	272(47)	4.98(3.76-6.54)	<b>2.51(1.79- 3.51)*</b>
	No	89(17)	432(83)	1	1
khat chewing	Yes	142(76.4)	44(23.7)	7.55(5.37-10.6)	<b>3.02(1.91-4.76)*</b>
	No	263(28.5)	660(71.6)	1	1
Alcohol drinking	Yes	214(66.3)	109(33.7)	6.12(4.61- 8.11)	<b>2.26(1.54- 3.35)*</b>
	No	191(24.3)	595(75.7)	1	1
Cigarette smoking	Yes	46(88.5)	6(11.5)	14.91(6.31-35.23)	2.26(0.83-6.16)
	No	359(44)	698(66)	1	1

»continuous variables (CI)\* significant P-0.05

## Chapter Six- Discussion

The prevalence of life time and current risky sexual behavior found to be 40.7% and 36.5% respectively. The finding is in line with studies conducted in Jimma Zone preparatory students, life time risky sexual behavior 42.1% (26). The finding is higher than studies done in Humera high school, North West Ethiopia, life time risky sexual behavior (13.7%) and Gondar high school, North West Ethiopia (25%) (31, 43). This difference might be due to in previous studies, majority of student's age less than 18 years. Thus when the age increase, peer pressure and social acceptance for sexual intercourse increase. Another reason in secondary school, majority of students was living with families that of one of the protective factor.

In this study, 19.2% and 16.8% of respondents reported to had chewing khat at least once in their life time and last six month respectively. This finding is in line with previous studies conducted in Jazan Region (Saudi Arabia) among college and secondary school life time and current prevalence of khat chewing were (21.4% and 20.5% %), Dire Dawa High School (18.4 and 10.9%,) and Bahir Dar college students (19.6 and 12.6%) (32,33,23). On the other hand the finding is lower than studies done in Aden university medical students in Yemen (54%), Eastern Ethiopia Harar high school (24.2%) and Jimma Zone, South West Ethiopia preparatory students (35.5%) (17,26). This difference might be due to place of residence; in this study 51.3% of the students were from rural area which is an important protective factor. The other reason might be socio-cultural differences of the study area. In the contrary the finding is higher than study done in Debre Markos poly Technique College (13.4% and 6.3%) (34). This difference might be due to majority 59% of students in Debre Markos was first year. Those first year students were less interaction with their colleagues thus the peer pressure for khat chewing less and also first year students not easily join in new behavior.

Prevalence of life time risky sexual behavior among khat chewer was 82.2% and significantly higher than among non chewer 30.9%. Similarly, current risky sexual behavior among khat chewer was 74.2%, significantly higher than among non khat chewer 27.6%. This finding is in line with studies done students in Jimma University, Humera North West Ethiopia high school, and Bahir Dar college; risky sexual behavior among chewer (51%,61.1%,and 52.5%) significantly higher than non chewer(19.8%, 9.3% and 16.5%) respectively( 11, 31,24). The reason might be during the hypo manic phase, khat chewers might not be capable of rational judgment and they also might not be able to predict the serious consequences of their actions. Thus, the chewers could walk into the

most dangerous situations feeling that there is no danger and being unaware of the possible dangers to their lives or well-being, they get motivated to have sexual intercourse. In the other way the finding is inconsistent with studies done Haramaya university, risky sexual behavior among khat chewer (68.4%) slightly higher than non chewer (62.7%)(46).The difference might be currently in universities BCC on risk perception and condom distribution activities in university compound improve utilization of condom consistently and increase risk perception.

Male sex were 1.8 times higher odds of risky sexual behavior than that of females .This finding is consistent with studies done in Humera North West Ethiopia high school, Gondar North West Ethiopia preparatory and Haramaya(31, 43,46).The reason might be cultural background in Ethiopia that males can ask females for sex, better access for resource and powerful for decision. Since males easily access females for sexual practice. The finding is inconsistent with studies done in Alkan College Addis Ababa unmarried students, females are more likely practice premarital sexual intercourse (27).The reason might be in urban area like Addis Ababa the students giving real information than rural area. Mostly females were not report sexual intercourse practice due to losing of virgin before marriage indignity in different cultures. Students age increase by one year the odds of risky sexual behavior increase by 1.2. The finding is in line with many literatures. The explanation is the fact that, as age increases involving in sexual practice increases due to social acceptance of sexual intercourse in late age (11, 28, 45). Students who were living away from family were 2.45 higher odds of risky sexual behavior than those who were living their family. The finding is consistent with other previous studies (24, 28, 31, 44). The reason might be students who were living in rental house away from family member pass most of their time with intimate friend; hence this could have result to share bad behavior. The other possible reason could believe free of family control by itself creates a room to initiate sexual intercourse. Urban students were 1.6 times higher odds of risky sexual behavior than that of rural .The finding in consistent with study conducted Jimma South West Ethiopia preparatory students there was no association between residence and risky sexual behavior. The reason might be urban youths wrongly decide to do they want due to better freedom in life styles and decision making power(48).Another reason might be urban resident students giving better real information than rural residents.

The study further declared that students who report having high peer pressure were more than two times higher odds of risky sexual behavior as compared to who had low peer pressure. This finding is similar with other studies before (45,51). This might be due to the fact that students were at higher probability of sharing their day to day life experience.

Respondents average grade increase by one the odds of risky sexual behavior decrease by 0.98. The reason might be academically poor students practice sexual intercourse with teachers and relatives to pass examination. The other reason might be academically poor students were not focus on their academic performance that gives time for watching pornographic movies and to practice sexual intercourse.

Those who regularly attended religious institution were 0.24 times less odds of risky sexual behavior than those who were never attending religious institution. This finding is similar with studies done in Jimma zone preparatory, Humera North West Ethiopia high school, and Haramaya University students (48, 31, 46). The reason might be an individual who attend in religious institution regularly they considered them very religious and feel that sexual intercourse out of marital union are always wrong and they abstain from sexual intercourse. Students who watching pornographic movies were more than two times higher odds of risky sexual behavior than those who never watching pornographic movies. This finding is supported by different studies conducted before (27, 31). The reason might be students watching movies that increase sexual desire and they also consider as a good practice. Thus students rush sexual intercourse without considering the consequences. Involvement in anti AIDs club is important to change the attitude and practice of risky sexual behavior by getting information relating with sexual behavior. All public colleges have anti AIDS club in the college. However in this study presence of anti AIDS clubs and membership were no statistically significant association with sexual practice. This finding is in line with study conducted youths of Western Ethiopia (44). Thus the effectiveness of anti AIDS club needs further research. Students who were chewing khat and drinking alcohol more than three times and more than two times higher odds of risky sexual behavior compared to non user. The finding is similarly revealed by many studies (11,46,). The reason might be students are initiated for sexual intercourse after having substances and might be due to the nature of substance in decreasing inhibitions, altering rational decision making and increasing risk taking behavior and alcohol limits the cognitive capacity of individuals that leads them to have unsafe sex. However the finding is not consistent with studies conducted in Jimma and Bahir Dar college revealed that there were no association between khat chewing and risky sexual behavior (26, 24) and in Humera high school North West Ethiopia, and Alkan College Addis Ababa, revealed that there was no association between smoking cigarette, khat chewing and alcohol drinking with risky sexual behavior (31, 27). The reason might be inadequate cases to compare the group in previous studies.

**Strength and Limitation**

Training and pre-testing the questionnaire to improve the quality, anonymity and confidentiality of information obtained was ensured throughout the duration of the study and also used adequate sample size for the study was some strengths of the study. The study has several limitations and caution must be exercised in generalizing the result of this study. First, it is cross-sectional in nature and may not explain the temporal relationship between the outcome variable and some explanatory variables. Secondly, the study topic by itself assesses personal and sensitive issues related to sexuality which might have caused underreporting of some behaviors.

## Chapter Seven-Conclusion and Recommendations

### 7.1 Conclusions

Considerable proportion of students were engaged in khat chewing and risky sexual behavior, including early sexual initiation, multiple sexual partners, sexual intercourse without condom and sex with commercial sex worker. The prevalence of risky sexual behavior among khat chewer was significantly higher than non chewer. Male sex, older age, urban residence, living away from family, high peer pressure, poor academic performance, not attending religious institution, watching pornographic movies, khat chewing, alcohol drinking were identified as predisposing factors for the existence of current risky sexual behavior.

### 7.2 Recommendations

Based on the findings of the study the following recommendations are given for the concerned bodies.

**Colleges** –should strengthen BCC on risk perception, life skill training, peer-education, availing services including condom distribution in college compound and surrounding and strengthen activities of anti AIDS club by administrative and technical support.

**College anti AIDS clubs** – should strengthen on educating consequence of risky sexual behavior, watching pornographic movies, khat chewing and alcohol drinking. Also encouraging students to practice premarital abstinence, consistent use of condom for sexual intercourse before marriage regardless of partner characteristics.

**Nongovernmental organization (Ethiopian Red Cross, OSSA, DKT, and others....)** – should support colleges and involve in interventions of substance use to reduce risky sexual behavior through peer education, life skill training provision and other activities.

**Town, Zonal and Regional Health Offices-** should give special attention in HIV prevention and promotion programme in secondary school and college students.

**Researchers**-researcher who interest on sexual behavior among students should conduct effectiveness of anti-AIDS clubs and relationship between khat chewing and risky sexual behavior with other strong study designs.

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## Annex 1. Questionnaire

### Information Sheet and Consent Form

**Name of the Principal Investigator:** Eyasu Ware, email- [eyaware@gmail.com](mailto:eyaware@gmail.com), Mobile 0911055613 masters Public Health Reproductive Health specialty student of Jimma University

### Introduction

This study is conducted to assess the status of khat chewing and compare the magnitude of the risky sexual behavior and associated factors among college students in Arba Minch town. You are one of the selected students to participate in this study, therefore you are kindly requested to participate in this study and provide the information required from you. Your Participation in this study is completely on voluntary basis and you have the right to refuse from participation. The questionnaire takes between 15 and 20 minutes to complete and your response will be kept confidential .I would like to inform you that the responses that you provide to the questions are very essential, not only, for the successful accomplishment of the study, but also for producing relevant information which will be helpful to minimize the practice of khat chewing & risky sexual behavior.

### Consent form

In signing this document, I am giving my consent to participate in the study title “khat Chewing and risky sexual behavior among college students in Arba Minch Town.

I have been informed that the purpose of this study is to assess the status of khat chewing and the magnitude and associated factors of risky sexual behavior among college students in Arba Minch town. I have understood that participation in this study is entirely voluntarily. I have also been informed that my participation or non-participation or my refusal to answer questions will have no effect on me. I understood that Eyasu Ware is the contact person if I have questions about the study or about my rights as a study participant.

Respondent's signature \_\_\_\_\_

Date of collection: \_\_\_\_\_ Time started: \_\_\_\_\_ Time finished: \_\_\_\_\_

Facilitator Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Supervisor's name \_\_\_\_\_ signature \_\_\_\_\_

**Questionnaire for assessment on status of khat chewing and magnitude and associated factors of risky sexual behavior among college students in Arba Minch town**

The questionnaire have 3 parts i.e. Socio-demographic factors contains 13 question, risk related behaviors contains 14 and sexual related behaviors contains 18 questions. You are expected to attempt all questions that concerned you honestly.

**Part I. Socio-demographic characteristics of the respondents and family (circle one answer)**

No	Question	Response	Remark
101	What is your college name	.....	
102	What is your year of study class	1st.....1 2nd.....2 3rd.....3	
103	What is your sex?	Male.....1 Female....2	
104	How old are you?	____years	
105	What is your religion?	Orthodox .....1 Muslim.....2 Protestant.....3 Others(specify).....4	
106	What is your marital status?	Married.....1 Unmarried.....2 Divorce.....3 Others(specify).....4	
107	What is your college cumulative average grade?	...../100	
108	What is your residence before joining college?	Urban.....1 Rural.....2	
109	Which place do you prefer for reading	Colleagues house....1 home.....2 Library.....3 Others(specify).....4	
110	Currently with whom are you Living?	Alone .....1 With colleagues.....2 family .....3 other (specify).....4	

111	How many Birr your average monthly income?	.....birr	
112	What is your mother highest educational status?	No formal education.....1 1-8grade.....2 9-12grade.....3 Above 12 grade.....4	
113	What is your father highest educational status?	No formal education .....1 1-8grade.....2 9-12grade.....3 Above 12 grade.....4	

**Part II. Khat chewing and other associated behavior**

No.	Question	Response	Remark
201	Have you ever chewed khat?	Yes.....1 No.....2	If your response is No, go to Q207
202	Where did you start chewing khat?	Before high school.....1 High school.....2 College.....3	
203	How long have you chewed khat?	More than 2 year.....1 1 to 2 year.....2 Less than 1 year.....3	
204	Why do you chew khat?	To stay long time for reading.....1 Personal pleasure.....2 To prevent depression.....3 Others(specify).....4	
205	How often do you chew khat per week?	>3times per week.....1 1-3times per week.....2 Occasional.....3 Never.....4	

206	Have you chewed khat in the last 6 months?	Yes.....1 No.....2	
207	Is there any habit of khat chewing in your family?	Yes.....1 No.....2	
208	Have you ever smoked cigarette in the last six month?	yes.....1 No.....2	
209	Have you ever drunk alcohol in the last six month?	yes.....1 No.....2	
210	How often do you attend night club in the last six month?	More than one day per week.....1 1-2 days in two week.....2 Occasionally.....3 Never.....4	
211	How often do you watch pornographic movies in the last six month?	More than one day per week.....1 1-2 days in two week.....2 Occasionally.....3 Never.....4	
212	Is there any anti AIDS club in your college?	No .....1            Yes.....2	
213	How often do you participate in the anti AIDS club in the last six month?	More than one day per week.....1 1-2 days in two week.....2 Occasionally.....3 Never.....4	
214	How often do you attend religious institution in the last six month?	More than one day per week.....1 1-2 days in two week.....2 Occasionally.....3 Never.....4	

**Part III. Sexual behavior**

	Question	Response	Remark
301	Have you ever had sexual intercourse?	Yes.....1 No.....2	If your response No go to 315
302	When did have sexual intercourse for the very first time?	Before joining college.....1 After joining college.....2	
303	Why did you have sexual intercourse for the very first time?	Sexual desire.....1 Boy/girlfriend's pressure....2 To maintain relationship....3 For financial purpose.....4 For passing examination....5 Others (specify).....6	
304	How old were you had sexual intercourse for the very first time?	_____ Years Don't know.....88	
305	Have you ever had sexual intercourse with commercial sex worker	Yes.....1 No.....2	
306	In a total, with how many different people have you had sexual intercourse in your lifetime?	One.....1 More than one.....2	
307	Have you ever had sexual intercourse with other than husband/wife?	Yes.....1 No.....2	If your response No go to 309
308	Did you use condom you had sexual intercourse with other than husband/wife?	Always.....1 Sometime.....2 Never.....3	
309	Have you ever had sex in the last 6 month?	Yes.....1 No.....2	If your response No go to 315
310	In total, with how many different people have you had sexual intercourse in the past 6 month?	One.....1 More than .....2	



311	Have you ever had sexual intercourse with commercial sex worker in the past 6 month	Yes.....1 No.....2	
312	Have you ever had sexual intercourse with other than husband/wife in the last 6 months?	Yes.....1 No.....2	
313	Did you use condom you had sexual intercourse with other than husband/wife in the last 6 months?	Always.....1 Sometime.....2 never.....3	If your response 1 go to 315
314	If your response is 2 or 3 what is the reason for not using condom?	I trust my partner.....1 Not accessible .....2 Decrease sexual pleasure...3 Don't like it .....4 Embarrassed to buy.....5 We are HIV negative.....6 Other(specify).....7	Multiple answer is possible
315	Which places do you know to obtain condom?	Health institution .....1 Shop.....2 Hotel.....3 Anti AIDS club.....4 Other(specify).....5	Multiple answer is possible
316	Does your best colleague start sexual intercourse?	Yes.....1 No.....2	
317	Do colleagues initiate you to start sexual intercourse?	Yes.....1 No.....2	
318	Majority of your colleague's sex experience?	Yes.....1 No.....2	

**/ Thank you/**

**የጥናት ማብራሪያና የስምምነት መግለጫ ቅጽ**

**የዋና ተመራማሪ ስም:** ኢያሱ ዋሬ ኢ.ሜይል [eyaware@gmail.com](mailto:eyaware@gmail.com), ሞባይል ቁጥር 0911055613 በጅም የንብርሲቲ

በህብረተሰብ ጤና የሥነ-ተዋልዶ ጤና የማስተርስ ተማሪ።

**መግቢያ**

የዚህ ጥናት ዋና ዓላማ በአርባምንጭ ከተማ በሚገኙ ኮሌጅ ተማሪዎች መካከል ጫት መቃምና አጋላጭ ጾታዊ ባሕርያት የሚያበቁ ተያያዥ ሁኔታዎችንና የችግሩን ስፋት መዳሰስ ነው። በዚህ ጥናት እርስዎ እንዲሳተፉ ከተመረጡት አንዱ ናት ። እና እርስዎ በጥናቱ እንድሳተፉ ጋብዘንዎታል። በጥናቱ ለመሳተፍ ከተስማሙ ስምምነቱን በደንብ መረዳትና እንዲሁም መፈረም ይገባዎታል። በጥናቱ ላለመሳተፍ ከፈለጉ በዚህ ጥናት ያለመሳተፍ ወይም ከአንድ በላይ ወይም ሁሉንም ጥያቄዎች አለመመለስ ይችላሉ። በዚህ ጥናት ባለመሳተፍዎ ወይም በከፊልም ሆነ በሙሉ ጥያቄዎችን ባለመመለስዎ በትምህርትዎ ላይ ምንም ዓይነት ችግር አይኖርም። በዚህ ጥናት መሳተፍዎ ምናልባት ከ15-20 ደቂቃ ጊዜዎን ሊሻማብዎት ይችል ይሆናል። ነገር ግን በኮሌጅ ተማሪዎች መካከል ያለውን አጋላጭ የጤና ሥጋትን ከመቀነስ አኳያ ከታየ ጊዜው ብዙ አይደለም። በዚህ ጥናት በመሳተፍዎ ምንም ዓይነት ስጋት (ችግር) አያጋጥምዎትም። በዚህ ጥናት የሚሳተፉት በአርባምንጭ ከተማ ካሉ ኮሌጅ ተማሪ ሲሆኑ የሚሠጡት መልስም ሆነ የሚገኘው ውጤት በምስጢር ይጠበቃል። በመሆኑም የጥናቱ ውጤት በጫት መቃምና በአጋላጭ ጾታዊ ባሕርያት ሳቢያ ለሚከሰት ሰፊ የሥነ ተዋልዶና የኤች.አይ.ቪ/ኤድስ ችግር ቅንሳ የራሱ አስተዋጽኦ ያበረክታል።

**የስምምነት መግለጫ**

እነም ከዚህ በታች ፍርማዬን ያስቀመጥኩት በአርባምንጭ ከተማ በሚገኙ ኮሌጅ ተማሪዎች መካከል ጫት መቃምና አጋላጭ ጾታዊ ባሕርያት የሚያበቁ ተያያዥ ሁኔታዎችንና የችግሩን ስፋት ለማወቅ በሚደረገው ጥናት ለመሳተፍ የጥናቱ ዓላማ ተገልጾልኛል። በዚህ ጥናት መሳተፍ ያለመሳተፍ ወይም እምብ ማለት በእኔ ላይ ምንም ተጽእኖ እንደለለ ተረድቼ በፈቃደኝነት ለመሳተፍ በፍርማዬ አረጋግጣለሁ። በጥናቱ ላይ ሆነ እንደተሳታፍ የሚጠይቀው መብት ካሌ የሚገናኘው ሰው ኢያሱ ዋሬ መሆኑን ተረድቻለሁ።

የተሳታፊ ፍርማ \_\_\_\_\_  
ቀን \_\_\_\_\_ የተጀመረበት ሰዓት-----የተፈጸመበት ሰዓት-----  
የአመቻች ስም \_\_\_\_\_ ፍርማ \_\_\_\_\_  
የተቆጣጣሪ ስም-----ፍርማ-----

**ቃለ መጠይቅ**

በአርባምንጭ ከተማ በሚገኙ ኮሌጅ ተማሪዎች መካከል ጫት መቃምና አጋላጭ ጾታዊ ባሕርያት የሚያበቁ ተያያዥ ሁኔታዎችንና የችግሩን ስፋት ለመዳሰስ የተዘጋጀ መጠይቅ

መጠይቁ 3 ክፍል ያለው ሲሆን ክፍል 1 ስለ አጠቃላይ ማህበራዊ ሁኔታ የሚጠይቅ 13 ጥያቄዎችን፣ ክፍል 2 አጋላጭ ተያያዥ ባሕርያት አስመልክቶ 14 ጥያቄዎችን፣ ክፍል 3 ጾታዊ ባሕርያትን በተመለከተ 18 ጥያቄዎችን ይዟል። ስለሆነም እርስዎን የሚመለከቱ ጥያቄዎችን በሙሉ እና በእውነት እንደሚመልሱ ተስፋ አደርጋለሁ።

**ክፍል 1. አጠቃላይ ማህበራዊ ሁኔታዎች መረጃ (አንዱን መልስ ይክበቡት)**

ተ.ቁ	ጥያቄ	መልስ
101	የኮሌጁ ስም ምንድን ነው?	.....
102	የስንተኛ ዓመት ተማሪ ነህ/ሽ?	1ኛ ዓመት                      2ኛዓመት                      3ኛዓመት
103	ጾታህ/ሽ ምንድን ነው ?	ወንድ.....1                      ሴት.....2
104	ዕድሜህ/ሽ ስንት ነው?	_____ዓመት
105	ሃይማኖትህ/ሽ ምንድን ነው?	ኦርቶዶክስ .....1 ሙስሊም.....2 ፕሮቴስታንት.....3 ሌላ ከሆነ (ይጠቀስ).....4
106	የትዳር ሁኔታህ/ሽ ምንድን ነው?	ያገባ .....1                      ያላገባ-----2                      የፈታ.....3 ሌላ ከሆነ ይጠቀስ.....4
107	የኮሌጅ አማካይ የትምህርት ዉጤትህ/ሽ ስንት ነው?	-----/100
108	የት ቦታ ነው ማንበብ የምትወደው/ጅዉ?	ጓደኛ ቤት.....1                      ቤት.....2 ላይብረሪ.....3                      ሌላ ከሆነ (ይጠቀስ)-----4
109	ከየትኛው አከባብ ነው የመጣህ/ሽዉ?	ከከተማ.....1                      ከገጠር.....2
110	አሁን እዚህ አርባምንጭ የሚትኖረው/ሪዉ ከማን ጋር ነው?	ብቻዬን .....1 ከጓደኛዬ ጋር.....2 ከቤተሰብ ጋር .....3 ሌላ ከሆነ ይጠቀስ-----4
111	አማካይ የወር ገቢህ/ሽ መጠን ስንት	.....ብር

	ነው?	
112	የእናትህ/ሽ የትምህርት ደረጃ ምንድን ነው?	ያልተማረች.....1 1-8ኛ ክፍል .....2 9-10(12)ኛ ክፍል.....3 ከ10(12)ኛ ክፍል በላይ.....4
113	የአባትህ/ሽ የትምህርት ደረጃ ምንድን ነው?	ያልተማረ.....1 1-8ኛ ክፍል .....2 9-10(12)ኛ ክፍል.....3 ከ10(12)ኛ ክፍል በላይ.....4

**ክፍል 2. ጫት መቃምና ለሎች ተያያዥ ባሕርያት**

201	ጫት ቅመህ/ሽ ታውቃለህ/ሽ?	አዎን.....1 ቅሜ አላውቅም.....2	ምላሽዎ 2ከሆነ ወደ ጥያቄ ቁጥር207ይህዱ
202	የት ነዉ ጫት መቃም የጀመርከዉ/ሽዉ?	ከሁለተኛ ደረጃ ትምህርት በፊት.....1 ሁለተኛ ደረጃ ላይ.....2 ኮለጅ ላይ.....3	
203	ስንት ዓመት ነዉ ጫት መቃም ከጀመርከ/ሽ?	ከሁለት ዓመት በላይ... ..1 1 እስከ 2 ዓመት.....2 ከ1 ዓመት በታች.....3	
204	ለምንድነዉ ጫት የምትቅመዉ/ምዉ?	እያነበብኩ ብዙ ሰዓት ለመቆየት.....1 ለመዝናናት.....2 ድብርት ለማሰወገድ.....3 ሌላ ከሆነ ይጠቀስ.....4	
205	በሳምንት ምን ያህል ቀን ጫት ትቅማለህ/ትቅምያለሽ?	በሳምንት ከሶስት ጊዜ በላይ.....1 በሳምንት 1-3 ጊዜ.....2 አንዳአንድ.....3	
206	ባለፈዉ ስድስት ወር ጫት ቅመህ/ሽ ታውቃለህ/ቅ ለሽ?	አዎን.....1 ቅሜ አላውቅም.....2	
207	ከቤተሰብ መካከል የሚቅም ሰዉ	አዎን.....1	

	አለ?	የለም.....2	
208	ባለፈው ስድስት ወር ሲጋራ አጭሰህ/ሽ ታወቃለህ/ሽ?	አዎን.....1 አጭሮ አላውቅም.....2	
209	ባለፈው ስድስት ወር የሚያሰክር መጠጥ ጠጥተህ/ሽ ታወቃለህ/ሽ?	አዎን.....1 ጠጥቼ አላውቅም.....2	
210	ባለፈው ስድስት ወር ምሽት ክለብ ገብተህ/ሽ ታወቃለህ/ሽ?	በሳምንት ከ1 ጊዜ በላይ.....1 በ2ሳምንት ከ1-2 ጊዜ.....2 አንዳንዴ.3 ተሳትፎ አላውቅም.....4	
211	ባለፈው ስድስት ወር ከወሲብ ጋር የተያያዙ ፊልሞችን አይተህ/ሽ ታወቃለህ/ሽ?	በሳምንት ከ1 ጊዜ በላይ.....1 በ2ሳምንት ከ1-2 ጊዜ.....2 አንዳንዴ.3 ተሳትፎ አላውቅም.....4	
212	ፀረ ኤች አይ ቭ ኤድስ ክብብ በኮለጃችሁ አለ?	አዎን .....1 የለም.....2	
213	ባለፈው ስድስት ወር በፀረ ኤች አይ ቭ ኤድስ ክብብ ተሳትፎ አድርገህ/ሽ ታወቃለህ/ሽ?	በሳምንት ከ1 ጊዜ በላይ.....1 በ2ሳምንት ከ1-2 ጊዜ.....2 አንዳንዴ.3 ተሳትፎ አላውቅም.....4	
214	ባለፈው ስድስት ወር ወደ ሃይማኖት ተቋም ክትትል ታደርጋለህ?	በሳምንት ከ1 ጊዜ በላይ.....1 በ2ሳምንት ከ1-2 ጊዜ.....2 አንዳንዴ.3 ተሳትፎ አላውቅም.....4	

ክፍል 3. ስለ ጾታዊ ባሕርያት

ተ.ቁ.	ጥያቄ	መልስ	
301	የግብረ ሥጋ ግንኙነት ፈጽመህ/ሽ ታወቃለህ/ሽ?	አዎን.....1 ፈጽሜ አላውቅም.....2	ምላሽዎ 2 ከሆነ ወደ ጥያቄ ቁጥር 315 ይህዱ
302	ለመጀመርያ ገዜ የፈጽመከዉ/ሽዉ መቸ ነዉ?	ኮለጅ ከመግባተ በፊት.....1 ኮለጅ ከገባሁ በኋላ.....2	
303	የመጀመሪያ የግብረ ሥጋ ግንኙነት የፈጽመከዉ/ሽዉ ዋንኛ ምክንያት ምን ነበር?	በግል ፍላጎት.....1 ከወንድ/ሴት ጓደኛ ግፊት የተነሳ.....2 ግንኙነታችንን ለማጠናከር.....3 ጫትቅሜ ሳላወቅ.....4 ገንዘብ ለማግኘት.....5 ፈተና ለማለፍ.....6 በሌላ ምክንያት(ይጠቀስ).....7	
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306	እስካሁን ድረስ ከስንት ሰዉ ጋር የግብረ ሥጋ ግንኙነት ፈጽመህል/ሻል?	ከአንድ ሰዉ ጋር.....1 ሁለትና ከዚያ በላይ.....2	
307	እስካሁን ድረስ ከባለበትህ/ሽ ዉጭ የግብረ ሥጋ ግንኙነት ፈጽመህ ታወቃለህ?	አዎን.....1 ፈጽሜ አላውቅም.....2	
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በ ጣም አ መስ ግ ና ለ ሁ!

