

**Addis Ababa University  
School of Graduate Studies**



Assessment of Pregnancy Risk perception and contraceptive use among female college students in Shashamane town

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### **List of abbreviations**

AAU- Addis Ababa University

AIDS- Acquired Immuno Deficiency Syndrome

ETB-Ethiopian birr

FP- Family Planning

HIV- Human Immunodeficiency Virus

IUCD- Intra uterine contraceptive device

MOE-Ministry of education

MOH- Ministry of Health

PI-Principal investigator

RH- Reproductive Health

SD- Standard deviation

SPH- School of Public Health

STDs-Sexually Transmitted Diseases

STI- Sexually Transmitted Infection

WHO- World Health Organization

## **Abstract**

**BACKGROUND:** The adolescent period is a time at which individuals explore and develop their sexuality, gender and sex role. These factors have a profound influence on a young person's current and future health. It is believed that age at menarche is declining, and that premarital adolescent sexual activity is increasing. Clearly, if this change in behavior is not compensated by an increase in premarital use of contraception, it is expected that there will be an increase in the proportion of out-of-wedlock adolescent births, as well as an increase in the prevalence of induced abortion which ends in high proportion of maternal mortality rate.

**OBJECTIVE:** The objective of this study is to assess pregnancy risk perception and contraceptive use among college student in Shashamane town.

**METHODS:** A cross-sectional descriptive survey was carried out among college students in Shashamane Woreda, Western Arsi Zone, from February 15th to May 2011. A total of six hundred seventeen subjects were involved with response rate of 100%. To collect data, a pre-tested self administered questionnaire was used.

**RESULTS:** Out of the total students 314(50.9%) were sexually active. The mean age for first sexual initiation was 17yrs with 1.4yrs of SD. The likelihood of becoming sexually active was lower among students from other Woreda than from Shashamane and two times higher among students who live with friends in rented house at significant level of association (AOR=0.5519;95%CI;0.3648,0.8349) and(AOR=2.44;95%CI;1.5581,3.8334) respectively. Out of the total respondent only 287(46.5%) knew the exact days of ovulation. Among the sexually active respondents, 164(52.2%) had ever used



contraceptive . The odds of contraceptive use among students who have low perception about the weight of being pregnant is extremely low

( AOR=0.31;95%CI;0.19, 0.5)

**CONCLUSION:** From this study, it was concluded that the age of the sexual debut among college youths were too early. Contraceptive utilization and self-risk perception toward unwanted pregnancy among youths were also very low. Youths also lack comprehensive knowledge about phase of ovulation. The likely hood of contraceptive use among students with low perception is low.

**RECOMMENDATION:** IEC programs should be put on reproductive health in order to encourage the youths to delay sex and negotiate contraceptive use. Young people rely heavily up on interpersonal contacts for sexual information, peer based intervention should be implemented to ascertain that youths have access to accurate information.

## **1.INTRODUCTION**

### **1.1 Back ground**

The adolescent period is a time at which individuals explore and develop their sexuality, gender and sex role. Unprotected premarital sexual relations are taking place at earlier ages giving rise not only to problems of unwanted pregnancy and child bearing, but also to induced abortion in hazardous circumstance.(1) High proportions of young people become sexually active during adolescence. (2)

Evidence from a number of school and college student studies indicates that the level of sexual activity among adolescent has been increasing. (3) A study conducted in USA found among college females the view that premarital coitus was immoral had declined from as high as of 70% in 1965 to 34% in 1970 and to 20% in 1975.(4, 5) The use of contraception is very in the society . This is of concern because early initiation of sexual intercourse places adolescents, particularly females, at elevated risk of being involved in an unintended pregnancy.(6)

Unwanted pregnancy is a serious public health problem, in the developing world; two million adolescents obtain abortion services each year, mostly under unsafe, illegal circumstance.(7,8)

### **1.2 Statement of problem**

Despite the availability of highly effective methods of contraception; many pregnancies are unplanned and unwanted. These pregnancies carry a higher risk of morbidity and mortality, often due to unsafe abortion. (9)

The literature on African family formation suggests that age at marriage is rising in many African societies, especially among the better-educated and urban segments of the population and premarital adolescent sexual activity is increasing.(10)

Clearly, if this change in behavior is not compensated by an increase in premarital use of contraception, it is expected that there will be an increase in the proportion of out-of-wedlock adolescent births, as well as an increase in the prevalence of induced abortion.(10)

The literature suggests that teenage childbearing is most likely to be a problem among unmarried girls, especially when they are still in school.(11) .

In many low income countries, the lack of knowledge about and access to EC may result in women resorting to unsafe abortions, which contribute significantly to maternal morbidity and mortality .(12)

### **1.3 Significance of the study**

The maternal mortality ratio has remained high at 671/100000 live births and about 20 percent of these deaths are due to induced abortion(EDHS2005). One of the groups that are particularly vulnerable to unsafe abortions is the young people (15–24 years) .Contraceptive use is low among adolescents. Because of this they are exposed to risks such as unwanted pregnancies.(13) Unwanted pregnancy is a big problem in Ethiopia; more than 60% of the pregnancies in adolescents are unwanted which is alarming figure and most of these pregnancies particularly the ones in adolescents end up as unsafe abortion. (14) The study is believed to provide necessary information for program and policy makers on pregnancy risk perception and contraceptive use among adolescent in the development of strategies to improve the service in general and in study areas specifically.

## **1.4 Literature review**

### **1.4.1sexual experience**

According to study done among 210 students at East Carolina University, of mean age 21 years,84% reported having had sexual intercourse, with 34% of the entire sample reporting a frequency of 1-3 times per week, and 27% reporting a frequency of 1-2 times per month. Forty eight percent of respondents reported having sexual intercourse with multiple partners during the past year.(9)

Another study was carried out in Uganda at Makerere University among the first year female undergraduate students, both residents and non resident in January to March 2005.Out of 379 sampled15% had had intercourse by the age of 16,and other. most(60%) of them are sexually experienced.(10)

About 3, 000 adolescents enrolled in 46 coeducational primary secondary and vocational schools in Kenya were surveyed in 1989 to investigate factors associated with premarital sexual behavior. About 77% of the males report ever having had coital experience, compared with 67% of the females. Nearly half the sexually experienced males report multiple sex partners .(11)

One study done in selected schools of Addis Ababa on 810 students of which (17.8%) sexually active. The mean age at sexual debut was  $16 \pm 2.02$  for both male and female. Males are sexually active than female with  $p < 0.001$ . More than half of sexually active (56.8%) have more than one partner. Around 33.8 % of youth have never used condom.(12)

According to study done in Nekemte one hundred forty(21.5%) adolescents reported having had premarital sexual intercourse at the time of survey, of which 102(70.3%) were males. The mean age at first intercourse was 16.2 years ( $16.2 \pm 1.5$ ) for males and 15.2( $15.2 \pm 1.7$ ) for females.

Among those adolescents who had premarital sexual intercourse the majority (57.2%) had their first sexual intercourse between 15 and 17 years.(13)

Another study was done in Harar town in 1997 among 900 youth females and males. The result shows nearly half of the participating males and one fifth females reported they have experienced sexual intercourse. About 15% of respondents experienced unwanted pregnancies and a little over half of them know the time of ovulation when pregnancy would occur.(14)

#### **1.4.2. Perception of risk of pregnancy**

A cross-sectional study was conducted in 1999 in Beijing, China. A total of 306 unmarried sexual active young women, aged 18 to 24 years were face to face interviewed. One of the most important reasons cited by 73 percent of women who had never used contraceptives was that they did not realize the risk of getting pregnant.(15)

In Transkei, South Africa, 25% of births are to teenagers, 75% of whom are unmarried. To investigate the factors associated with adolescent sexual activity and facilitate the design of preventive programs, a self-administered questionnaire was provided to 1025 females from 21 secondary schools. Knowledge of reproduction was low, with only 19% able to identify the fertile phase of the menstrual cycle. (16)

Cross-sectional survey using a self-administered anonymous questionnaire was conducted to assess knowledge, attitude and practice of contraception and sexuality. The questionnaire was filled out in April 2000 by 752 high school students in Butajira, Ethiopia. The mean age of the subjects was 17.1 years. One hundred thirteen never married students . Sexual abstinence was not dictated by perception of risk.(17)

#### **1.4. 3.Contraceptive use**

162 college students (52 males and 110 females) from an urban area in New Zealand's North Island region completed an anonymous questionnaire on sexual behavior and contraceptive use. 39% of these students had experienced sexual intercourse. 20% of the sexually active students had never used contraception, 37% reported occasional use, and 41% claimed to always use a method of fertility control.(18)

A cross sectional comparative survey was conducted to assess barriers to the use of contraceptive among adolescents and their contraceptives choices and preferences, in a randomly selected samples of in and out of school adolescents in Addis Ababa city administration from November to December 2003. The data was collected using anonymous self administered questionnaire and focus group discussion.

A total of 1591 (of which 796 out of school and 795 in school) adolescents participated in the quantitative and four sex segregated focus group participated in the qualitative part of the study. Only 28.6% of out of school and 49.3% of in school ever users consistently used contraceptive. (19)

Sexual experience, knowledge, attitude, and practice of contraception was studied among 991 senior high school students 15-17 years old in 3 secondary schools in north Gonder, Ethiopia, in May 1993 using an anonymous questionnaire. 51 (5.1%) of the respondents had used a modern contraceptive: 31 had used the condom and 20 had used the pill. 929 (93.7%) had never used any contraception. (20)

Cross-sectional survey using a self-administered anonymous questionnaire was conducted to assess knowledge, attitude and practice of contraception and sexuality. The questionnaire was filled out in April 2000 by 752 high school students in Butajira, Ethiopia. About 78% of boys and 91% of the females did not use modern contraceptives during their sexual intercourse. (17)

Different study showed that, college students had low knowledge about emergency contraceptive.

A cross-sectional survey was conducted on February 2007 in [Asella town](#). There were a total of 2167 female students in 10 colleges in Asella town. From 833 respondents 228 (27.4%) have knowledge about emergency contraception; Correct timing of emergency contraception was reported only by 82(9.8%) and 200 (24%) of them had ever used emergency contraception. (21,22,23)

## **2. OBJECTIVES**

### **2.1 General Objective**

To assess pregnancy risk perception and contraceptive use among college student in Shashamane town.

### **2.2 Specific Objectives**

- To assess sexual experience of college students in Shashamane town.
- To determine pregnancy risk perception among college students in Shashamane town.
- To assess contraceptive use among college students in Shashamane town.

### **3.METHODOLOGY**

#### **3.1 Study design**

A quantitative cross –sectional study design in the form of institutional based survey was used.

#### **3.2. Study area and period**

The study was conducted from December to May 2011 in Shashamane town, in Western Arsi zone. The town is about 255 km away from Addis Ababa. The town has 10 Administrative ‘Kebeles’ and 102062 total population from the Central Statistical Agency (CSA) ,of Ethiopia published in 2007. Out of which 50.4% were males and 49.6% were females. The Town has one hospital, two health centers, one Family Guidance Association clinic, one health post and several private clinics. The total number of college is six (two governmental and four non governmental) namely Shashamane health college, Shashamane TVET college, Paradise valley college, Rift valley college, Pharma college and African beza college. The total number of students in these six colleges is about 12,000. Out of this female student accounts 5488.

#### **3.3 Study population**

##### **3.3.1 Source Population:**

All students in the colleges of Shashamane town.

##### **3.3.2 Study Population:**

Female students who were at age of 15 -24 at the time of data collection .



### 3.4 Sample size determination

Using single population proportion sampling formula

$$n = \frac{z^2}{d^2} pq$$

Where

$\alpha$ =level of confidence

n=minimum sample size needed

d= level of precision (5%)

(2 stages)

P=prevalence of point under consideration that is taken from contraceptive use prevalence among college students, which is 24% ( 0.24 )

q= (1-p)

z= standard normal distribution curve value for 95% CI which is 1.96 (where  $\alpha= 0.05$ ).

Based on these assumptions, the sample size required from the selected colleges was

$$\frac{(1.96)^2 \times 0.24 \times (1 - 0.24)}{(0.05)^2} \times 2 = 561, \text{ and adding 10\% of non response rate, the final sample}$$

size was 617 female students.

### 3.5 Sampling procedures

Firstly, to avoid knowledge variation about reproductive health two colleges (one health college and other non health college ) from government and two colleges (one health and the other non health) from private were selected by using purposive non probability sampling and the required number of sample was allocated proportionally among the four colleges. Secondly, through a simple random sampling, departments from each college were selected. Number of subjects that were selected from each department and the perspective year were allocated proportionally. Finally, by systematic random sampling technique study subjects were selected from each department.

### **3.5.1 Inclusion Criteria**

- ✓ Female Students whose age was between 15-24.
- ✓ Regular students

### **3.5.2 Exclusion Criteria**

- ✓ Non regular student

## **3.6 Data collection procedures**

**3.6.1 Data collectors and Study Instruments:** Data collectors were trained and approached the selected respondents first by greeting and continued on explanations of the aim of the study. Self administered questionnaire was conducted after a verbal consent of respondents was obtained. The data collectors were supervised daily by the principal investigator and supervisors and problems faced during data collection were corrected on time.

The filled questionnaires completed were checked and for identified problems the solution was given immediately and all the finished questionnaires were signed by supervisors after checking for its completeness and consistence.

Self-administered questionnaires consisting socio demographic variables, items focusing on sexual experience, items focusing on perception of risk of pregnancy and focusing on contraceptive use were used.

**3.6.2. Quality control measures:** Data collectors and supervisors were adequately trained. .Data collection processes was closely monitored by the supervisors and the Principal Investigator. The self-administered questionnaire was translated to Afan Oromo by the Investigator and then back to English by another person and the consistency between the two translations was evaluated. A guideline was prepared to provide interpersonal communication. Pre-test study was conducted among the students of TVET College to maximize the validity and reliability of the study instrument that was used in the study. Forty students were included in the pre-test.

## **3.7. Variables in the study:**

### ***3.7.1. Dependent Variables:***

- Sexual experience
- Pregnancy risk perception
- Contraceptive use

**3.7.2 Independent Variables:** The independent variables included in this study were Socio-demographic variables like age, religion, marital status, information about contraceptive, sexual experience, knowledge of contraceptive.

### **3.8 Operational definitions**

**Youth/adolescent:** students whose age are from 15-24

**Contraceptive use:** student who use any modern contraceptive method until their last sexual intercourse and with in appropriate time after or before intercourse.

**Risk behavior-**engaging in risk behavior like khat chewing, alcohol consumption etc.

**Sexual behavior:** any sexual experience and /or sexual intercourse.

**Sexuality:** physiologic and psychological process within an individual which promote behavior related to procreation and/or erotic exposure.

### **3.9 Data Analysis procedures**

The raw data was entered into the computer using the data entry program EPINFO 2002 and it was analyzed by using SPSS version16. Descriptive statistics was used to determine the frequency of different variables .The data analysis techniques used was logistic regression model analysis to see the explanatory variables or predictors on the dependent variables

### **3.10 Data quality management**

The data collected was cleaned for completeness and consistencies. Responses in each question were coded for simplicity of data entry. Then, 10% of the data was entered in to EPI INFO 2002 and checked for the appropriateness of data entry.

### **3.11 Ethical consideration**

Ethical approval was obtained from the research and Ethical Committee (REC) of the school of public health, college of health science, Addis Ababa University. Informed verbal consent or permission was obtained from the Woreda Education and Health departments. The freedom of students to participate or not to participate in the study was explained.

The student's privacy during the data collection was maintained and the data obtained from them was kept confidential.

### **3.12 Dissemination of results**

The final report of the study will be defended in college of health science, school of public health, Addis Ababa University. Result of the study will also be communicated to study area colleges, zonal, regional health offices, funding agency and other relevant organizations working around sexual reproductive health. Finally, the thesis will be sent to local and international for publication.

## 5. RESULTS

### 5.1 Socio-demographic characteristics of study population

A total of 617 college youth completed the questionnaire making the response rate of 100%. Analysis was made based on the total completed questionnaires. The mean and median age of the study population was both 20 yrs with standard deviation of  $\pm 2$  yrs. Out of the total, 474(76.8%) were Oromo, 108(17.5%) Amhara, 25(4.1%) gurhage, 10 were others in ethnicity .Three hundred fifty seven (57.9%) were Muslim, 159(25.8%) orthodox, 58(9.4%) protestant and 15(2.4%) were followers of others religion. Almost all of the students, 604(97.9%) reside out of the college while only 13(2.1%) students use dormitory service as a residence. Out of the total respondents, 213(34.55) were technical and vocational students, 205 (33.2%) were health science students and the rest 159(15.8%) and 40(6.5%) were social and natural science respectively. One hundred fifty (24.3%) were first year, 302(48.9%) were second year, 163(16.3%) were third year while the rest 2 students were fourth year students. Considering the marital status, 504(81.7%) were single, 107 (17.3%) married, 3 students were separated and 3 were widowed .Among the married students 42(39.3%) had one child, 28(26.2%) had two children where as 11 students had three or more. Two hundred four (33.1%) were lived with their family and relatives, 180(29.2%) were lived with friends in rented house, 164(26.6%) lived with their boy friends and 63(10.3%) were lived with their husband. Considering the family's occupation, the family's of 368(59.6%) students were farmers, 116(18.8%) employee, 68 and 65 students were merchant and others (daily laborers, pastoralists etc) respectively (Table 1).

**Table 1: Socio-demographic characteristics of college youth in shasahamaneTown, West Arsi Zone; may 2011**

<b>Variables</b>	<b>Frequency( n=617)</b>	<b>Percent</b>
<b>Age group( years)</b>		
15-19	258	41.7
20-24	359	58.3
<b>ETHNICITY</b>		
Amara	108	17.5
Oromo	474	76.8
Guraghe	25	4.1
Other	10	1.6
<b>RELIGION</b>		
Orthodox	159	25.8
Muslim	357	57.9
Catholic	28	4.5
Protestant	58	9.4
Other	15	2.4
<b>MARRITAL STATUS</b>		
Unmarried	504	81.7
Married	107	17.3
Other	6	1
<b>NUMBER OF CHILD</b>		
No child	536	86.9
1	42	6.8
2	28	4.5
≥3	11	1.8
<b>RESIDENCE</b>		
Shashamane woreda	13	2.1
Other woreda	604	97.9
<b>WITH WHOM THEY LIVED</b>		
Family and relatives	204	33.1
Friends	180	29.2
Boy friend	164	26.6
Husband	63	10.2
Other	6	1.0
<b>FAMILY'S OCCUPATION</b>		
Farmer	368	59.6
Employee	116	18.8
Merchant	68	11.0
Other	65	10.5
<b>DEPARTMENT</b>		
Health science	205	33.2
Social science	159	15.8
Technical and vocational	213	34.5
Natural science	40	6.5

## 5.2 sexual history of the study population

Three hundred twenty two (52.2 %) had boy friend while the remained 295(47.8.) study subjects had not. From total student who had boy friend, 224(75.8%) discuss about sexual matter with their boy friend. Out of the total students, three hundred fourteen (50.9%) were sexually active out of which single students account 32 .6%. Out of sexually active students, 184(58.2%) mentioned being fallen in love as a reason for their first sexual initiation, 77(24.4%) to get sexual pleasure, 52(16.1%) for the purpose of marriage and 5 are forced to had sexual intercourse. From total students who had sexual intercourse, 263(83.3%) had one sexual partner, 39(12.6%) had two partner and 12(4.1%) had greater than two sexual partner through their life. The mean age for first sexual initiation was 17yrs  $\pm$ 1.4 SD. The median age for first sex is 17 yrs.

### Socio-demographic correlates of sexual behavior

Generally, being from other woreda and in age group 20-24 show significant difference in ever had sex with AOR= 0.55; and AOR=0.47respectively.

Students who were living with friends in rented house were twice sexually active than those who live with both parents and relatives to a significant level of association (COR=2.52; ;95% CI, 1.67-3.79, even after adjusting using other variables the association still persisted(AOR=2.4439;95%CI;1.5581,3.8334) .Even though being Gurhage shows significant association ,after adjusting for other variables the association was refuted. However, there was no difference in sexual activeness by difference in religion and family's occupation, (Table 2).

Table 2: Relation between selected socio-demographic variables and sexual behavior of college youth, Shashamane wareda, West Arsi Zone; May 2011

Variable	Ever had sex		COR(95% CI)	AOR(95% CI)
	Yes	No		
<b>Age (YRS)</b>				
15-19	166	92	1	1
20-24	148	211	<b>0.39 (0.28-0.54)</b>	<b>0.47 (0.32-0.56)</b>
<b>Ethnicity</b>				
Amara	53	55	1.00	1.00
Oromo	236	238	1.03(0.68-1.56)	1.19 (0.67 -2.15)
Guraghe	19	6	<b>3.29(1.22-8.86)</b>	1.95(0.62-6.12)
Other	6	4	1.04 (0.06-17.02)	0.76 (0.03-20.42)
<b>Religion</b>				
Orthodox	73	86	1.00	1.00
Muslim	189	168	1.33 (0.91-1.93)	1.11 (0.67-1.83)
Catholic	17	11	1.82( 0.80-4.13)	1.37 (0.54-3.49)
Protestant	28	30	1.09 0.60-2.00	0.99 (0.49-2.03)
Other	7	8	0.84(0.26-2.76)	0.60 (0.15-2.4)
<b>Where you come from?</b>				
Shashamane	127	85	1.00	1.00
Woreda				
Other			<b>0.57(0.41-0.80)</b>	<b>0.55 (0.36-0.83)</b>
Woreda	187	218		
<b>With whom currently living</b>				
Family	74	130	1.00	1.00
Friends	106	74	<b>2.52(1.67-3.79)</b>	<b>2.44 (1.56-3.83)</b>
Boy friend	74	90	1.44 (0.95-2.19)	1.54 (0.97-2.46)
Husband	57	6	<b>16.69 (6.87-40.57)</b>	<b>17.06 (6.77-42.99)</b>
Other	3	3	1.76 (0.35-8.92)	1.79 (0.32-10.01)
<b>Famil's occupation</b>				
Farmers	185	183	1.00	1.00
Employee	59	57	1.02 (0.67-1.55)	0.89 (0.55-1.43)
Merchant	35	33	1.05 (0.63-1.76)	1.13 (0.6-2.04)
Other	35	30	1.15 (0.68-1.96)	1.39 (0.76-2.57)



### 5.3 pregnancy risk perception

Participants' attitude towards perceiving themselves as susceptible to unwanted pregnancy was asked and the result indicated that, more than half of them, (54.3%) of the college youth were aware of being at risk if they engaged in unprotected sexual intercourse. From the total study population, 331(53.8%) reported that the risk of being pregnant after un protected sexual practice is high, 223 (36.1%) reported as low while the left 63 (10.1%) said medium. Out of the total respondent only 287(46.5%) knew the exact days of ovulation. ( Table 3)

**Table 3: pregnancy risk perception among college students in shashamane town,West Arsi zone may 2011**

<b>Variables</b>	<b>Frequency(n=617)</b>	<b>Percent</b>
<b>Being at risk of pregnant</b>		
Yes	335	54.3
No	282	45.7
<b>Weight of being pregnant</b>		
high	331	53.8
medium	63	10.1
Low	223	36.1
<b>Exact day of ovulation</b>		
During menstruation	52	8.4
Mid of month	287	46.5
Few days after menstruation	76	12.3
I don't know	202	32.7

### **Pregnancy risk perception with selected variables**

Being in age group 20-24 shows significant association with (COR=1.51;95%CI,1.09-2.09) when compared to age group 15-19 and the association persisted after adjusting for different variables with (AOR=1.43;95%CI=1.04,1.89). Similarly, living with friends (COR=1.59,95%CI;1.07,2.39)and(AOR=1.59,95%CI;1.05,2.41), boy friend (COR=1.73 ;95%CI ; 1.14-2.62 and AOR=1.73,95% CI;1.12, 6.67) have shown significant association with pregnancy risk perception. Ethnicity and religion were lost their significance after adjusting for confounding factors by multivariate analysis.(Table4)

**Table 4: pregnancy risk perception among college students with other variable in shashamane town, West Arsi zone may 2011(n=617)**

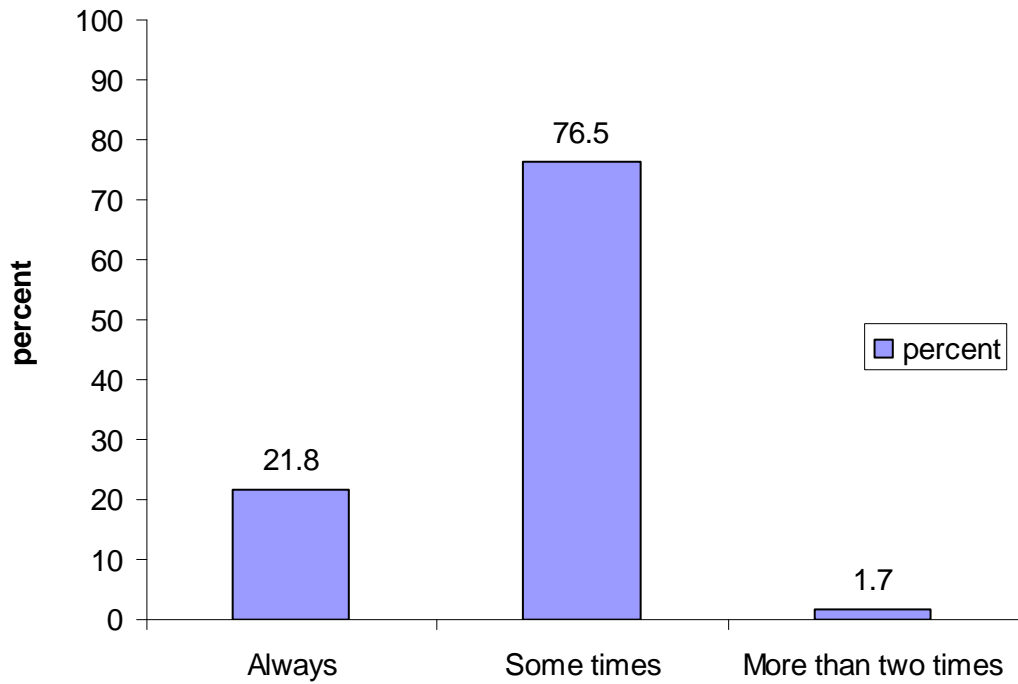
	Perception of Being pregnant		COR 95% CI	AOR 95% CI
	Yes	No		
<b>Age(years)</b>			<b>1</b>	<b>1</b>
15-19	158	102		
20-24	180	179	<b>1.51 (1.09-2.09)</b>	<b>1.43(1.04-1.89)</b>
<b>Ethnicity</b>				
Amara	47	61	1.00	1.00
Oromo	270	204	<b>1.72 (1.13-2.62)</b>	1.48 (0.87-2.52)
Guraghe	14	11	1.65 (0.69-3.97)	1.37 (0.54-3.48)
Other	4	6	1.29 (0.08-21.29)	0.64 (0.03-12.00)
<b>Religion</b>				
Orthodox	72	87	1.00	1.00
Muslim	200	157	<b>1.54 (1.06-2.24)</b>	1.27 (0.80-2.01)
Catholic	19	9	<b>2.55 (1.09-5.98)</b>	2.40 (0.99-5.86)
Protestant	35	23	1.84 (0.99-3.39)	1.51 (0.78-2.92)
Other	9	6	2.42 (0.69-8.35)	1.98 (0.52-7.48)
<b>Where you come from?</b>				
Shashamane wareda	112	100	1.00	1.00
Other wareda	223	182	1.09 (0.78-1.53)	0.93 (0.65-1.33)
<b>Whith whom are you currently living?</b>				
Family	93	111	1.00	1.00
Friends	103	77	<b>1.59 (1.06-2.39)</b>	<b>1.59 (1.05-2.41)</b>
Boy friend	97	67	<b>1.73(1.14-2.62)</b>	<b>1.73 (1.12-2.68)</b>
Husband	77	26	1.69 (0.96-3.01)	1.65 (0.92-2.98)
Other	5	1	5.97 (0.69-51.98)	5.45 (0.62-48.31)
<b>Families occupation</b>				
Farmers	199	169	1.00	1.00
Employe	60	56	0.91 (0.59-1.38)	0.97 (0.62-1.50)
Merchant	42	26	1.37 (0.81-2.33)	1.26 (0.73-2.17)
Other	34	31	0.93 (0.55-1.58)	0.82 (0.47-1.42)

#### 5.4 contraceptive utilization

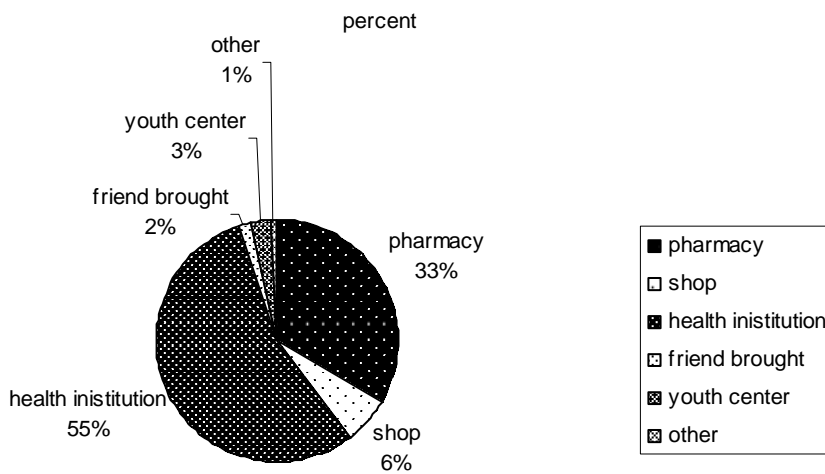
Three hundred fifty nine (58.2%) participants knew contraceptive method . Thirty seven percent of respondents knew oral pills, injectable and condom as contraceptive while it is followed by norplant contraceptive 47(13.1%). The least known contraceptive is IUCD. Out of total study population who knew contraceptive, Only 42(11.7%) consider condom as contraceptive that used to prevent unwanted pregnancy in addition to HIV/AIDS and other STI prevention. Respondents were able to cite diverse source of information about contraceptive including from health professionals 237(63.2%), from teachers /Schools 173(48.1%), from their friends 118(32.9%), from family 99(27.9%) and from religious leader 43(13.4%).

Among the sexually active respondents, 164(52.2%) had ever used contraceptive. Out of this only 19.2% were single contraceptive users. Only 51(30.7%) of the sexually active respondents claimed that they had consistent contraceptive use. Out of sexual active respondents, 118(37.6%) had ever used condom and only 26(21.8%) claimed that they had consistence use.

One hundred fifty seven, (25.4%) reported as they were currently using contraceptive. Three hundred seventy nine,(61.43%) have the plan to use contraceptive in the future. More than half,55% of contraceptive users obtain their contraceptive from the health institution,33% from pharmacy,6% from shop,3%from youth center ,2% from their partner and 1% from other place.



**Figure 1: Frequency of condom utilization among college students in shashamane town, West Arsi zone may 2011(n=118)**



**Figure 2: Place where contraceptive is obtained by college students in shashamane town, West Arsi zone may 2011(n=164)**

Out of the total study population, only one hundred fifty six (25.3%) knew emergency contraceptive. From total respondents, 111(18%) said emergency contraceptive should be taken within 72hrs, 19(3.1%) said it should be within 120 hrs while the rest 487(78.8%) did not know the exact day at which emergency contraceptive should be taken.

The odds of contraceptive use among college students was around 4 times higher in students who live with their husband than those who live with their family, and after controlling for other socio-demographic and knowledge characteristics of study participant, the odds of contraceptive use still statistically significant at level (AOR=3.20; 95% CI; 1.69, 6.43). Similarly, the likelihood of utilizing contraceptive was higher to statistically significant level among youth whose family's occupation is other (merchant, daily laborers, pastoralists, etc) than students from farmer family. Moreover, after adjusting for the other variables, the association still persisted (AOR= 1.86; 95% CI; 1.03, 4.34).

Importantly, the odds of contraceptive use among students who had low perception about the weight of being pregnant is extremely low when compared to the students with high perception about the weight of being pregnant after sexual intercourse. The association still persisted decreasing after adjusting for socio-demographic variables and other important variables with level (AOR=0.31; 95%CI; 0.19, 0.50) (table 5).

**Table 5: contraceptive use with selected variables in shashamane town, West Arsi zone may 2011(n=617)**

Variables	contraceptive use		COR 95% CI	AOR 95% CI
	Yes	No		
<b>Age</b>				
15-19	58	200	1	1
20-24	100	259	0.75 (0.51-1.08)	1.35(0.89-2.04)
<b>Ethnicity</b>				
Ahmara	27	26	1.00	1.00
Oromo	107	129	1.15 (0.70-1.88)	1.38(0.74-2.58)
Guraghe	5	14	1.56 (0.60-4.05)	1.72 (0.59-4.93)
Other	2	4	3.32(0.20,55.02)	1.69 (0.08-33.62)
<b>Religion</b>				
Orthodox	40	33	1.00	1.00
Muslim	77	112	<b>0.87</b> (0.57-1.34)	0.73 (0.43-1.24)
Catholic	5	12	<b>1.11</b> (0.46-2.72)	0.82 (0.31-2.15)
Protestant	13	15	0.97 (0.49-1.93)	0.73 (0.34-2.15)
Other	5	1	2.79 (0.85-9.11)	2.25(0.61-8.21)
<b>Where you come from</b>				
Shashamane woreda	47	80	1.00	1.00
Other wareda	94	93	1.26 (0.85, <b>1.96</b> )	1.29(0.84-1.98)
<b>With whom currently living</b>				
Family	36	37		1
Friends	37	69	1.45 (0.89-2.34)	1.22(0.74-2.20)
Boy friend	33	42	1.28 (0.78-2.11)	0.99(0.58-1.82)
Husband	34	23	<b>3.73 (2.04-6.81)</b>	<b>3.21(1.69-6.43)</b>
Other	1	2	0.82 (0.09-7.20)	0.71(0.07-5.77)
<b>Families occupation</b>				
Farmers	74	111	1.00	
Employee	29	30	1.45 (0.80-2.61)	1.40(0.85-2.33)
Other	38	32	<b>2.54 (1.20,5.35)</b>	<b>1.86(1.03-3.34)</b>
<b>Weight of being pregnant</b>				
High	103	228		
Medium	23	40	1.22(0.69- 2.15)	1.33(0.73- 2.40)
Low	32	191	<b>0.37 (0.24,0.58)</b>	<b>0.31(0.19- 0.51)</b>

## 6. DISCUSSION

This study has attempted to assess the sexual behavior of youth, their pregnancy risk perception and possible protective measures i.e. utilization of contraceptive and other related matters of college students. The basic demographic characteristic of the study population are not different from other similar college population.

This study revealed that college adolescent/youth commence sexual practice at early age.

Comprising the married, almost half of the students had sexually experienced. In this study, the mean age at first sexual intercourse was 17yrs  $\pm$ 1.4 SD. Even though many students had one sexual partner some of the students had more than one sexual partner. This may invite them for series health impact including HIV/AIDS and STD. Even though this result is lower than the results of the studies conducted in East Carolina University and in Uganda at Makerere University in which 84%(9) and 60%(10) were reported having had sexual intercourse respectively , our result depicts premarital sexual intercourse, which was taboo in our country, has been increasing from time to time. If this revolution in behavior is not compensated by an increase in premarital use of contraception, it is expected that there will be an increase in the prevalence of induced abortion which intern can increase maternal mortality.

Our result match with the result of the study conducted in our neighbor Kenya in 1989 which reveals that about 17-67% of the females report ever having had coital experience.(11)

Different study conducted in different part of Ethiopia reveal different results. Accordingly, the study done in selected schools of Addis Ababa depicted that (17.8%) of students were sexually active with the mean age at sexual debut  $16\pm 2.02$  (12)

According to study done in Nekemte and Harar ,one hundred forty(21.5%) (13) and one fifth females adolescents reported having had premarital sexual intercourse with mean age at first intercourse( $16.2\pm 1.5$  ) respectively. (14) When we compare these results with ours, our result is much higher than these. This indicates that the trend of adolescent premarital intercourse has been increasing from time to time. Different factors may insist college adolescent/youth to engage in a premarital sexual practice due to an inherent risk in being youth and the need to experiment different things by this group.



The development of sexual explicit materials through technological advancement may exacerbate the problem. Most young People are keenly sensitive to peer's opinion especially among older youths; perception peers think often had a greater influence on sexual and other risk taking behavior than the opinion of parents and older adults. Accordingly, our result shows students who lived with their friends are twice sexual active than students who lived with their families. The problem is worsening that different police makers and stake holders at each levels should give due attention to tackle the problem by appropriate means.

Considering the pregnancy risk perception of the students, more than half of the students were unable to identify the fertile phase of the menstrual cycle and only half of the students reported that, the weight of being pregnant after un protected sexual practice is high.

In different studies conducted in different corners of the world to investigate the underlying factor for low Utilization of contraceptive, it was found that low pregnancy risk perception as preliminary factor.

Accordingly, cross-sectional study conducted in China showed that, One of the most important reasons cited by 73 percent of women who had never used contraceptives was that they did not realize the risk of getting pregnant.(15). Another study conducted in Transkei, South Africa, to investigate the factors associated with adolescent sexual activity and to facilitate the design of preventive programs, depicted that Knowledge of reproduction was low, with only 19% able to identify the fertile phase of the menstrual cycle. (16) Even if the result of our study shows some advance in perception toward the fertile phase of the menstrual cycle, still more than half of the participant couldn't identify fertile phase of the menstrual cycle. Necessary information should be given to this age group through public media or any means in order to prevent the problems that Youth encounter due to unwanted pregnancy.

A cross-sectional survey was conducted to assess knowledge, attitude and practice of contraception and sexuality in April 2000 in Butajira, Ethiopia revealed that Sexual abstinence was not dictated by perception of risk.(17).

In general perception of students toward risk of pregnancy is low that they do not need to have protective measures to avoid unwanted pregnancy. Our result also justify this reality in that student with low perception did not need to have contraceptive .To over come these problems awareness creation by different method should be done by all organization who work around this area.

Regarding contraceptive use, even though almost half of the students had ever used contraceptive still consistent use is extremely low. The study done in New Zealand's to assess sexual behavior and contraceptive use indicated that 39% of students had experienced sexual intercourse and only 20% of the sexually active students had never used contraception, 37% reported occasional use, and 41% claimed to always use a method of fertility control.(18)

When we compare this study with our study, the result of our study is extremely lower than this result in terms of contraceptive use .This shows that despite high rate of sexual activity, the culture of contraceptive use is low in our country. This low utilization of contraceptive ends in induced abortion which has high contribution for maternal death. To tackle this problem awareness creation on contraceptive acceptance and utilization should be conducted cooperatively by governmental and non governmental organizations which work around this area.

In our country, the study conducted in Addis Ababa to assess barriers to the use of contraceptive among adolescent and their contraceptives choices and preferences indicates ,only 28.6% of out of school and 49.3% of in school ever users consistently used contraceptive.(19)

Similarly the study conducted in north Gonder indicated that, 51 (5.1%) of the respondents had used a modern contraceptive: 31 had used the condom and 20 had used the pill. 929 (93.7%) had never used any contraception.(20) , another study conducted in Butajira indicated 91% of the females did not use modern contraceptives during and after their sexual intercourse. A cross-sectional survey conducted in Asella town depicted that 200 (24%) of them had ever used emergency contraception. (21)

These all result including our result show low acceptance and utilization of contraceptive by adolescent. One of the underlying factors cited by different research is low risk perception which indicates significant association in our research, even after adjusting for different confounders the significance was extremely increased.

The reported low utilization rate of condom and other contraceptive in this study is an indication of the fact that the risk behaviors are widely practiced among college youths. This calls for well organized information, education and communication to bring behavioral change. Awareness or knowledge on occurrence of pregnancy and other STDs in their broader context should be translated into safe behavior so as to control the problem among the college youths.

## **7. STRENGTH AND LIMITATIONS**

This study has tried to assess factors that characterize college youths' sexual behavior, their knowledge and risk perception to ward unwanted pregnancy and contraceptive utilization.

### **STRENGTH**

- The reliability of data was maintained by use of standardized questionnaire and
- Pre-testing the questionnaire has given high reliability to the data.

### **LIMITATIONS**

- Since the study touches very sensitive and personal issues, the possibility of under estimation cannot be ruled out. But by maintaining its confidentiality and privacy we have tried to eliminate this under-estimation.
- Out of college youths were not included, but this is due to the aim was on college Students.
- Finally, this study was based on cross-sectional data, which implies that the direction of Casual relationships cannot always be determined.

## 8. CONCLUSIONS

- The age of first sexual debut was found to be very young.
- Students who came from Shashamane and who live out of their family were more sexually active .
- Knowledge of students on reproduction, specially the fertile phase of menstrual cycle is low.
- Low pregnancy risk perception results in low utilization of contraceptive.
- There was a low Utilization of contraceptive among college youths.
- The practice of condom use is very low in the area and even many students do not consider condom as contraceptive to prevent unwanted pregnancy except to prevent HIV/AIDS.

## **9. RECOMMENDATIONS**

- It is crucial to contact youth people before they engage in premarital sexual intercourse.
- IEC programs should be put on comprehensive knowledge of reproductive health to motivate the youths to delay sex and negotiate contraceptive use.
- Building(if not present) and Upgrading the capability of college reproductive health club, and improving peer education that is the main source of information about reproductive health would help to disseminate accurate information and minimize misperception specially for students who are out of their family.
- Creating awareness about the importance of condom in addition to HIV/AIDS prevention
- Conducting further study on factors affecting acceptance and consistence use of contraceptive among college students is advisable.

## ANNEX II. REFERENCES

1. Puri M. sexual risk behavior and risk perception of unwanted pregnancies and sexually transmitted diseases among young factory workers in Nepal. *November, 2001:134-145*
2. Susheela S. Evaluating the need for sex education in developing countries: sexual behavior, knowledge of preventing sexually transmitted infections/HIV. *November, 2005; 5(4): 307-31.*
- 3 . MZaJ K. Sexual and Contraceptive Experience of Young Unmarried Women in the United States .*Apr, 1977 ;9 (2 ) : 55-68.*
4. John A. Contraception awareness and practice amongst Nigerian tertiary school girls. *2002:212-265*
5. Lydia O,Donnell C. Early Sexual Initiation and Subsequent Sex-Related Risks among Urban Minority Youth. *Dec,2001 ; 33( 6):268-275*
6. Thornton A. Adolescent Religiosity and Contraceptive Usage. *journal of Marriage and Family Feb, 1987; 49(1): 117-28.*
- 7 . *Adriana O,Guadalupe G,Fernando G, Patricia C, Francisco P. Abortion and adolescent pregnancy among first-year medical students at a major public university in Mexico Cit.january,2002:341-65*
8. Uche A, Joan K, Daniel S. Sexual Activity and Contraceptive Knowledge and Use Among In-School Adolescents in Nigeria .*Mar, 1997; 23( 1 ): 28-33.*
- 9.Poulso R, Eppler M, Satterwhite T, Wuensch K , Bass L. Alcohol consumption, strength of religious beliefs, and risky sexual behavior in college students. *Am coll health 1998;46(5):227-32.*
10. Gemzell-Danielsson K. Emergency Contraception and Fertility awareness among University Students in Kampala Uganda. *2005:164-203*
11. Karungari K, Laurie S. The Correlates of Premarital Sexual Activity Among School-Age Adolescents in Kenya. *InternationalFamilyPlanning Perspectives,Sep,1993;19(3):92-7.*
12. Berhnu L, Jemal H. Does exposure to sexually explicit films predict sexual activity of in school youth? *EJHD; 23(3):183-4.*
13. Seme A, Wirtu D. premarital sexual practice among school adolescents in Nekemte town, east wolega. *Ethiopian Journal of Health Development, 2008;22(2):167-73.*
14. korra A, Haile M.sexual behavior and level of awareness on reproductive health among youths. evidence from harar, eastern Ethiopia. *Ethiopian Journal of Health Development; 1999;13(2):107-13.*

15. UNFPA. Young People and demographic trends. New York:2000  
<http://www.unfpa.org/adolescent/facts.html> (accessed in June 2010)
16. Buga D. Ncayiyana J ,Sexual behavior, contraceptive practice and reproductive health among school adolescents in rural Transkei. S Afr Med J, 1996:243-264
17. Versnel M ,Yemene B, Wendte .Sexuality and contraception among never married high school students in Butajira Ethiopia. Ethiop Med J;2002 J40((1)):41-51.
18. McEwan\_B . High school students' attitudes towards and use of contraceptives. 2002:253-287
19. Gadisa T. Barriers to use contraceptive among adolescents in the city of Addis Ababa. Ethiopian journal of health development December, 2003.
20. Fantahun M.Knowledge, attitude and practice of family planning among senior high school students in north Gonder. Ethiopian journal of health d evelopment 1988
21. Mangistu S. Assessment of level awareness and emergence contraceptive use among female college student in asella town, Ethiopia 2007
22. Josaphat K. Emergency Contraception and Fertility awareness among University Students in Kampala,uganda 2005.
23. Elisabeth F. Emergency Contraception and Fertility awareness among University Students in Kampala, uganda 2005.
24. Chris P. Adolescents and Emergency contraceptive pills in developing countries. Family Health International. May 2005, No.WP05-01



## **ANNEXE \_1 ENGLISH QUESTIONNAIRE**

### **Questionnaire on Assessment of pregnancy risk perception and contraceptive use among college student in shashamane town, western Arsi zone, Oromia region, Ethiopia**

#### **Information sheet**

Dear respondent,

This questionnaire is designed for a research work approved by Addis Ababa University college of health science, School of Public Health to be conducted in partial fulfillment of a master's degree in public health. None of your answers will be available to anyone at anytime. All the information you give us will be kept private. Do not put your name anywhere on this questionnaire. If you decide not to participate or complete the form, you may end filling the questionnaire anytime you want to. However, we really need your honest response to better understand pregnancy risk perception and contraceptive use. The results of the study would hopefully serve as an important input to intervention programs that aim at improving youth health in general and college students in particular.

It will take you 20-30 minutes to complete the whole questionnaire.

We thank you in advance for taking your time to respond to our questions!

If you decide not to participate in the study, please return the questionnaire to the Data collector/Investigator.

#### **Consent form**

I am informed all about the purpose of the study and my right to not participate or to discontinue at any time in the process of interview, I am volunteer to participate and I signed as below.

Date\_\_\_\_\_ signature\_\_\_\_\_

Name of investigator: Edao Tesa keliyo

Address of investigator: Tell **+251913736375**

Email: **edaotesa@ymail.com**

SECTION-1 Socio-demographic questions:

No	Question and filters	Possible response	Code	Skip
Q101	What is your age	-----		
Q102	Ethnicity	1.Amhara 2. Oromo 3.Gurage 4.Tigrie 99.if other specify_____		
Q103	Religion	1Orthodox 2. Muslim 3.Catholic 4.Protestant 5. No affiliation 99.If other specify _____		
Q104	Marital status	1 unmarried/single 2-married 3-divorced 4-widowed 5-separated 6- Mention if other _____		
Q105	How many currently alive children do you have?	1. none 2. one 3. two 4. three or more		
Q106	Where do you live?	1. In campus __ 2. Outside campus __		108 107
Q107	If your response to question Q106 is #2 with Whom do you live now?	1. with parent(father, mother & others) 2. With peers in rented house		

		3. Alone in rented house 4. with a boy friend 5. with husband 6. If other specify _____		
Q108	What is your parent's occupation? List all possible answers. By the way, what is the objective of asking this question?	1. both peasant 2. both employee 3. both traders If other Father _____ Mother _____		
Q109	What is your department?	1.Social science 2. health science 3.other natural science 4.TVET		
Q110	Year of study	1. year one 2. year two 3. year three 4. if other _____		
Q111	Where is your origin of residence?	1.Shashamane town 2.Out side Shashemene 3.Other zone 9.Other region		

## Part 2: Questions related to sexual experience

No	Question and filters	Possible response		
Q01	Have you ever had a boy friend?	1. Yes 2. No (Skip to Q.203)		
Q202	Have you ever discussed about Sexual matters with your boy friend?	1. Yes 2. No		
Q203	Have you ever had sexual intercourse with any one?	1. Yes 2. No		
Q204	At what age did you first have sexual intercourse?	1.age in years _____ 99.I don't remember		
Q205	What drove you to have your first sexual intercourse?	1. Fell in love 2. Had a personal desire 3. I got married 4. I was forced.		
Q06	How many sexual partners did you have?	1. One person 2. two persons 3. three or more		
Q207	Have you ever used condom?	1.Yes 2. No (skip to question209)		
Q208	How often did you use condom?	1. Always 2. Sometimes 3. Once or twice		
Q209	Have you ever used any other Contraceptive?	1.Yes 2. No (Specify)-----		
Q210	IfQ09 is yes, how often?	1. Always 2. Some Times 3. Rarely		

## Section-3-Questions related to pregnancy risk perception

No	Question and filters	Possible response		
Q301	Do you think that a female can become pregnant after unprotected sexual intercourse	1.yes 2.no		
Q302	How big is your chance of getting pregnancy?	1-high 2-low 3-no chance at all 4 .I don't know		

Q303	What makes you at higher risk of contracting pregnancy?	1.being student 2.being from poor family 99.other specify_____		
Q304	Do you know the menstrual phase at which pregnancy can occur?	1.yes 2.no 3.don't know		

### Section-4 Question related to contraceptive use

No	Question and filters	Possible response		
Q401	Have you ever heard about contraceptive methods?	1. Yes 2. No (skip to Q407)		
Q402	If yes which one?  Pills IUCD Injection Norplant Condom  ➤ More than One response is possible	Yes      No 1          2 1          2 1          2 1          2 1          2		
Q403	Source of information  ➤ More than One response possible	1.From health 2.workers _____ 3.education __ __ 4.from friends/peers discussion _ 5.from teachers in the class 6.from clubs in the schools 7.From parents __ __ 8.From religious leader __ 9.From mass media (TV, Radio) 10.By reading articles/news		

		99.If other specify _____		
Q404	Have you ever used any modern contraception methods	1.Yes 2.No		
	Have you currently using any modern contraception methods	1.Yes 2.No		
Q405	If yes which one?  1. Pills ____ 2.Injectable ____ 3. Implants ____ 4. IUCD ____ 5. Condoms ____ 6. Calendar methods _ 7. Withdrawal ____ 8. Tubal ligation ____ 9. Others ____	Yes          No 1              2 1              2 1              2 1              2 1              2 1              2 1              2 1              2		
Q406	Do you want to use any contraceptive in the future?	1.yes 2.No		
Q407	Where do/did you get the contraceptives?	1.From pharmac 2.From shop 3.From health institution 4.from friends 5.youth center 99.if other specify ____		
Q408	Have you ever had unintended pregnancy?	1. Yes ____ 2. No ____		
Q409	Do you know how to prevent Unwanted pregnancy following unprotected sexual intercourse?	1.Yes ____ 2.No ____		
Q410	If Yes to Q408 what are the methods used to prevent unwanted pregnancy?	1. Pills 2. Injection		

		3. condoms 4. IUDs 5. Norplant 6. Sterilization 7. Withdrawal 8. Calendar method 9. Abstinence 10. Emergency contraception 99.. specify if other_____		
Q411 1	Have you ever faced unwanted pregnancy while using a contraceptive?	1. Yes 2. No __9(skiptoQ412)		
Q412	If yes to Q410,what was the reason for unwanted pregnancy?	1. rape 2. incest		
Q413	Have you ever heard about emergency contraception?	1.Yes 2. No		
Q414	if yes which one( more than response is possible)	1.OCP 2. IUCD 3. Injectable 4. Implant 5. Others __ __		
Q415	Source of information	1.From health workers 2.education/clinic 3.from friends/peers discussion 4.from teachers in the class 5.from clubs in the schools 6.From parents 7.From religious leader 8.From mass media (TV, Radio)_ _ 9.By reading articles/news		

		99.if other specify _____		
Q416	Do you know from where emergency contraception can be obtained?(more than one answer is possible)	1.From health institutions 2.from private clinic 3.Pharmacy 4.Shop 99.specify if other _____		
Q417	In your opinion, when do you think EC should be used?	1.After unprotected sexual intercourse __ __ 2.when unwanted pregnancy occurred __ __ 3.As an ongoing contraceptive 4.Do not know __ __ 99.specify if other _____		
Q418	Do you know when emergency Contraceptive pills will be effective after unprotected sexual intercourse?	1.within 72 hours __ __ 2.within 120hours/5days _ 3.I don't know the time _		
Q419	Which methods do you know used as emergency contraceptive ?	1. Pills __ 2. Injection __ __ 3. condoms __ __ 4. IUCDs __ __ 5. Norplant __ __ 6. Sterilization __ __ 7. Withdrawal __ __		



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**Mana barumsa Fayyaa hawaasaa**  
**Birqaba Gaafilee**

Universitii Addis Ababa ti kolleejjii saayinsii fayyaattdipaartiimeentii fayyaa haawaasaa gaafilee shamareen barattoota kolleejiwwan magaalaa shashaamanee keessa barataa jiranin kan gutamu.

Tajaajila fayyaa shamareeni foyyessuf, rakkoolee fayyaa dhimma walqunamtii nafasaalaa tasaa fi haala dawaalee dhimma kanaaf oolan gadi-fageenyaan qorataniin hubachun barbaachsaa dha.

Kanaafu qorannoon sadarkaa beekumsaa, illaalchaafi ittifayadama dawa qusano maattii yaroo ariiti shamareenif gargaaru fi dhimmota keeninsa tajaajila kanaa gufachisu malan qorachuuf qorannoon kuninqophaa'eera. Isiniis qorannoo kanaaf caraadhaan filatamtanii jirtu.

Gaafii qorannoo kanaa keessatti hirmaachuun fedhii keessanii? Eeyyee ykn Miti .Deebi kee mallattoo "X" galchudhaan mirkaneesi. Yoo deebin kee eeyyee ta'ee gara fuula itti annuti dabri. Yoo deebin kee miti ta'e hanga shamareen gutaa jiran xumuranitti waraqaa gaafichaa gadi garagalchitani iddoo taa'uumsa keessanni irraa turtan.

***unkaa waliigaltee***

*Anii kaayoo qorannichaas ta,ee gaafii irratti hirmaachuu dhiisuu ykn yeroo barbaadetti addaan kutuuf akkan mirga qabuu siritti hubadheera.haaluma kanaan gaafii fi deebicha irratti fedha kootiin hirmaachuu koo mallattoo kootiin ibseera.*

eeyyee        mitii   

guyyaa\_\_\_\_\_

mallattoo\_\_\_\_\_

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*Gaafilee*

Kutaa-1-Haala-maalummaa dhunfaa ilaalu (socio-demography)

Deebii kee lakkofsa irratti mari(circle)

Maqaa koolleejji \_\_\_\_\_

G101	Umriin kee meeqa?	Waggaa _____ (Lakkofsaan barresi)
G102	Qomoon(sabni) kee maalii?	1. Amaaraa ____ ____ 2. Oromoo ____ ____ 3. Guraagee ____ ____ 4. Tigiree ____ ____ 9. Kan biraa yoo ta'ee ibisi-----
G103	Amantiin kee maali?	1. Ortodooksii ____ ____ 2. Islaama ____ ____ 3. Kaatolikii ____ ____ 4. Proteestaantii ____ ____ 5. Kamiyu hinhordofu ____ ____ 99.Kan biraa yoo ta'ee ibsi _____
G104	Haalli fuudhaa fi heerumaa kee maal fakaata?	1 In heerumnee 2. Heerumeeraa 3. Hikeeraa 4. yeroof adda baaneraa 5. Najalaa du'eera 99. Kan biraa yoo ta'ee ibsi _____
G105	Ijoolee meeqa deesee?	1. hindeenyee 2. Tokko 3. Lama 4. Sadi fi sanaa oli

G106	Edoon jireenyaa kee eessaa?	1. Oddoo koolleejji kessa(dormitory) 2. Oddoo koolleejjiin ala/Magaalaa kessaa
G107	Yoo deebin G106 Lakk. 2 ta'ee (magaalaa kessa) Yeroo ammaa eenyuu waliin jiraata?	1. Maatii kiyya(Abbaa, Haadhaa fi kkf) 1. Hiriyoota kiyya walin mana kireefannee 2. Kophaa kiyya mana kireefadhee 3. Kaadhimaa kiyya waliin 4. Abbaa warraa kiyya waliin 99. Kan biraa yoo ta'ee ibsi.....
G108	Hojjin haadhaa fi abbaa keetii maali?	1. Lamaanu qotee bultootaa ____ ____ 2. Lamaanu hojattota motummaati ____ ____ 3. Lamaanu daldaltoota ____ ____ 99. Kan biraa yoo ta'ee ibsi Abbaan_____ Haarmeen_____
G109	Gostii leenji keettii maali?/dipaartimeentii/	Maqaa Barressi_____
G110	Waggaa meeqaffaa barachaa jirta?	1) 1 <sup>ffaa</sup> ____ ____ 2) 2 <sup>ffaa</sup> ____ ____ 3) 3 <sup>ffaa</sup> ____
G111	Barumsaaf eessarraa dhuftee?	1. Magaalaa shaashamannee ____ ____ 2. Aanaa biraa irraa_____

### Kutaa-2 Odeeffannoo waa'ee hormaataa

G201	Hiriyaa dhiiraa qabdaa	1.eeyyee 2.hin qabu, gara G203 ce'ii
G202	Waa'ee Wal qunnamtii qaama saala wajjin mari'atee beektaa?	1. Eeyyee ____ 2. hinbeeku ____
G203	Wal qunnamtii qaama saala nama kamminu wajjiin gootee beektaa?	1. Eeyyee 2. Miti

G204	Yeroo wal qunnamtii qaama sala gootu umriin kee waggaa meeqa ture?	1.waggaan _____ 99.hin yaadadhu
G205	Walquunamtii saalaa akka gootu kan sidirqisiisee maal ture?	1.jaalala 2.fedhii fooniitiif 3.heerumeeti 4.dirqisiifameeti
G206	Hanga ammatti nama meeqa wajjiin wal qunnamtii saala gootee?	1.tokko 2.lama 3.sadiifi achii ol
G207	Yeroo wal qunnamtii qaama saala gootu koondomii fayyadamtee beekta?	1.eeyyee 2.hin beeku
G208	Deebin G207 “eeyyee” Yoo ta’ee yeroo kam kam fayyadamtaa?	1.yeroo hundaa 2.yeroo tokko tokkoo 3.al lama ykn sadii
G209	Mala karoorra maatii fayyadamtee beektaa?	1.eeyyee 2.hin beemu
G210	Deebin G209 “eeyyee” yoo ta’ee yeroo kam kam fayyadamtaa?	1.yeroo hundaa 2.yeroo tokko tokkoo 3.darbee darbee

### **Kutaa-3 odeefannoo hubannoo carraa ulfaa’uu**

G301	Shamarreen taka wal qunnamtii saala yoo goote ni ulfoofti jette yaadaa	1.eeyye 2.mitii
G302	Carran ulfaa’uu wal qunnamtii of eeganno hin qabnee hangam jettee yaada?	1.baay’ee guddaadha 2.baay’ee xiqqaadha 3.Hin beeku
G303	Maal ta’utuu ulfa hin barbaachisneef nama saaxila?	1.Barattuu ta’uu 2.maatii hiyyeesa irra dhalachuu 3. hin beeku
G304	Laguu baatii kanaatii hanga baatii itti aanutitti guyyootiin itti ulfi uumamu ni jiraa?	1.eeyye 2.hin jiru 3.hin beekuu

G305	Shamarreen taka baatii keessati yerroo kam wal qunnamti of eegannoo hin qabne yoo goote ulfaa'uu dandeessi?	1.yeroo lagu argituttii 2.walakkaaa baatiiti 3.laguun booda 4.Hin beeku
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Kutaa- 4 **Beekumsa, ilaalchaa fii haala itti fayyadama karoora maatii ariiti**

**(Emergency contraceptive )**

<i>Lakk</i>	<i>Gaafiilee</i>	<i>Deebii ta'u malan</i>
G401	Waa'ee karoora maatii beektaa?	1. Eeyyee _____ 2. Hinbeeku .....gara G403 tti dabri
G402	Deebiin G401 “eeyyee” yoo ta’ee kamiin?  ➤ Deebiin tokko ol ta’uu ni danda,a	1. Dawaa karoora maatii kan liqimsamu ____ 2. Dawaa karoora maatii lilmoon waraanamu ____ 3. Kondomitti fayadamu 4. Dawaa gadameessa kessatti kaawamun ____ 5. Dawaa ciqileetti awaalamun ____ ____ 6. Da’umsa hanga dhumaattii dhisu (ujjumoo Hidhu) ____ 7. Yeroo walqunamti saalaa ija sanyi dhiiraa qaama dhalaattin alatti dhangalaasun. ____ 8. Guyyooti itti ulfa hinta’amneeti fayadamu _ 9. Walquunamtii saalaa yeroo murtaa’eef dhaabu _ 99. Kan biraa yoo ta’ee ibsii_____
G403	Deebiin G401 “eeyyee” yoo ta’ee Odeefanno/barumsa/ eessa irraa argate? <i>(deebii tokko oli qabaachu nidanda’a)</i>	1. Barumsa ogeessa fayyaa irraa 2. Hiriyoota koo irraa 3. Mana barumsaa/barsisaa/ irraa 4. Gummiwan mana barumsaa kessaa 5. Maatii kiyya irraa 6. Abbooti amantaa irraa

		7. Oduu televiziyiinii ykn raadiyoo irraa 8. Barulee dubisuudhaan 99. Kan biraa yoo ta'ee ibis
G404	Mala (dawaa) karoora maatiittin fayadamte beektaa?	1. Eeyyee _____ gara G406 tti dabri 2. Hinbeeku _____
G405	Yeroo ammaatti fayyadamaa jirtaa?	1. Eyyee 2. mitii
G406	Gara fuulduratti karrora maati fayyadamuu barbaadaa?	1.eyyee 2.miti
G407	Deebiin G405 "eeyyee" yoo ta'ee dawaa karoora maatii eessa irraa argate? <i>(deebii tokko oli qabaachu nidanda'a)</i>	1. Farmaasii irraa ____ ____ 2. Suuqii irraa ____ ____ 3. Dhaabata fayyaa irraa ____ ____ 4. Hiriyoota irraa ____ ____ 5. Dhaabata dargaggoo irraa ____ ____ 99. Kan bira yoo ta'ee ibsi _____ _
G408	Ulfi ati hinbarbaanee si qunamee beekaa?	1. Eeyyee _____ 2. Hinbeeku _____
G409	Ulfa hinbarbaadamnee walqunamtii saalaa tasaa irraa dhufu akkamitin akka ofrira ittistu beektaa?	1. Eeyyee _____ gara G409 tti dabri 2. Hinbeeku _____
G410	Deebiin G408 "eeyyee" yoo ta'ee mallii(karaan) ulfa hinbarbaadamnee walqunamti saala tasaan dhufee	1. Dawaa karoora maatii kan liqimsamu ____ ____ 2. Dawaa karoora maatii lilmoon waraanamu ____ ____

	<p>ittin ittifamu maalii? (<i>deebii tokko oli qabaachu n idanda'a</i>)</p>	<p>3. Kondomitti fayyadamu ____ ____ 4. Dawaa gadameessa kessatti kaawamun ____ ____ 5. Dawaa ciqilee kessa awaalamun ____ ____ 6. Da'umsa hanga dhumaattii dhiisu (ujjummoo Hidhu) ____ ____ 7. Yeroo walqunnamti saalaa sanyi dhiiraa qaama dhalaattin ala dhangalaasun. ____ ____ 8. Guyyooti itti ulfa hinta'amneeti fayadamu ____ ____ 9. Walquunamtii saalaa yeroo murtaa'eef dhaabu ____ 99. Kan biraa yoo ta'ee ibsii _____</p>
G411	<p>Dawaa karoora maatii osoo fayadamtu ulfoofta beektaa?</p>	<p>. Eeyyee ____ 2. Hinbeeku _____</p>
G412	<p>DeebiiG410“eeyyee” yoo ta'ee ulfi maaliif hin barbaadamnee?</p>	<p>1. Barattu waanan ta'eef ____ ____ 2. Hojji waan hinqabneef ____ ____ 3. Jaalaleen kiyya waan nadhiseef ____ ____ 4. Heerumaan ala waan ta'eef ____ ____ 5. Abbaa waraa kiyyaan waligaltee waan Hinqabneef ____ ____ 6. Ijoollee bay'ee waanan qabuf ____ ____ 7. Guddedi dhaan waan ta'eef ____ ____ 8. Fira kiyya irraa wanta ulfaa'eef ____ ____ 9. HIV/AIDSin waan qabameef ____ ____ 99. kan biraa yoo ta'ee ibsi _____</p>
G413	<p>Waa'ee dawaa/mala karoora maatii yeroo</p>	<p>1. Eeyyee _____ gara G413tti dabri 2. Hinbeeku _____</p>

	ariiti (Emergency contraceptive) dhageessee beektaa?	
G414	Deebii413 “eeyyee” yoo ta’ee, mala kamiin?	<ol style="list-style-type: none"> <li>1. Dawaa karora maatii liqimsamu ___ ___</li> <li>2. Dawaa karoora maatii lilmoon waraanamu ___</li> <li>3. Kondoomii ___ ___</li> <li>4. Dawaa gadameesa kessa kaawamu ___ ___</li> <li>5. Dawaa ciqilee kessa awaalamu ___ ___</li> </ol>
G415	Deebii413 “eeyyee” yoo ta’ee waa’ee mala karroora maatti yeroo ariiti eessa irraa dhageessee? (deebii tokko oli qabaachu nidanda’a)	<ol style="list-style-type: none"> <li>1. Barumsa ogeessi fayyaa keenu irraa ___</li> <li>2. Marii hiriyoota walin godhamee irraa ___ ___</li> <li>3. Mana barumsaati barsisaa irraa ___ ___</li> <li>4. Gumiwan mana barumsaa irraa ___ ___</li> <li>5. Maatii kiyaa irraa ___ ___</li> <li>6. Abbooti amantaa irraa ___ ___</li> <li>7. Oduu televiiziyiinii ykn radiyoo irraa ___ ___</li> <li>8. Barulee dubisudhaan ___ ___</li> <li>9. Kan biraa yoo ta’ee ibsi _____</li> </ol>
G416	Dawaan karoora maatii ariiti eessa irraa akka argamu beektaa? (deebii tokko oli qabaachu nidanda’a)	<ol style="list-style-type: none"> <li>1. Dhaabata Galatoomaa !fayyaa irraa ___</li> <li>2. kiliniikii dhunfaa irraa ___ ___</li> <li>3. Faarmaasii irraa ___ ___</li> <li>4. Suuqii irraa ___ ___</li> <li>5. Hinbeeku ___ ___</li> <li>9. Kan bira yoo ta’ee ibsi _____</li> </ol>
G417	Akka oddeefannoo argateen dawaan(malli) karoora maatii ariiti yeroo kam hojiira	<ol style="list-style-type: none"> <li>1. Walquunamti saalaa tasaatin booda ___ ___</li> <li>2. Ulfi hinbarbaadamnee yeroo umamee ___ ___</li> <li>3. akka karoora maatiitti ittin gargaaramuf ___ ___</li> </ol>



	olu qabaa?	4. hinbeeku ___ __ 99. Kan biraa yoo ta'ee ibsi _____
G418	Walquunamti tasaan booda dawaan karroora maati ariiti liqimsamu yeroo kam yoo liqimsamee ulfa hinbarbaadamnee ittisu danda'a?	1. Sa'atti 72 kessatti ___ 2. Sa'attii 120/guyyaa 5/ kessatti ___ __ 3. hinbeeku ___ __
G419	Mallii(karaan) kumi karroora maatii ariitiittif akka oolu beektaa? <i>(deebii tokko oli qabaachu nidanda'a</i>	1. Dawaa karora maatii liqimsamu ___ __ 2. Dawaa karroora maatii lilmoon waraanamu ___ 3. Kondoomii ___ __ 4. Dawaa gadameesa kessa kaawamu ___ __ 5. Dawaa ciqilee kessa awaalamu ___ __ 6. Da'umsa hanga dhumaati dhisu/ ujjumoo hidhu ___ __ 7. Ija sanyi dhira qama dhalaatin ala dhangalaasu ___ __ 8. Guyyooti itti ulfi hinumamneti Fayyadamu ___ __ 9. Guyyooti muraasaaf walquunamti dhiisu ___ 10. Hinbeeku ___ __ 99. Kan bira yoo ta'ee ibsi _____

*Galatoomaa!!*

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for degree in this or any other university and that all sources of materials used for this thesis have been fully acknowledged.

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Signature\_\_\_\_\_

Place:-Addis Ababa,Ethiopia

Date of Submission:May,2011

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

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Signature:-\_\_\_\_\_