

Prevalence of Pre-marital Sexual Practices and Associated Factors among Jimma Teacher Training College Students in Jimma Town, South West Shoa Zone, Oromiya Region, Ethiopia-2013

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Abstract

Background: Currently, adolescents are more sexually active than ever before. Being sexually active exposes them to various sexual and reproductive health problems, such as; unwanted pregnancy, unsafe abortion, obstructed labour, contracting sexually transmitted infections and death. Thus the Prevalence of Pre-marital Sexual Practices and Associated Factors among students should be an area of concern for researchers.

Methods: A facility based cross-sectional study (both quantitative and qualitative) design was conducted on 361 students of Jimma Teacher Training College from February 28 to March 05, 2013. A structured questionnaire adapted from different literatures used to collect data. A self administered questionnaire was completed by sampled and systematically selected students. The data was entered, cleaned and analyzed by using SPSS version 16.0. Bivariate and multivariate logistic regressions were used for quantitative data analysis while thematic analysis was used for qualitative data analysis.

Result: One hundred forty two (39.7%) of participants reported to have practiced pre-marital sexual intercourse, of whom 90 (63.4%) were males and 52 (36.6%) were females. The mean age at first sexual intercourse was 17.75 years for males and 17.98 for females. Variables such as, years at college, students whose mothers are having private business, having pocket money, students having friends with dating experience, communication with families, source of sexual and reproductive health information and seeing pornography were the independent predictors of pre-marital sexual practices, ($P < 0.05$).

Conclusion: The study reflected that there is high prevalence of pre-marital sexual practices (39.7%) among the young people. Young people were practicing risky sexual behaviors including having multiple partners, having sex with commercial sex workers, substance abuse, drinking alcoholic beverages, seeing pornography .etc. Therefore, this requires an integrated effort of governmental and non-governmental agencies and parents to address young people's sexual and reproductive health problems and intervene accordingly.

Keywords: Young people; Pre-marital sexual practices; Risky sexual behaviors; Knowledge about sexual and reproductive health

Abbreviations: AOR: Adjusted odds ratio; AIDS: Acquired Immune Deficiency Virus; CI: Confidence interval; CSA: Central statistics authority; CSW: Commercial sex workers; Edu: Education; FGD: Focused group discussion; HIV: Human Immune deficiency Virus; IEC: Information, education and communication; JTTC: Jimma teachers training college; ISY: In-school youth; MOLSA: Ministry of labor and social affairs; OSY: Out of school Youth; OR: Odds ratio; PMSP: Pre-marital sexual practices; R/ship: Relationship; SPSS: Statistical package for social science ;STD: Sexually transmitted disease; SRH: Sexual and reproductive health; STIs: Sexually transmitted Infections; VCT: Voluntary counseling test; WHO: World Health Organization; PPS: Probability proportionate to sample size

Introduction

The World Health Organization defines "adolescents" as people age 10-19; "youth" as those age 15-24; and "young people" as those age 10-24 [1]. Young people undergo a period of development when biological, physical, cognitive, and social traits mature from childhood to adulthood. During this stage, the challenges that youth face and the decisions they make can have a tremendous impact on the quality and length of their lives. Many important life events and health-damaging behaviors that are contributing for pre-marital sexual activities start during these years [2].

Unprotected sexual activity carries with it risks to reproductive health at any age but most particularly during adolescence, because the risks of infection are greater when full physical maturation is

incomplete, and the risks of pregnancy are greater at the youngest maternal ages and when the pregnancy is unwanted, which is often the case when a pregnancy occurs prior to marriage [3].

Pre-marital sexual activities among adolescents have been reported to be increasing worldwide. A rising prevalence of early sexual activity among youth has been witnessed in Taiwan and around the world for the past decade. studies done in Taiwan have identified that the factors associated with early onset of sexual activity among youth include individual, socio demographic factors, such as age, gender, educational status, and race/ethnicity , interpersonal factors related to knowledge, attitudes, beliefs, expectations, family structure and parental involvement [4,5].

Several studies in Sub-Saharan Africa have also documented high and increasing pre-marital sexual activities among adolescents. The rise

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in pre-marital sex in Africa has resulted from a sexual revolution that came with western culture. Non experimental cross sectional studies that are undertaken in other countries outside Ethiopia revealed that male gender, alcohol consumption, substance use and living out of parental close supervision were associated with early initiation of pre-marital sexual activity.

In Ethiopia, an increasingly large number of adolescents are enrolled in both private and government colleges and they often live away from parental guidance. Early engagement in pre-marital sexual activity without having proper protection has been one of the concerns, which might be due to lack of inadequate education on their sexual and reproductive health and contraceptive use, access to health services and vulnerability to sexual abuse [6-15].

Related to their pre-marital sexual activities, adolescents in Ethiopia are exposed to various risks such as unprotected sex, early marriage, early pregnancy, unsafe abortion, sexually transmitted infections (STIs) and HIV/AIDS, unemployment, drug abuse and crime. Moreover, studies show that in Ethiopia, 60% of adolescents' pregnancy is unwanted or unintended pregnancies resulted from unprotected sexual intercourse [7].

Adolescents who become sexually active early at age 14 or younger face numerous health risks. They are more likely to engage in high-risk sexual behavior such as unprotected sex, having multiple or high-risk partners, raping a partner, and being intoxicated while having sex, alcohol and drug abuse, stealing, violence, and poor performance in school [16-18]. High divorce rates, sexually transmitted diseases, unwanted pregnancies, abortions, and related health problems frequently follow romantically-driven decisions on sexual relationships. The psychological and socioeconomic cost of these problems and the impact of their cascade on the national social welfare, with the universal nature of sexual relationships, are immense [19,20].

The majorities of studies done previously in some parts of Ethiopia identified inconsistent predictors of pre-marital sexual activities and have focused mainly on the relationships between pre-marital sexual initiation and socio-demographic variables but rarely go beyond that as well as there were no recent studies conducted on this topic for college students, especially at this study area, so in spite of that, this study assessed the prevalence of pre-marital sexual practices and other additional factors contributing to it among Jimma Teacher Training College students, in Jimma Town of south west Ethiopia.

Materials and Methods

A facility based cross sectional study (both quantitative and qualitative) design was used among sampled regular students in Teacher Training College of Jimma town, South west Ethiopia, Oromia regional state from February 28-March 05, 2013. Jimma Teacher Training College is one of the governmental Colleges in Jimma town which is about 2.5 km to the northeast of Jimma City Centre. In this year it has a total of 2,292 students, in which 1046 of them are males and 1246 of them are females from all 11 streams.

Single population proportion formula was used to calculate a sample size, by using 50% of the proportion of expected prevalence of pre-marital sexual practice, as there is no such study for college students in the country. Simple random sampling technique was used for allocating a probability proportionate to sample size for each year one to year three students across each 11 streams. Study participants who were not included in quantitative sampling were conveniently selected from all students and interviewed in depth.

Pre-tested structured questionnaires were adapted after reviewing relevant literatures and similar studies and were self-administered to the respondents.

After intensive revision of the instruments (tools) was made the final version of the English language, was translated in to Afan-Oromo version and back to English by individuals who had good command of two languages, English and Afan Oromo. It was also reviewed by ethical committee and comments were incorporated for content validity. The tools grouped and arranged by the principal investigator according to each particular objectives. The instrument comprises in part I: socio-demographics characteristics with 18 items, Part II: knowledge about sexual and reproductive health issue questions with 12 items with response format of 'yes' or 'no' measurements. Part III: Sexual history with 21 items and part IV: Questions about some risk behaviors of adolescents with 5 items.

The collected data was edited, coded, categorized, verified as well as entered into a computer and analyzed using SPSS window version 16.0. The statistical analysis was conducted in two steps namely: Bivariate and multivariate analysis. Frequency distribution, percentages, means, and cross tabulations between the dependent and independent variables used to describe and summarize the basic socio-demographic characteristics of the respondents. Bivariate analysis was done for all independent and dependent variables one by one using binary logistic regression to see their association. The variables which show significant association on bivariate analysis with p-value of <0.05 were used for multivariate logistic regression. Strength of the relationships (adjusted odds ratio) between specific independent variables and dependent variable was determined by a multivariate logistic regression analysis (to control any confounders) with 95% confidence intervals. Statistical significance declared at P<0.05.

The qualitative data was analyzed by sorting and coding the responses under some selected thematic frameworks based on the interview guides and summarized manually and presented in narratives and triangulated with the quantitative data descriptively. Age at pre-marital sex, factors contributing to pre-marital sex, consequences of pre-marital sex, risky sexual behaviors, reproductive health, source of reproductive health information and respondents' recommendations were selected themes.

Ethical clearance was obtained from Jimma University College of public health and medical science Ethical Review Committee. Prior to data collection, an official letter was written to JTTC, and then the head or director of the college was communicated through formal letter in addition to personal communication made with the principal investigator.

All study participants were given information on the study in order to obtain their verbal consent before administering questionnaires and were assured that all data was confidential and was only analyzed as aggregates. They were also informed that they have full right to discontinue or refuse to participate in the study. Answers to any questions were made completely confidential.

Results

Socio-demographic characteristics of young people

From the total of 358 respondents 192 (53.6%) and 166 (46.4%) were males and females respectively. One hundred thirty two (36.9%)

of the respondents were first year, 121(33.8%) were second year while, 105(29.3%) were third year students. Half of the respondents had pocket money while the rests had not. (Table 1). The majority of the students' parents (fathers and mothers) were farmers, 289(80.7%) and 278(77.7%) respectively (Table 2).

Variables	Frequency	Percentage
Stream		
Natural	243	67.9
Social	115	32.1
Sex		
Male	192	53.6
Female	166	46.4
Age		
15-19	132	36.9
20-24	208	58.1
25-29	17	4.7
≥30	1	0.3
Years at college		
First year	132	36.9
Second year	121	33.8
Third year	105	29.3
Academic performance		
High achiever	115	32.1
Medium	242	67.6
Low achiever	1	0.3
Ethnicity		
Oromo	346	96.6
Amara	10	2.8
Gurage	2	0.6
Religion		
Protestant	89	24.9
Orthodox	169	47.2
Muslim	88	24.6
Catholic	2	0.6
Wakefata	10	2.8
Frequency of religious service attendance		
Once per day	204	57
Once per week	136	38
Once per month	6	1.7
Once per year	3	0.8
Never attend	9	2.5
Living arrangement/place of residence		
In student hostel	3	0.8
Relatives home	1	0.3
In rented house	353	98.6
In church	1	0.3
Currently living with		
Father and mother	3	0.8
Relatives	6	1.7
Fiancé	17	4.7
Spouse	7	2
Same friend	229	64
Alone	96	26.8
Pocket money		
Yes	179	50
No	179	50

Table 1: Socio-demographic characteristics of the study population. Jimma teacher training college, Jimma town, April, 2013 n=358.

Variables	Frequency	Percentage
Fathers' educational status		
Illiterate	124	34.6
Read and write	99	27.7
Primary school	63	17.6
High school	34	9.5
12+	38	10.6
Mothers' educational status		
Illiterate	210	58.7
Read and write	83	23.2
Primary school	43	12
High school	11	3.1
12+	11	3.1
Fathers' occupation		
Daily laborer	2	0.6
Farmer	289	80.7
Civil servant	37	10.3
Employed in private sector	5	1.4
Has private business	21	5.9
Other(preacher&student)	4	1.1
Mothers' occupation		
Daily laborer	6	1.7
Farmer	278	77.7
Civil servant	11	3.1
Employed in private sector	5	1.4
Has private business	51	14.2
Other(merchant)	7	2
Approximate family monthly income		
50-500	103	28.8
550-1000	97	27.1
1250-2000	70	19.6
2050-6000	58	16.2
≥ 10,000	30	8.4
Perceived family economic status		
Very rich	19	5.3
Rich	84	23.5
Medium	233	65.1
Poor	22	6.1
Perceived relationship with family		
Very good	306	85.5
Good	38	10.6
Fair	11	3.1
Bad	3	0.8

Table 2: Description of parents of the study population, Jimma teacher training college, Jimma town, 2013n=358.

Pre-marital sexual history of young people

From the total respondents, 226(63.1%) had sexual partners and 158(44.1) reported of ever having sexual intercourse. One hundred forty two (39.7%) of the study population had practiced pre-marital sexual intercourse, of whom 90(63.4%) were males and 52(36.6%) were females. From 158 respondents who had ever sex, 103(65.2%) had practiced pre-marital sex in the past 12 months prior to data collection, from whom 63(61.2%) were males and 40(38.8%) were females (Table 3).

The interviewees mentioned that pre-marital sexual practice was commonly seen both in the area from where they came as well as in Jimma Teacher Training College. Almost most of them said that, pre-

Variables	Frequency	Percentage
Have sexual partner		
Yes	226	63.1
No	132	36.9
Ever had sex		
Yes	158	44.1
No	200	55.9
Pre-marital sexual intercourse		
Yes	142	39.7
No	216	60.3
Relationship with first partner		
Acquaintance	74	32.7
Friends	76	33.6
Fiancé	60	26.6
Spouse	9	4
Relatives	4	1.8
Other (commercial sex worker)	3	1.3
Have current boy/girl friend		
Yes	167	73.9
No	59	26.1
Number of sexual partners so far		
One	119	75.3
Two	12	7.6
Three	14	8.9
Four and above	13	8.2
Dating experience with friend		
Yes	159	70.4
No	67	29.6
Have premarital sex in the past 12 months		
Yes	103	65.2
No	55	34.8
Number of sexual partners in the past 12 months		
One	89	86.4
Two	9	8.8
Three	3	2.9
Four & above	2	1.9

Table 3: Premarital sexual histories among Jimma teacher training college students, Jimma town, April, 2013, n=358.

marital sex was practiced these days at highest level around the college. One second year male student interviewee said that, "pre-marital sexual practice was made all the times in my area, for instance, before marriage many males do sex with women who had husbands." Additionally one third year female interviewee said that "young males perceive pre-marital sex as good things and practice, young females also see themselves as a foolish being remain virgin and practice sex pre-marriage."

From all respondents 245(68.4%) of them reported that their friends had girl/boy friend, from whom 172(70.2%) of their friends had a dating experience with their friends. From 192(53.6%) of total male respondents, 154(80.2%) of them underlined that girls wearing style influenced their sexual desire towards pre-marital sexual practice (Table 4).

Knowledge about sexuality and reproductive health issues of young people

One hundred eighty four (51.4%) of the respondents had a good knowledge about SRH issues, while 162(45.3%) and 12(3.4%) had a medium and poor knowledge of SRH issues respectively (Figure 1).

Variables	Frequency	Percentage
Friends have girl/boy friend		
Yes	245	68.4
No	113	31.6
Friends have dating experience		
Yes	172	70.2
No	73	29.8
Number of friends having premarital sex		
All of them	28	11.4
Most of them	31	12.7
Some of them	91	37.1
None of them	95	38.8
Girls wearing style influence your sexual desire		
Yes	154	80.2
No	38	19.8

Table 4: Peer influences on premarital sexual practices of JTTC students, Jimma town, April, 2013.

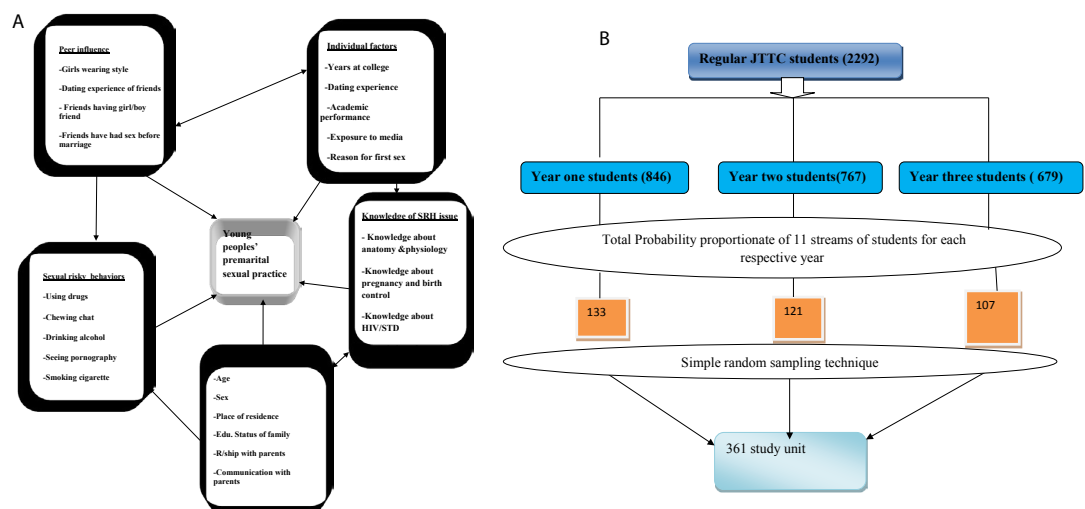


Figure 1: a) Conceptual frameworks for young peoples' premarital sexual practice developed from literature review. b) Schematic presentation of sampling procedure

“Reproductive health”, defined by different interviewees in different ways as “reproductive organs of males and females that have protection and continues for marriage, free from unwanted pregnancy, using family planning, function of ovary and test at their appropriate times, executing sexual intercourse voluntarily, reproducing offspring at enough age ,marriage of spouses at balanced age, males and females abstinence from pre-marital sex, having legalized sex at enough age, being honesty and using condom, having safe birth”.

Variables	Frequency	Percentage
Puberty		
Never	198	55.3
Yes a little	98	27.4
Yes a lot	62	17.3
Love		
Never	210	58.7
Yes a little	90	25.1
Yes a lot	58	16.2
HIV/AIDS prevention		
Never	76	21.2
Yes a little	48	13.4
Yes a lot	234	65.4
PREGNANCY prevention		
Never	162	45.3
Yes a little	63	17.6
Yes a lot	133	37.1

Table 5: Communication with their families about SRH issues among JTTC students, Jimma town, April, 2013.

Variables	Frequency	Percentage
Sexual intercourse with commercial sex workers		
Yes	6	3.13
No	186	96.87
Drink alcoholic beverages		
Never	307	85.8
Once or twice a week	45	12.6
Drink daily	1	0.3
No response	5	1.4
Chew chats		
Never	314	87.7
Once or twice a week	29	8.1
chew daily	12	3.4
No response	3	0.8
Use drugs like hashish		
Never	352	98.3
Sometimes	5	1.4
No response	1	0.3
See pornography		
Yes	129	36
No	229	64
Frequency of seeing pornography		
Every day	3	0.8
Once a week	23	6.4
Once a month	55	15.4
Once a year	48	13.4
No response	229	64

Table 6: Some risky behaviors of young people among Jimma teacher training college students, Jimma town, April, 2013, n=358.

Risky behaviors of young people

One hundred twenty nine (36%) of the respondents reported seeing of pornography. Six (3.13%) of male respondents reported that they had sexual intercourse with commercial sex workers (Table 6).

The interviewees mentioned that “young people are practicing the following risky behaviors:-learning different addictions (drinking alcohol, chewing chat, smoking cigarette, using depressant drugs),sex in early age, early marriage, lacking inappropriate impression for girls, sex with widowed and other persons’ women, multiple sexual intercourse for many times, rape (sexual harassment), always giving place and attention for sexual intercourse, perceiving women’s reproductive organ as incomplete,

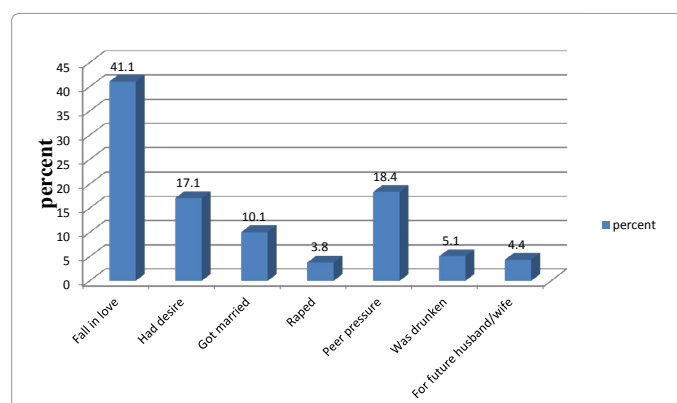


Figure 2: Figure 1.Reasons for having first sexual intercourse among JTTC students, Jimma town, April, 2013.

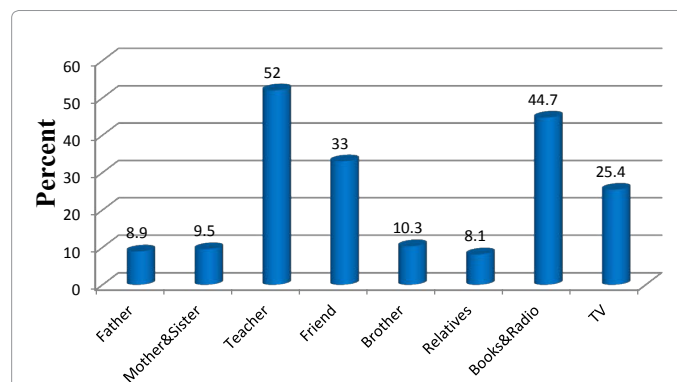


Figure 3: Source of SRH information of JTTC students, Jimma town, April, 2013.

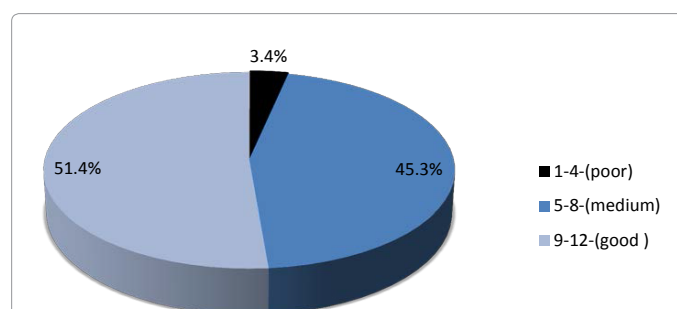


Figure 4: knowledge about SRH issues of JTTC students, Jimma town, April 2013

improper kissing, multiple sexual partners and sexual intercourse with all, lacking respect for humanity, seeing sex films and following developed countries wearing style”.

Factors associated with pre-marital sexual practices

Multivariate logistic regression was used to identify the associated factors for young people's pre-marital sexual practice. Coefficients were expressed as crude and adjusted odd ratios relative to the referent category and a number of factors were emerged to be significant for young people pre-marital sexual practice (Table 7).

Among the socio-demographic variables, sex of respondents and variables from young people's sexual history such as, friend had girl/boy friend, knowledge about sexual and reproductive health issue, influence of girls wearing style were associated with pre-marital sexual practice only at COR at $p < 0.05$ while other variables like years at college, mother's occupation and having permanent pocket money, friend had a dating experience, communication with family about puberty, love and pregnancy, source of SRH information (books) and

seeing pornography were all significantly associated with pre-marital sexual practice at both crude and adjusted odd ratios at $p < 0.05$.

Those first year students were less likely practice pre-marital sexual intercourse than third year students, both in crude (COR=0.51, 95%CI [0.3, 0.86]) and after controlling other factors (AOR=0.37, 95%CI [0.17, 0.78]). Respondents whose mothers having private business were less likely to report pre-marital sexual practice than those with merchant mothers (COR=0.15, 95% CI [0.03, 0.087] and AOR=0.1, 95%CI [0.01, 0.94]), respectively. Respondents who had pocket money were more likely to have pre-marital sexual practice than those who had not (COR=1.58, 95% CI [1.04, 2.4] and AOR=2.2, 95% CI [1.14, 4.05]), respectively. Those young people respondents whose their friends had a dating experience were more likely to report pre-marital sexual practice than those whom their friends had no dating experience (COR=13.6, 95% CI [7.5, 24.63] and AOR=16.46, 95% CI [6.87, 39.44]), respectively.

Those male respondents who reported that girls wearing style influence their sexual desire, were 2 times more likely to practice pre-

No .	Variables	Premarital sex		COR(95% CI)	AOR(95%CI)	
		Yes	No			
1	Years at college	1 st year	44(33.3%)	88(66.7%)	0.51(0.3,0.86)*	0.37(0.17,0.78)**
		2 nd year	62(51.2%)	59(48.8%)	1.07(0.64,1.81)	0.66(0.3,1.47)
		3 rd year	52(49.5%)	53(50.5%)	1	1
2	Mother occupation	Daily laborer	3(50%)	3(50%)	0.4(0.04,3.95)	1.96(0.09,42.1)
		Farmer	127(45.7%)	151(54.3%)	0.34(0.06,1.76)	0.36(0.05,2.79)
		Civil servant	5(45.5%)	6(54.5%)	0.33(0.04,2.52)	0.58(0.04,8.8)
		Employed in private sector	4(80%)	1(20%)	1.6(0.104,24.7)	2.55(0.09,73.68)
		Has private business	14(27.5%)	37(72.5%)	0.15(0.03,0.087)*	0.1(0.01,0.94)**
		merchant	5(71.4)	2(28%)	1	1
3	Having pocket money	Yes	89(49.7%)	90(50.3)	1.58(1.04,2.4)*	2.2(1.14,4.05)**
		No	69(38.5%)	110(61.5%)	1	1
4	Knowledge of SRH issues	Poor	6(50%)	6(50%)	0.92(0.28,2.95)	3.51(0.53,23.18)
		Medium	56(34.6%)	106(65.4%)	0.48(0.31,0.75)*	0.55(0.28,1.06)
		Good	96(52.2%)	88(47.8%)	1	1
5	Friends had girl/boy friend	Yes	139(56.7%)	106(43.3%)	6.5(3.73,11.29)*	1.2(0.46,3.10)
		No	19(16.8%)	94(83.2%)	1	1
6	Friends had dating experience	Yes	126(73.3%)	46(26.7%)	13.6(7.5,24.63)*	16.46(6.87,39.44)**
		No	13(17.8%)	60(82.2%)	1	1
7	Girls wearing style	Yes	80(51.9%)	74(48.1%)	1.9(1.2,2.99)*	0.82(0.28,2.35)
		No	18(47.4%)	20(52.6%)	1	1
8	Communication about puberty with parent	Never	67(33.8%)	131(66.2%)	1	1
		Yes a little	48(49%)	50(51%)	1.88(1.15,3.08)*	1.97(0.93,4.2)
		Yes a lot	43(69.4%)	19(30.6%)	4.43(2.4,8.2)*	10.5(3.38,32.78)**
9	Communication about love with parent	Never	83(39.5%)	127(60.5%)	1	1
		Yes a little	43(47.8%)	47(52.2%)	1.4(0.85,2.3)	0.45(0.2,1.001)
		Yes a lot	32(55.2%)	26(44.8%)	1.88(1.05,3.39)*	0.29(0.1,0.85)**
10	Communication about pregnancy prevention with parent	Never	55(34%)	107(66%)	1	1
		Yes a little	31(49.2%)	32(50.8%)	1.89(1.04,3.41)*	1.36(0.58,3.2)
		Yes a lot	72(54.1%)	61(45.9%)	2.3(1.43,3.8)*	2.34(1.12,4.89)**
11	Source of SRH information	Mother	8(23.5%)	26(76.5%)	0.59(0.18,1.95)	1.57(0.29,8.55)
		Sister	8(23.5%)	26(76.5%)	0.71(0.16,3.16)	0.59(0.05,7.4)
		Brother	10(27%)	27(73%)	1.74(0.43,6.95)	0.48(0.04,5.81)
		Relative	6(20.7%)	23(79.3%)	0.6(0.13,2.67)	1.1(0.12,9.99)
		Books	53(33.1%)	107(66.9%)	0.56(0.31,0.8)*	0.48(0.23,0.98)**
		Internet	30(33%)	61(67%)	1	1
12	Seeing pornography	Yes	83(64.3%)	46(35.7%)	3.71(2.35,5.83)*	5.7(2.82,11.43)**
		No	75(32.8)	154(67.2%)	1	1

NB.*/**=significant at $p < 0.05$

**=Adjusted to years at college, mother occupation, having pocket money, friends with dating experience, communication with family about puberty, love and pregnancy, source of SRH information and seeing pornography.

Table 7: Factors associated with premarital sexual practices at bi and multivariate logistic regression analysis for JTTC students, Jimma town, April, 2013.

marital sex than those who did not report the influence of girls wearing style on their sexual desire (COR= 1.9, 95% CI [1.2, 2.99]).

Respondents who communicate a lot with their families about puberty and pregnancy prevention were more likely to report pre-marital sexual practice than those who never communicate about these issues with their families (COR=4.43, 95% CI [2.4, 8.2] and AOR=10.5, 95% CI [3.38, 32.78], COR= 2.3, 95% CI [1.43, 3.8] and AOR=2.34, 95% CI [1.12, 4.89]). respectively. However, respondents who communicate a lot about love with their families were less likely to report pre-marital sexual practice than those who never communicate it with their families (AOR=0.29, 95% CI [0.1, 0.85]). Those respondents who got SRH information from books, were less likely to report pre-marital sexual practice than those who got from Internet and TV (COR= 0.56, 95% CI [0.31, 0.8] and AOR=0.48, 95% CI [0.23, 0.98]). Respondents who saw pornography were more likely to report pre-marital sexual practice than those who didn't see it (COR=3.71, 95% CI [2.35, 5.83] and AOR=5.7, 95% CI [2.82, 11.43]), respectively.

Most of the interviewees said that "young people started sexual intercourse at an age of 15" and some of them said "at age of 12".

Age of the young people was mentioned as one of the factors contributing to sexual debut. Saying that it is a natural phenomenon for young adolescents that once they reach at the age of puberty they are forced by both internal and external factors to have sexual intercourse. One first year female interviewee forwarded her idea that "*many of young peoples in my area started sexual practice at an age of 15 years which has many problems on their SRH, so it has better if they start after 18 years with marriage.*" The other listed factors contributing for young people pre-marital sexual practice from interviewees were individual factors (lack of appropriate education, knowledge and perception on sexuality, being caught by different addiction, being out of work and carelessness, heavily drinking of different alcoholic beverages, chewing chats, seeing of different porn films and eating of nuts), social factors (peer pressure, low role of family in rearing and following their Childs, closeness between males and females, separation from the family,) biological factors, (having of high sexual desire and inability of controlling it and for fulfilling their urgent sexual desire, inability to pass over young ages) cultural factors (community culture), environmental factors (living site, disturbance from environmental situations), technological, and economic factors.

One second year male interviewee described concerning peer pressure that, "*if young people have a bad friend with different unnecessary activities including pre-marital sexual practice and live with him/her, he/she will become like his /her friend and engage in activities of him/her.*" Additionally, one first year female student said that, "*factors contribute for young people pre-marital sexual practice, might be related with education concerning sex, for instance, students during their study of biology course, when sexual issue was raised for discussion they might be filled with different sexual desire and then after practice pre-marital sex*". Other factors were, economic status of female student, technology, girls wearing style and beauty. One second year male interviewee said that, "*due to now day's technological advancement, girls were follow other developed countries wearing style, and wear short skirts, thin dresses which shows parts of their sexual body which highly motivate young males to engage in practicing pre-marital sex. Concerning the economic status of the female student's family, if her families were poor and unable to support her, she will easily be cheated with money by young males who offered her for support which eventually leads them for pre-marital sex*".

In-depth interview respondents' recommendations

1. Health education and training should be given by all existing organizations for young people concerning to their SRH issues, risky behaviors, and consequences of pre-marital sexual practices before they reach at those activities and advising them to form marriage and live one to one when they reached for marriage.
2. Teaching, educating and giving responsibility in-depth to the community and religious leaders concerning the effect of pre-marital sexual practices and young people's risky behavior has on economy of the country and health of them, avoiding those cultures and traditional practices that influence young people's pre-marital sexual practices.
3. Concerned bodies should emphasize on strengthening families follow up for their children, making behavior change in the community and making young peoples to be entered into job.

Discussion

Pre-marital sex is a penetrative vaginal or anal sexual intercourse performed between couples before formal marriage. Some people who advocate virginity and abstinence argue that those People engaged in such sexual practice may have sex with many sexual partners and may have high number of life time sexual partners. As a result, they may be liable to acquire STIs including HIV. Besides, females, particularly adolescent girls may end up with unwanted pregnancies, abortions, teenage deliveries, and various complications of these including death. Moreover, the girls may drop out from school to rare their children and in most cases became economically dependent upon their parents [14].

The World Health Organization defines "adolescents" as people age 10-19; "youth" as those age 15-24; and "young people" as those ages 10-24. The pre-marital sexual activity and reproductive health of young people in developing countries have attended considerable attention over the last 15 years, in which youth constitute a large proportion of the populations and are disproportionately affected by HIV/AIDS and others negative reproductive health outcomes [1, 21-24].

This study was done on a randomly selected Jimma teacher training college students and assessed the prevalence of pre-marital sexual practices and associated factors to it. From the total respondents, 226 (63.1%) had sexual partners and 158 reported of ever having sexual intercourse. The overall prevalence of pre-marital sexual practice among the study population was 142 (39.7%) of whom 90 (63.4%) and 52 (36.6%) were males and females respectively. This finding was higher when compared to other similar study findings. For instance in Nekemte town, the prevalence of pre-marital sexual practice was 21%, 70.3% for males and 29.7% for females [25-27]. In Ambo, the prevalence was 19.4%, 59.5% and 40.5% for males and females respectively (49). In Gondar, it was 46.2% and 16.2% for males and females respectively. This finding is higher when compared to other similar studies done in Harar which reveals that 24.8%, of which 28.8% were males and 14.7% were females [11]. In Addis Ababa it was 39.8% and 5.6% for males and females respectively which is also lower than this [14].

The current finding is also higher than the national findings among school youth 31.3% and 19% in Oromia and nationally respectively [17]. This is due to the reason that all those studies done previously in some parts of Ethiopia were on high school adolescents, whom were living with their families, but the present study was done for college students whom are living separately from their families close follow up, that makes their pre-marital sexual practice to be rise.

However, in sub-Saharan Africa, the figures were higher than the current findings which were 50%,63% and 82% in Guinea, Tunisia and Nigeria respectively [28-43]. But, it is found to be higher than the findings from Taiwan, 16% of which, 20% for males and 13% for females and in Brazil which was 64% for males and 13% for females [23,44,45]. In this two areas students might get different supports and follow ups from their families and appropriate education about their sexuality than this study's college students. Generally, this shows that pre-marital sexual practice among young people in the study area was higher than other study findings. This might be due to the fact that ,these college students are out of their families close supervision, lack appropriate knowledge about their SRH issues, close to university and have high chance of exposure to peer pressure for practicing pre-marital sex. Moreover, from in depth interview, one second year male student said that "*pre-marital sexual practice was practiced all the times, for instance, before marriage many young males made sex with women who had husband.*" Additionally, one 3rd year female interviewee said that "*young males perceive pre-marital sex as good things and practice it many times; young females also see themselves as a foolish being remain virgin and practice sex pre-marriage.*"

In this study, from those all who had first pre-marital sex, 30(23%) of males and 18(13.8%) of females had their first sexual intercourse before the age of 18years. Similarly, in rural Kenya , most of adolescents start sexual practices between the age of 15-19 years [23]. This is one of the risky sexual behaviors of young people exposing them to different health and related problems in their early age.

According to their years at college, 36.9%, 33% and 29.3% of them were 1st, 2nd and 3rd years respectively. Years of students at college showed statistically significant difference in their reporting of pre-marital sexual practice, that is first year students were 74% less likely in reporting pre-marital sexual practice (AOR=0.26, 95%CI, 0.09, 0.75).

This might be due to the reason that, in their first year at college, most of the students gave emphasis for their education because of the newness of the environment of the college and fellow students, studying styles and formed tensions etc.

In this study, some socio-demographic variables such as sex of respondents, years at college, mother's occupation and having pocket money of the respondents, as well as knowledge about sexual and reproductive health issue and variables from young people sexual history, such as friend had girl/boy friend, friend had a dating experience, influence of girls wearing style, communication with family about puberty, love and pregnancy, source of sexual and reproductive health information(books) were analyzed for possible association with pre-marital sexual practice. Those first year young people students were less likely to report pre-marital sexual practice than third year students, (COR=0.51, 95%CI [0.3, 0.86] and AOR=0.37, 95%CI [0.17, 0.78]). This may indicate that, most of young people do not focus on their education as the years at college increases, may be due to different new encounters.

Respondents whose mothers had private business were less likely to report pre-marital sexual practice than those whom their mothers were merchant (COR=0.15, 95%CI [0.03, 0.087] and AOR=0.1, 95%CI [0.01, 0.94]). This might be due to the reason that, respondents whose mothers had private business have got chance for discussion about love and other SRH issues with their mother. Other similar study in east Gojjam zone also showed that participants who didn't find it easy to discuss about important matters with their mother were more likely to initiate sex earlier (AOR=2.48, 95%CI [1.48, 4.17]) [26].

Respondents who had pocket money were more likely to report pre-marital sexual practice than those who had not (COR=1.58, 95%CI [1.04, 2.4] and AOR=2.2, 95%CI [1.14, 4.05]). This may indicate that young people who have pocket money can have a better exposure to different Medias that initiate sex, have high chance of dating with their friends and drinking different alcoholic beverages and buy different addictions as well as porn films and practicing sex. Similar studies in Nekemte town showed that adolescents who had pocket money were 1.78 times more likely to engage in pre-marital sexual practice [34]. Those respondents whose their friends had a dating experience were more likely to report pre-marital sexual practice than those whom their friends had no dating experience (COR=13.9, 95%CI [7.5, 24.63] and AOR=16.46, 95%CI [6.87, 39.44]).

This highlights the role of peer influence on young people sexual behaviors, as they behave like their friends. Some studies conducted in Uganda have found a high correlation between the individual's own behavior and the perceived behavior of the best friend of the same sex both for males and females [29]. A cross sectional study from Nekemte town also indicated that, peer pressure contributes for 17.2% of pre-marital sexual initiation of the adolescents [27]. Similar study on sexual experience of rural Thailand, Philippines and Taiwanese adolescents found that the peers' pressure has motivated them to have pre-marital sexual practice with a variety of risky health behaviors [44,45-49]. One second year male student interviewee from in-depth interview described concerning peer pressure that, "*if young people have a bad friend with different unnecessary activities including pre-marital sex and live with him/her, he/she will become like his /her friend and engage in activities of him/her.*"

Those male respondents who reported that girls wearing style influence their sexual desire, were 2 times more likely to practice pre-marital sex than those who didn't report its influence (COR=1.9, 95%CI [1.2,2.99]). Idea of one second year male student from in-depth interview also supports this finding by saying that, "*due to now days technological advancement, girls were follow other developed countries wearing style, and wear short skirts, thin dresses which shows/exposes parts of their sexual body which highly motivate young males to engage in practicing pre-marital sex.*"

Respondents who communicate a lot with their families about puberty and pregnancy prevention were more likely to report pre-marital sexual practice than those who never communicate about this issues with their families (COR=4.43, 95%CI [2.4, 8.2] and AOR=10.5, 95%CI [3.38, 32.78], COR=2.3, 95%CI [1.43, 3.8] and AOR=2.34, 95%CI [1.12, 4.89]), respectively. However, respondents who communicate a lot about love with their families were less likely to report pre-marital sexual practice than those who never communicate it with their families (AOR=0.29, 95%CI [0.1, 0.85]). Other study conducted in Uganda indicated that young people's communication with their parents on SRH issue had a significant association with their pre-marital sexual practice, as those adolescents with poor communication with their parents on SRH issues were three times more likely to initiate pre-marital sex than those whose communication was good [29].

But, this study indicates that young people communicate about SRH issue with their families but not about love that leads them into pre-marital sexual practice, which may be due to limited knowledge of their adult parents about sexuality of their young people on one hand, and cultural taboo to talk with them about love, on the other hand.

Respondents who got SRH information from books, were less likely to report pre-marital sexual practice than those who got from

Television and other Medias (COR=0.56, 95%CI [0.31, 0.8] and AOR=0.48, 95%CI [[0.23, 0.98]). This indicates the influence of media on young people pre-marital sex. Similar study in Indonesia indicated that adolescents whose major source of information about SRH issue was media were more likely to initiate pre-marital sex [41]. Because with no family guidance, distorted and non systematic information dissemination through mass media may have had negative impact, on young people's sexuality towards practicing of pre-marital sex.

Respondents who saw pornography were more likely to report pre-marital sexual practice than those who didn't see it (COR=3.71, 95%CI [2.35, 5.83] and AOR=5.7, 95% CI [2.82, 11.43]). This is due to the fact that, such unnecessary forbidden sex movies/videos are one of sexual risky behaviors that greatly influence young people to imitate the action they observed practically in the practices of pre-marital sex. Similar, different studies done, in east Gojjam zone and Dessie town reported that due to such a risk behaviors, 2.4% and 8.7% of adolescents initiated their first sex with commercial sex workers and 39% and 65% had unplanned and unprotected sex respectively [26].

Conclusions

Understanding of the pre-marital sexual practices and associated factors must be the fundamental element of interventions that are working in the areas of unwanted pregnancy, unsafe abortion, maternal death, STI and HIV/AIDS. This study has revealed that a substantial proportion of the young people had engaged in pre-marital sexual practices, 142 (39.7%) of whom 90(63.4%) were males and 52(36.6%) were females, which is found to be higher than most of the studies done previously. Young people were found to start pre-marital sexual practice at their earlier age (15-19) with mean age of 17.75 for males and 17.98 for females. 103(65.2%) of respondents had practiced pre-marital sex in the past 12 months, from whom 63(61.2%) were males and 40(38.8%) were females.

The most mentioned reasons for young people to start their first sexual intercourse were:-Fall in love, peer pressure, personal desire, alcohol drinks and being raped. From this study, one can also conclude that young people were practicing risky behaviors such as seeing pornography, drinking alcoholic beverages, chewed chat, use drugs like Hashish and sexual intercourse with commercial sex workers in the study area. The study also revealed that, most of the respondents made communication with their families concerning HIV/AIDS and pregnancy prevention but not so much about love and puberty. Variables like, years at college, mother's occupation, having permanent pocket money, friends with dating experience, communication with family(about puberty, love and pregnancy), source of SRH information (books) and seeing pornography were all significantly associated with pre-marital sexual practice at both crude and adjusted odd ratios at $p < 0.05$.

Competing Interests

The authors declare that they have no competing interests

Authors Contributions

All authors participated in the design of the study. BF searched the databases, analyzed findings and wrote the first and second draft of the article. All authors revised the manuscript and approved the final version.

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