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Prevalence of Premarital Sexual Practice and Associated Factors among Alamata High School and Preparatory School Adolescents, Northern Ethiopia

By Getachew Mullu Kassa, Emebet Berhane Woldemariam
& Nurilign Abebe Moges

Debre Markos University, Ethiopia

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Prevalence of Premarital Sexual Practice and Associated Factors among Alamata High School and Preparatory School Adolescents, Northern Ethiopia

Getachew Mullu Kassa ^α, Emebet Berhane Woldemariam ^σ & Nurilign Abebe Moges ^ρ

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Statistical analysis used: Data entered using Epi Info version 3.5.1 analyzed using SPSS version 16. Descriptive, bivariate, and multivariate logistic regression analysis were used. Result: A total of 493 participants give complete response. One hundred four (21.1%) of adolescent have had premarital sexual practice. Associated factors were age > 18 years (AOR=12, 95%CI=3.97, 36.54), urban resident (preventive) (AOR=0.23, 95%CI=0.07, 0.75), having a positive attitude towards premarital sex (AOR=3.07, 95%CI=1.19, 7.91), having a boy/girlfriend (AOR=3.33, 95%CI=1.39, 7.99), peer pressure (AOR=7.33, 95%CI=2.97, 18.09), and watching sex movies (AOR=7.98, 95%CI=2.55, 24.93).

Conclusion: Prevalence of premarital practice was high. Therefore, community and/or school health interventions are needed to reduce the premarital sexual practice among school adolescents to prevent sexually related health problems.

Keywords: sexual practice, health related problems, alamata, adolescent.

Keymessage: late adolescents, rural resident and having boy/girl friend need special attention in the reduction of premarital sexual practice.

Author α ρ: Debre Markos University, college of medicine and health sciences, Department of Nursing, Debre Markos, Ethiopia. e-mails : gechm2005@gmail.com, nure113@gmail.com

Author σ: Addis Ababa University, college of health science, school of Allied health science, department of Nursing and Midwifery, AA, Ethiopia. e-mail : emebetbrhan@yahoo.com

I. INTRODUCTION

According to World Health Organization (WHO) definition adolescent comprises individuals between the age group of 10–19 years old.¹ United Nations International Children's Emergency Fund (UNICEF) categorizes adolescents in to three stages; 10-13 years old as early adolescents, 14-16 years old as middle adolescents, and 17-19 years old as late adolescents.²

The World Health Organizations (WHO) has reported that young people aged 15-24 accounted for an estimated 45% of new HIV infections worldwide.³

Age at marriage is rising in many African societies, especially among the better-educated and urban segments of the population. At the same time, it is believed that age at menarche is declining, and that premarital adolescent sexual activity is increasing.⁴

According to Ethiopian Demographic and Health Survey (EDHS) 2011 report, among women age 25-49, 29 percent first had sexual intercourse before age 15.⁵

Early sexual debut increases young peoples' risk for infection with HIV and other STIs. Youth who begin early sexual activity are more likely to have high-risk sex or multiple partners and are less likely to use condoms.⁶

In Ethiopia, HIV prevalence in the 15-24 age groups is 8.6%.⁷ The commonest mode of HIV infection is heterosexual contact accounting 87%.^{5, 7}

Studies conducted so far on pre-marital sexual practices and factors related to it in Ethiopia are few in number and there are no current data on this topic in the study area.

II. MATERIALS AND METHODS

Institutional based cross sectional study design was conducted among high school and preparatory school students in Alamata town, northern Ethiopia in 2013. A total of 520 sample size was calculated using single population proportion formula then the sample was allocated proportionally for all classes. The procedure involved of three steps. First, in order to select the study population; half of the sections from each grade

(namely, grade 9, 10, 11, and 12) were selected by using simple random sampling (SRS). Second, a probability proportion to sample size (PPs) was used to select the total number of participants to be included in the study from the randomly selected sections. Third, in order to select the study participants, a systematic random sampling method was used by using roster list or names of the students from the registrar office of both schools in every fourth interval.

Data was collected from March to April, 2013 using self administered questionnaire with seven parts namely, Socio-demographic characteristics; Sexual and Reproductive health knowledge and related questions, communication on Sexuality and HIV/AIDS; Attitudes towards pre-marital sex; related to some risk behaviours of Adolescents; Peer Influence and peer behaviour; and sexual behaviour and practices.

Data quality was ensured through pre test was done from other school out of the mail study participants, the questionnaire was translated in to local language-Tigrigna, supervisors and school community were communicated and orientation was given for data collectors and study participants on the purpose of the study.

Data cleaning and entry was performed by using Epi Info version 3.5.1 and analyzed by using SPSS version 16. Descriptive analysis was carried out for the dependent and independent variables. Bivariate analysis was done for the independent variables with the

dependent variable to select candidate variables (p - value less than 20%) for multivariate analysis. P value less than 0.05 and 95% confidence interval (CI) for odds ratio was used to judge the significance of association.

Ethical clearance was obtained from Addis Ababa University (AAU), department of nursing and midwifery research committee institutional review board. Permission was granted from officials at different levels in Alamata town through the formal letter obtained from the department's research committee institutional review board.

Administrative and academic staffs were communicated about the study, and they gave their willingness on data collection. Informed consent was obtained from the study subjects after providing the necessary information through the information sheet and the informed consent form which is attached to the front page of the questionnaire and data was collected after getting informed consent from the study participant.

III. RESULT

a) Socio demographic characteristics of respondents

The response rate was 94.8%. From the total respondents, male accounting 264 (53.5%). Among the respondents 472(95.7) were in the age group of 15 to 19 years old. The mean age and standard deviation (SD) for male was 16.7 and 1.48 respectively, and mean age for females was 16.45 and SD of 1.26. (Table 1)

Table 1 : Socio-Demographic Characteristics of Alamata high school and preparatory school adolescent students, Northern Ethiopia, March to April 2013

Variables		Frequency	Percentage
Sex	Male	264	53.5
	Female	229	46.5
Age	10-14 years old	21	4.3
	15-19 years old	472	95.7
Education	Grade 9	227	46.0
	Grade 10	162	32.9
	Grade 11	58	11.8
	Grade 12	46	9.3
Previous residence	Urban	383	77.7
	Rural	110	22.3
Ethnicity	Tigray	452	91.7
	Amhara	41	8.3
Religion	Orthodox	393	79.7
	Muslim	85	17.2
	Protestant	15	3.0
Living condition	With Father and mother	288	58.4
	Mother only or Father only	139	28.2
	Relatives/friends/fiancé	55	11.2
	Alone	11	2.2
Pocket money	Yes	144	29.2
	No	349	70.8

One hundred four (21.1%) of adolescent students participated in this study had had premarital sexual practice. From these, Seventy five (72%) were male and 29 (28%) were females. Age at first sexual intercourse is shown in (fig 1).

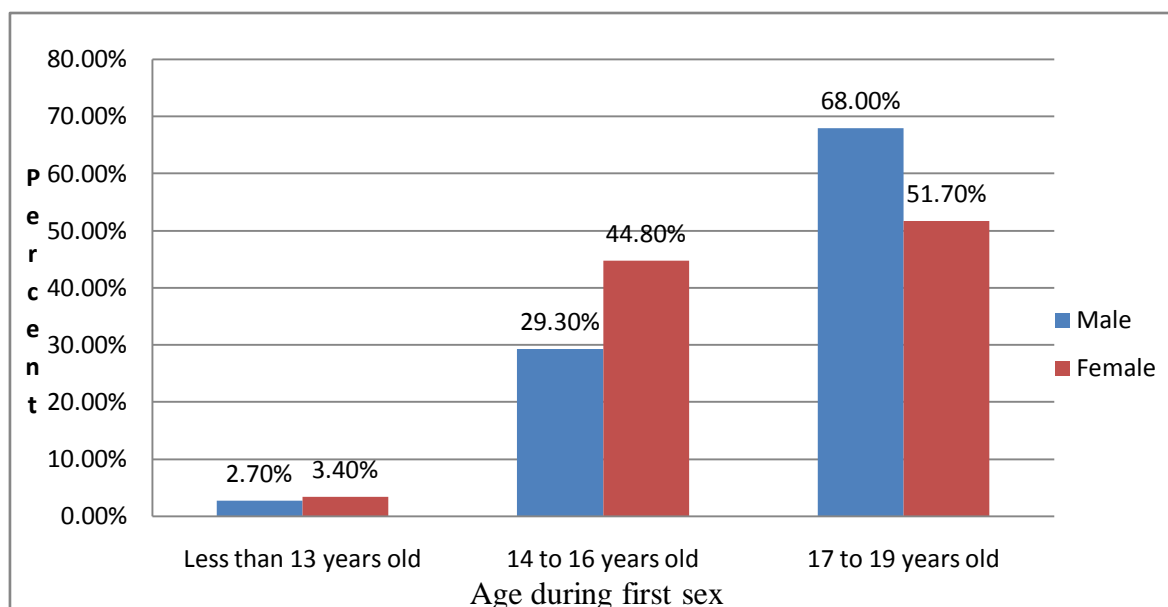


Figure 1 : Age during first sex for male and female among Alamata high school and preparatory school adolescent students, northern Ethiopia, March to April 2013

Sixty six (17.2%) of urban residents and 38(34.5%) of rural residents had had sexual practice before marriage. In addition, 24(77.4%) of respondents who didn't attend church or mosque were engaged in premarital sexual practice, compare to 80(17.3%) of those who attend religious. More than one third of respondents (38.5%) who had sexual practice were from illiterate father, 40(31.5%) of respondents who start sexual practice were from illiterate father, while 8(9.4%) of those who start sexual practice were form a father who have educational level of college and above.

Similarly, 47(27.5%) of respondents who start sexual practice were from illiterate mother, while 12(17.1%) of respondents who start sexual practice were from a mother with educational status of college level and above.

Reasons given by the respondents to start sexual practice include fall in love, had desire, peer pressure, raped was drunk and to get money or gift accounting (figure 2).

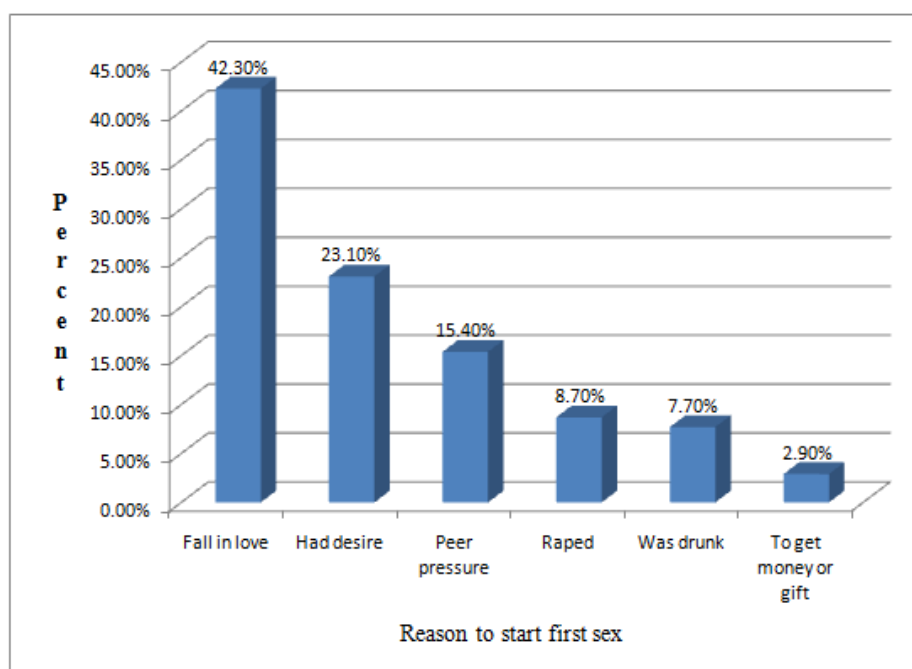


Figure 2 : Reason to start first sex among Alamata high school and preparatory school adolescent students, northern Ethiopia, March to April 2013

b) *Knowledge and attitude of adolescents about premarital sex*

Two third, 318 (64.5%), of study participants had poor knowledge (<mean score (4.1), while 175(35.5%) had good knowledge regarding sexual and reproductive health. Regarding the attitude towards premarital sex, 139(28.2%) of the respondents agree that there is nothing wrong if unmarried boys have sex and 291 (59.0%) of respondents disagree this idea. Regarding the risk behaviors of adolescent's majority,

253(51.3%), of the respondents had never drink alcoholic beverages, while 23.3% drink once or twice a week. Four hundred sixty one (93.5%) had never smoke cigarette in their life, while 21(4.3%) smokes once or twice a week and 3 (0.6%) smokes daily.

More than one third (36.3%) of the respondents said that they have a boy/girlfriend at the time of data collection, while 314(63.7%) don't have a boy/girlfriend (Table 2).

Table 2 : Peer behavior and peer pressure among Alamata high school and preparatory adolescent students, northern Ethiopia, March to April 2013

Variable		Frequency	Percentage
Have boy/girl friend	Yes	179	36.3
	No	314	63.7
Peer pressure	Yes	123	24.9
	No	370	75.1
Male friend sex with prostitute	Yes	69	14
	No	267	54
Best friend had sex	I don't know	157	31.8
	Yes	101	20.5
	No	198	40.2
Place to spend leisure time	I don't know	194	39.4
	Reading books/attend religious ceremony	331	67.1
	Night club	15	3.0
	Others(Watch films with friends, playing with friends, helping family at home)	147	29.8
Watch sex movies	Yes	232	47.1
	No	261	52.9
Frequency of watching sex movies	Once per week	115	49.6
	Twice per week	16	6.9
	Three times and more per week	38	16.4
	Others *	63	27.2

*= every month, twice a month, every 3 months, twice a year, every 1 year

c) *Factors associated with premarital sexual practice*

Variables found to have significant association with the premarital sexual practice on bivariate and multivariate analysis are shown in Table 3.

Table 3 : Binary and Multivariate logistic regression indicating factors associated with premarital sexual practice among Alamata high school and preparatory school adolescent students, northern Ethiopia, March to April 2013

Variables		Premarital sex		Crud OR (95% CI)	Adjusted OR(95%CI)	P-value
		Yes	No			
Age	<18 years old	31	313	1	1	
	≥18 years old	73	76	9.7(5.94,15.81)	12.05(3.97,36.53)	0.000*
Previous residence	Urban	66	317	0.39(0.25,0.63)	0.23(0.07,0.75)	0.014*
	Rural	38	72	1	1	
Attitude to prem. sex	Positive	86	167	6.35(3.7,10.96)	3.07(1.19,7.91)	0.020*
	Negative	18	222	1	1	
Use of drugs	Yes	18	5	15.93(5.8,44.1)	8.30(1.17,58.97)	0.034*
	No	85	376	1	1	
Have boy or girl friend	Yes	76	103	7.5(4.6,12.3)	3.33(1.39,7.99)	0.007*
	No	28	286	1	1	
Peer Pressure	Yes	75	48	18.3(10.87,31)	7.33(2.97,18.09)	0.000*
	No	29	341	1	1	
Watch sexual explicit film	Yes	91	141	12.3(6.6,22.8)	7.98(2.55,24.93)	0.000*
	No	13	248	1	1	

*significant association with $p < 0.05$

IV. DISCUSSION

This study revealed that more than one fifth (21.1%) of respondents were involved in premarital sexual practice. When compared with other studies done on a similar topic, the finding of this study is almost similar with studies done in Nekemt and Injibara.^{8,9} But the finding of this study is relatively higher than the national level of premarital sex. According to BSS, the proportion of premarital sex among in school youths is 16%. This difference could be due to the study population (this study assessed the prevalence of premarital sex among in school students aged 10 to 19 years old, while the national study included only adolescents who are at the age group of 15 to 19 years old). The other reason could be the number of sample used, the current study assessed adolescents found in two schools, while the national survey included a large number sample with diverse population.

According to this study, majority, 75(28.4%) of male respondents and 29(12.7%) of female respondents had had sexual intercourse. This showed that males are highly involved in premarital sexual activity than their counterparts. This could be due to the high expectation of virginity before marriage for females than males and a lesser cultural expectation for males to remain virgin until marriage than females in our society, due to low parental control for males than females and the difference in the opportunity costs of becoming sexually active (and the subsequent risks of unintended pregnancy).¹⁰ Other similar studies done in eastern Ethiopia, Ambo, Nekemt, Injibara, and Gedeo zone also showed that the proportion of males to engage in premarital sexual practice is relatively higher than females.^{8,9,10, 12, 13} A study done among undergraduate university students in Ethiopia also showed that more proportion of male students ever had sex compared to females.¹⁴ Another study done in Jima University students also showed that male students are three times more as likely as their female counterparts to experience sexual intercourse.¹⁵ Previous studies done in India, Malaysia and China also found that young boys tend to have premarital sexual activity than young girls.¹⁶

According to the current study, adolescents who are aged 18 and above are more likely to involve in premarital sexual practice than adolescents who are aged below 18 years old. This shows that as the age of adolescents increase, there is higher probability to involve in sexual practice. This result is similar with other studies done in Ambo, Jimma, and Injibara.^{9, 12, 15}

Place of residence was another factor found to be associated with premarital sexual practice. According to this study, adolescents who were living in the rural area were more likely to involve in premarital sexual activity than urban residents. This could be because adolescents from rural areas often live away from parental guidance and peoples in urban areas

commonly have better sexual and reproductive health access comparing with the rural people.^{10, 16, 17} A study conducted in Nekemt town showed that if adolescents migrate from rural areas to urban areas, then it predisposes them to unnecessary communications and unsupervised relations which lead them to reckless sex.⁸ A study done in Nigeria regarding internal migration and premarital sexual practice also showed that premarital sexual debut is generally higher among migrants than non-migrants.¹⁷

In contrast to the current study, a study done in eastern Ethiopia showed that, adolescents from urban families are more likely to engage in pre-marital sex than those from rural area. The reason for this difference could be attributed to a reason that this study involved only 2 schools, while the study in eastern Ethiopia involved 14 schools with diverse population. Another study done in Lesotho showed that norms of the society discouraging sex before marriage have eroded more in urban areas than in rural areas. Hence urban environment provides a conducive environment for experimenting with sex before marriage. Because of this, never married women living in urban areas are more likely to be sexually experienced than their counterparts residing in rural areas.¹⁸ The difference with the current study could be due to the difference in the socio demographic characteristics and the difference in the study population (the study in Lesotho included women's aged 15-49 years old while the current study included both male and female in school students whose age is 10 to 19 years old). By considering the above different findings and the reasons given, the association between premarital sex and place of residence needs further investigation.

Adolescents with positive attitude towards premarital sexual practice were more likely to engage in premarital sex than those who have negative attitude towards premarital sex. This may be because of the reason that, since the acceptance of sexual practice before marriage encourage adolescents to engage in premarital sexual activity. Other studies done in Jima and Jigjiga also showed that students with moderate and positive attitude towards premarital sexual practice are more likely to engage in sexual activity than their traditional minded students.^{15, 19} A study done in Nigeria also showed that personal attitude in favor of delayed sexual debut were associated with lower sexual debut among both males and females.²⁰ A study done in Indonesia also showed that, adolescents who accept premarital sexual intercourse have had premarital sexual intercourse than those who do not accept (8.0% and 0.4 respectively).¹⁶

According to the result of this study, adolescents who use drugs are more likely to involve in premarital sexual practice than non-drug users. This could be because adolescents who abuse drugs are more likely to have poor judgment, which can result in

unplanned and unsafe sex. In addition, most of the adolescents involved in substance use are often also involved in sexual practice.²¹ A study done in Maharashtra, India on correlates of premarital relationships among unmarried youth also showed that exposure to drugs to be positively associated with romantic and sexual relationships for both young women and young men.²² According to the study done on individual, familial, friends and contextual predictors of early sexual intercourse, substance use was found to be associated with early sexual intercourse.²¹ In addition, a study done regarding sexual initiation, substance use, and sexual behavior and knowledge among vocational students in Northern Thailand also showed that use of substances is associated with initiation of sexual intercourse.²³ Similar findings were also seen in a study done in Malaysia, showing that adolescent sexual intercourse is significantly associated with drug use.¹¹

A study done in Indonesia showed that, in school late adolescents who have a boyfriend or girlfriend were more likely to have premarital sexual intercourse than those who do not have a boy/girlfriend.¹⁶ Similar finding was also observed in this study that, adolescents who have a boy/girlfriend are more likely to involve in premarital sex than those who don't have a boy/girlfriend. This could be due to the pressure from their girl/boyfriend to have sexual practice. In Ethiopia, a study done in Jigjiga and Nekemt town also showed that having a boy/girl friend is one factor which determines to start sexual intercourse.^{8,19} Other study done in Malawi also showed that romantic interpersonal relationship was one of the factors that informed sexual decisions of female adolescents.²⁴

According to the result of this study, adolescents who experience pressure from their friends were found more likely to involve in premarital sexual practice than those adolescents who didn't experience peer pressure from their friends. This could be because; peers play important part in deciding personality and behavior among adolescents.¹⁶ In Ethiopia, according to the national HIV/AIDS Behavioral Surveillance Survey (BSS), peer pressure was one of the common reasons given for starting sex.²⁵ Similar result were also observed in studies done in Injibara, Jimma, and Jigjiga showing that students who had peer influence were more likely to have sexual intercourse than students who do not.^{9, 15, 19} A study done on premarital sexual debut and its associated factors among in school adolescents in eastern Ethiopia also showed that adolescents who were less influenced by external pressure were more protected against pre-marital sexual debut than their counter parts.¹⁰ Another study done in Nigeria regarding adolescent's susceptibility to peer pressure and how it affects pre-marital sexual practice among adolescents, also showed that susceptibility to peer pressure is significantly associated with premarital sexual practice.²⁶ Another study regarding the reasons for delaying or

engaging in early sexual initiation among adolescents in Nigeria, also showed that peer pressure to be associated with early sexual initiation.²⁷

According to the result of this study, adolescents who watch sex/pornographic movies were more likely to engage in premarital sexual practice than those who don't. This could be because adolescents who watch pornographic movies may develop unrealistic attitudes about sex, which leads them to engage in sexual practice. A study done regarding the age at sexual initiation and factors associated to it among youths in North East Ethiopia showed that watching pornographic materials at age less than 18 years old was found to be associated with sexual initiation.²⁸ A study done in Jigjiga also showed that students who watched pornographic/sex movies are more likely to engage in sexual activity.¹⁹ Another study done in Jimma also showed that high and medium level of erotic exposure was more than twice as likely as their peer who had low exposure to erotic materials to be sexual experienced.¹⁵ A study done in Injibara town also showed that students who had not seen sex films were less likely to get in to sexual intercourse than those who had seen such film.⁹ The result of this study is also similar with a study done in Asian country about premarital sexual intercourse among adolescents. According to the study, pornography viewing was found to be significant factor for premarital sex among boys.²⁹ In addition a study done in Maharashtra, India, also showed that exposure to pornographic films is positively associated with romantic and sexual relationship.²²

V. CONCLUSION

A large number of school adolescents were engaged in sexual practice before marriage. Majority of adolescents were males.

The risk factors associated with premarital sexual practice were age (>18 years old), previous residence in rural area, having positive attitude towards premarital sexual practice, use of drugs, having a boy/girlfriend, peer pressure and watching sex movies.

So, community and/or school health interventions are needed to reduce the premarital sexual practice among in school adolescents to prevent sexually related problems by providing due attention for adolescents with above characteristics.

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