PREMARITAL SEX AND ASSOCIATED FACTORS AMONG UNMARRIED STUDENTS OF A PRIVATE COLLEGE IN ADDIS ABABA, ETHIOPIA

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ABSTRACT

BACKGROUND: Premarital sex may result in sexually transmitted infections (STIs) and unwanted pregnancy. Published reports on the prevalence of premarital sex among private college students in Ethiopia are limited. This study aimed to assess the prevalence of premarital sex and associated factors among unmarried students of a private college in Addis Ababa, Ethiopia.

METHODS: A cross-sectional study was conducted and a structured questionnaire was used to collect data from 390 unmarried students of the college selected by stratified random sampling. Associations between variables were determined using binary and multiple logistic regression at P-value less than 0.05.

RESULTS: Eighty-one percent (316/390) and about 62% (241/389) of the participants were females and 18-21 years of age, respectively. The prevalence of premarital sex was 23.3% (88/378), and 20% (18/86) of the participants started sex before 18. About 68% (58/85) did not use condom at the first sex. Nearly 15.5% (9/58) had multiple sexual partners. About 14.5% (48/332) said oral contraceptive pills prevent STIs. Nearly 59 % (47/80) did not request a new sexual partner for STIs status. Multiple logistic regression analysis showed that religion (AOR,4.282; CI95%, 1.229-14.913; P, 0.022), study program (AOR, 3.417; CI95%,1.423-8.206; P, 0.006), having a boyfriend or girlfriend (AOR, 6.259; CI95%,2.866-13.672; P, 0.000), misconception that oral contraceptive pills prevent STIs (AOR, 3.345; CI95%,1.317-8.499; P, 0.011) and taking alcohol (AOR, 3.304; CI95%, 1.319-8.501; P, 0.011) were significantly associated with having premarital sex.

CONCLUSION: The prevalence of premarital was high among participants. Effective intervention strategies are needed to reduce the prevalence of premarital sex.

KEYWORDS: COLLEGE STUDENTS, ETHIOPIA, PREMARITAL SEX, PREVALENCE

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INTRODUCTION

Premarital sex is sexual intercourse performed before marriage. Many students start in premarital sex in educational institutions. The rate of premarital sex among university/college students is increasing globally and it varies from country to country. In Iran, it was 15.1% among non- medical students of a great university of Mashhad[1] . It was 63.9% among the unmarried youth of Vientiane, Laos[2]. It was 8.1% among unmarried female undergraduates in China (Wuhan)[3, 4]. The rate of premarital sexual intercourse was low (4.3%) among students of Dicle University in Turkey[5]. The prevalence of premarital sexual practice in Africa seems to be higher compared to other continents. In Nigeria the prevalence of premarital sex was 45.8% among nursing students[6]. A higher prevalence of premarital sex (70.4%) was found among female undergraduate students of Muhimbili and Dar es Salaam Universities, Tanzania[7], and university students in Uganda (74%)[8] and Botswana (65.35%)[9].

In Ethiopia, the prevalence of premarital sex among university/college students ranged from about 23% to 68%10-23. The associated factors with premarital sex were watching pornography, alcohol use, attending night clubs and khat chewing[10,13,24,25]. Unsafe premarital sex may lead to unwanted pregnancy and STIs. It is estimated that 50% of pregnancies among girls between 15 and 19 years of age in developing countries are unintended[26]. The prevalence of unintended pregnancy is about 34% among college students in China[27]. Among female students of Ethiopian universities and colleges, it is 6.6% [28]. World Bank estimates that 5% to 33% of girls between 15 and 24 years of age in some countries drop out from schools due to early pregnancy or marriage[29]. This is also a problem among female students in Ethiopian universities[30,31].

There are a few published reports on the prevalence of premarital sex among unmarried students of private colleges, particularly in Addis Ababa. This study aimed to determine the prevalence of premarital sex and associated factors among students of Ayer Tena Health Science and Business College (ATHSBC).

MATERIALS AND METHODS

Study Setting and Design

A cross-sectional survey was used. ATHSBC, located in Addis Ababa, Ethiopia, runs degree and level programs in regular and extension modalities.

Population

The source population was all students of ATHSBC. The study population included randomly selected unmarried students.

Sample size determination

Sample size (n) was calculated to be 384 using a single population proportion formula.

$n = (z\alpha/2)^2 p(1-p)/w^2$

where,

p = proportion (50%)

n = sample size

z = confidence interval (with 95% level of certainty)

w = margin of error (5%)

When a 10% non-response rate was considered, the sample size became 422.

Sampling methods and procedure

A source population of about 2900 students was stratified by division of study, field of study, department, section and sex. Systematic random sampling was used to select females and males from each section in proportion to their numbers, resulting in the selection of 422 students from all sections.

Exclusion and inclusion criteria

Married students were excluded from this study, whereas single students who were not widowed or divorced were included.

Study variables

The independent variables were sex, age, religion, frequency of religious service attendance, study field, place of residence, cohabitant type and place of high/preparatory school completion. The dependent variable was having premarital sex.

Data collection and analysis

Data were collected using a self-administered, close-ended questionnaire that was pretested. The questionnaire included questions about socio-demographic characteristics and behavior of the study participants. Data were entered into Excel before export to SPSS v20 for management and analysis. Missing data were excluded from prevalence calculations. Associations between variables were determined using binary and multiple logistic regression. P-value less than 0.05 was considered statistically significant. First, binary logistic regression was used to determine the existence of association between having premarital sex and many independent variables (Table 3). Variables that showed statistically significant association at P-value less than 0.05 were analysed for further association by multiple logistic regression (Table 3).

Ethics approval

This study was approved by the Ethical Review Committee of ATHSBC. Informed written consent was obtained from study participants before data collection.

RESULTS

Socio-demographic characteristics of the study participants

From a total of 422 unmarried students recruited to participate in this study, 390 (92.4%) filled the questionnaire. The majority of them were 18-21 years old (61%; 241/389), females (81%; 316/390), Christians (61.6%; 282/381), business students (58.8%; 228/388), degree students (56.8%; 221/389) and regular students (62.1%; 242/390). Most of them lived together with both parents (35.7%; 138/387), did not have income (69%; 256/371), lived in and around Addis Ababa for five or more years (63.7%; 246/386), and completed grade 10 or 12 in and around Addis Ababa (55.7%; 215/386) (Table 1).

Table 1. Socio-demographic characteristics of students of ATHSBC, Addis Ababa, 2019

Variable	Measurement level	Frequency	Percent
Sex	Male	74	19.0
	Female	316	81.0
Age	16-17	22	5.7
	18-19	128	32.9
	20-21	113	29.0
	22-23	65	16.7
	24-25	37	9.5
	≥ 26	24	6.2
Religion	Orthodox	221	58.0
	Islam	90	23.6
	Protestant	60	15.7
	Catholic	1	0.003
	Other	9	2.4
Frequency of religious service attendance	Daily	99	25.6
	1-2 times per week per week	126	32.6
	3 times or more	74	19.1
	Occasionally	78	20.2
	Never	10	2.6
Field of study	Health	160	41.2
	Business	228	58.8
Program of study	Level	168	43.2
	Degree	221	56.8
Division of study	Regular	242	62.1
	Extension	148	37.9
Have income	Yes	115	31.0
	No	256	69.0
Place where Grade10 or 12 Completed	In or around Addis Ababa	215	55.7
	Amhara	61	15.8
	Oromia	50	13.0
	Debub	47	12.2
	Tigray	6	1.6
	Other	7	1.8
Number of years lived in or around Addis Ababa	1-2 years	92	23.8
	3-4 years	48	12.4
	≥ 5 years	246	63.7

Prevalence of pre-marital sex

The prevalence of premarital sex was 23.3% (88/378) among the students (Table 2). Of those who experienced sexual intercourse, 43.5% (37/85) had sex in the last 12 months, 14.3% (12/84) practiced sex with individuals of the same sex, and 51.3% (41/80) did not plan for the first sexual intercourse. From the total participants who answered a relevant question, 11.4 % (40/352) had sex in the last 12 months. The most common reasons reported for having premarital sex were falling in love (69.3%; 52/75), development of sexual desire (16%; 12/75) and peer pressure (9.3%; 7/75) (Table 2).

Table 2. Premarital sexual activity of students of ATHSBC, Addis Ababa, 2019

Variable	Measurement level	Frequency	Percent
Ever had sex	Yes	88	23.3
	No	290	76.7
Age at first sex	12-13	4	4.7
	14-15	5	5.8
	16-17	9	10.5
	18-19	31	36.0
	20-21	21	24.4
	22-23	14	16.3
	24-25	2	2.3
Used condom at first sex	Yes	27	31.8
	No	58	68.2
Reason for premarital sex	Fell in love	52	69.3
	Peer pressure	7	9.3
	Developed desire for sex	12	16.0
	Raped	2	2.7
	Drunk	1	1.3
First sex planned	Yes	39	48.8
	No	41	51.3
Had sex in the last 12 months	Yes	40	11.4
	No	312	88.6
Number of lifetime sex partners	1	54	65.9
	2	12	14.6
	3	7	8.5
	4	3	3.7
	5-10	4	4.9
	> 10	2	2.4
Number of current sex partners	1	49	84.5
	2	3	5.2
	4	2	3.4
	5-10	3	5.2
	>10	1	1.7
Ever had sex without condom	Yes	52	61.2
	No	33	38.8
Reason for having sex without condom	The sex was accidental and I did not have condoms with me.	18	40.0
	I believed that my sex partner was free from STIs.	12	26.7
	My sex partner refused.	6	13.3
	I did not know that I had to use condom.	2	4.4
	To get better sexual satisfaction	2	4.4
	Other	5	11.1
Ever requested a new sex partner for STIs and HIV test	Yes	33	41.3
	No	47	58.8
Seduce opposite sex	Yes	19	5.3
	No	337	94.7
Frequency of pornography watch	Always	4	1.1
	Most of the time	15	4.1
	Sometimes	44	12.1
	Never	302	82.7
Ever had sex with a person of the same sex	Yes	12	3.3
	No	352	96.7
Drink alcohol	Yes	63	17.1
	No	306	82.9
Take drugs	Yes	11	3.0
	No	356	97.0

Risky sexual practice

About 21% (18/87) of the participants who had practiced sex started it before the age of 18, whereas 76.4% (66/86) began sex between 18 and 23, inclusively (Table 2). Regardless of whether it was the first sex or not, 70% (49/70) had a history of having sex without a condom, and 47.3% (35/74) had never used a condom for

sex. About 68% (27/85) did not use condom for the first sex. The most common reasons reported for having unprotected sex were that they had sex accidentally and they did not have condoms with them (40%;18/45) and that they believed that their new sexual partner was STI-free (26.3%; 12/45) (Table 2). Out of 82 respondents, 28 (34.1%) had two or more sexual partners in their lifetime. About 58.8% (47/80) of respondents established a new sexual partner without asking for STI and HIV status. About 14.5% (48/332) responded that oral contraceptive pills protect against STIs.

Factors associated with having premarital sex

In bivariate analysis, sex, religion, study field, study program, income, seducing the opposite sex, having a boyfriend or girlfriend, misconception that oral contraceptive pills protect from acquiring STIs, watching pornography and alcohol drinking were statistically significantly associated with having premarital sex (Table 3). In multivariate analysis, religion (AOR, 4.282; CI95%, 1.229-14.913; P,0.022), program of study (AOR, 3.417; CI95%,1.423-8.206 ; P, 0.006), having a boyfriend or girlfriend (AOR, 6.259; CI95%, 2.866-13.672; P,0.00), misconception that oral contraceptive pills protect from STIs (AOR, 3.345; CI95%, 1.317-8.499; P, 0.011) and taking alcohol (AOR, 3.304; CI95%, 1.319-8.501; P, 0.011) were independently associated with having premarital sex, after controlling other variables (Table 3). Thus multiple logistic regression analysis showed that premarital sex was found to be more common among Christians, degree students, those who have a boyfriend or girlfriend, those who believe that oral contraceptive pills provide protection against STIs and those who take alcohol (Table 3).

Table 3. Factors associated with having premarital sex among students of ATHSBC, Addis Ababa, 2019

Variable	Category	Had premarital sex		cOR	CI 95%	p-value	AOR	CI 95%	p-value
		Yes (%)	No (%)						
Sex	Male (ref)	30 (41.7)	42(58.3)				1		
	Female	58(19)	248(81)	3.050	1.764-5.288	0.000	1.844	0.699-4.868	0.216
Religion	Christian (ref)	76(27.9)	196(72.1)				1		
	Muslim	7(7.8)	83(92.2)	4.598	2.034-10.393	0.000	4.282	1.229-14.913	0.022
Field of study	Health (ref)	52(32.9)	106(67.1)				1		
	Business	36(16.5)	182(83.5)	2.480	1.523-4.039	0.000	1.889	0.901-3.960	0.092
Program of study	Level	20 (12.3)	142(87.7)	3.284	1.896-5.689	0.000	3.417	1.423-8.206	0.006
	Degree (ref)	68(31.6)	147(68.4)				1		
Have income	Yes (ref)	39(35.8)	70(64.2)				1		
	No	44(17.5)	208(82.5)	2.634	1.583-4.382	0.000	1.912	0.888-4.118	0.098
Seduce opposite	Yes (ref)	14(73.7)	5(26.3)				1		
sex	NO	68(20.7)	261(79.3)	10.747	3.741-30.878	0.000	1.229	0.290-5.200	0.780
Have boy-/	Yes (ref)	65(44.8)	80(55.2)				1		
girl-friend	No	21(9.7)	196(90.3)	7.583	4.347-13.229	0.000	6.259	2.866-13.672	0.000
Do contraceptive	Yes (ref)	26(53.1)	23(46.9)				1		
pills protect	No	54(19.4)	224(80.6)	4.689	2.485-8.847	0.000	3.345	1.317-8.499	0.011
from STIs?									
Ever watched	Yes	29(34.5)	31(65.5)				1		
Pornography	NO	31(11.4)	242(81.5)	4.116	2.293-7.388	0.000	2.180	0.866-5.485	0.098
Take alcohol	Yes (ref)	36(60)	24(40)				1		
	No	49(16.3)	252(83.7)	7.714	4.232-14.061	0.000	3.304	1.319-8.501	0.011

CONCLUSION

This study showed that the prevalence of premarital sex and risky practices is high among students of ATHSBC. Therefore, effective reproductive and sex health education must be provided to college and secondary school students by colleges and other stakeholders in order to save them from being victims of unwanted pregnancy and sexually transmitted infections. In providing health education, it is important to ensure that students get rid of misconception about the function of oral contraceptive pills. Moreover, parents and guardians need to advise their children not be engaged in premarital sexual intercourse and risky sexual behaviors. Furthermore, the usual role of religious institutions in solving these problems has to be emphasized and promoted.

DECELARATIONS

Authors' contribution

All authors contributed to the conceptualization, design and implementation of the study, data collection, analysis and interpretation, and writing the manuscript.

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