Prevalence of premarital sexual practice and associated factors among Goba town high school students, South East-Ethiopia

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Abstract

Background: Premarital sexual practice significantly attributes for increase adolescent’s risk of unintended pregnancy, early marriage, abortion and STIs. In Ethiopia adolescents were intended to engage at early initiation to sexual intercourse without having proper protection has been one of the concerns. Study aimed to assess the prevalence of premarital sexual practice and associated factors among high school students.

Method: A facilities based study design was employed. Data were collected from 291 randomly selected Negade and Finca Bamo high school students using structured questionnaire from June 1-30, 2018. Bi-variate logistic regression used to identify variables that crudely associated and variables with p - value ≤ 0.05 fitted to multiple logistic regression. Odds ratio with 95% confidence interval was estimated using multivariable logistic regression to identify independent predictors of premarital sex.

Result: Among high school students, 31.2% reported had experienced premarital sexual practices. This shows that premarital sexual practices among high school adolescent’s students were high. Drinking alcohol [AOR = 4.06, 95%CI, (2.06 - 7.99)]. Watching pornographic video [AOR: 2.78, 95%CI, (1.45 - 5.3)] and educational status of mothers [AOR: 0.33; 95% CI (0.13, -0.84)] were significantly associated factors.

Conclusion: Drinking alcohol, watching pornography and mother education were predominantly significantly associated. Therefore, an integrated effort needs to be highlighted to deter the health behavioral problems of school adolescents at the early stages.

Introduction

World Health Organization (WHO) defines adolescent people as those between the ages of 10-19 years [1]. Adolescent is the time of transition from childhood to adult hood during which young people experiencing following puberty and human beings faced once in their life time [2]. The world today is experiencing a rapid increasing in the number of young people. Today adolescents constitute approximately one-fifth of the world’s population with more than four-fifth in developing countries [3].

According to Ethiopian demographic and health survey (EDHS), 2011, 1.5% of Ethiopian adults age 15-49 are infected with HIV and the number of women age 15-19 years who tested positive for HIV is much higher than the number of males in the same age group which is due to early sexual initiation among young females and having multiple sexual partner [4].

Pre-marital sex is any sexual activity with an opposite sex partner or with same sex partner before he/she has started a marriage life. The term is usually used to refer the intercourse before a marriage. Sexual activities among young people have been increasing worldwide. Several studies in Sub-Saharan Africa have also documented high and increasing pre-marital sexual activities among young peoples [5].
In Ethiopia, an increasingly large number of adolescents are enrolled in preparatory schools. Early initiation to sexual intercourse without having proper protection has been one of the concerns. Adolescents often encounter high-risk situations, such as contracting STD/HIV/AIDS and often experience unintended pregnancy, illicit abortions and its negative sequel. Both female and male adolescents are usually curious to discover sexes which are usually unprotected [6].

Another study done among Ambo high school students revealed that 30.5% of sexually active female students had got pregnant at least once prior to the study out of which 66.7% reported history of abortion and from sexually active male respondents 15.94% were also impregnated at least once prior to that assessment. The existing literatures also document that adolescents engage in pre-marital sex with insufficient knowledge of reproductive health and the proportion of pre-marital sex is higher among older age groups than younger age groups [7]. Different studies conducted in Ethiopia identified inconsistent factors of sexual practice. Thus, this study tries to assess prevalence of pre-marital sexual practice and factors associated with it among Goba town high school students.

Method and material

Study setting

Study conducted in Goba town high schools, which were found in Bale zone of the Oromia region. The town was located in Oromia region approximately 446 km south east from the Capital city, Addis Ababa and 13km from capital city of Bale zone, Robe town. And in this town there were two secondary schools that served a population of Goba town and the surrounded kebeles. The total enrolled students in Negade high school were 1564, out of which 762 were females and 802 were males. The total enrolled students in Finca’a Bamo were 400, out of which 208 were females and 192 were males. The total number of students were recruited in Grade 9 and 10 were 1245 and 719 respectively. Totally 1964 students, out of which 970 were females, were attended high school education in Goba town.

Study design and participants

A facility based cross-sectional study was carried out in Goba town (Negade and Finca Bamo high school), Bale zone, south east Ethiopia from June 1 to June 30, 2018. The students who attended during the study period were selected as participants that were specifically ensure the inclusion criteria.

Sample size determinations and sampling techniques

The sample size for this study was determined using single population proportion formula: assuming, 95% confidence interval (CI), 5% margin of error (d), 10% Non-response rate and \( p = \frac{87}{200} \) and\( p = \frac{73}{200} \) of prevalence of premarital sexual practice that were conducted in Sebata secondary school [8]. Therefore, the determined sample size by considering 5% contingency was 343. Since the total population was <10,000 this might needs the correction formula then the final sample size was 291. During the study consultation with high school administration was made to obtained details of classes and respective numbers of students in the school. A Simple random sampling technique was used and the sample size allocated proportionally to 9th and 10th grade students.

Data collection procedures

Structured, pretested and self-administer questionnaire Oromia version questionnaires were used to collect the data adapted from different literatures. The questionnaire incorporates student information of, socio demographic characteristic, sexual history of the respondent and associated factors were major factors that contributed for the involvement of the respondents into premarital sexual activity. The principal investigator was coordinating the overall activity of the study.

Data analysis

Data coded and entered into a computer using Epi info version 7.2.0.1 and checked for completeness and transferred to SPSS version 20 for analysis. During the process of statistics analysis like frequencies, percentage, pie chart, table and mean computed. Bi-variate logistic regression used to identify variables that crudely associated and variables with \( p - \) values less than or equal to 0.05 fitted to multiple logistic regression. Then association between dependent and independent variables was assessed using adjusted odds ratio (AOR), 95% CI and \( p \) value of < 0.05 considered statistically significant.

Operational definition

Premarital sexual practice: in this study refers to penetration of males’ penis into vagina.

Premarital sex: refers to sexual practice with any one before the marriage between has been launched.

Ethical consideration

Before data collection procedure, letter of permission was obtained from Madda Wallabu University Research and Community Service Directorate and verbal consent was taken from the study subjects. The respondent right and dignity was also respected in order to keep confidentiality of each respondents’ name was not included.

Result

Sociodemographic characteristics of study participants

Two hundred sixty respondents aged between 15-19 years were participated yielding a response rate of 276 (94.9%). One hundred fifty eight (57.2%) of the respondents were males. Regarding education, majority of the respondents were from grade nine (66.7%). Similarly the followers of orthodox Christianity were (43.5%), were followed by Muslims (36.2%) and (2.5%) were other (wakifeta, hawariat).

The most predominant ethnic group was Oromo (75.7%). Majority of the respondents (95.3%) were unmarried.
Regarding place of residence more than half (72.5%) were from urban. Regarding educational status of father, most of them were (43.1%) completed primary and secondary school, whereas (33.7%) attained college/university respectively. Regarding, educational level of mother, majority of them were attained primary and secondary (35.1%), and (32.2%) can read and write. Monthly income of most of the study subjects’ family ranges from > 2000 Birr which accounts (37.7%).

More than half of the respondents (65.2%) were lived with their families while the rest (34.8%) were living away from their families. Most of the respondent were (54.3%) attended their families while the rest (34.8%) were living away from

Sexual history of the participants

Regarding to sexual practice one hundred ninety (68.84%) of participants were did not ever involved in premarital sexual practice. Eighty six (31.16%) of the students have had sex with more than one sexual partner. The reason not to use condom during their first sexual practice. The reason not to use condom in their first sexual intercourse. But more than half of the participants (65.1%) did not use condom was used condom in their first sexual intercourse. But more than half of the participants (65.1%) did not use condom (Table 2).

Prevalence of premarital sexual practice

Regarding the multivariate analysis students whose mothers educational status determine premarital sexual practice [AOR: 0.33; 95%CI (0.13, -0.84)] with p - value = 0.02, alcohol drinking [AOR: 4.06, 95%CI, (2.06, -7.99)] with p - value < 0.0001 and watching pornography [AOR: 2.78, 95%CI, (1.45-5.3)] wit p - value = 0.002 were independent predictors of premarital sex (Table 3).

**Discussion**

This study revealed that more than one fourth (31.16%)
of the respondents had premarital sexual intercourse. It was in line with from Sebeta town, 28.3% [8], Bahir-Dar, 30.8% [9], Maichew, 29.3% [3], Gondar and Meteme, 31.9% [14]. But this study finding was higher than study done in Agaro, 25% [10] and Shendi town, 19% [11]. This could be explained by this study finding was higher than study done in Agaro, 25%, Maichew, 29.3%, Gondar and Meteme, 31.9%. But in line with from Sebeta town, 28.3%, Bahir-Dar, 30.8% of the respondents had premarital sexual intercourse. It was students in Bale zone.

Table 2: Premarital sexual practices and behavior among Goba town high school students in Bale zone.

| Variable                        | Categories | Frequency | Percent |
|---------------------------------|------------|-----------|---------|
| Have boy/girl friend            | Yes        | 112       | 44.2    |
|                                 | No         | 154       | 57.6    |
| Age at first sexual intercourse | 15-19      | 43        | 50.0    |
|                                 | 20-25      | 23        | 26.7    |
|                                 | > =25      | 1         | 1.2     |
|                                 | Not know   | 19        | 22.1    |
| Age of first sexual Partner     | 15-19      | 29        | 33.7    |
|                                 | 20-25      | 17        | 19.8    |
|                                 | > =25      | 1         | 1.2     |
|                                 | Did not know | 39      | 45.3    |
| Consumed any alcohol and 'khat' during first sex | Yes | 13 | 15.1 |
|                                 | No         | 73        | 84.9    |
| First Sexual partner           | Spouse     | 4         | 4.6     |
|                                 | Friend     | 58        | 67.4    |
|                                 | Teacher    | 17        | 19.8    |
|                                 | Other specify | 7   | 8.2     |
| Reason to start sex            | Fall in love | 34  | 39.5    |
|                                 | Had sex desire | 39 | 45.3    |
|                                 | Forced     | 5         | 5.8     |
|                                 | To get money | 3        | 3.4     |
|                                 | Peer pressure | 7   | 8.2     |
|                                 | Substance abuse | 16 | 18.7    |
| Did you use condom during sexual intercourse(n = 86) | Yes | 30 | 34.9 |
|                                 | No         | 56        | 65.1    |
| How often you use condom       | Always     | 6         | 20.0    |
|                                 | Usually    | 3         | 10.0    |
|                                 | Sometimes  | 21        | 70.0    |
| Reasons for not use of condom  | Not available | 8   | 14.3    |
|                                 | Ashamed to ask partner | 21 | 31.7 |
|                                 | Didn't think | 20    | 35.7    |
|                                 | Substance abuse | 4   | 7.1     |
|                                 | Don't know how to use | 3   | 5.4     |
|                                 | 0          | 0        | 0.0%    |
| Sexual intercourse after drinking alcohol | Yes | 33 | 38.4 |
|                                 | No         | 53        | 61.6    |
| Sexual intercourse after smoking cigarettes | Yes | 26 | 30.2 |
|                                 | No         | 60        | 69.8    |
| Sexual intercourse after chat chewing | Yes | 13 | 15.1 |
|                                 | No         | 73        | 84.9    |
| Number of sexual partner       | One        | 29        | 33.7    |
|                                 | Two or more | 57    | 66.3    |
| Had sex in the past 12 months  | Yes        | 30        | 53.6    |
|                                 | No         | 56        | 46.4    |
| Peer pressure toward sex       | Yes        | 7         | 8.1     |
|                                 | No         | 79        | 91.9    |

Other finding revealed that condom use during first sexual intercourse in this study is about (34.9%). This finding is higher than from a study result 33.6% among students of Jimma town [13]. This could be due to fact that availability of information about condom has got an impact on condom use through time.

Study showed that, the student reason claimed to have the first sexual intercourse was due to fall in love, 39.5%, had desire, 24.4%, Peer pressure, 8.2% and to get money or gifts, 3.4%, Raped, 5.8%, and substance abuse, 18.7%. This finding is similar to the study conducted in Addis Zemen Town South Gondar (14). But the reason of having premarital sex among northern Ethiopia High School students was due to peer pressure (35.2%), and use of drugs, which is different from the current study [3]. The possible reason may be adapting of western culture and style.

One of the predictor variables in this study was students who drink alcohol four times more likely to report and begin premarital sexual practice than that of those who did not drink alcohol (AOR = 4.06, 95%CI, (2.06, 7.99)). The possible reason might be, drinking alcohol decrease self-control and predispose to risky behavior such as early initiation of sexual intercourse [15].

This study found that students whose educational status of mother attended college and above education were odds of 0.33 premarital sexual practice than those of not attended formal education [AOR = 0.33, 95%CI, (0.13-0.84)]. This finding is in line with study done in gedeo zone [AOR=0.81, 95%CI, (1.12, 2.35)].

On the other hand, students whose educational status of mother attended college and above education were 0.33 time less likely to have odds of premarital sexual practice than those of not attended formal education [AOR = 0.33, 95%CI, (0.13-0.84)]. This finding is in line with study done in gedeo zone [AOR=0.81, 95%CI, (1.12, -2.35)].

In addition, those students who were watching pornography were reported high risk of premarital sexual practice than those who did not watch pornography [AOR = 2.78, 95%CI, (1.45, 5.3)]. This finding is higher than result of study done in shendi town of east gojjam [AOR = 1.74 95% CI, (1.18, 2.54)]. This may be due to the difference in study population culture [11].

Conclusion

This study has revealed that significant numbers of high
school students are engaged in premarital sexual practice very early, with risky situation (different sexual partner, due to alcoholic consumption and non-use of condom). Attending to watch pornography, educational status of mother and dirking alcohol were independent predictors of premarital sexual practice among high school students. Therefore, health information supply on sexuality and reproductive health to disrupt the deep rooted believes and traditions should establish so as to bring behavioral change among students. As well students should be aware about high risk sexual behavior through behavioral materials and their family. Further interventional study design should need to be done.

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### Declaration of conflict of interest

The authors declare there is no any conflict of interest.

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**Table 3:** Final regression analysis showing factor associated with premarital sexual practice among high school students.

| Model variables          | Premarital sex | COR, 95%CI       | p - value | AOR, 95%CI       | p - value |
|--------------------------|----------------|------------------|-----------|------------------|-----------|
|                          | Yes            | No               |           |                  |           |
| **Educational status of mothers** |                |                   |           |                  |           |
| Collage and above        | 8(32%)         | 17(68%)          | 0.5(0.22-1.14) | 0.054 | 0.33(0.13-0.84) | 0.02** |
| Primary and secondary    | 20(20.6%)      | 77(79.4%)        | 0.47(0.22-1.01) | 0.07 | 0.77(0.38-1.58) | 0.075  |
| Not attended formal education | 34(58.6%)   | 24(41.4%)        | 1          | 1                 | 1         |
| **Attended religious services** |                |                   |           |                  |           |
| Yes                      | 60(24.1%)      | 189(75.9%)       | 0.39(0.21-0.73) | 0.003* | 0.55(0.25-1.22) | 0.141  |
| No                       | 26(96.3%)      | 1(3.7%)          | 1          | 1                 | 1         |
| **Drinking alcohol**     |                |                   |           |                  |           |
| Yes                      | 57(68.7%)      | 26(31.3%)        | 6.17(3.59-10.84) | <.0001* | 4.06(2.06-7.99) | < 0.001 |
| No                       | 29(15%)        | 164(85%)         | 1          | 1                 | 1         |
| **Cigarette smoking**   |                |                   |           |                  |           |
| Yes                      | 19(82.6%)      | 4(17.4%)         | 3.14(1.54-6.42) | 0.002* | 1.05(0.41-2.69) | 0.918  |
| No                       | 67(26.4%)      | 186(75.6%)       | 1          | 1                 | 1         |
| **Watching Pornography**|                |                   |           |                  |           |
| Yes                      | 59(50.4%)      | 58(49.6%)        | 4.55(2.59-7.98) | < 0.0001 | 2.78(1.45-5.3) | 0.002* |
| No                       | 27(17%)        | 132(83%)         | 1          | 1                 | *         |
| **Peer pressure**        |                |                   |           |                  |           |
| Yes                      | 7(100%)        | 0(0%)            | 2.625(222-.652) | < 0.0001 | 1.56(0.82-2.97) | 1.564  |
| No                       | 79(100%)       | 190(0%)          | 1          | 1                 | *         |

Note: COR: Crude Odd Ratio; AOR: Adjusted Odd Ratio; *= significant at bivariate level; **= significant at multivariate level; ~= boarder line significant at bivariate level (p < 0.2) and p < 0.05 for multivariate.
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