

## Determinants of Sexual Debut among High School Girl Students in Arsi Zone, Huruta Town, Ethiopia

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### Abstract

**Background:** Premature sexual debut increases the likely-hood of having many sexual partners, early pregnancy, unintended pregnancy, abortion and its complications. Moreover, the age at primary sex is affected by numerous of factors and this makes the consequences much more serious. Therefore, the purpose of this study is to explore determinants that affect high school female students.

**Methods:** A cross-sectional study was employed from December, 15-19/2015 at huruta senior secondary school. A multi-stage sampling technique was used to select the respondents. Data were gathered using structured, self-administered questionnaire. Epi-Info version 3.5.1 was used to enter, clean and analyze the collected data. To explore the possible factors related with early sexual debut were carried out using descriptive statistics, binary and multivariable logistic regression model.

**Results:** Among high school girl students 53.7% reported early sexual debut. The mean age at primary sexual debut was 16.27 (SD ± 2.1) years. The major predictors were age group 20-24 [AOR=3.03, 95% CI; (2.09, 4.39)], marital status [AOR=0.05, 95% CI; (0.02, 0.12)], peer pressure [AOR=3.85, 95% CI; (2.66, 5.58)], alcohol use [AOR=2.01, 95% CI; (1.41, 2.87)] and watching pornographic videos [AOR=3.01, 95% CI; (2.06, 4.40)].

**Conclusions:** Significant proportion of high school students have started early sexual debut. The study shows that the need to aware school students to make them informed and sound decision on their sexual experimentation. Therefore, Huruta town administration education and health bureau should design a persistent and effective health education, to reduce the exposure to early sexual debut among high school girl students.

**Keywords:** Sexual debut; Female students

### Introduction

Adolescence defined as a transition from childhood to adulthood with features including secondary sexual growth, changes in hormonal milieu, emotional, cognitive and psychological development [1]. Adolescents are usually adventurous in all spheres of human activities including experimentation of sexual practices [2]. Adolescent girls and young women aged 15-24 years constitutes about approximately 880 million of world's population [3]. There are over 600 million girls (aged 10 to 19) in the world today; more than half million of them live in low and middle-income countries [4]. Only, Sub-Saharan Africa make up 23 percent of the world adolescent's population [5], while Ethiopia adolescents' population constitutes about 26.1 percent of the total population [6]. Early sexual debut is defined as sexual activity before 18 years, the age of legal adulthood in Ethiopia [7]. Adolescent sexual experimentation before marriage is considered as the reproductive health problems. As young population elucidate their sexual value, it is common for them to practice with sexual behavior [8] that might increase the risk of unintended pregnancy, abortion, multiple sexual partners, sexually transmitted infection and consecutively lead them to poor reproductive health outcomes. Contraceptive use is inconsistent particularly condom on each sexual intercourse [9]. Many studies revealed that, adolescents face different challenges to make use of

alcohol, chewing chat or use of drugs, exposure to unlicensed pornographic videos and these influence them to begin sexual relationships at earlier ages [10-15]. Poverty, exposure to mass media, as well as the changes taking place in the traditional family may contribute to early sexual debut among young girls. In addition, studies done in Ethiopia revealed that peer pressure, alcohol use, and chewing khat are the major causes of early sexual initiation [6]. In Ethiopia schools, sexuality education had been a controversial issue among adolescents. Apart from this, studies have also showed that there is high rate of parental aversion in discussing sexuality issues [1,15]. This has lead in Ethiopia adolescents being exposed to all forms of reproductive health problems such as early pregnancy, unintended pregnancy, premature births, and sexually transmitted infection including HIV/AIDS. This study therefore, to explore factors related with early sexual debut among high school girl students in huruta high school, Huruta town.

### Materials and Methods

#### Study design and setting

School-based cross-sectional research design was conducted in Huruta town from December, 15-19/2015. Huruta is a town in central Ethiopia. The town is situated in the Arsi Zone of the Oromia Region to the north of Itaya. Based on figures from the CSA, Ethiopia

published in 2005, Huruta has an estimated total population of 16,922 consisting of 8,391 men and 8,531 women [14]. In Ethiopia, education from grade nine to grade twelfth regarded as high school. The town has one high school and junior secondary school (1-8 grades). The high school serves for the students found in the town and coming from surrounding rural areas.

### Study respondents and Estimation of sample size

Respondents were high school girl students selected from a high school. A single population proportion formula was used to estimate the sample size. The following assumptions were used; 95% level of confidence interval, 0.05 margins of error, and expected proportion of early sexual debut 51% [15]. After the correction of the first sample size, we used a design effect of 2 to estimate the final sample size. Lastly, we add a 10% of non-response rate, and the final sample size was 845 high school female students.

### Sampling procedure

A multi-stage sampling procedure was employed to select 845 respondents and to give equal chance for all respondents; a probability proportionate to size of the students from each grade (ninth and tenth grade) was used. To use as a sampling frame, a list of sections were applied and a simple random sampling method was used to select sections. Respondents from each section were selected again by random sampling method from the list of students.

### Data collection and analysis

A pretested, structured, facilitator guided, and self-administered questionnaire was used to collect the data, adapted from EDHS, 2011 [10]. First, the tool was developed in English and then translated in to Oromiffa (local language) and again back to English to check reliability. From all respondents, data were collected within one day to overcome contamination of the information. Data supervisors and facilitator were recruited and trained. Both the supervisors and facilitators were provided clarification on the procedure and tool. They also ensured privacy and confidentiality of information. The outcome variable was early sexual debut, while the independent variables were

socio-demographic characteristics of the respondents, peer pressure, alcohol use, watching pornographic videos, and drug use. Data were entered, coded, cleaned and analyzed using Epi Info Version 3.5.1 statistical package software. Frequency of reported early sexual debut was computed. To control the effect of confounding factors, a logistic regression was employed. P-value <20% was taken as a cut-off point for selecting variables for logistic regression. P-value less than 0.05 were regarded as statistically significant.

### Ethical issues

This particular study was conducted after securing all the ethical approval of institutional review committee. A permission letter was obtained from the Woreda Education Bureau. An oral consent was obtained from each respondent. The privacy was maintained throughout by not mentioning their name on the questionnaire.

### Results

A total of 784 respondents were take part in this study and obtained a complete response of 92.9%. The questions (7.1%) were discarded because of incompleteness and inconsistencies. More than half, 425 (54.2%) of the girl students were 15-19 years age group. Majority 511 (65.2%), of the respondents were Oromo by ethnicity, 416 (53.1%) of them were Orthodox followers and never married constitute 659 (84.1%). regarding, parental residence, 672 (85.7%) of respondents were had parents from urban areas and a little higher percentage (50.3%) of respondents were attend grade nine (Table 1). About 259 (61.5%) of age 20-24 years and 305 (72.4%) of unmarried respondents reported having sexual debut. In this finding, the mean age was 16.27 years with (2.1 ± SD). The minimum and maximum age of sexual debut was 15 and 24 years respectively. About 46.3% were influenced by their friends to have sex and among 284 (67.5%) of the respondents it happened willingly. One fifth, 144 (18.4%) of respondents who already started sexual initiation had pregnancy. Among pregnant, 100 (12.8%) of respondents had abortion history. Only 286 (36.5%) of students were used condom consistent. One third, 250 (59.4%) and 242 (57.5%) of female students who were began sexual debut reported drunk alcohol, watched pornographic videos respectively (Table 2).

Variables	Number	Percentage (%)
<b>Age range (in years)</b>		
15-19	425	54.2
20-24	359	45.8
<b>Ethnicity</b>		
Oromo	511	65.2
Amhara	148	18.9
Tigre	125	15.9
<b>Religion</b>		
Orthodox	416	53.1
Protestant	261	33.3
Muslim	107	13.6

<b>Marital status</b>		
Married	125	15.9
Unmarried	659	84.1
<b>Educational Grade</b>		
Grade 9	394	50.3
Grade 10	390	49.7
<b>Parental Residence</b>		
Urban	672	85.7
Rural	112	14.3

**Table 1:** Socio-demographic features of respondents in Huruta town, from December, 15-19/2015, Ethiopia.

<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Sexual debut</b>		
Yes	421	53.7
No	363	46.3
<b>Condition of sexual debut</b>		
Willingly	284	67.5
Sudden	137	32.5
<b>Peer pressure</b>		
Yes	363	46.3
No	421	53.7
<b>Parent-child communication on sexual behavior</b>		
Yes	101	12.9
No	683	87.1
<b>Pregnancy History</b>		
Yes	144	18.4
No	640	81.6
<b>Abortion History</b>		
Yes	100	12.8
No	684	87.2
<b>Use of condom</b>		
Yes	286	36.5
No	498	63.5
<b>Drunk alcohol</b>		
Yes	379	48.3
No	405	51.7

Viewed pornographic videos		
Yes	346	44.1
No	438	55.9

**Table 2:** Percentage distribution of sexual and non-sexual behavior concerning sexual debut among high school female students in Huruta town, from December, 15-19/2015, Ethiopia.

The multivariable logistic regression analysis depicted that sexual initiation was more likely to occur among respondents age group 20-24 [AOR=3.03, 95% CI; (2.09, 4.39)], unmarried [AOR=0.05, 95% CI; (0.02, 0.12)], peer pressure [AOR=3.85, 95% CI; (2.66, 5.58)], alcohol use (AOR=2.01, 95% CI; (1.41, 2.87)) and watching pornographic videos [AOR=3.01, 95% CI; (2.06, 4.40)] (Table 3).

Determinants	Start sexual debut		Crude OR (95% CI)	Adjusted OR (95% CI)
	Yes (%)	No (%)		
<b>Age range (in years)</b>				
15-19	162 (38.5)	263 (72.5)	1	1
20-24	259 (61.5)	100 (27.5)	4.20 (3.1, 15.69)	3.03 (2.09, 4.39)
<b>Marital status</b>				
Married	116 (27.6)	125 (15.9)	1	1
Single	305 (72.4)	659 (84.1)	0.06 (0.03, 0.13)	0.05 (0.02, 0.12)
<b>Peer pressure</b>				
Yes	260 (61.8)	103 (28.4)	4.07 (3.01, 5.50)	3.85 (2.66, 5.58)
No	161 (38.2)	260 (71.6)	1	1
<b>History of pregnancy</b>				
Yes	90 (21.4)	54 (14.9)	1.55(1.07, 2.25)	0.79 (0.35, 1.74)
No	331 (78.6)	309 (85.1)	1	1
<b>History of Abortion</b>				
Yes	66 (15.7)	34 (9.4)	1.79 (1.15, 2.79)	2.19 (0.86, 5.53)
No	355 (84.3)	329 (90.6)	1	1
<b>Drunk alcohol</b>				
Yes	250 (59.4)	129 (35.5)	3.36(2.49,4.53), (1.98, 3.54)	2.01 (1.41, 2.87)
No	171 (40.6)	234 (64.5)	1	1
<b>Viewed pornographic videos</b>				
Yes	242 (57.5)	104 (28.7)	3.36 (2.49, 4.53)	3.01 (2.06, 4.40)
No	179 (42.5)	259 (71.3)	1	1

**Table 3:** Factors related with sexual debut among high school female students in Huruta town, from December, 15-19/2015, Ethiopia.

## Discussions

Early sexual debut predispose high school girl students to numerous reproductive health problems such as sexually transmitted infection; including HIV/AIDS, unintended pregnancy, abortion, etc. The

respondents age was main predictor for sexual debut; those respondents whose age group 20-24 years were found to be 3 times higher chance to start sexual debut compared to 15-19 years [AOR=3.03, 95% CI; (2.09, 4.39)]. This finding is similar with a study conducted in South Africa and India [16,17]. About 84.1% of single

high school girl students have initiated sexual debut. It was comparatively higher than a study conducted in high school girl students of Jimma and Addis Ababa [18,19]. The disparity might be because of the fact that technological advancement that increases watching videos and substance use such as alcohol, Khat and cigarette, which might boost the chance to be engaged in early sexual debut. This particular finding revealed that majority (87.1%) of the high school girl students had no parent-child communication at home related to sexual matters. This is because of the fact that sexuality issue still remains a taboo in Ethiopia so; the parent-child communication is not encouraged as a result of culture. However, the peer pressure to undertake sexual debut among school female students was found to be statistically associated [AOR=3.85, 95% CI; (2.66, 5.58)] with first sexual exposure. This result was conforming to other studies conducted in different areas [18,20]. Drinking alcohol decreases self-control and expose to risky sexual intercourse [11,21]. In this finding, girl students who drinking alcohol were found to be twice more likely to begin sexual debut compared to their counterpart (AOR=2.01, 95% CI; (1.41, 2.87)). In this finding, watching pornographic videos was found to be a major predictor to sexual debut among girl high school; the adjusted odds ratio also showed that high school girl students who watched pornographic videos was found to be three times more likely to begin sexual debut [AOR=3.01, 95% CI; (2.06, 4.40)], which is similar with a cross-sectional study conducted in Jimma Zone, South West Ethiopia [11].

### Study Limitation

The study was conducted based on cross-sectional survey; casualty cannot be incidental from the finding. Lack of using qualitative method which helps to explore in-depth view about the enabling factors for sexual debut could be the other possible limitations.

### Conclusion and Recommendation

In conclusion, the proportion of sexual debut was high. Age of respondent and being unmarried were major predictor for sexual debut. Peer influences, drinking alcohol and watching unrestricted pornographic material/videos have considerable consequence on the timing of sexual debut for high school girls' students. Therefore, firming virginity norm as a culture, which delays sexual contact, should be advocated. The town administration education and health bureau should design a persistent and effective health education, establishing and strengthening center/club should be intensified to reduce early sexual debut in high school girl students. Lastly, stake holders such as policy makers should think to revise a legal age for buying alcohol and restricting videos.

### Declarations

**Competing interest:** Authors declare that they have no competing interest.

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**Author's contribution:** DTN participate in design, analysis, and write-up of the project and in development of the manuscript. The author read and approved the final manuscript.

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