Prevalence and Factors Associated with Early Sexual Debut among Preparatory School Students in Gondar Town, North West Ethiopia 2018

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Research note

Keywords: Early sexual debut, factors, preparatory students, Gondar, Ethiopia

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Abstract

Objective: Early sexual debut increases youth exposure to risky sexual behaviors, STIs including HIV/AIDS, and unsafe abortion. There is study limitation on this specific issue on the study area. Therefore, this study aimed to determine the prevalence and associated factors of early sexual debut among preparatory school students in Gondar town, North West Ethiopia. Results: From a total of 797 students, 750 respondents complete the questionnaire giving a response rate of 94.1%. About 20.5% with 95%CI (17.6, 23.3%) of the respondents had early sexual debut. Had lesson on sexuality education (AOR=2.14, 95%CI 1.15, 3.98), drinking alcohol (AOR= 14.5, 95%CI 7.81, 27.22), had good parental monitoring (AOR=3.6, 95%CI 1.8, 7.45), had discussion on sexual issues with parents (AOR=3.05, 95%CI 1.04, 8.88), and had good academic achievement (AOR=4.2, 95%CI 1.72, 10.26) were found to be significantly associated with early sexual debut. Sexual education programs at earlier life may help to delay sexual debut for school youths and is recommended to incorporate it in the curriculum. Key words: Early sexual debut, factors, preparatory students, Gondar, Ethiopia

Introduction

Early sexual debut is performing sex before the age of 18 years. Early sexual debut increases young people to STIs including HIV/AIDS, early pregnancy, child birth, unsafe abortion, and dropout from school[1, 2].

Studies conducted in different parts of the world showed the prevalence of early sexual debut being 9.8% in Malaysia[3], 18.6% in Ogbomoso, Nigeria[4], 11% in Ido-ekiti, South-West Nigeria[5], 36% among males and 16% among females in Nyaza, Kenya[6], and 27.3% in a study conducted among eight African Countries[7].

Studies conducted in different regions of Ethiopia showed the prevalence of early sexual debut being 64.7% in Debre Markos University[8], 18.40% in Woldiya town[9], 19.0% in Shire-Endessilassie[10], 20.4% in FaggetaLekoma District of Awi Zone[11], 27.6% in Legehida district[12].

Attending religious programs[4, 9], peer pressure[9, 11], exposure to pornographic materials[9, 10, 12] parental residence (being urban) [13], sex(being female) [14], cigarette smoking[15], do not have comprehensive knowledge about HIV/AIDS[16], and feel they know enough about sexuality[17] were the main factors identified to have significant association with early sexual debut in the previous studies.

The prevalence as well as the factors associated with early sexual debut varies from place to place and hence it is very difficult to generalize the results of other studies for the current setting. Hence, this study was conducted to determine the prevalence and associated factors of early sexual debut among preparatory school students in Gondar town, North West Ethiopia.

Materials And Methods

A school based cross-sectional study was conducted from October 20 to December 30, 2018 in Gondar city administration which is found at the North West of Ethiopia.

Sample size was determined by using single population proportion formula, taking the prevalence of 62% early sexual debut report from EDHS 2016, considering 5% margin of error[18], considering design effect of 2 and non-response rate of 10% and, the final sample size for this study became 797. Students who were present during data collection time were included and those who were unable to respond were excluded. Early sexual debut is defined as an experience of first sexual intercourse before the age of 18 years.

A structured and self-administered questionnaire was used to collect data. The data were coded and entered in to EPI INFO version 7 and exported to SPSS version 20.0 for further analysis. Descriptive statics was done and summarized using frequency tables. Bivarible and multivariable logistic regression analysis were employed to determine those variables having significant association. In the multivariable logistic regression model, AOR with 95% CI was calculated and variables having P-value less than 0.05 were considered as having statistically significant association.

Ethical clearance was obtained from the Institutional Review Board (IRB) of the Institute of Public Health, the Gondar University. Permission letter was obtained from Zonal health department, Gondar town health office and the authorities of selected preparatory schools.

Written consent was obtained from each study participants' of age above 18 years after informing them all the purpose, benefits, and risks on participation on the this study. Individual assent and parental consent was obtained for those participants of age below 18 years. In addition participants were informed about the importance of keeping the confidentiality of the responses they provided and the voluntary nature of participants in the study.

Results

Socio demographic characteristics of respondents

From a total of 797 students, 750 respondents complete the questionnaire giving a response rate of 94.1%. The mean age of the respondents was 18.7 ± 0.89 years, with the minimum of 16 years and maximum of 24 years. Males respondents were 314 (41.9%) and the majority of the respondents, 625 (83%) were Orthodox Christian followers. Regarding residence, 624(83.3%) lives in urban area and 578(77.1%) lives with both of their families (Table 1).

Risky Behaviors of the respondents

From the total respondents 17 (2.3%) had history of cigarette smoking, 49 (6.5%) had history of chewing chat and 164 (21.9%) had history of drinking alcohol (Table 2).

Prevalence of early sexual debut

About 154(20.5%), with 95%CI (17.6, 23.3%) had history of early sexual debut. The prevalence of early sexual debut among males was 59(18.8%) and 95 (21.8%) among females.

Factors associated with early sexual debut

In the Bivariable logistic regression model, factors which were found to have P-value of <0.2 were parents residence, mother's educational level, father educational level, family monthly income, discussion about sexual issues with parents, religious connectedness, peer connectedness, parental monitoring, academic achievement, drinking alcohol, lesson on sexuality education, and school connectedness. All the above twelve variables having P-value of <0.2 in the bivariable model were fitted in to the multivariable model.

Respondents who didn't discuss on sexuality issues with their parents were 3 times more likely to had early sexual debut (AOR=3.05, 95% CI 1.04, 8.88). Respondents who drink alcohol were 14 times more likely to had early sexual debut (AOR= 14.5, 95% CI 7.81, 27.22). Respondents who had no lesson on sexuality education were two times more the odds of early sexual debut (AOR=2.14, 95% CI 1.15, 3.98) when compared to those had ever had a lesson. Respondents who had no good parental monitoring were 3 times more likely to report early sexual debut (AOR=3.6, 95% CI 1.8, 7.45) as compared to those who had good parental monitoring. Respondents who had no history of good academic achievement were 4 times more likely to had early sexual debut as compared to those respondents who good academic achievement (AOR=4.2, 95%CI 1.72, 10.26) (Table 3).

Discussion

The prevalence of early sexual debut in this study was 20.5% with 95% CI (17.6, 23.3%).

This finding is similar with studies conducted in Nigeria(18.6%)[4], Woldiya Town (18.4%)[9], Shire-Endassilassie town(19.0%)[10], and FagetaLekoma district of Awi zone(20.4%)[11]. However, this finding is higher than the results of studies conducted in Malaysia (9.8%)[3], and Ido-ekiti, South-west Nigeria(11.0%)[5]. The possible justification could be due to variations in some demographic characteristics between the current study as compared to those mentioned studies. For instance, in the case of Malaysia study, the proportion of urban residents (57.5%)[3] is lower than the current study(83.3%). Generally, youth living in urban residents are exposed to watching pornography, drinking alcohol and taking different substances which in turn lead them to early sexual debut. In addition, there is variation in age of the respondents between the Ido-ekiti study as compared to the current study. For instance, if we compare the age of the study participants included in the Ido-ekiti study, around 38.1% of the respondents are 14 years or below[5]. Where as in the current study all the respondents are above the age of 16 years. Hence as the age of the respondents became higher the probability of youth to be engaged in sexual practices including early sexual debut could be higher.

This finding is lower than the results of studies conducted in Legehida district (27.6%)[12], Debre Markos(64.7%)[8], and a study conducted in eight east African countries(27.3%)[7]. The possible justification could be the difference in study populations included. For instance, the Debre Markos study was conducted among university students; whereas the current study was conducted among preparatory school students. University students may have more sexual exposure as compared to preparatory students. In addition there is some socio-cultural variation between the studies conducted in eight African countries as compared to the current study, which may contribute for the high prevalence of early sexual debut. More over if we compare the current study with that of a study conducted in Legehida district the proportion of Muslim study participants is higher in Legehida district (72.9%)[12] as compared to the current study (15.9%). Usually, in the Muslim community early marriage is a common practice that may contribute for the high prevalence of early sexual debut in Legehida district.

The odds of early sexual debut was two times more experienced among participants who did not get lesson on sexuality education as compared to those who did. This finding is supported by a study conducted in Ogbomosa, Nigeria[4]. The possible explanation is that had lesson on sexuality education is a protective factor for early sexual debut, since many sexuality education programs include it.

The odds of early sexual debut is fourteen times more experienced among participants who had history of drinking alcohol as compared to those who had not. This finding is supported by studies conducted in Ido-ekiti, South west Nigeria[5], a study conducted among eight African countries[7], and Ogbomoso, Nigeria[4]. The possible justification is usually drinking alcohol is one of the risky behaviors that lead young people to be engaged in risky sexual practices including early sexual debut. Moreover, this might be due to the effect of alcohol which changes healthy thinking ability of the young people and results in unplanned and unsafe sex.

The odds of early sexual debut is nearly four times more observed among study participants who had poor parental monitoring as compared to those who had good parental monitoring. This finding is in line with studies conducted in Woldiya town[9], Faggeta Lekoma district of Awi zone[11], and a study conducted in eight African countries[7]. The possible reason is that parental monitoring is mentioned as one of the protective factors that help young people to have positive development. In addition had parental monitoring is one of the protective factors mentioned, and has strong influence on young peoples' engagement in early sexual debut. [19].

The odds of early sexual debut is four times more experienced among respondents who had no history of good academic achievement as compared to those who had good academic achievement. This is in line with a study conducted in faggeta Lekoma district of Awi zone[11]. The reason could be those students who have good academic achievement may be engaged more in reading on subject(academic) matters rather than reading on magazines and watching different medias that promote early sexual debut. In addition, those students who had poor academic achievement may be out of school, and may be exposed to different risky behaviors like alcohol drinking, chewing Khat and other substances that

may in turn lead youth to practice early sexual debut. Moreover, those students who have poor academic performance usually and may watch different pornographic films that may promote early sexual debut.

The odds of early sexual debut is three times more common among participants who had no history of discussion on sexuality issues with their parents as compared to those who had. This is supported by studies conducted in Shire-Endassilasie[10], and Debre Markos[8]. The possible explanation is that had discussion about sexuality issues with parents lead young people to develop self confidence on their own decision making ability on sexuality issues. Usually parents tell to their kids on the risks of having early sexual debut, and magnify the advantage of delaying the age of sexual debut. All these issues may have influence on youth to delay the age of onset of sexual exposure.

In conclusion, around one fifth of study participants engaged in early sexual debut. Had no lesson on sexuality education, had history of drinking alcohol, had no history of good parental monitoring, had no discussion on sexual issues with parents, and had poor academic achievement were found to have statistically significant association with early sexual debut. Sexuality education programs at earlier life are strongly recommended, hence school and other program managers should strongly work to incorporate sexuality education in the school curriculum. Parents should be trained in a way that enables them to monitor their teens with the necessary skill for sexual negotiation. Use of alcohol to adolescents and alcohol sales outlet proximal to school environments need legislative restriction. The school environment should consider different strengthening mechanisms for those students who have poor academic achievement.

Limitations

This is an institution based cross-sectional study and hence cannot be generalized to the out of school youth. The cross-sectional nature of the study we cannot infer the true causal association between the dependant and independent variables.

Abbreviations

AIDS: Acquired Immune Deficiency Syndrome; AOR: Adjusted Odds Ratio; CI: Confidence Intervals; EDHS: Ethiopian Demographic and Health Survey; HIV: Human Immunodeficiency Viruses; SPSS: Statistical Package for Social Science Students; STIs: Sexually Transmitted Infections; UNICEF: United Nations Children's Fund; WHO: World Health Organization.

Declarations

Ethics approval and consent to participate

Ethical clearance was obtained from the Institutional Review Board of the Institute of Public Health, University of Gondar. A formal letter request of cooperation was written to Gondar town administration office. Written consent was obtained from each study participants. Confidentiality of information and privacy was maintained.

Consent to publish
Not applicable.

Availability of data and materials
All the datasets used to made the conclusions of the current study are included in the main manuscript.

Competing interests
The authors declare that they have no competing interests.

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Authors' contributions
BG, YAH and AA inception designed the protocol, data collection, data analysis, interpretation, manuscript drafting, wrote the paper and revised the manuscript. Both authors read and approved the final manuscript

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Tables

Table 1: Socio demographic characteristics of respondents

Variables		Frequency(n)	Percentage (%)
Sex	Male	314	41.9
	Female	435	58.1
Age			
	16	28	3.7
	17	100	13.3
	18	228	30.4
	19	278	37.1
	20	91	12.1
	21	13	1.7
	22	8	1.1
	23	2	0.3
	24	2	0.3
Grade	11^{th}	393	52.4
	12^{th}	357	47.6
Residence	Rural	125	16.7
	Urban	624	83.3
Mother educational level	No education	194	25.9
	Primary	186	24.8
	Secondary	236	31.5
	Higher	134	17.9
Father educational level	No education	108	14.4
	Primary	96	12.8
	Secondary	256	34.1
	Higher	290	38.7
Family monthly income	Low	49	6.5
	Middle	206	27.5
	High	495	66.0
Religion	Muslim	119	15.9
	Orthodox	625	83.3
	Protestant	6	0.8
School name	Angereb	76	10.1
	Community	20	2.7
	Debreselam	50	6.7
	Fasiledes	506	67.5

	Hidar11	98	13.1
Whom do you Live with	Both parents	578	77.1
	Alone	34	4.5
	Father	11	1.5
	Mother	81	10.8
	Others	46	6.1

Table 2: Showing the non Sexual Risky Behaviors of the respondents

Variables		Frequency(n)	Percentage (%)
Cigarette smoking	No	733	97.7
	Yes	17	2.3
Alcohol drinking	No	586	78.1
	Yes	164	21.9
chat chewing	No	701	93.5
	Yes	49	6.5

Table 3: Table showing the bivariable and multivariable logistic regression results showing factors associated with early sexual debut.

Variables	Early sexual debut		Crude Odds Ratio [95% CI]	Adjusted Odds Ratio [95% CI]
	No N (%)	Yes N (%)		
Parents residence				
Rural	74(9.9)	51(6.8)	3.4(2.3,5.27)	2.6(0.67,6.62)
Urban	521(69.6)	103(13.8)	1	1
Mother's Educational level				
No education	117(15.6)	77(10.3)	4.24(2.38,7.52)	2.2(0.59,8.5)
Primary	158(21.1)	28(3.7)	1.14(0.6,2.16)	1.3(0.41,4.34)
Secondary	205(27.3)	31(4.1)	0.97(0.52,1.81)	1.2(0.46,3.37)
Higher	116(15.5)	18(2.4)	1	1
Father Educational Level				
No education	64(8.5)	44(5.9)	3.94(2.38,6.52)	0.33(0.85,1.30)
Primary	71(9.5)	25(3.3)	2.0(1.15,3.53)	0.71(0.22,2.34)
Secondary	214(28.5)	42(5.6)	1.12(0.7,1.79)	0.5(0.24,1.33)
Higher	247(32.9)	43(5.7)	1	1
Family monthly income				
Low	20(2.7)	29(3.9)	7.3(3.9,13.5)	4.5(0.93,5.6)
Middle	163(21.7)	43(5.7)	1.32(0.88,2.06)	0.53(0.24,1.18)
Higher	413(55.1)	82(10.9)	1	1
Had discussion on sexuality issues with Parents				
No	464(61.9)	145(19.3)	4.5(2.27,9.2)	**3.05(1.04,8.88)***
Yes	132(17.6)	9(1.2)	1	1
Religious connectedness				
No	377(50.3)	117(15.6)	1.8(1.2,2.75)	0.91(0.46,1.86)

Yes	219(29.2)	37(4.9)	1	1
Peer connectedness				
No	316(42.1)	99(13.2)	1.159(1.1,2.35)	0.86(0.43,1.57)
Yes	280(37.3)	55(7.3)	1	1
Had good parental monitoring				
No	228(30.4)	135(18.0)	11.4(6.9,19.05)	**3.6(1.8,7.45)***
Yes	368(49.1)	19(2.5)	1	1
School connectedness				
No	209(27.9)	102(13.6)	3.49(2.14,5.70)	1.47(0.79,2.73)
Yes	387(51.6)	52(6.9)	1	1
Had lesson on sexuality education				
No	110(14.7)	309(41.2)	7.34(3.91, 12.60)	**2.14(1.15,3.98)***
Yes	240(32.0)	91(12.1)	1	**1**
Drinking alcohol				
No	393(52.4)	193(25.6)	1	**1**
Yes	33(4.4)	131(17.6)	8.08(3.61, 11.72)	**14.5(7.81,27.22)***
Had good academic achievement				
No	215(28.7)	24(3.2)	3.06(1.59,6.24)	**4.2(1.72,10.26)***
Yes	381(50.8)	130(17.3)	1	**1**

AOR=Adjusted odds ratio, COR=Crude odds ratio, CI =Confidence interval, *with bold indicate statically significant at p value ≤0.05