Journal of
Health, Medicine and Nursing
(JHMN)

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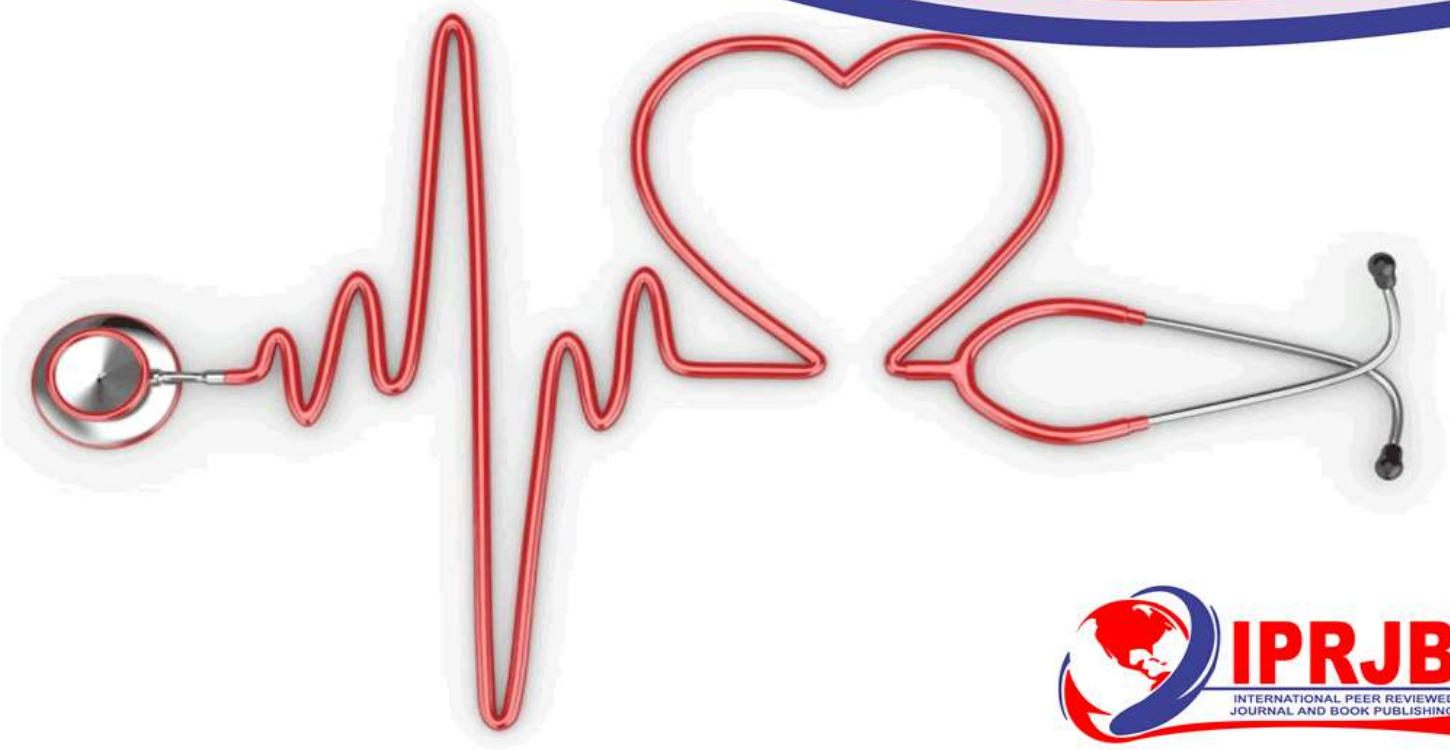

IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

Journal of Health, Medicine and Nursing
ISSN 2520-4025 (Online)
Vol.1, Issue 1 No.4, pp 52-64, 2017

www.iprjb.org

Sexual initiation and factors related with it among female youths in west Shoa, Ambo town, Ethiopia: Community based Cross sectional study

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Abstract

Background: Early sexual debut may be linked to reproductive health problems later in life. In addition, the timing of first sex is affected by a variety of factors and this makes the consequences of youth sexuality much more serious. Therefore, this study aims to assess factors that influence youths' to practice sexual activities and the consequences of these behaviors.

Methods: Community-based cross-sectional study was employed from January to May, 2013 among 675 female youth of Ambo town. A multistage sampling technique was applied. The participants were selected using simple random sampling technique. Face to face interview using structured and pretested questionnaires were used to collect thedata from the study participants. Data was entered, cleaned by using Epi-Info version 3.5.1 and exported to SPSS version 16.00 for analysis. Bivariate and multivariate logistic regression analysis was used to determine the predictors of early sexual initiation.

Result: Nearly half, 48.7% of the study participants have ever had sex. The mean age at first sexual initiation was 16.74 (SD ±2.1) years. Being in age group 20-24 (AOR=2.75, 95% CI; 1.74, 4.34), having paid job (AOR=2.20, 95% CI; 1.19, 4.07), peer pressure (AOR=3.20, 95% CI; 2.08, 4.94), alcohol (AOR=2.17, 95% CI; 1.43, 3.28) and pornographic materials (AOR=2.27, 95% CI; 1.43, 3.61) have significant association with early sexual initiation. Educational level (AOR=0.20, 95% CI; 0.08, 0.48) and being in school (AOR=0.19, 95% CI; 0.11, 0.33), was found less likely to initiate sex earlier.

Conclusion: Substantial amount of female youths had started sexual activity that might expose them to different reproductive health problems. In general, educational status, age group, peer pressure, alcohol consumption and watching pornographic materials were predictors for the sexual initiation. Therefore, building life skill, an active effort to promote sexuality education,

establishing and strengthening youth center/club should be intensified, particularly for young women, in making informed decisions about sexuality issues to reduce youth reproductive health problems.

Key words: *Sexual initiation, factors and female youths*

Introduction

A youth is defined by world health organization (WHO) as an individual aged 15 to 24 years while adolescents are those aged 10 to 19 years and young people as those between the age of 10 to 24 years old. Adolescence is a period of opportunity and risk when numerous young people practice critical and life-defining experiments such as their first sexual experience, marriage, pregnancy, and parenthood (1).

The youths, aged 15 to 24, accounted for an estimated more than 1 billion people worldwide, and the majority live in developing countries (2). Youth aged 15 to 24 represent slightly more than twenty percent of Africa's population.

Early coital activity is not a new incident in sub-Saharan Africa. Today, secondary sexual characteristic (maturity) occurs at an earlier age, and age at marriage is going up; therefore, adolescents' sexual initiation is found to be earlier and premarital. Due to this, youths are more vulnerable to risks of unwanted pregnancy, early pregnancy, premature births, and sexually transmitted infection (3).

Ethiopia as one of a Sub-Sahara African country, regarded as having many cultural diversity, there are diverse culture, social values and practices that influence the age at which young females begin sexual proximity. In this practice they become sufferers of unprotected sex, early marriage, early pregnancy and mortality from unsafe abortion (4, 5).

Studies have also revealed that in Ethiopia, 29% of women age 25-49 had first sexual intercourse before age 15, and 62% before age 18.For women age 25-49 years old, the median age at first sexual intercourse is 16.6 years that is very close to the first marriage of 16.5 years (6).

Cross-sectional studies conducted in Southern nation and nationalities, South West Ethiopia have shown that youth sexual debut timing is influenced by number of factors including age, gender, residence, educational level, knowledge on HIV, economic status, watching pornography, Khat and alcohol utilization (7). In addition, adolescents take part in sex activities because of the factors such as peers, unlicensed erotic video films exposure and the desire for economic gain (8). Due to this, a substantial proportion of youths are participated in their earlier sexual activity.

Any sexual activity before marriage is regarded as the reproductive health problem in adolescent. Studies showed that the proportion of premarital sexual practice among youths in Oromia region (31%) is higher compared to national (19%) (9). however, factors that contribute to early sexual practices were not as such dealt in-depth within the study area.

Therefore, this study has been intended to determine the prevalence of age at first sex and factors accompanying with early sexual commencement among female youths in the Ambo town.

Methods

Study design and Study setting

Community-based cross-sectional study design was employed among female youths in Ambo town from Jan.26 to May 13, 2013. Ambo town is the capital of West Shewa Zone, in Oromia regional state. The town located 114 km west of Addis Ababa and it has three kebeles01, 02 and 03. According to the town municipality, more than 67,514 populations live in the town in 2009 (2001 E.C) including the population of expansion areas; of which males accounts for 34,276 (50.8%) and females 33,238 (49.2%).

Study participants & sample size calculation

The study participants were all female youths in the age group of 15 to 24, who legally reside in the town at the time of the survey. The sample size was considered by assuming a 95% level of confidence interval, 0.05 margins of error, and with expected prevalence of sexual initiation among female youths 51% (2). After the correction of the primary sample size, we used a design effect of 1.5 to calculate the final sample size. Finally, after adding a 10% of non-response to the final sample size, the final sample size was 675 female youths.

Sampling procedure

Finally, 675 sample sizes were used. A multistage sampling procedure was employed. The town has three kebeles and two kebeles were selected by a lottery method. We then further sub-divided these kebeles by Got/village. From each Got/village, households were selected by simple random sampling, based on proportional allocation of the size of households in each Got or villageand using the number of household as a sampling frame.The first households were selected from the town using the town's house number registration by lottery method. In cases of selected household with more than one eligible study subject, only a single respondent was chosen by random method. In cases where no eligible respondent found in the chosen household, the data collectors have gone to the next household to the right direction until they got eligible female youths.

Data collection & analysis

We adopted the questionnaire from EDHS, 2011 (6). Face to face interview using structured and pretested questionnaires were used to collect the data from the study participants.. Trained public health officers supervised the data collection process. Data was entered and cleaned using Epi Info Version 3.5.1, and then exported to SPSS 16.00 for analysis.

From entered data, descriptive statistics such as frequency, percent, and median with standard deviation were drawn. We conducted a bivariate analysis to examine the potential associated factors of early sexual debut. Then, all variables that were significantly associated ($P < 0.05$) with sexual debut in our bivariate analysis were considered in our multiple logistic regression models. Finally, variables that remained significant at p-value less than 5% in the multiple logistic regression model were identified as foremost predictors of sexual initiation.

Finally, outcomes were compiled and presented in tables and graphs with brief description. Odd ratios with 95% CI were reported to two decimal places and p-values less than 0.05 indicated as statistically significance.

Ethical issues

Ethical clearance was obtained from School of Public Health, research ethical review committee of Addis Ababa University. Formal letter of support was written to Ambo town health office and it was also found from Ambo town health office to each Kebele administrations. Oral informed consent was obtained from each respondent after informing the objectives of the study; the right to participate and not participate or to terminate the interview at any time was fully explained before data collection. Respondents who declined to participate in the study were not forced. Confidentiality was maintained by not mentioning their name on the questionnaire.

Result

Socio-Demographic variables

From the total of 675 respondents, a complete response of 94.1% was obtained. Forty questions (5.9%) were excluded for general incompleteness and inconsistencies. The mean age of respondents was 16.74 years with 2.1 years Standard deviations. More than half of the study subjects were found in age group (53.5%) of 15-19 years. Majority of the study participants were Oromo in ethnicity (66.5%), 321 (50.6%) of them were Orthodox followers and singles in marital status (82.4%). Concerning educational status, 222 (35.0%) of respondents were secondary school and 54 (8.5%) of them were college and above. On the other hand, majority (68.5%) of respondents were attended their education at the time of the survey and 525 (82.7%) of them do not had pocket money. According to the response of study subjects, the mean monthly pocket money was 520.68(SD = 363.38) Birr (Table 1).

Table 1: Socio-demographic characteristics of the study participants in Ambo, April 2013

Variables	Number	Percent (%)
Age group (years)		
15-19	340	53.5
20-24	295	46.5
Ethnicity		
Oromo	422	66.5
Amhara	119	18.7
Tigre	58	9.1
Others	36	5.7
Religion		
Orthodox	321	50.6
Protestant	202	31.8

Muslim	65	10.2
Catholic	32	5.0
Others	15	2.4
Marital status		
Married	112	17.6
Unmarried	523	82.4
Education		
Primary school 1-8	182	28.7
Secondary school 9-10	222	35.0
Preparatory & TEVT	177	27.9
College & Above	54	8.5
Currently in school		
Yes	435	68.5
No	200	31.5
Pocket money		
Yes	110	17.3
No	525	82.7
Youths monthly income (ETB)		
<450	60	54.5
>=450	50	45.5

Sexual involvements

Concerning sexual activity, 309 (48.7%) of the surveyed participants ever had sex. Among sexually experienced participants, the mean age at first sex was 16.74 (+SD = 2.1) and three-fifth (60%) of them were initiated sex before age of 18 years. The main reasons for engaging in first time sex were passionate love (38.2%) and followed by need for marriage (26.5%) (Table 2).

Table 2: Issues motivated to begun first sex by respondents, in Ambo town; Ethiopia; 2013

Variables	Number	Percent (%)
Passionate love	206	31.02
Substance use	171	25.75
Maturity	124	18.67
Marriage	69	10.39
Peer pressure	39	5.87
Forced sex	38	5.72
Getting gift	13	1.96
Movies/Films	4	0.60

Peer pressure

The study also examined the role of peer pressure on sexual initiation. Results depicted that, over thirty nine percent of our study participants had ever been encouraged by their friends to have boyfriend. In addition, 175(27.6%) of study participants had been encountered pressure from their peers to have sexual intercourse more frequently (Table 3).

Table 3: Percentage distribution of peer pressure and non-sexual behavior regarding sexual initiation among sexually experienced female youths in Ambo town; Ethiopia April 2013.

Variables	Frequency	Percent
Ever had sex		
Yes	309	48.7
No	326	51.3
Peer pressure		
Yes	249	39.2
No	386	60.8
Encountered pressure by peers to have sexual intercourse		
Frequently	175	27.6
Occasionally	226	35.6
Not at all	234	36.9
Ever used drugs		
Yes	171	26.9
No	464	73.1
Ever drunk alcohol		
Yes	289	45.5
No	346	54.5
Ever viewed pornographic material		
Yes	217	34.2
No	418	65.8

Non-sexual risk behaviors

As depicted; in table 2, 171 (26.9 %) of the respondents were ever used drug to make feel high; mainly of Khat (93.6%), 289 (45.5%) of study participants were ever drunk alcohol and 217 (34.2%) of them were ever viewed pornographic materials.

Factors related with sexual commencement

Bivariate logistic regression analyses revealed that, age, educational status, being in school, pocket money, peer pressure, ever used drugs, ever drank alcohol and ever viewed pornographic materials had statistically significant (p-value < 0.05) association with sexual initiation. Further multivariate analysis showed, age of the respondents, educational status, being in school, pocket money, peer pressure, ever drank alcohol and ever viewed pornographic materials were remain significantly associated with sexual initiation. After controlling for potential co-founders, logistic regression analysis showed that respondents who use substances (i.e chew Khat) were found to be more likely to initiate sexual intercourse (Adjusted OR [95 % CI] = 1.30 [0.83, 2.06]). Those who drank alcohol (Adjusted OR [95%CI] = 2.17 [1.43, 3.28]) were two times more likely to initiate sexual

intercourse. Furthermore, viewing pornographic materials (Adjusted OR [95%CI] = 2.27 [1.43, 3.61]) also were associated with early sexual debut (Table 4).

Table 4: Factors contributing to sexual initiation among female youths, in Ambo town, April 2013, Ethiopia

Determinants	Sexual Initiation		Crude OR (95% CI)	Adjusted OR (95% CI)
	Yes	No		
Age group (years)				
15-19	104 (33.7)	236 (72.4)	1.00	1.00
20-24	205 (66.3)	90 (27.6)	5.17 (3.68, 7.25)***	2.75 (1.74, 4.34)***
Education				
Primary school 1-8	77 (24.9)	105 (32.2)	0.15 (0.06, 0.31)***	0.25 (0.10, 0.62)**
Secondary school 9-10	94 (30.4)	128 (39.3)	0.14 (0.06, 0.31)***	0.20 (0.08, 0.48)***
Preparatory & TEVT	93 (30.1)	84 (25.8)	0.22 (0.10, 0.48)***	0.30 (0.12, 0.73)*
College & Above	45 (14.6)	9 (2.8)	1.00	1.00
Currently in school				
Yes	151 (48.9)	284 (87.1)	0.14 (0.09, 0.21)***	0.19 (0.11, 0.33)***
No	158 (51.1)	42 (12.9)	1.00	1.00
Pocket money				
Yes	88 (28.5)	22 (6.7)	5.50 (3.34, 9.06)***	2.20 (1.19, 4.07)*
No	221 (71.5)	304 (93.3)	1.00	1.00
Peer pressure				
Yes	163 (52.8)	86 (26.4)	2.92 (2.09, 4.08)***	3.20 (2.08, 4.94)***
No	146 (47.2)	240 (73.6)	1.00	1.00
Ever used substances				
Yes	98 (31.7)	73 (22.4)	10.1 (3.94, 25.89)***	1.30 (0.83, 2.06)
No	211 (68.3)	253 (77.6)	1.00	1.00
Ever drank alcohol				
Yes	180 (58.3)	109 (33.4)	8.26 (5.25, 13.0)***	2.17 (1.43, 3.28)**
No	129 (41.7)	217 (66.6)	1.00	1.00
Ever viewed pornographic materials				
Yes	144 (46.6)	73 (22.4)	3.46 (2.43, 4.92)***	2.27 (1.43, 3.61)**
No	165 (53.4)	253 (77.6)	1.00	1.00

Notes: Significance: *** p < 0.00, ** p < 0.01, * p < 0.05. , 1.00: Reference category

Discussion

This cross-sectional study tried to assess age at sexual commencement andrelated factors among female youths in Ambo town during the 2013 G.C.

In our study, nearly half (48.7%) of the surveyed participants have ever had sex. The finding is roughly comparable to other studies conducted in different countries on sexual behavior among young females. The mean age at first sexual initiation was 16.74 (+SD = 2.1) years and this is comparable with other previous studies in Ethiopia [2, 11]. However, the mean year of sexual commencement in this study is somewhat higher than previous studies conducted in Ethiopia, DHS2011 (value), in Dessie, north east Ethiopia (16.8 years), in Kolladiba, north west Ethiopia (15 years), in Gojam, north west Ethiopia (13.5 years) and in Butajira, southern Ethiopia (16 years) [2, 12, 13, 14,]. The difference might be due to the decrease in early marriage (10) and because of the recently endorsed family law [15].

In our finding, over thirty nine percent of study participants had ever been encouraged by their friends to have boyfriend. Furthermore, 27.6 percent of respondents had been encountered pressure from their peers to have sexual intercourse. Furthermore, logistic regression analysis also revealed that respondents' external pressure lead to first sex (Adjusted OR [95 % CI] = 3.20 (2.08, 4.94]), which is similar with a cross-sectional and the National Longitudinal Study of Adolescent Health conducted in three Developing Countries, University of Minnesota, Minneapolis [Adjusted OR [95 % CI] = 1.11 (.82–1.50)]) and Penn Institute for Economic Research [16], which revealed that, peer norms have a substantial effect on the timing of sexual initiation for both boys and girls. According to Social-psychological theories of health behavior, adolescents' sexual behaviors are influenced by the sexual attitudes and behaviors of their friends. As different studies demonstrated, adolescents who are highly involved with their friends may find themselves in social contexts that encourage early dating and entry into romantic relationships, which have been linked to earlier sexual initiation.

Use of substance, alcohol use and viewing pornographic materials were extra factors associated with early sexual debut identified by this study. Around twenty seven percent of the respondents were ever used drug to make feel high; mainly of Khat (93.6%), ever drunk alcohol 289 (45.5 %) and 217 (34.2%) of them were ever viewed pornographic materials.

Drug trading and drug misuse, although not significant problems in the past, are now becoming more familiar in Ethiopia [17]. According to the Ethiopian Ministry of Health Department of Pharmacy report for 2000/01, it is aggravated by high unemployment chances and general feelings of desperateness. Substance users were more than once at higher risk to initiate sexual intercourse earlier than non-users. Alcohol drinking usually follows khat chewing and might be related with unprotected sex and this leads to early sexual debut. This finding is comparable by a cross-sectional study conducted in North East Ethiopia and nine European cities [2, 18].

In our finding, multivariate logistic regression analyses indicated that, alcohol drinkers were more than two times at higher risk to initiate sexual intercourse early than non-drinkers, which is conform with Unmatched case control study conducted in Gamo-Gofa Zone, South West Ethiopia; which reveals that the use of alcohol and khat were found to be a major predictors of early sexual initiation and HIV infection [19]. Similarly, a survey conducted in Botswana also revealed that the number of sexual intercourse youths had increased according to the number of times that they drank alcohol [10].

Viewing Pornographic material which typically followed by alcoholic drinks mentioned as a major contributing factor to early initiation in the study area. Pornographic material viewers were found to be twice more likely at higher risk to initiate sex (Adjusted odds ratio, 2.27; 95% confidence interval, 1.43, 3.61), which is almost similar with a cross-sectional study done in Dessie, north east Ethiopia, revealed that the increased openness to Western culture has resulted in the invasion of pornographic videos, books, and magazines, whose consumers are mostly young people [2] and The National Longitudinal Study of Adolescent Health also supported this finding [20].

Limitation of the study

The limitations of this study were lack of using qualitative method which helps to explore in-depth view about the enabling factors for early sexual initiation. The other possible limitations could be not including the study participants from the rural parts and the nature of the study –being across sectional study not to properly show the direction of association.

Conclusion and Recommendation

In summary, the proportion of early sexual commencement was high; peer influences have a substantial effect on the timing of sexual initiation for young girls. Other non-sexual risky behaviors such as pornographic materials viewing at earlier age, using substances (such as Khat) and drinking alcohol especially at earlier age are major predictors of early sexual initiation. Therefore, firming the norm of virginity, which delays sexual intercourse, should be advocated. There is need sexuality education and behavioral change communication at this teeming population of adolescents and young adults. Socio-economic empowerment and provision of youth-friendly services by local government, non-governmental and community-based organizations are crucial. Finally, Policy makers should think of setting a legal age for buying alcohol and Khat; and restricting video.

Declarations

Ethical approval and consent to participate

The Ethical review board of the School of Public Health, Addis Ababa University was approved the Ethical clearance. Then, official letter of cooperation was obtained from Addis Ababa University. Oral informed consent was obtained from each respondent before starting the interview and respondents' information would be kept confidential.

Consent to publish: N.A

Availability of data: Data supporting the conclusion of this article are not accessible because of involvement in an unpublished project in similar field as well as possible risk of the leaks of individual privacy.

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

Funding: The project was funded by UNFPA through the school of School of Public health Addis Ababa University. The organization has no role in the design, collection, analysis and interpretation of data and manuscript development.

Authors' contribution

DTN and SF participate in design, analysis, write-up of the project and in development of the manuscript. All authors read and approved the final manuscript.

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Acknowledgments

We would like to thank UNFPA for granting the fund to carry out this study. We are also acknowledging the respondents who participated in this study.

References

1. Team, Y. A. (2004). Assessment of youth reproductive health programs in Ethiopia.

2. Mazengia, F., & Worku, A. (2009). Age at sexual initiation and factors associated with it among youths in North East Ethiopia. *Ethiopian Journal of Health Development*, *23*(2).

3. Yode, M., & LeGrand, T. (2012). Association between age at first sexual relation and some indicators of sexual behaviour among adolescents. *African Journal of Reproductive Health*, *16*(2), 173-188.

4. Taffa, N., Sundby, J., & Bjune, G. (2003). Reproductive health perceptions, beliefs and sexual risk-taking among youth in Addis Ababa, Ethiopia. *Patient education and counseling*, *49*(2), 165-169.

5. Mensch, B. S., Grant, M. J., & Blanc, A. K. (2006). The Changing Context of Sexual Initiation in sub-Saharan Africa. *Population and development review*, *32*(4), 699-727.

6. Demographic, E. (2012). Health Survey 2011 Central Statistical Agency Addis Ababa. *Ethiopia ICF International Calverton, Maryland, USA*.

7. Tilahun, M., & Ayele, G. (2013). Factors associated with age at first sexual initiation among youths in Gamo Gofa, south west Ethiopia: a cross sectional study. *BMC Public Health*, *13*(1), 622.

8. Seme, A., & Wirtu, D. (2016). Premarital sexual practice among school adolescents in Nekemte Town, East Wollega. *The Ethiopian Journal of Health Development (EJHD)*, *22*(2).

9. HIV/AIDS Prevention and control Office (HAPCO), Behavioral surveillance survey in Ethiopia. 2000.

10. Campbell, E. K. (2003). A note on alcohol consumption and sexual behaviour of youths in Botswana. *African Sociological Review/Revue Africaine de Sociologie*, 146-161.

11. Fekadu, Z. (2001). Casual sex-debuts among female adolescents in Addis Ababa, Ethiopia. *Age*, *120*, 67-70.

12. Molla, M., Berhane, Y., & Lindtjørn, B. (2008). Traditional values of virginity and sexual behaviour in rural Ethiopian youth: results from a cross-sectional study. *BMC public health*, *8*(1), 9.

13. Ismail, S., Bitsaumlak, H., & Alemu, K. (1997). High risk sexual behavior for STD/HIV, pregnancies and contraception among high school students in a rural town, North Western Ethiopia. *Ethiopian Journal of health development*, *11*(1), 29-36.

14. Seifu, A., Fantahun, M., & Worku, A. (2006). Reproductive health needs of out-of-school adolescents: A cross-sectional. *Ethiopian Journal of Health Development*, *20*(1), 10-17.

15. Proclamation, S. W. M. (2007). Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia.

16. Richards-Shubik, S. (2012). Peer effects in sexual initiation: Separating demand and supply mechanisms.

17. Kebede, D., Alem, A., Mitike, G., Enquselassie, F., Berhane, F., Abebe, Y., ... & Gebremichael, T. (2005). Khat and alcohol use and risky sex behaviour among in-school and out-of-school youth in Ethiopia. *BMC public health*, *5*(1), 109.

18. Richards-Shubik, S. (2015). Peer effects in sexual initiation: Separating demand and supply mechanisms. *Quantitative Economics*, *6*(3), 663-702.

19. Malaju, M. T., & Asale, G. A. (2013). Association of Khat and alcohol use with HIV infection and age at first sexual initiation among youths visiting HIV testing and counseling centers in Gamo-Gofa Zone, South West Ethiopia. *BMC international health and human rights*, *13*(1), 10.

20. Ashby, S. L., Arcari, C. M., & Edmonson, M. B. (2006). Television viewing and risk of sexual initiation by young adolescents. *Archives of pediatrics & adolescent medicine*, *160*(4), 375-380.

21. Mark A Bellis, Karen Hughes, Amador Calafat, Montse Juan, Anna Ramon, José A Rodriguez, Fernando Mendes, Susanne Schnitzer and Penny Phillips-Howard: Sexual uses of alcohol and drugs and the associated health risks: A cross sectional study of young people in nine European cities; BMC Public Health 2008, 8:155; available at: http://www.biomedcentral.com/1471-2458/8/155.