

Alcohol use and risky sexual behaviors among local drink sellers in Addis Ababa, Ethiopia

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Abstract

Background: AIDS continues to be a major global health priority. The number of people living with HIV is still growing worldwide reaching an estimated 36.7 million at the end of 2015. Slightly more than half are women. Hazardous alcohol use is often assumed mainly to affect men, but women are harmed in large numbers by alcohol use: either their own or that of their partner. Women who sell alcohol are at increased risk of drinking alcohol themselves, engaging in unprotected sex with their clients which could lead to HIV infection.

Objective: To assess the prevalence of alcohol use and its association with risky sexual behaviors among local drink sellers in Addis Ketema sub-city, Addis Ababa.

Method: A cross sectional study was conducted among 698 women engaged in selling local alcohol drinks. The sample size was calculated using single population proportion formula and multistage cluster sampling technique was used. The data were collected through standardized questionnaire by trained data collectors. Respondents were assessed by socio demographic variables, type, amount and frequency of alcohol use and also risky sexual behaviors and bivariate and multivariate Logistic regression were used to assess the association between these variables.

Results: The prevalence of alcohol use among local drink sellers was found to be 33.3%. Seventy two (41%) of the respondents drank alcohol on a daily basis. Five hundred sixty six (82.4%) of the respondents had initiated sexual intercourse, out of which 85(15%) had sex with non regular partner and 29.7% didn't use condom the last time they had sex with non regular partner. Having 3 or more drinks at one time was associated with having had sex with non regular partner. Condom use at last sex was higher among those who had primary and above level of education and among those who were never married.

Conclusions: HIV prevention programs for local drink sellers should recognize that alcohol use may be an important indicator of risk for HIV infection and AIDS through its association with risky sexual behaviors.

Key words: Alcohol, sexual behavior, drink sellers

Introduction

AIDS continues to be a major global health priority. The number of people living with HIV is still growing worldwide reaching an estimated 36.7 million at the end of 2015. Slightly more than half of all people living with HIV are women and girls. The number of people newly infected with HIV in 2015 was 2.1 million and there were a total of 1.1 million AIDS related deaths (UNAIDS 2016). In 2015, Eastern and southern Africa remains the region most heavily affected by HIV worldwide; accounting for 52% of all people living with an estimated 960,000 newly infected, 17.2 million living with HIV and 470,000 AIDS related deaths (UNAIDS 2016).

Ethiopia is one of the sub-Saharan African countries with high HIV prevalence. Hazardous alcohol use is often assumed mainly to affect men, but women are harmed in large numbers by alcohol use; either their own or that of their partner (MoH, 2007). Women who sell and serve alcohol in bars, hotels, and other venues are at increased risk of drinking alcohol themselves, engaging in unprotected sex with their clients (Women ICfRo 2010) which may predispose them to risk sexual behaviors: problem which is usually overlooked. Data on prevalence of alcohol use and its association with risky sexual behaviors among the target populations is

limited. Therefore, this study is aimed to assess the prevalence of alcohol use and examine the nature of relationship between alcohol use and risky sexual behavior which could fill the research gap on the area.

Materials and Methods

A cross-sectional study was conducted from February to April, 2011 in Addis Ketema sub city, Addis Ababa; sub city with high number of slum areas and departure point for the high way transport system across the country and is also the sub-city with the largest market 'Merkato' where a lot of local drink sellers and buyers are located. By using single population proportion formula, 698 study participants were recruited. The whole 10 woredas and 28 sub-woredas of the sub-city were stratified in to south, west, north, east and central zones directionally; one woreda from each zone which consist a total of 13 sub woredas were selected. Finally, local drink sellers were selected from sub woredas. Data were analyzed using SPSS version 16.0. Frequencies, percentage and tables were used for description. OR with CI were computed to assess the presence and degree of association between alcohol use and risky sexual behaviors. P-Value of 0.05 was set as a cut-off point for the significance association between dependent and independent variables. Ethical clearance was obtained from IRB of Addis Ababa University.

Results

A total of 687 (98.4%) local drink sellers were participated in the study. Around 276 (40.2%) were found in the age group of 40-80 years. About 260 (37.8%) of the respondents have no education at all; 611 (88.9%) of them were Orthodox religion followers; 334 (48.6%) of the respondents were Amhara; only 17.4% of them have 300 Birr or above monthly personal income; 228 (33.2%) of the study

participants were married and 201 (29.3%) were never married (Table 1). The overall prevalence of alcohol use among local drink sellers was found to be 33.3%. Out of the total respondents, 77.1% of them drank alcohol in the past one month and out of them 72 (41.4%), 46 (26.4%) and 56 (32.2%) drank alcohol on a daily basis, twice a week and once a week or less respectively.

Table 1: Socio demographic characteristics of local drink sellers in Addis Ketema sub-city Addis Ababa, 2011

Characteristics	No	Percent
Age (in years)		
15 – 25	173	25.2
26 – 39	238	34.6
40 – 80	276	40.2
Current marital status		
Married	228	33.2
Never married	201	29.3
Divorced	89	13.0
Widowed	169	24.6
Level of education		
No education	260	37.8
Read and write	159	23.1
Primary	183	26.6
Secondary and above	85	12.4
Religion		
No religion	17	2.5
Ortodox	611	88.9
Protestant	20	2.9
Muslim	39	5.7
Ethnic Group		
Amhara	334	48.6
Oromo	209	30.4
Tigray	83	12.1
Gurage	61	8.9
Monthly personal income (in birr)		
< 100	151	34.1
100 – 299	215	48.5
>= 300	77	17.4
Total family monthly income (in birr)		
< 100	66	19.5
100 – 299	106	31.4
>= 300	166	49.1

About 566 (82.4%) of the respondents had initiated sexual intercourse, of which 75 (35.2%) reported that they ever drank alcohol and had sexual intercourse while 45(52.3%) drank alcohol the last time they had sexual intercourse. The overall prevalence of condom use among local drink sellers in was found to be 157 (24.5%) and the prevalence of condom use at last sex was 113 (52.1%). About 294 (52.2%) respondents have a regular sexual partner, but only 76 (23.5%) of them use condom at last sex with regular sexual partner. Forty four (58.7%) of the study participants used condom with their regular sexual partner by joint decision and 17 (22.7%) suggest condom use themselves but only 11 (14.7%) of them use condom by their partner suggestion. Study participants who do not use condom at last sex with their regular sexual partner were asked about the reason not to use

condom. Around 101 (42.1%) of them do not use condom because they used other contraceptives and 36 (15.0%) do not use because they don't like to use condom. Frequency of condom use with regular sexual partner was also assessed and 183(60.4%) of the respondents never use condom with their regular sexual partner, 67 (22.1%) of them use sometime and only 38 (12.5%) of them use every time. While 85 (15.0%) of the respondents had sex with non-regular partner, 64 (70.3%) of those used condom at the last time they had sex with non-regular partner, but 27 (29.7%) of them didn't use and 39 (61.9%) of respondents who use condom suggest condom use by themselves and 71 (13.0%) of the respondents reported that they have received gift or money in exchange for sex. The main reasons given by the study participants not to use condom at last sex with non

regular partner were use of other contraceptives (22.6%) and not think of it (22.6%). Nearly 59.3% of the respondents used condom every time while they have sex with non regular partner, but about 20.9%

of them never use. In the multivariate logistic regression drinking alcohol was found to be significantly associated only with current marital status and monthly personal income in (Table 2).

Table 2: Determinant of alcohol use among local drink sellers in Addis Ketema sub-city, Addis Ababa, 2011

Variables	Ever drink alcohol		COR(95% CI)	AOR(95% CI)
	Yes	No		
Monthly personal income				
< 100	33	118	1.00	1.00
100 – 299	70	145	1.73 (1.06-2.79)	2.02(1.22 – 3.36)
>= 300	39	38	3.67 (2.03-6.62)	4.73(2.49 – 8.99)
Religion				
No religion	10	10	1.00	1.00
Ortodox	208	403	0.36 (0.13-0.96)	0.43(0.14 – 1.30)
Protestant	15	12	0.46(0.12-1.74)	0.305(0.05 – 1.68)
Muslim	10	36	0.05(0.01-0.26)	0.00(0.00)
Current marital status				
Married	62	166	1.00	1.00
Never married	57	144	1.06 (0.69-1.61)	1.11(0.64 – 1.92)
Divorced	49	40	3.28 (1.97-5.45)	2.68(1.28 – 5.57)
Widowed	61	108	1.51 (0.98-2.32)	1.75(0.98 – 3.11)
Ethnicity				
Amhara	112	222	2.57(1.25-5.25)	2.49(0.85 – 7.32)
Oromo	74	135	2.79(1.34-5.82)	2.43(0.81 – 7.26)
Tigray	33	50	3.36(1.5 – 7.55)	3.15(0.97 – 10.21)
Gurage	10	51	1.00	1.00

The odds of condom use at last sex were 2.45 (1.27 – 4.72) times higher among those who ever drink alcohol as compared to those who never drink alcohol and also 2.46 (1.08 - 5.55) and 4.71 (1.54 – 14.3) times higher among those who have primary and secondary or above level of education, respectively, as compared to those with no education. Those who were never married has 4.66 (2.15 – 10.11) times higher chance of using condom at last sex and those who were widowed

0.26 (0.08 – 0.85) were less likely to use condom at last sex as compared to those who were married. Having three or more drinks at one time was found to be significantly associated with ever having had sex with non regular partner. Those who have three or more drinks at one time have 3.54(1.08 – 11.6) higher odds of having had sex with non regular partner (Table 3).

Table 3: Determinants of condom use at last sex among local drink sellers in Addis ketema sub-city, Addis Ababa, 2011

Variables	Condom use at last sex		COR(95% CI)	AOR(95% CI)
	Yes	No		
Ever drink alcohol				
Yes	60	36	2.13(2.23 – 1.23)	2.45(1.27 – 4.72)
No	53	68	1.00	1.00
Level of education				
No education	30	44	1.00	1.00
Read and write	28	29	1.41(0.70 – 2.84)	1.58(0.69 – 3.63)
Primary	35	24	2.13(1.06 – 4.29)	2.46(1.08 – 5.55)
Secondary and above	20	10	4.19(1.57 – 11.14)	4.71(1.54 – 14.3)
Age group				
15 – 25	32	25	1.60(0.77 – 3.29)	0.66(0.27 – 1.62)
26 – 39	53	44	1.50(0.79 – 2.84)	1.04(0.45 – 2.37)
40 -80	28	35	1.00	1.00
Current marital status				
Married	24	38	1.00	1.00
Never married	60	18	5.27(2.53 – 11.0)	4.66(2.15 – 10.11)
Divorced	24	21	1.81(0.83 – 3.93)	1.75(0.75 – 4.09)
Widowed	10	27	0.29(0.09 – 0.86)	0.26(0.08 – 0.85)

Table 4: Determinants of ever having had sex with non regular partner among local drink sellers in Addis ketema sub-city, Addis Ababa, 2011

Variables	Ever had sex with non regular partner		COR(95 % CI)	AOR(95% CI)
	Yes	No		
Frequency of drinking				
Daily	33	37	5.86(2.32 – 14.75)	2.25(0.48 – 10.45)
Twice a week	14	29	3.17(1.14 – 8.79)	2.78(0.42 – 18.4)
Once a week or less	10	46	1.00	1.00
No of drinks at one time				
1-2 drinks	29	114	1.00	1.00
>=3 drinks	27	23	4.61(2.31 – 9.19)	3.54(1.08 – 11.6)
Ever drink alcohol and have sex				
Yes	45	30	10.12(5.03 – 20.38)	3.46(0.32 – 36.5)
No	16	108	1.00	1.00
Drink alcohol at last sex				
Yes	33	12	6.64(2.58 – 17.0)	2.75(0.84 – 9.03)
No	12	29	1.00	1.00

Discussion

This study showed the overall prevalence of alcohol use among local drink sellers 33.3% which is higher as compared to a research done on the epidemiology of problem drinking in Butajira which revealed that 23.4% of the respondents drank alcohol (Alem et al. 1999). This might be due to more exposure of local drink sellers to alcohol drinking than the rest of the population with the nature of their job. In this study, 77.1% of the study participants drank alcohol in the past one month which is similar to Ethiopian BSS 2000 which indicated that in a similar group of population (FSWs), 79% of them drank alcohol in previous four weeks (MoH 2002). Considering frequency of drinking, in our study 41.4% drank alcohol on a daily basis which is higher than a study in Ethiopian BSS 2000, (33%) (MoH 2002). Alcohol intake and the amount of alcohol taken were associated with having sex with non regular partners but were not associated with using condom at last sex. This result supports finding from event level study of alcohol use, partner type and risky sexual behaviors which revealed that unprotected vaginal sex was just as likely for non-drinking events as for events involving alcohol use. However, for sexual encounters involving a non-steady partner, alcohol consumption was associated with an increase in unprotected vaginal sex, whereas rates of UVS did not vary by drinking status for encounters involving a steady partner (Jenniffer 2007).

In this study, the odds of condom use at last sex were higher among those who ever drink alcohol and those who have primary and secondary or above level of education. Study on alcohol use and risky sexual behaviors among college students and youth also reported more condom use among those who ever drank (Kebede et al. 2005). Those who were never married has higher chance of using condom at last sex, while being widowed was protective for use of condom at last sex. Event level studies that link

alcohol use to sexual activity for specific encounters often show no difference in condom use for drinking versus non-drinking encounters. Finding from event level study on alcohol use, partner type and risky sexual behavior shows that 47% of participants who drank prior to sex engaged in Unprotected Vaginal Sex, whereas among participants who reported no alcohol use, 35% engaged in Unprotected Vaginal Sex (Jenniffer 2007).

In this study, having 3 or more drinks at one time was associated with sex with non regular partner and also with receiving gift or money in exchange for sex. Having had drank in the past one month; drinking alcohol daily and twice a week were also associated with receiving gift or money in exchange for sex. Existing research indicates that alcohol use and certain types of sexual behavior co vary. Not only does the likelihood that an individual has ever drunk alcohol predict the likelihood he or she has ever had sex, but level of alcohol involvement also predicts level of sexual involvement (Cooper 2002).

Conclusions

This study revealed that the overall prevalence of alcohol use among local drink sellers was higher than other population groups. Majority of them drank alcohol on a daily basis and “Tela” was the common type alcoholic drink used. Even if majority of the study participants have a regular sexual partner, condom use with regular sexual partner was very low and the main reason given not to use condom was use of other contraceptives. Knowledge on use of condom, types STDs and HIV transmission and prevention methods was very low among the study population. In this study, drinking alcohol was found associated with monthly personal income of 100 birr or more and being divorced. Condom use at last sex was higher among those who had primary or above level of education, those who ever drink alcohol and those who were never married.

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