
ORIGINAL ARTICLE**KHAT USE AND RISKY SEXUAL BEHAVIOR AMONG YOUTH IN ASENDABO TOWN, SOUTH WESTERN ETHIOPIA**

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ABSTRACT

BACKGROUND: Currently due to changing conditions of urbanization and associated life styles, the health of youth is increasingly at stake. Substance use, sexually transmitted diseases including HIV/AIDS and other reproductive health problems are the greatest threats to their well being. The aim of this study was to assess the magnitude of khat use by the youth, attitudes and perceptions towards its utilization and other risky behaviors.

METHOD: A cross sectional community based study was conducted in Asendabo Town from November 10 to December 8, 2005. Information was collected from a sample of 660 youths aged 15 - 29 years selected using single population formula for cross-sectional studies. Structured questionnaire was used to collect information on socio-demographic data, pattern of khat/substance use, sexual behavior, attitudes and perceptions related to the use of these substances. Data were analyzed using SPSS for windows version 12.0.

RESULTS: A total of 624 completed the questionnaire making the response rate of 94.5%. Characteristically 292 (46.8%) are males and 352 (53.2%) females. The age of the majority ranged from 15-19 years, 260 (41.7%). Muslims and illiterates, constitute the majority accounting for 412 (66.0% and 270 (43.3%), respectively. Two hundred twelve (34%) reported to have chewed khat in their lifetime, out of which 18 (8.5%) male and 8 (3.8%) female youths tried chewing Khat before the age of 15 years. Higher proportion of males (26.7%) chewed khat more frequently than their female (6.7%) counter parts during their recent sexual practice. Condom use during the recent sexual intercourse have no statistically significant difference between the two sexes ($p=0.05$). However, the overall proportion of condom non-users was very high. This study found that males and ever married ($p=0.02$) were two to three times more likely to have multiple sexual partners as compared to females and single counter parts, respectively. Khat chewers were twice more likely to have multiple sexual partners.

CONCLUSION: Multiple sexual intercourse, substance use such as Khat, alcohol and cigarette were widely practiced among the studied youth. High proportions of youth are engaged in the consumption of substances and sexual practice with multiple partners. Therefore, intervention activities to bring about behavioral changes among the youth on the danger of use of Khat, alcohol and tobacco are recommended.

KEY WORDS: Khat, Risky sexual behavior, youth, Southwest Ethiopia

INTRODUCTION

Khat is a natural stimulant harvested from the *Catha edulis* plant. It is classified among the flowering evergreen tree or large shrub of *Celastraceae family*, which grow mainly in some developing countries including Ethiopia (1, 2, 3). The potential adverse effect is diversion of income for the purchase of khat, resulting in neglect of the needs of the family, leading to family discord and divorce (3-6).

Youth, especially adolescents are in a state of rapid physical and psychological change. Because of their curiosity, enthusiasm and urge to experience new phenomena, a considerable number of youth experienced with or become addicted to alcohol, smoking, Khat, dangerous drugs and narcotics, all of which are detrimental to health. These and many similar health hazards challenge the youth's proper physical, mental and psychological development. As a result of such behaviors, the youth are being exposed to serious problems that include unsafe/unprotected sexual practice, early sexual debut, early marriage, unwanted pregnancy, unsafe abortion, various venereal diseases and most importantly to HIV/AIDS pandemic (7, 8).

Few discrete studies conducted on the utilization and effect of Khat reported a prevalence of substance use as khat use from 22.3% to 65% (9 -14). In order to translate potential energies of youth into fruitful action, youth need favorable healthy environments. Cognizant of this, numerous countries have given special attention to addressing youth issues, establishing institutions that are concerned with youth affairs (1, 2, 3).

As part of a global movement, Ethiopia has also formulated a comprehensive National Youth Policy in 2005, while regional states have organized

youth bureaus (15). To enhance the contribution of the youth in the national development agenda, maintaining their well-being should be among the priority issues. Attaining this goal requires regular assessment of general and specific risk behavior among the youth. In view of this, the current study attempts to assess the magnitude of khat use, attitudes and perceptions of youth towards utilization of this substance, and other risky behaviors affecting their reproductive life in Asendabo town, Jimma zone.

MATERIALS AND METHODS

The study was conducted in Asendabo Town located 55 Kms from Jimma town on the way to Addis Ababa. From the baseline data compiled by the Jimma University Field research Center in 2005 the total population of Asendabo Town was about 6397 (16) with youth (15-29 years) comprises 1691.

This was a cross sectional community based study conducted from November 10 to December 8, 2005. We studied sampled youth age 15-29 years who resided in Asendabo town for more than 6 months. The sample size was determined using a single population proportion formula, since there was no any previous study in the same area, expected prevalence of Khat use of 50% was used to get the maximum confidence level of 95% and 10 % contingency was used for possible non-response giving a final sample size of 660. The study participants were randomly selected from the sampling frame of youth in the age rang of 15-29 obtained from the baseline study. A pre-tested, structured questionnaire prepared in the local language (Oromiffa) was used to collect data on Socio - demographic variables, pattern of khat/substance use, sexual

behavior, and, attitudes and perceptions related to the use of those substances. The data were collected by University students after training and orientation. Appropriate supervision and follow up was made by the principal investigator, including a cross checking interview of 5% of the respondents, to ensure data quality. The data were entered in to a computer and analyzed using SPSS for windows version 12.0.1. Frequencies and percentages were computed to see the pattern of study variables according to the different socio demographic characteristics. The significance of the differences was tested using χ^2 tests. Odds ratios with 95%CI were calculated using logistic regression models to control for confounders. Statistical tests were done at a level of significance of 5%.

Ethical clearance was obtained from the Jimma University Ethical Review Committee. Permission was secured from the Woreda Administrative Council after explaining the purpose of the study. Informed consent was obtained from each respondent before each interview. They were informed that the information to be collected would be kept confidential and participation was entirely voluntary. To ensure privacy and enhance honest and frank responses, same sex data collectors interviewed male and female youth. The participants were told that they could withdraw at any time amidst the interview.

The following operational definitions were used;

Youth: individuals in age group 15-29 as defined in youth policy in Ethiopian context (15).

Substance-A substance, in this context, is defined as any product that affects the way a person feels, thinks, sees, tastes, smells or behaves when he/she uses it, which includes Khat, alcohol and cigarettes.

Non-user: Person who has never used khat or other substances in any form.

Lifetime prevalence of substance use: the proportion of the study population who had ever used the substance in their lifetime.

RESULTS

A total of 624 completed the questionnaire making a response rate of 94.5%. There was a fairly comparative sex distribution of the study subjects were males and females constituting 292 (46.8%) and 352 (53.2%) of the participants. The age range varied from 15 - 29 years with the mean age of 21.3 years ($SD \pm 4.12$). Out of the total subjects, 260 (41.7%) were in the age group of 15 - 19 years old. Two hundred and ten (43.1%) males and 200 (58.7%) of the females reported that they have ever married. Muslim religion 412 (66%) and uneducated youth 270 (43.3%) constitute the majority of the study subjects (Table 1).

Table 2. The lifetime and current prevalence of Khat chewing among youth of Asendabo town, Jimma Zone, December 2005.

Characteristic	Frequency	Percentage
Chewed Khat at least once during the past 30 days		
No	459	83.5
Yes	165	26.5
Total	624	100
Chewed Khat at least once in life time		
No	412	66.0
Yes	212	34.0
Total	624	100.0

Table 1. Socio-demographic characteristics of the study subjects by gender, Asendabo town, Jimma Zone, December 2005.

Socio-demographic Variables	Gender		Total (n=624) No (%)
	Male (n=292) No (%)	Female (n=332) No (%)	
Age group			
15-19	133(45.5)	127(38.3)	260(41.7)
20-24	86(29.5)	103(31.0)	189(30.3)
25-29	73(25.0)	102(30.7)	175(28.0)
Religion			
Christian	99(33.9)	113(34.0)	212(34.0)
Muslim	193(66.1)	219(66.0)	412(66.0)
Educational Status			
Illiterate	80(27.4)	190(64.0)	270(43.3)
1-6	39(13.4)	46(15.5)	85(13.6)
7-8	66(22.6)	39(1.3)	105(16.8)
9+	107(36.6)	57(19.2)	164(26.3)
Ever married			
Yes	210(43.1)	200(58.7)	410(43.1)
No	82(75.6)	132(41.3)	214(56.9)
Decision on Income within last month			
Self	242(82.9)	217(65.4)	459(73.6)
Others	50(17.1)	115(34.6)	165(26.4)

Percentages for each variable were calculated by taking all studied youth (n=624) as the denominator

In this study, it was found out that 212 (34%) of the respondents admitted to have chewed khat in their lifetime while 165 (26.5%) reported history of chewing Khat in the past one month. Out of those who reported to chew Khat 18 (8.5%) males and

8 (3.8%) female youths started chewing Khat before the age of 15 years. A higher proportion of males (26.7%) chew khat more frequently than their female (6.7%) counter parts (table 2 and fig. 1).

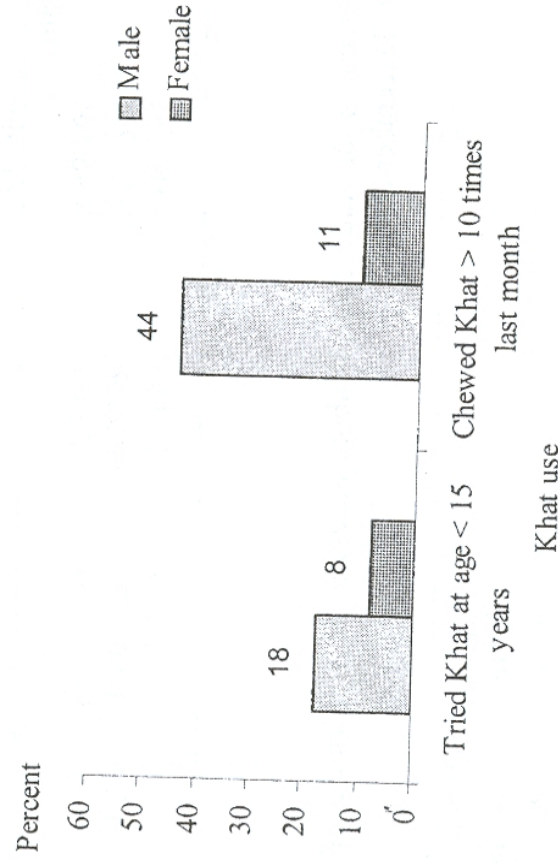


Figure 1. Khat use by gender and age, Asendabo Town, December 2005

With regard to the availability and health risk of Khat use 112 (17.9%) of males and 229 (36.7%) of females reported that Khat is easily accessible to the youth while 208 (33.3%) of male youths and 252 (40.4%) of females believe that every day use of khat

imposes huge health risk. Similarly, about half of the study subjects of both sexes believe that neighbors, family and youth themselves disapprove of the use of khat by this age group (table 3).

Table 4. Self attitudes towards chewing khat among life time chewers and non-users, Asendabo town Jimma zone, December 2005

	Attitude towards chewing khat		χ^2	P value
	Don't support	Support		
Lifetime chewing status				
Non chewer	399(96.8)	13(3.2)	412(100.0)	
Chewer	156(73.6)	56(26.4)	212(100.0)	77.00
Total	555 (88.9)	69(11.1)	624(100.0)	0.000

Table 3. Believe/perception of study subjects about access to and utilization of khat by gender, Jimma Zone, December 2005.

Perceptions	Gender	
	Male n (%)	Female n (%)
Reported easy accessibility of Khat: (n= 341)	112 (17.9)	229 (36.7)
Reported harmfulness of Khat: (n= 460)	208 (33.3)	252 (40.4)
Respondents who believe that neighbors disapprove of:		
Smoking cigarettes	263(42.1)	341(54.6)
Drink alcohol	271(43.4)	321(51.4)
Chewing Khat	251(40.2)	304(48.7)
Youths who reported their parents disapprove of:		
Smoke cigarettes	276(44.2)	332(53.2)
Drink alcohol	272(43.6)	331(53.0)
Chew Khat	253(40.5)	308(49.4)
Disapproval by the youth them selves of:		
Smoking cigarettes	268(42.9)	332(53.2)
Drink alcohol	256(41.0)	344(55.1)
Chewing Khat	247(39.6)	303(48.6)

In this study, it was found that although the majority of both Khat non-chewers 399 (96.8%) and chewers 156 (73.6%) report that they do not support chewing khat, but about 56 (26.4%) among Khat chewer more support the practice but statistically significant difference was observed in the

attitude of non-chewers and chewers towards Khat chewing practice ($P < 0.001$) (Table 4).

The majority of respondents [371(59.5%)] were engaged in sexual intercourse prior to this study. More females 246 (39.4 %) than males 125

(20.0%) reported to engaging in sexual intercourse/practice. However, only a small proportion of both sexes reported utilization of substances (khat/drugs/cigarettes/alcohol or a combination of them) before their most recent sexual intercourse. Eighty-one (21.8%) of the sexually experienced youth had sex with more than one sexual partner in their lifetime. A statistically significant difference ($p=0.001$) was observed between males 47 (51.1%) and females 21 (22.8%)

in the number of sexual partners during the last three months prior to the survey. Thirty four (29.8%) of the non-married/single respondents had more than one life-time sexual partner, while the corresponding figure for married respondents is only 47(18.3%). Condom use during the most recent sexual intercourse showed no statistically significant difference between the two sexes ($p =0.051$). However, the overall condom use rate was very low 91 (24.5%) (Table5).

Table 5. Sexual Behavior among Youths, Asendabo town, Jimma Zone, December 2005.

Sexual Behaviors	Responses		P value
	Yes	No	
Ever had sexual intercourse (n=624)			
Male	125(20.0)	167(26.8)	
Female	246(39.4)	86(13.8)	0.000
Use of alcohol, Khat or cigarette before their last sexual intercourse (n=371)			
Male	30(0.08)	262(70.6)	
Female	24(0.06)	55(14.8)	0.000
Use of condom during their most recent sexual intercourse (n=371)			
Male	65(17.5)	227(61.2)	
Female	26(0.07)	53(14.3)	0.051
Number of sexual partner in life time (n=371)			
Male	90(24.3)	37(0.09)	
Female	200(53.9)	44(11.9)	0.020
Number of sexual partners during the last 3 months (n=92)			
Male	7(7.6)	47(51.1)	
Female	17(18.5)	21(22.8)	0.001

Thirty seven (29.1%) males and 44(18.0%) females had multiple sexual partner practices, and males were two times more likely to have more than one sexual partner than females (OR (95%CI): 1.87 (1.10,

3.19). Of the 371 youth who were sexually active, 57.4% reported Khat use and 77.4% reported using alcohol. Khat chewers were as twice likely as non-chewers to have multiple sexual partner and alcohol

drinkers were also prone to practice multiple sexual partnerships as compared to non-drinkers (Table 6).

Table 6. Association of selected Socio-demographic Characteristics and substance use with Sexual practices among youth, Asendabo town, Jimma Zone, December 2005.

Characteristics	Number of life time sexual partner		P value	Adjusted OR (95%CI)
	More than one	One		
Sex				
Male	37(29.1)	90(70.9)		1.87(1.10, 3.19)
Female*	44(18.0)	200(82.0)	0.02	1
Religion				
Christian*	47(34.6)	89(65.4)		1
Moslem	34(14.5)	201(85.5)	0.00	3.12(1.82, 5.35)
Ever married*				
No	34(29.6)	81 (31.6)		1
Yes	47(18.4)	209(81.6)	0.02	1.87(1.09, 3.21)
Substance use				
Life time Khat				
Non chewers*	45 (28.5)	113 (71.5)		1
Chewers	36 (16.9)	177 (83.1)	0.01	1.96(1.16, 3.32)
Life time alcohol				
Non-drunker*	44(15.3)	243(84.7)		1
Drinkers	37(44.0)	47(56.0)	001	0.23(0.13,0.41)

* Reference category

DISCUSSION

Youth are in a state of rapid physical and psychological change. Because of their curiosity, enthusiasm and urge to experience new phenomena, a considerable number of youth experience with and become addicted to alcohol, smoking and Khat, which are detrimental to health (17, 18). The current study revealed that about a quarter of the youth in the study area regularly chew khat. This finding is fairly lower than other studies carried out in

Agaro and Butajira. Another community based survey (2000) in the rural part of the country showed a prevalence of 31.7%. The Butajira and Agaro study found higher rate, 50% and 64.9%, respectively (9, 14). These differences may be attributed to the perceived demographic variations (essentially age, sex and religion) between the subjects included in each of the research projects.

On the other hand, our study showed a higher prevalence of chewing khat compared to studies conducted among

Ethiopian universities students (22.3%) and a community based study in the North-west part of the country (17.5%) [11, 13, 18]. Surprisingly, the present study found that a fairly large proportion of children before the age of 15 years are involved in chewing khat. The associations of Khat use with the use of other substances like tobacco and alcohol compounds the matter, as both would encourage the practice of risky sexual behaviors. Our study and some others (6, 20-21) have clearly indicated the association between and complementary effect of these substances. In this study, out of those youth who are sexually active, about two-third did not use condom during their most recent sexual intercourse, and about the same proportion reported to have had more than one sexual partner during the last three months. This is an important finding calling for serious attention.

Most youths, when entering into sexual relations, do not use any form of protection. Particularly, youths who initiate sexual activity early are more likely to have multiple partners and are less likely to use condom. This makes them vulnerable to unplanned parenthood and STIs. In cases involving sex in exchange for money or gifts, youths may encounter further difficulties in negotiating safer sex. For young women receiving payment, the power imbalance in the relationship may make it difficult to refuse sex, or negotiate condom or contraceptive use, as reported else where (22-24). In this study, about one-third of the studied youth have initiated sex before the age of 15 years, indicating that there is still a lot to be done to reverse such risky conditions.

Some researchers indicated the discrepancy between intention and practice. In most studies, youth are against the use of substances, support delay of sexual debut and promote consistent practice of safe sex (25). However, in practice, smaller proportions report that they do what they

actually claim to be "right". Our current finding is not different from such a phenomenon. More than eighty percent of the study participants, including the abusers, are against the use of substances. They believe also that their neighbors and family members have a similar stand.

In conclusion, our study showed that substance use such as Khat, alcohol and cigarette were widely practiced among the studied youth and both male and female youths reported to have started chewing Khat before the age of 15 years. About third of males (29.1%) and females (18.0%) reported to have had multiple sexual partner practices. Male youths were two times more likely to have more than one sexual partner than females. Khat chewers were as twice likely as non-chewers to have multiple sexual partners. Therefore, intervention activities to bring about behavioral changes among the youth on the danger of use of Khat, alcohol and tobacco are recommended.

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