Research Article

Assessment on the prevalence and contributing factors of social drugs utilization among university of gondar regular undergraduate students, Maraki Campus, 2013.

Desalegn Birara Mamo[1*], Deribew Abebaw Abuhay[2], Belayneh Kefale Gelaw[3] and Gobezie Temesgen Tegegne[3]

[1]Department of Pharmacy, College of Medicine and Health Science, Wollo University, Amhara region, Ethiopia
[2]Department of laboratory, College of Medicine and Health Science, University of Gondar, Amhara region, Ethiopia
[3]Department of Pharmacy, College of Medicine and Health Science, Ambo University, Oromia region, Ethiopia
Corresponding Author : *birara.desalegn@yahoo.com*

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Abstract

According to WHO expert committee on drug dependence, drug abuse is persistent or sporadic excessive drug use in consistence with all unrelated to medical practice. Substances of abuse include controlled drugs (under international law) and other substance with abuse potential but not subjected to international controls such as alcohol, khat, tobacco, and volatile substances. Social drug utilization has a negative impact on health and economic development of an individual and a country as a whole. Especially youngsters, who are the most productive section of the population, are suffering from the negative consequences of social drugs utilization. The objective of this study is to assess the prevalence and contributing factors of social drugs utilization in university of Gondar regular undergraduate students, Maraki campus, in 2013 academic year. The study design employed was mixed type where quantitative data was emphasized and the qualitative data was used to illustrate the quantitative data. Descriptive survey method using questionnaires, key informant interview and focus group discussion (FGD) was conducted to collect the data. Utilization of social drugs among regular students of different departments of Maraki campus of University of Gondar was assessed using cross sectional study in 2013. Results: From a total of 682 respondents the majority 429(62.9%) were found as utilizers and the rest 253(37.1%) as non utilizers. Regarding contributing factors the result of this study showed that relaxation 125(29.1%), to increase performance 63(14.7%), and peer pressure 53(12.4%) were the major contributing factors for students' social drugs utilization. The prevalence of social drugs utilization was high (62.9%). Although the majority of utilizers started utilization before they join campus, peer pressure had a statistically significant association with social drugs utilization. All the concerned bodies should take part and work hand in hand in controlling and reducing the problem.

Introduction

According to WHO expert committee on drug dependence, drug abuse is persistent or sporadic excessive drug use in consistence with all unrelated to medical practice. Substances of abuse include controlled drugs (under international law) and other substance with abuse potential but not subjected to international controls such as alcohol, khat, tobacco, and volatile substances. History of drug abuse is as old as history of mankind. Human beings have been using different parts of plants as medicine for relieving different health conditions and also as mediators in different religious and cultural ceremonies. Later on people have come to realize that the use of certain plants produce addiction, dependence and misconduct when they are abused since many years ago. In due course following the development of science and technology, however the uses of these drugs and substance for the above purpose have decreased. On the contrary, their use for the changing mood and getting relief from stress has drastically increased globally (1).

Until the 1950s, drug abuse was uncommon phenomenon. It was a baseless underground problem that did not produce much media attention and an industry that did not generate the exceedingly large profiles seen today. Modernization and expansion of transportation and communication systems have paved the way for proliferation of trade among peoples of different nations that has also facilitated for the migrations of people from place to place along with their tradition and beliefs. Today, there is an estimated 190 million drug abusers around the globe, which accounts 3.1% of the world population age 15 years and above. The majority of illegal drugs are consumed in industrialized nations. It crosses national, ethnic, religious class and gender lines. Addicts range from the homeless to white-collar professionals, college students, commercial sex workers, rural farmers and street children (1).

Khat and alcoholic beverages have been part of countries tradition for centuries (1). Khat, which Ethiopia does consider being an illicit drug is a cash crop and important source of foreign exchange next to coffee, skin and hides. Besides in some areas like Harar production and chewing of khat is deeply rooted culturally that controlling khat chewing and production will create a socio economic imbalance (2, 3, and 4).

Statement of the problem

It is obvious that social drugs utilization has a negative consequence on the economic development of a country as the health, time and money of the most productive section of human resource (youngsters) are affected by the habit of indulging in drugs. It is time for policy makers to revise the rules and regulations regarding the control of the use of illicit drugs. The problem of social drugs utilization is an emerging and serious problem in the world. However, studies on the utilization of these drugs are rare. Social drug utilization including chat use in many European countries and Canada has been restricted and is as such classified as controlled substances. In the United States, the drug enforcement agency, DEA, has asserted that chat, khata edulis, is a schedule I substance (5).

The history of drug abuse in Africa is relatively short. However, the abuse of drugs in Africa is escalating rapidly from cannabis and chat abuse to the more dangerous drugs and from limited groups of drug users to a wide range of users. National drug studies in Nigeria showed that cannabis is predominantly used in schools and universities followed by cocaine and tobacco. In Zambia, 20% of university and high school students were drug users, and in Egypt, cannabis, glue and petroleum sniffing were found to be widely prevalence among students (6, 7, 8, and 9).

A few studies done in Ethiopia regarding substance abuse in selected urban areas showed that the use of these drugs is high and most commonly found among youngsters, 82% of street

children, commercial sex workers, street vendors and students. They also reported that khat, alcohol, hashish, tobacco and solvents were the most abused substances. Heroin, cocaine and other narcotic drugs were not considered to be important. The adverse effect is diversion of income for the purchase of drugs at the expense of the needs of the family, leading to family discord, and divorce and absenteeism from work, and criminal acts (2, 5).

The government of Ethiopia considers social drugs utilization as a serious and emerging problem. However, little attention has been given to the understanding of the factors related to drugs abuse. Yet this understanding is critical to the successful implementation of the drug control strategies. The recent sharp increase in khat and cannabis production and consumption may not only affect the health of individuals, but also has serious socio-economic consequences. Although the literature on khat is fairly extensive, several authors strongly stated the potential adverse effect of khat, there is no well designed study that examined other illicit drug problems and factors related with their use that could serve as a tool to guide policy makers (10).

Prevention of drug /substance abuse becomes complex problem to educators, public health authorities and law enforcement agencies in Ethiopia. Lack of awareness of the problem of drug (substance abuse) on the part of law makers who could enforce preventive measures seems at the root of difficulties in dealing with it. To assist policy formation for coping with all forms of drug abuse in specific risk groups and the general population of Ethiopia, epidemiological studies are needed to identify risk groups and patterns of drug use behavior (11).

Khat and alcohol use is linked to unprotected sex, putting young people at risk of unwanted pregnancy, abortion and HIV/AIDS infection. Young men who use khat have been shown to be more likely to use a sex worker, and more likely to have many different sexual partners. All of these behaviors increase their risk of becoming infected with HIV/AIDS (12).

There is no well designed study that examined the problem and the contributing factors related with social drugs utilization in our University that could be serve as a tool guide for policy makers of the administrative body of the university. Most studies done in our university focuses on the prevalence rather than the contributing factors.

A study conducted among college students in GCMS revealed 26.3% prevalence of cigarette smoking and prevalence of alcohol drinking was 31.1% in 1988 (1).

Thus this study is undertaken with the aim of filling this gap in knowledge on the magnitude and contributing factors related with social drugs utilizations.

Objective of the study

General objective

To assess the prevalence and contributing factors of social drugs utilization in university of Gondar regular undergraduate students, Maraki campus, in 2013 academic year

Specific objectives

To explore the extent of social drugs utilization in Maraki campus
To examine the major contributing factors for students social drugs utilization in Maraki campus
To identify the commonly utilized social drugs in the campus

Significance of the study

To reduce and then to stop the utilization of social drugs among students of University of Gondar Maraki campus specifically and other campus of the university as well as to the nearby society at large
To set a baseline data about the prevalence and major contributing factors of social drugs utilization gained through research at institution level.

Considering the potentially large impact of social drugs utilization on the economic development of a country as the health, time, and money of the most productive section of human resource (youngsters) are affected and the fact that there is no refined and well designed study regarding the contributing factors and the negative consequences of utilization in the students' academic performance in our university, and thus this study is significant in suggesting the possible mechanisms for alleviating these problems.

Materials and Methods

Study area and setting

The study was conducted in University of Gondar, one of the government universities in Ethiopia, which is found in North West of Ethiopia in North Gondar administrative zone 727 km far from Addis Ababa. The study settings were the different departments found in Maraki campus of University of Gondar.

Study population

The Study populations are regular undergraduate students attending their study in different departments of Maraki campus.

Study variables
Dependent variables

Utilization of social drugs
Independent variables

Sex
Department
Study year
Peer pressure
Religion

Inclusion and exclusion criteria
Inclusion criteria

Regular students attending their study in the year 2013

Exclusion criteria

Dismissal and re-students

Study design and period

The study design employed was mixed type where quantitative data was emphasized and the qualitative data was used to illustrate the quantitative data. The quantitative part of this research was employed to provide statistical generalizations about the prevalence of social drugs utilization and the qualitative method was used to provide detail descriptions about the contributing factors. For the quantitative parts of the study, respondents were selected based on stratified sampling techniques by using field of study as a stratum. Within each stratum, a simple random sampling technique was employed to select samples from each stratum. Descriptive survey method using questionnaires, key informant interview and focus group discussion (FGD) was conducted to collect the data. Utilization of social drugs among students of different departments of Maraki campus of University of Gondar was assessed using cross sectional study in 2013.

Sampling technique and sampling size

Sampling technique

Stratified Proportional Simple random sampling was carried out to get the sample what we need. Stratified and simple random sampling techniques were used to minimize the chance of selecting respondents from the same field of study and study year.

Sample size determination

The prevalence and contributing factors of social drugs utilization didn't study before in the campus. Hence, p is taken as 50% of the total students. Sample size can be determined by using the following single population proportion formula which encompasses the correction formula:

$$n = \frac{NZ^2_{1-\frac{\alpha}{2}}pq}{d^2(N-1)+z^2pq}$$

Where n=the required sample size
N=total number of students
Z=standard normal deviation at 95% CI=1.96
P=proportion of students
   q=1-p

d=the margin of error tolerated=5%

Sample size $n = \frac{3011\times1.96^2\times\frac{1}{2}\times\frac{1}{2}}{0.05^2(3011-1)+1.96^2\times\frac{1}{2}\times\frac{1}{2}}$ =341

So as to make the sample more representative and reduce random errors as well as to get accurate prevalence data, we have multiplied the sample size by 2 and hence the final sample size taken was 682.

Proportional allocation of the total sample size was made for each department, year of study, and sex by using the following formula:

$$ni = \frac{Ni\times n}{N}$$

Where ni =total sample size of each department/sex/year of study

N=total number of students
n =the sample size of the study

Data Collection Tools

A. Questionnaire

The study used self administered questionnaires as the principal data collection tool in order to get intensive information. It helps the respondents to state their response freely without interference. Pre tested questionnaire was distributed randomly to students by data collectors. Completeness and fulfillment of all questions in the questionnaire by students was checked by the principal investigator and data collectors while collecting the questionnaire and incomplete questionnaire was refilled soon. After students were informed about the objective of the study, they were kindly requested for their full consent and cooperation to fill the questionnaire.

B. Key informant Interview

Individuals who were considered to have close contact with students because of the nature of their work or can be witness while students utilize these substances were identified and data were collected using semi structured open ended questionnaire and depth interview was employed to key informants to get both intensive and extensive data initially not obtained by questionnaire and to make more clarification about the data. Key informant interview included nine individuals. Two from male proctors, two from female proctors, two cleaners, two campus polices, and one counselor from guidance and counseling. These individuals were included since they are directly working with students.

C. Focus Group Discussion (FGD)

For this study, FGD was conducted to gather information which was not obtained through questionnaires and interview. Through FGD students shared their ideas, opinions, and feelings. This method helped to have reliable and reasonable information about why some students utilize and why others do not utilize. It enabled the researcher to identify the major contributing factors and to grasp detail information from the users. The FGD discussion was held with ten purposively selected students, who are potentially exposed to social drugs utilization. Both key informant interview and FGD was employed to cross-check the validity of the response of respondents.

Data management, processing, analysis and interpretation

All data collected by data collectors was checked for completeness and fulfillment daily. The collected data was handled and organized in the appropriate time for further processing and analysis. Data gathered through interview and FGD were analyzed by using thematic method which is by means of grouping similar responses given by respondents .The quantitative data was processed manually using scientific calculator and analysis was done concurrently through a computer program called statistical package for the social sciences (SPSS) version 16 and the result was presented in tables and graphs and interpreted by percentage.

Ethical consideration

Formal letter was obtained from Research Ethics Committee of university of Gondar ethical board review, so the letter was given to the campus dean and they allowed us to do the research.

After we have informed the objective of the study, students were kindly requested for their full consent and cooperation to fill the questionnaires and verbal consent was obtained from the respondents and brief explanation on the aim of the study was provided at the start of data collection. Accountability, confidentiality, neutrality and academic honesty was maintained throughout the study.

Data utilization and Dissemination

The final report of this study was given to the office of research and community service, University of Gondar and

other concerned body of the administration of the university and a hard copy of the study was placed in the library and in the clinic for the students to refer it.

Conceptual and operational definitions of terms

Narcotic drugs: drugs that induce stupor and insensibility and relieve pain.

Psychotropic substances: substances that affect mood.

Substance abuse: maladaptive pattern of substance use resulting in repeated Problems and adverse consequences.

Addiction: a state of dependence produced by the habitual taking of drugs.

Dependence: the physical and/or psychological effects produced by the Habitual taking of certain drugs, characterized by compulsion to continue taking the drugs.

Poly drug abuse: two or more substance abused in with one another.

Euphoric: a state of optimistim, cheerfulness, and wellbeing.

Social drugs: drugs that are going to be consumed by wide range of users in the society and have potential of dependence /abuse but not subjected to international control e.g. khat, tobacco, and alcohol

Utilizer: an individual who uses at least one of the social drugs even occasionally.

Non-utilizer: an individual who never and ever utilizes social drugs.

Results

This section of the study states details of the results .Here, background information of respondents and utilization status is compared with the variables. In this study, a total of 682 students from different departments of Maraki campus attending their education in the 2012/13 academic year in the regular program were involved.

This study revealed that from a total of 682 respondents the majority 429(62.9%) were found as utilizers and the rest 253(37.1%) as non utilizers.

Proportional allocation of students to all departments of the campus was done as it was shown in the above table. About 110(16.1%) of students were from law department. From a total of 682 students included in the study the majority of respondents were utilizers. From all departments of Maraki campus Gender, Psychology, Amharic and English departments contributes the highest prevalence while Social work, Geography, Special need and Anthropology comprises the least prevalence.

In this study, second year students comprises the largest size which was about 221(32.4%), first year students 210(30.8%) and third year students 194(28.4%) from the total study sample. The number of fourth year and fifth year students was few since most departments need a three year education course to graduate their students. The study showed that first

year students were highest utilizers 140 (66.67%) as compared with second year students 135(61.09%) and third year students 116 (59.79%). However, the prevalence in fifth year students was high which about 25 (78.13%) was but it was from only Law department of 32 students.

In our study, proportional allocation of students by sex was done and accordingly 420(61.6%) were males and the rest 262 (38.4%) were females. Among 420 male students about 291(69.28%) were utilizers and from a total of 262 female students about 138(52.67%) were found as utilizers.

In the study samples from all regions were involved. But there was no even distribution among regions of students they came because about 189(27.7%) students were from Amhara, 128(18.8%) from Addis, 124(18.2%) from Oromiya and 117 (18.2%) were from SNNP. Sample from Benshangul, Gambela, Somalia, Harar, Diredawa and Afar was not much significant in number for analysis and discussion. The majority were from Amhara ethnicity which is about 189 and from this 114(60.32%) were found as utilizers. Among 128 students who came from Addis Ababa about 85(66.41%) were utilizers. From 124 students of Oromiya and 117 students of Debub, 81(65.32%) and 65 (55.56%) were found as utilizers respectively.

Considering religion the majority of respondents were Orthodox Christians 440 (64.5%) followed by Protestants 128(18.8%) and Muslims 93(13.6%). As the study result showed, 66(70.97%) of Muslim students, 280(63.63%) of Orthodox Christians and 67(52.34%) Protestant students were utilizers.

In case of starting time, most of the students 236(55.0%) started utilization before they join the university. About 124 (28.9%) of students started while they were first year and 48(11.2%) started utilization while they were second year.

The majority of students 176(41.0%) utilize alcohol and 105(24.5%) khat. There was also poly drug utilization because about 74(17.2%) utilize khat + tobacco + alcohol together, 21(4.9%) utilize khat + tobacco and about 14(2.1%) utilize alcohol + tobacco. However, the utilization of other social drugs other than khat, tobacco and alcohol was not much significant it was about 5(1.2%).

From the findings of the result, about 128(29.8%) spent less than 50 Ethiopian birr per month and 117(27.3%) spent 50-100 birr for utilization of social drugs.
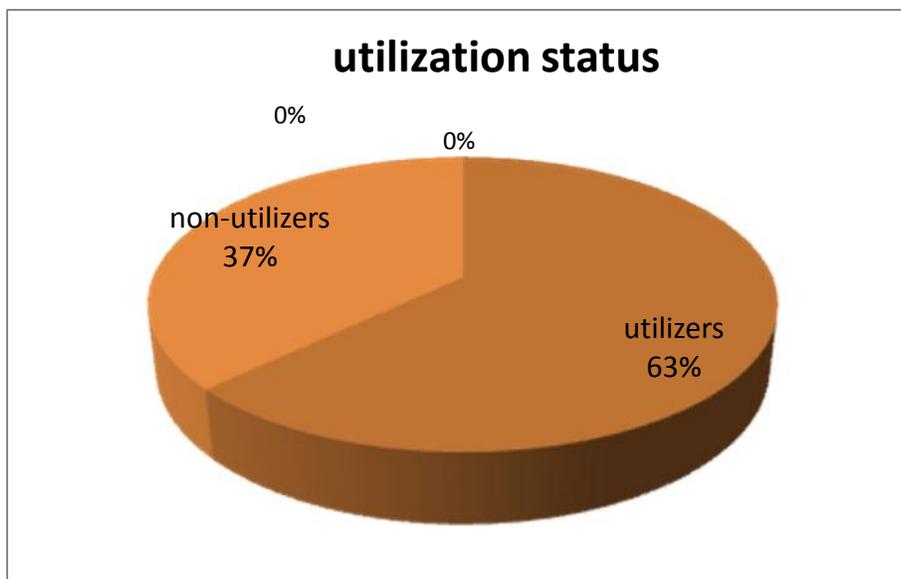
Figure 1: Percentage distribution of utilizers Vs non-utilizers among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Table 1: Prevalence of social drugs utilization among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Departments of respondents * Utilization status Cross tabulation						
Department	Frequency	Percent	Valid Percent	Cumulative Percent	Utilization status	
					yes	No
Amharic	28	4.1	4.1	4.1	24(85.71%)	4(14.28%)
English	40	5.9	5.9	10.0	33(82.5%)	7(17.5%)
Civics	41	6.0	6.0	16.0	22(53.65%)	19(46.34%)
Law	110	16.1	16.1	32.1	58(52.73%)	52(47.27%)
Psychology	45	6.6	6.6	38.7	39(86.67%)	6(13.33%)
Geography	39	5.7	5.7	44.4	20(51.28%)	19(48.72%)
History	34	5.0	5.0	49.4	25(73.53%)	9(26.47%)
Sociology	64	9.4	9.4	58.8	34(53.13%)	30(46.87%)
Social work	37	5.4	5.4	64.2	19(51.35%)	18(48.64%)
DEMS	54	7.9	7.9	72.1	31(57.40%)	23(42.59%)
Anthropology	41	6.0	6.0	78.2	20(48.78%)	21(51.22%)
EDPM	40	5.9	5.9	84.0	28(70.0%)	12(30.0%)
Population Study	35	5.1	5.1	89.1	21(60.0%)	14(40.0%)
Gender	38	5.6	5.6	94.7	37(97.0%)	1(3.0%)
Special need	36	5.3	5.3	100.0	18(50.0%)	18(50.0%)
Total	682	100.0	100.0		429(62.9%)	253(37.1%)

Table 2: Percentage distribution of social drugs utilization based on year of study among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Study year of respondents * Utilization status Cross tabulation							
Study year		Frequency	Percent	Valid Percent	Cumulative Percent	Utilization status	
						Yes	No
	First	210	30.8	30.8	30.8	140(66.67%)	70(33.33%)
	Second	221	32.4	32.4	63.2	135(61.09%)	86(38.91%)
	Third	194	28.4	28.4	91.6	116(59.79%)	78(40.21%)
	Fourth	25	3.7	3.7	95.3	13(52.0%)	12(48.0%)
	Fifth	32	4.7	4.7	100.0	25(78.13%)	7(21.87%)
	Total	682	100.0	100.0		429(62.9%)	253(37.1%)

Table 3: Prevalence of social drugs utilization based on sex among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Sex		Frequency	Percent	Valid Percent	Cumulative Percent	Utilization status	
						Yes	No
	Male	420	61.6	61.6	61.6	291(69.28%)	129(30.72%)
	Female	262	38.4	38.4	100.0	138(52.67%)	124(47.33%)
	Total	682	100.0	100.0		429(62.9%)	253(37.1%)

Table 4: Percentage distribution of social drugs utilization based on the region where they came among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Region of respondents * Utilization status Cross tabulation							
Region		Frequency	Percent	Valid Percent	Cumulative Percent	Utilization status	
						Yes	No
	Tigray	75	11.0	11.0	11.0	47(62.67%)	28(37.33%)
	Afar	14	2.1	2.1	13.0	12(85.71%)	2(14.29%)
	Amhara	189	27.7	27.7	40.8	114(60.32%)	75(39.68%)
	Oromiya	124	18.2	18.2	58.9	81(65.32%)	43(34.68%)
	Somalia	5	.7	.7	59.7	5(100 %)	0(0%)
	Benshangul	4	.6	.6	60.3	2(50.0%)	2(50.0%)
	SNNP	117	17.2	17.2	77.4	65(55.56%)	52(44.44%)
	Gambela	4	.6	.6	78.0	3(75.0%)	1(25.0%)
	Harar	10	1.5	1.5	79.5	7(70.0%)	3(30.0%)
	Addis Ababa	128	18.8	18.8	98.2	85(66.41%)	43(33.59%)
	Dire Dawa	12	1.8	1.8	100.0	8(66.67%)	4(33.33%)
	Total	682	100.0	100.0		429(62.9%)	253(37.1%)

Table 5: The social drugs utilization prevalence based on religion among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Religion of respondents * Utilization status Cross tabulation						
Religion		Frequency	Percent	Valid Percent	Cumulative Percent	Utilization status	
						Yes	No
	Orthodox	440	64.5	64.5	64.5	280(63.63%)	160(36.37%)
	Muslim	93	13.6	13.6	78.2	66(70.97%)	27(29.03%)
	Protestant	128	18.8	18.8	96.9	67(52.34%)	61(47.66%)
	Other	21	3.1	3.1	100.0	16(76.19%)	5(23.81%)

Table 6: Percentage distribution of social drugs utilization based on starting time of utilization among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

	Starting time of utilization	Frequency	Percent	Valid Percent	Cumulative Percent
	Before	236	34.6	55.0	55.0
	First year	124	18.2	28.9	83.9
	Second year	48	7.0	11.2	95.1
	Third year	18	2.6	4.2	99.3
	Fourth year	1	.1	.2	99.5
	Fifth year	2	.3	.5	100.0
	Total	429	62.9	100.0	
Missing	System	253	37.1		
Total		682	100.0		

Table 7: Prevalence of different types of social drugs utilized among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

	Type of social drugs utilized	Frequency	Percent	Valid Percent	Cumulative Percent
	khat	105	15.4	24.5	24.5
	tobacco	17	2.5	4.0	28.4
	alcohol	176	25.8	41.0	69.5
	khat + tobacco	21	3.1	4.9	74.4
	khat + alcohol	17	2.5	4.0	78.3
	alcohol + tobacco	14	2.1	3.3	81.6
	khat + tobacco + alcohol	74	10.9	17.2	98.8
	others	5	.7	1.2	100.0
	Total	429	62.9	100.0	
Missing	System	253	37.1		
Total		682	100.0		

Table 8: Amount of money spent per month for social drugs utilization among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

	Money spent per month for utilization	Frequency	Percent	Valid Percent	Cumulative Percent
	< 50	128	18.8	29.8	29.8
	50-100	117	17.2	27.3	57.1
	100-200	96	14.1	22.4	79.5
	>200	88	12.9	20.5	100.0
	Total	429	62.9	100.0	
Missing	System	253	37.1		
Total		682	100.0		
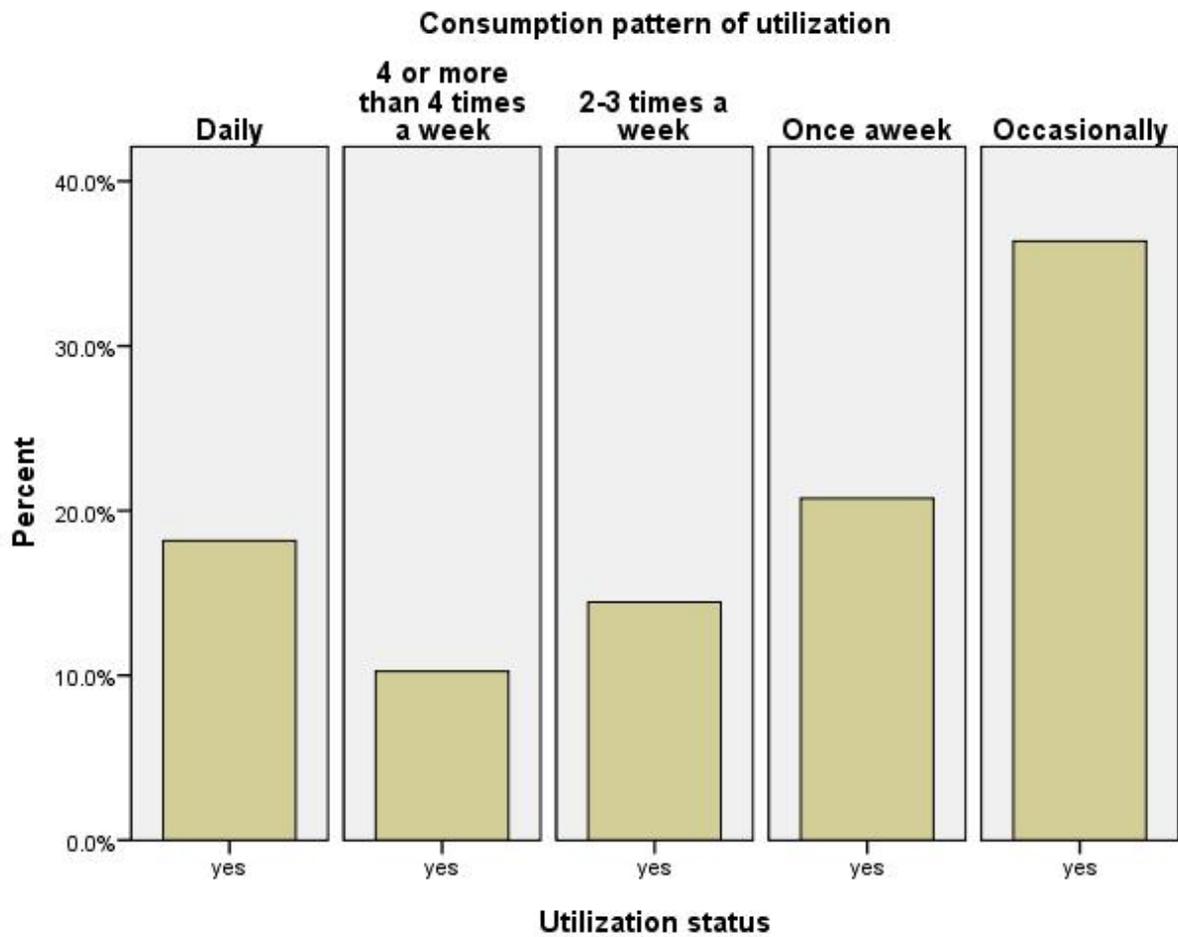
Figure 2: Consumption pattern of social drugs in percent among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

Table 9: Percentage distribution of social drugs utilization based on reason for utilization among regular undergraduate students in different departments of Maraki campus, UoG in 2013 academic year

		Frequency	Percent	Valid Percent	Cumulative Percent
	Reason for utilization				
	To increase performance/reading	63	9.2	14.7	14.7
	For relaxation/to celebrate special occasions	125	18.3	29.1	43.8
	To avoid unpleasant feeling	52	7.6	12.1	55.9
	For socialization	39	5.7	9.1	65.0
	Peer pressure	53	7.8	12.4	77.4
	To kill extra time	26	3.8	6.1	83.4
	Academic dissatisfaction	16	2.3	3.7	87.2
	Other reason	10	1.5	2.3	89.5
	History of family use	38	5.6	8.9	98.4
	Loosening of family control	7	1.0	1.6	100.0
	Total	429	62.9	100.0	
Missing	System	253	37.1		
Total		682	100.0		

Table 10: The significance association between the independent variables and utilization status

Independent variables	Dependent variable (Utilization status)		
	Chi-square	Degree of freedom (df)	P -value
Sex	19.085	1	0.000
Department	65.845	14	0.000
Study year	6.842	4	0.144
Religion	10.398	3	0.015
Peer pressure	33.890	1	0.000

From the total of 429 utilizers the majority 156(36.4%) utilize social drugs occasionally. About 89(20.7%) utilize once a week and 78(18.2%) of utilizers utilizes daily. Regarding reason for utilization, the majority of students 125(29.1%) stated relaxation as their reason. To increase performance 63(14.7%) while reading and peer pressure 53(12.4%) comprises the second and third reason respectively. Loosening of family control and academic dissatisfaction has been stated as least prevalent to be reason.

The test of significance was done between the utilization status which is a dependent variable and the factors affecting the dependent variable which are the independent variables by Chi-square and P- value. According to the statistical analysis and calculated p values, sex (p<0.05), department (p<0.05), religion (p<0.05) and peer pressure (p<0.05) have statistically significant association with social drugs utilization. However, study year (p>0.05) and hence did not have statistically significant association with social drugs utilization.

Discussion

In this study a total of 682 undergraduate regular students were included from different departments found in Maraki campus. From these students, 420 were males and the remaining 262 were females. In the study as it is stated in the operational definition utilizers means a student who takes at least one among the social drugs even occasionally and Non- utilizer is a student who never take these drugs. Accordingly, this study showed that 429(62.90 %) of the students were found to be utilizers of social drugs and the rest 253(37.10%) of the students never use these drugs and were non-utilizers. In Zambia, 20% of university and high school students were drug users, and in Egypt, cannabis, glue and petroleum sniffing were found to be widely prevalent among students (6, 7, 8, and 9). This study as compared to the study done in university and high school students of Zambia, greater than threefold utilizer was found in our study. The high prevalence in our study could be attributed to the study assumption which means

according to the study students who used at least one of the social drugs even once are considered as utilizer so the overall prevalence would increase. It might also be because of high prevalence 176(41.0%) of alcohol users which in turn increases the total prevalence out of which the majority were drunker at cultural and religious holidays as well as following finishing of exams.

In this study the majority of students 176(41.0%) utilizes alcohol only, around 105(24.50%) utilize khat only, and about 74(17.20%) utilize khat, tobacco and alcohol together. Poly drug utilization was widely used by chronic utilizers and the most common combinations were 74(17.20%) khat + tobacco + alcohol, 21(4.9%) khat + tobacco,and 17(4.0%) khat + alcohol what they called "ጨብሲ." high prevalence of alcohol could be because most students utilize alcohol to celebrate special occasions and cultural holidays. Khat is also used mostly during examination time for reading to increase performance by enhancing memorization ability as they replied and evidenced by qualitative data methods. Qualitative data findings from key informants and FGD confirmed this result. As the data most students utilize alcohol for "ጥፈራ በ በዓል ጊዜ" and at weekend. Khat is the second highly prevalent social drug especially for reading during examination time, "ፋራ ላለመባል"፣ "ጊዜ ለማሳለፍ ፍሪ በርጫ"፣"ጨብሲ"፣"ቃጢራ"፣"ካልቃምኩኝ ግቢው የሚበላኝ ይመስለኛል"፣ "የቃም ተጠቀም ያልቃም ተለቀም" ፣"ሲጋራ ይሻላል ከ እንጀራ" and to generate fantastic ideas. Students from Harar, Afar & Dire dawa got money from their family for chewing khat purpose in addition to other basic expenses. According to the study conducted among college students in GCMS, prevalence of alcohol drinking was 31.1%in 1988 (1). A study conducted among Jimma university students in 2002 revealed that prevalence of khat chewing was 24.79 %(1) and hence the results of our study is almost comparative. Unlike our findings, national drug studies in Nigeria showed that cannabis is predominantly used by university students followed by cocaine and tobacco (6, 7, 8, and 9). But the result in our study showed that tobacco 17(4.0%) and others (cannabis/hashish) 5(1.2%).The least prevalence of tobacco might be due to fear of bad odor of the mouth and easily identified due to smell while smoking inside the block as smoker and no direct effect in relation with either in reading or relaxation unlike khat and alcohol. The study revealed that the majority of utilizers 125(29.10%) utilize social drugs for relaxation to celebrate special occasions especially high prevalence of alcohol 176 (41.0%) is strongly related with this result. Many others 63(14.70%) use to increase performance/reading for this khat is highly used especially during exam. About, 53(12.4%) due to peer pressure and 52(12.10%) of utilizers utilize to avoid unpleasant feelings. Loosening of family control is the least stated reason by students this might be because almost all students are above the age of 18 and matured enough they can lead their life by their decisions. More than half of the utilizers 236(55.0%) started utilization before they join Gondar university. This could be due to culture of their place and while celebrating

holidays with their family at least they might drink alcohol. Although they were with their family, there might be also loosening of family control, poor monitoring and supervision and lack of open communication between parents and their children on various risk behaviors related topics. About 124(28.9%) started when they were fresh students this could be because of peer pressure by senior students, to be considered as modern and moody and loosening of family control. About 48(11.20%) during 2nd year student and the remaining 18(4.2%) when they were 3rd year student. Prevalence based on year of study also confirmed these result because the majority 140 (66.67%) of fresh students were found to be users, 135(61.08 %) of 2nd year students and 116 (59.79%) of 3rd year students were also utilizers. On the other hand, evidences from in-depth interview and focus group discussion indicated that senior students were the most utilizers as compared to fresh students based on their rough observation. From a total of 93 Muslim students included in the study, 66 of them were found to be utilizer which means around 70.96%.This might be because cultures of most Muslims to use khat for "ድዋ" (praying to Allah). About 63.63 % 0rthodox Christian students from all Orthodox respondents were also found as utilizers. This high prevalence in Orthodox Christian students might be due to a number of religious holidays and students celebrate these holidays mostly by drinking alcohol. But since the sample in all religions included in the study is not proportional and evenly distributed it is impossible to give conclusions. However, from the total users 280 (65.27%) were Orthodox Christian students and 66(15.38%) were Muslims. Related to sex the study revealed that from the total users, 291(67.83%) were male utilizers and the rest 138(32.16%) were females. From the total of 420 males involved in the study 291 which means 69.28% were utilizers and from the total of 262 females involved in the study 138 which means 52.67% were found to be utilizers. This could be because most males utilize all the social drugs but females usually utilize alcohol during holidays. Study conducted among Jimma university students in 2002 revealed that prevalence of khat chewing was 27% in males and 17.43%in females (1). As compared to this result the study of this research is almost comparative. From a total of 682 students included in the study the majority of respondents were utilizers. From all departments of Maraki campus Gender, Psychology, Amharic and English departments consists of high prevalence and Social work, Geography, Special need and Anthropology as the least utilizer prevalence. But this prevalence is not related with the nature of the departments and hence couldn't be justified.

Considering the consumption pattern the study revealed that the majority of students 156(36.36%) utilize occasionally and 89(20.74%) once a week. This could be because most students especially alcohol users utilize alcohol during holidays and khat during examination time which means occasionally, lack of enough money and high cost of social

drugs could also be justified. Due to these reasons the majority of students 128(29.83%) spent <50 Ethiopian birr per month for consumption of these drugs. This all results indicates that majority of the utilizers are not addicted by social drugs because if they were addicted majority would not utilize occasionally and spent <50 Ethiopian birr. A total of 14 students from Afar were included in the study among these 12 students which is about 85.71% were found as utilizers. From Addis Ababa 128 students were included in our study and 85(66.40%) were utilizers. From Oromiya 124 students were included and 81(65.32%) were found as utilizers. From Tigray a total of 75 students were included and 47(62.66%) were found as utilizers and from Amhara 189 students were included and 114(60.31%) were found as utilizers. The results of this study revealed that students who came from Afar, Harar, Somalia, Addis Ababa, Oromiya and Diredawa were found as high utilizers. This result is similar with the data obtained from the qualitative study through FGD and key informant interview. High prevalence in these areas might be because in these places especially chewing khat is practiced as a culture and even their family also allocate and sent money for their students to utilize these drugs other than their basic expenses. But it is impossible to give a deduction because sample size is not evenly distributed among regions.

According to the data obtained from our key informants and FGD participants; khat, alcohol and tobacco were the most commonly utilized social drugs. Although few students who came from Shashemene were obtained while utilizing Hashish (cannabis). They also stated that relaxation, to increase performance by reading especially with khat and peer pressure were the major reasons for students utilizing social drugs. They also reported that utilization of social drugs was high during examination times, when their family sent money to them, when they receive cost sharing fee for food and during weekends. Most FGD participants said that they started utilization before they join the university due to cultural and social pressures. They also stated that poly drug abuse was widely used by chronic utilizers and the most common combinations were tobacco + shisha, khat + alcohol ("ጨበሲ."). They entered these drugs, especially khat and tobacco in to the campus via pockets, sucks, on their back and even bags. Almost all participants involved in the FGD stated that only few students were addicted but the majority of utilizers utilize khat for reading during examination and drunk alcohol to celebrate holly days. They have also a plan to reduce utilization when they leave the campus but they will continue utilizing occasionally to celebrate special occasions.

The result of qualitative study showed that the majority of utilizers were males though some female students consume alcohol during weekends and second semester of graduation year since there is less academic stress. Unlike our findings obtained in the quantitative data, both FGD and key informant participants respond that the majority of utilizers were senior students as compared to fresh students due to their familiarity with the campus and little attention to the rules and regulations of the university. They also replied that there was no awareness problem towards the negative impacts of social drugs. They also said religion and region have influences in social drugs utilization to some extent usually Muslims chew khat for "ዱዓ" (praying to Allah) and Christians drunk alcohol during religious holly days. Students who came from Harar, Afar, Somalia, Dire dawa, Addis Ababa and Oromiya consume more frequently than others.

Conclusions

There were different factors that contributed to social drugs utilization of the utilizers: for relaxation (to celebrate special occasions), to increase performance/reading, peer pressure, to avoid unpleasant feeling/tension, for socialization, history of family use, to kill extra time, academic dissatisfaction, other reason and loosening of family control in decreasing order.

So from the above findings we can conclude that chronic utilization of social drugs is not a big deal in our university of Maraki campus which means addiction is not a burning issue because majority of utilizers are one time users which is natural and common.

Related to the starting time the majority 236(55.0%) of utilizers started utilization of social drugs before they join campus which means while they were with their family. Therefore, it is not a behavior that they develop while their stay in university. However, a significant number of utilizers 124(28.9%) started while they were fresh students and here we can conclude that peer pressure which accounts 53(12.4%) of utilizers reasons had influence to the fresh students by their seniors.

Considering the second high valid percent of utilizers reason which is 63(14.7%) for increasing performance /reading purpose because of especially during narrow gap of exam schedule and the trend of most teachers to give lessons near the exam time as FGD participants said. There is a problem in teachers not using the whole credit hours appropriately with their lesson plan and course out line and hence students were forced to be loaded near the exam time by teachers trial to cover and end all the topics in the short time, so to adjust this and to memorize a bulky page of hand outs within a short period of time students were obligated to chew khat which enables them to stay long time on reading and to memorize their notes.

Recommendations

Finally we have recommended the university management, students, governmental and nongovernmental organizations to apply the following:

Awareness creation should be maximized about the negative consequences of social drugs utilization in their academic performance and health especially when fresh students join the university

Different alternative entertaining and recreational facilities such as sport fields in each campus, DSTV- in each TV-room of each block, theaters and cultural enhancements should be designed for students

Strong and well organized counseling and guidance services providing not only office but also outreach services to the students in addressing negative impacts of social drugs utilization should exist

Anti- substance abuse clubs and drug traffic organizations should be established with the aim of discussing and sharing ideas, opinions in addressing social drugs utilization impact

Promoting life skill training that include positive behavior, coping with emotions and stress ,and capacity to make informed and healthy decisions and choices

Adopting peer-based positive peer to peer education, counseling and influencing approaches.

Coping best practices from other equivalent higher institutions in combating students addiction by social drugs should be considered e.g. Bahirdar university

Revising, incorporating and implementing strong policies with clear, appropriate and effective legislation as well as educating sanctions in the students' code of conduct

In addition to all these preventive efforts against social drugs utilization by students focus must be made on demand and supply reduction around the university premises by collaborating with concerned bodies and project should be designed to avoid this problem

Acronyms and Abbreviations

ATS: Amphetamine Sulfate
CIDI: Composite International Diagnostic Interview
DEA: Drug Enforcement Administration
DEMS: Development and Environmental Management Science
DSM-IV: Diagnostic and Stastical Manual-IV
EDPM: Educational Planning and Management
FGD: Focus Group Discussion
GCMS: Gondar College of Medical Science
LSD: N, N-diethyl –D-Lysergamide
THC: Tetra Hydrocannabiols
UOG: University of Gondar
WHO: World Health Organization

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