



## Type and magnitude of drug and substance abuse among Samburu youths in Samburu country, Kenya

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### ARTICLE HISTORY

Received: 12.07.2017

Accepted: 21.08.2017

Available online: 30.09.2017

### Keywords:

Drug, Drug abuse, Substance abuse, Youth

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### ABSTRACT

Drugs and substance abuse (DSA) continue to jeopardize the health and welfare of youths throughout the world. Drugs and substances abuse, its magnitude among youths in semi-nomadic communities in Kenya is not known. The main objective of this study was to determine the type and magnitude of drug and substance abuse among youths in semi-nomadic communities Samburu County. This was a cross-sectional study with a total of 415 youths aged 15-24 getting involved in the study. Simple random sampling was used to select one Sub-county and four community health units (CHU) to participate in the study. Using systematic random sampling selection of research participants were selected. Quantitative data was analyzed using Statistical Package for Social Sciences (SPSS). From the results 54% of the respondents reported to have ever used drugs and substances before. About 52 % of the respondents reported to be currently using drugs and substances. The study revealed that 43.2% of the respondents abused drug for the first time between 18-21 years of age. Drugs and substances commonly abused included miraa (17.3%), sniffed tobacco (12.5%), traditional liquor (10.6%), cigarettes (6.7%), alcohol (3.6%) and bhang 1.4%). The study established a significant association between drug and substance abuse and Gender ( $\chi^2=107.0$ ;  $df=1$ ;  $p<0.001$ ), marital status ( $\chi^2=223.2$ ;  $df=1$ ;  $p<0.001$ ), education ( $\chi^2=22.599$ ;  $df=3$ ;  $p<0.001$ ) and age ( $\chi^2=5.242$ ;  $df=2$ ;  $p=0.073$ ) of the respondents. Miraa (55.9%) was most abused by male while female mostly abused sniffed tobacco (51.1%). In conclusion, respondents felt that war against drugs abuse is achievable.

### INTRODUCTION

Drugs and substance abuse is a problem that all countries of the world have had to contend with for centuries. Drug and substance abuse continues to exact a significant toll, with valuable human lives lost and productive years of many persons being lost [1]. An estimated 183,000 (range: 95,000-226,000) drug related deaths were reported in 2012 and globally it is estimated that in 2012, some 243 million people corresponding to some 5.2 percent of the world population had used a substance of abuse at least once in the previous year [1].

Drugs and substance abuse among youths in Kenya has become a serious problem. The trends shows continuous increase of drugs and substance abuse among youths. Regrettably continued drug abuse by youths decreases their performance in

almost all aspects of socio-economic development and makes them vulnerable to crimes. Addiction leads to many youths into trends of hopelessness, which at times ends fatally [1, 3, and 4]. Even though everyone who uses drugs is at risk, studies have shown that adolescents and youths between the 15-24 years face a greater risk of addiction and more harm. This is due to the growth and development changes that come up when they are transiting from childhood to adulthood [5].

Samburu County is classified as arid and semi-arid nomadic pastoralist region. It is a unique county with multifaceted characteristics. The level of poverty and illiteracy are very high. There are many studies done in Samburu, which unfortunately most of them focus on humanitarian situation in the County. Many studies that have been carried out in Samburu are focusing on water and sanitation, hygiene, latrine coverage, nutrition and maternal and child health. A comprehensive literature review was

carried out to find out if there is any comprehensive study done specifically in regards to drugs and substance abuse, but the findings did not yield any significant results.

At Maralal county referral hospital, there are many reported cases of mental and behavioral disorders, toothache and injuries attributed to drugs and substance abuse and use of other psychoactive substances and most of the clients are youths within the ages of 15 to 24 [6]. Despite these many cases, there is no comprehensive study done to determine if there is any relationship between these cases and drugs and substance abuse in this area. It is against this background that this study was undertaken to determine type and magnitude of drugs and substance abuse among youths in Samburu County.

## MATERIALS AND METHODS

This was a cross sectional study involving both quantitative and qualitative methods of data collection was used to collect and analyze data. The study was done in Samburu Central Sub-county located in Samburu County, in Kenya. The Sub-County borders Lake Turkana to the North West, Marsabit to the North and North East, Isiolo to the East and South East, Laikipia and Baringo to the South West, and Turkana to the West and North West. It covers an area of 21,022.2 sq. Km. Temperatures varies with altitude and ranges from a mean annual minimum of 24°C to a mean maximum of 33°C, with rainfall amounts of between 250mm and 1,250mm per annum. The study population constituted 424 youths aged 15-24 years from Samburu Central Sub-County. They were both male and female within this age bracket. According to National Campaign Against Drug Abuse Authority (NACADA) in Kenya, this is the population at the greatest risk of drugs and substance abuse. Given three Sub-counties in Samburu County, Samburu Central Sub-county was selected using simple random sampling method. The study then selected four Community Health Units through simple random sampling technique. Community Health Units were composed of cohorts of population of 1000 households (one household has 5 people therefore 1000 households is equivalent to 5000 people). Each Community Health Unit had a composition of 50 Community Health Volunteers also known as Community Own Resource Persons (CORPs) and each one of them served 20 households (100 people). The CORPs are supervised by two trained Community Health Extension Workers (CHEWs). The CHEWs are retrained Public Health Officers or Technicians (PHOs/PHTs). Systematic sampling method was used to select study participants from the four selected Community Health Units. Both male and female were selected to participate in this study. The selection of the study participants was made easier since each CORPs had a register of all the households he or she was supervising. A semi-structured researcher administered questionnaire was used to collect quantitative data from the youth respondents. Likewise focus group discussions were carried out with at least one youth group picked from each Community Unit. Participants were asked questions on General knowledge on drugs and substance abuse, types and extent of use.

The data collected was organized, tabulated and analyzed using descriptive and inferential statistics. The statistics were generated using Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics was performed for proportions and percentages. Inferential statistics of chi-square was used to test relationships between independent and dependent variables. Qualitative data collected was transcribed by using thematic content analysis which involved five main stages that included;

familiarization, identifying thematic framework, indexing/coding, charting, mapping and interpretation.

## RESULTS

### Demographic characteristic of the respondents

Table 1 shows the demographic characteristic of the respondents. Most of the study respondents (58.4%) were male. Distribution by age in years showed that, those who were aged 22-25 years were the majority (53.2%) followed by those aged between 18-21 years (31.6%). Most of the study respondents (48.2%) had primary education followed by those with secondary education (24.6%) while those with post-secondary education (6.2%) were the minority. Distribution by respondents' neighborhood revealed that majority of the respondents (82.4%) were from rural areas. Segregated by religion, most of the respondents (72.3%) were Christians.

### Type of drugs used by youths in Samburu Central

Table 2 below illustrates the type of drugs used by youths in Samburu Central. About 33.3% of them chewed khat, 24.1% sniffed tobacco, 20.4% drunk traditional liquor, and 12.5% smoked cigarettes while 6.9% used alcohol. Less than 3% abused bhang.

### Current use of drugs

Table 3 below shows the proportion of respondents who were using any form of drug or substance at the time of study. About 52% of the respondents reported to be using drugs at the time of study.

Table 4 displays inferential analysis between some respondent's demographic characteristics and use of drugs at the time of study. From the study young men (41.9%) too drugs more compared to young women (10.1%). Chi-square analysis demonstrated that drug use and gender of the respondents was statistically significant ( $\chi^2=107.0$ ;  $df=1$ ;  $p=0.0001$ ) at 95% confidence level. Moreover, odds ratio analysis shows that males were 9.5 times more likely to use drugs and substances than female. It was also noted that those youths in primary school level used drugs and substances more than other levels. Unmarried youths used drugs and substances more than their married counterparts. Level of education and marital status was also associated with drug use ( $\chi^2=223.2$ ;  $df=1$ ;  $p<.0001$ ) and ( $\chi^2=22.599$ ;  $df=3$ ;  $p<.0001$ ) respectively. There was no direct significant relationship between age and drug use ( $\chi^2=5.242$ ;  $df=2$ ;  $p=0.073$ ).

### Availability of substances and drugs used in Samburu Central

Table 5 below displays the source of drugs and substances among youth users in Samburu Central. Majority (88%) of respondents attested that drugs and substances were available in shops/markets. Only 12% obtained drugs from friends.

### Ease of availability of drug type

Table 6 below displays proportions of different types of drugs and substances that are easily available to youths in Samburu Central. Sniffed tobacco was easily obtained by 43.9% of respondents in the survey, Khat/Miraa was the second easily available at 20.7%. Alcohol was the least accessible (8.2%).

**Table 1 :** Demographic characteristics of respondent.

Variable	Category	Frequency (%)
<b>Gender</b>	Male	234(56.4%)
	Female	181(43.6%)
<b>Age</b>	15-17	63(15.2%)
	18-21	131(31.6%)
	22-25	221(53.2%)
<b>Marital Status</b>	Single	198(47.7%)
	Married	217(52.3%)
<b>Respondents level of education</b>	None	87(21%)
	Primary	200(48.2%)
	Secondary	102(24.6%)
	Tertiary	15(3.6%)
	University	11(2.6%)
<b>Respondents neighborhood</b>	Rural	342(82.4%)
	Urban	73(17.6%)
<b>Respondents religion</b>	Christian	300(72.3%)
	Muslim	16(3.9%)
	None	86(20.7%)
	Traditional	13(3.1%)

**Table 2 :** Type of drugs used by respondents

Response item	Frequency	Percent (%)
Alcohol	15	6.9
Cigarettes	27	12.5
Marijuana/ bhang	6	2.8
Khat/ miraa	72	33.3
Traditional liquor	44	20.4
Sniffed tobacco	52	24.1
<b>Total</b>	<b>216</b>	<b>100</b>

### Extent of Drug and Substance Abuse among youths in Samburu Central

#### Age of drug use for the first time by gender

Table 7 below displays age of drugs use by respondents for the first time by gender. Close to 40% of male youths reported to have first used drugs between the ages of 15-17. The rest 58.9% first used drugs and substances when they were above 18 years old. Only one female youth who reported to have first used drugs/substances when she was below 18 years old.

#### Time of drug use among youths

Table 8 below displays time of drug use trends. Majority of

respondents (57.5%) in the survey revealed that they used drugs all day long. About 42.1% of the youths in Samburu used drugs between 6-11pm while a few (0.4%) used between 4-6pm in the evening.

#### Trends of drug use among youths in Samburu Central

Respondents were asked of their perception on the drug trends in the county. Majority of the respondents (84.7%) indicated that drug use has been on increase in the study area, 5.8% thought the drug menace was on the decrease while 9.6% had no idea (Table 9).

Chi-square test was used to test the association between some respondents' demographic characteristics and opinion on drug

**Table 3 :** Status of drug use at the time of study

Currently using drugs	Frequency	Percent (%)
Yes	216	52
No	199	48
<b>Total</b>	<b>415</b>	<b>100</b>

**Table 4 :** Association between respondent's demographics and drug use

Variable	Category	Drug use		Significance
		Used	Didn't use	
Gender	Male	41.9%	14.5%	$\chi^2=107.0$ ;df=1; p <0.001
	Female	10.1%	33.5%	
Marital status	Single	43.1%	4.6%	$\chi^2=223.2$ ; df=1; p <0.001
	Married	8.9%	43.4%	
Level of education	None	11.6%	9.4%	$\chi^2=22.599$ ; df=3; p<.0001
	Primary	20.2%	28%	
	Secondary	15%	9.6%	
	Post-Secondary	4.8%	1.4%	
Age	15-17	7.2%	8%	$\chi^2=5.242$ ; df=2; P=0.073
	18-21	19%	12.5%	
	22-25	25.8%	27.5%	

**Table 5 :** Sources of drugs and substances

Response item	Frequency	Percent (%)
Available in shops/markets	190	88
From friends	26	12
<b>Total</b>	<b>216</b>	<b>100</b>

**Table 6 :** Ease of availability of drugs by type

Drug	Frequency	Percent (%)
Alcohol	34	8.2
Cigarettes	48	11.6
Khat/Miraa	86	20.7
Traditional liquor	65	15.7
Sniffed tobacco	182	43.9
<b>Total</b>	<b>415</b>	<b>100</b>

**Table 7 :** Age drug use for the first time among youths by Gender

Gender	Age-group	Frequency	Percent (%)
Male	15-17	72	41.1
	18-24	103	58.9
	<b>Total</b>	<b>175</b>	<b>100</b>
Female	15-17	1	2
	18-24	50	98
	<b>Total</b>	<b>51</b>	<b>100</b>

**Table 8 :** Time of drug and substance use by youths

Response item	Frequency	Percent
4-6pm	1	0.4
6-11pm	95	42.1
All day long	130	57.5
<b>Total</b>	<b>226</b>	<b>100</b>

**Table 9 :** Trends of drug use among youths

Response item	Frequency	Percent
Increasing	351	84.6
Decreasing	24	5.8
No idea	40	9.6
<b>Total</b>	<b>415</b>	<b>100</b>

and substance use trends. The results showed that male respondents (56.1%) were more likely to report increase in drugs and substance abuse in the area as compared to the female respondents (43.6%). This association was statistically significant ( $\chi^2=35.054$ ;  $df=2$ ;  $P<.001$ ) at 95% confidence level. Respondents that were married (46.1%) were more likely to report increase in drugs and substances abuse in the area as compared to single respondents (38.6%). However, this association of trend in drugs abuse/substance and marital status of the respondents was not statistically significant (Table 10). Association of trend in drugs abuse and level of education of the respondents and age of the respondents were not statistically significant (Table 10).

#### Cost of drug

As shown on figure 1 below, 69% of the respondents in the survey claimed that sniffed tobacco most affordable in terms of

price and therefore most easily accessible. Tobacco was easily available because it could grow in their farms and sold as cheap as from 5 Kenyan shilling (0.05USD). Khat (11%) and Cigarettes (11%) were also affordable at a price of from 100 Kenyan Shillings (1 USD).

The respondents' view on the prevalence of drug and substance abuse among gender groups was also measured. It was the view of most respondents (55.9%) that miraa was commonly abused among young men while sniffed tobacco (51.1%) among female youths (Figure 2).

#### DISCUSSION

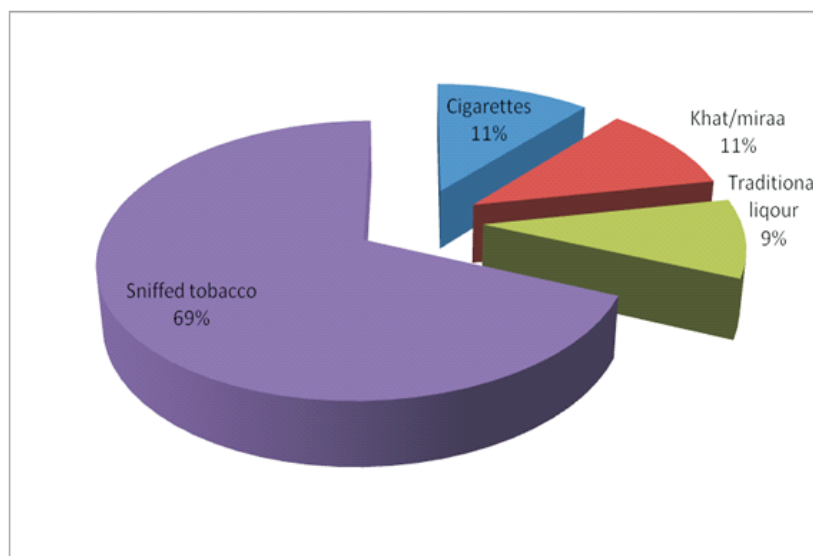
The study revealed that drug and substance abuse among the youth was major concern in Samburu central. This concurred with a study done in the South Africa which showed that drug and substance abuse was a growing problem among the youth (including children and adolescents)[7]. That clearly indicate a

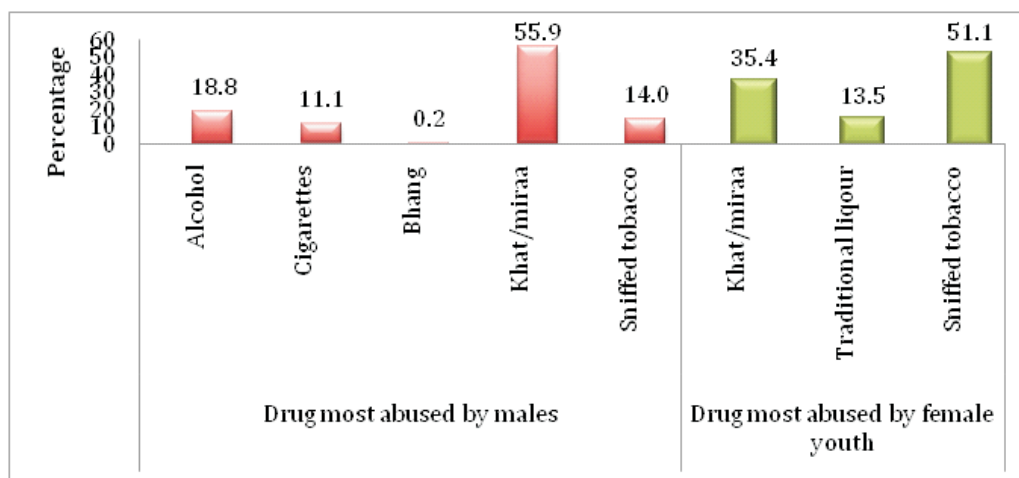
**Table 10** : Association between some respondents' demographic characteristics and opinion on drug use trend

		In this area, is drugs and substance abuse increasing or decreasing?				
Variable	Category	Opinion on drug use trend			Total	Significance
		Increasing	Decreasing	No idea		
Gender	Male	183	10	40	233	$\chi^2= 35.054; df=1; p <0.001$
	Female	148	21	13	182	
Marital status	Single	161	12	25	198	$\chi^2= 4.325; df=1; p <0.115$
	Married	191	11	15	217	
Level of education	None	71	6	10	87	$\chi^2=12.175; df=6; p<0.058$
	Primary	170	13	16	199	
	Secondary	90	5	7	102	
	Post-Secondary	11	9	7	27	
Age	15-17	52	6	6	64	$\chi^2=5.398; df=4; P=0.249$
	18-21	117	6	8	131	
	22-25	183	11	26	220	

big challenge that is likely to denying the young people an opportunity to participate in the socio-economic development of the country. A study done in Kenya by Chesang, (2013) indicted that drug abuse is one of the top problems confronting the nation today especially among the youth. A study done in Hong Kong showed a dramatic increase in the use of drugs among students [8, 9]. The study found out that majority of the respondents (84.7%) indicated that drug use has been on increase in the study area. This concurred with the study done in Kenya which showed that over the past two decades, the abuse of drugs has rapidly increased and risen to unprecedented level and that no part of the country is safe from the scourge [10]. About 52% of the youth in Samburu Central reported to be using drugs at the time of study. Young men (41.9%) used drugs more compared to young women (10.1%) in Samburu Central. A study done in Kenya by NACADA (2012)

among young people aged 15-24, showed that 11.7% were at the time of study using alcohol, 6.2% tobacco, 4.7% miraa, and 1.5% bhang[3]. From the study male youth (18.1%) were more likely to be users of alcohol compared with their female (5.6%) counterparts. That shows that youths in Samburu Central more users of drugs and substances compared to the National level. Findings from this study showed that most young people sniffed tobacco followed by Khat and Cigarettes, however it contradicted with a study done in South Africa, which indicated that about 50% of the young people in school had taken alcohol and 30% of them had smoked cigarettes[7]. In a study done by Njeru 2014, revealed that alcohol, tobacco, bhang, miraa (khat), inhalants and prescription drugs were the commonly abused drugs and substances by Kenyan youth. The study supported finding from this study which showed that youths in

**Fig 1** : Accessibility in terms of cost



**Fig 2 :** Common drug and substance abused among youth by gender

Samburu Central got tobacco and Miraa/khat at an affordable price enhancing their availability and usage in abundance. A study done by NACADA (2012) in Kenya, revealed that Cigarettes and alcohol were mentioned spontaneously by over 50% of the 1014 year old respondents[3]. At the National level drugs and substances abused by youths include Alcohol (16.1%), tobacco (11.0%), miraa (9.8%) and bhang (3.0%)[3].

In this study close to 40% of male youths reported to have used drugs for the first time while 15-17 of age. This concurred with a study done in Hong Kong by YIP (2011) which showed that there was a rising and worrying trend of over 50% for youth using drugs and with weakening of resistance to it[9]. It is very worrying when young people at a very tender age start using drugs and substances. That means that there is a likely hood that they are not productive in developing their society now as well as in future. Majority of youths (57.5%) in the survey revealed that they used drugs all day long. This revealed some level of addiction to drug and substance use. It also showed that there was a high degree of drug and substance use among young people in the study area.

## CONCLUSION

The study found that abuse of drugs and substances among the youths in Samburu central was a big problem and of great concern. The type of drugs and substances abused in Samburu Central included khat, tobacco, traditional liquor, cigarettes, alcohol and bhang. The study established that the drugs and substances were readily available in shops and market place, some were also gotten from friends. Majority of the youth felt that the use of drug and substance is on the increase. The study revealed that the youths in Samburu Central started using drugs and substances at a very tender age of 15-17 years. Majority of youths in the survey revealed that they used drugs all day long. It was the view of most youths in Samburu Central that miraa was mostly abused among young men while sniffed tobacco among female youths.

## ACKNOWLEDGEMENT

We are most grateful to God for his grace and strength to carry out this study. Special appreciation goes to Samburu County and Samburu Central Sub-County administration for permission and support they gave in allowing us to collect data for the success of this study. We thank all who participated in this study in one way

or another including all respondents. We appreciate the contribution offered by the members of staff, school of Public Health, Kenyatta University. Their critical suggestions were valuable at the different stages of this study.

## REFERENCES

1. World Drugs Report (2014). United Nations Office on Drugs and Crime (UNODC). United Nations Publication, Sales No. E14.X17; Vienna.2014.p.1-51
2. Boyd, C.J., McCabe, S.E. and Teter, C.J. Asthma inhaler misuse and substance abuse: a random survey of secondary school student. Journal of Europe PMC, [20 Jun 2005, 31(2):278-287]
3. NACADA. Rapid Assessment of Drugs and Substance Abuse in Kenya. GoK Printers, Nairobi,2012.p.15-50
4. Nyassy, D. and Kihara, G. Kenya risk losing entire generation to drugs. Sunday nation Newspaper, Nairobi, 2008. Dec. 28
5. Kiambuthi, N.K. Drug abuse in some selected public secondary schools in Kiambu District, Kenya. Kenyatta University, Nairobi, 2007.
6. GOK. District Health Information System. Outpatient MOH form 708, Maralal County Referral Hospital. Samburu, Kenya, 2013
7. A review of Literature on Drug and Substance Abuse amongst Youth and Young Women in South Africa. Available from: <http://www.soulcity.org.za/research/literature-reviews/soul-city-institute-drug-abuse-youth-south-africa.pdf>
8. Chesang R. K. Drug Abuse among the Youth in Kenya. International Journal of Scientific & Technology Research.2013: 2 (6):126-130.
9. YIP P., Karen C. S. L., Tsang S., Tse S., Ling W.O., Laidler K., Wong P., Law F., Wong L. A. Study on Drug Abuse among Youths and Family Relationship. 2011
10. Ngesu, LM., Ndiku, J., Masese, A. Drug Dependence and Abuse in Kenya Secondary schools: Strategies for Intervention. Educational Research and Review 20083 (10):304-308