NATIONAL AUTHORITY FOR THE CAMPAIGN AGAINST ALCOHOL AND DRUG ABUSE

RAPID SITUATION ASSESSMENT OF DRUGS AND SUBSTANCE ABUSE IN KENYA

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ABBREVIATIONS AND ACRONYMS

ADA	Alcohol and Drug Abuse
DSM-V	Diagnostic and Statistical Manual of Mental Disorders – V
EA	Enumeration Area
FGD	Focus Group Discussion
HIV	Human Immune-deficiency Virus
KNBS	Kenya National Bureau of Statistics
NACADA	National Authority for the Campaign against Alcohol and Drug Abuse
SDGs	Sustainable Development Goals
SUDs	Substance Use Disorders

FORWARD

Psychoactive substance use and substance use disorders (SUDs) continue to be a major problem around the world taking a toll on global health and on social and economic functioning. SUDs contribute significantly to global illness, disability and death. Prevention of substance use and other social problems is a goal that can significantly improve the health and safety of well-being in the society.

The National Authority for the Campaign against Alcohol and Drug Abuse (NACADA) is a State Corporation established in July 2012 to coordinate multi-sectoral effort aimed at preventing, controlling and mitigating the effects of alcohol and drug abuse in Kenya. One of its key functions is to facilitate, conduct, promote and coordinate research and dissemination of findings on alcohol and drug abuse and also serve as a repository of data.

Towards promoting evidence based alcohol and drug abuse programing, the survey on "*Rapid Situation Assessment on Drugs and Substances of Abuse in Kenya*" becomes a critical tool for monitoring the impact and effectiveness of alcohol and drug abuse interventions implemented by the Authority in collaboration with partners and other stakeholders.

The national survey findings will assist program implementers in the area of alcohol and drug abuse to tailor their interventions towards addressing the most critical areas of need. Further, the findings will bolster priority setting and resource allocation in the next phase of ADA programing both at the national and county levels.

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The "*Rapid Situation Assessment on Drugs and Substances of Abuse in Kenya*" is a national survey that is conducted by NACADA after every five (5) years to evaluate the impact of its interventions. The 2017 survey is the third cycle of similar surveys conducted in 2007 and 2012.

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EXECUTIVE SUMMARY

The Government of Kenya recognizes the threat posed by alcohol and drug abuse and has enacted a legal and institutional framework to control both licit and illicit drugs, and set up institutions to combat both supply and demand of drugs. The National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) is mandated to facilitate, conduct, promote and coordinate research on alcohol and drug abuse to guide policy and programmes.

This survey is a follow-up of the 2007 and 2012 Rapid Situation Assessment Surveys conducted by NACADA. The survey covered respondents aged 10 – 65 years and sampled 3,136 households from 31 counties that were proportionately distributed across the eight regions (Nairobi, Central, Eastern, Rift Valley, Western, Nyanza, Coast and North Eastern).

Spontaneous awareness was used to measure the knowledge of psychoactive substances of abuse among the interviewed respondents. Data among respondents aged 15 – 65 years shows that spontaneous awareness of alcohol (84.3%) and tobacco (73.1%) is generally high while spontaneous awareness of narcotics, inhalants and prescription drugs is very low. *Khat/ miraa* (45.9%) is also fairly well known. For narcotic drugs, bhang (60.8%) has the highest spontaneous awareness compared to heroin (18.7%), cocaine (22.6%) and hashish (1.3%) which recorded very low awareness.

In terms of usage of drugs and substances of abuse, statistics on lifetime abstainers (a respondent who has never used any drug or substance of abuse) among respondents aged 15 – 65 years show that the prevalence has slightly declined from 62.9% in 2012 to 62.5% in 2017. In comparison with 2007, the prevalence has greatly improved from 51.7% in 2007 to 62.5% in 2017.

Analysis of current usage of alcohol among respondents aged 15 – 65 years shows that the prevalence stands at 12.2% in 2017. The trend shows a decline from 13.6% in 2012 and 14.2% in 2007. Nairobi region is leading in the prevalence of current usage of alcohol (17.5%) followed by Eastern 14.3% and Western 13.4% regions. Western region has recorded a steady increase in the prevalence of current usage of alcohol from 6.8% in 2007, 13.6% in 2012 to 13.4% in 2017. From the findings, Nairobi, Eastern, Western and Rift Valley regions have continued to record the highest current prevalence of alcohol usage.

Data across the age categories shows that 12.2% of respondents aged 15 – 65 years are currently using alcohol; 15.1% of respondents aged 25 - 35 years are currently using alcohol; 5.6% of respondents aged 15 – 24 years are currently using alcohol; and 0.9% of respondents aged 10 – 19 years are currently using alcohol.

The findings on tobacco use show that the prevalence in the current usage of tobacco among respondents aged 15 – 65 years has declined from 9.1% in 2012 to 8.3% in 2017. Coast region is leading in the prevalence of current usage of tobacco (11.0%) followed by Eastern 10.9% and Nairobi 10.4% regions. Coast, Eastern Nyanza and Western regions have recorded a steady increase in the prevalence of current usage of tobacco from 2012 to 2017. Data shows that 8.3% of respondents aged 15 – 65 years are currently using tobacco; 7.2% of respondents aged 25 - 35 years are currently using tobacco; and 2.9% of respondents aged 15 – 24 years are currently using tobacco.

Data on usage of *khat/ miraa* shows that the current prevalence among respondents aged 15 – 65 years stands at 4.1% in 2017. The trend shows a slight decline from 4.2% in 2012. The prevalence is however lower compared to 5.5% in 2007. North Eastern region is leading in the prevalence of current usage of *khat/ miraa* in 2017 (12.2%) followed by Coast 10.1% and Eastern 8.5% regions. Coast region has recorded a steady increase in the prevalence of current usage of *khat/ miraa* from 2012 to 2017. From the findings, all other regions have continued to record a decline in the current usage of *khat/ miraa*. Statistics also show that 4.1% of respondents aged 15 – 65 years are currently using *khat/ miraa;* 5.5% of respondents aged 25 - 35 years are currently using *khat/ miraa;* and 3.2% of respondents aged 15 – 24 years are currently using *khat/ miraa.*

The survey also shows that bhang is the most widely used narcotic drug in Kenya. Findings on bhang among respondents aged 15 – 65 years show that the trend has stabilized at 1.0% from 2007, 2012 and 2017. Coast region is leading in the current usage of bhang (2.8%) followed by Nyanza 2.0% and Nairobi 1.4% regions. Nairobi, North Eastern, Coast, Nyanza and Western regions have recorded a steady increase in the prevalence of current usage of bhang from 2012 to 2017. Data also shows that 1.0% of respondents aged 15 – 65 years are currently using bhang; 1.1% of respondents aged 25 - 35 years are currently using bhang; and 1.1% of respondents aged 15 – 24 years are currently using bhang.

The survey shows that current usage of hashish among respondents aged 15 – 65 years has been recording a decline from 0.2% in 2007 and 0.1% in 2012. In 2017, very low levels of current usage of hashish have been recorded. Similarly, the current usage of cocaine and heroin has been on a steady decline from 2007 to 2017. The study shows that the current usage of cocaine among respondents aged 15 – 65 years has declined from 0.2% in 2007 to levels below 0.1% in 2012 and 2017. The current usage of heroin among respondents aged 15 – 65 years has also declined from 0.1% in 2007, 0.1% in 2012 to levels below 0.1% in 2017. The data also shows that the current usage of inhalants and prescription drugs among respondents aged 15 – 65 years is very low in 2017. Current usage of prescription drugs has declined from 2012 to levels below 0.1% in 2017.

In terms of current usage of at least one substance of abuse among respondents aged 15 – 65 years, data shows that the trend has declined slightly from 19.8% in 2012 to 18.2% in 2017. The prevalence in 2017 is lower compared to 22.2% in 2007. Coast region has the highest prevalence of current usage of at least one substance of abuse (18.8%) followed by Western 14.7% and Eastern 14.4% regions. Findings show that 9.7% of respondents aged 15 – 24 years are currently using at least one substance of abuse.

Data on current polydrug use (use of multiple drugs and substances of abuse) among respondents aged 15 -65 years shows that the prevalence stands at 6.0% in 2017. Coast region has the highest prevalence of current polydrug use (8.3%) followed by Eastern 8.2% and North Eastern 7.8% regions.

The survey shows that alcohol abuse contributes the highest burden of substance use disorders (SUDs). According to the data, the prevalence of alcohol use disorders among respondents aged 15 -65 years stands at 10.4% in 2017. Nairobi region has the highest prevalence of alcohol use disorders (18.4%) followed by Western 13.1%, Rift Valley 10.7%, Eastern 10.6%, Nyanza 9.6%, Coast 8.7%, Central 8.3% and North Eastern 1.4%.

Analysis of tobacco shows that the prevalence of tobacco use disorders among respondents aged 15 -65 years stands at 6.8% in 2017. Nairobi region has the highest prevalence of tobacco use disorders (10.4%) followed by Coast 9.2%, Eastern 8.8%, North Eastern 8.8%, Rift Valley 5.9%, Western 4.9% and lastly Nyanza 4.4%.

The prevalence of *khat/ miraa* use disorders among respondents aged 15 -65 years stands at 3.1% in 2017. North Eastern region has the highest prevalence of *khat/ miraa* use disorders (7.4%) followed by Coast 7.3%, Eastern 6.9%, Nairobi 5.2%, Rift Valley 1.6%, Central 1.0% and Nyanza 0.6%.

The prevalence of bhang use disorders among respondents aged 15 -65 years stands at 0.8% in 2017. Coast region has the highest prevalence of bhang use disorders (2.8%) followed by Nairobi 1.9%, Nyanza 1.8%, Western 0.7%, Central 0.3%, Eastern 0.3% and Rift Valley 0.2%. North Eastern region recorded the lowest prevalence of bhang use disorders.

The findings also show that the enforcement of the Alcoholic Drinks Control Act 2010 or the County Alcoholic Drinks Control Act is inadequate. This has led to the proliferation of illicit brews and an increase in the number of alcohol selling outlets. Further, enforcement of the regulations on drinking hours was also inadequate with Nairobi, Coast and Eastern regions being the most affected.

From the survey findings, it is evident that the trend of alcohol and drug abuse is on a slow downward shift. On the contrary, across the regions, Eastern, Nairobi and Coast have recorded increasing trends of alcohol and drug abuse. Notably, there is a shift in Eastern region concerning *khat/ miraa* use. The region has now shifted from a supplier into a major market for *khat/ miraa* consumption. Also notable is Western region where an upsurge of traditional liquor (*busaa*) and *chang'aa* was recorded. The region has also recorded the highest prevalence of alcohol use among the youth aged 15 -24 years and adolescents (those aged 10 – 19 years).

Although findings on usage point to a slow downward trend, the burden of substance use disorders is on the increase with majority of the substance use disorders being categorized as severe.

Given the emerging evidence on the alcohol and drug abuse situation in Kenya, the survey draws the following recommendations;

- NACADA in collaboration with county governments should undertake elaborate public education and awareness campaigns aimed at sensitizing the community and families about the risks, protective factors and dangers of alcohol and other substances of abuse;

- There is an unmet need for treatment and rehabilitation services in the Kenya. There is need for NACADA and the county governments to allocate more resources to establish more treatment and rehabilitation centres across the country. In addition, there is need to explore community based out-reach services targeting the mild and moderate cases of substance use disorders;

- NACADA in collaboration with the Faith Based Organizations (FBOs) should strengthen parent-child communication about drugs and substances of abuse, enforce prevention in the home environment, promote parental role modeling and strengthen the general parenting skills;

- NACADA in collaboration with the Ministry of Education, Science and Technology should support learning institutions to come up with institution-based alcohol and drug abuse policies that holistically address the aspects of promoting free drug environments; early identification of persons with substance use disorders; focus on extra-curricular activities; and evidence based preventive strategies of dealing with cases of drugs and substances abuse in learning institutions;

- There is a general inadequacy of targeted “out of school” youth friendly ADA programs that are channeled by the right people through the relevant modes of communication. NACADA in collaboration with the county governments should undertake audience segmentation to enhance effective messaging and programming;

- The media plays a critical role in increasing public awareness and shaping community perceptions. NACADA should work more closely with the media during its campaigns in order to change the negative perceptions of the public about NACADA;

- NACADA, county governments and other relevant enforcement agencies should collaborate to fast track enforcement of the existing legal and policy framework to suppress production, sale, distribution and consumption of licit and illicit alcohol; curb underage drinking; regulate promotion and advertisements; and suppressing drug trafficking.

CHAPTER ONE: INTRODUCTION

1.1 Background

The Government of Kenya recognizes alcohol and drug abuse (ADA) as a major threat to the life of her citizens and to national development. Furthermore, the Constitution of Kenya under Chapter 2, Article 26 appreciates the sanctity of life and acknowledges the right of every person to life. Over the last decade, however, ADA has increased in magnitude and threatens to undermine the social, economic and political gains made towards betterment of Kenyans' lives. Due to its magnitude and negative impacts, ADA can no longer be ignored in national development especially in the attainment of the Kenya Vision 2030.

Appreciating the need for concerted multi-sectoral and grassroots efforts to combat alcohol and drug abuse, the Constitution of Kenya devolved the function of implementing drug abuse prevention and control of alcoholic beverages among the Kenyan population to the county governments. The Constitution also envisages the safeguarding of the youth and children of this nation from harm occasioned by ADA, hence interventions towards prevention and control of the vice by both coordinating and implementing entities, are expected to primarily focus on this target population.

The campaign against alcohol and drug abuse in Kenya focuses on demand reduction and supply suppression strategies. Demand reduction involves a wide range of activities that aim to reduce individuals' desire to use drugs. The focus for demand reduction is on initiatives that aim to delay or prevent uptake, encourage drug-free lifestyles or create awareness on the risks involved with drug use. Supply suppression aims to prevent or reduce harm by restricting the availability of drugs. For licit drugs, this will involve restricting the circumstances in which they can be sold, supplied or consumed. For illicit drugs, supply suppression activities will focus on domestic drug cultivation, trafficking and selling operations.

1.2 Alcohol and drug abuse situation in Kenya

Use of alcohol and other substances is a social behaviour which is embedded in communities and cultures and is sustained by supply. According to the last survey conducted by NACADA in the year 2012, statistics indicate that the proportion of respondents aged 15-65 years who reported ever use (lifetime use) of at least one substance of abuse stands at 37.1%. About 30% of these respondents have ever used an alcoholic drink. Ever use of cigarettes stands at 14.9% and sniffed/ chewed/ piped tobacco stands at 2.4%. Overall, 16.7% of the respondents, aged 15-65 years, have ever used a tobacco product in their lifetime. The prevalence of *khat* stands at 8.9%, bhang stands at 1.1%, hashish stands at 0.6%, heroin stands at 0.7% while cocaine stands at 0.7% (NACADA, 2012).

The survey also shows that 19.8% of Kenyans aged 15-65 years are currently using at least one substance of abuse. Current use of alcohol stands at 13.6%, cigarettes stands at 8.6%, sniffed/chewed/piped tobacco stands at 0.7%, *khat* stands at 4.2%, bhang stands at 1.0%, hashish stands at 0.1% and heroin stands at 0.2%. Data also shows that 5.5% of Kenyans aged 15-65 years are dependent on alcohol; 4.5% tobacco; 1.5% *khat* and 0.4% bhang (NACADA, 2012).

1.3 Rationale of the survey

The "Rapid Situation Assessment on the Situation of Alcohol and Drug Abuse in Kenya, 2016" is a five year survey conducted to assess the trend of alcohol and drug abuse programing indicators. Given that the need for alcohol and drug abuse programing is apparent, the national survey provides data that is used to assess the effectiveness of the universal preventive interventions targeting communities, schools and workplaces in Kenya as well as selective preventive interventions focusing on specific sub-groups like the youth in school and youth out of school. This data provides evidence to determine whether the prevention programs put in place are actually achieving the intended outcomes of lowering the prevalence of alcohol and drug use as well as reducing the burden of substance use disorders.

The national survey therefore becomes a critical tool that will provide data to promote evidence based decision making in the area of alcohol and drug abuse prevention in the country.

1.4 Objectives

General objective

To determine the trend of alcohol and drug use patterns and the burden of substance use disorders in Kenya.

Specific objectives

i. To determine awareness levels of psychoactive substances of abuse in Kenya;

ii. To determine the prevalence of alcohol and substances of abuse in Kenya;

iii. To establish the health, social and economic consequences of alcohol and drug abuse in Kenya;

iv. To determine the extent of substance use disorders in Kenya;

v. To identify the status of alcohol and drug control by county governments in Kenya.

CHAPTER TWO: METHODOLOGY

2.1 Study design

A cross-sectional survey was conducted where both quantitative and qualitative data was collected.

2.2 Study coverage

The survey covered all the eight regions of Kenya namely; Nairobi, Coast, Nyanza, Western, Central, Eastern, North Eastern and Rift Valley. A total of thirty one (31) counties were covered and data was stratified to include both the urban and rural population. This ensured that the survey covers respondents of different socio-economic and cultural backgrounds. This also guaranteed that other unique regional contextual factors related to alcohol and drug abuse were captured in the national survey.

2.3 Study population

The target population was divided into two groups. The first group comprised of the respondents aged between 15 – 65 years. This data was used to compare trends since the first cycle of the national ADA survey carried out in 2007. The survey also determined the status of alcohol and drug use among the respondents aged 10 – 14 years. Ethical consideration was strictly upheld to ensure that those respondents aged below 18 years of age were protected by ensuring that adequate information regarding the study was provided in the presence of a responsible adult. All other ethical considerations such as informant confidentiality, power to terminate the interview at any time without fear or intimidation and freedom to decline to answer some or all of the questions was used to govern data collection at all times.

2.4 Sample size determination

The sample size was informed by the desired level of accuracy and the cost of the survey. The sample size was determined using the following formula (Kothari, 2003):

$$n = \frac{z^2.p.q.N}{e^2.(N-1) + z^2.p.q}$$

Where:

- z = 1.96 (95% significance level) [standard variate at a given confidence level]
- p = 0.20 (Based on the NACADA 2012 rapid assessment) [sample proportion of the population with the desired characteristics]
- q = 0.80 [1-p]
- e = 0.014 [acceptable error (precision)]
- n = simple population
- N = 25,839,381 (KNBS, 2009) [sampling frame[1] (total population aged 10-65 years in Kenya)]

[1] At the time of the survey KNBS was working on a new national sampling frame.

Based on the accuracy of data, the margins of error associated with sampling and other random effects at 95% confidence level was kept at a maximum of +/-1.4% for a sample size of 3136 households. One respondent was interviewed per household giving a total of 3136 respondents.

2.5 Sampling method

A stratified multi-stage random sampling technique was used to identify the enumeration areas (EA) from which data was to be gathered. This method aimed at establishing reliable and representative national estimates and indicative regional estimates based on the 2007 and 2017 indicators. At the national level, all the eight regions (Nairobi, Central, Eastern, Rift Valley, Western, Nyanza, Coast and North Eastern) were purposively selected and the 3136 sampled households were distributed proportionately across each of the eight regions.

The first stratification was applied at the county level. The 47 counties were stratified based on their unique cultural, socio-economic and geographic characteristics. However, due to logistical and resources limitations, it will not be possible to collect data across the 47 counties. Therefore, a purposive sample of 31 counties was randomly selected from each stratum. As shown in Table 1, the 31 counties were distributed proportionately across the eight regions based on the total number of counties per region. Within each selected county, the sample was proportionately distributed based on total population aged 10-65 years.

Table 1: Sample size distribution per region

Region	No. of HH	Population 10-65 yrs	Sampled HH	No. of Counties	Sampled Counties
Nairobi	985,016	2,400,179	291	1	1
North Eastern	312,661	1,509,462	183	3	1
Coast	731,199	2,224,368	269	6	4
Central	1,224,742	3,108,078	378	5	4
Eastern	1,284,838	3,795,333	461	8	5
Rift Valley	2,137,136	6,566,966	798	14	9
Nyanza	1,188,287	3,497,696	424	6	4
Western	904,075	2,737,299	332	4	3
Total	**8,767,954**	**25,839,381**	**3136**	**47**	**31**

From each county, sub-counties were randomly selected and then two divisions were randomly selected from each sub-county. One location was then selected randomly per division. The enumeration areas (sub-locations) were randomly drawn from each selected location and the sample was proportionately distributed based on the total population distribution. Annex 1 shows the selected sub-locations (enumeration areas) in all the eight regions in the country. For comparison purposes of the alcohol and drug abuse indicators, the same sampling points identified in the two previous surveys were maintained.

At the sub-location level, a landmark (e.g. a school) was identified and selected to determine the starting point. The direction was determined by spinning a pen in the air and letting it drop on the ground. The date score was then be used to determine the first household to be sampled.

The second stratification was done at the household level. Potential respondents were stratified by their age (10 -14 years, 15-35 years and 36-65 years) and gender categories. The Kish Grid was used to identify a potential respondent based on age and gender categories in a given household. Subsequent households were then selected using the random walk method, turning left or right at every junction. After administering the first interview, systematic random sampling was used where every 3rd household was selected to participate in the survey.

2.6 Data types

Two types of data – quantitative and qualitative data – were generated. The quantitative data was obtained from individual respondents because the survey was interested in individual rather than group behaviour. Those interviewed were asked to respond to a survey questionnaire. Qualitative data was captured from the open ended questions. This method elicited rich qualitative data that aided the deeper understanding of perceptions, attitude and behaviour around alcohol and drug abuse.

2.6.1 Data collection tools

The survey relied on both primary and secondary data sources. The primary data sources included a structured questionnaire. The structured questionnaire was developed to capture basic demographic information on respondents, perceptions, attitudes and behaviour related to alcohol and drug abuse. For the structured questionnaires, two tools were developed. The first tool was used to collect data from respondents aged between 10-14 years while the second tool was used to collect data from respondents aged 15-65 years.

2.7 Training

Supervisors and research assistants were trained for three (3) days in Nairobi. This involved a detailed discussion of each question in each of the two instruments and mock interviews among themselves. Training also involved extensive discussions of street names of all drugs in the country and compilation of a list of such names for easy referencing during data collection. After these discussions, the research team was also trained on research ethics. After training on research ethics, a pre-test of the questionnaires was carried out in three sampled sub-locations that were not part of the main survey. The questionnaires were revised to accommodate for any observations that were made during the pre-test.

2.8 Fieldwork

Data collection took approximately twenty (20) days. Data collection was divided into three regional clusters namely; Nairobi/Eastern/ Coast, Nairobi/Central/ North Eastern/ Lower Rift Valley and Nairobi/Nyanza/Western/Upper Rift Valley. Each region comprised a team of 8 research assistants and two (2) supervisors.

2.9 Data processing

Data was collected concurrently by the three teams. The first team covered Nairobi/Central/ North Eastern/ Lower Rift Valley regions. The second team covered Nairobi/Nyanza/Western/Upper Rift Valley regions and the third team covered Nairobi/Eastern/ Coast regions. Data entry was done at NACADA's headquarter offices in Nairobi. An interviewer screen was developed for data entry to minimize errors. Quantitative data was coded, sorted, entered and analysed using SPSS software. Descriptive statistics namely frequencies, pie chart, bar graphs and percentages were used to describe, organize and summarize collected data. Cross tabulations were used to assess the relationship between two variables.

2.10 Ethical consideration

Informed consent was sought from the respondents and participation in the survey was strictly on voluntary basis. Anonymity and confidentiality of the study participants was also safeguarded. For respondents below the age of 18 years, informed consent was sought from a parent or responsible guardian.

2.11 Construction of economic status index

The survey tool included several proximate indicators of household wealth. When a number of these indicators were pooled together they provided a pointer on the economic status of the household in question. Some of these indicators included: type of dwelling structure that the household occupies; main type of floor, roof and wall material for the household's main dwelling structure; main source of cooking fuel and main source of lighting; main source of water; and the toilet facility that the household uses. The survey also tracked household possession of selected items such as a radio, a television, bicycle, car, refrigerator and motorcycle among others.

In constructing the household economic index the following indicators were used: ownership of a radio; ownership of a television; main dwelling unit has a finished floor (polished wood/vinyl/tiles/cement); main dwelling unit has a roof made of materials other than grass; main dwelling unit is permanent; household's access to own water source (piped into residence, compound, well in the compound) and; household has own toilet facility. In total, seven indicators were used.

The respondent's households were grouped into high, middle, low and very low economic index categories depending on the number of indicators for which they gave positive responses. Thus, households which recorded positive responses for all the seven factors listed above were classified as "high" while those households with a score of 61 to 99 percent were classified under "middle". A score of 31-60 percent was classified as "low" and the rest were grouped as "very low".

CHAPTER 3: BACKGROUND CHARACTERISTICS OF RESPONDENTS

3.0 Introduction

This chapter provides details of the background characteristics of the respondents. This includes the details for respondents aged 10 – 14 years and those aged 15 – 65 years.

3.1 Background characteristics of respondents aged 10 – 14 years

Data of the 10 – 14 year old respondents according to Table 2 shows that 51.6% are male while 48.4% are female. In terms of setting, 72.0% of the respondents are from rural areas while 28.0% are from urban areas. The data also shows that majority of the respondents live with both a father and mother (71.0%) followed by those who live with a mother alone 15.9%, grandparents 5.3%, guardian 4.5% and lastly father alone 3.3%. Finally, majority of the respondents aged 10 – 14 years are in school (98.1%) compared to 1.9% who are not in school.

Table 2: Characteristics of respondents aged 10 – 14 years (%)

Characteristic	Region								
	Nairobi	Central	Coast	Eastern	Nyanza	Rift Valley	Western	North Eastern	Total
Gender									
Male	54.5	53.7	55.6	55.4	49.4	44.4	41.9	82,4	**51.6**
Female	45.5	46.3	44.4	44.6	50.6	55.6	58.1	17.7	**48.4**
Setting									
Urban	94.5	9.8	57.4	26.1	22.5	18.1	4.8	26.5	**28.0**
Rural	5.5	90.2	42.6	73.9	77.5	81.9	95.2	73.5	**72.0**
Economic status									
High	23.6	3.7	3.7	1.1	3.4	5.0	-	2.9	**4.9**
Medium	27.3	31.7	29.6	31.9	19.1	21.9	12.9	58.8	**26.5**
Low	34.5	41.5	37.0	45.1	31.5	39.4	30.6	32.4	**37.5**
Very low	14.5	23.2	29.6	22.0	46.1	33.8	56.5	5.9	**31.1**
Who do you live with									
Father & mother	67.3	72.0	74.1	78.3	65.2	68.8	71.0	76.5	**71.0**
Father alone	7.3	4.9	-	5.4	1.1	3.8	1.6	-	**3.3**
Mother alone	20.0	17.1	14.8	8.7	22.5	13.1	16.1	23.5	**15.9**
Grandparents	-	3.7	3.7	2.2	9.0	7.5	9.7	-	**5.3**
Others (e.g. guardian)	5.5	2.4	7.4	5.4	2.2	6.9	1.6	-	**4.5**
Schooling status									
In school	100.0	92.7	98.1	98.9	100.0	98.8	96.8	100.0	**98.1**
Not in school	-	7.3	1.9	1.1	-	1.3	3.2	-	**1.9**
Total	**55**	**82**	**54**	**92**	**89**	**160**	**62**	**34**	**628**

3.2 Background characteristics of respondents aged 15 - 65 years

The data according to Table 3 shows that among the 48.8% of the respondents aged 15 – 65 years are male while 51.2% are female. In terms of setting, 70.5% are from rural areas while 29.5% are from urban areas. In terms of economic status, 37.1% are classified as low, 29.7% very low, 29.1% middle and 4.1% are classified as high.

In terms of marital status, majority are married or living with a partner (60.8%), 29.1% are single or never married while 10.1% are divorced/ widowed or separated. Data on religious background shows that majority are Christians (87.3%) while 12.1% are Muslims. In terms of education status, 42.5% have attained a primary level education, 37.9% a secondary level education, 12.5% a post-secondary level education while 7.1% have no formal education. Data on employment shows that majority (58.5%) are either formally or informally employed, 23.6% are unemployed while 14.1% are students. Finally in terms of the age categories, majority (40.0%) are aged 36 years and above, 33.2% are aged 25 – 35 years, 19.8% are aged 18 – 24 years while 6.9% are aged 15 – 17 years.

Table 3: Characteristics of respondents aged 15 - 65 years (%)

Characteristic	Region								
	Nairobi	Central	Coast	Eastern	Nyanza	Rift Valley	Western	North Eastern	Total
Setting									
Urban	99.5	4.5	60.1	26.0	21.6	19.8	4.9	51.4	**29.5**
Rural	0.5	95.5	39.9	74.0	78.4	80.2	95.1	48.6	**70.5**
Economic status									
High	10.4	7.2	6.8	3.5	1.8	3.3	0.4	2.1	**4.1**
Middle	39.3	39.1	37.7	33.5	19.0	22.9	10.6	52.1	**29.1**
Low	35.5	37.1	37.7	44.5	37.8	38.0	25.4	35.6	**37.1**
Very low	14.7	16.6	17.9	18.5	41.4	35.8	63.6	10.3	**29.7**
Gender									
Male	49.1	42.0	55.5	49.6	46.2	47.7	50.7	57.4	**48.8**
Female	50.9	58.0	44.5	50.4	53.8	52.3	49.3	42.6	**51.2**
Age in Years									
15 – 17	5.2	6.4	5.0	7.2	8.8	6.0	8.6	9.5	**6.9**
18 – 24	18.4	15.8	24.3	15.7	23.6	18.4	18.4	34.7	**19.8**
25 – 35	42.0	33.9	33.9	35.1	29.2	33.4	27.0	33.3	**33.2**
36+	34.4	36.7	36.7	42.0	38.3	42.2	46.1	22.4	**40.0**
Marital status									
Single/never married	24.3	29.4	33.6	30.6	29.6	26.3	25.1	43.2	**29.1**
Married/ living with a partner	62.9	59.4	55.8	60.4	56.6	65.2	65.9	50.7	**60.8**
Divorced/ Widowed/ Separated	12.9	11.3	10.6	9.0	13.8	8.6	9.0	6.1	**10.1**
Religion									
Christian	95.8	97.8	45.9	92.0	94.7	97.2	98.5	21.6	**87.3**
Muslim	4.2	1.6	53.2	8.0	5.0	1.4	1.1	78.4	**12.1**
Others	-	0.6	0.9	-	0.3	1.4	0.4	-	**0.6**
Education status									
No formal	3.8	1.9	10.1	6.9	3.2	7.7	5.6	27.7	**7.1**
Primary	35.2	43.9	48.4	45.6	40.8	42.3	44.8	33.8	**42.5**
Secondary	44.8	40.0	32.7	34.4	39.6	40.2	37.7	27.0	**37.9**
Post-secondary	16.2	14.2	8.8	13.1	16.4	9.8	11.9	11.5	**12.5**
Employment status									
A student	9.0	14.2	11.1	11.5	18.8	13.6	17.2	18.9	**14.1**
Unemployed	22.2	11.0	30.0	21.9	28.2	20.1	31.7	37.8	**23.6**
Employed	68.9	73.3	55.8	61.4	50.4	62.4	43.3	38.5	**58.5**
Others	-	1.6	3.2	5.3	2.6	3.9	7.8	4.7	**3.7**
Total	**212**	**312**	**218**	**377**	**342**	**643**	**268**	**148**	**2520**

CHAPTER 4: AWARENESS OF PHYSCHOACTIVE SUBSTANCES

4.0 Introduction

This chapter presents findings on the knowledge of psychoactive substances. In assessing the level of awareness of the different substances of abuse, respondents were required to answer two separate but interlinked questions. The first question sought to generate spontaneously knowledge on all the psychoactive substances a respondent was aware of. After spontaneous response, all the respondents were prompted on the psychoactive substances that they did not mention. Put together, the spontaneous response and the prompted response was used to estimate total awareness level of psychoactive substances among the interviewed respondents.

4.1 Spontaneous awareness of psychoactive substances

4.1.1 Spontaneous Awareness of tobacco products

The respondents were asked to name all the psychoactive substances that they were aware of (spontaneous awareness). Spontaneous awareness of tobacco products shows that *shisha* and *kuber* have the lowest levels of spontaneous awareness at 3.5% and 12.7% respectively among respondents aged 15 – 65 years. Cigarettes recorded the highest spontaneous awareness at 64.3% followed by sniffed/ chewed/ piped tobacco at 30.0%. Generally, spontaneous awareness of at least one tobacco product is relatively high (73.1%). Data shows that Central region has the highest spontaneous awareness of at least one tobacco product (84.3%) while Western region has the lowest level of spontaneous awareness of at least one tobacco product (58.6%) (Table 4).

Table 4: Spontaneous awareness (%) of tobacco among respondents aged 15 – 65 years by background characteristics

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one tobacco product	Total
Setting	Urban	67.3	30.1	13.8	4.4	**75.3**	**744**
	Rural	63.1	29.9	12.2	3.0	**72.2**	**1776**
Region	Nairobi	77.8	22.2	12.7	6.6	**81.1**	**212**
	N. Eastern	75.7	41.2	5.4	4.7	**83.8**	**148**
	Coast	64.2	42.7	10.6	5.5	**69.7**	**218**
	Central	79.5	30.4	10.3	4.2	**84.3**	**312**
	Eastern	62.9	40.1	6.1	1.1	**72.4**	**377**
	R. Valley	62.4	24.6	13.4	3.3	**72.2**	**643**
	Nyanza	55.8	30.1	24.9	3.2	**69.6**	**342**
	Western	47.4	17.5	13.4	1.9	**58.6**	**268**
Gender	Male	66.6	32.1	15.5	4.7	**75.8**	**1229**
	Female	62.1	27.9	10.0	2.2	**70.6**	**1291**
Economic status	High	79.2	33.7	10.9	7.9	**83.2**	**101**
	Middle	73.0	31.3	15.1	4.9	**80.1**	**715**
	Low	61.1	28.3	11.8	2.6	**70.4**	**913**
	Very low	59.2	29.9	11.9	2.7	**69.3**	**730**
Age in years	15 – 17	69.5	35.6	8.6	3.4	**78.7**	**174**
	18 – 24	69.0	33.0	13.5	5.6	**77.7**	**497**
	25 – 35	66.6	25.6	10.9	3.2	**73.2**	**833**
	36+	59.2	31.5	14.6	2.6	**70.0**	**1003**

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one tobacco product	Total
Employment status	A student	73.0	35.5	11.5	6.2	**82.3**	**355**
	Unemployed	56.2	26.1	11.1	3.0	**66.7**	**594**
	Employed	65.1	29.7	13.3	3.1	**73.5**	**1469**
	Others	68.1	37.2	17.0	2.1	**73.4**	**94**
Religion	Christian	63.4	28.8	13.0	3.1	**72.6**	**2200**
	Muslim	70.2	38.4	10.2	6.2	**76.4**	**305**
	Others	80.0	33.3	13.3	-	**80.0**	**15**
Education level	No formal education	60.1	38.2	2.2	1.7	**66.9**	**178**
	Primary level	60.4	27.3	11.3	2.5	**69.4**	**1066**
	Secondary level	66.4	30.9	14.4	3.7	**76.2**	**951**
	Post-secondary	73.6	31.8	17.5	7.0	**79.6**	**314**
Total		**64.3**	**30.0**	**12.7**	**3.5**	**73.1**	**2520**

Spontaneous awareness of tobacco products among respondents aged 10-14 years is presented in Table 5 below. *Shisha* and *kuber* recorded the lowest levels of spontaneous awareness at 0.8% and 6.4% respectively. Cigarettes recorded the highest spontaneous awareness at 65.3% followed by sniffed/ chewed/ piped tobacco at 24.4%. Generally, spontaneous awareness of at least one tobacco product is relatively high (72.0%). Data shows that Central region has the highest spontaneous awareness of at least one tobacco product (84.1%) while Eastern region has the lowest level of spontaneous awareness of at least one tobacco product (59.6%).

Table 5: Spontaneous awareness (%) of tobacco among respondents aged 10 – 14 years by background characteristics

Characteristic		Cigarettes	Sniffed/chewed/piped tobacco	Kuber	Shisha	At least one tobacco product	Total
Setting	Urban	64.8	29.0	8.5	1.1	**72.2**	**176**
	Rural	65.5	22.6	5.5	0.7	**71.9**	**452**
Region	Nairobi	75.0	21.4	7.1	-	**76.8**	**55**
	N. Eastern	64.7	23.5	2.9	-	**67.6**	**34**
	Coast	72.2	29.6	1.9	-	**77.8**	**54**
	Central	74.4	29.3	6.1	2.4	**84.1**	**82**
	Eastern	53.2	29.8	5.3	-	**59.6**	**92**
	R. Valley	68.6	22.6	8.2	0.6	**75.5**	**160**
	Nyanza	56.8	25.0	9.1	2.3	**65.9**	**89**
	Western	60.7	11.5	4.9	-	**67.2**	**62**
Gender	Male	67.6	27.2	9.3	0.6	**74.4**	**324**
	Female	62.8	21.4	3.3	1.0	**69.4**	**304**
Economic status	High	87.1	12.9	6.5	-	**87.1**	**31**
	Middle	61.4	21.7	4.8	0.6	**66.9**	**166**
	Low	66.8	26.0	8.9	1.3	**75.7**	**235**
	Very low	63.1	26.2	4.6	0.5	**69.2**	**195**
School	In- school	65.4	24.2	6.3	0.8	**71.9**	**616**
	Not in school	58.3	33.3	8.3	-	**75.0**	**12**
Total		**65.3**	**24.4**	**6.4**	**0.8**	**72.0**	**628**

4.1.2 Spontaneous Awareness of alcohol products

Spontaneous awareness of alcohol products shows that second generation alcohol/ potable spirits and traditional liquor have the lowest levels of spontaneous awareness at 27.7% and 44.1% respectively among respondents aged 15 – 65 years. Packaged/ legal alcohol recorded the highest spontaneous awareness at 66.0% followed by *chang'aa* at 49.9%. Generally, spontaneous awareness of at least one alcohol product was relatively high (84.3%). Data shows that Western region has the highest spontaneous awareness of at least one alcohol product (91.0%) while North Eastern region has the lowest level of spontaneous awareness of at least one alcohol product (56.1%) (Table 6).

Table 6: Spontaneous awareness (%) of alcohol among respondents aged 15 – 65 years by background characteristics

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	Second generation/ potable spirits	At least one alcohol product	Total
Setting	Urban	67.6	46.8	37.2	32.0	80.6	**744**
	Rural	65.3	51.2	47.0	26.0	85.9	**1776**
Region	Nairobi	75.0	56.6	37.3	36.8	89.6	**212**
	N. Eastern	54.1	13.5	12.2	8.1	56.1	**148**
	Coast	58.7	36.7	34.4	22.9	71.1	**218**
	Central	77.6	42.6	38.1	34.6	89.4	**312**
	Eastern	68.7	27.9	38.5	23.1	79.8	**377**
	R. Valley	67.7	52.1	48.1	28.5	88.0	**643**
	Nyanza	67.8	74.0	55.0	34.8	89.8	**342**
	Western	47.4	78.7	66.4	23.1	91.0	**268**
Gender	Male	70.1	51.7	46.1	32.6	85.3	**1229**
	Female	62.0	48.2	42.1	23.1	83.4	**1291**
Economic status	High	86.1	38.6	35.6	25.7	93.1	**101**
	Middle	71.3	40.7	37.5	29.4	81.0	**715**
	Low	67.0	49.0	42.8	27.6	83.4	**913**
	Very low	57.4	62.9	53.6	27.5	87.8	**730**
Age in years	15 – 17	59.8	42.0	31.6	23.6	79.9	**174**
	18 – 24	70.4	42.7	36.2	26.0	84.3	**497**
	25 – 35	67.6	46.8	43.9	26.9	84.6	**833**
	36+	63.6	57.6	50.4	30.3	85.1	**1003**
Employment status	A student	70.4	42.8	33.5	27.0	85.1	**355**
	Unemployed	59.9	53.0	44.6	24.1	81.8	**594**
	Employed	67.6	50.1	45.7	29.2	85.2	**1469**
	Others	61.7	54.3	57.4	30.9	85.1	**94**
Religion	Christian	67.4	53.5	47.2	29.0	87.3	**2200**
	Muslim	56.1	24.3	21.0	18.4	63.0	**305**
	Others	60.0	40.0	53.3	33.3	80.0	**15**
Education level	No formal education	42.7	41.6	43.8	16.9	68.5	**178**
	Primary level	64.0	54.2	47.6	27.6	85.9	**1066**
	Secondary level	68.3	48.5	42.0	28.5	85.2	**951**
	Post-secondary	79.0	44.3	39.5	31.8	86.0	**314**
Total		**66.0**	**49.9**	**44.1**	**27.7**	**84.3**	**2520**

Spontaneous awareness of alcohol products among respondents aged 10 - 14 years is presented in Table 7 below. Second generation/ potable spirits and traditional liquor recorded the lowest levels of spontaneous awareness at 12.3% and 26.4% respectively. Packaged/ legal alcohol recorded the highest spontaneous awareness at 58.9% followed by *chang'aa* at 32.3%. Generally, spontaneous awareness of at least one alcohol product is relatively high (76.3%). Data shows that Western region has the highest spontaneous awareness of at least one alcohol product (86.9%) while North Eastern region has the lowest level of spontaneous awareness of at least one alcohol product (44.1%).

Table 7: Spontaneous awareness (%) of alcohol among respondents aged 10 – 14 years by background characteristics

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	Second generation/ potable spirits	At least one alcohol product	Total
Setting	Urban	62.5	32.4	20.5	14.2	75.6	**176**
	Rural	57.5	32.3	28.8	11.5	76.5	**452**
Region	Nairobi	66.1	39.3	19.6	10.7	83.9	**55**
	N. Eastern	44.1	-	-	-	44.1	**34**
	Coast	74.1	18.5	25.9	13.0	79.6	**54**
	Central	68.3	23.2	17.1	18.3	80.5	**82**
	Eastern	46.8	12.8	16.0	6.4	56.4	**92**
	R. Valley	61.6	34.6	31.4	13.2	81.1	**160**
	Nyanza	59.1	54.5	35.2	18.2	83.0	**89**
	Western	45.9	60.7	50.8	9.8	86.9	**62**
Gender	Male	58.3	34.3	26.2	13.9	75.0	**324**
	Female	59.5	30.3	26.6	10.5	77.6	**304**
Economic status	High	71.0	25.8	16.1	12.9	83.9	**31**
	Middle	60.8	22.3	16.9	9.6	72.9	**166**
	Low	60.0	30.2	26.0	14.5	77.4	**235**
	Very low	54.4	44.6	36.9	11.8	76.9	**195**
School	In- school	59.1	32.5	26.6	12.3	76.5	**616**
	Not in school	50.0	25.0	16.7	8.3	66.7	**12**
Total		**58.9**	**32.3**	**26.4**	**12.3**	**76.3**	**628**

4.1.3 Spontaneous awareness of narcotics

Spontaneous awareness of narcotics among respondents aged 15 - 65 years shows that hashish and heroin have the lowest levels at 1.3% and 18.7% respectively. Bhang recorded the highest spontaneous awareness at 60.8% followed by cocaine at 22.6%. Generally, spontaneous awareness of narcotic drugs is relatively low. Data shows that Central region has the highest spontaneous awareness of bhang (70.2%); Coast region has the highest spontaneous awareness of cocaine (35.3%) and heroin (36.2%); while North Eastern region has the highest spontaneous awareness of hashish (4.1%) (Table 8).

Table 8: Spontaneous awareness (%) of narcotics among respondents aged 15 – 65 years by background characteristics

Characteristic		Narcotics				No. of respondents
		Bhang	Cocaine	Heroin	Hashish	
Setting	Urban	64.1	27.2	22.2	2.0	**744**
	Rural	59.5	20.7	17.3	1.0	**1776**
Region	Nairobi	70.3	31.1	23.6	1.9	**212**
	North Eastern	41.9	14.9	12.2	4.1	**148**
	Coast	66.1	35.3	36.2	3.2	**218**
	Central	70.2	28.2	20.8	2.2	**312**
	Eastern	55.7	18.6	15.9	1.3	**377**
	R. Valley	56.1	19.4	16.5	0.3	**643**
	Nyanza	67.3	19.9	17.3	0.3	**342**
	Western	59.0	20.1	13.1	0.4	**268**
Gender	Male	65.7	27.0	22.8	2.1	**1229**
	Female	56.2	18.4	14.9	0.5	**1291**
Economic status	High	77.2	40.6	37.6	0.5	**101**
	Medium	63.9	31.0	25.3	0.5	**715**
	Low	62.7	21.0	17.6	2.4	**913**
	Very low	53.8	14.9	11.6	6.9	**730**
Age in years	15 – 17	65.5	44.3	27.0	1.7	**174**
	18 – 24	63.4	29.0	23.1	0.8	**497**
	25 – 35	59.1	21.5	17.6	1.1	**833**
	36+	60.2	16.8	16.2	1.7	**1003**
Employment status	A student	65.9	43.1	29.9	0.8	**355**
	Unemployed	56.9	14.5	13.8	0.3	**594**
	Employed	61.5	21.4	18.3	1.7	**1469**
	Others	54.3	14.9	14.9	3.2	**94**
Religion	Christian	61.5	22.1	18.0	1.1	**2200**
	Muslim	56.4	25.9	24.6	3.0	**305**
	Others	53.3	26.7	6.7	-	**15**
Education level	No formal education	39.3	6.7	6.7	1.1	**178**
	Primary level	56.1	13.7	11.5	0.6	**1066**
	Secondary level	65.8	27.3	23.3	1.2	**951**
	Post-secondary	73.9	47.1	36.3	4.5	**314**
Total		**60.8**	**22.6**	**18.7**	**1.3**	**2520**

Spontaneous awareness of narcotics among respondents aged 10 - 14 years is presented in Table 9 below. Hashish and heroin recorded the lowest levels of spontaneous awareness at 0.2% and 13.2% respectively. Bhang recorded the highest spontaneous awareness at 60.8% followed by cocaine at 22.6%. Generally, spontaneous awareness of narcotic drugs is also relatively low. Data shows that Nairobi region has the highest spontaneous awareness of bhang (64.3%) and cocaine (30.4%); Coast region has the highest spontaneous awareness of heroin (22.2%); while Nyanza region has the highest spontaneous awareness of hashish (1.1%).

Table 9: Spontaneous awareness (%) narcotics among respondents aged 10 – 14 years by background characteristics

Characteristic		Narcotics				No. of respondents
		Bhang	Cocaine	Heroin	Hashish	
Setting	Urban	51.1	19.9	13.6	0.6	**176**
	Rural	40.9	18.8	13.1	-	**452**
Region	Nairobi	64.3	30.4	17.9	-	**55**
	North Eastern	26.5	5.9	20.6	-	**34**
	Coast	51.9	16.7	22.2	-	**54**
	Central	47.6	19.5	14.6	-	**82**
	Eastern	47.9	21.3	10.6	-	**92**
	R. Valley	41.5	21.4	11.9	-	**160**
	Nyanza	36.4	14.8	11.4	1.1	**89**
	Western	32.8	14.8	4.9	-	**62**
Gender	Male	44.1	21.3	12.7	0.3	**324**
	Female	43.4	16.8	13.8	-	**304**
Economic status	High	35.5	25.8	19.4	-	**31**
	Middle	47.0	27.7	19.9	0.6	**166**
	Low	44.7	17.0	10.2	-	**235**
	Very low	41.5	13.3	10.3	-	**195**
School	In- school	44.2	19.3	13.5	0.2	**616**
	Not in school	25.0	8.3	-	-	**12**
Total		**43.8**	**19.1**	**13.2**	**0.2**	**628**

4.1.4 Spontaneous awareness of khat/ miraa and other psychoactive substances

Spontaneous awareness of *khat/ miraa* among respondents aged 15 - 65 years shows that awareness of total *khat* stands at 45.9%. However, in terms of the different variants of *khat*, *miraa* recorded the highest spontaneous awareness at 45.9% followed by *muguka* at 19.8%. North Eastern region recorded the highest spontaneous awareness of total *khat* (74.3%) while Western region recorded the lowest spontaneous awareness of total *khat* at 31.0% (Table 10).

Spontaneous awareness of prescription drugs and inhalants among respondents aged 15 – 65 years is very low at 6.0% and 8.0% respectively. Nairobi region recorded the highest spontaneous awareness of inhalants (11.3%) while Central region recorded the highest spontaneous awareness of prescription drugs (8.3%) Table 10).

Table 10: Spontaneous awareness (%) of khat and other psychoactive substances among respondents aged 15 – 65 years

Characteristic		*Khat*			Others		
		Miraa	*Muguka*	Total khat	Inhalants	Prescription drugs	No. of respondents
Setting	Urban	49.2	25.3	49.2	7.5	6.2	**744**
	Rural	44.5	17.6	44.5	8.2	5.9	**1776**
Region	Nairobi	43.9	28.3	43.9	11.3	8.0	**212**
	North Eastern	74.3	35.1	74.3	4.1	6.1	**148**
	Coast	58.3	28.9	58.3	8.7	4.6	**218**
	Central	45.2	23.4	45.2	9.0	8.3	**312**
	Eastern	61.8	37.4	61.8	4.5	2.9	**377**
	R. Valley	33.6	14.6	33.6	10.3	8.1	**643**
	Nyanza	45.0	3.5	45.0	7.0	5.0	**342**
	Western	31.0	1.9	31.0	6.7	3.0	**268**
Gender	Male	49.5	20.9	49.5	8.8	7.0	**1229**
	Female	42.5	18.8	42.5	7.3	5.0	**1291**
Economic status	High	45.5	24.8	45.5	10.9	7.9	**101**
	Medium	53.3	25.2	53.3	10.2	7.6	**715**
	Low	46.1	20.6	46.1	8.0	6.1	**913**
	Very low	39.6	13.3	39.6	5.8	4.4	**730**
Age in years	15 – 17	62.6	22.4	62.6	14.4	5.2	**174**
	18 – 24	57.9	22.7	57.9	10.3	6.0	**497**
	25 – 35	44.9	20.5	44.9	6.6	5.0	**833**
	36+	38.1	17.4	38.1	6.9	6.8	**1003**
Employment status	A student	62.3	20.6	62.3	13.2	6.2	**355**
	Unemployed	40.4	16.2	40.4	6.2	4.5	**594**
	Employed	44.2	20.5	44.2	7.4	6.2	**1469**
	Others	42.6	27.7	42.6	9.6	9.6	**94**
Religion	Christian	43.5	18.3	43.5	8.0	5.8	**2200**
	Muslim	63.0	31.1	63.0	8.2	7.2	**305**
	Others	60.0	13.3	60.0	6.7	-	**15**
Education level	No formal education	38.8	24.7	38.8	3.9	3.4	**178**
	Primary level	40.2	18.2	40.2	6.1	4.9	**1066**
	Secondary level	51.2	20.5	51.2	9.6	5.9	**951**
	Post-secondary	52.9	20.7	52.9	12.1	11.1	**314**
Total		**45.9**	**19.8**	**45.9**	**8.0**	**6.0**	**2520**

Spontaneous awareness of *khat/ miraa* among respondents aged 10 - 14 years is presented in Table 11 below. Data shows that spontaneous awareness of total *khat* stands at 39.0%. However, in terms of the different variants of *khat, miraa* recorded the highest spontaneous awareness at 37.9% followed by *muguka* at 14.5%. Eastern region recorded the highest spontaneous awareness of total *khat* (54.3%) while Western region recorded the lowest spontaneous awareness of total *khat* at 14.8%.

Spontaneous awareness inhalants among respondents aged 10 – 14 years is very low (9.1%). Nairobi region recorded the highest spontaneous awareness of inhalants (11.3%).

Table 11: Spontaneous awareness (%) of khat and other psychoactive substances among respondents aged 10 – 14 years

Characteristic		Khat			Others	
		Miraa	*Muguka*	Total khat	Inhalants	No. of respondents
Setting	Urban	45.5	21.6	47.2	8.0	**176**
	Rural	35.0	11.7	35.8	9.5	**452**
Region	Nairobi	46.4	32.1	51.8	21.4	**55**
	North Eastern	52.9	29.4	52.9	8.8	**34**
	Coast	46.3	24.1	46.3	-	**54**
	Central	31.7	15.9	34.1	12.2	**82**
	Eastern	53.2	26.6	54.3	6.4	**92**
	R. Valley	37.7	7.5	38.4	11.3	**160**
	Nyanza	27.3	-	27.3	5.7	**89**
	Western	14.8	-	14.8	4.9	**62**
Gender	Male	38.6	13.3	39.2	7.1	**324**
	Female	37.2	15.8	38.8	11.2	**304**
Economic status	High	41.9	25.8	45.2	6.5	**31**
	Middle	39.8	15.7	41.6	10.8	**166**
	Low	43.8	17.9	44.7	10.2	**235**
	Very low	28.2	7.2	28.7	6.7	**195**
School	In- school	37.8	14.4	39.0	9.1	**616**
	Not in school	41.7	16.7	41.7	8.3	**12**
Total		**37.9**	**14.5**	**39.0**	**9.1**	**628**

4.1.5 Profile of spontaneous awareness of psychoactive substances

Figure 1 below shows the profile of spontaneous awareness of the various psychoactive substances among respondents aged 15 – 65 years. Data shows that alcohol recorded the highest spontaneous awareness (84.3%) followed by tobacco 73.1%, bhang 60.8%, *khat/ miraa* 45.9%, cocaine 22.6%, heroin 18.7% and lastly hashish 1.3%.

Figure 1: Spontaneous awareness (%) of psychoactive substances among respondents aged 15 – 65 years

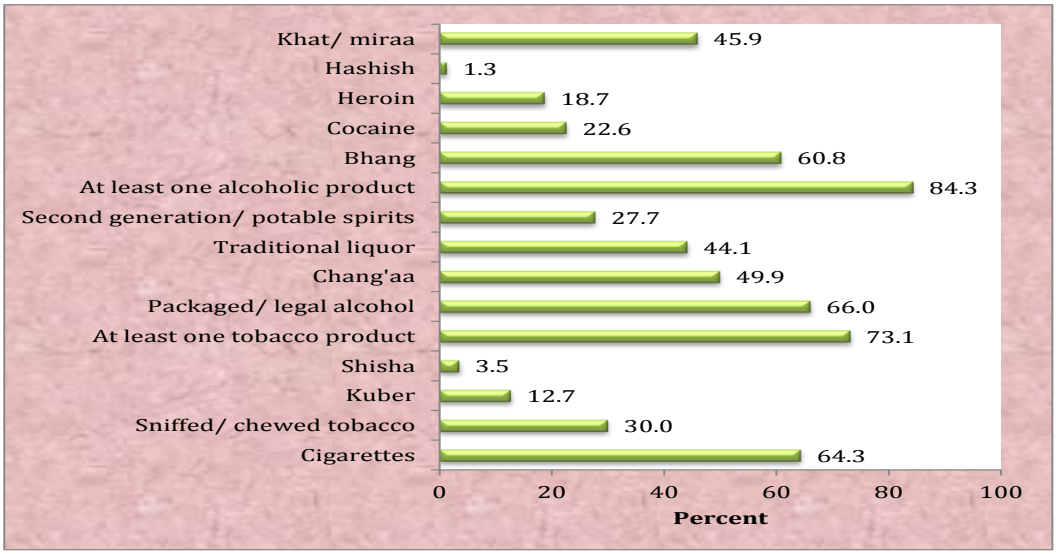
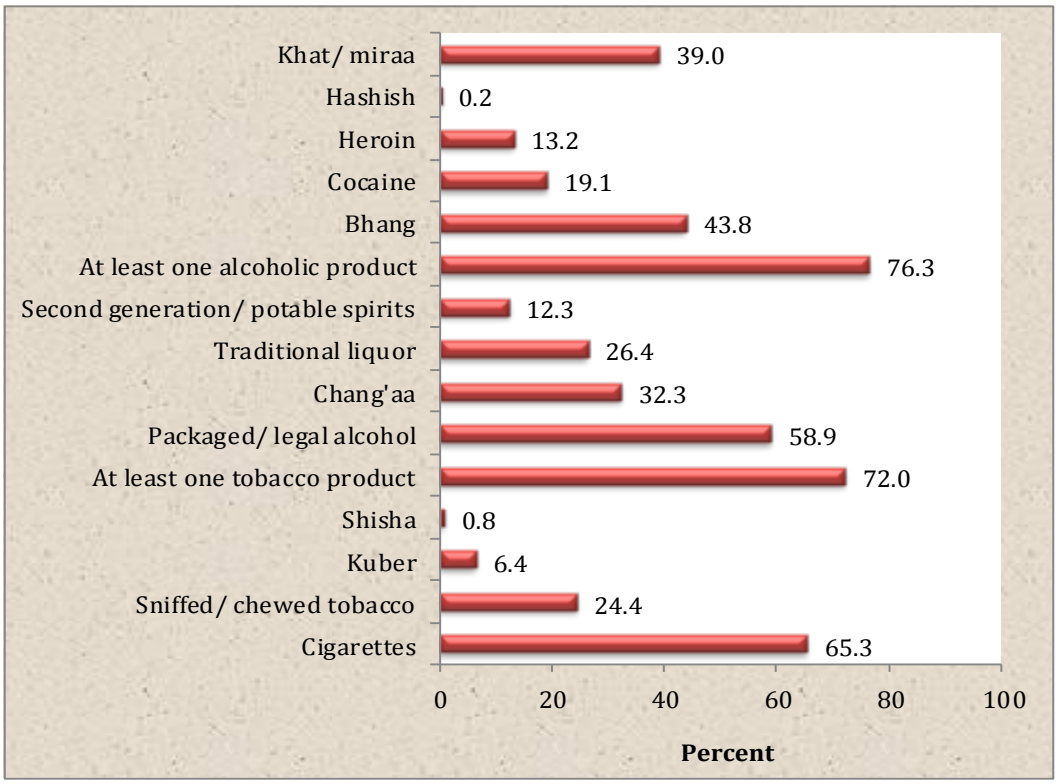


Figure 2 below shows the profile of spontaneous awareness of the various psychoactive substances among respondents aged 10 – 14 years. Data shows that alcohol recorded the highest spontaneous awareness (76.3%) followed by tobacco 72.0%, bhang 43.8%, *khat/ miraa* 39.0%, cocaine 19.1%, heroin 13.2% and lastly hashish 0.2%.

Figure 2: Spontaneous awareness (%) of psychoactive substances among respondents aged 10 – 14 years



4.2 Total awareness of psychoactive substances

4.2.1 Awareness of tobacco products

Total awareness of a psychoactive substance was computed as a combined score of both spontaneous and prompted recall. Total awareness of tobacco products among respondents aged 15-65 years shows that s*hisha* and *kuber* have the lowest levels at 23.1% and 57.7% respectively. Cigarettes recorded the highest total awareness at 97.2% followed by sniffed/ chewed/ piped tobacco at 82.0%. Generally, total awareness of at least one tobacco product is very high (99.6%). Data shows that Central, North Eastern and Eastern regions have the highest total awareness of at least one tobacco product each recording 100% (Table 12).

Table 12: Total awareness (%) of tobacco among respondents aged 15 – 65 years

Characteristic		Cigarettes	Sniffed/chewed/piped tobacco	Kuber	Shisha	At least one tobacco product	Total
Setting	Urban	96.9	80.0	66.5	35.6	99.7	**744**
	Rural	97.3	82.9	53.9	17.9	99.5	**1776**
Region	Nairobi	96.7	68.4	59.9	42.5	99.5	**212**
	N. Eastern	96.6	88.5	41.9	41.9	100.0	**148**
	Coast	97.7	93.6	64.2	38.1	99.5	**218**
	Central	99.0	77.6	48.7	25.3	100.0	**312**
	Eastern	97.3	90.7	55.4	18.3	100.0	**377**
	R. Valley	96.3	79.2	55.8	17.7	99.1	**643**
	Nyanza	97.7	81.9	79.2	19.9	99.7	**342**
	Western	96.6	79.9	49.6	6.7	99.6	**268**
Gender	Male	97.0	82.7	66.8	29.2	99.5	**1229**
	Female	97.4	81.4	49.0	17.4	99.7	**1291**
Economic status	High	99.0	79.2	62.4	62.4	100.0	**101**
	Middle	98.0	82.2	64.6	35.8	99.6	**715**
	Low	98.4	81.6	55.8	18.2	99.8	**913**
	Very low	95.5	83.2	53.2	12.7	99.6	**730**
Age in years	15 – 17	97.7	77.0	53.4	29.9	100.0	**174**
	18 – 24	97.6	81.7	68.0	32.2	99.6	**497**
	25 – 35	97.2	81.0	57.9	23.4	99.6	**833**
	36+	96.9	84.3	53.4	17.4	99.6	**1003**
Employment status	A student	97.7	81.7	61.7	34.1	99.7	**355**
	Unemployed	96.8	80.5	55.1	19.9	99.3	**594**
	Employed	97.1	82.8	58.9	22.3	99.7	**1469**
	Others	98.9	81.9	40.4	14.9	100.0	**94**
Religion	Christian	97.3	81.4	57.9	20.0	99.6	**2200**
	Muslim	96.7	87.2	56.7	46.2	100.0	**305**
	Others	93.3	73.3	46.7	6.7	93.3	**15**
Education level	No formal education	96.1	88.8	33.7	13.5	100.0	**178**
	Primary level	97.6	82.5	51.8	15.9	99.5	**1066**
	Secondary level	96.8	79.6	63.9	26.3	99.6	**951**
	Post-secondary	97.8	84.4	72.0	43.0	100.0	**314**
Total		**97.2**	**82.0**	**57.7**	**23.1**	99.6	**2520**

Total awareness of tobacco products among respondents aged 10-14 years is presented in Table 13 below. *Shisha* and *kuber* recorded the lowest levels of total awareness at 9.4% and 27.2% respectively. Cigarettes recorded the highest spontaneous awareness at 96.7% followed by sniffed/ chewed/ piped tobacco at 67.8%. Generally, total awareness of at least one tobacco product is very high (98.9%). Data shows that Nairobi, North Eastern, Coast and Central regions have the highest levels of total awareness of at least one tobacco product with each recording 100%.

Table 13: Total awareness (%) of tobacco among respondents aged 10 – 14 years

Characteristic		Cigarettes	Sniffed/chewed /piped tobacco	Kuber	Shisha	At least one tobacco product	Total
Setting	Rural	98.9	71.6	30.7	14.2	100.0	**176**
	Urban	95.8	66.4	25.9	7.5	98.5	**452**
Region	Nairobi	100.0	57.1	28.6	10.7	100.0	**55**
	N. Eastern	97.1	76.5	23.5	20.6	100.0	**34**
	Coast	98.1	90.7	24.1	18.5	100.0	**54**
	Central	100.0	58.5	15.9	11.0	100.0	**82**
	Eastern	96.8	81.9	13.8	6.4	97.9	**92**
	R. Valley	97.5	60.4	31.4	10.7	98.7	**160**
	Nyanza	92.0	69.3	45.5	4.5	97.7	**89**
	Western	91.8	60.7	29.5	-	98.4	**62**
Gender	Male	97.8	71.3	29.9	10.2	99.7	**324**
	Female	95.4	64.1	24.3	8.6	98.0	**304**
Economic status	High	100.0	54.8	32.3	19.4	100.0	**31**
	Middle	99.4	69.3	19.9	14.5	100.0	**166**
	Low	96.6	68.9	33.6	8.9	98.7	**235**
	Very low	93.8	67.2	25.1	4.1	97.9	**195**
School	In- school	96.8	68.0	27.4	9.3	98.9	**616**
	Not in school	91.7	58.3	16.7	16.7	100.0	**12**
Total		**96.7**	**67.8**	**27.2**	**9.4**	98.9	**628**

4.2.2 Awareness of alcoholic products

Total awareness of alcohol products among respondents aged 15 - 65 years shows that second generation alcohol/ potable spirits and traditional liquor have the lowest levels at 61.6% and 84.6% respectively. Packaged/ legal alcohol recorded the highest total awareness at 92.9% followed by *chang'aa* at 88.6%. Generally, total awareness of at least one alcohol product is very high (99.2%). Data shows that Nairobi, Central, Eastern and Western regions have the highest total awareness of at least one tobacco product with each recording 100% (Table 14).

Table 14: Total awareness (%) of alcohol among respondents aged 15 – 65 years

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	Second generation/ potable spirits	At least one alcohol product	Total
Setting	Urban	93.0	91.3	83.9	68.5	99.6	**744**
	Rural	92.8	87.5	85.0	58.7	99.1	**1776**
Region	Nairobi	93.4	94.3	81.1	70.3	100.0	**212**
	N. Eastern	89.2	61.5	43.2	31.1	91.9	**148**
	Coast	92.7	89.9	89.9	62.4	99.1	**218**
	Central	97.1	86.5	81.1	64.1	100.0	**312**
	Eastern	94.7	84.6	87.0	66.6	100.0	**377**
	R. Valley	92.2	87.6	86.2	58.2	99.4	**643**
	Nyanza	95.6	96.8	91.8	67.8	99.7	**342**
	Western	85.1	98.1	94.0	61.6	100.0	**268**
Gender	Male	94.1	88.5	84.4	64.9	99.2	**1229**
	Female	91.6	88.7	84.9	58.5	99.3	**1291**
Economic status	High	95.0	87.1	85.1	59.4	100.0	**101**
	Medium	95.4	87.4	83.1	66.6	98.9	**715**
	Low	93.4	88.2	83.0	60.1	99.3	**913**
	Very low	89.9	92.1	88.9	60.4	99.5	**730**

Age in years	15 – 17	89.1	88.5	79.9	59.2	98.3	**174**
	18 – 24	95.0	88.1	79.9	62.4	99.2	**497**
	25 – 35	93.0	88.0	84.9	63.3	99.4	**833**
	36+	92.6	89.5	87.8	60.5	99.4	**1003**
Employment status	A student	94.1	90.7	82.3	65.1	99.4	**355**
	Unemployed	90.7	86.9	82.5	60.4	98.5	**594**
	Employed	93.7	89.0	86.5	62.0	99.6	**1469**
	Others	90.4	87.2	79.8	50.0	98.9	**94**
Religion	Christian	93.1	90.3	86.9	63.0	99.7	**2200**
	Muslim	91.5	76.7	68.9	51.8	96.1	**305**
	Others	86.7	80.0	80.0	53.3	93.3	**15**
Education level	No formal education	83.7	70.8	74.7	42.7	95.5	**178**
	Primary level	92.1	90.9	85.3	60.5	99.4	**1066**
	Secondary level	94.3	89.0	85.7	64.7	99.6	**951**
	Post-secondary	92.2	90.4	85.7	66.9	100.0	**314**
Total		**92.9**	**88.6**	**84.6**	**61.6**	**99.2**	**2520**

Total awareness of alcohol products among respondents aged 10 - 14 years is presented in Table 15 below. Second generation/ potable spirits and traditional liquor recorded the lowest levels of total awareness at 33.9% and 64.6% respectively. Packaged/ legal alcohol recorded the highest spontaneous awareness at 86.5% followed by *chang'aa* at 75.0%. Generally, spontaneous awareness of at least one alcohol products is very high (97.3%). Data shows that Coast and Central regions have the highest total awareness of at least one alcohol product with each recording 100%.

Table 15: Total awareness (%) of alcohol among respondents aged 10 – 14 years by background characteristics

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	Second generation/ potable spirits	At least one alcohol product	Total
Setting	Rural	88.6	83.0	60.8	37.5	96.6	**176**
	Urban	85.6	71.9	66.2	32.5	97.6	**452**
Region	Nairobi	87.5	85.7	55.4	37.5	98.2	**55**
	N. Eastern	76.5	20.6	8.8	5.9	76.5	**34**
	Coast	96.3	70.4	81.5	29.6	100.0	**54**
	Central	91.5	72.0	56.1	40.2	100.0	**82**
	Eastern	87.2	66.0	57.4	31.9	94.7	**92**
	R. Valley	83.0	76.1	67.3	30.2	99.4	**160**
	Nyanza	88.6	90.9	79.5	50.0	98.9	**89**
	Western	80.3	91.8	83.6	31.1	98.4	**62**
Gender	Male	87.0	75.6	65.1	35.8	96.3	**324**
	Female	85.9	74.3	64.1	31.9	98.4	**304**
Economic status	High	87.1	67.7	35.5	29.0	100.0	**31**
	Middle	89.8	65.7	53.6	30.8	95.2	**166**
	Low	87.7	77.0	66.8	35.7	97.0	**235**
	Very low	82.1	81.5	75.9	35.5	99.0	**195**
School	In- school	86.4	75.3	64.8	33.9	97.2	**616**
	Not in school	91.7	58.3	58.3	33.3	100.0	**12**
Total		**86.5**	**75.0**	**64.6**	**33.9**	**97.3**	**628**

4.2.3 Awareness of narcotics

Total awareness of narcotics among respondents aged 15 - 65 years shows that hashish and heroin have the lowest levels of awareness at 7.4% and 51.0% respectively (Table 16). Bhang recorded the highest total awareness at 87.2% followed by cocaine at 54.3%. Generally, spontaneous awareness of narcotic drugs is relatively low apart from bhang. Data shows that Nairobi region has the highest total awareness of bhang (91.0%); Coast region has the highest spontaneous awareness of cocaine (61.9%) and heroin (62.8%); while North Eastern region has the highest spontaneous awareness of hashish (25.7%).

Table 16: Total awareness (%) of narcotics among respondents aged 15 – 65 years

Characteristic		Narcotics				No. of respondents
		Bhang	Cocaine	Heroin	Hashish	
Setting	Urban	89.4	59.7	52.3	14.1	**744**
	Rural	86.3	52.0	50.5	4.6	**1776**
Region	Nairobi	91.0	61.3	54.7	15.1	**212**
	North Eastern	81.8	46.6	41.9	25.7	**148**
	Coast	86.7	61.9	62.8	14.7	**218**
	Central	89.1	56.1	50.6	7.1	**312**
	Eastern	87.8	49.9	44.6	7.2	**377**
	R. Valley	86.0	56.8	52.9	2.0	**643**
	Nyanza	85.1	52.6	52.3	4.7	**342**
	Western	90.3	47.0	46.6	2.2	**268**
Gender	Male	88.8	61.2	59.4	10.7	**1229**
	Female	85.7	47.7	43.0	4.2	**1291**
Economic status	High	90.1	79.2	73.3	21.8	**101**
	Middle	87.0	63.5	58.7	12.3	**715**
	Low	88.8	54.5	51.5	5.4	**913**
	Very low	86.0	42.6	40.7	3.6	**730**
Age in years	15 – 17	87.9	71.8	68.4	6.3	**174**
	18 – 24	87.1	67.0	62.2	7.6	**497**
	25 – 35	87.3	52.5	48.7	7.6	**833**
	36+	87.0	46.8	44.6	7.4	**1003**
Employment status	A student	86.8	76.3	73.5	6.5	**355**
	Unemployed	85.9	45.6	43.4	6.1	**594**
	Employed	88.0	53.6	49.4	8.2	**1469**
	Others	85.1	37.2	40.4	5.3	**94**
Religion	Christian	87.6	54.2	50.6	5.4	**2200**
	Muslim	84.6	55.4	53.8	22.0	**305**
	Others	80.0	46.7	46.7	6.7	**15**
Education level	No formal education	79.8	20.8	21.3	9.0	**178**
	Primary level	86.5	44.5	39.1	5.2	**1066**
	Secondary level	88.1	63.9	62.7	7.4	**951**
	Post-secondary	91.4	77.7	73.2	13.7	**314**
Total		**87.2**	**54.3**	**51.0**	**7.4**	**2520**

Total awareness of narcotics among respondents aged 10 - 14 years is presented in Table 17 below. Hashish and heroin recorded the lowest levels of total awareness at 1.6% and 29.3% respectively. Bhang recorded the highest total awareness at 78.7% followed by cocaine at 33.6%. Generally, spontaneous awareness of narcotic drugs is also relatively low apart from bhang. Data shows that Nairobi region has the highest total awareness of bhang (83.9%) and cocaine (42.9%); Rift Valley region has the highest total awareness of heroin (35.8%); while North Eastern region has the highest total awareness of hashish (8.8%).

Table 17: Total awareness (%) narcotics among respondents aged 10 – 14 years

Characteristic		Narcotics				No. of respondents
		Bhang	Cocaine	Heroin	Hashish	
Setting	Urban	81.8	37.5	31.8	1.7	**176**
	Rural	77.4	32.1	28.3	1.5	**452**
Region	Nairobi	83.9	42.9	32.1	3.6	**55**
	North Eastern	73.5	8.8	26.5	8.8	**34**
	Coast	83.3	38.9	31.5	-	**54**
	Central	78.0	30.5	28.0	2.4	**82**
	Eastern	76.6	34.0	24.5	-	**92**
	R. Valley	82.4	39.6	35.8	0.6	**160**
	Nyanza	77.3	28.4	27.3	2.3	**89**
	Western	68.9	29.5	21.3	-	**62**
Gender	Male	81.8	34.9	29.3	2.5	**324**
	Female	75.3	32.2	29.3	0.7	**304**
Economic status	High	67.7	35.5	35.5	-	**31**
	Medium	79.5	44.0	39.2	3.0	**166**
	Low	82.1	32.3	26.0	2.1	**235**
	Very low	75.9	26.2	24.1	-	**195**
School	In- school	78.7	34.1	29.9	1.6	**616**
	Not in school	75.0	8.3	-	-	**12**
Total		**78.7**	**33.6**	**29.3**	**1.6**	**628**

4.2.4 Awareness of khat/ miraa and other psychoactive substances

Total awareness of *khat*/ *miraa* among respondents aged 15 - 65 years stands at 93.5%. However, in terms of the different variants of *khat*, *miraa* recorded the highest total awareness at 90.8% followed by *muguka* at 54.9%. Eastern region recorded the highest total awareness of total *khat* (98.4%) while Western region recorded the lowest spontaneous awareness of total *khat* at 86.2% (Table 18).

Total awareness of prescription drugs and inhalants among respondents aged 15 – 65 years is relatively low (21.6% and 54.5% respectively). Nairobi region recorded the highest total awareness of inhalants (64.6%) while Coast region recorded the highest total awareness of prescription drugs (29.4%) (Table 18).

Table 18: Total awareness (%) of khat and other drugs among respondents aged 15 – 65 years

Characteristic		*Khat/ miraa*			Others		
		Miraa	*Muguka*	Total *khat*	Inhalants	Prescription drugs	No. of respondents
Setting	Urban	92.6	69.6	96.5	62.2	26.2	**744**
	Rural	90.1	48.8	92.2	51.2	19.7	**1776**
Region	Nairobi	91.0	78.8	96.7	64.6	26.9	**212**
	North Eastern	95.3	66.2	98.0	43.9	21.6	**148**
	Coast	93.6	79.8	96.8	62.4	29.4	**218**
	Central	93.3	72.4	95.2	54.8	26.9	**312**
	Eastern	95.5	77.5	98.4	48.0	15.6	**377**
	R. Valley	86.9	45.4	88.8	51.9	19.9	**643**
	Nyanza	92.4	26.3	94.7	63.7	23.4	**342**
	Western	84.0	16.8	86.2	48.9	15.3	**268**
Gender	Male	91.1	56.9	93.9	58.3	23.7	**1229**
	Female	90.5	53.1	93.0	50.8	19.7	**1291**
Economic status	High	96.0	78.2	97.0	62.4	31.7	**101**
	Medium	93.1	69.5	95.9	61.8	29.1	**715**
	Low	92.0	56.1	94.9	54.1	20.3	**913**
	Very low	87.0	37.4	89.3	48.1	15.8	**730**
Age in years	15 – 17	92.0	50.6	94.8	58.0	21.8	**174**
	18 – 24	94.0	58.6	95.6	65.0	24.7	**497**
	25 – 35	92.1	56.7	94.5	54.3	21.1	**833**
	36+	88.2	52.7	91.4	49.1	20.6	**1003**
Employment status	A student	93.2	52.4	94.9	65.6	27.3	**355**
	Unemployed	88.2	48.5	91.6	50.0	15.5	**594**
	Employed	91.5	58.5	94.1	54.7	22.6	**1469**
	Others	88.3	48.9	89.4	37.2	23.4	**94**
Religion	Christian	90.5	53.0	93.1	54.7	20.8	**2200**
	Muslim	93.8	70.2	96.4	52.5	28.2	**305**
	Others	86.7	33.3	86.7	60.0	13.3	**15**
Education level	No formal education	83.1	56.7	87.1	27.5	14.6	**178**
	Primary level	90.7	52.8	93.4	50.3	15.9	**1066**
	Secondary level	92.5	55.7	94.8	59.6	23.2	**951**
	Post-secondary	90.4	58.6	93.0	68.5	39.5	**314**
Total		**90.8**	**54.9**	**93.5**	**54.5**	**21.6**	**2520**

Total awareness of *khat/ miraa* among respondents aged 10 - 14 years is presented in Table 19 below. Data shows that total awareness of total *khat* stands at 82.3%. However, in terms of the different variants of *khat, miraa* recorded the highest total awareness at 80.1% followed by *muguka* at 42.2%. North Eastern region recorded the highest total awareness of total *khat* (97.1%) while Western region recorded the lowest total awareness of total *khat* at 55.7%.

Total awareness inhalants among respondents aged 10 – 14 years is low (38.4%). Nairobi region recorded the highest total awareness of inhalants (66.1%).

Table 19: Total awareness (%) of khat and other drugs among respondents aged 10 – 14 years

Characteristic		*Khat/ miraa*			Others	
		Miraa	*Muguka*	Total khat	Inhalants	No. of respondents
Setting	Urban	85.2	58.5	90.3	50.0	**176**
	Rural	78.1	35.8	79.2	33.8	**452**
Region	Nairobi	80.4	75.0	92.9	66.1	**55**
	North Eastern	97.1	61.8	97.1	23.5	**34**
	Coast	96.3	77.8	96.3	37.0	**54**
	Central	80.5	51.2	81.7	41.5	**82**
	Eastern	93.6	61.7	95.7	34.0	**92**
	R. Valley	75.5	28.9	76.1	40.9	**160**
	Nyanza	76.1	9.1	77.3	39.8	**89**
	Western	52.5	9.8	55.7	16.4	**62**
Gender	Male	82.7	46.3	85.2	37.7	**324**
	Female	77.3	37.8	79.3	39.1	**304**
Economic status	High	87.1	64.5	96.8	51.6	**31**
	Medium	87.3	49.4	89.8	45.2	**166**
	Low	83.0	48.5	86.0	38.7	**235**
	Very low	69.2	24.6	69.2	30.3	**195**
School	In- school	80.0	42.5	82.3	38.6	**616**
	Not in school	83.3	25.0	83.3	25.0	**12**
Total		**80.1**	**42.2**	**82.3**	**38.4**	**628**

4.3 Profile of total awareness of psychoactive substances

Figure 3 below shows the profile of total awareness of the various psychoactive substances among respondents aged 15 – 65 years. Data shows that tobacco recorded the highest total awareness (99.6%) followed by alcohol 99.2%, *khat/ miraa* 93.5%, bhang 87.2%, cocaine 54.3%, heroin 51.0% and lastly hashish 7.4%.

Figure 3: Total awareness (%) of psychoactive substances among respondents aged 15 – 65 years

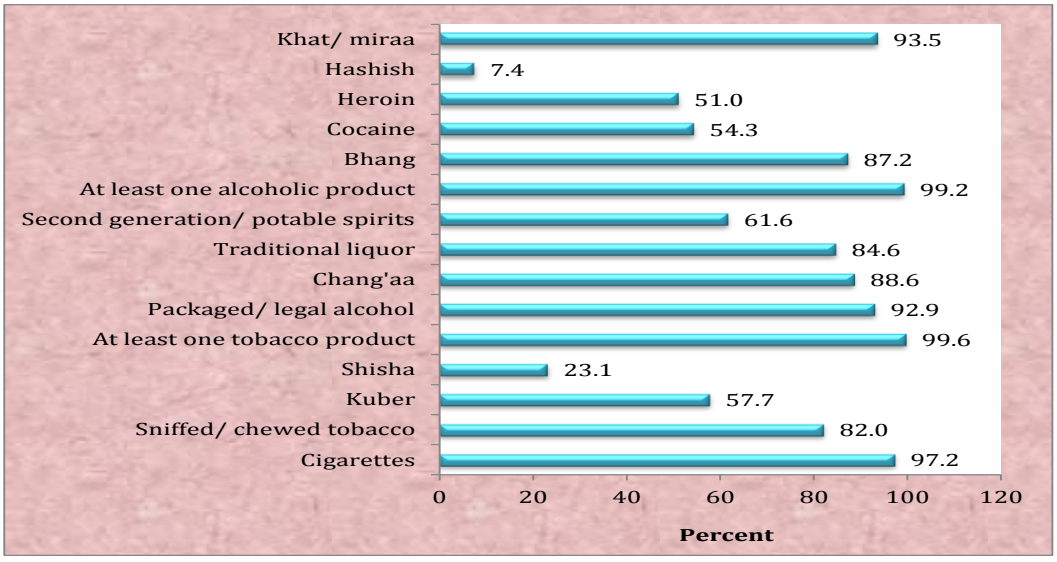
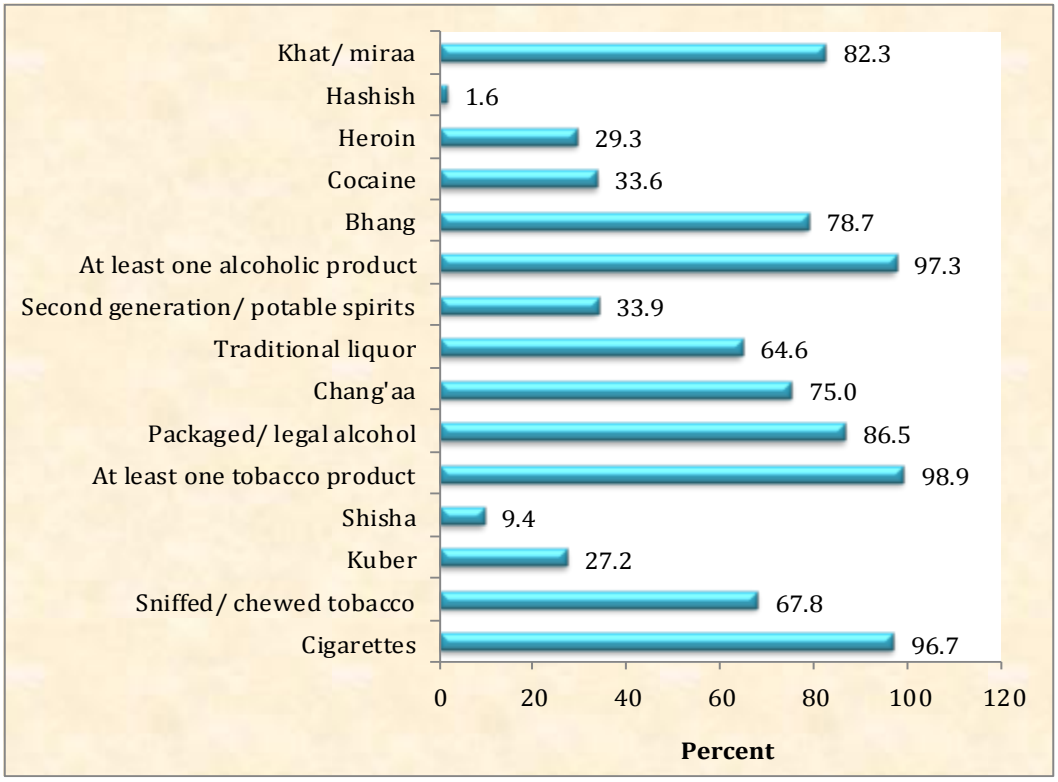


Figure 4 below shows the profile of total awareness of the various psychoactive substances among respondents aged 10 – 14 years. Data shows that tobacco recorded the highest total awareness (98.9%) followed by alcohol 97.3%, *khat/ miraa* 82.3%, bhang 78.7%, cocaine 33.6%, heroin 29.3% and lastly hashish 1.6%.

Figure 4: Total awareness (%) of psychoactive substances among respondents aged 10 – 14 years



CHAPTER 5: PREVALENCE OF ALCOHOL AND SUBSTANCES OF ABUSE IN KENYA

5.0 Introduction

This section highlights the usage patterns of alcohol and substances of abuse in Kenya. Data on lifetime/ ever use and current usage (use in the last 30 days prior to the survey) is presented in this section. The findings are categorized by the different age categories i.e. age 15 – 65 years, 10 – 14 years, 10 – 19 years (adolescents), 15 – 24 years and lastly 18 – 65 years.

5.1 Lifetime usage of alcohol

Respondents were asked whether they have ever used alcohol at least once in the past. According to Table 20, 18.3% of the respondents aged 15 – 65 years have ever used packaged/ legal alcohol at least once in the past in 2017. The trend shows a decline from 19.3% in 2012 and 24.2% in 2007. Nairobi region is leading in the lifetime/ ever use of packaged/ legal alcohol (32.5%) followed by Central 24.0% and Eastern 20.7% regions.

The data also shows that lifetime usage of *chang'aa* stands at 9.0% in 2017. The trend shows a decline from 10.3% in 2012 and 15.1% in 2007. Western region is leading in the lifetime usage of *chang'aa* (18.7%) followed by Rift valley 12.6%, Nyanza 12.3% and Nairobi 12.3% regions.

Table 20: Lifetime usage of alcohol among respondents aged 15 – 65 years by background characteristics

Characteristic		Packaged/ legal alcohol			*Chang'aa*			Total
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	31.6	25.1	20.8	15.9	8.2	9.3	**744**
	Rural	21.6	15.9	17.3	13.0	11.6	8.8	**1776**
Region	Nairobi	32.6	27.2	32.5	11.6	11.2	12.3	**212**
	N. Eastern	0.6	6.5	5.4	9.5	-	-	**148**
	Coast	23.1	19.5	18.8	8.3	8.0	3.7	**218**
	Central	34.9	23.2	24.0	7.7	3.5	3.5	**312**
	Eastern	29.6	23.8	20.7	29.6	5.6	2.1	**377**
	R. Valley	19.3	15.9	14.8	16.9	13.8	12.6	**643**
	Nyanza	23.7	16.4	19.6	23.7	12.7	12.3	**342**
	Western	16.1	13.5	10.8	-	20.3	18.7	**268**
Gender	Male	35.4	27.3	27.6	23.8	14.8	13.8	**1229**
	Female	13.5	10.7	9.5	6.8	5.6	4.4	**1291**
Age in years	15 – 17	8.7	3.9	4.6	5.9	3.1	2.3	**174**
	18 – 24	20.4	15.8	13.5	11.5	6.1	5.0	**497**
	25 – 35	27.7	22.8	18.6	15.9	12.3	7.8	**833**
	36+	29.4	20.3	23.0	20.8	11.8	13.1	**1016**
Religion	Christian	26.0	20.0	19.2	16.2	10.8	9.7	**2200**
	Muslim	8.3	11.2	11.1	2.5	3.5	2.6	**305**
	Others	30.0	27.0	33.3	27.2	19.1	26.7	**15**

Economic status	High	38.6	33.1	23.8	10.5	6.5	3.0	**101**
	Middle	29.9	18.7	24.3	11.5	4.8	5.5	**715**
	Low	26.4	19.1	18.5	15.2	10.9	7.8	**913**
	Very low	16.1	15.0	11.8	18.5	16.0	14.9	**730**
Employment status	A student	12.4	9.8	9.6	6.3	3.5	3.4	**355**
	Unemployed	23.1	14.4	11.1	14.4	4.6	7.7	**594**
	Employed	32.0	23.0	23.7	20.1	12.6	10.8	**1469**
	Others	13.5	10.6	10.6	9.1	7.1	9.6	**94**
Education level	No formal	8.3	9.3	11.2	9.6	9.3	10.1	**178**
	Primary	19.3	15.0	15.9	17.3	13.7	10.6	**1066**
	Secondary	27.9	21.0	19.6	14.7	8.1	7.3	**951**
	Post-secondary	44.7	32.4	26.8	13.4	4.8	7.6	**314**
Total		**24.2**	**19.3**	**18.3**	**15.1**	**10.3**	**9.0**	**2520**

According to Table 21, lifetime usage of traditional liquor stands at 12.5% in 2017 among the respondents aged 15 – 65 years. The trend shows no change in the prevalence from year 2012. However, the prevalence is lower compared to 22.1% recorded in 2007. Western region is leading in the lifetime usage of traditional liquor (26.1%) followed by Rift Valley 16.2% and Coast 13.8% regions. Data also shows that lifetime usage of 2nd generation/ potable spirits stands at 4.3% in 2017. The trend shows an increase from 4.3% in 2012. However, data on 2nd generation alcohol/ potable spirits was not captured in 2007. Nairobi region is leading in the lifetime usage of 2nd generation/ potable spirits (8.5%) followed by Nyanza 5.6% and Rift Valley 5.1% regions.

Data on usage of alcohol shows that the lifetime prevalence stands at 30.2% in 2017. The trend shows a slight increase from 29.9% in 2012. However, the prevalence is much lower compared to 39.2% in 2007.

Table 21: Lifetime usage of alcohol among respondents aged 15 – 65 years by background characteristics cont'

Characteristic		**Traditional liquor**			**2nd generation alcohol/ potable spirits**		**At least one type of alcohol**			**Total**
		2007	**2012**	**2017**	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	24.0	8.5	11.4	3.1	6.2	40.2	31.6	31.7	**744**
	Rural	16.6	15.0	12.9	2.8	3.5	38.8	29.2	29.6	**1776**
Region	Nairobi	14.8	5.9	8.0	3.3	8.5	40.1	36.1	40.1	**212**
	N. Eastern	0	3.2	2.0	1.1	-	0.6	10.8	6.8	**148**
	Coast	29.5	12.4	13.8	3.1	2.8	41.4	27.9	28.0	**218**
	Central	18.5	6.2	8.3	1.9	4.2	42.4	24.5	29.5	**312**
	Eastern	21.5	13.6	9.5	2.8	2.7	39.1	32.0	30.5	**377**
	R. Valley	22.8	18.1	16.2	4.4	5.1	38.2	32.6	31.6	**643**
	Nyanza	27.5	10.6	8.2	2.1	5.6	46.1	24.3	27.8	**342**
	Western	31.2	19.2	26.1	1.9	3.4	42.7	35.7	37.7	**268**
Gender	Male	35.4	27.3	18.2	4.0	7.0	53.2	41.9	43.9	**1229**
	Female	13.5	10.7	7.0	1.8	1.7	25.8	17.4	17.3	**1291**
Age in years	15 – 17	8.1	7.0	4.6	0.8	0.6	18.6	10.9	9.8	**174**
	18 – 24	16.8	6.8	6.8	3.8	3.8	34.6	22.9	22.7	**497**
	25 – 35	21.3	11.5	11.2	3.4	5.3	41.8	33.6	29.8	**833**
	36+	32.8	16.5	17.7	2.4	4.2	48.0	33.1	38.1	**1003**
Religion	Christian	23.1	12.8	13.3	2.8	4.3	41.9	31.1	32.0	**2200**
	Muslim	8.5	6.6	5.9	2.3	4.3	14.0	16.2	16.4	**305**
	Others	39.3	24.4	20.0	7.9	-	51.8	46.0	53.3	**15**

Economic status	High	16.9	6.1	1.0	2.3	4.0	45.3	36.9	28.7	**101**
	Middle	16.4	6.4	8.4	2.6	3.8	38.8	24.4	30.6	**715**
	Low	22.5	14.5	11.9	3.2	4.6	39.7	30.0	28.7	**913**
	Very low	26.9	18.2	18.8	3.1	4.7	38.2	32.0	32.7	**730**
Employment status	A student	9.0	5.1	5.4	2.0	2.8	22.9	14.1	15.8	**355**
	Unemployed	20.3	8.9	12.6	3.4	3.2	37.0	23.6	24.1	**594**
	Employed	27.5	14.5	14.3	3.6	5.2	48.6	35.1	36.5	**1469**
	Others	19.3	9.0	10.6	-	2.1	28.7	18.6	24.5	**94**
Education level	No formal	24.0	16.3	16.3	1.3	3.4	27.7	22.1	25.8	**178**
	Primary	25.4	15.8	15.5	2.6	5.2	38.3	28.8	31.0	**1066**
	Secondary	18.7	10.1	9.8	3.4	3.6	40.0	29.8	29.5	**951**
	Post-secondary	19.3	7.9	8.3	2.8	4.1	50.4	36.9	32.2	**314**
Total		**22.1**	**12.5**	**12.5**	**2.9**	**4.3**	**39.2**	**29.9**	**30.2**	**2520**

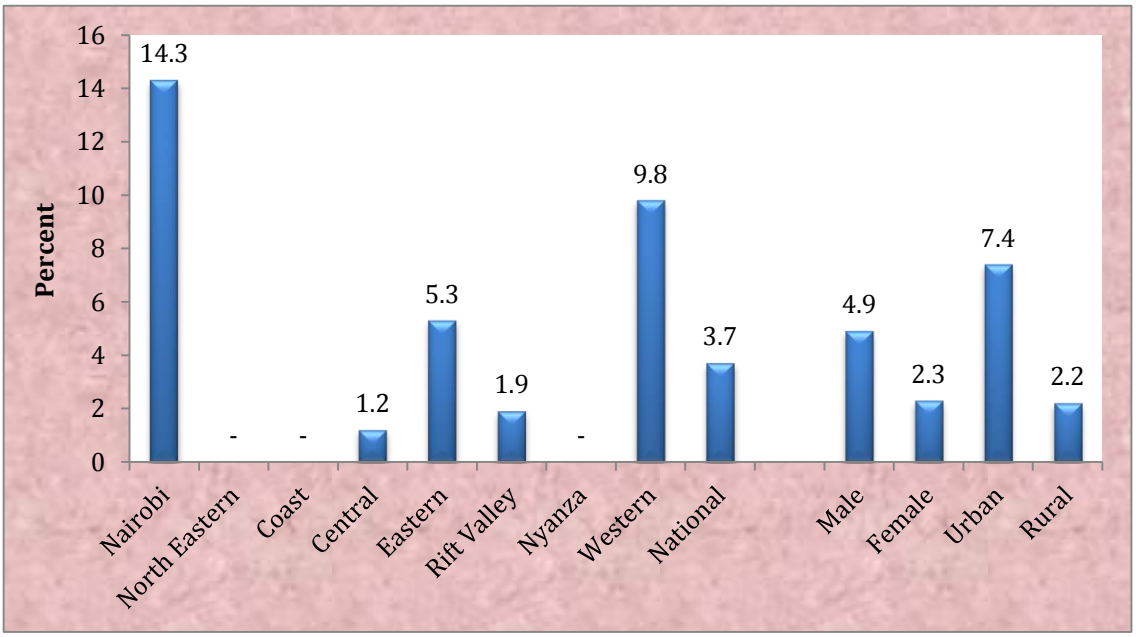
According to Table 22 below, data among the respondents aged 10 – 14 years shows that the prevalence of lifetime usage of packaged/ legal alcohol in 2017 stands at 0.8%, *chang'aa* 0.8%, traditional liquor 0.2% and 2nd generation alcohol/ potable spirits stands at 0.2%. Lifetime usage of alcohol stands at 3.7% in 2017.

Table 22: Lifetime usage of alcohol among respondents aged 10 -14 years by background characteristics

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	At least one type of alcohol	Total
Setting	Urban	2.3	2.3	2.8	0.6	7.4	**176**
	Rural	0.2	0.2	1.8	-	2.2	**452**
Region	Nairobi	5.4	3.6	3.6	1.8	14.3	**56**
	N. Eastern	-	-	-	-	-	**34**
	Coast	-	-	-	-	-	**54**
	Central	-	-	1.2	-	1.2	**82**
	Eastern	1.1	2.1	2.1	-	5.3	**94**
	R. Valley	0.6	-	1.9	-	1.9	**159**
	Nyanza	-	-	-	-	-	**88**
	Western	-	1.6	8.2	-	9.8	**61**
Gender	Male	0.9	1.2	2.8	0.3	4.9	**324**
	Female	0.7	0.3	1.3	-	2.3	**304**
Total		**0.8**	**0.8**	**2.1**	**0.2**	**3.7**	**628**

Data according to Figure 5 below among respondents aged 10 – 14 years shows that the prevalence of lifetime usage of at least one type of alcohol product stands at 3.7% in 2017. Nairobi region is leading in the prevalence of lifetime usage of alcohol in 2017 (14.3%) followed by Western 9.8% and Eastern 5.3% regions. The prevalence of lifetime usage of alcohol is higher among males 4.9% compared to females 2.3%. The prevalence is also higher among the respondents from urban areas 7.4% compared to those in the rural areas 2.2%.

Figure 5: Lifetime usage of alcohol among respondents aged 10 -14 years (n=628)



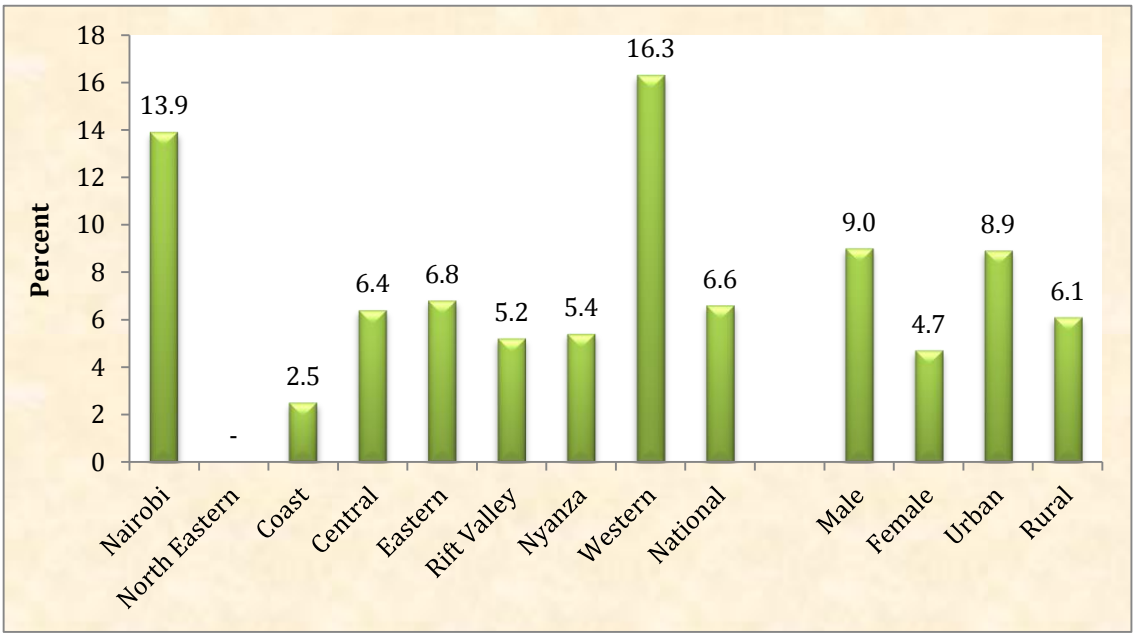
According to Table 23 below, data among the respondents aged 10 – 19 years shows that the prevalence of lifetime usage of packaged/ legal alcohol in 2017 stands at 2.6%, *chang'aa* 1.6%, traditional liquor 3.0% and 2nd generation alcohol/ potable spirits stands at 0.8%. Lifetime usage of alcohol stands at 6.6% in 2017.

Table 23: Lifetime usage of alcohol among respondents aged 10 -19 years

Characteristic		Packaged/ legal alcohol	Chang'aa	Traditional liquor	2nd generation alcohol/ potable spirits	At least one type of alcohol	Total
Setting	Urban	3.5	1.5	3.5	0.8	8.9	**259**
	Rural	2.2	1.6	2.8	0.7	6.1	**667**
Region	Nairobi	6.9	2.8	2.8	1.4	13.9	**72**
	N. Eastern	-	-	-	-	-	**59**
	Coast	1.3	-	1.3	-	2.5	**79**
	Central	5.5	0.9	0.9	0.9	6.4	**109**
	Eastern	2.3	2.3	2.3	-	6.8	**132**
	R. Valley	2.2	0.4	3.5	0.9	5.2	**230**
	Nyanza	2.7	1.4	0.7	1.4	5.4	**147**
	Western	-	6.1	12.2	1.0	16.3	**98**
Gender	Male	3.3	2.3	4.0	1.0	9.0	**480**
	Female	1.8	0.9	2.0	0.4	4.7	**446**
Total		**2.6**	**1.6**	**3.0**	**0.8**	**6.6**	**926**

Data according to Figure 6 below among respondents aged 10 – 19 years shows that the prevalence of lifetime usage of alcohol stands at 9.0% in 2017. Western region is leading in the prevalence of lifetime usage of alcohol (16.3%) followed by Nairobi 13.9% and Eastern 6.8% regions. The prevalence of lifetime usage of alcohol is higher among males 9.0% compared to females 4.7%. The prevalence is also higher among the respondents from urban areas 8.9% compared to those in the rural areas 6.1%.

Figure 6: Lifetime usage of alcohol among respondents aged 10 -19 years (n=926)



According to Table 24 below, data among the respondents aged 15 – 24 years shows that the prevalence of lifetime usage of packaged/ legal alcohol in 2017 stands at 10.7%, *chang'aa* 4.3%, traditional liquor 5.9% and 2nd generation alcohol/ potable spirits stands at 2.4%. Lifetime usage of alcohol stands at 18.6% in 2017.

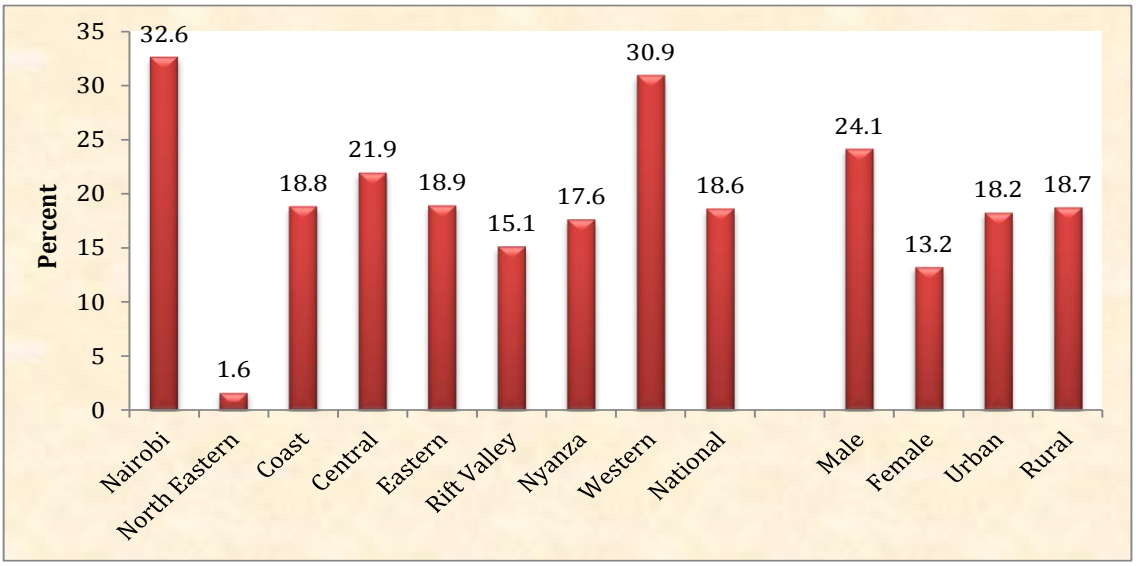
Table 24: Lifetime usage of alcohol among respondents aged 15 -24 years

Characteristic		Packaged/ legal alcohol	Chang'aa	Traditional liquor	2nd generation alcohol/ potable spirits	Total alcohol	Total
Setting	Urban	10.3	2.8	5.6	1.9	18.2	**198**
	Rural	10.8	5.0	6.1	2.7	18.7	**435**
Region	Nairobi	23.3	4.7	4.7	2.3	32.6	**43**
	N. Eastern	1.6	-	-	-	1.6	**63**
	Coast	11.6	2.9	7.2	1.4	18.8	**69**
	Central	20.3	1.6	1.6	1.6	21.9	**64**
	Eastern	13.3	2.2	4.4	-	18.9	**90**
	R. Valley	7.2	2.6	7.9	3.3	15.1	**152**
	Nyanza	10.2	7.4	2.8	5.6	17.6	**108**
	Western	5.9	13.2	17.6	2.9	30.9	**68**
Gender	Male	13.6	5.6	7.7	2.5	24.1	**323**
	Female	7.8	3.0	4.2	2.4	13.2	**334**
Total		**10.7**	**4.3**	**5.9**	**2.4**	**18.6**	**657**

Data according to Figure 7 below among respondents aged 15 – 24 years shows that the prevalence of lifetime usage of alcohol stands at 18.6% in 2017. Nairobi region is leading in the prevalence of lifetime usage of alcohol (32.6%) followed by Western 30.9% and Central 21.9% regions.

The prevalence of lifetime usage of alcohol is higher among males 24.1% compared to females 13.2%. However, the prevalence is almost similar between respondents from rural areas 18.7% and urban areas 18.2%.

Figure 7: Lifetime usage of alcohol among respondents aged 15 -24 years (n=657)



According to Table 25 below, data among the respondents aged 25 – 35 years shows that the prevalence of lifetime usage of packaged/ legal alcohol in 2017 stands at 18.6%, *chang'aa* 7.8%, traditional liquor 11.2% and 2nd generation alcohol/ potable spirits stands at 5.3%. Lifetime usage of alcohol stands at 29.8% in 2017.

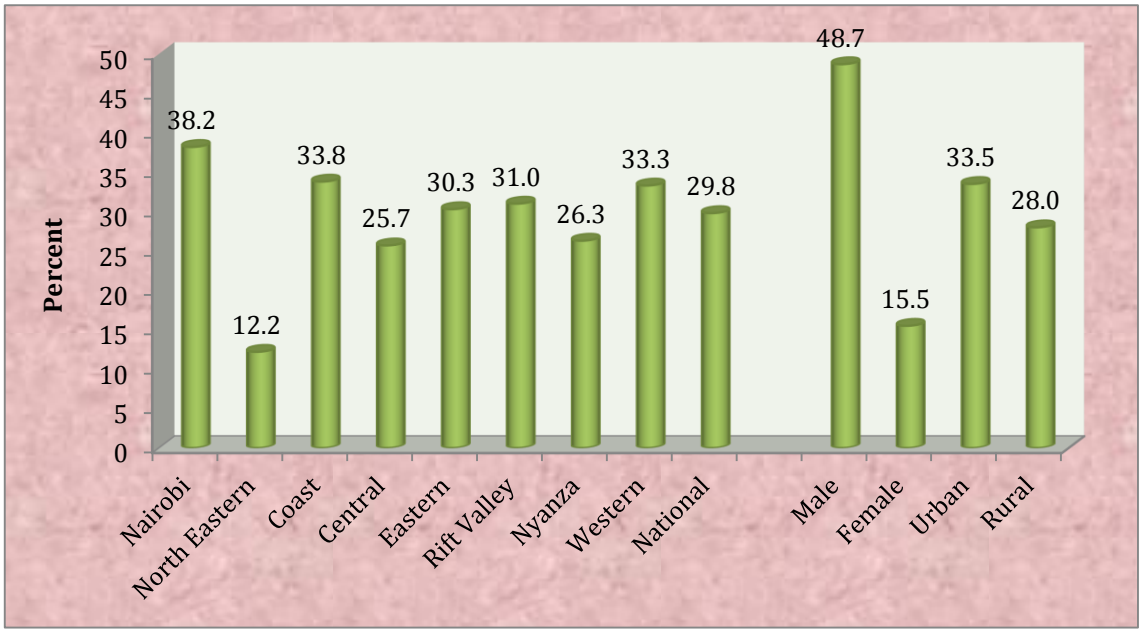
Table 25: Lifetime usage of alcohol among respondents aged 25 -35 years

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	At least one type of alcohol	Total
Setting	Urban	23.4	7.4	10.8	7.1	33.5	**269**
	Rural	16.3	8.0	11.3	4.4	28.0	**564**
Region	Nairobi	32.6	9.0	7.9	9.0	38.2	**89**
	N. Eastern	12.2	-	2.0	-	12.2	**49**
	Coast	20.3	5.4	17.6	6.8	33.8	**74**
	Central	18.1	2.9	8.6	4.8	25.7	**105**
	Eastern	22.0	1.5	5.3	6.1	30.3	**132**
	R. Valley	15.0	11.7	13.1	5.2	31.0	**213**
	Nyanza	20.2	13.1	10.1	4.0	26.3	**99**
	Western	6.9	13.9	25.0	4.2	33.3	**72**
Gender	Male	31.7	14.3	18.5	10.6	48.7	**357**
	Female	8.8	2.9	5.7	1.3	15.5	**476**
Total		**18.6**	**7.8**	**11.2**	**5.3**	**29.8**	**833**

Data according to Figure 8 below among respondents aged 25 – 35 years shows that the prevalence of lifetime usage of alcohol stands at 29.8% in 2017. Nairobi region is leading in the prevalence of lifetime usage of alcohol (38.2%) followed by Coast 33.8% and Western 33.3% regions.

The prevalence of lifetime usage of alcohol is higher among males 48.7% compared to females 15.5%. The prevalence is also higher in urban areas 33.5% compared to rural areas 28.0%.

Figure 8: Lifetime usage of alcohol among respondents aged 25 -35 years (n=833)



According to Table 26 below, data among the respondents aged 18 – 65 years shows that the prevalence of lifetime usage of packaged/ legal alcohol in 2017 stands at 19.4%, *chang'aa* 9.5%, traditional liquor 13.1% and 2nd generation alcohol/ potable spirits stands at 4.5%. Lifetime usage of alcohol stands at 31.8% in 2017.

Table 26: Lifetime usage of alcohol among respondents aged 18 -65 years (n=2333)

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	Total alcohol	Total
Setting	Urban	22.0	9.8	12.0	6.5	33.6	**694**
	Rural	18.3	9.3	13.5	3.7	31.1	**1639**
Region	Nairobi	34.3	12.9	8.5	9.0	42.3	**201**
	N. Eastern	6.0	-	2.3	-	7.5	**133**
	Coast	19.8	3.9	14.5	2.9	29.5	**207**
	Central	24.7	3.8	8.9	4.5	30.6	**291**
	Eastern	21.8	1.7	10.0	2.9	31.8	**349**
	R. Valley	15.4	13.4	16.9	5.3	33.1	**599**
	Nyanza	21.4	13.3	8.7	5.5	30.1	**309**
	Western	11.9	20.1	27.0	3.7	39.3	**244**
Gender	Male	29.4	14.7	19.2	7.3	46.5	**1133**
	Female	10.0	4.6	7.3	1.8	18.0	**1200**
Total		**19.4**	**9.5**	**13.1**	**4.5**	**31.8**	**2333**

According to Figure 9 below among respondents aged 18 - 65 years, the prevalence of lifetime usage of alcohol stands at 31.8% in 2017. Nairobi region is leading in the prevalence of lifetime usage of alcohol (42.3%) followed by Western 39.3% and Rift Valley 33.1% regions.

The prevalence of lifetime usage of alcohol is higher among males 46.5% compared to females 18.0%. The prevalence is also slightly higher among the respondents from urban areas 33.6% compared to those in the rural areas 31.1%.

Figure 9: Lifetime usage of alcohol among respondents aged 18 -65 years (n=2333)

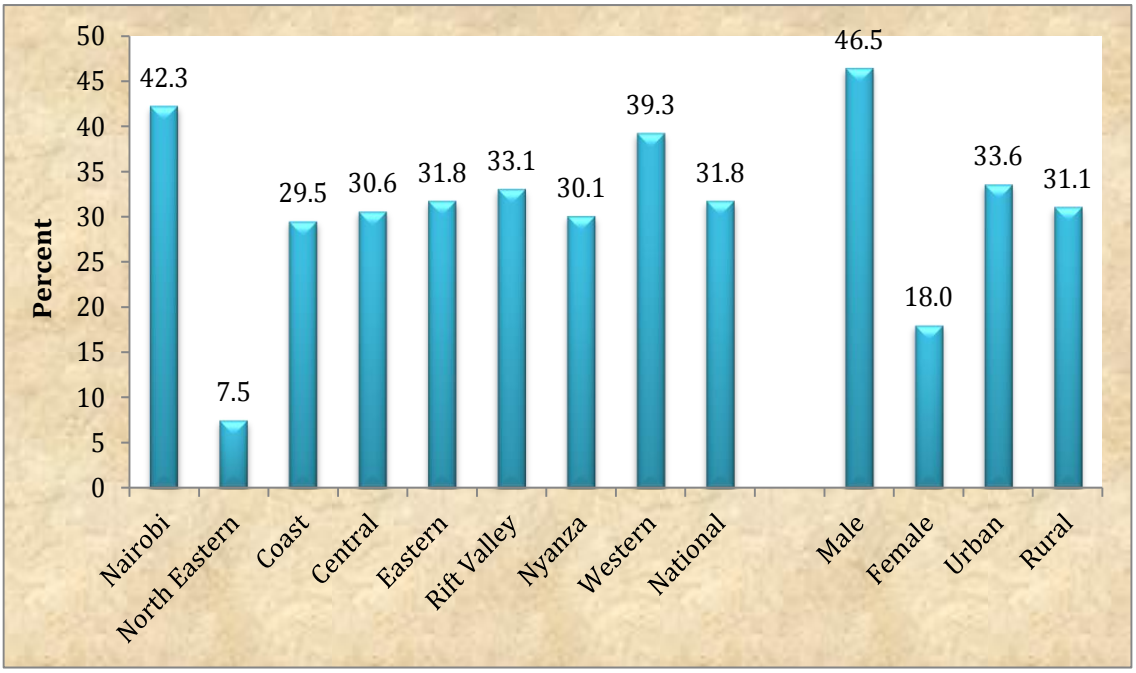


Figure 10 below among respondents aged 15 – 65 years shows that the prevalence of lifetime usage of alcohol stands at 30.2% in 2017. Nairobi region is leading in the prevalence of lifetime usage of alcohol (40.1%) followed by Western 37.7% and Rift Valley 31.6% regions.

The prevalence of lifetime usage of alcohol is higher among males 43.9% compared to females 17.3%. The prevalence is also slightly higher among the respondents from urban areas 31.7% compared to those in the rural areas 29.6%.

Figure 10: Lifetime usage of alcohol among respondents aged 15 -65 years (n= 2520)

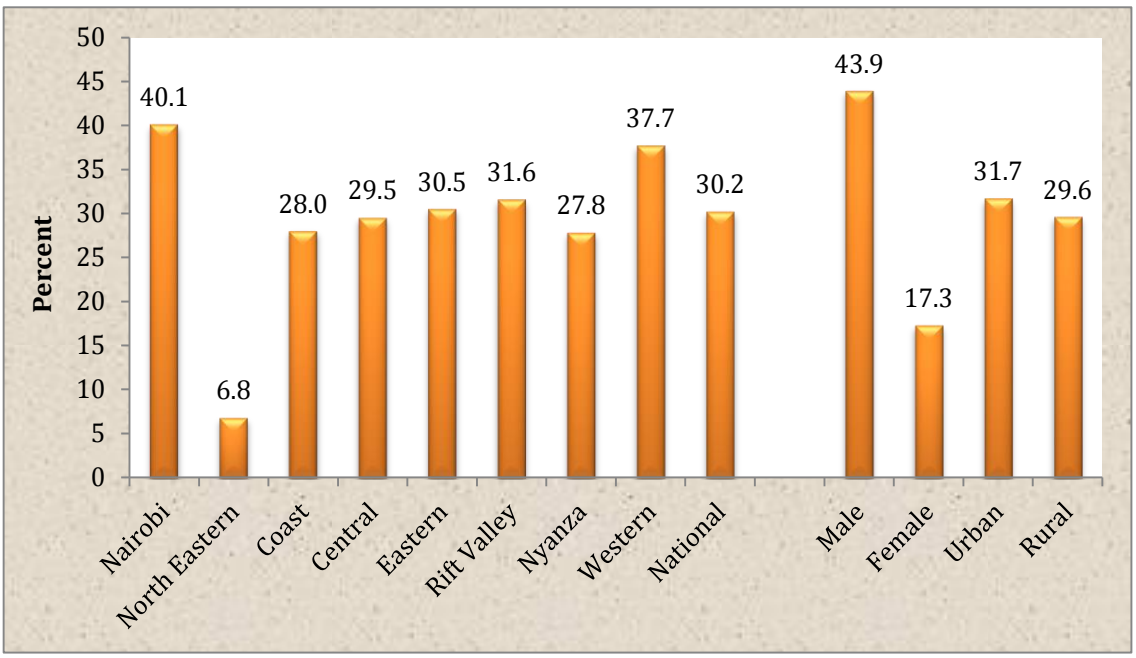
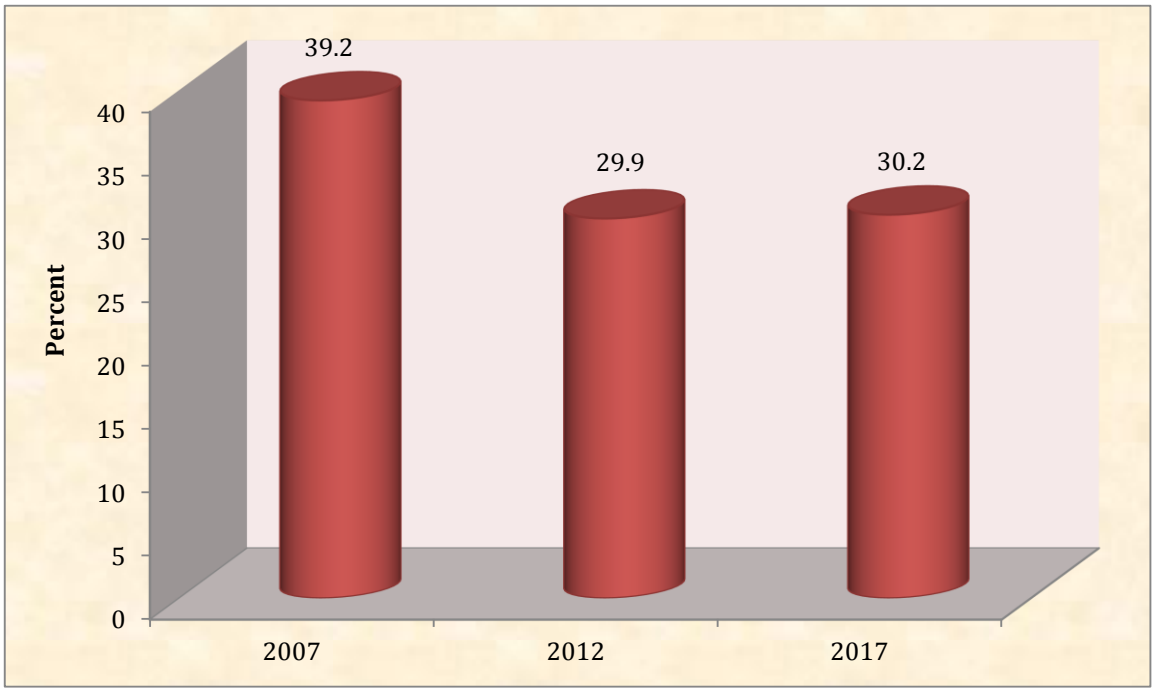


Figure 11 below shows the trend of lifetime usage of alcohol. The data shows that the prevalence in the lifetime usage of alcohol has increased slightly from 29.2% in 2012 to 30.2% in 2017. However, the prevalence is much lower compared to 39.2% in 2007.

Figure 11: Trend of lifetime usage of alcohol among respondents aged 15 -65 years (n=2520)



5.2 Lifetime usage of tobacco

Respondents were asked whether they have ever used tobacco at least once in the past. Findings according to Table 27 shows that 12.8% of the respondents aged 15 – 65 years have ever used cigarettes at least once in the past in 2017. The trend shows a decline from 14.9% in 2012 and 21.7% in 2007. Nairobi region is leading in the lifetime/ ever use of cigarettes (19.3%) followed by Coast 18.8% and Eastern 16.2% regions.

The data also shows that lifetime usage of sniffed/ chewed/ piped tobacco stands at 2.1% in 2017. The trend shows a decline from 2.4% in 2012 and 4.9% in 2007. North Eastern region is leading in the lifetime usage of sniffed/ chewed/ piped tobacco (4.7%) followed by Coast 3.2% and Western 2.6% regions.

Table 27: Lifetime usage of tobacco among respondents aged 15 – 65 years

Characteristic		Cigarettes			Sniffed/ chewed/ piped tobacco			Total
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	20.0	18.0	15.6	5.6	2.6	2.4	**744**
	Rural	26.6	12.2	11.6	2.9	2.3	2.0	**1776**
Region	Nairobi	29.6	20.0	19.3	2.8	2.3	2.4	**212**
	N. Eastern	21.3	19.4	12.2	3.2	4.3	4.7	**148**
	Coast	28.4	20.4	18.8	8.6	4.4	3.2	**218**
	Central	29.5	17.3	14.4	2.3	1.4	0.6	**312**
	Eastern	24.4	16.6	16.2	10.5	2.8	2.1	**377**
	R. Valley	17.6	13.4	11.5	5.4	3.5	1.9	**643**
	Nyanza	17.7	6.9	6.1	2.9	0.3	1.8	**342**
	Western	9.3	9.8	7.8	1.4	0.8	2.6	**268**
Gender	Male	40.4	24.8	23.5	11.2	3.0	3.3	**1229**
	Female	3.9	4.1	2.6	3.6	1.7	1.0	**1291**
Age in years	15 – 17	7.2	4.7	1.1	1.1	0	-	**174**
	18 – 24	16.9	10.9	4.8	6.5	2.7	1.4	**497**
	25 – 35	26.9	15.4	10.4	8.9	2.2	1.6	**833**
	36+	25.5	17.7	20.7	5.9	2.7	3.4	**1003**
Religion	Christian	20.9	13.6	12.0	4.3	0.1	1.8	**2200**
	Muslim	24.2	20.9	19.0	5.9	4.3	3.9	**305**
	Others	34.1	33.3	6.7	16.7	3.2	13.3	**15**
Economic status	High	29.1	20.9	9.9	2.6	2.7	4.0	**101**
	Middle	22.3	12.5	13.6	2.7	1.9	1.7	**715**
	Low	21.2	15.8	13.0	3.9	2.5	1.6	**913**
	Very low	21.7	14.1	12.6	7.7	2.7	2.6	**730**
Employment status	A student	8.8	6.3	2.8	1.1	1.6	0.6	**355**
	Unemployed	19.6	15.2	9.4	5.2	1.3	1.9	**594**
	Employed	31.0	18.1	16.7	5.4	2.7	2.6	**1469**
	Others	9.0	4.4	8.5	6.4	1.9	2.1	**94**
Education level	No formal	13.6	14.8	16.3	2.6	16.3	6.7	**178**
	Primary	20.6	15.4	14.8	1.7	4.4	2.3	**1066**
	Secondary	22.3	16.9	10.8	1.7	2.6	1.2	**951**
	Post-secondary	31.3	12.8	10.2	5.8	4.2	2.2	**314**
Total		**21.7**	**14.9**	**12.8**	**4.9**	**2.4**	**2.1**	**2520**

According to Table 28 below, lifetime usage of *kuber* stands at 1.2% in 2017 among the respondents aged 15 – 65 years. The trend shows a decline in prevalence from year 2012 (1.6%). Nairobi region is leading in the lifetime usage of *kuber* (3.3%) followed by Nyanza 2.3%, Eastern 1.1% and Western 1.1% regions.

Data also shows that lifetime usage of *shisha* stands at 0.6% in 2017. The trend shows an increase from 0.4% in 2012. However, data on *shisha* was not captured in 2007. Nairobi region is leading in the lifetime usage of *shisha* (2.4%) followed by Central 0.6% region.

Data on usage of tobacco shows that the lifetime prevalence stands at 14.8% in 2017. The trend shows a slight decline from 16.7% in 2012.

Table 28: Lifetime usage of tobacco among respondents aged 15 – 65 years cont'

Characteristic		Kuber		Shisha		At least one type of tobacco product		Total
		2012	**2017**	**2012**	**2017**	**2012**	**2017**	
Setting	Urban	2.5	1.9	0.8	1.2	20.5	17.9	**744**
	Rural	1.2	0.9	0.2	0.3	14.5	13.5	**1776**
Region	Nairobi	2.3	3.3	2.0	2.4	22.6	21.7	**212**
	N. Eastern	2.2	-	1.1	-	21.5	13.5	**148**
	Coast	3.1	0.9	-	0.5	21.7	21.6	**218**
	Central	0.8	1.0	0.3	0.6	18.1	15.4	**312**
	Eastern	1.3	1.1	-	0.3	19.2	17.8	**377**
	R. Valley	1.4	0.5	0.5	0.5	15.9	13.2	**643**
	Nyanza	2.1	2.3	-	0.3	7.9	9.1	**342**
	Western	1.1	1.1	-	0.4	10.2	10.8	**268**
Gender	Male	2.1	2.0	0.5	0.9	27.3	26.4	**1229**
	Female	1.1	0.5	0.3	0.2	5.6	3.8	**1291**
Age in years	15 – 17	1.6	-	-	-	6.2	1.1	**174**
	18 – 24	2.9	1.4	1.1	0.4	13.1	7.0	**497**
	25 – 35	1.9	1.1	0.5	1.0	16.1	12.0	**833**
	36+	0.7	1.3	0.1	0.4	20.1	23.3	**1003**
Religion	Christian	1.5	1.1	0.4	0.5	15.3	13.8	**2200**
	Muslim	2.3	1.3	0.8	0.3	23.9	21.3	**305**
	Others	4.8	6.7	-	6.7	34.9	26.7	**15**
Economic status	High	3.8	3.0	3.0	3.0	24.0	12.9	**101**
	Middle	1.6	1.1	0.3	0.7	13.8	15.1	**715**
	Low	1.9	0.7	-	0.4	17.8	14.7	**913**
	Very low	0.7	1.6	0.1	0.3	15.7	15.1	**730**
Employment status	A student	2.4	0.6	0.8	-	7.8	3.4	**355**
	Unemployed	0.8	0.7	0.8	-	16.9	10.9	**594**
	Employed	2.0	1.6	0.4	0.8	20.0	19.2	**1469**
	Others	-	-	-	-	5.9	10.6	**94**
Education level	No formal	1.3	1.1	0.1	-	16.5	21.3	**178**
	Primary	1.8	1.1	0.3	0.4	16.5	16.3	**1066**
	Secondary	2.8	1.3	1.7	0.5	18.6	12.4	**951**
	Post-secondary	-	1.3	-	1.3	17.4	13.4	**314**
Total		**1.6**	**1.2**	**0.4**	**0.6**	**16.7**	**14.8**	**2520**

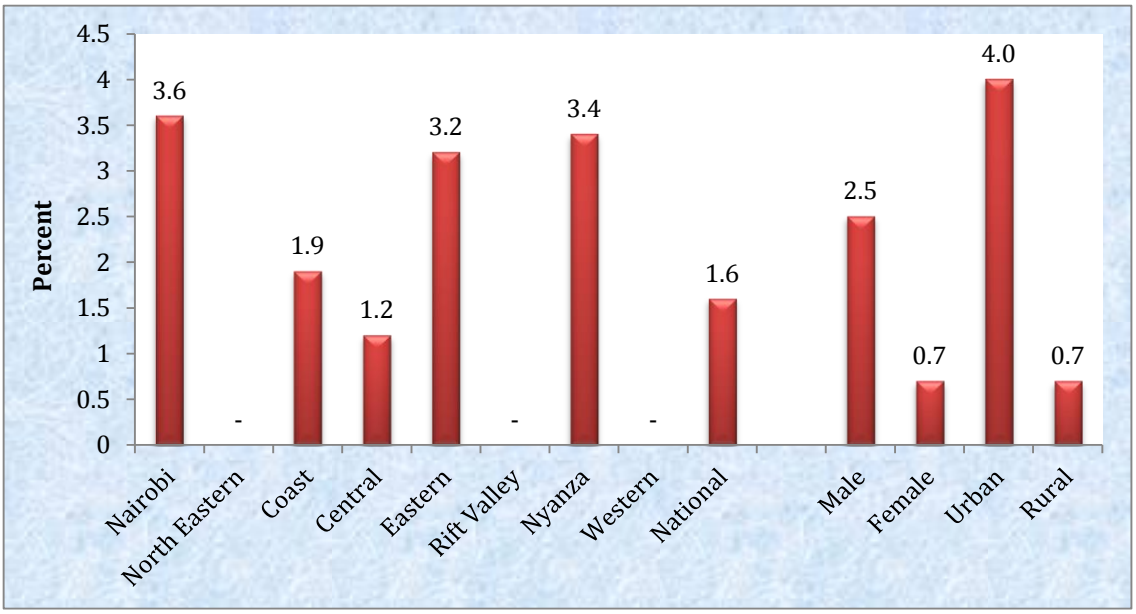
According to Table 29 below, data among the respondents aged 10 – 14 years shows that the prevalence of lifetime usage of cigarettes in 2017 stands at 0.5%, sniffed/ chewed/ piped tobacco 0.5% and *shisha* stands at 0.5%. However, lifetime usage of *kuber* was not reported. Lifetime usage of tobacco stands at 1.6% in 2017.

Table 29: Lifetime usage of tobacco among respondents aged 10 -14 years (n=628)

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	2.8	1.1	-	1.1	4.0	**176**
	Rural	0.2	0.2	-	0.2	0.7	**452**
Region	Nairobi	3.6	-	-	-	3.6	**56**
	N. Eastern	-	-	-	-	-	**34**
	Coast	-	-	-	1.9	1.9	**54**
	Central	1.2	-	-	-	1.2	**82**
	Eastern	2.1	1.1	-	2.1	3.2	**94**
	R. Valley	-	-	-	-	-	**159**
	Nyanza	1.1	2.3	-	-	3.4	**88**
	Western	-	-	-	-	-	**61**
Gender	Male	1.5	0.6	-	0.9	2.5	**324**
	Female	0.3	0.3	-	-	0.7	**304**
Total		**1.0**	**0.5**	**-**	**0.5**	**1.6**	**628**

Data according to Figure 12 below among respondents aged 10 – 14 years shows that the prevalence of lifetime usage of tobacco product stands at 1.6% in 2017. Nairobi region is leading in the prevalence of lifetime usage of tobacco product in 2017 (3.6%) followed by Nyanza 3.4% and Eastern 3.2% regions. The prevalence of lifetime usage of tobacco is higher among males 2.5% compared to females 0.7%. The prevalence is also higher among the respondents from urban areas 4.0% compared to those in the rural areas 0.7%.

Figure 12: Lifetime usage of tobacco among respondents aged 10 -14 years (n=628)



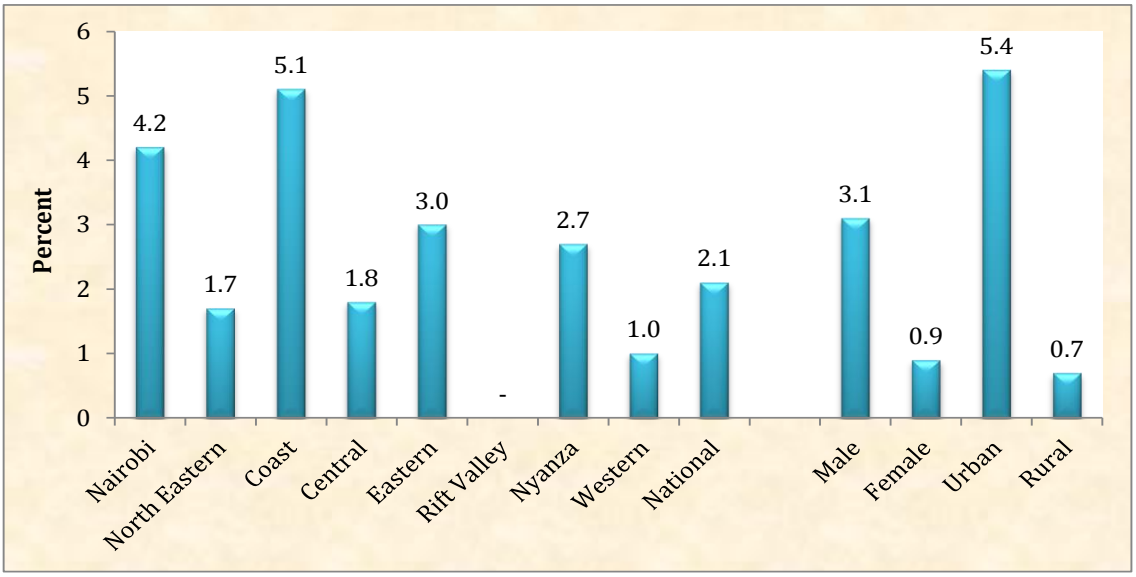
According to Table 30 below, data among the respondents aged 10 – 19 years shows that the prevalence of lifetime usage of cigarettes in 2017 stands at 1.4%, sniffed/ chewed/ piped tobacco 0.4%, *shisha* 0.3% and *kuber* stands at 0.2%. Lifetime usage of tobacco stands at 2.1% in 2017.

Table 30: Lifetime usage of tobacco among respondents aged 10 -19 years

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	3.9	1.2	0.8	0.8	5.4	**259**
	Rural	0.4	0.1	-	0.1	0.7	**667**
Region	Nairobi	2.8	-	1.4	-	4.2	**72**
	N. Eastern	1.7	-	-	-	1.7	**59**
	Coast	3.8	1.3	-	1.3	5.1	**79**
	Central	1.8	-	-	-	1.8	**109**
	Eastern	1.5	0.8	0.8	1.5	3.0	**132**
	R. Valley	-	-	-	-	-	**230**
	Nyanza	1.4	1.4	-	-	2.7	**147**
	Western	1.0	-	-	-	1.0	**98**
Gender	Male	2.3	0.6	0.2	0.6	3.1	**480**
	Female	0.4	0.2	0.2	-	0.9	**446**
Total		**1.4**	**0.4**	**0.2**	**0.3**	**2.1**	**926**

Data according to Figure 13 below among respondents aged 10 – 19 years shows that the prevalence of lifetime usage of tobacco stands at 2.1% in 2017. Coast region is leading in the prevalence of lifetime usage of tobacco (5.1%) followed by Nairobi 4.2% and Eastern 3.0% regions. The prevalence of lifetime usage of tobacco is higher among males 3.1% compared to females 0.9%. The prevalence is also higher among the respondents from urban areas 5.4% compared to those in the rural areas 0.7%.

Figure 13: Lifetime usage of tobacco among respondents aged 10 -19 years (n=926)



According to Table 31 below, data among the respondents aged 15 – 24 years shows that the prevalence of lifetime usage of cigarettes in 2017 stands at 3.7%, sniffed/ chewed/ piped tobacco 0.9%, *kuber* 1.1% and *shisha* stands at 2.4%. Lifetime usage of tobacco product stands at 5.2% in 2017.

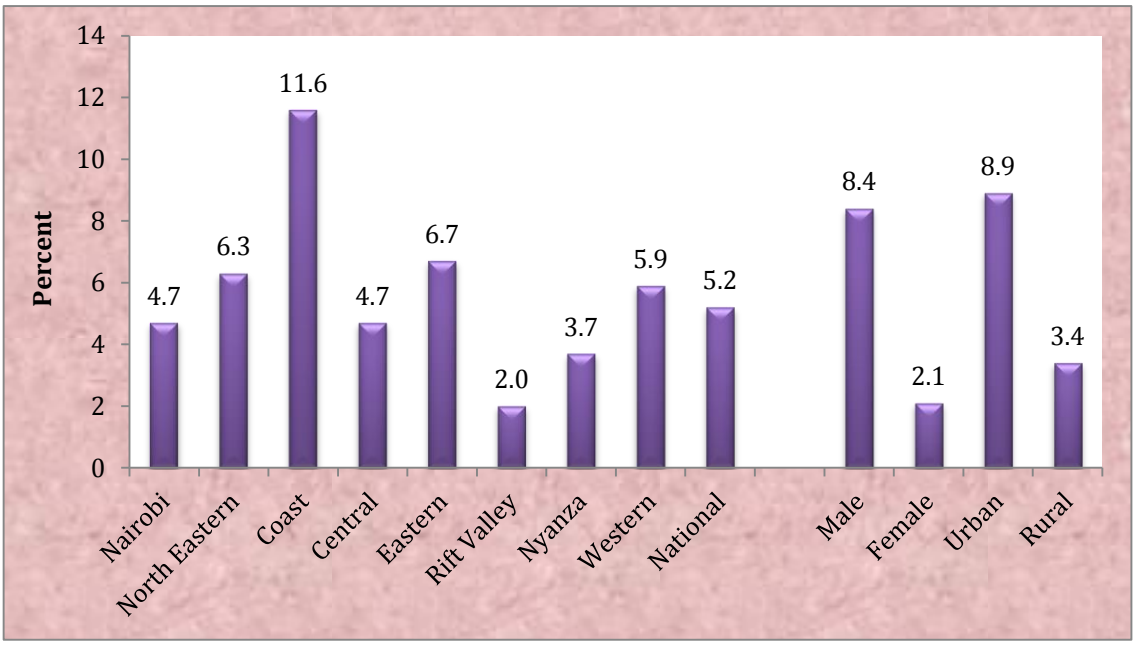
Table 31: Lifetime usage of tobacco among respondents aged 15 -24 years

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	7.5	0.9	0.9	0.5	8.9	**198**
	Rural	1.8	0.9	1.1	0.2	3.4	**435**
Region	Nairobi	2.3	-	2.3	-	4.7	**43**
	N. Eastern	4.8	3.2	-	-	6.3	**63**
	Coast	11.6	1.4	-	-	11.6	**69**
	Central	1.6	1.6	1.6	1.6	4.7	**64**
	Eastern	5.6	-	1.1	-	6.7	**90**
	R. Valley	0.7	1.3	0.7	0.7	2.0	**152**
	Nyanza	0.9	-	2.8	-	3.7	**108**
	Western	5.9	-	-	-	5.9	**68**
Gender	Male	6.2	1.5	1.2	0.6	8.4	**323**
	Female	1.2	0.3	0.9	-	2.1	**334**
Total		**3.7**	**0.9**	**1.1**	**0.3**	**5.2**	**657**

Data according to Figure 14 below among respondents aged 15 – 24 years shows that the prevalence of lifetime usage of tobacco stands at 5.2% in 2017. Coast region is leading in the prevalence of lifetime usage of tobacco (11.6%) followed by Eastern 6.7% and North Eastern 6.3% regions.

The prevalence of lifetime usage of tobacco is higher among males 8.4% compared to females 2.1%. The prevalence is also higher among respondents from urban areas 8.9% compared to those in the rural areas 3.4%.

Figure 14: Lifetime usage of tobacco among respondents aged 15 -24 years (n=657)



According to Table 32 below, data among the respondents aged 25 – 35 years shows that the prevalence of lifetime usage of cigarettes in 2017 stands at 10.4%, sniffed/ chewed/ piped tobacco 1.6%, *kuber* 1.1% and *shisha* stands at 1.0%. Lifetime usage of tobacco product stands at 12.0% in 2017.

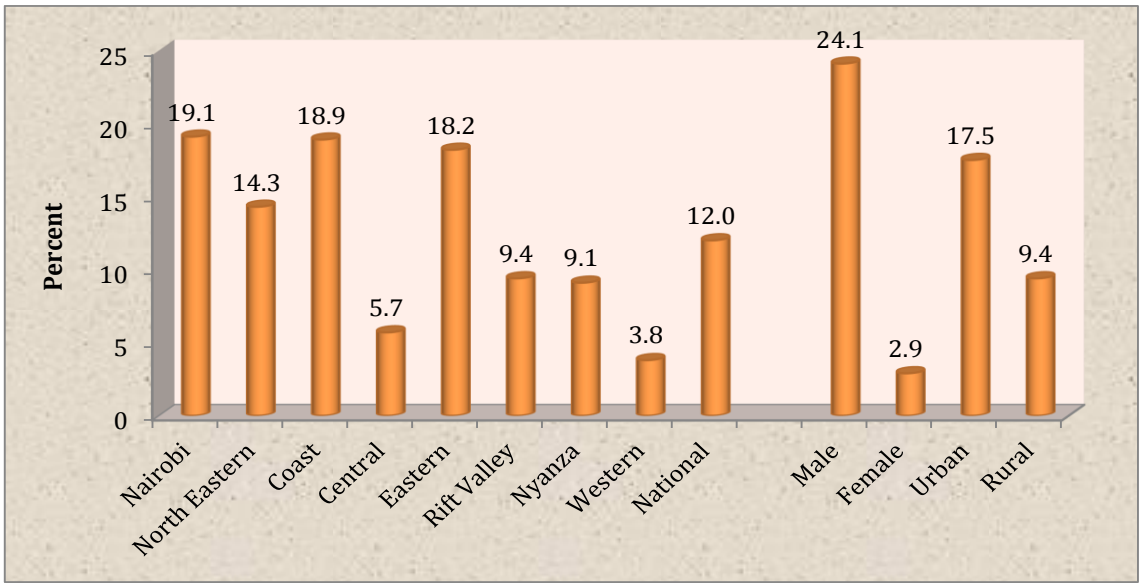
Table 32: Lifetime usage of tobacco among respondents aged 25 -35 years

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	14.9	3.0	1.9	2.2	17.5	**269**
	Rural	8.3	0.9	0.7	0.4	9.4	**564**
Region	Nairobi	16.9	3.4	3.4	5.6	19.1	**89**
	N. Eastern	12.2	4.1	-	-	14.3	**49**
	Coast	14.9	4.1	-	1.4	18.9	**74**
	Central	5.7	-	-	-	5.7	**105**
	Eastern	17.4	1.5	1.5	-	18.2	**132**
	R. Valley	8.0	0.9	0.5	0.5	9.4	**213**
	Nyanza	6.1	1.0	3.0	1.0	9.1	**99**
	Western	3.8	-	-	-	3.8	**72**
Gender	Male	21.3	2.5	2.5	2.0	24.1	**357**
	Female	2.3	0.8	-	0.2	2.9	**476**
Total		**10.4**	**1.6**	**1.1**	**1.0**	**12.0**	**833**

Data according to Figure 15 below among respondents aged 25 – 35 years shows that the prevalence of lifetime usage of tobacco stands at 12.0% in 2017. Nairobi region is leading in the prevalence of lifetime usage of tobacco (19.1%) followed by Coast 18.9% and Eastern 18.2% regions.

The prevalence of lifetime usage of tobacco is higher among males 24.1% compared to females 2.9%. The prevalence is also higher among respondents from urban areas 17.5% compared to those in the rural areas 9.4%.

Figure 15: Lifetime usage of tobacco among respondents aged 25 -35 years (n=833)



According to Table 33 below, data among the respondents aged 18 – 65 years shows that the prevalence of lifetime usage of cigarettes in 2017 stands at 13.7%, sniffed/ chewed/ piped tobacco 2.3%, *kuber* 1.2% and *shisha* stands at 0.6%. Lifetime usage of tobacco stands at 15.8% in 2017.

Table 33: Lifetime usage of tobacco among respondents aged 18 -65 years (n=2333)

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	16.6	2.6	1.9	1.3	18.9	**694**
	Rural	12.4	2.2	1.0	0.3	14.5	**1639**
Region	Nairobi	20.4	2.5	3.5	2.5	22.9	**201**
	N. Eastern	12.8	5.3	-	-	14.3	**133**
	Coast	19.8	3.4	1.0	0.5	22.7	**207**
	Central	15.1	0.7	1.0	0.7	16.2	**291**
	Eastern	17.2	2.3	1.1	0.3	18.9	**349**
	R. Valley	12.4	2.0	0.5	0.5	14.2	**599**
	Nyanza	6.8	1.9	2.3	0.3	9.7	**309**
	Western	8.6	2.9	1.2	0.4	11.9	**244**
Gender	Male	25.3	3.6	2.0	1.0	28.3	**1133**
	Female	2.7	1.1	0.5	0.3	4.0	**1200**
Total		**13.7**	**2.3**	**1.2**	**0.6**	**15.8**	**2333**

According to Figure 16 below among respondents aged 18 - 65 years, the prevalence of lifetime usage of tobacco stands at 15.8% in 2017. Nairobi region is leading in the prevalence of lifetime usage of tobacco (22.9%) followed by Coast 22.7% and Eastern 18.9% regions. The prevalence of lifetime usage of tobacco is higher among males 28.3% compared to females 4.0%. The prevalence is also higher among the respondents from urban areas 18.9% compared to those in the rural areas 14.5%.

Figure 16: Lifetime usage of tobacco among respondents aged 18 -65 years (n=2333)

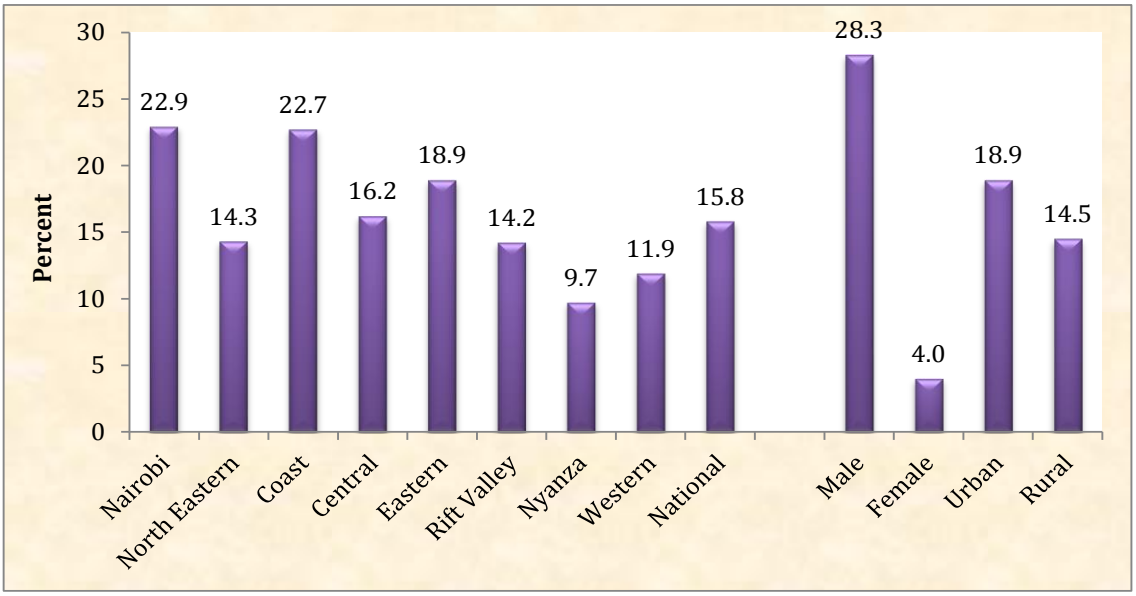


Figure 17 below among respondents aged 15 – 65 years shows that the prevalence of lifetime usage of tobacco stands at 14.8% in 2017. Nairobi region is leading in the prevalence of lifetime usage of tobacco (21.7%) followed by Coast 21.6% and Eastern 17.8% regions.

The prevalence of lifetime usage of tobacco is higher among males 26.4% compared to females 3.8%. The prevalence is also higher among the respondents from urban areas 17.9% compared to those in the rural areas 13.5%.

Figure 17: Lifetime usage of tobacco among respondents aged 15 -65 years (n=2520)

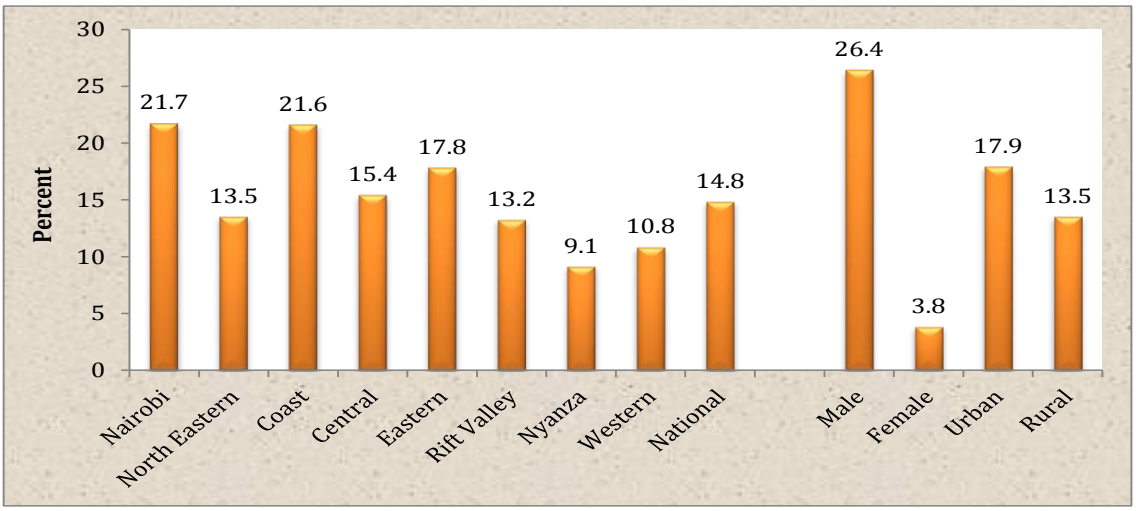
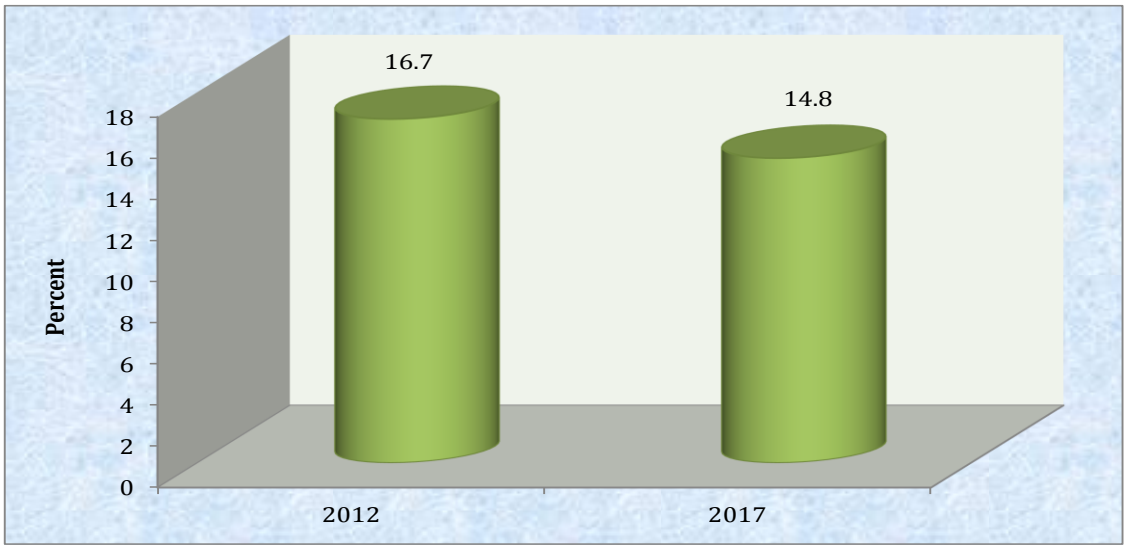


Figure 18 below shows the trend of lifetime usage of tobacco. The data shows that the prevalence in the lifetime usage of tobacco has declined from 16.7% in 2012 to 14.8% in 2017.

Figure 18: Trend of lifetime usage of tobacco among respondents aged 15 -65 years (n=2520)



5.3 Lifetime usage of *khat/ miraa*

Respondents were asked whether they have ever used *khat*/ *miraa* at least once in the past. Findings according to Table 34 shows that 7.2% of the respondents aged 15 – 65 years have ever used *miraa* at least once in the past in 2017. The trend shows a decline from 8.1% in 2012. Coast region is leading in the lifetime use of *miraa* (17.0%) followed by Eastern 15.4% and North Eastern 14.2% regions. The data also shows that lifetime usage of *muguka* stands at 3.1% in 2017. The trend shows an increase from 2.3% in 2012. Eastern region is leading in the lifetime usage of *muguka* (7.7%) followed by Nairobi 6.6% and Coast 5.5% regions.

Data on usage of total *khat* shows that the lifetime prevalence stands at 8.7% in 2017. The trend shows a slight decline from to 8.9% in 2012. The prevalence is however much lower compared to 11.3% in 2007.

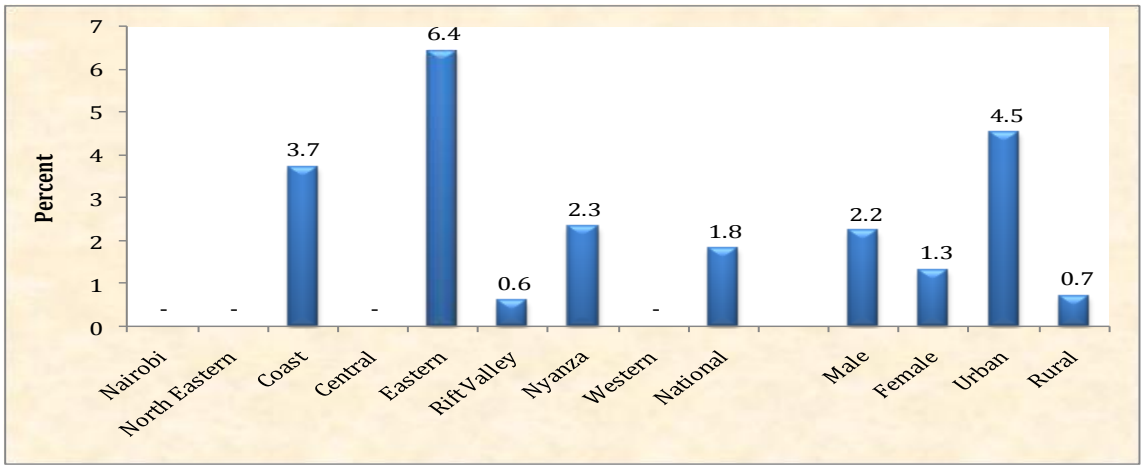
Table 34: Lifetime usage of khat/ miraa among respondents aged 15 – 65 years

Characteristic		Khat (Miraa)		Khat (Muguka)		Total Khat[2]			Total
		2012	2017	2012	2017	2007	2012	2017	
Setting	Urban	13.1	11.2	3.7	7.0	9.9	14.3	14.9	**744**
	Rural	5.2	5.5	1.4	1.5	15.4	5.6	6.1	**1776**
Region	Nairobi	10.5	6.6	6.2	6.6	15.3	12.8	10.4	**212**
	N. Eastern	37.6	14.2	4.3	2.0	23.4	38.7	14.9	**148**
	Coast	15.0	17.0	1.8	5.5	16.6	15.5	20.2	**218**
	Central	3.8	3.5	0.3	1.9	7.4	4.0	4.5	**312**
	Eastern	11.3	15.4	5.6	7.7	25.8	13.0	18.8	**377**
	R. Valley	5.0	4.4	1.3	1.4	4.7	5.4	5.0	**643**
	Nyanza	4.1	2.6	-	1.2	5.1	4.1	5.0	**342**
	Western	2.6	1.1	0.4	0.4	1.7	2.6	1.1	**268**
Gender	Male	12.5	12.2	3.7	5.0	18.5	14.0	14.6	**1229**
	Female	3.5	2.4	0.8	1.2	4.5	3.5	3.0	**1291**
Age in years	15 – 17	1.6	2.3	0.8	1.1	6.3	2.3	2.9	**174**
	18 – 24	9.3	5.4	3.6	4.0	11.7	10.0	8.0	**497**
	25 – 35	11.1	7.9	2.9	4.3	14.4	11.4	10.1	**833**
	36+	6.3	8.3	1.4	2.0	9.6	6.7	8.9	**1003**
Religion	Christian	5.7	5.2	1.8	2.5	9.1	6.2	6.5	**2200**
	Muslim	28.2	21.6	5.4	7.9	24.7	30.1	25.2	**305**
	Others	9.0	-	6.4	-	22.8	12.7	-	**15**
Economic status	High	10.7	8.9	4.9	3.0	13.6	12.6	11.9	**101**
	Middle	9.8	8.1	2.6	4.1	12.4	10.3	10.1	**715**
	Low	7.0	7.9	2.0	3.5	10.9	7.8	9.5	**913**
	Very low	7.0	5.5	1.4	1.9	10.4	7.5	6.3	**730**
Employment status	A student	6.7	4.2	2.0	1.4	6.3	7.1	5.1	**355**
	Unemployed	7.2	4.0	1.3	2.4	12.3	8.0	5.2	**594**
	Employed	9.3	9.5	3.0	4.0	15.0	10.2	11.4	**1469**
	Others	4.4	-	-	-	5.0	4.4	-	**94**
Education status	No formal	6.6	10.7	2.3	2.2	11.7	7.4	10.7	**178**
	Primary	8.9	7.0	2.4	3.9	11.1	9.7	9.1	**1066**
	Secondary	9.3	6.6	2.4	2.4	11.4	9.7	7.9	**951**
	Post-secondary	16.3	7.3	2.3	2.9	11.8	16.3	8.6	**314**
Total		**8.1**	**7.2**	**2.3**	**3.1**	**11.3**	**8.9**	**8.7**	**2520**

[2] In 2007 khat was captured as "miraa" and not disaggregated into the two common variants (i.e. muguka and miraa)

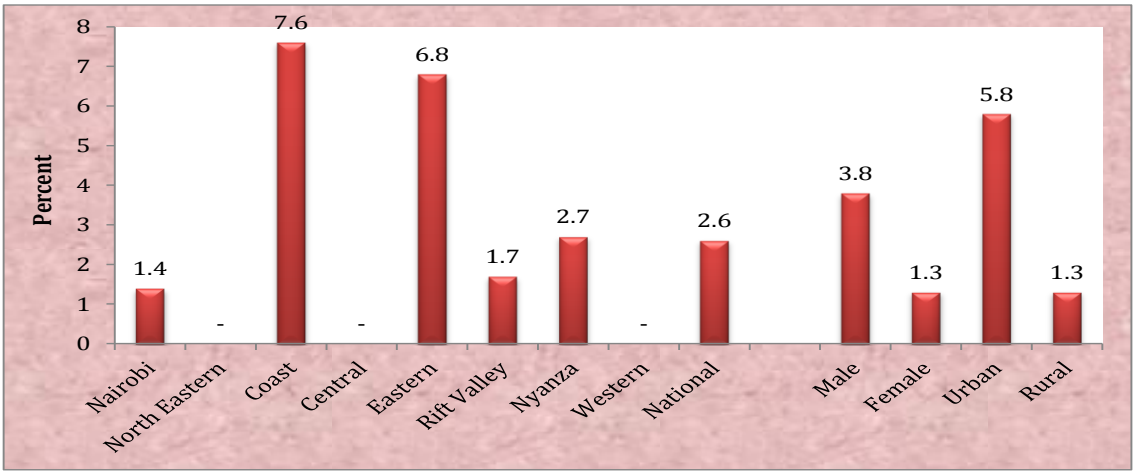
Data according to Figure 19 below among respondents aged 10 – 14 years shows that the prevalence of lifetime usage of total *khat* stands at 1.8% in 2017. Eastern region is leading in the prevalence of lifetime usage of total *khat* in 2017 (6.4%) followed by Coast 3.7% and Nyanza 2.3% regions. The prevalence of lifetime usage of total *khat* is higher among males 2.2% compared to females 1.3%. The prevalence is also higher among the respondents from urban areas 4.5% compared to those in the rural areas 0.7%.

Figure 19: Lifetime usage of total khat/ miraa among respondents aged 10 – 14 years (n=628)



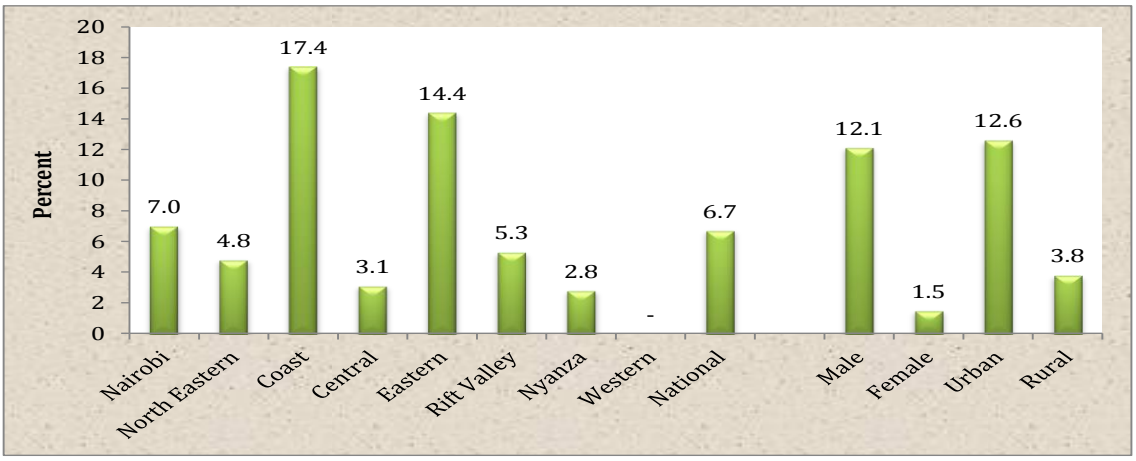
Data according to Figure 20 below among respondents aged 10 – 19 years shows that the prevalence of lifetime usage of total *khat* stands at 2.6% in 2017. Coast region is leading in the prevalence of lifetime usage of total *khat* in 2017 (7.6%) followed by Eastern 6.8% and Nyanza 2.7% regions. The prevalence of lifetime usage of total *khat* is higher among males 3.8% compared to females 1.3%. The prevalence is also higher among the respondents from urban areas 5.8% compared to those in the rural areas 1.3%.

Figure 20: Ever use of total khat/ miraa among respondents aged 10 – 19 years (n=926)



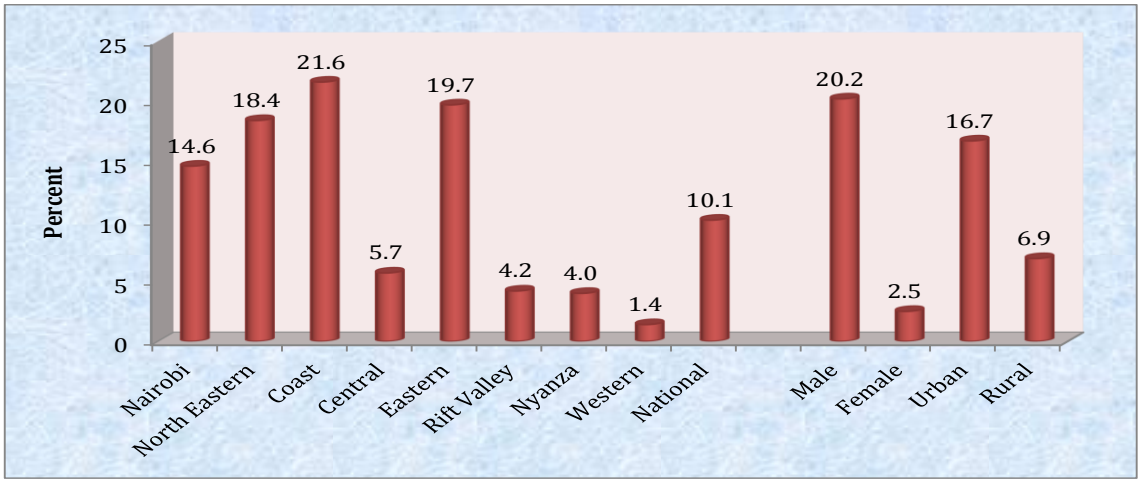
Data according to Figure 21 below among respondents aged 15 – 24 years shows that the prevalence of lifetime usage of total *khat* stands at 6.7% in 2017. Coast region is leading in the prevalence of lifetime usage of total *khat* in 2017 (17.4%) followed by Eastern 14.4% and Nairobi 7.0% regions. The prevalence of lifetime usage of total *khat* is higher among males 12.1% compared to females 1.5%. The prevalence is also higher among the respondents from urban areas 12.6% compared to those in the rural areas 3.8%.

Figure 21: Lifetime usage of total khat/ miraa among respondents aged 15 – 24 years (n=657)



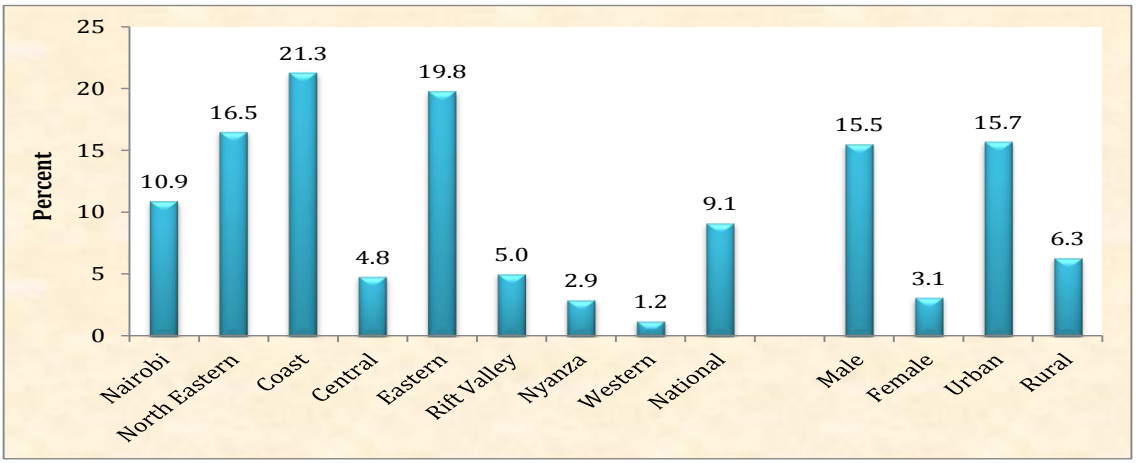
Data according to Figure 22 below among respondents aged 25 – 35 years shows that the prevalence of lifetime usage of total *khat* stands at 10.1% in 2017. Coast region is leading in the prevalence of lifetime usage of total *khat* in 2017 (21.6%) followed by Eastern 19.7% and North Eastern 18.4% regions. The prevalence of lifetime usage of total *khat* is higher among males 20.2% compared to females 2.5%. The prevalence is also higher among the respondents from urban areas 16.7% compared to those in the rural areas 6.9%.

Figure 22: Lifetime usage of total khat/ miraa among respondents aged 25 – 35 years (n=833)



Data according to Figure 23 below among respondents aged 18 – 65 years shows that the prevalence of lifetime usage of total *khat* stands at 9.1% in 2017. Coast region is leading in the prevalence of lifetime usage of total *khat* in 2017 (21.3%) followed by Eastern 19.8% and North Eastern 16.5% regions. The prevalence of lifetime usage of total *khat* is higher among males 15.5% compared to females 3.1%. The prevalence is also higher among the respondents from urban areas 15.7% compared to those in the rural areas 6.3%.

Figure 23: Ever use of total khat/ miraa among respondents aged 18 – 65 years (n=2333)



Data according to Figure 24 below among respondents aged 15 – 65 years shows that the prevalence of lifetime usage of total *khat* stands at 8.7% in 2017. Coast region is leading in the prevalence of lifetime usage of total *khat* in 2017 (20.2%) followed by Eastern 18.8% and North Eastern 14.9% regions. The prevalence of lifetime usage of total *khat* is higher among males 14.6% compared to females 3.0%. The prevalence is also higher among the respondents from urban areas 14.9% compared to those in the rural areas 6.1%.

Figure 24: Lifetime usage of total khat/ miraa among respondents aged 15 – 65 years (n=2520)

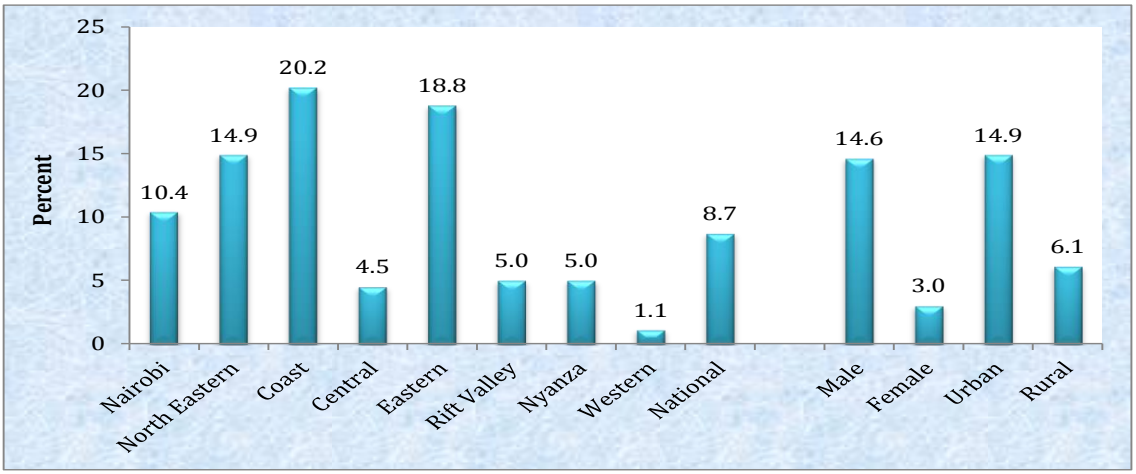
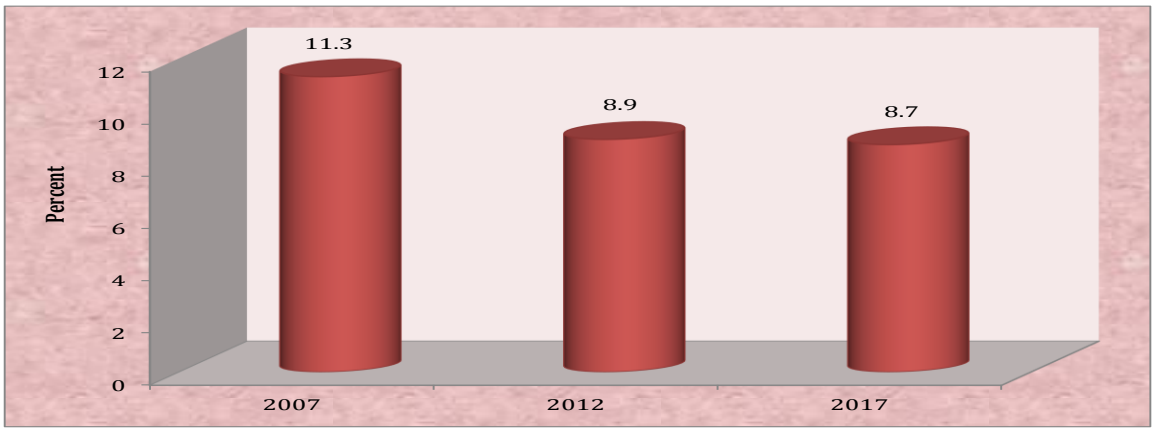


Figure 25 below shows the trend of lifetime usage of total *khat*. The data shows that the prevalence in the lifetime usage of total *khat* has declined slightly from 8.9% in 2012 to 8.7% in 2017. The prevalence in 2017 is also lower compared to 11.3% in 2007.

Figure 25: Trend of lifetime usage of total khat/miraa among respondents aged 15 – 65 years olds (n=2520)



5.4 Lifetime usage of narcotics

The respondents were asked whether they have ever used any narcotic drug at least once in the past. Findings according to Table 35 shows that 4.5% of the respondents aged 15 – 65 years have ever used bhang at least once in the past in 2017. The trend shows a decline from 6.5% in 2007 and 5.4% in 2012. Nairobi region is leading in the lifetime use of bhang (8.5%) followed by Coast 8.3% and Nyanza 6.4% regions.

The data also shows that lifetime usage of hashish stands at 0.1% in 2017. The trend shows a decline from 0.3% in 2007 and 0.6% in 2012.

Table 35: Lifetime usage of narcotics among respondents aged 15 – 65 years

Characteristic		Bhang			Hashish			Total
		2007	2012	2017	2007	2012	2017	
Setting	Urban	8.9	7.5	6.2	0.9	0.9	0.1	**744**
	Rural	5.7	4.1	3.8	0.2	0.4	0.1	**1776**
Region	Nairobi	8.0	8.9	8.5	1.4	1.0	-	**212**
	N. Eastern	21.3	4.3	1.4	0	2.2	-	**148**
	Coast	8.6	8.4	8.3	1.7	2.2	-	**218**
	Central	9.9	4.6	2.9	-	-	-	**312**
	Eastern	24.4	4.0	4.5	-	0.5	0.3	**377**
	R. Valley	17.6	4.6	2.3	0.1	0.3	-	**643**
	Nyanza	17.7	4.6	6.4	-	0.3	-	**342**
	Western	9.3	6.2	4.5	-	-	0.4	**268**
Gender	Male	11.9	8.0	7.6	0.4	1.0	0.1	**1229**
	Female	1.4	2.7	1.5	0.3	0.2	0.1	**1291**
Age in years	15 – 17	1.1	3.1	1.7	-	0.8	-	**174**
	18 – 24	6.5	6.3	3.4	0.3	0.5	-	**497**
	25 – 35	8.9	6.9	5.8	0.6	0.7	-	**833**
	36+	5.9	4.1	4.7	0.1	0.5	0.2	**1003**
Religion	Christian	6.2	4.4	4.2	0.3	0.5	0.1	**2200**

	Muslim	6.9	7.7	6.2	0.6	1.9	-	**305**
	Others	12.6	17.5	6.7	0.8	0	-	**15**
Economic status	High	5.9	9.1	6.9	1.2	0.8	-	**101**
	Middle	7.9	4.3	5.0	0.3	0.9	0.1	**715**
	Low	6.0	5.7	3.6	0.1	0.6	0.1	**913**
	Very low	5.9	4.5	4.9	0.3	0.3	-	**730**
Employment status	A student	3.2	2.4	2.5	0.2	0.4	-	**355**
	Unemployed	6.5	4.6	3.0	0.5	0.4	-	**594**
	Employed	9.1	6.3	5.7	0.3	0.7	0.1	**1469**
	Others	2.3	2.5	2.1	0.4	0	-	**94**
Education status	No formal	3.6	9.1	1.1	0.3	0.8	-	**178**
	Primary	6.0	4.4	4.6	0.2	0.9	0.1	**1066**
	Secondary	7.2	5.7	4.2	0.2	0.6	-	**951**
	Post-secondary	8.5	4.5	6.7	1.3	0.3	0.3	**314**
Total		**6.5**	**5.4**	**4.5**	**0.3**	**0.6**	**0.1**	**2520**

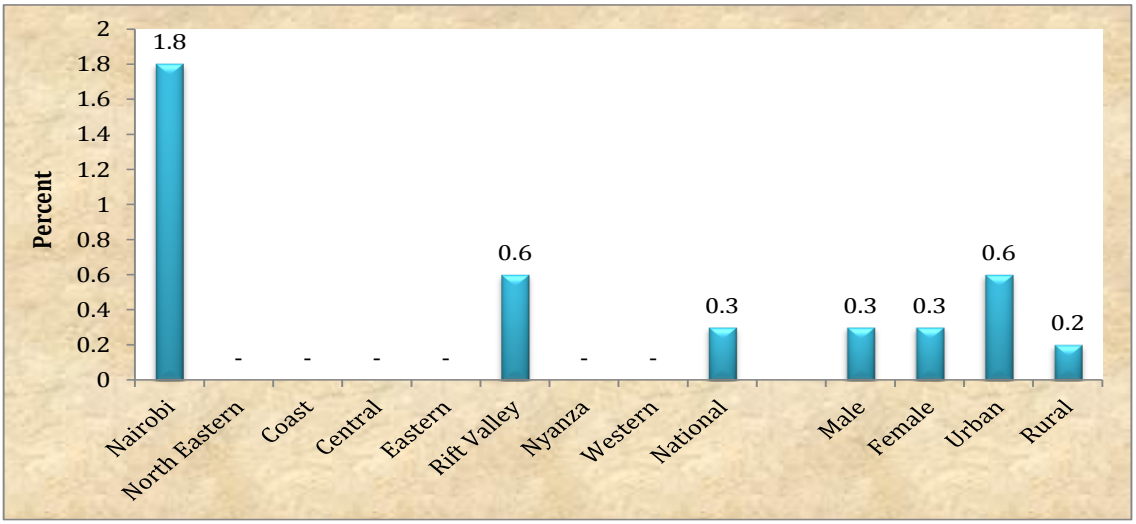
Findings according to Table 36 shows that 0.4% of the respondents aged 15 – 65 years have ever used cocaine at least once in the past in 2017. The trend shows a decline from 0.6% in 2012. Data also shows that the lifetime prevalence of heroin stands at 0.3% in 2017. The trend shows a decline from 0.7% in 2012.

Table 36: Lifetime usage of narcotics among respondents aged 15 – 65 years

Characteristic		**Cocaine**			**Heroin**			**Total**
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	1.2	0.7	0.7	0.9	1.0	0.4	**744**
	Rural	0.2	0.6	0.3	0.2	0.6	0.3	**1776**
Region	Nairobi	1.4	0.7	1.9	1.5	1.0	0.5	**212**
	N. Eastern	0	0	-	0	0	-	**148**
	Coast	1.8	0.9	-	0.8	1.3	0.5	**218**
	Central	0.3	0	0.3	0.9	0.5	0.3	**312**
	Eastern	0.2	1.0	-	0	1.3	-	**377**
	R. Valley	0.3	0.9	0.3	0.2	0.5	0.5	**643**
	Nyanza	0	0	0.6	0	0.7	0.3	**342**
	Western	0	0.8	0.7	0	0.4	0.4	**268**
Gender	Male	0.7	0.5	0.6	0.7	0.7	0.5	**1229**
	Female	0.2	0.7	0.3	0.2	0.8	0.2	**1291**
Age in years	15 – 17	0.2	0	-	0	0	-	**174**
	18 – 24	0.6	1.3	-	0.4	1.4	-	**497**
	25 – 35	0.7	0.8	0.8	0.5	0.8	0.5	**833**
	36+	0.1	0.3	0.4	0.3	0.5	0.4	**1003**
Religion	Christian	0.4	0.6	0.4	0.4	0.6	0.3	**2200**
	Muslim	0.6	0.4	1.0	0.3	1.2	0.7	**305**
	Others	1.8	0	-	1.0	3.2	-	**15**
Economic status	High	1.6	1.9	3.0	1.6	1.5	-	**101**
	Middle	0.5	0.7	0.6	0.8	0.9	0.4	**715**
	Low	0.4	0.6	0.1	0	0.6	0.1	**913**
	Very low	0.2	0.4	0.4	0.1	0.8	0.5	**730**
Employment status	A student	0.4	0.8	-	0	0.8	-	**355**
	Unemployed	0.6	0.4	-	0	0.4	-	**594**
	Employed	0.5	0.9	0.7	0.5	1.0	0.5	**1469**
	Others	0.3	0	-	0.4	0	-	**94**
Education status	No formal	0.3	1.9	0.6	0.3	1.5	-	**178**
	Primary	0.2	0.7	0.4	0.2	0.9	0.3	**1066**
	Secondary	0.4	0.6	0.5	0.3	0.6	0.3	**951**
	Post-secondary	1.3	0.4	0.3	1.6	0.8	0.3	**314**
Total		**0.4**	**0.6**	**0.4**	**0.4**	**0.7**	**0.3**	**2520**

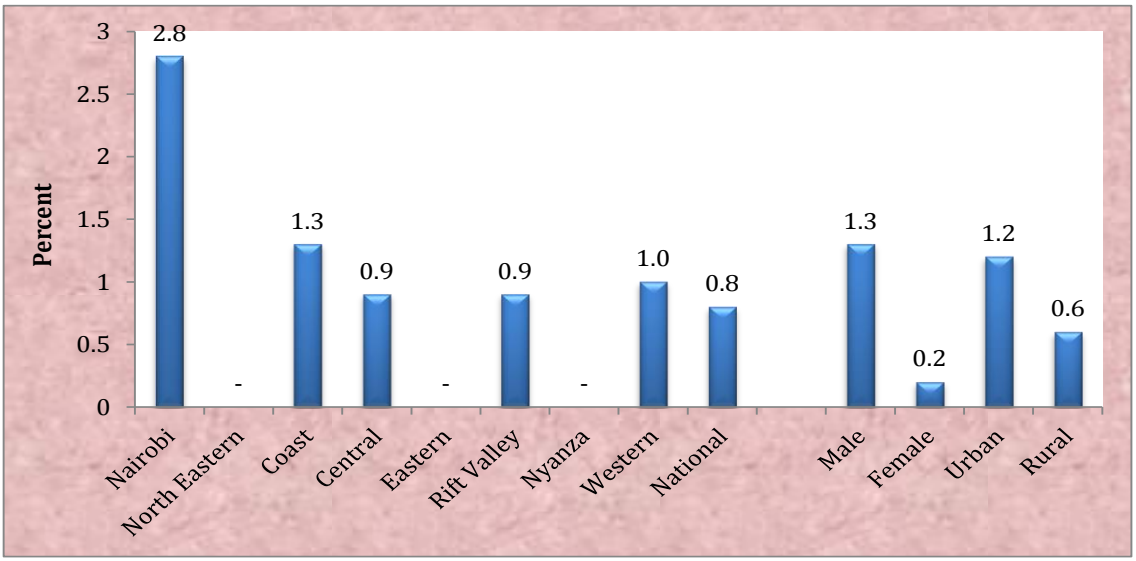
Data according to Figure 26 below among respondents aged 10 – 14 years shows that the prevalence of lifetime usage of bhang stands at 0.3% in 2017. Nairobi region is leading in the prevalence of lifetime usage of bhang in 2017 (1.8%) followed by Rift Valley 0.6% regions. The prevalence of lifetime usage of bhang is 0.3% among males and 0.3% among females. The prevalence is higher among the respondents from urban areas 0.6% compared to those in the rural areas 0.2%.

Figure 26: Lifetime usage of bhang among respondents aged 10 – 14 years (n=628)



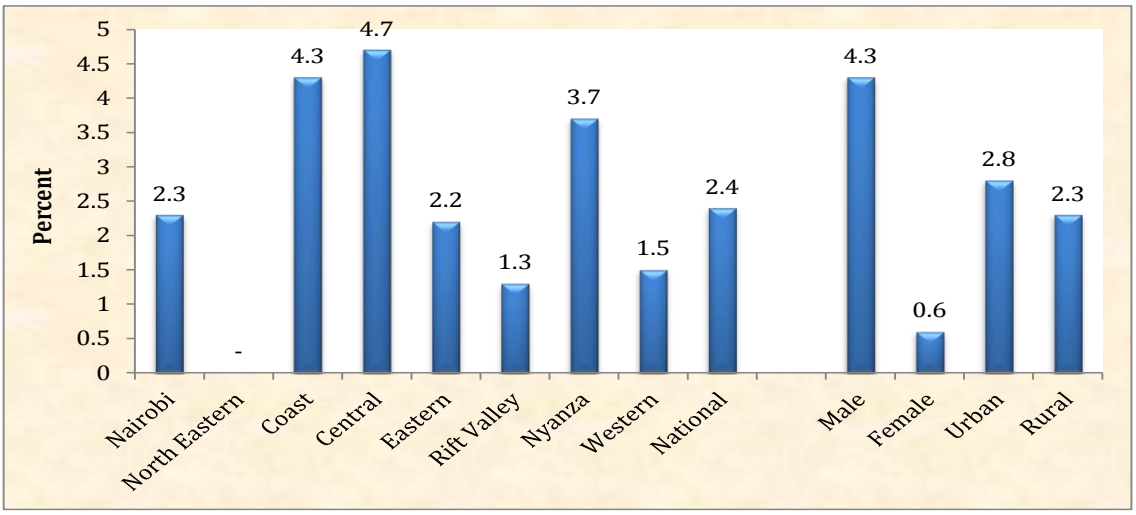
Data according to Figure 27 below among respondents aged 10 – 19 years shows that the prevalence of lifetime usage of bhang stands at 0.8% in 2017. Nairobi region is leading in the prevalence of lifetime usage of bhang in 2017 (2.8%) followed by Coast 1.3% and Western 1.0% regions. The prevalence of lifetime usage of bhang is higher among males 1.3% compared to females 0.2%. The prevalence is also higher among the respondents from urban areas 1.2% compared to those in the rural areas 0.6%.

Figure 27: Lifetime usage of bhang among respondents aged 10 – 19 years (n=926)



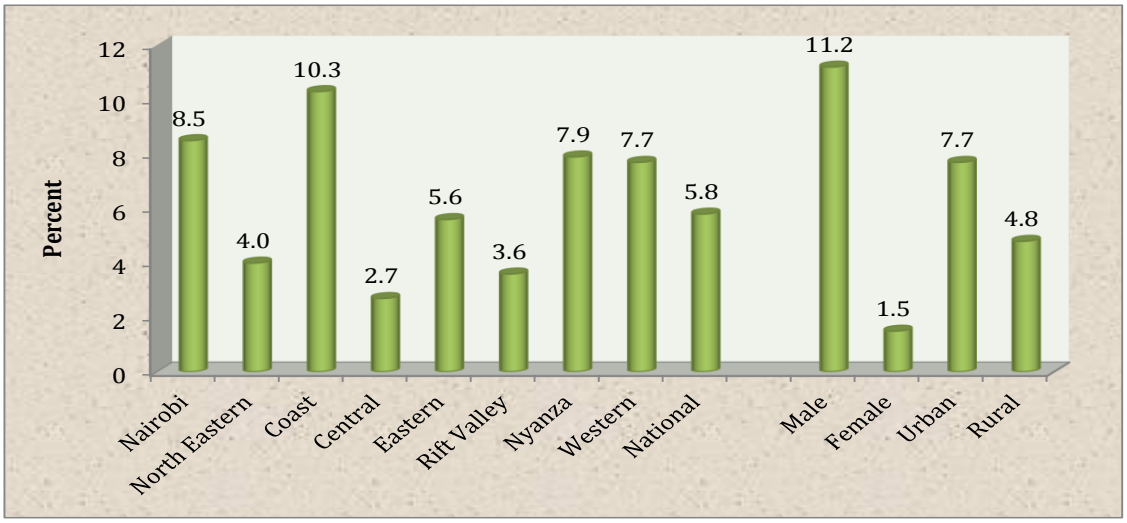
Data according to Figure 28 below among respondents aged 15 – 24 years shows that the prevalence of lifetime usage of bhang stands at 2.4% in 2017. Central region is leading in the prevalence of lifetime usage of bhang in 2017 (4.7%) followed by Coast 4.3% and Nyanza 3.7% regions. The prevalence of lifetime usage of bhang is higher among males 4.3% compared to females 0.6%. The prevalence is also higher among the respondents from urban areas 2.8% compared to those in the rural areas 2.3%.

Figure 28: Lifetime usage of bhang among respondents aged 15 – 24 years (n=657)



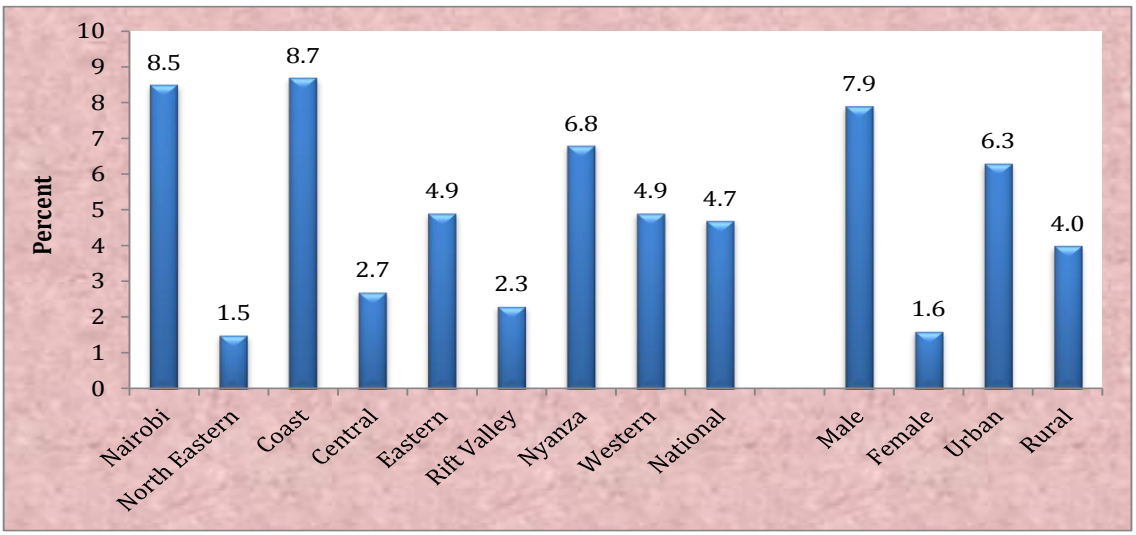
Data according to Figure 29 below among respondents aged 25 – 35 years shows that the prevalence of lifetime usage of bhang stands at 5.8% in 2017. Coast region is leading in the prevalence of lifetime usage of bhang in 2017 (10.3%) followed by Nairobi 8.5% and Nyanza 7.9% regions. The prevalence of lifetime usage of bhang is higher among males 11.2% compared to females 1.5%. The prevalence is also higher among the respondents from urban areas 7.7% compared to those in the rural areas 4.8%.

Figure 29: Lifetime usage of bhang among respondents aged 25 – 35 years (n=833)



Data according to Figure 30 below among respondents aged 18 – 65 years shows that the prevalence of lifetime usage of bhang stands at 4.7% in 2017. Coast region is leading in the prevalence of lifetime usage of bhang in 2017 (8.7%) followed by Nairobi 8.5% and Nyanza 6.8% regions. The prevalence of lifetime usage of bhang is higher among males 7.9% compared to females 1.6%. The prevalence is also higher among the respondents from urban areas 6.3% compared to those in the rural areas 4.0%.

Figure 30: Lifetime usage of bhang among respondents aged18 – 65 years (n=2333)



Data according to Figure 31 below among respondents aged 15 – 65 years shows that the prevalence of lifetime usage of bhang stands at 4.5% in 2017. Nairobi region is leading in the prevalence of lifetime usage of bhang in 2017 (8.5%) followed by Coast 8.3% and Nyanza 6.4% regions. The prevalence of lifetime usage of bhang is higher among males 7.6% compared to females 1.5%. The prevalence is also higher among the respondents from urban areas 6.2% compared to those in the rural areas 3.8%.

Figure 31: Lifetime usage of bhang among respondents aged 15 – 65 years

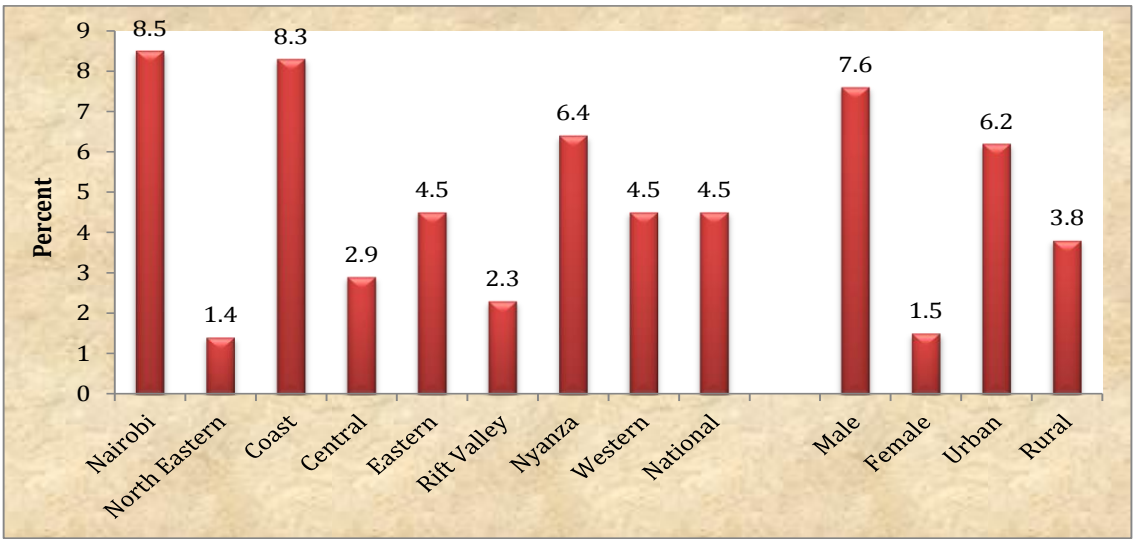
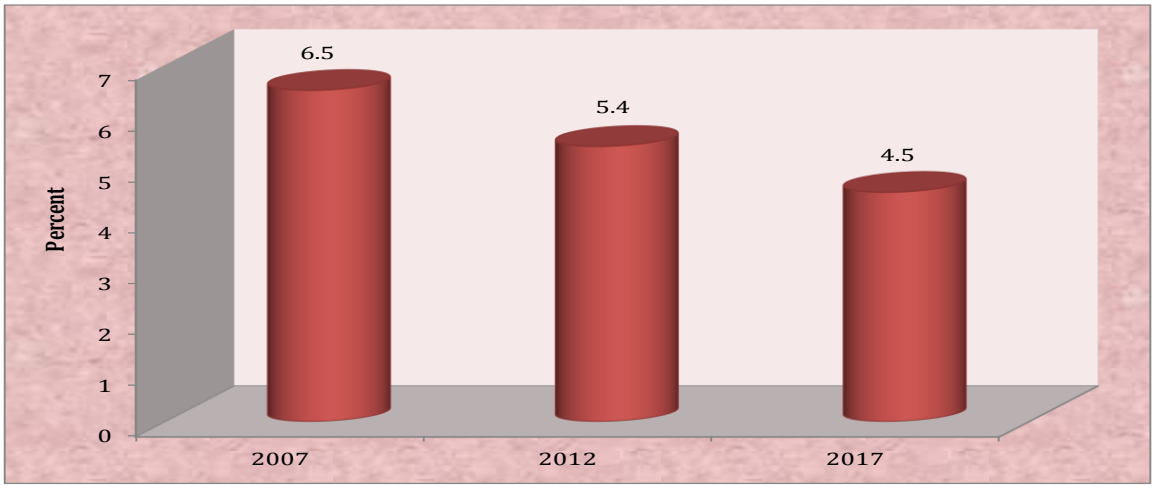


Figure 32 below shows the trend of lifetime usage of bhang. The data shows that the prevalence in the lifetime usage of bhang has declined from 6.5% in 2007, 5.4% in 2012 to 4.5% in 2017.

Figure 32: Trend of lifetime usage of bhang among respondents aged 15 – 65 years (n=2520)



5.5 Lifetime usage of inhalants and prescription drugs

Respondents were asked whether they have ever used inhalants or prescription drugs at least once in the past. Findings according to Table 37 shows that 0.2% of the respondents aged 15 – 65 years have ever used inhalants at least once in the past in 2017. The trend shows a decline from 0.7% in 2012. The data also shows that lifetime usage of prescription drugs stands at 0.3% in 2017. The trend shows a decline from 0.7% in 2012.

Table 37: Ever use of inhalants and prescription drugs among 15 -65 year olds

Characteristic		Inhalants		Prescription drugs		Total
		2012	2017	2012	2017	
Setting	Urban	0.7	0.3	0.9	0.5	**744**
	Rural	0.8	0.2	0.4	0.2	**1776**
Region	Nairobi	1.3	-	1.0	0.9	**212**
	N. Eastern	-	-	1.1	-	**148**
	Coast	0.4	-	0.4	-	**218**
	Central	0.5	-	0.3	0.3	**312**
	Eastern	1.0	0.5	0.5	0.3	**377**
	R. Valley	0.8	0.2	0.9	0.3	**643**
	Nyanza	0.3	0.6	0.3	0.3	**342**
	Western	0.8	-	-	-	**268**
Gender	Male	0.5	0.3	0.5	0.3	**1229**
	Female	1.0	0.1	0.7	0.2	**1291**
Age in years	15 – 17	0.8	-	0.8	-	**174**
	18 – 24	1.6	-	1.4	-	**497**
	25 – 35	0.8	0.4	0.5	0.5	**833**
	36+	0.3	0.2	0.2	0.2	**1003**

Religion	Christian	0.7	0.1	0.6	0.2	**2200**
	Muslim	0.4	0.7	0.4	1.0	**305**
	Others	-	-	-	-	**15**
Economic status	High	1.1	-	1.5	-	**101**
	Middle	1.0	0.4	0.9	0.4	**715**
	Low	0.7	0.1	0.5	0.4	**913**
	Very low	0.4	0.1	0.1	-	**730**
Employment status	A student	0.4	-	1.2	-	**355**
	Unemployed	1.0	0.2	0.4	0.2	**594**
	Employed	1.7	0.3	0.7	0.3	**1469**
	Others	-	-	0.3	-	**94**
Education status	No formal	1.2	0.6	0.5	0.6	**178**
	Primary	0.8	0.3	0.6	0.3	**1066**
	Secondary	0.8	0.1	2.1	0.1	**951**
	Post-secondary	-	-	-	0.6	**314**
Total		**0.7**	**0.2**	**0.7**	**0.3**	**2520**

The findings also show that the lifetime usage of prescription drugs among respondents aged 18 – 65 years is 0.3%. However, lifetime usage of prescription drugs among respondents aged 10 – 14 years, 10 – 19 years and 15 – 24 years was not reported.

In terms of inhalants, the lifetime usage among respondents aged 18 – 65 years stands at 0.3%, 10 – 14 years 0.2% and 10 – 19 years 0.1%. Lifetime usage of inhalants was not reported.

5.6 Lifetime abstainers of alcohol and substances of abuse

A lifetime abstainer was any respondent who had never used any alcohol or substance of abuse. Figure 33 below shows the prevalence of lifetime abstainers (respondents who have never used alcohol or any other substance of abuse in their lifetime) among respondents aged 10 -14 years. Data shows that the prevalence of lifetime abstainers among respondents aged 10 – 14 years stands at 95.1% in 2017. North Eastern region has the highest prevalence of lifetime abstainers (99.9%) followed by Coast 98.1% and Central 97.6% regions. Data shows that there are more female lifetime abstainers 97.0% compared to males 93.2%. Rural areas have higher prevalence of lifetime abstainers 96.9% compared to urban areas 90.3%.

Figure 33: Prevalence of lifetime abstainers among respondents aged 10 - 14 years (n=628)

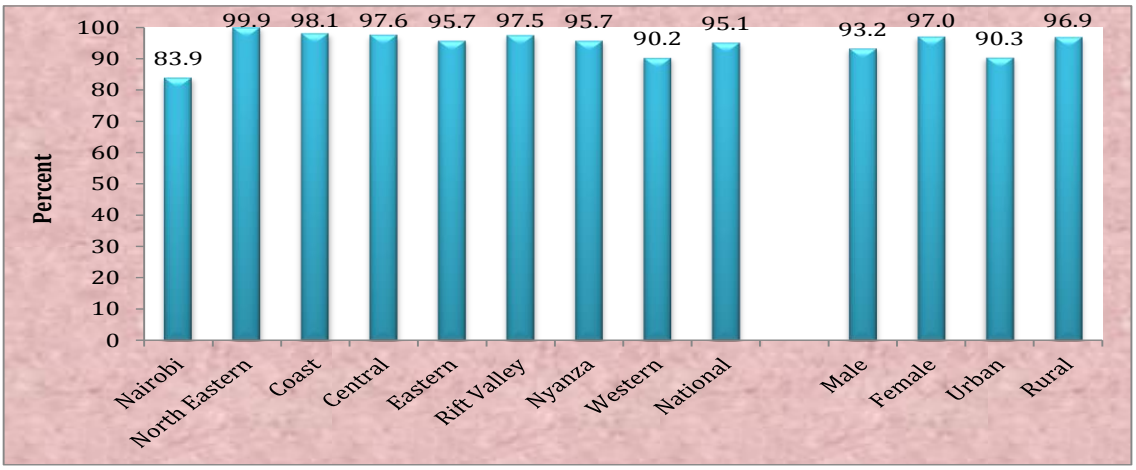


Figure 34 below shows the prevalence of lifetime abstainers among respondents aged 10 -19 years. Data shows that the prevalence of lifetime abstainers among respondents aged 10 – 19 years stands at 90.5% in 2017. North Eastern region has the highest prevalence of lifetime abstainers (98.3%) followed by Rift Valley 94.3% and Central 92.7% regions. Data shows that there are more female lifetime abstainers 94.4% compared to males 86.9%. Rural areas have higher prevalence of lifetime abstainers 92.7% compared to urban areas 84.9%.

Figure 34: Prevalence of lifetime abstainers among respondents aged 10 - 19 years (n=926)

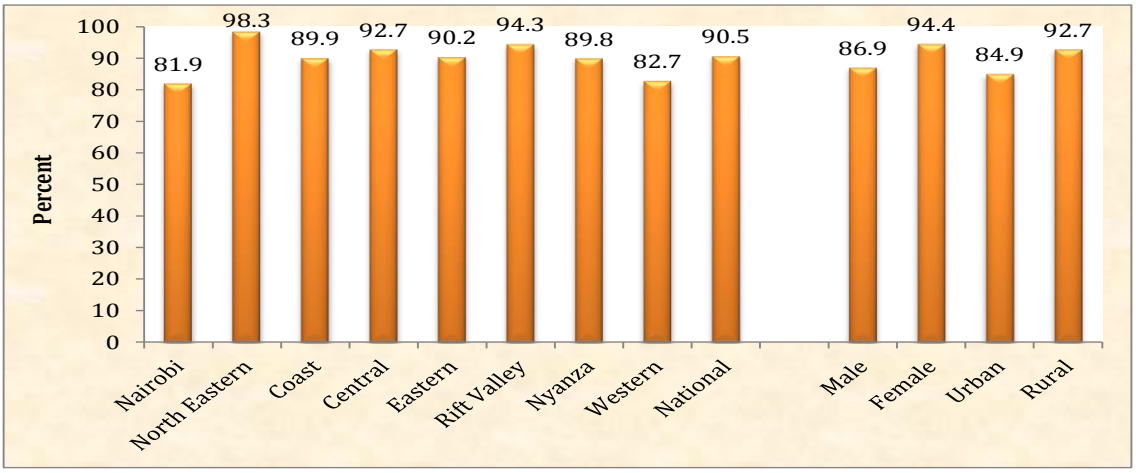


Figure 35 below shows the prevalence of lifetime abstainers among respondents aged 15 -24 years. Data shows that the prevalence of lifetime abstainers among respondents aged 15 – 24 years stands at 75.8% in 2017. North Eastern region has the highest prevalence of lifetime abstainers (93.7%) followed by Rift Valley 83.6% and Nyanza 78.7% regions. Data shows that there are more female lifetime abstainers 85.3% compared to males 65.9%. Rural areas have higher prevalence of lifetime abstainers 78.1% compared to urban areas 71.0%.

Figure 35: Prevalence of lifetime abstainers among respondents aged 15 - 24 years (n=657)

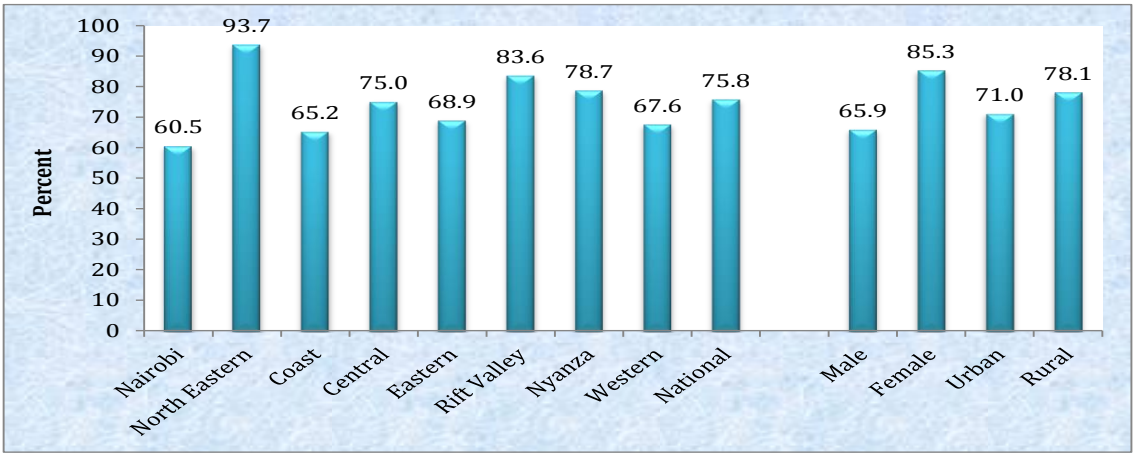


Figure 36 below shows the prevalence of lifetime abstainers among respondents aged 25 -35 years. Data shows that the prevalence of lifetime abstainers stands at 64.6% in 2017. North Eastern region has the highest prevalence of lifetime abstainers (75.5%) followed by Central 69.5% and Nyanza 68.7% regions. Data shows that there are more female lifetime abstainers 82.4% compared to males 40.9%. Rural areas have higher prevalence of lifetime abstainers 66.7% compared to urban areas 60.2%.

Figure 36: Prevalence of lifetime abstainers among respondents aged 25 - 35 years (n=833)

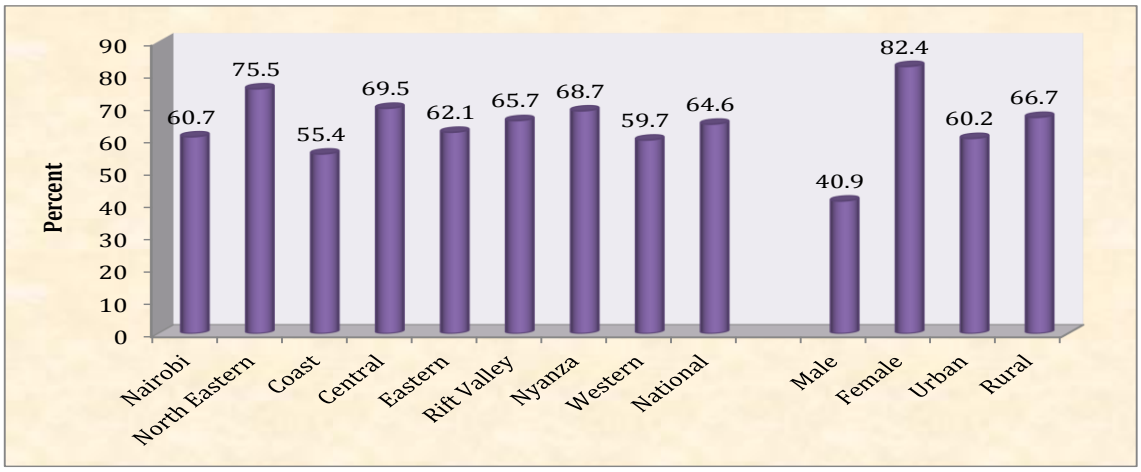


Figure 37 below shows the prevalence of lifetime abstainers among respondents aged 18 -65 years. Data shows that the prevalence of lifetime abstainers among respondents aged 18 – 65 years stands at 60.6% in 2017. North Eastern region has the highest prevalence of lifetime abstainers (77.4%) followed by Nyanza 65.4% and Rift Valley 62.3% regions. Data shows that there are more female lifetime abstainers 79.8% compared to males 40.2%. Rural areas have higher prevalence of lifetime abstainers 62.1% compared to urban areas 56.9%.

Figure 37: Prevalence of lifetime abstainers among respondents aged 18 - 65 years (n=2333)

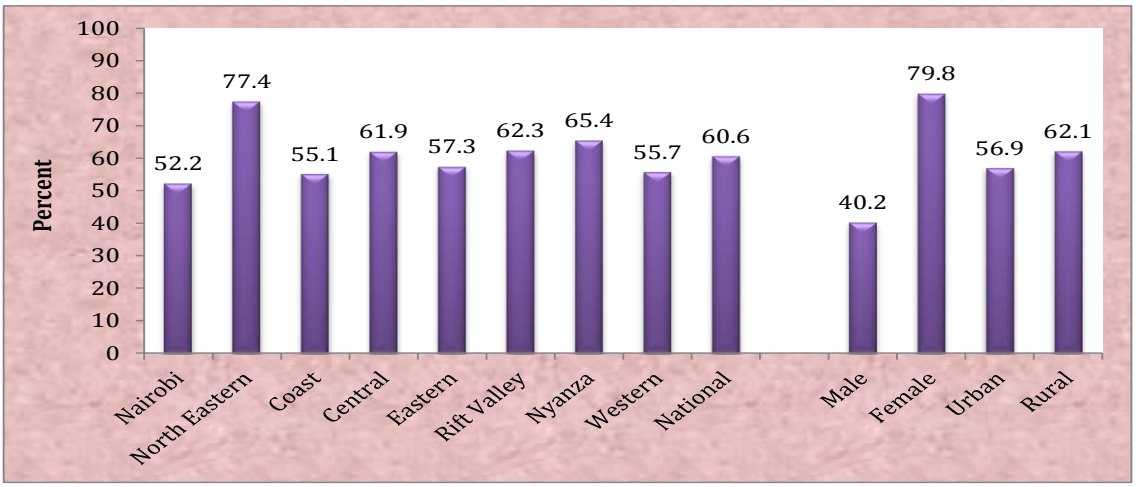


Figure 38 below shows the prevalence of lifetime abstainers among respondents aged 15 -65 years. Data shows that the prevalence of lifetime abstainers among respondents aged 15 – 65 years stands at 62.5% in 2017.

North Eastern region has the highest prevalence of lifetime abstainers (79.1%) followed by Nyanza 67.5% and Rift Valley 64.1% regions. Data shows that there are more female lifetime abstainers 73.4% compared to males 43.5%. Rural areas have higher prevalence of lifetime abstainers 64.0% compared to urban areas 58.9%.

Figure 38: Prevalence of lifetime abstainers among respondents aged 15 - 65 years (n=2520)

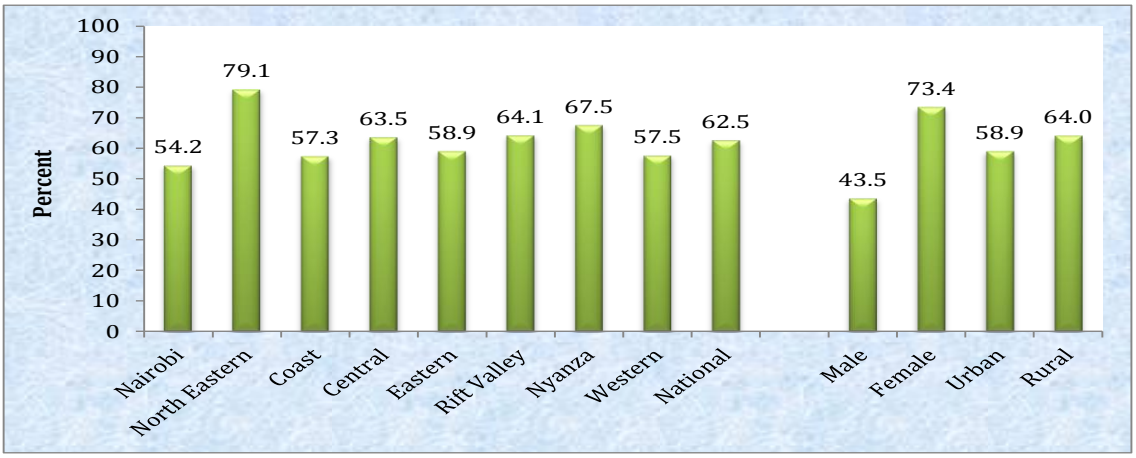
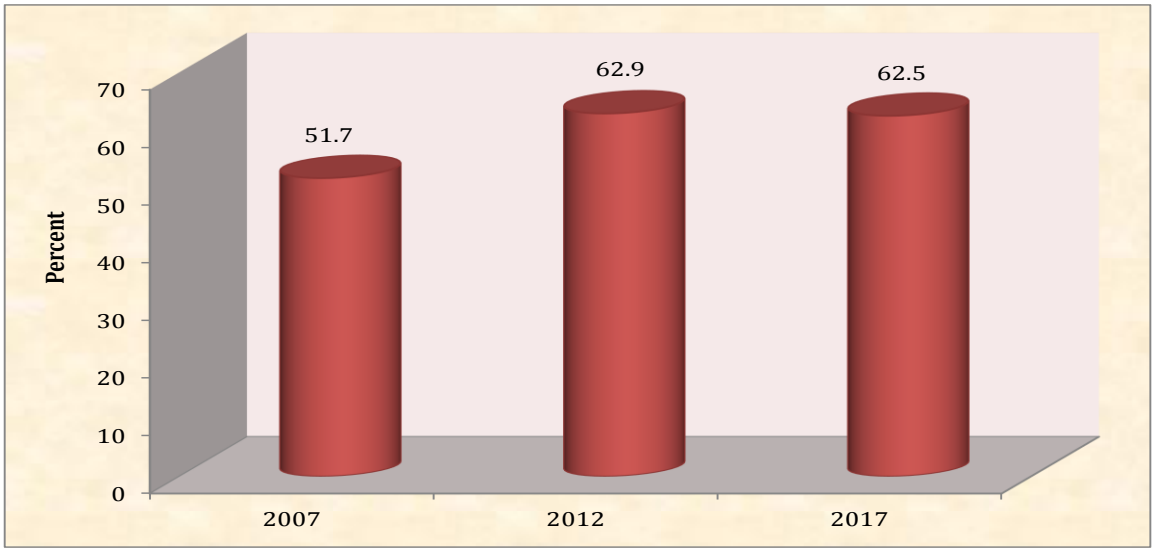


Figure 39 below shows the trend in the prevalence of lifetime abstainers among respondents aged 15 – 65 years. Analysis of data shows that the prevalence of lifetime abstainers has declined slightly from 62.9% in 2012 to 62.5% in 2017. In comparison with 2007, the prevalence has greatly improved from 51.7% in 2007 to 62.5% in 2017.

Figure 39: Trends in lifetime abstainers (never used any drug) among 15 - 65 years (n=2520)



5.7 Current usage of alcohol among 15 – 65 year-olds

Respondents were asked whether they have ever used alcohol in the last 30 days prior to the survey (current use). Findings according to Table 38 shows that 7.0% of the respondents aged 15 – 65 years are currently using packaged/ legal alcohol in 2017. The trend shows a decline from 9.1% in 2007 and 8.6% in 2012. Nairobi region is leading in the current usage of packaged/ legal alcohol (13.7%) followed by Eastern 10.6% and Coast 6.9% regions.

The data also shows that current usage of *chang'aa* stands at 3.3% in 2017. The trend shows a decline from 4.2% in 2012 and 3.8% in 2007. Nairobi region is leading in the current usage of *chang'aa* (7.2%) followed by Western 7.1% and Nyanza 6.2% regions.

Table 38: Current usage of alcohol among respondents aged 15 – 65 years

Characteristic		Packaged/ legal alcohol			*Chang'aa*			Total
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	15.1	12.3	8.5	2.3	3.9	4.0	**744**
	Rural	7.0	6.4	6.4	4.3	4.4	3.0	**1776**
Region	Nairobi	16.8	15.7	13.7	1.8	7.2	5.2	**212**
	N. Eastern	0	4.3	2.0	0	0	-	**148**
	Coast	7.9	7.5	6.9	0.8	1.3	1.4	**218**
	Central	16.3	9.2	7.4	0.9	0.5	0.3	**312**
	Eastern	11.0	9.0	10.6	1.7	2.1	0.5	**377**
	R. Valley	6.4	8.7	5.9	5.6	5.5	5.0	**643**
	Nyanza	7.6	6.2	6.7	9.8	6.2	5.6	**342**
	Western	1.3	3.8	2.2	3.7	7.1	6.0	**268**
Gender	Male	15	13.2	11.5	6.6	6.2	5.3	**1229**
	Female	3.4	3.8	2.8	1.1	2.0	1.5	**1291**
Age in years	15 – 17	1.8	0	1.1	0.5	0.8	0.6	**174**
	18 – 24	8.7	7.5	4.8	2.6	1.3	1.4	**497**
	25 – 35	10.5	11.7	8.9	4.4	6.4	3.6	**833**
	36+	10.7	7.5	7.7	5.4	4.2	4.6	**1003**
Religion	Christian	9.7	8.9	7.4	3.9	4.2	3.6	**2200**
	Muslim	2.2	5.0	3.9	0.3	1.2	0.7	**305**
	Others	14.3	11.1	13.3	11.8	14.3	13.3	**15**
Economic status	High	21.7	17.1	9.9	0.6	3.0	2.0	**101**
	Middle	12.6	8.6	9.8	2.1	1.9	1.5	**715**
	Low	8.4	8.7	6.1	4.3	4.2	2.0	**913**
	Very low	4.9	5.6	4.8	5.2	6.6	6.7	**730**
Employment status	A student	3.7	3.9	1.7	0.4	0.4	0.8	**355**
	Unemployed	8.8	9.3	4.7	3.5	3.4	2.5	**594**
	Employed	13.1	10.3	9.4	5.3	5.1	4.2	**1469**
	Others	2.9	2.5	2.1	2.5	2.3	3.2	**94**
Education level	No formal	1.8	6.8	3.4	1.5	5.2	5.1	**178**
	Primary	6.1	8.6	5.7	4.8	3.0	3.5	**1066**
	Secondary	10.0	16.2	7.8	3.8	2.1	2.8	**951**
	Post-secondary	23.8	3.5	10.8	2.1	4.7	3.2	**314**
Total		**9.1**	**8.6**	**7.0**	**3.8**	**4.2**	**3.3**	**2520**

According to Table 39, current usage of traditional liquor stands at 3.3% in 2017 among the respondents aged 15 – 65 years. The trend shows a decline from 4.0% in 2012 and 5.5% in 2007. Western region is leading in the current usage of traditional liquor (6.7%) followed by Coast 4.6% and Rift Valley 4.2% regions.

Data also shows that current usage of 2nd generation/ potable spirits stands at 1.8% in 2017. The trend shows an increase from 1.2% in 2012. However, data on 2nd generation alcohol/ potable spirits was not captured in 2007. Nairobi region is leading in the current usage of 2nd generation/ potable spirits (3.8%) followed by Rift Valley 2.2% and Eastern 2.1% regions.

Data on usage of alcohol shows that the current prevalence stands at 12.2% in 2017. The trend shows a decline from 13.6% in 2012 and 14.2% in 2007.

Table 39: Current usage of alcohol among respondents aged 15 – 65 years cont'

Characteristic		Traditional liquor			2nd generation alcohol/ potable spirits		Total alcohol			Total
		2007	2012	2017	2012	2017	2007	2012	2017	
Setting	Urban	3.1	3.5	3.2	1.7	2.7	17.7	17.0	13.3	**744**
	Rural	6.3	4.5	3.4	0.8	1.4	13.0	11.8	11.7	**1776**
Region	Nairobi	1.3	2.3	2.8	1.3	3.8	18.6	22.0	17.5	**212**
	N. Eastern	-	1.1	0.7	-	-	-	5.4	2.0	**148**
	Coast	13.2	4.4	4.6	0.9	0.9	18.6	10.6	11.0	**218**
	Central	2.9	1.4	2.6	1.1	1.3	17.7	10.0	10.6	**312**
	Eastern	6.9	4.6	1.3	1.0	2.1	14.8	14.6	14.3	**377**
	R. Valley	6.2	6.0	4.2	2.0	2.2	12.5	15.7	13.2	**643**
	Nyanza	7.3	5.1	2.6	1.0	2.0	17.0	12.0	10.2	**342**
	Western	3.4	3.8	6.7	0	0.7	6.8	10.2	13.4	**268**
Gender	Male	8.9	6.1	5.2	1.9	3.0	22.9	21.2	19.9	**1229**
	Female	2.2	1.9	1.5	0.4	0.6	5.9	5.9	4.9	**1291**
Age in years	15 – 17	0.6	0.8	1.1	-	0.6	2.6	1.6	2.9	**174**
	18 – 24	3.6	1.8	2.0	1.1	1.4	11.7	10.2	7.2	**497**
	25 – 35	5.2	4.9	3.5	1.5	2.8	16.4	17.6	15.1	**833**
	36+	9.1	4.9	4.3	1.1	1.4	18.4	13.6	14.0	**1003**
Religion	Christian	5.1	4.3	3.6	1.1	1.8	14.6	14.1	12.9	**2200**
	Muslim	4.0	2.3	1.3	0.8	1.6	5.7	7.0	6.2	**305**
	Others	17.7	4.8	6.7	4.8	-	30.5	23.8	33.3	**15**
Economic status	High	2.2	1.9	-	1.1	-	22.1	19.8	10.9	**101**
	Middle	3.0	2.1	2.0	1.0	1.8	14.4	11.7	12.4	**715**
	Low	5.6	4.4	2.4	1.5	2.0	14.4	13.8	10.3	**913**
	Very low	7.8	6.1	6.0	0.9	1.9	12.7	13.2	14.2	**730**
Employment status	A student	0.9	0.8	1.4	0.4	0.8	4.6	4.7	3.9	**355**
	Unemployed	3.7	3.0	3.5	0.8	1.7	12.7	13.5	9.1	**594**
	Employed	7.8	4.9	3.7	1.6	2.2	19.9	16.6	15.5	**1469**
	Others	4.0	2.2	3.2	-	-	7.8	4.4	7.4	**94**
Education level	No formal	7.9	5.4	6.2	1.3	1.1	9.4	12.7	11.8	**178**
	Primary	6.6	2.8	3.9	1.2	2.4	12.5	13.2	11.7	**1066**
	Secondary	4.2	1.7	2.6	0.3	1.3	14.1	17.9	12.1	**951**
	Post-secondary	3.2	5.8	1.9	-	1.6	25.5	11.6	13.7	**314**
Total		**5.5**	**4.0**	**3.3**	**1.2**	**1.8**	**14.2**	**13.6**	**12.2**	**2520**

According to Table 40 below, data among the respondents aged 10 – 19 years shows that the prevalence of current usage of packaged/ legal alcohol in 2017 stands at 0.3%, *chang'aa* 0.2%, traditional liquor 0.3% and 2nd generation alcohol/ potable spirits stands at 0.1%. Current usage of alcohol stands at 0.9% in 2017.

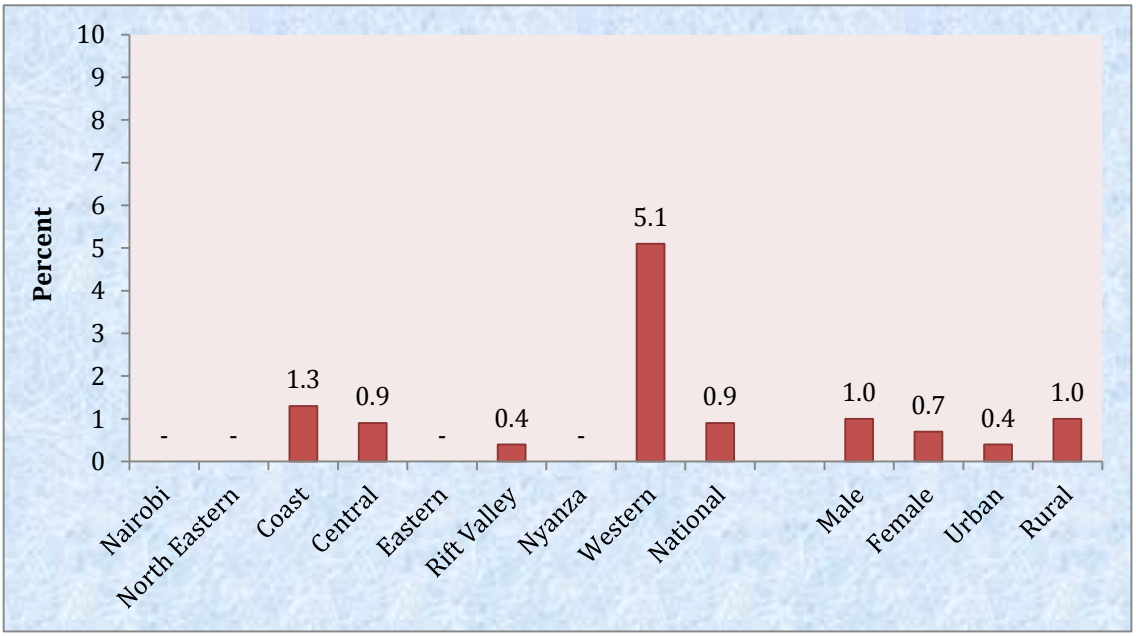
Table 40: Current usage of alcohol among respondents aged 10 -19 years

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	Total alcohol	Total
Setting	Urban	0.4	-	-	-	0.4	**259**
	Rural	0.3	0.3	0.4	0.1	1.0	**667**
Region	Nairobi	-	-	-	-	-	**72**
	N. Eastern	-	-	-	-	-	**59**
	Coast	1.3	-	-	-	1.3	**79**
	Central	0.9	-	-	-	0.9	**109**
	Eastern	-	-	-	-	-	**132**
	R. Valley	0.4	-	-	0.4	0.4	**230**
	Nyanza	-	-	-	-	-	**147**
	Western	-	2.0	3.1	-	5.1	**98**
Gender	Male	0.4	0.2	0.4	0.2	1.0	**480**
	Female	0.2	0.2	0.2	-	0.7	**446**
Total		**0.3**	**0.2**	**0.3**	**0.1**	**0.9**	**926**

Data according to Figure 40 below among respondents aged 10 – 19 years shows that the prevalence of current usage of alcohol stands at 0.9% in 2017. Western region is leading in the prevalence of current usage of alcohol (5.1%) followed by Coast 1.3% and Central 0.9% regions.

The prevalence of current usage of alcohol is higher among males 1.0% compared to females 0.7%. The prevalence is also higher among the respondents from rural areas 1.0% compared to those in the urban areas 0.4%.

Figure 40: Current usage of alcohol among respondents aged 10 -19 years (n=926)



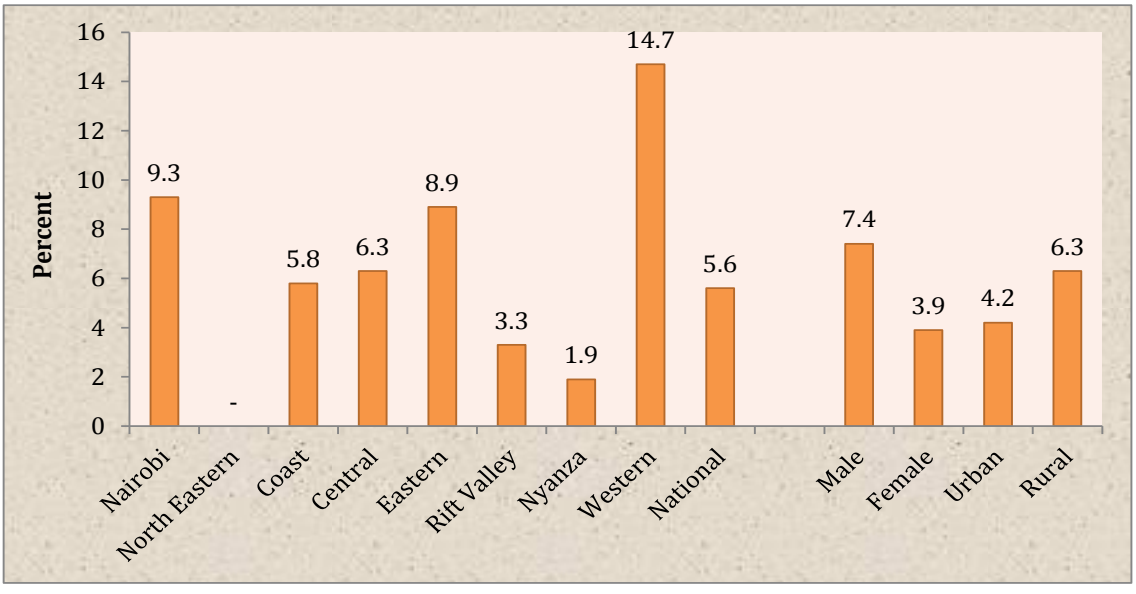
According to Table 41 below, data among the respondents aged 15 – 24 years shows that the prevalence of current usage of packaged/ legal alcohol in 2017 stands at 3.8%, *chang'aa* 1.4%, traditional liquor 1.2% and 2nd generation alcohol/ potable spirits stands at 0.8%. Current usage of alcohol stands at 5.6% in 2017.

Table 41: Current usage of alcohol among respondents aged 15 -24 years

Characteristic		Packaged/ legal alcohol	Chang'aa	Traditional liquor	2nd generation alcohol/ potable spirits	At least one type of alcohol product	Total
Setting	Urban	2.8	0.9	0.9	0.5	4.2	**198**
	Rural	4.3	1.6	1.4	0.9	6.3	**435**
Region	Nairobi	7.0	2.3	-	-	9.3	**43**
	N. Eastern	-	-	-	-	-	**63**
	Coast	4.3	1.4	1.4	1.4	5.8	**69**
	Central	6.3	-	-	-	6.3	**64**
	Eastern	7.8	-	1.1	-	8.9	**90**
	R. Valley	2.6	-	0.7	0.7	3.3	**152**
	Nyanza	1.9	1.9	1.9	1.9	1.9	**108**
	Western	2.9	7.4	4.4	1.5	14.7	**68**
Gender	Male	4.3	1.9	1.5	0.9	7.4	**323**
	Female	3.3	0.9	0.9	0.6	3.9	**334**
Total		**3.8**	**1.4**	**1.2**	**0.8**	**5.6**	**657**

Data according to Figure 41 below among respondents aged 15 – 24 years shows that the prevalence of current usage of alcohol stands at 5.6% in 2017. Western region is leading in the prevalence of current usage of alcohol (14.7%) followed by Nairobi 9.3% and Eastern 8.9% regions. The prevalence of current usage of alcohol is higher among males 7.4% compared to females 3.9%. The prevalence of current usage of alcohol is also higher among respondents from rural areas 6.3% compared to those in urban areas 4.2%.

Figure 41: Current usage of alcohol among respondents aged 15 -24 years (n=657)



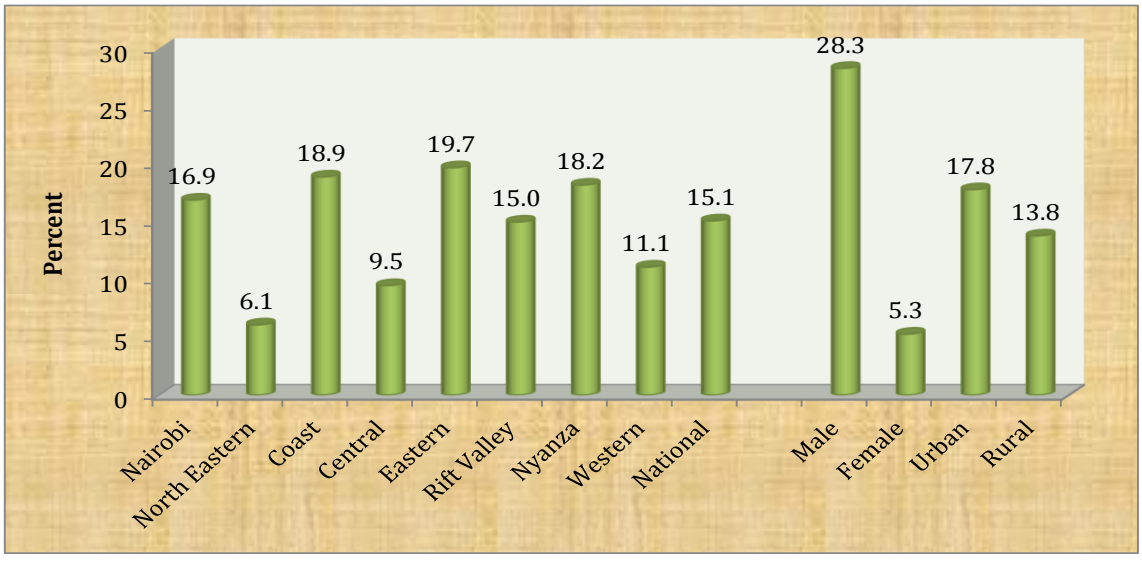
According to Table 42 below, data among the respondents aged 25 – 35 years shows that the prevalence of current usage of packaged/ legal alcohol in 2017 stands at 8.9%, *chang'aa* 3.6%, traditional liquor 3.5% and 2nd generation alcohol/ potable spirits stands at 2.8%. Current usage of alcohol stands at 15.1% in 2017.

Table 42: Current usage of alcohol among respondents aged 25 -35 years

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	At least one type of alcohol product	Total
Setting	Urban	11.5	4.1	3.7	4.1	17.8	**269**
	Rural	7.6	3.4	3.4	2.1	13.8	**564**
Region	Nairobi	12.8	4.3	4.3	5.3	16.0	**89**
	N. Eastern	6.0	-	2.0	-	6.0	**49**
	Coast	10.3	2.9	8.8	1.5	20.6	**74**
	Central	5.4	-	2.7	1.8	9.8	**105**
	Eastern	14.3	0.8	0.8	5.6	20.6	**132**
	R. Valley	7.6	5.4	3.6	3.6	16.1	**213**
	Nyanza	11.9	9.9	4.0	2.0	17.8	**99**
	Western	1.3	2.6	9.0	1.3	12.8	**72**
Gender	Male	17.1	6.7	6.4	5.6	28.3	**357**
	Female	2.7	1.3	1.3	0.6	5.3	**476**
Total		**8.9**	**3.6**	**3.5**	**2.8**	**15.1**	**833**

Data according to Figure 42 below among respondents aged 25 – 35 years shows that the prevalence of current usage of alcohol stands at 15.1% in 2017. Eastern and Coast regions are leading in the prevalence of current usage of alcohol (19.7% and 18.9% respectively) followed by Nyanza 18.2% and Nairobi 16.9% regions. The prevalence of current usage of alcohol is higher among males 28.3% compared to females 5.3%. The prevalence of current usage of alcohol is also higher among respondents from urban areas 17.8% compared to those in rural areas 13.8%.

Figure 42: Current usage of alcohol among respondents aged 25 -35 years (n=833)



According to Table 43 below, data among the respondents aged 18 – 65 years shows that the prevalence of current usage of packaged/ legal alcohol in 2017 stands at 7.5%, *chang'aa* 3.6%, traditional liquor 3.5% and 2nd generation alcohol/ potable spirits stands at 1.9%. Current usage of alcohol stands at 12.9% in 2017.

Table 43: Current usage of alcohol among respondents aged 18 -65 years

Characteristic		Packaged/ legal alcohol	*Chang'aa*	Traditional liquor	2nd generation alcohol/ potable spirits	Total alcohol	Total
Setting	Urban	9.1	4.3	3.5	2.9	14.3	**694**
	Rural	6.8	3.2	3.5	1.5	12.4	**1639**
Region	Nairobi	14.4	5.5	3.0	4.0	18.4	**201**
	N. Eastern	2.3	-	0.8	-	2.3	**133**
	Coast	7.2	1.4	4.8	1.0	11.6	**207**
	Central	7.6	0.3	2.7	1.4	11.0	**291**
	Eastern	11.5	0.6	1.1	2.3	15.2	**349**
	R. Valley	6.2	5.3	4.5	2.2	14.0	**599**
	Nyanza	7.4	6.1	2.9	2.3	11.3	**309**
	Western	2.5	6.1	7.0	0.8	13.9	**244**
Gender	Male	12.4	5.7	5.5	3.2	21.3	**1133**
	Female	2.9	1.5	1.7	0.7	5.1	**1200**
Total		**7.5**	**3.6**	**3.5**	**1.9**	**12.9**	**2333**

According to Figure 43 below among respondents aged 18 - 65 years, the prevalence of current usage of alcohol stands at 12.9% in 2017. Nairobi region is leading in the prevalence of current usage of alcohol (18.4%) followed by Eastern 15.2% and Rift Valley 14.0% regions. The prevalence of current usage of alcohol is higher among males 21.3% compared to females 5.1%. The prevalence is also higher among the respondents from urban areas 14.3% compared to those in the rural areas 12.4%.

Figure 43: Current usage of alcohol among respondents aged 18 -65 years (n=2333)

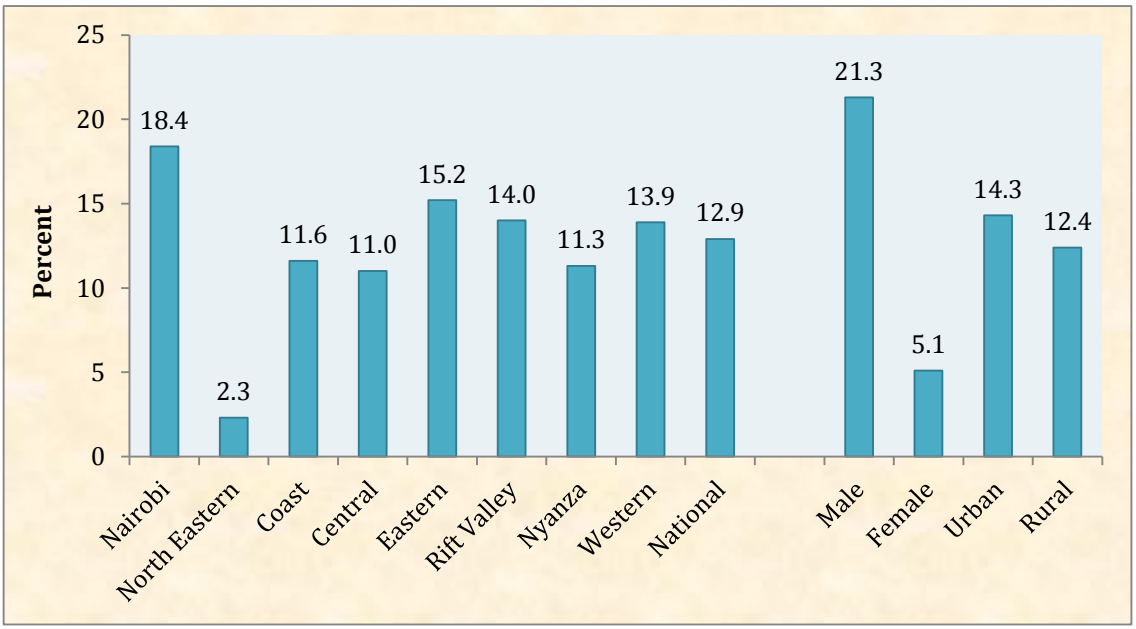


Figure 44 below among respondents aged 15 – 65 years shows that the prevalence of current usage of alcohol stands at 12.2% in 2017. Nairobi region is leading in the prevalence of current usage of alcohol (17.5%) followed by Eastern 14.3% and Western 13.4% regions. The prevalence of current usage of alcohol is higher among males 19.9% compared to females 4.9%. The prevalence is also higher among the respondents from urban areas 13.3% compared to those in the rural areas 11.7%.

Figure 44: Current usage of alcohol among respondents aged 15 -65 years (n=2520)

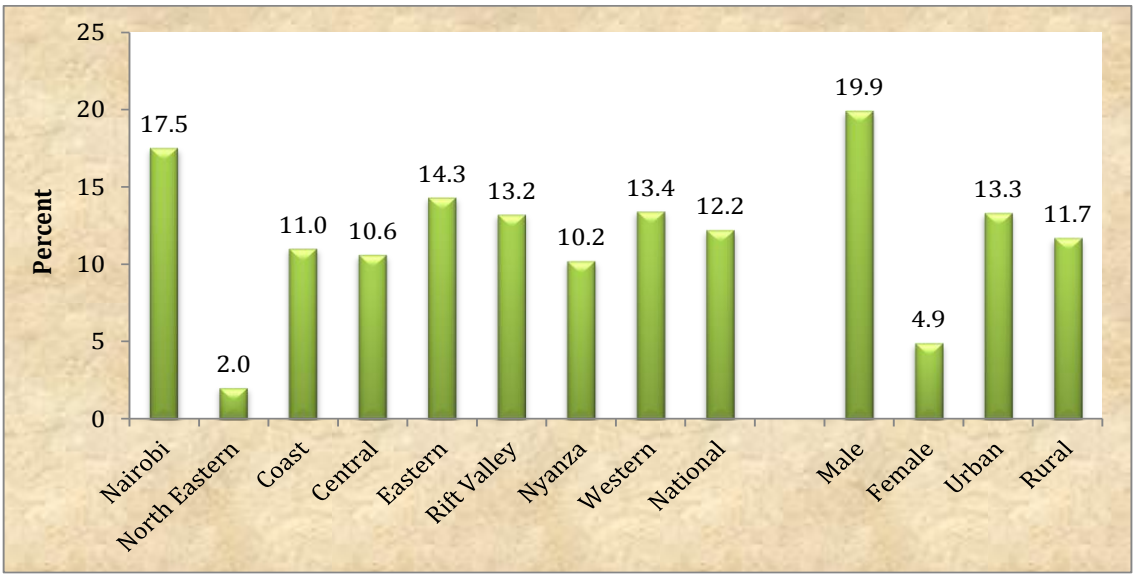


Figure 45 below shows the trend of current usage of alcohol. The data shows that the prevalence in the current usage of alcohol has declined from 14.2% in 2007 and 13.6% in 2012 to 12.2% in 2017.

Figure 45: Trend of current usage of alcohol among respondents aged 15 -65 years (n=2520)

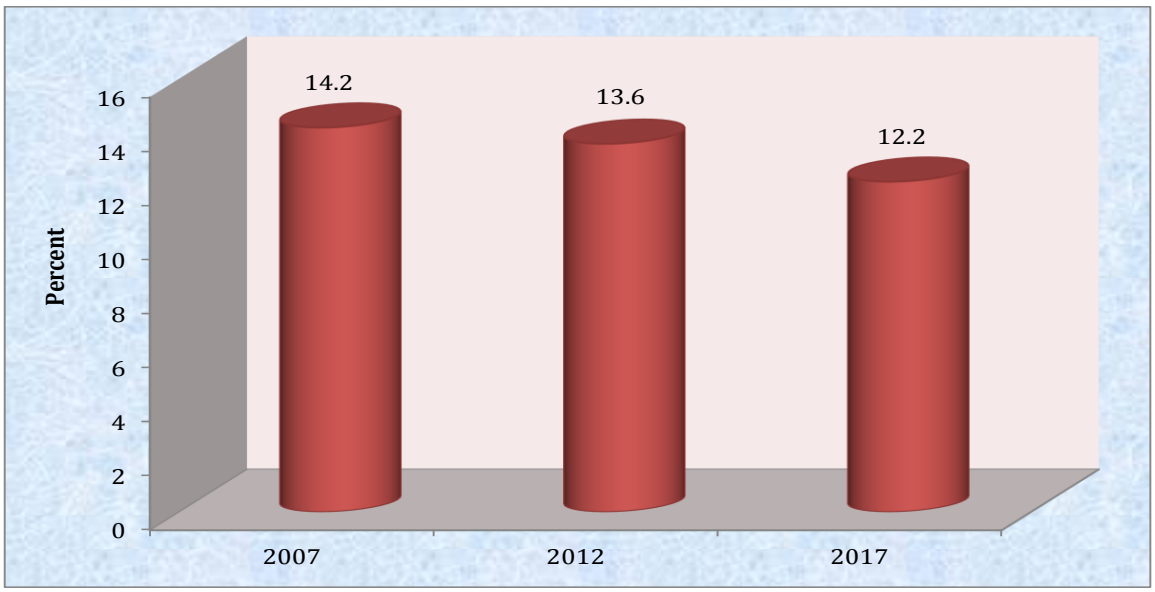
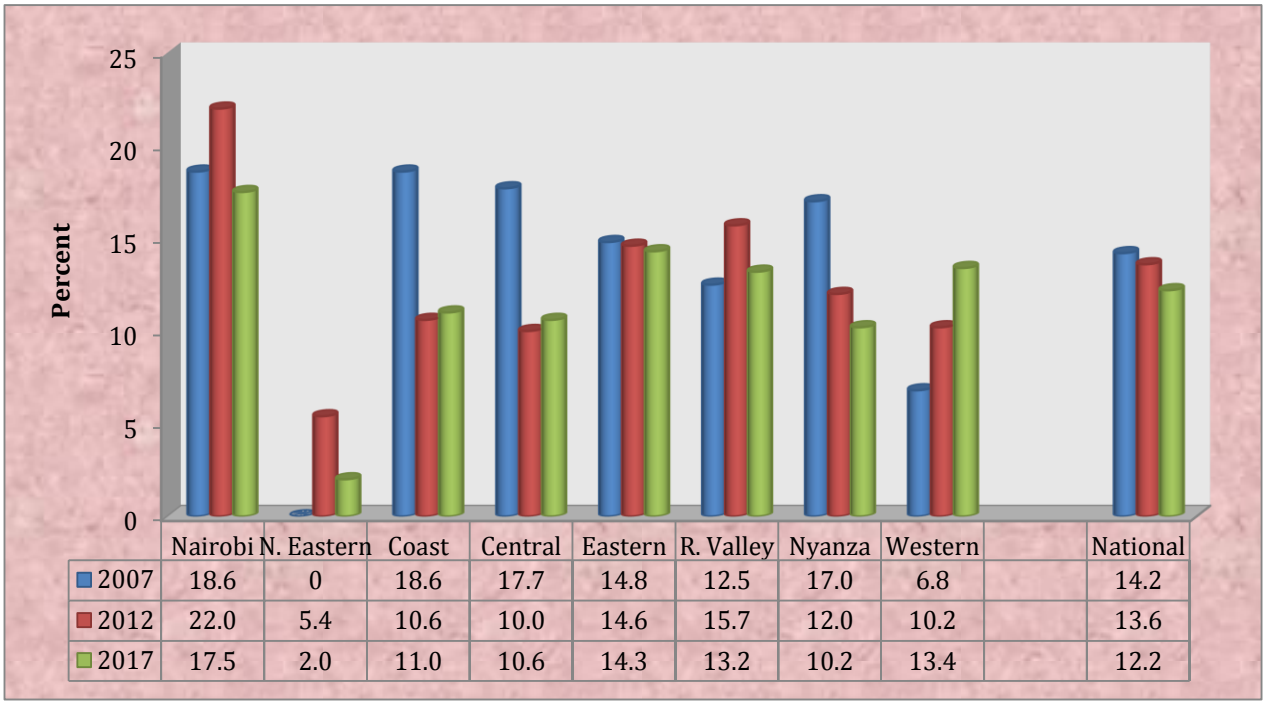


Figure 46 below shows that there is a general decline in current usage of alcohol nationally from 14.2% in 2007, 13.6% in 2012 to 12.2% in 2017. Data shows that Western region has recorded a steady increase in the prevalence of current usage of alcohol from 6.8% in 2007, 13.6% in 2012 to 13.4% in 2017. From the findings, Nairobi, Eastern, Western and Rift Valley regions have continued to record the highest current prevalence of alcohol usage.

Figure 46: Trend of current use of alcohol among respondents aged 15 -65 years by region (n=2520)



	Nairobi	N. Eastern	Coast	Central	Eastern	R. Valley	Nyanza	Western		National
2007	18.6	0	18.6	17.7	14.8	12.5	17.0	6.8		14.2
2012	22.0	5.4	10.6	10.0	14.6	15.7	12.0	10.2		13.6
2017	17.5	2.0	11.0	10.6	14.3	13.2	10.2	13.4		12.2

5.8 Current use of tobacco among 15 – 65 year-olds

Respondents were asked whether they have ever used tobacco in the last 30 days prior to the survey (current use). Findings according to Table 44 shows that 7.1% of the respondents aged 15 – 65 years are currently using cigarettes in 2017. The trend shows a decline from 10.9% in 2007 and 8.6% in 2007. Eastern region is leading in the current usage of cigarettes (10.3%) followed by Nairobi 9.9% and Coast 9.6% regions.

The data also shows that current usage of sniffed/ chewed/ piped tobacco stands at 1.1% in 2017. The trend shows a slight increase from 0.1% in 2012. North Eastern region is leading in the current usage of sniffed/ chewed/ piped tobacco (3.4%) followed by Western 1.9% and Coast 1.8% regions.

Table 44: Current use of tobacco among respondents aged 15 – 65 years

Characteristic		Cigarettes			Sniffed/ chewed/ piped tobacco			Total
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	13.4	11.7	8.7	0.2	0.9	1.1	**744**
	Rural	9.9	6.7	6.5	1.9	0.6	1.1	**1776**
Region	Nairobi	15.3	13.4	9.9	0.2	1.0	0.9	**212**
	N. Eastern	15.1	14.0	7.4	1.2	1.1	3.4	**148**
	Coast	14.4	9.7	9.6	5.0	1.3	1.8	**218**
	Central	16.9	10.5	6.7	0	0	0.6	**312**
	Eastern	12.5	9.0	10.3	3.8	1.0	0.5	**377**
	R. Valley	7.4	8.2	7.2	1.2	1.3	0.6	**643**
	Nyanza	7.6	3.8	3.2	0.6	0	1.2	**342**
	Western	3.6	3.0	3.7	1.2	0	1.9	**268**
Gender	Male	20.9	14.9	13.7	1.7	1.2	2.0	**1229**
	Female	1.3	2.0	0.9	1.3	0.2	0.3	**1291**
Age in years	15 – 17	0.6	0.8	-	0	0	-	**174**
	18 – 24	8.4	6.6	2.8	0.6	0.4	0.4	**497**
	25 – 35	14.1	9.7	6.6	0.5	0.8	0.8	**833**
	36+	13.2	9.8	11.1	3.9	0.9	1.9	**1003**
Religion	Christian	9.8	7.5	6.5	1.0	0.6	0.9	**2200**
	Muslim	15.3	13.5	12.1	3.5	1.9	3.0	**305**
	Others	21.8	27.0	6.7	7.1	0	-	**15**
Economic status	High	13.5	11.4	5.0	0.5	1.5	1.0	**101**
	Middle	10.4	7.4	6.2	0.1	0.3	0.7	**715**
	Low	11.2	10.0	7.3	1.2	0.6	0.8	**913**
	Very low	10.5	7.1	8.5	2.9	1.0	1.6	**730**
Employment status	A student	1.8	2.8	0.8	0	0	0.6	**355**
	Unemployed	10.1	10.1	5.6	1.9	1.3	1.2	**594**
	Employed	16.5	10.5	9.4	1.6	0.8	1.1	**1469**
	Others	3.4	1.6	5.3	2.1	0.6	2.1	**94**
Education level	No formal	6.6	8.6	12.4	8.0	1.2	5.1	**178**
	Primary	10.4	8.7	8.7	1.3	0.2	0.9	**1066**
	Secondary	11.7	8.6	5.3	0.2	0.7	0.6	**951**
	Post-secondary	13.6	7.0	4.8	0.9	1.2	1.0	**314**
Total		**10.9**	**8.6**	**7.1**	**1.5**	**0.7**	**1.1**	**2520**

According to Table 45 below, current usage of *kuber* stands at 0.4% in 2017 among the respondents aged 15 – 65 years. The trend shows a slight increase in prevalence from year 2012 (0.3%). North Eastern region is leading in the current usage of *kuber* (1.1%) followed by Coast 0.4% and Nairobi 0.3% regions.

Data also shows that lifetime usage of *shisha* stands at 0.1% in 2017. The trend shows a decline from 0.2% in 2012.

Data on usage of tobacco shows that the current prevalence stands at 8.3% in 2017. The trend shows a slight decline from 9.1% in 2012.

Table 45: Current use of tobacco among respondents aged 15 – 65 years cont'

Characteristic		Kuber		Shisha		At least one type of tobacco product		Total
		2012	2017	2012	2017	2012	2017	
Setting	Urban	0.5	0.5	0.3	-	12.0	9.5	**744**
	Rural	0.2	0.3	0.1	0.1	7.4	7.7	**1776**
Region	Nairobi	0.3	0.9	0.3	-	14.4	10.4	**212**
	N. Eastern	2.2	-	1.1	-	16.1	8.8	**148**
	Coast	0	0.9	0.4	-	9.7	11.0	**218**
	Central	0	-	0	-	10.2	7.4	**312**
	Eastern	0	0.3	0	-	10.0	10.9	**377**
	R. Valley	0.8	0.2	0.2	0.2	9.1	8.1	**643**
	Nyanza	0	0.6	0	0.3	3.8	5.0	**342**
	Western	0	0.4	0	-	3.1	6.0	**268**
Gender	Male	0.5	0.6	0.3	0.2	16.0	15.5	**1229**
	Female	0.2	0.2	0	-	2.0	1.3	**1291**
Age in years	15 – 17	0	-	0	-	0.8	-	**174**
	18 – 24	0.5	0.6	0.2	-	7.0	3.8	**497**
	25 – 35	0.2	0.1	0.2	0.1	10.1	7.2	**833**
	36+	0.2	0.5	0.1	0.1	10.6	12.9	**1003**
Religion	Christian	0.2	0.3	0.1	0.1	7.9	7.5	**2200**
	Muslim	1.2	0.7	0.8	-	15.1	13.8	**305**
	Others	1.6	6.7	0	-	27.0	13.3	**15**
Economic status	High	0.8	-	0.8	-	12.6	5.0	**101**
	Middle	0.1	0.4	0.1	-	7.7	6.7	**715**
	Low	0.5	-	0	0.1	10.2	8.1	**913**
	Very low	0.1	0.7	0.1	0.1	8.0	10.3	**730**
Employment status	A student	0.4	-	0	-	2.8	1.4	**355**
	Unemployed	0.4	0.7	0.4	-	11.4	6.7	**594**
	Employed	0.4	0.3	0.2	0.1	11.4	10.5	**1469**
	Others	0	-	0	-	2.3	7.4	**94**
Education level	No formal	0.2	0.6	0.1	-	9.6	15.7	**178**
	Primary	0.3	0.4	0.3	0.1	8.9	9.8	**1066**
	Secondary	0.7	0.3	0	0.1	9.3	6.1	**951**
	Post-secondary	0	0.3	1.3	-	8.1	5.7	**314**
Total		**0.3**	**0.4**	**0.2**	**0.1**	**9.1**	**8.3**	**2520**

Note: There were no statistics for all tobacco products for the 2007 survey

According to Table 46 below, data among the respondents aged 15 – 24 years shows that the prevalence of current usage of cigarettes in 2017 stands at 2.1%, sniffed/ chewed/ piped tobacco 0.3% and *kuber* 0.5%. Current usage of *shisha* was not reported. Current usage of tobacco stands at 2.9% in 2017.

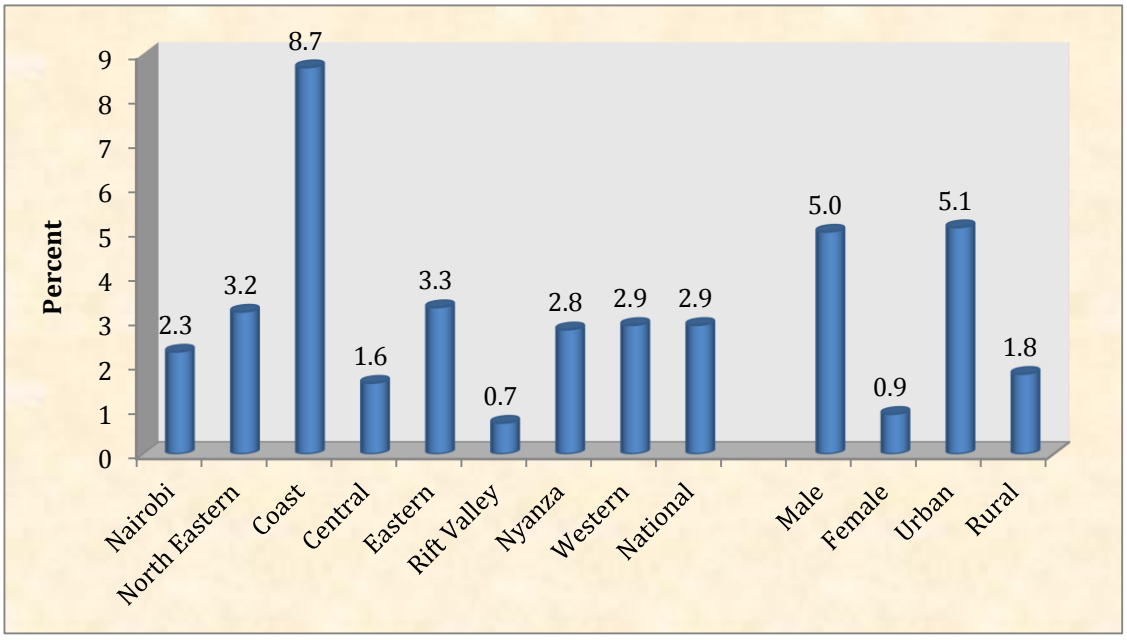
Table 46: Current use of tobacco among respondents aged 15 -24 years (n=657)

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	5.1	-	-	-	5.1	**198**
	Rural	0.7	0.5	0.7	-	1.8	**435**
Region	Nairobi	2.3	-	-	-	2.3	**43**
	N. Eastern	1.6	-	-	-	3.2	**63**
	Coast	8.7	-	-	-	8.7	**69**
	Central	-	1.6	-	-	1.6	**64**
	Eastern	3.3	-	-	-	3.3	**90**
	R. Valley	-	-	0.7	-	0.7	**152**
	Nyanza	0.9	-	1.9	-	2.8	**108**
	Western	2.9	-	-	-	2.9	**68**
Gender	Male	4.0	0.6	0.3	-	5.0	**323**
	Female	0.3	-	0.6	-	0.9	**334**
Total		**2.1**	**0.3**	**0.5**	**-**	**2.9**	**657**

Data according to Figure 47 below among respondents aged 15 – 24 years shows that the prevalence of current usage of tobacco stands at 2.9% in 2017. Coast region is leading in the prevalence of current usage of tobacco (8.7%) followed by Eastern 3.3% and North Eastern 3.2% regions.

The prevalence of current usage of tobacco is higher among males 5.0% compared to females 0.9%. The prevalence is also higher among respondents from urban areas 5.1% compared to those in the rural areas 1.8%.

Figure 47: Current use of tobacco among respondents aged 15 -24 years (n=657)



According to Table 47 below, data among the respondents aged 25 – 35 years shows that the prevalence of current usage of cigarettes in 2017 stands at 6.6%, sniffed/ chewed/ piped tobacco 0.8%, *kuber* 0.1% and shisha 0.1%. Current usage of tobacco stands at 7.2% in 2017.

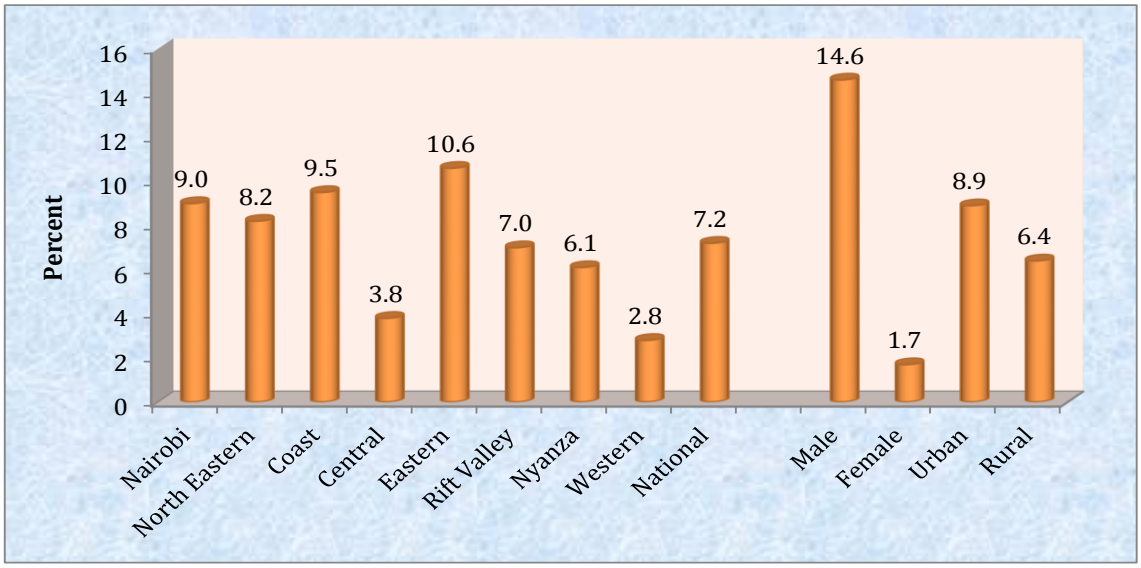
Table 47: Current use of tobacco among respondents aged 25 -35 years (n=833)

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	At least one type of tobacco product	Total
Setting	Urban	8.2	1.5	0.4	-	8.9	**269**
	Rural	5.9	0.5	-	0.2	6.4	**564**
Region	Nairobi	9.0	1.1	-	-	9.0	**89**
	N. Eastern	6.1	2.0	-	-	8.2	**49**
	Coast	8.1	2.7	-	-	9.5	**74**
	Central	3.8	-	-	-	3.8	**105**
	Eastern	10.6	-	0.8	-	10.6	**132**
	R. Valley	6.1	0.9	-	-	7.0	**213**
	Nyanza	5.1	1.0	-	1.0	6.1	**99**
	Western	2.8	-	-	-	2.8	**72**
Gender	Male	13.4	1.4	0.3	0.3	14.6	**357**
	Female	1.5	0.4	-	-	1.7	**476**
Total		**6.6**	**0.8**	**0.1**	**0.1**	**7.2**	**833**

Data according to Figure 48 below among respondents aged 25 – 35 years shows that the prevalence of current usage of tobacco stands at 7.2% in 2017. Eastern region is leading in the prevalence of current usage of tobacco (10.6%) followed by Coast 9.5% and Nairobi 9.0% regions.

The prevalence of current usage of tobacco is higher among males 14.6% compared to females 1.7%. The prevalence is also higher among respondents from urban areas 8.9% compared to those in the rural areas 6.4%.

Figure 48: Current use of tobacco among respondents aged 25 -35 years (n=833)



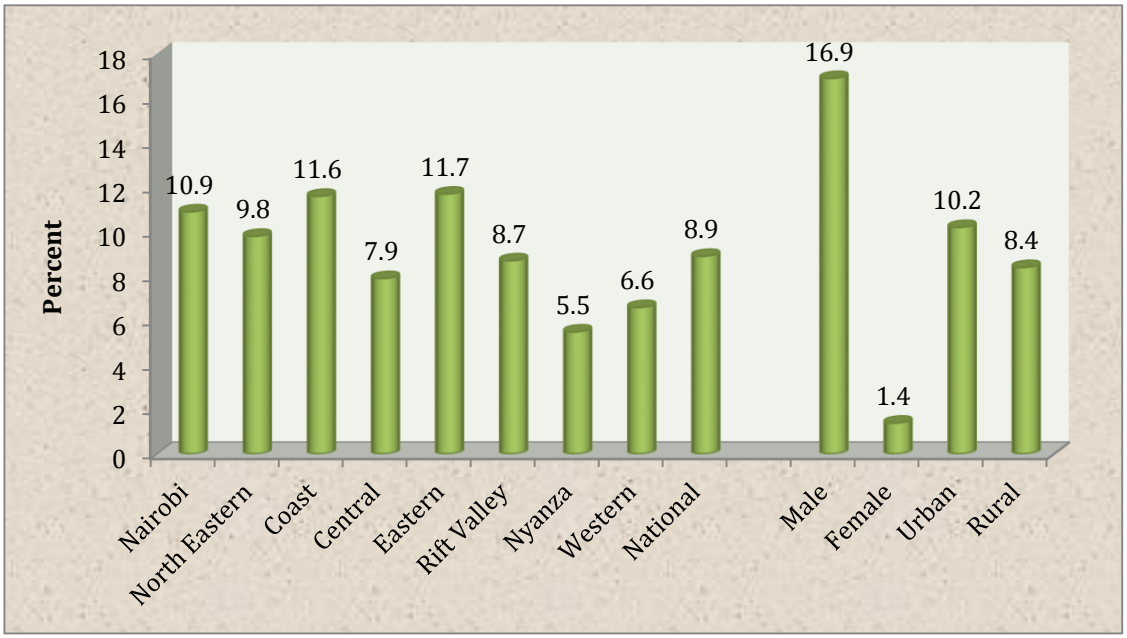
According to Table 48 below, data among the respondents aged 18 – 65 years shows that the prevalence of current usage of cigarettes in 2017 stands at 7.7%, sniffed/ chewed/ piped tobacco 1.2%, *kuber* 0.4% and *shisha* stands at 0.1%. Current usage of tobacco stands at 8.9% in 2017.

Table 48: Current use of tobacco among respondents aged 18 -65 years (n=2333)

Characteristic		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	Total tobacco products	Total
Setting	Urban	9.4	1.2	0.6	0.1	10.2	**694**
	Rural	7.0	1.2	0.3	-	8.4	**1639**
Region	Nairobi	10.4	1.0	1.0	-	10.9	**201**
	N. Eastern	8.3	3.8	-	-	9.8	**133**
	Coast	10.1	1.9	1.0	-	11.6	**207**
	Central	7.2	0.7	-	-	7.9	**291**
	Eastern	11.2	0.6	0.3	-	11.7	**349**
	R. Valley	7.7	0.7	0.2	0.2	8.7	**599**
	Nyanza	3.6	1.3	0.6	0.3	5.5	**309**
	Western	4.1	2.0	0.4	-	6.6	**244**
Gender	Male	14.8	2.1	0.6	0.2	16.9	**1133**
	Female	1.0	0.3	0.2	-	1.4	**1200**
Total		**7.7**	**1.2**	**0.4**	**0.1**	**8.9**	**2333**

According to Figure 49 below among respondents aged 18 - 65 years, the prevalence of current usage of tobacco stands at 8.9% in 2017. Eastern region is leading in the prevalence of current usage of tobacco (11.7%) followed by Coast 11.6% and Nairobi 10.9% regions. The prevalence of current usage of tobacco is higher among males 16.9% compared to females 1.4%. The prevalence is also higher among the respondents from urban areas 10.2% compared to those in the rural areas 8.4%.

Figure 49: Current use of tobacco among respondents aged 18 -65 years (n=2333)



According to Figure 50 below among respondents aged 15 - 65 years, the prevalence of current usage of tobacco stands at 8.3% in 2017. Coast region is leading in the prevalence of current usage of tobacco (11.0%) followed by Eastern 10.9% and Nairobi 10.4% regions. The prevalence of current usage of tobacco is higher among males 15.5% compared to females 1.3%. The prevalence is also higher among the respondents from urban areas 9.5% compared to those in the rural areas 7.7%.

Figure 50: Current use of tobacco among respondents aged 15 -65 years (n=2520)

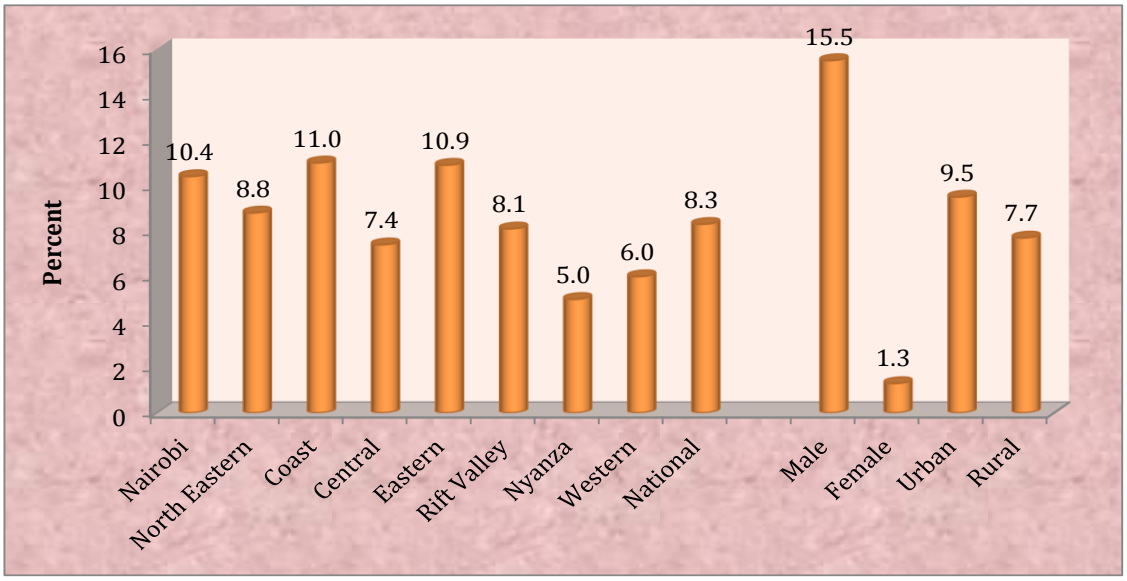


Figure 51 below shows the trend of current usage of tobacco. The data shows that the prevalence in the current usage of tobacco has declined from 9.1% in 2012 to 8.3% in 2017.

Figure 51: Trends in current use of tobacco among respondents aged 15 -65 years (n=2520)

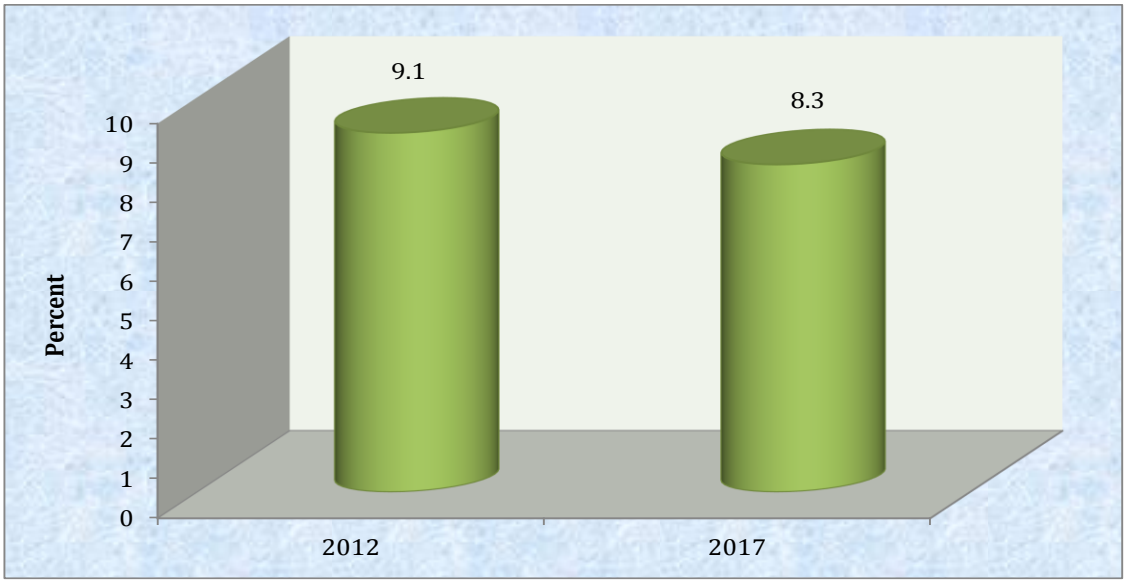
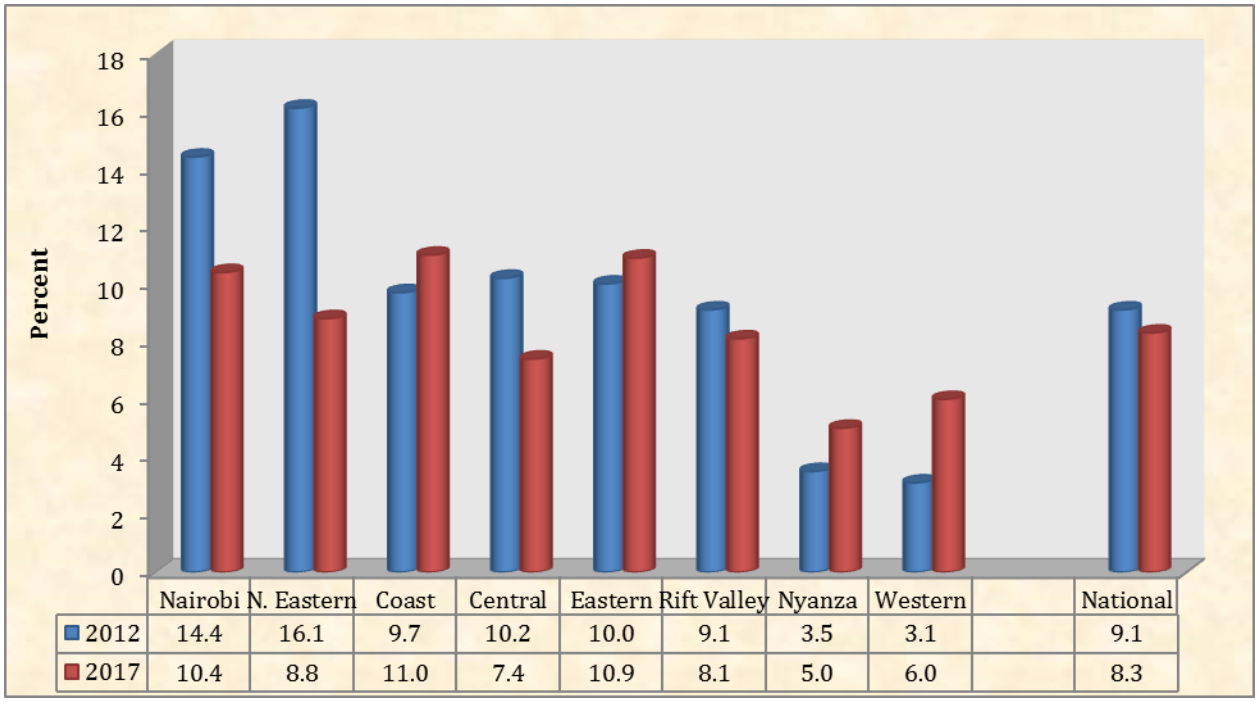


Figure 52 below shows that there is a general decline in current usage of tobacco product nationally from 9.1% in 2012 to 8.3% in 2017. Data shows that Coast, Eastern Nyanza and Western regions have recorded a steady increase in the prevalence of current usage of tobacco from 2012 to 2017. From the findings, Nairobi, Coast and Eastern regions have continued to record the highest current prevalence of tobacco usage.

Figure 52: Trends in current use of tobacco among respondents aged 15 -65 years by region (n=2520)



	Nairobi	N. Eastern	Coast	Central	Eastern	Rift Valley	Nyanza	Western		National
2012	14.4	16.1	9.7	10.2	10.0	9.1	3.5	3.1		9.1
2017	10.4	8.8	11.0	7.4	10.9	8.1	5.0	6.0		8.3

5.9 Current use of *khat/ miraa* among respondents aged 15 – 65 years

Respondents were asked whether they have ever used *khat/ miraa* in the last 30 days prior to the survey (current use). Findings according to Table 49 shows that 3.2% of the respondents aged 15 – 65 years are currently using *miraa* in 2017. The trend shows a decline from 3.7% in 2012. North Eastern region is leading in the current usage of *miraa* (11.5%) followed by Coast 7.8% and Eastern 6.4% regions.

The data also shows that the current usage of *muguka* stands at 1.7% in 2017. The trend shows an increase from 0.7% in 2012. Coast region is leading in the current usage of *muguka* (4.1%) followed by Eastern 4.0% and Nairobi 3.8% regions.

Data on usage of total *khat* shows that the current prevalence stands at 4.1% in 2017. The trend shows a slight decline from 4.2% in 2012. The prevalence is however lower compared to 5.5% in 2007.

Table 49: Current usage of khat/ miraa among respondents aged 15 – 65 years

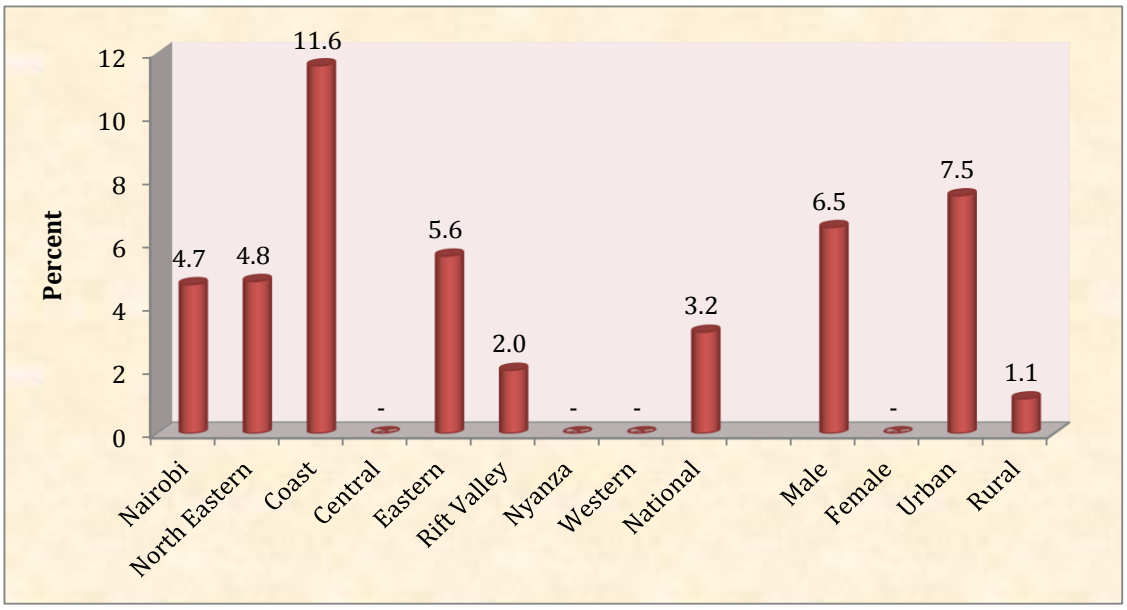
Characteristic		Khat (Miraa)		Khat (Muguka)		Total Khat[3]			Total
		2012	2017	2012	2017	2007	2012	2017	
Setting	Urban	7.2	5.9	1.3	4.2	7.7	7.9	8.1	**744**
	Rural	1.6	2.0	0.4	0.7	4.7	1.9	2.4	**1776**
Region	Nairobi	5.6	3.3	3.3	3.8	7.6	7.2	5.2	**212**
	N. Eastern	26.9	11.5	1.1	1.4	18.7	28.0	12.2	**148**
	Coast	5.8	7.8	0.9	4.1	7.8	6.2	10.1	**218**
	Central	0.8	1.0	-	1.3	2.3	0.8	1.6	**312**
	Eastern	4.6	6.4	1.3	4.0	13.9	5.4	8.5	**377**
	R. Valley	2.0	1.4	0.2	0.6	1.4	2.2	1.9	**643**
	Nyanza	2.0	0.9	-	0.3	1.5	2.1	0.9	**342**
	Western	0.4	-	-	-	-	0.4	-	**268**
Gender	Male	6.5	5.9	1.5	3.2	9.4	7.3	7.6	**1229**
	Female	0.9	0.5	0	0.3	1.7	0.9	0.7	**1291**
Age in years	15 – 17	0.8	-	0.8	-	2.9	1.6	-	**174**
	18 – 24	4.1	3.0	0.7	2.4	6.3	4.7	4.4	**497**
	25 – 35	4.9	4.0	1.3	2.8	7.4	5.7	5.5	**833**
	36+	2.6	3.2	0.3	0.8	3.6	2.6	3.5	**1003**
Religion	Christian	2.1	1.9	0.5	1.4	3.5	2.4	2.7	**2200**
	Muslim	18.2	12.5	2.7	4.3	8.3	20.1	14.1	**305**
	Others	0	-	1.6	-	13.6	1.6	-	**15**
Economic status	High	4.6	4.0	2.7	2.0	6.5	6.1	5.9	**101**
	Middle	5.4	3.2	0.6	2.0	5.7	5.4	4.3	**715**
	Low	3.1	3.7	0.6	2.1	4.8	3.6	4.8	**913**
	Very low	2.6	2.3	0.4	1.1	5.6	3.0	2.7	**730**
Employment status	A student	1.6	0.8	0.4	0.6	3.1	2.0	1.1	**355**
	Unemployed	5.1	2.7	1.3	1.3	4.4	5.9	3.4	**594**
	Employed	4.6	4.1	0.9	2.2	8.1	5.1	5.3	**1469**
	Others	0.6	-	-	-	1.0	0.6	-	**94**
Education status	No formal	3.6	7.9	0.8	1.7	7.2	3.9	7.9	**178**
	Primary	3.7	2.9	0.9	2.1	5.5	4.4	4.2	**1066**
	Secondary	4.8	2.9	0.3	1.5	4.9	4.8	3.7	**951**
	Post-secondary	4.7	2.2	1.2	1.3	5.6	4.7	2.9	**314**
Total		**3.7**	**3.2**	**0.7**	**1.7**	**5.5**	**4.2**	**4.1**	**2520**

Note: In the 2007 survey, miraa was captured as just miraa and not either muguka or miraa.

Data according to Figure 53 below among respondents aged 15 – 24 years shows that the prevalence of current usage of total *khat* stands at 3.2% in 2017. Coast region is leading in the prevalence of current usage of total *khat* in 2017 (11.6%) followed by Eastern 5.6% and North Eastern 4.8% regions. The prevalence of current usage of total *khat* is higher among males 6.5% compared to females. The prevalence is also higher among respondents from urban areas 7.5% compared to those in the rural areas 1.1%.

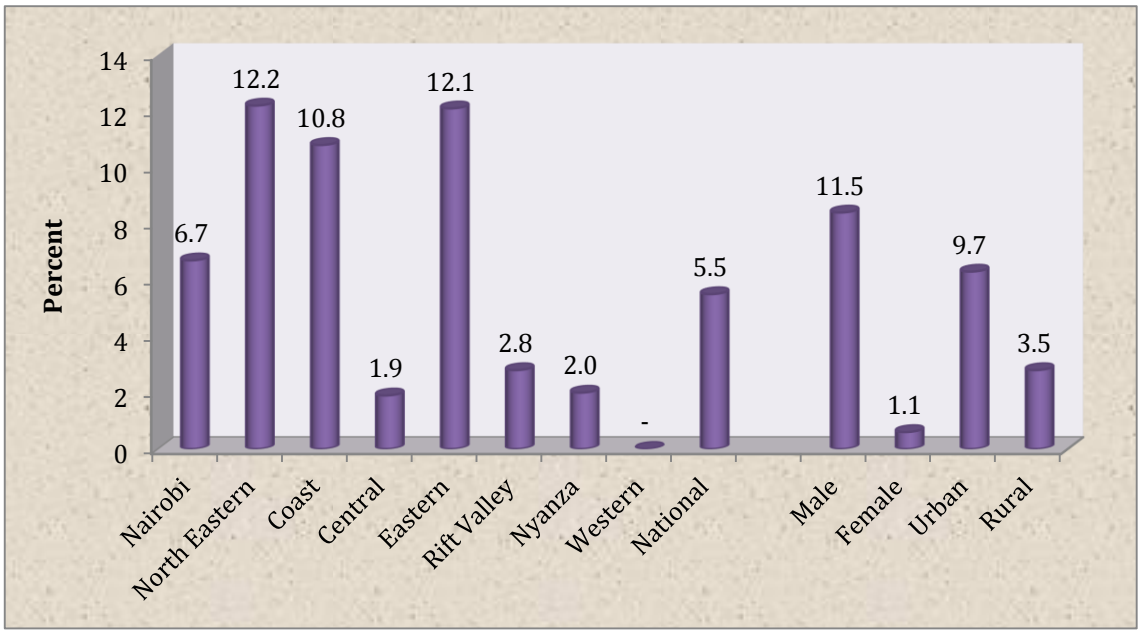
[3] In 2007 khat was captured as "miraa" and not disaggregated into the two common variants (i.e. muguka and miraa)

Figure 53: Current usage of total khat/ miraa among respondents aged 15 – 24 years (n=657)



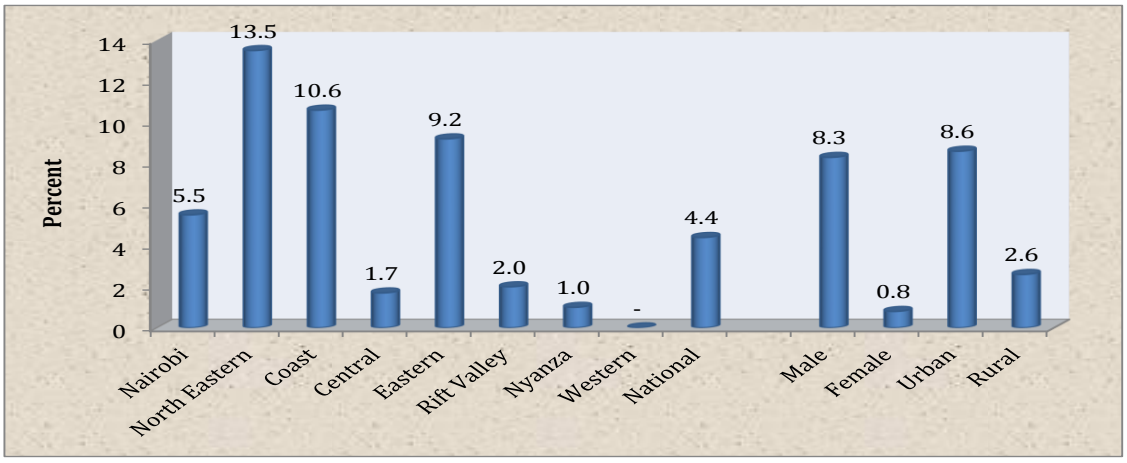
Data according to Figure 54 below among respondents aged 25 – 35 years shows that the prevalence of current usage of total *khat* stands at 5.5% in 2017. North Eastern region is leading in the prevalence of current usage of total *khat* in 2017 (12.2%) followed by Eastern 12.1% and Coast 10.8% regions. The prevalence of current usage of total *khat* is higher among males 11.5% compared to females 1.1%. The prevalence is also higher among the respondents from urban areas 9.7% compared to those in the rural areas 3.5%.

Figure 54: Current usage of total khat/ miraa among respondents aged 25 – 35 years (n=833)



Data according to Figure 55 below among respondents aged 18 – 65 years shows that the prevalence of current usage of total *khat* stands at 4.4% in 2017. North Eastern region is leading in the prevalence of current usage of total *khat* in 2017 (13.5%) followed by Coast 10.6% and Eastern 9.2% regions. The prevalence of current usage of total *khat* is higher among males 8.3% compared to females 0.8%. The prevalence is also higher among the respondents from urban areas 8.6% compared to those in the rural areas 2.6%.

Figure 55: Current usage of total khat/ miraa among respondents aged 18 – 65 years (n=2333)



Data according to Figure 56 below among respondents aged 15 – 65 years shows that the prevalence of current usage of total *khat* stands at 4.1% in 2017. North Eastern region is leading in the prevalence of current usage of total *khat* in 2017 (12.2%) followed by Coast 10.1% and Eastern 8.5% regions. The prevalence of current usage of total *khat* is higher among males 7.6% compared to females 0.7%. The prevalence is also higher among the respondents from urban areas 8.1% compared to those in the rural areas 2.4%.

Figure 56: Current usage of total khat/ miraa among respondents aged 15 – 65 years (n=2520)

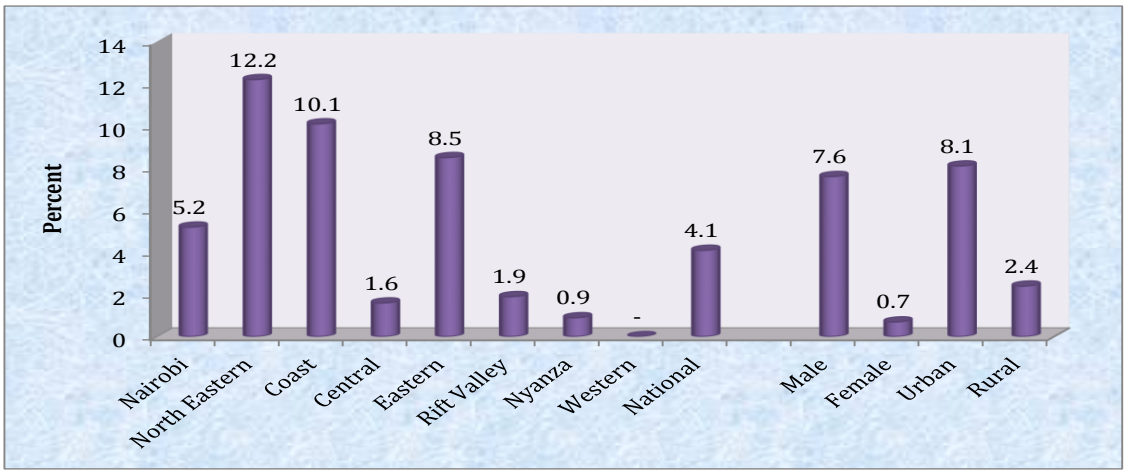


Figure 57 below shows the trend of current usage of total *khat*. The data shows that the prevalence in the current usage of total *khat* has declined slightly from 4.2% in 2012 to 4.1% in 2017. The prevalence in 2017 is also lower compared to 5.5% in 2007.

Figure 57: Trends in current usage of total khat/ miraa among respondents aged 15 – 65 years (n=2520)

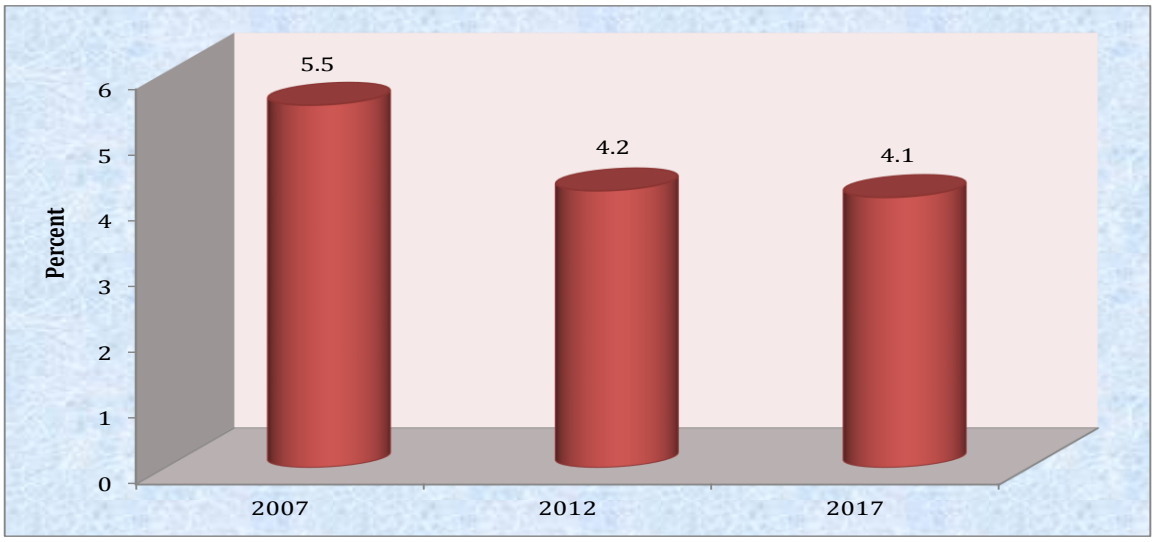
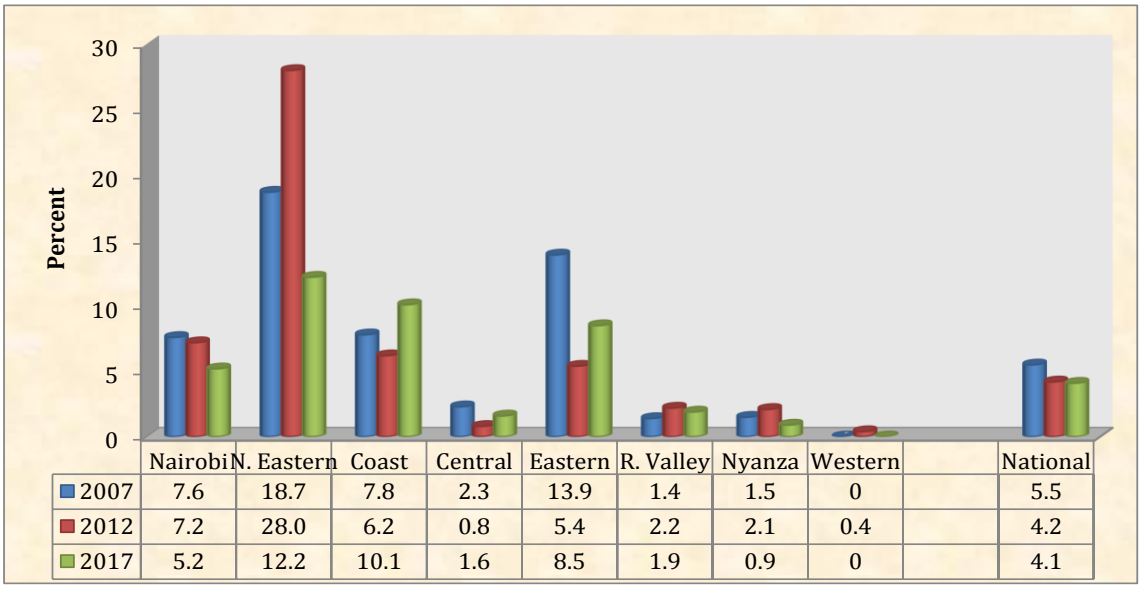


Figure 58 below shows that there is a general decline in current usage of total *khat* nationally from 5.5% in 2007, 4.2% in 2012 to 4.1% in 2017. Data shows that Coast region has recorded a steady increase in the prevalence of current usage of total *khat* from 2012 to 2017. From the findings, all other regions have continued to record a decline in the current usage of total *khat*.

Figure 58: Trends in current usage of total khat/ miraa among respondents aged 15 – 65 years by region (n=2520)



	Nairobi	N. Eastern	Coast	Central	Eastern	R. Valley	Nyanza	Western		National
2007	7.6	18.7	7.8	2.3	13.9	1.4	1.5	0		5.5
2012	7.2	28.0	6.2	0.8	5.4	2.2	2.1	0.4		4.2
2017	5.2	12.2	10.1	1.6	8.5	1.9	0.9	0		4.1

5.10 Current use of narcotics among respondents aged 15 – 65 year-olds

Respondents were asked whether they have ever used any narcotic drug in the last 30 days prior to the survey (current use). Findings according to Table 50 shows that 1.0% of the respondents aged 15 – 65 years are currently using bhang in 2017. The trend has stabilized at 1.0% from 2007, 2012 and 2017. Coast region is leading in the current usage of bhang (2.8%) followed by Nyanza 2.0% and Nairobi 1.4% regions.

The data also shows that current usage of hashish has been recording a decline from 0.2% in 2007 and 0.1% in 2012. In 2017, very low levels of current usage of hashish have been recorded.

Table 50: Current usage of narcotics among respondents aged 15 – 65 year olds

Characteristic		Bhang			Hashish			Total
		2007	2012	2017	2007	2012	2017	
Setting	Urban	1.4	1.7	1.5	0.4	0.3	-	**744**
	Rural	0.9	0.6	0.8	0.1	0	-	**1776**
Region	Nairobi	1.1	1.3	1.4	0.8	0.3	-	**212**
	N. Eastern	0.8	1.1	-	0	0	-	**148**
	Coast	2.3	1.3	2.8	0.8	0	-	**218**
	Central	0.6	1.1	0.6	0	0	-	**312**
	Eastern	1.3	0.8	0.5	0	0.3	-	**377**
	R. Valley	0.6	0.9	0.6	0.2	0	-	**643**
	Nyanza	1.4	1.7	2.0	0	0.3	-	**342**
	Western	0.3	0	0.7	0	0	-	**268**
Gender	Male	1.7	1.7	1.9	0.1	0.2	-	**1229**
	Female	0.3	0.3	0.2	0.3	0	-	**1291**
Age in years	15 – 17	0.9	0	1.1	0	0	-	**174**
	18 – 24	1.6	1.8	1.6	0.3	0	-	**497**
	25 – 35	1.2	1.6	1.1	0.3	0.1	-	**833**
	36+	0.3	0.2	0.7	0	0.2	-	**1003**
Religion	Christian	0.8	0.8	0.9	0.1	0.1	-	**2200**
	Muslim	1.9	1.9	2.3	0.6	0.8	-	**305**
	Others	2.8	1.6	-	0.8	0	-	**15**
Economic status	High	0.6	1.1	2.0	0	0.4	-	**101**
	Middle	0.9	1.0	1.1	0.2	0	-	**715**
	Low	0.5	1.3	0.8	0	0.2	-	**913**
	Very low	1.4	0.7	1.1	0.3	0	-	**730**
Employment status	A student	1.4	0	0.8	0.2	0	-	**355**
	Unemployed	1.5	0.8	1.3	0.2	0	-	**594**
	Employed	1.0	1.2	1.0	0.1	0.2	-	**1469**
	Others	0.3	0.3	1.1	0.3	0	-	**94**
Education status	No formal	0.9	1.6	0.6	0.3	0.2	-	**178**
	Primary	0.8	0.9	1.0	0.1	0.1	-	**1066**
	Secondary	1.5	0	1.1	0.2	0	-	**951**
	Post-secondary	0.3	1.2	1.3	0.6	0	-	**314**
Total		**1.0**	**1.0**	**1.0**	**0.2**	**0.1**	**<0.1**	**2520**

The data according to Table 51 shows that current usage of cocaine and heroin has been on a steady decline from 2007 to 2017. The study shows that the current usage of cocaine has decline from 0.2% in 2007 to minimal levels in 2012 and 2017.

The current usage of heroin has also declined from 0.1% in 2007, 0.1% in 2012 to very minimal levels in 2017.

Table 51: Current usage of narcotics among respondents aged 15 – 65 year olds cont'

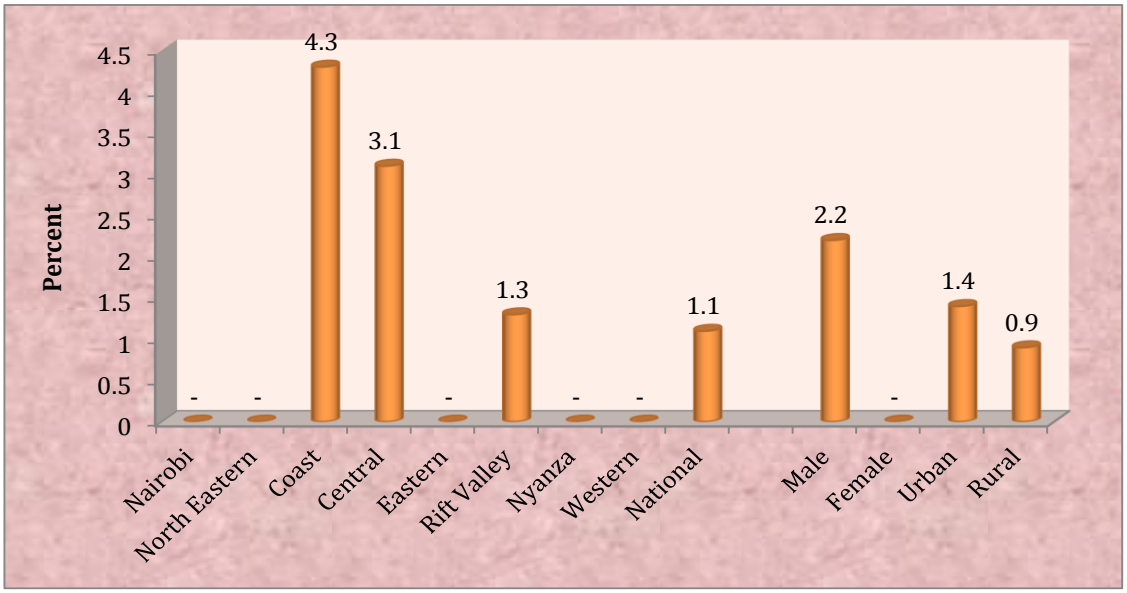
Characteristic		Cocaine			Heroin			Total
		2007	**2012**	**2017**	**2007**	**2012**	**2017**	
Setting	Urban	0.5	-	-	0.1	0.1	**-**	**744**
	Rural	0.1	0.1	-	0.1	0.1	**-**	**1776**
Region	Nairobi	0.5	-	-	0.2	-	**-**	**212**
	N. Eastern	-	-	-	-	-	**-**	**148**
	Coast	1.3	0.4	-	0.4	0.4	**-**	**218**
	Central	-	-	-	0.2	-	**-**	**312**
	Eastern	-	-	-	-	-	**-**	**377**
	R. Valley	0.2	-	-	-	-	**-**	**643**
	Nyanza	-	-	-	-	-	**-**	**342**
	Western	-	-	-	-	-	**-**	**268**
Gender	Male	0.2	-	-	0.1	-	**-**	**1229**
	Female	0.2	0.1	-	0.1	0.2	**-**	**1291**
Age in years	15 – 17	-	-	-	-	-	**-**	**174**
	18 – 24	0.2	-	-	0.1	0.2	**-**	**497**
	25 – 35	-	0.1	-	-	0.1	**-**	**833**
	36+	-	-	-	0.2	-	**-**	**1003**
Religion	Christian	0.1	0.1	-	0.1	0.1	**-**	**2200**
	Muslim	0.6	-	-	0.3	0.4	**-**	**305**
	Others	1.8	-	-	-	-	**-**	**15**
Economic status	High	-	-	-	0.5	0.4	**-**	**101**
	Middle	0.3	-	-	0.1	-	**-**	**715**
	Low	-	0.1	-	-	-	**-**	**913**
	Very low	0.3	-	-	0.1	0.1	**-**	**730**
Employment status	A student	0.2	-	-	-	0.4	**-**	**355**
	Unemployed	-	-	-	-	-	**-**	**594**
	Employed	0.2	0.1	-	0.1	0.1	**-**	**1469**
	Others	0.3	-	-	0.3	-	**-**	**94**
Education status	No formal	0.2	-	-	0.3	0.1	**-**	**178**
	Primary	-	0.1	-	-	-	**-**	**1066**
	Secondary	0.2	-	-	0.1	0.3	**-**	**951**
	Post-secondary	0.3	-	-	0.3	-	**-**	**314**
Total		**0.2**	**<0.1**	**<0.1**	**0.1**	**0.1**	**<0.1**	**2520**

Note: The survey coincided with the Government's efforts to suppress supply narcotic drugs

Data according to Figure 59 below among respondents aged 15 – 24 years shows that the prevalence of current usage of bhang stands at 1.1% in 2017. Coast region is leading in the prevalence of current usage of bhang in 2017 (4.3%) followed by Central 3.1% and Rift Valley 1.3% regions. The prevalence of current usage of bhang is higher among males 2.2% compared to females.

The prevalence is also higher among the respondents from urban areas 1.4% compared to those in the rural areas 0.9%. Current usage of other narcotic drugs like heroin, cocaine and hashish was below 0.1%.

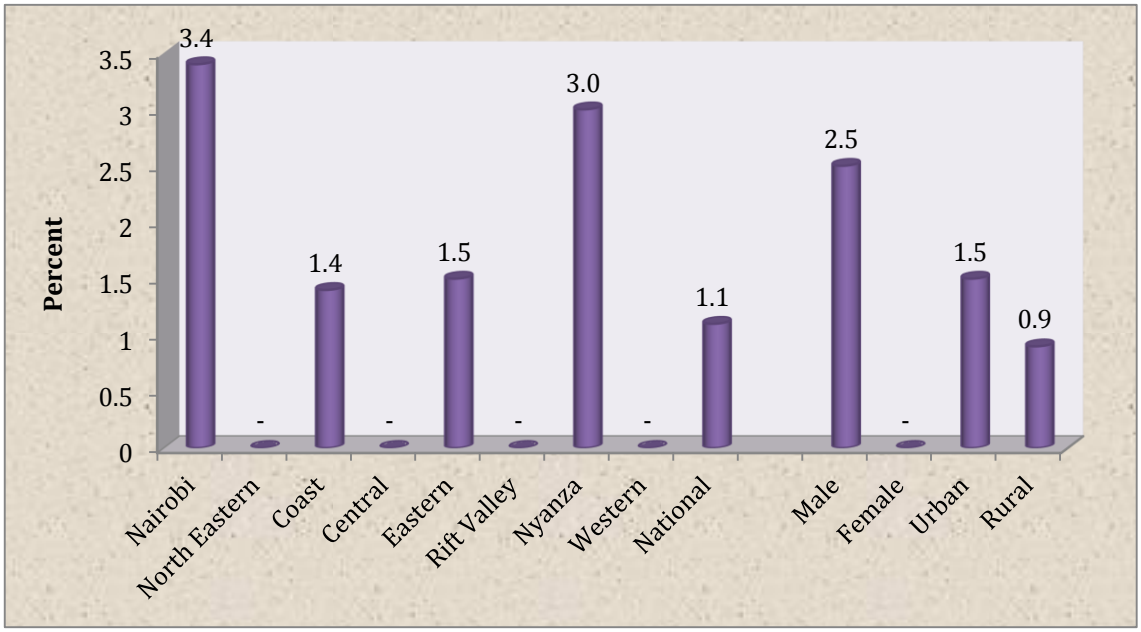
Figure 59: Current usage of bhang among respondents aged 15 – 24 years (n=657)



Data according to Figure 60 below among respondents aged 25 – 35 years shows that the prevalence of current usage of bhang stands at 1.1% in 2017. Nairobi region is leading in the prevalence of current usage of bhang in 2017 (3.4%) followed by Nyanza 3.0% and Eastern 1.5% regions. The prevalence of current usage of bhang is higher among males 2.5% compared to females.

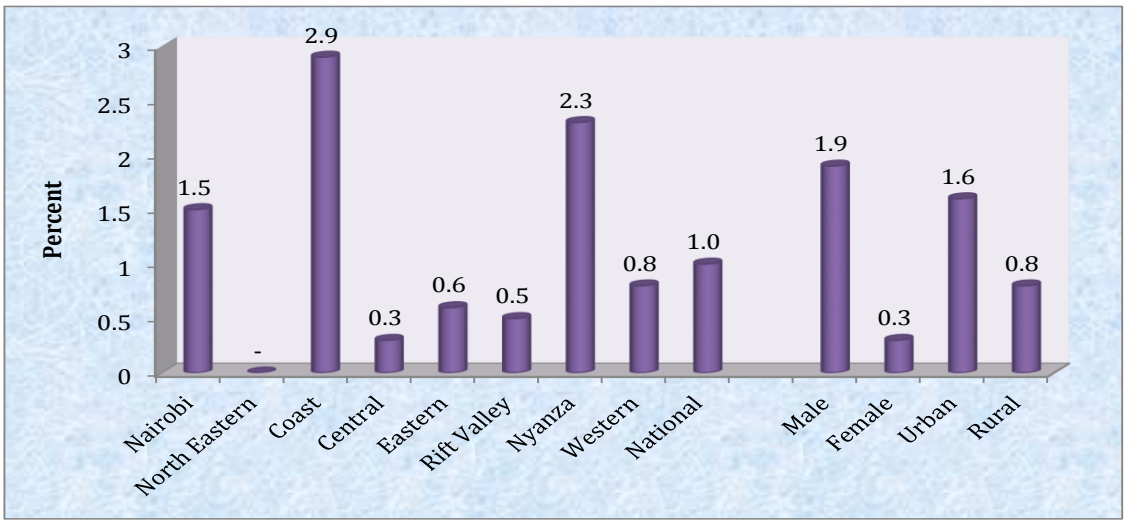
The prevalence is also higher among the respondents from urban areas 1.5% compared to those in the rural areas 0.9%.

Figure 60: Current usage of bhang among respondents aged 25 – 35 years (n=833)



Data according to Figure 61 below among respondents aged 18 – 65 years shows that the prevalence of current usage of bhang stands at 1.0% in 2017. Coast region is leading in the prevalence of current usage of bhang in 2017 (2.9%) followed by Nyanza 2.3% and Nairobi 1.5% regions. The prevalence of current usage of bhang is higher among males 1.9% compared to females 0.3%. The prevalence is also higher among the respondents from urban areas 1.6% compared to those in the rural areas 0.8%.

Figure 61: Current usage of bhang among respondents aged 18 – 65 years (n=2333)



Data according to Figure 62 below among respondents aged 15 – 65 years shows that the prevalence of current usage of bhang stands at 1.0% in 2017. Coast region is leading in the prevalence of current usage of bhang in 2017 (2.8%) followed by Nyanza 2.0% and Eastern 2.0% regions. The prevalence of current usage of bhang is higher among males 1.9% compared to females 0.2%. The prevalence is also higher among the respondents from urban areas 1.5% compared to those in the rural areas 0.8%.

Figure 62: Current usage of bhang among respondents aged 15 – 65 years (n=2520)

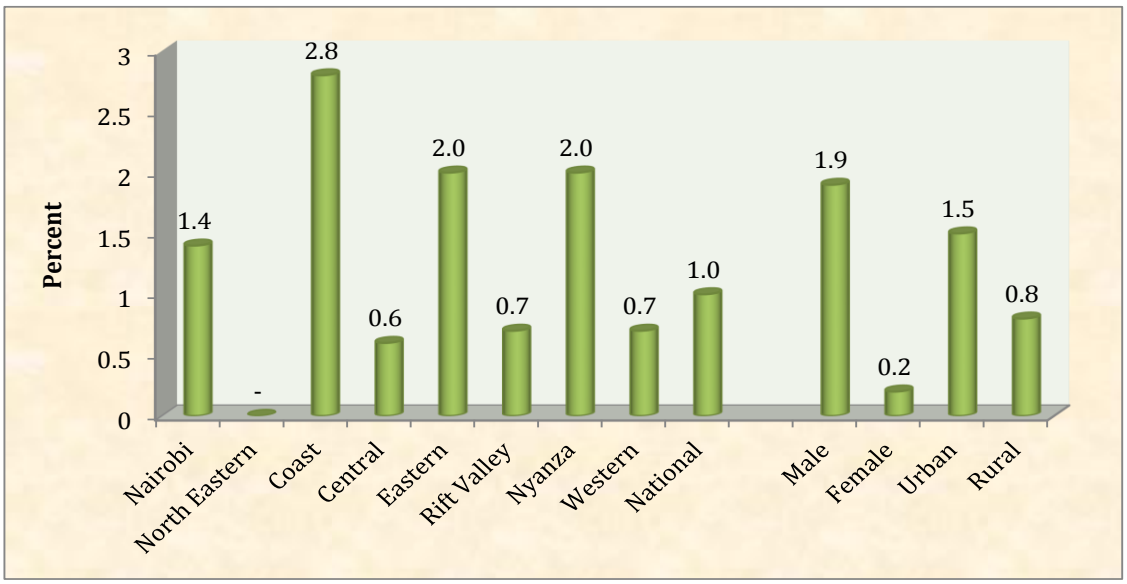


Figure 63 below shows the trend of current usage of bhang. The data shows that the prevalence in the current usage of bhang has stabilized at 0.1% from 2007, 2012 to 2017.

Figure 63: Trends in current usage of bhang among respondents aged 15 – 65 years (n=2520)

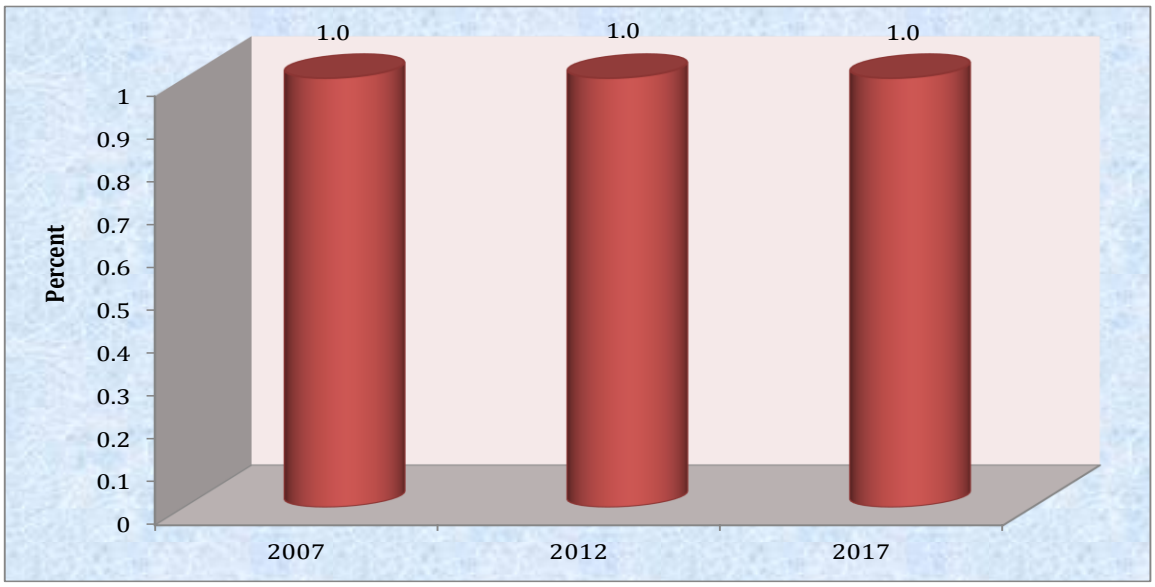
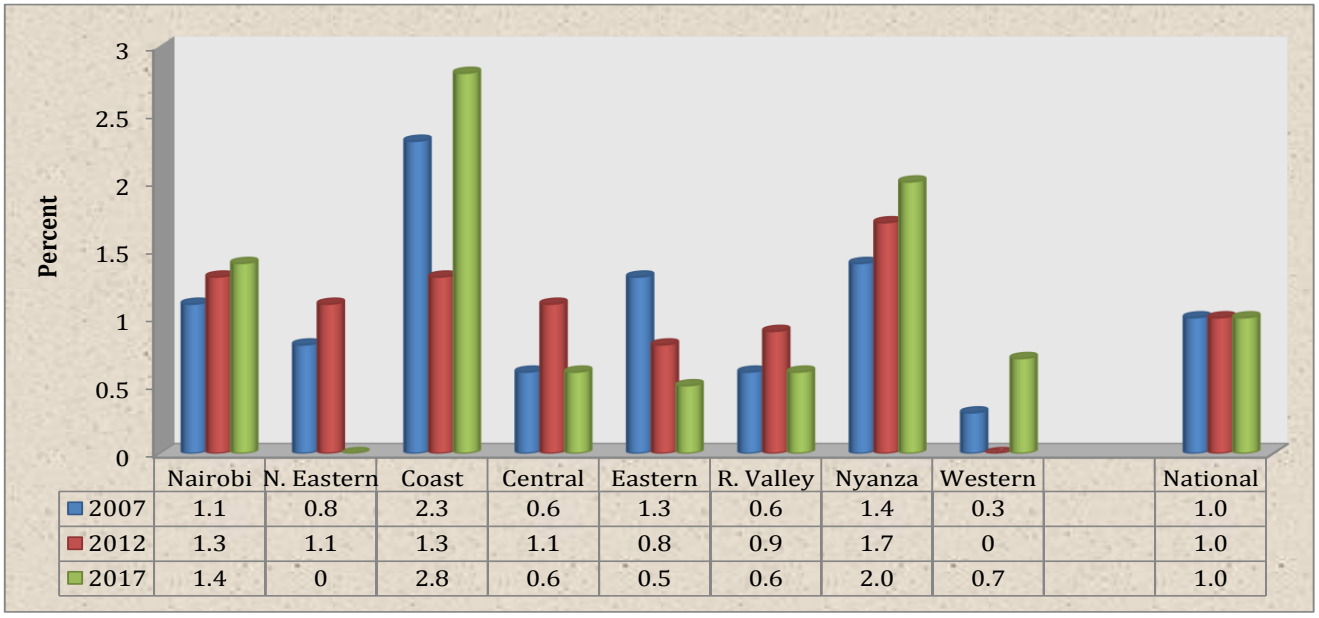


Figure 64 below shows that the current usage of bhang nationally has stabilized at 0.1% from 2007, 2012 to 2017. Analysis of the different regions shows that Nairobi, North Eastern, Coast, Nyanza and Western regions have recorded a steady increase in the prevalence of current usage of bhang from 2012 to 2017.

Figure 64: Trends in current usage of bhang among respondents aged 15 – 65 years by region (n=2520)



	Nairobi	N. Eastern	Coast	Central	Eastern	R. Valley	Nyanza	Western		National
2007	1.1	0.8	2.3	0.6	1.3	0.6	1.4	0.3		1.0
2012	1.3	1.1	1.3	1.1	0.8	0.9	1.7	0		1.0
2017	1.4	0	2.8	0.6	0.5	0.6	2.0	0.7		1.0

5.11 Current use of inhalants and prescription among 15 – 65 year olds

Respondents were asked whether they have ever used inhalants or prescription drugs in the last 30 days prior to the survey (current use). Data according to Table 52 below shows that the current usage of inhalants and prescription drugs is very low in 2017. Current usage of prescription drugs has declined from 2012 to levels below 0.1% in 2017.

Table 52: Current usage of inhalants and prescription drugs among 15 -65 year olds

Characteristics		Inhalants		Prescription drugs		Total
		2012	2017	2012	2017	
Setting	Urban	-	-	0.2	-	**744**
	Rural	-	-	-	-	**1776**
Region	Nairobi	-	-	-	-	**212**
	N. Eastern	-	-	0.3	-	**148**
	Coast	-	-	0.4	-	**218**
	Central	-	-	-	-	**312**
	Eastern	-	-	-	-	**377**
	R. Valley	-	-	-	-	**643**
	Nyanza	-	-	-	-	**342**
	Western	-	-	-	-	**268**
Gender	Male	-	-	0.1	-	**1229**
	Female	-	-	0.1	-	**1291**
Age in years	15 – 17	-	-	-	-	**174**
	18 – 24	-	-	0.2	-	**497**
	25 – 35	-	-	-	-	**833**
	36+	-	-	0.1	-	**1003**
Religion	Christian	-	-	0.1	-	**2200**
	Muslim	-	-	-	-	**305**
	Others	-	-	-	-	**15**
Economic status	High	-	-	0.4		**101**
	Middle	-	-	-	-	**715**
	Low	-	-	-	-	**913**
	Very low	-	-	0.1	-	**730**
Employment status	A student	-	-	-	-	**355**
	Unemployed	-	-	-	-	**594**
	Employed	-	-	0.3	-	**1469**
	Others	-	-	-	-	**94**
Education status	No formal	-	-	0.2	-	**178**
	Primary	-	-	-	-	**1066**
	Secondary	-	-	-	-	**951**
	Post-secondary	-	-	-	-	**314**
Total		**<0.1**	**<0.1**	**0.1**	**<0.1**	**2520**

The findings also show that the lifetime usage of prescription drugs among respondents aged 18 – 65 years is 0.3%. However, lifetime usage of prescription drugs among respondents aged 10 – 14 years, 10 – 19 years and 15 – 24 years was very low.

In terms of inhalants, the lifetime usage among respondents aged 18 – 65 years stands at 0.3%, 10 – 14 years 0.2% and 10 – 19 years 0.1%. Lifetime usage of inhalants was below 0.1%.

5.12 Current usage of at least one substance of abuse

Respondents were asked whether they have ever used at least one substance of abuse in the last 30 days prior to the survey (current usage). Figure 65 below shows that the prevalence of current usage of at least one substance of abuse among respondents aged 15 -24 years stands at 9.7% in 2017.

Coast region has the highest prevalence of current usage of at least one substance of abuse (18.8%) followed by Western 14.7% and Eastern 14.4% regions. Data shows that there are more males that are currently using at least one substance of abuse 15.5% compared to females 4.2%. Urban areas have higher prevalence of current usage of at least one substance of abuse 12.6% compared to rural areas 8.4%.

Figure 65: Current usage of at least one substance of abuse among respondents aged 15 – 24 years (n=657)

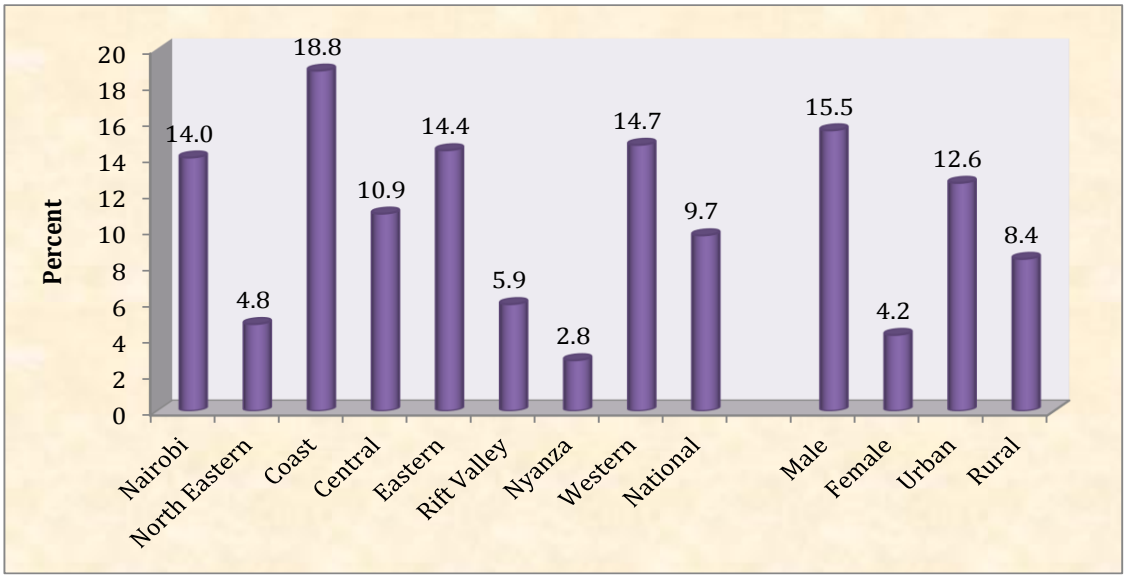


Figure 66 below shows that the prevalence of current usage of at least one substance of abuse among respondents aged 25 -35 years stands at 19.4% in 2017. Eastern region has the highest prevalence of current usage of at least one substance of abuse (26.5%) followed by Coast 25.7% and Nairobi 22.5% regions.

Data shows that there are more males that are currently using at least one substance of abuse 37.5% compared to females 5.9%. Urban areas have higher prevalence of current usage of at least one substance of abuse 22.3% compared to rural areas 18.1%.

Figure 66: Current usage of at least one substance of abuse among respondents aged 25 – 35 years (n=833)

Figure 67 below shows that the prevalence of current usage of at least one substance of abuse among respondents aged 18 -65 years stands at 19.4% in 2017. Eastern region has the highest prevalence of current usage of at least one substance of abuse (25.2%) followed by Nairobi 24.9% and Coast 23.2% regions. Data shows that there are more males that are currently using at least one substance of abuse 33.7% compared to females 5.8%. Urban areas have higher prevalence of current usage of at least one substance of abuse 22.3% compared to rural areas 18.1%.

Figure 67: Current usage of at least one substance of abuse among respondents aged 18 – 65 years (2333)

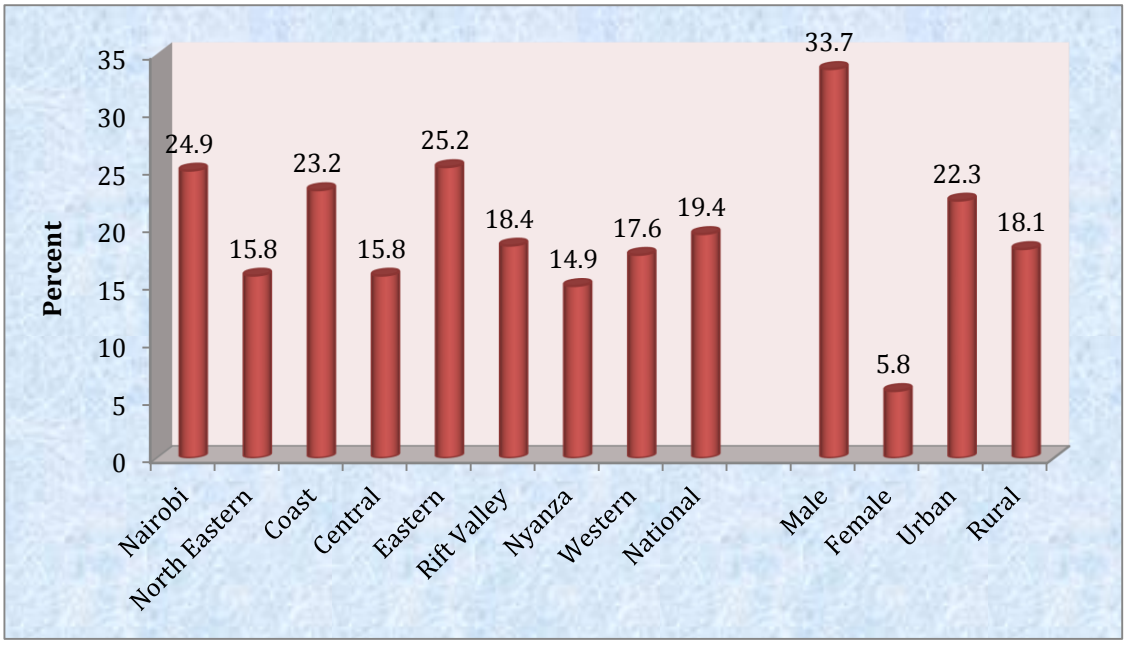


Figure 68 below shows that the prevalence of current usage of at least one substance of abuse among respondents aged 15 -65 years stands at 18.2% in 2017. Eastern and Nairobi regions have the highest prevalence of current usage of at least one substance of abuse (23.6% and 23.6% respectively) followed by Coast 22.0% and Rift Valley 17.3% regions. Data shows that there are more males that are currently using at least one substance of abuse 31.4% compared to females 5.6%. Urban areas have higher prevalence of current usage of at least one substance of abuse 20.8% compared to rural areas 17.1%.

Figure 68: Current usage of at least one substance of abuse among respondents aged 15 – 65 years (n=2520)

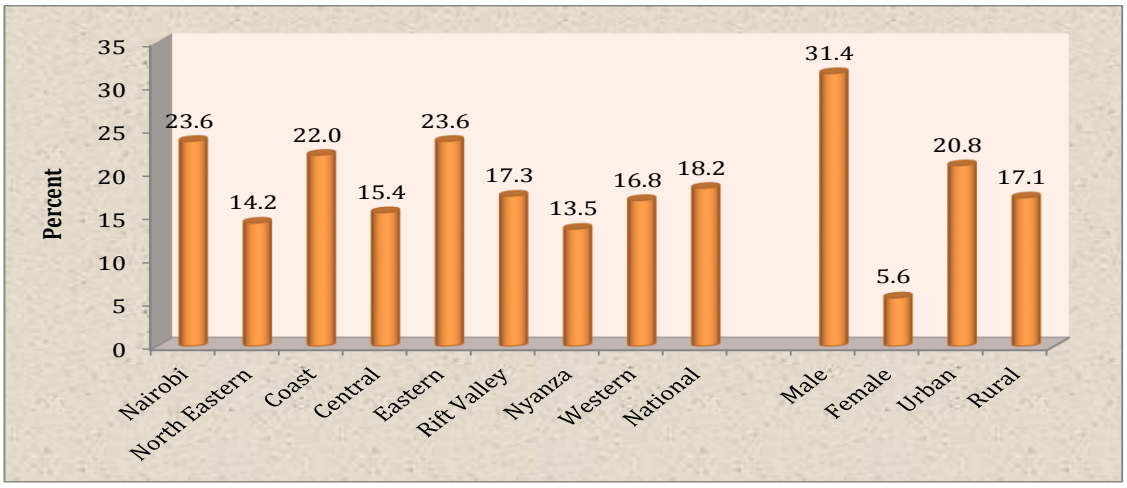
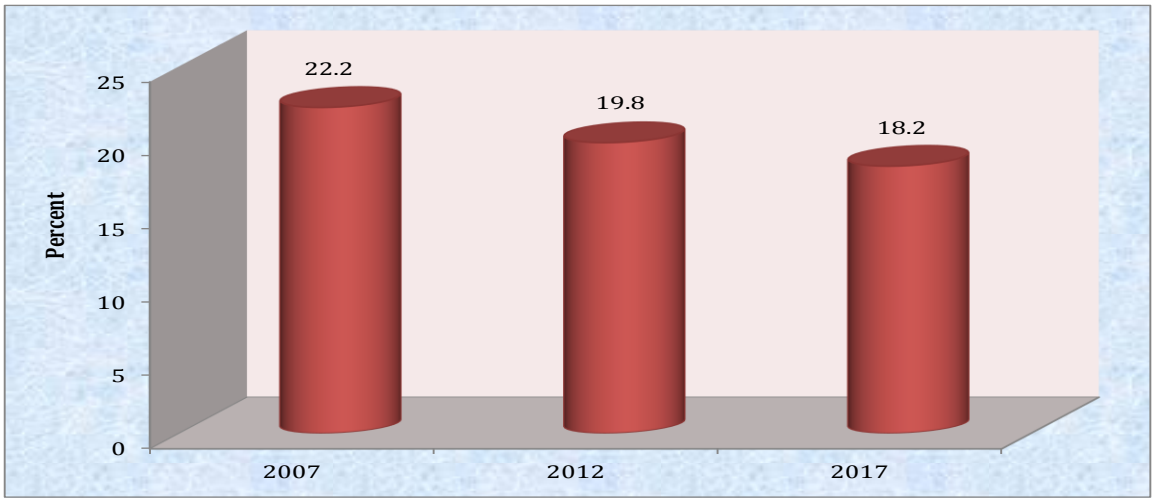


Figure 69 below shows the trend of current usage of at least one substance of abuse. The data shows that the prevalence in the current usage of at least one substance of abuse has declined slightly from 19.8% in 2012 to 18.2% in 2017. The prevalence in 2017 is however lower compared to 22.2% in 2007.

Figure 69: Trends in current usage of at least one substance of abuse among respondents aged 15 – 65 years (n=2520)



5.13 Polydrug use

Current polydrug use is the use of two or more substances either concurrently or simultaneously (multiple drug use) in the last 30 days prior to the survey. Figure 70 below shows that the prevalence of current polydrug use (current usage of multiple drugs and substances of abuse) among respondents aged 15 -24 years stands at 2.7% in 2017. Coast region has the highest prevalence of current polydrug use (8.7%) followed by Eastern 3.3% and North Eastern 3.2% regions. Data shows that males have a higher prevalence of current polydrug use 5.0% compared to females 0.6%. Urban areas have higher prevalence of current polydrug use 4.7% compared to rural areas 1.8%.

Figure 70: Current polydrug use among respondents aged 15 – 24 years (n=657)

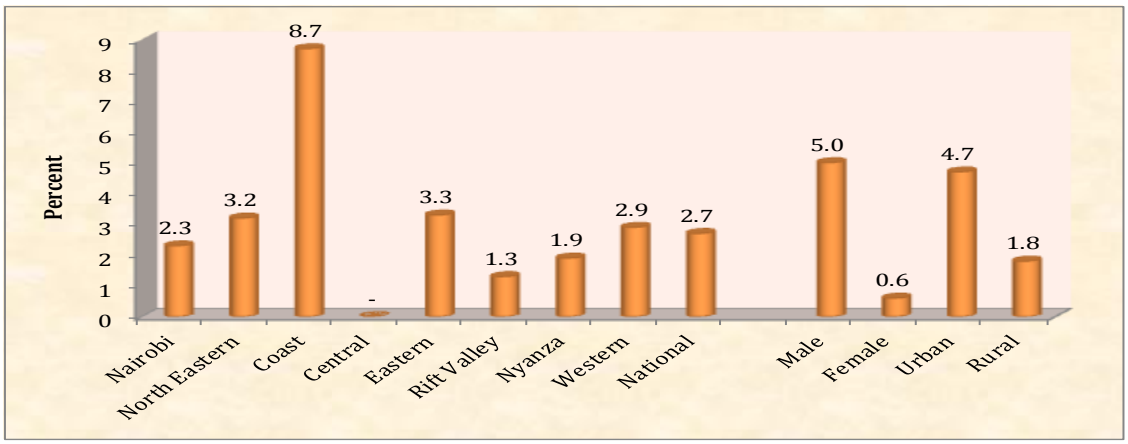


Figure 71 below shows that the prevalence of current polydrug use among respondents aged 25 - 35 years stands at 7.0% in 2017. Eastern region has the highest prevalence of current polydrug use (11.4%) followed by Coast 9.5% and North Eastern 8.2% regions. Data shows that males have a higher prevalence of current polydrug use 13.7% compared to females 1.9%. Urban areas have higher prevalence of current polydrug use 9.9% compared to rural areas 5.7%.

Figure 71: Current polydrug use among respondents aged 25 – 35 years (n=833)

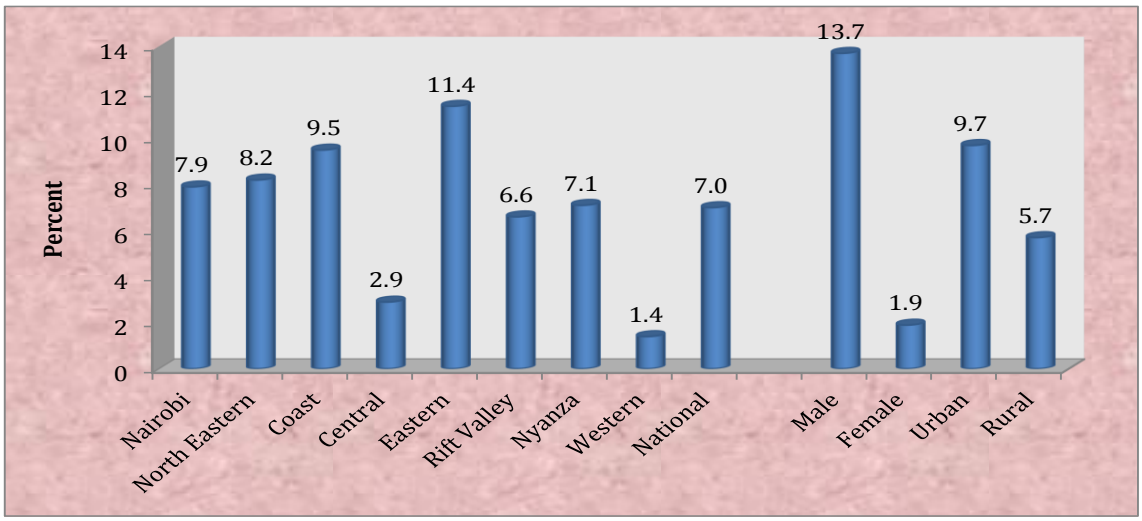


Figure 72 below shows that the prevalence of current polydrug use among respondents aged 18 -65 years stands at 6.5% in 2017. Eastern region has the highest prevalence of current polydrug use (8.9%) followed by Coast 8.7% and North Eastern 8.3% regions. Data shows that males have a higher prevalence of current polydrug use 11.7% compared to females 1.5%. Urban areas have higher prevalence of current polydrug use 8.9% compared to rural areas 5.0%.

Figure 72: Current polydrug use among 18 – 65 year olds (n=2333)

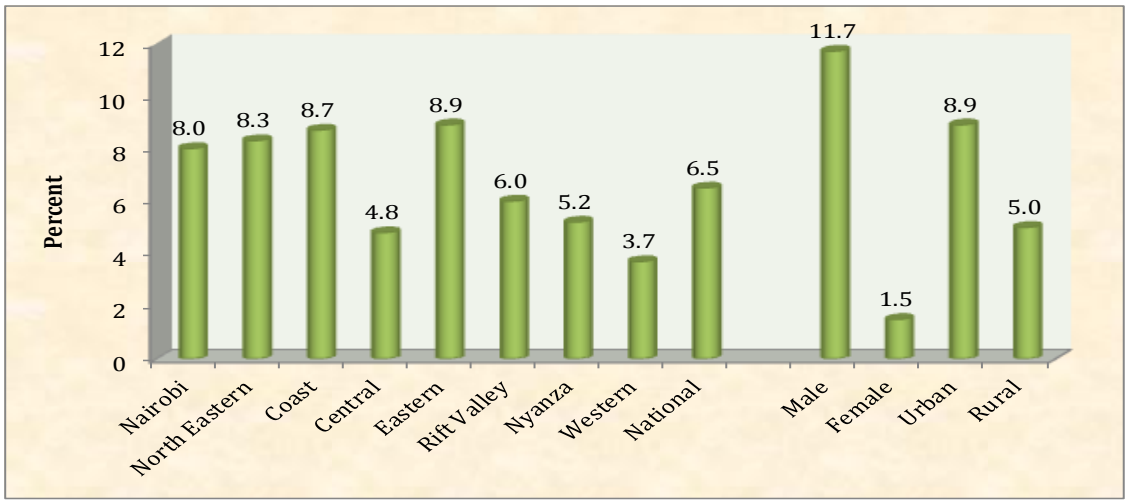
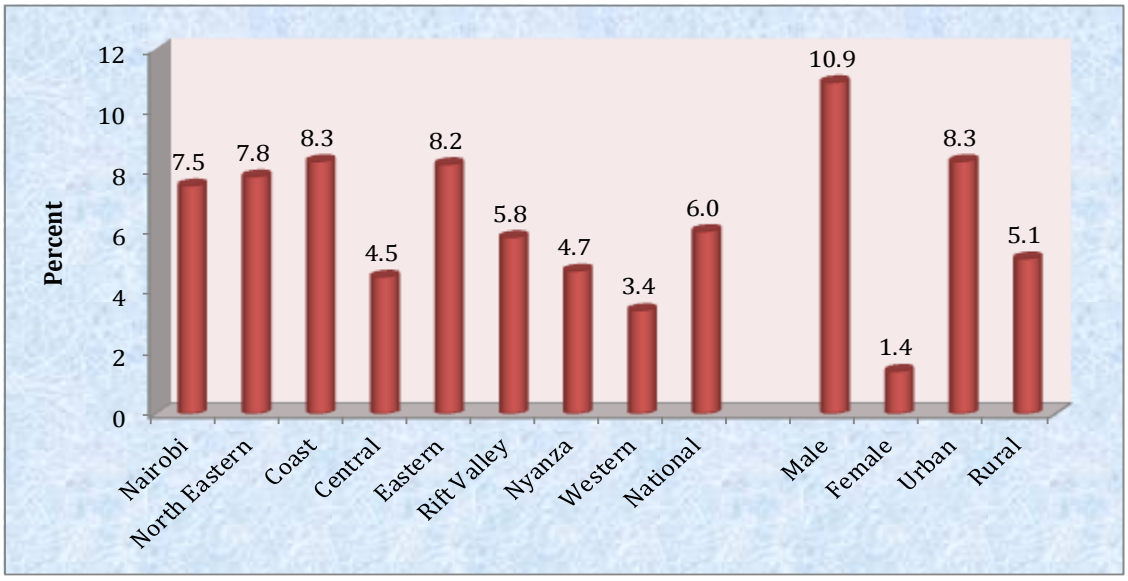


Figure 73 below shows that the prevalence of current polydrug use among respondents aged 15 -65 years stands at 6.0% in 2017. Coast region has the highest prevalence of current polydrug use (8.3%) followed by Eastern 8.2% and North Eastern 7.8% regions. Data shows that males have a higher prevalence of current polydrug use 10.9% compared to females 1.4%. Urban areas have higher prevalence of current polydrug use 8.3% compared to rural areas 5.1%.

Figure 73: Current polydrug use among respondents aged 15 – 65 years (n=2520)



5.12 Initiation of various drugs and substances of abuse

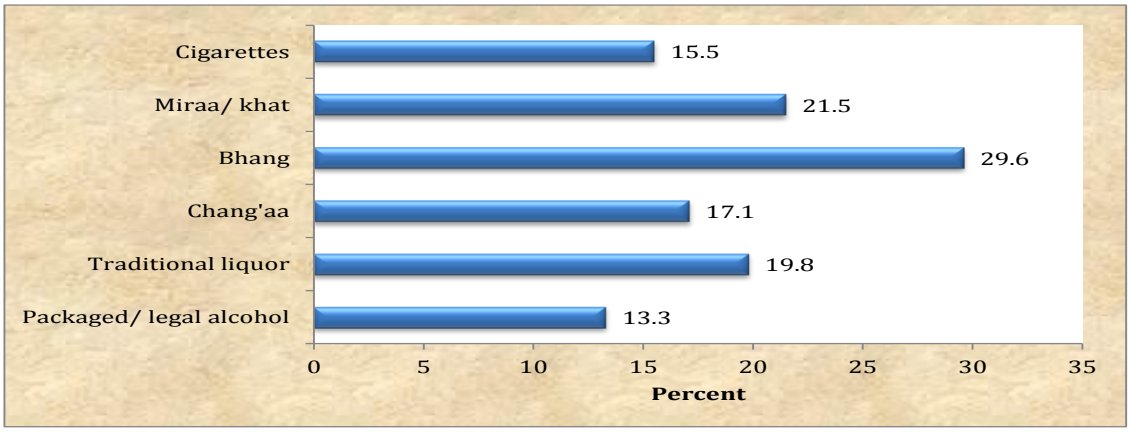
The age of initiating alcohol and drugs of abuse has a direct implication on brain development as well as the likelihood of substance use disorders. Among the respondents aged 10 – 14 years, the median age for initiating tobacco use is 12 years while the minimum reported age is 9 years. For alcohol the median age of initiation is 12 years while the minimum reported age is 5 years. For *bhang*, the median age of initiation among respondents aged 10 – 14 is 12 years. For *miraa/ khat*, the median age of initiation among respondents aged 10 – 14 years is 12.5 years while the minimum age reported is 9 years. Overall, these findings indicate that age 12 is the most likely period for initiating drugs and substances of abuse among the respondents aged 10 – 14 years.

CHAPTER 6: HEALTH AND SOCIO-ECONOMIC CONSEQUENCES OF ALCOHOL AND DRUG ABUSE

6.1 Health problems emanating from drugs and substance abuse

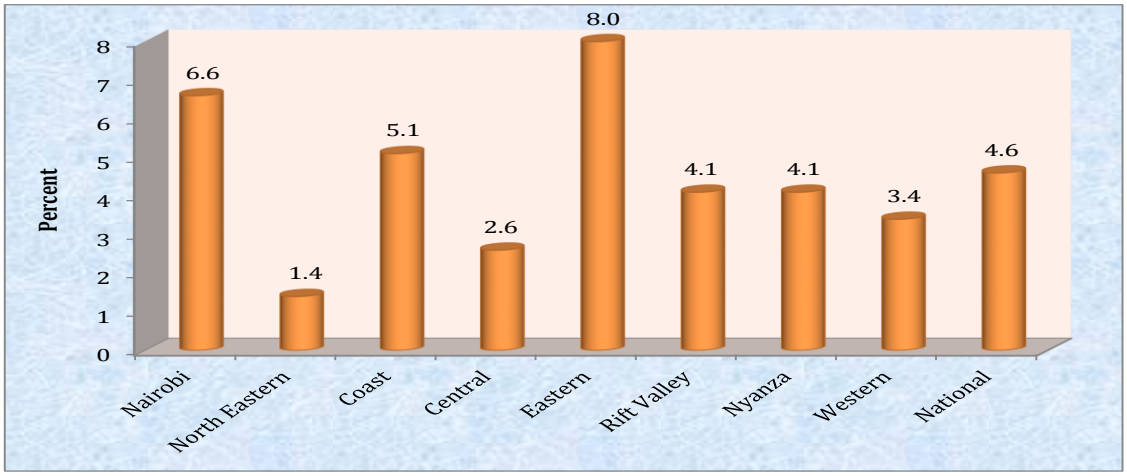
The national survey sought to determine the proportion of users of various drugs who have ever sought medical attention following the use of each drug. Findings reveal that out of those who have used bhang, 29.6% have ever sought medical attention for problems related to its usage. This is followed by users of *miraa/ khat* 21.5%, traditional liquor 19.8%, *chang'aa* 17.1%, cigarettes 15.5% and lastly packaged/legal alcohol 13.3% (Figure 74).

Figure 74: Respondents aged 15 – 65 years using of various drugs who have ever sought treatment



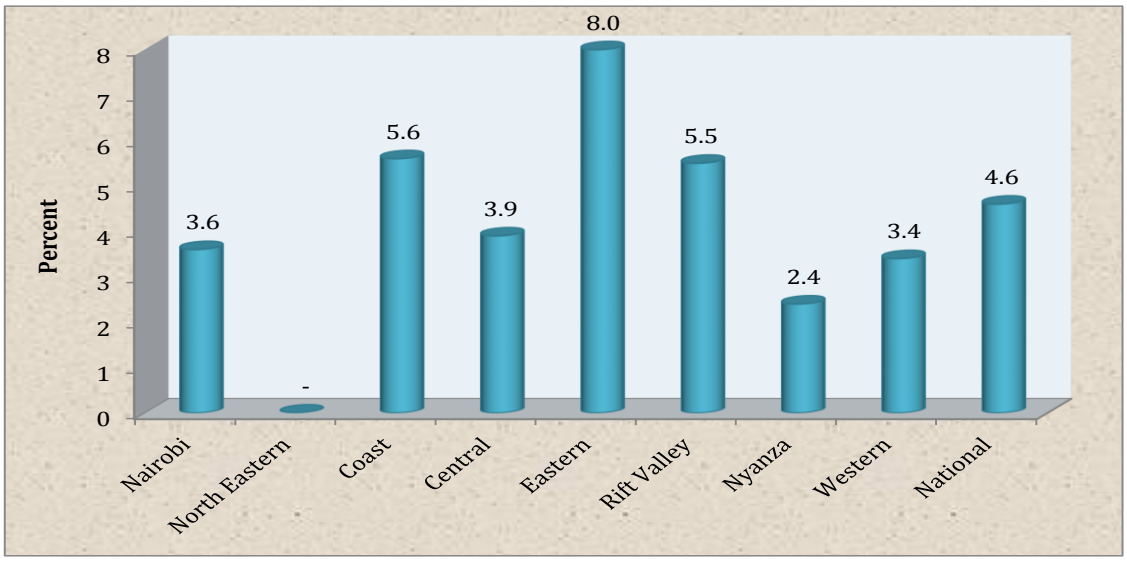
Among respondents aged 15-65 years who reported usage of alcohol or drugs in the last one year, 4.6% of them had ever had sex while drunk or on drugs with someone other than their regular partner. Eastern region has the highest prevalence (8.0%) followed by Nairobi 6.6% and Coast 5.1% (Figure 75).

Figure 75: Respondents aged 15 – 65 years who have ever had sex in the last one year due to alcohol and drugs



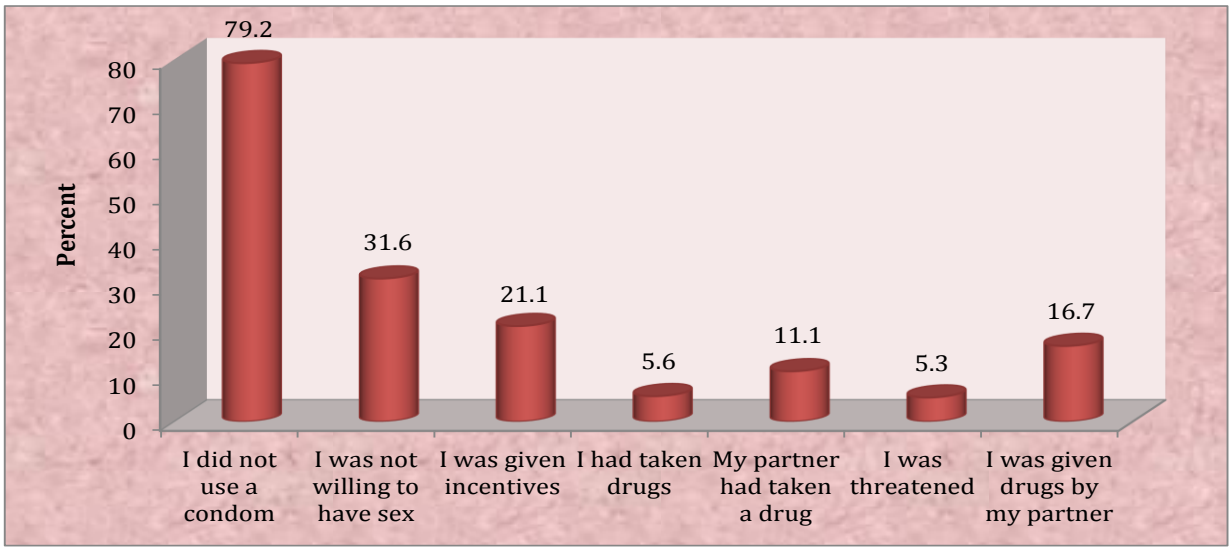
Overall, out of 628 children interviewed in this survey, 4.6% have ever engaged in sex (5.5% for boys and 3.5% for girls). The median age of sexual debut was estimated at 9.5 years (Figure 76).

Figure 76: Respondents aged 10 – 14 years who have ever had sex in the last one year due alcohol and drug abuse



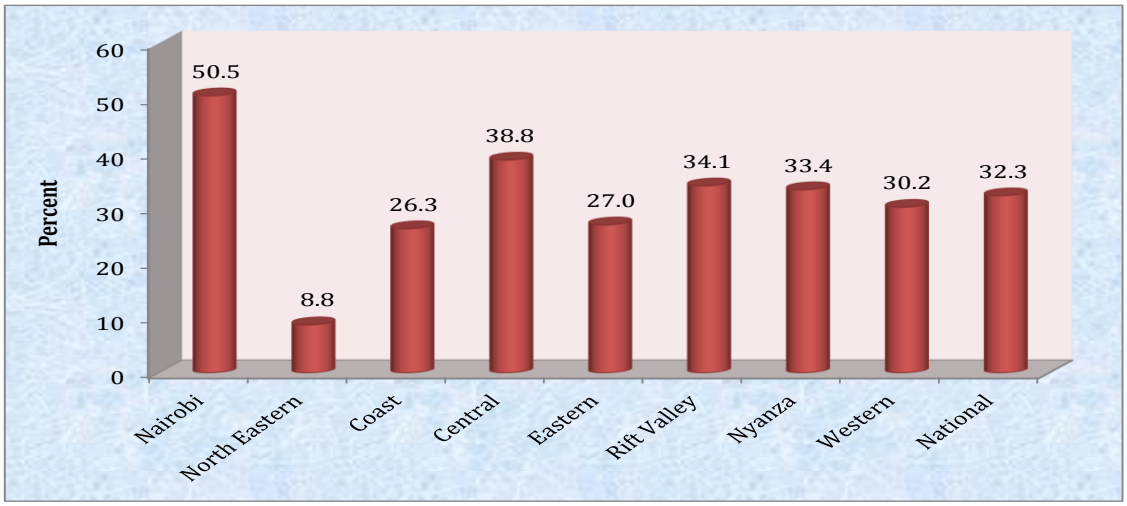
An assessment of the situation during the first sexual intercourse, 79.2% did not use a condom. Further, 31.6% were not willing to have sex, 21.1% were given incentives to lure them into sex, 5.6% had taken alcohol or drugs before the first sexual encounter, 5.3% were threatened to have sex, 16.7% had been given alcohol or drugs by their partners while 11.1% reported that their partners had taken alcohol or drugs (Figure 77).

Figure 77: Rrespondents aged 10 – 14 years by context of first sexual encounter



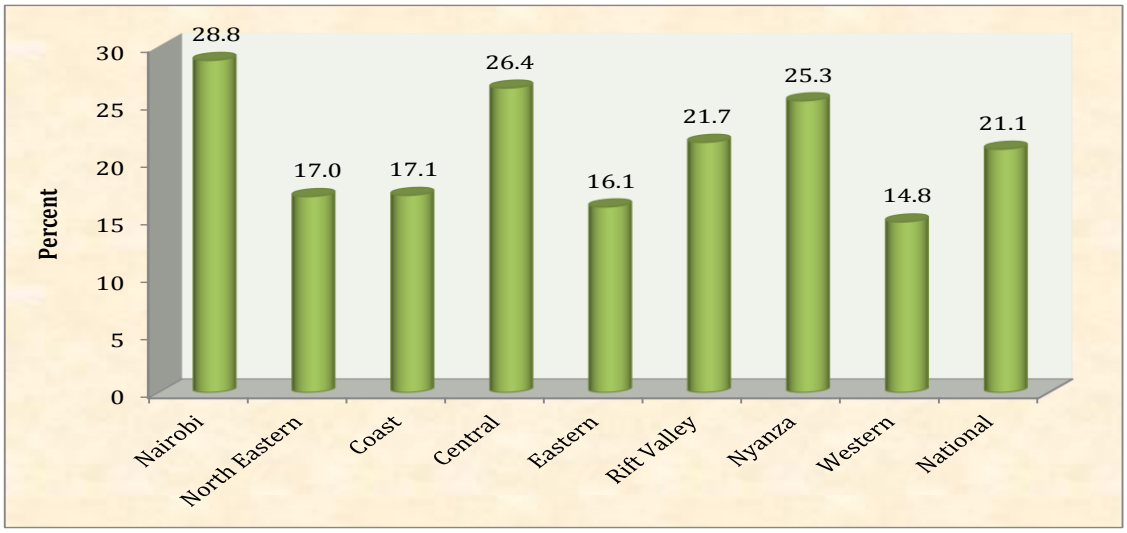
Among respondents aged 15-65 years, 32.3% reported that they know a person in their community who has died due alcohol abuse. Nairobi had the highest prevalence (50.5%) followed by Central 38.8%, Rift Valley 34.1% and Nyanza 33.4% (Table 78).

Figure 78: Respondent knows a person who has died as a result of alcohol abuse in their community in the last one year



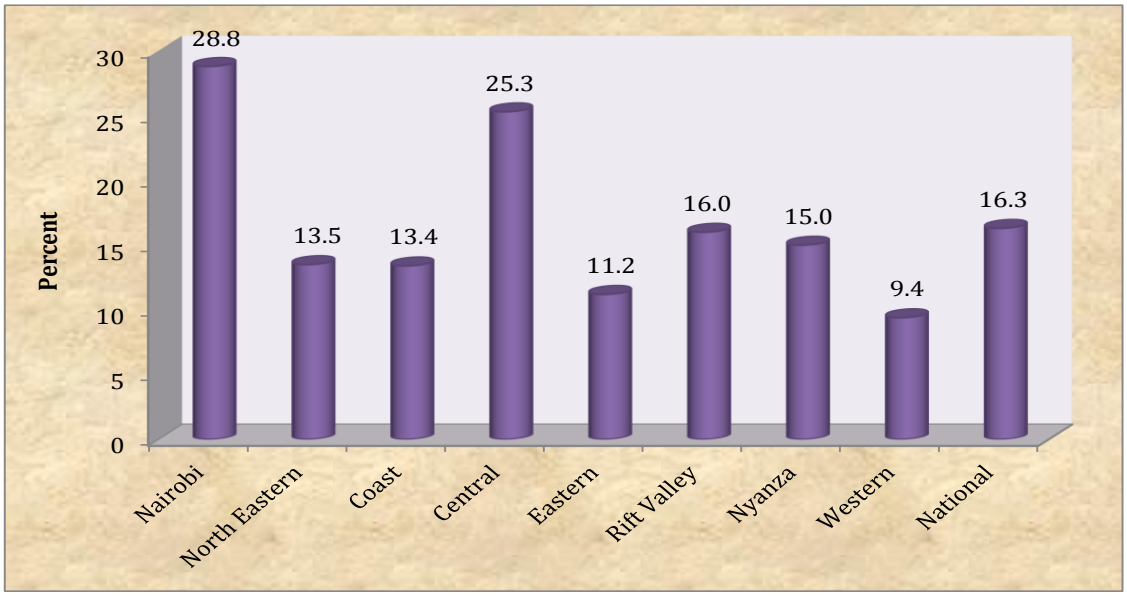
Among respondents aged 15-65 years, 21.1% reported that they have a family member who has died due alcohol abuse. Nairobi had the highest prevalence (28.8%) followed by Central 26.4%, Nyanza 25.3% and Rift Valley 21.7% (Figure 79).

Figure 79: Respondent has a family member who has died as a result of alcohol abuse in the last one year



Among respondents aged 15-65 years, 16.3% reported that they have a family member who has a mental disorder due to drug abuse. Nairobi had the highest prevalence (28.8%) followed by Central 25.3%, Rift Valley 16.0% and Nyanza 15.0% (Figure 80).

Figure 80: Respondent has a family member who has a mental disorder due to drug abuse



6.2 Socio-economic effects of drugs and substance abuse

Alcohol and drug abuse has a direct impact on an individual's productivity and the overall economic development. According to the national survey findings, alcohol and bhang were the two drugs singled out as having the greatest negative effect at the individual, family and community level. One of the socio-economic effects of alcohol and drug abuse reported was work-related absenteeism. Findings show that 40.5% of all *chang'aa* users had missed to go to work or school in the last 12 months followed by those using bhang/ marijuana 37.0%, packaged/ legal alcohol 29.4%, *miraa/ khat* 28.6% and traditional liquor 25.5%.

On diversion of family resources to fulfil one's desire for alcohol or drugs, majority were users of *chang'aa* 50.7%, bhang 43.3%, *miraa/ khat* 41.5%, traditional liquor 35.5%, and packaged/ legal alcohol 28.8%.

Harm to self and harm to others by alcohol and drug users is becoming a major public health concern. Considering harm to self, where someone has been injured as a result of an individual's alcohol and drug abuse, majority were users of *chang'aa* 40.3% followed by users of bhang 34.6%, packaged/ legal alcohol 23.5%, traditional liquor 21.5% and *miraa/ khat* 9.6%.

On the other aspect of harm to others, where a user has become violent towards a spouse/ partner or family member as a result of alcohol and drug abuse, majority were users of *chang'aa* 61.8% followed by users of bhang 50.0%, traditional liquor 36.4%, and packaged / legal alcohol 23.9% and *khat/ miraa* 18.1%.

CHAPTER 7: EXTENT OF ALCOHOL AND DRUG ABUSE DEPENDENCE IN KENYA

7.0 Introduction

This Chapter focuses on substance use disorders (SUDs)/ dependence including perceptions on counselling, treatment and rehabilitation. In particular, it seeks to establish the extent of dependence among respondents aged between 15- 65 years. Categories of substance use disorders have also be explored.

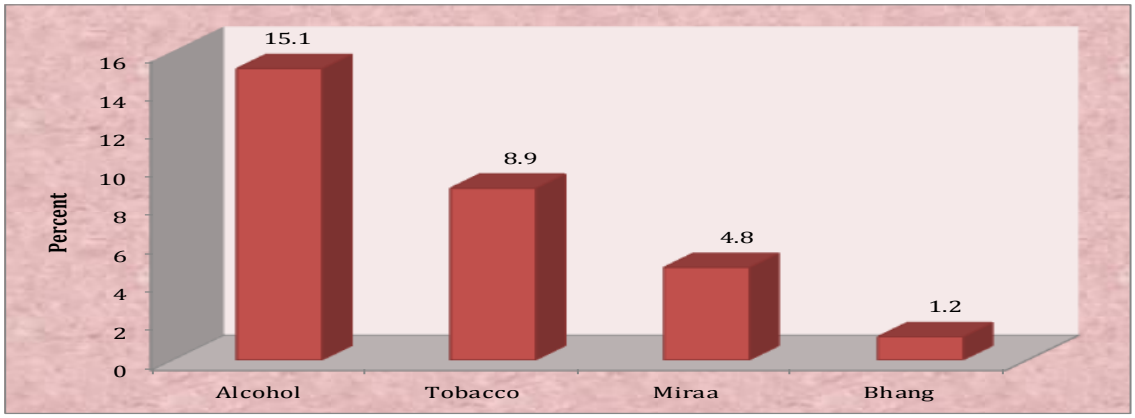
Under Sustainable Development Goals (SDG 3) sub-section 3.5, it mandates countries to strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

7.1 Prevalence of substance use disorders among respondents aged 15 – 65 years

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) screening tool was applied to identify respondents with substance use disorders among those respondents who had used alcohol and other drugs of abuse in the last one year prior to the survey. Substance use disorders are patterns of symptoms resulting from use of a substance which the individual continues to take, despite experiencing problems as a result.

The prevalence of alcohol and drug use in the last one year (annual prevalence) is presented in Table 81 below. From the findings, 15.1% of the respondents have used alcohol in last one year prior to the survey, 8.9% have used tobacco, 4.8% have used miraa and 1.2% have used bhang. The screening tool was therefore applied to any respondent who had used alcohol or drugs in the last one year.

Figure 81: Annual prevalence of alcohol and drug use



The DSM-V recognizes substance related disorders resulting from the use of ten separate classes of drugs: alcohol, caffeine, cannabis, hallucinogens, stimulants, tobacco and other substances.

The DSM-V also recognizes that people are not all automatically or equally vulnerable to developing substance related disorders, and that some individuals have lower levels of self-control, which may be brain-based, which predispose them to developing problems if exposed to drugs. The following eleven (11) different criteria were used to identify substance use disorders:

1. Taking the substance in larger amounts or for longer than the you meant to;

2. Wanting to cut down or stop using the substance but not managing to;

3. Spending a lot of time getting, using, or recovering from use of the substance;

4. Cravings and urges to use the substance;

5. Not managing to do what you should at work, home or school, because of substance use;

6. Continuing to use, even when it causes problems in relationships;

7. Giving up important social, occupational or recreational activities because of substance use;

8. Using substances again and again, even when it puts the you in danger;

9. Continuing to use, even when the you know you have a physical or psychological problem that could have been caused or made worse by the substance;

10. Needing more of the substance to get the effect you want (tolerance);

11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

The DSM-V was also used to categorize severity of substance use disorders depending on how many symptoms were identified. Two (2) or three (3) symptoms indicated a mild substance use disorder; four (4) or five (5) symptoms indicated a moderate substance use disorder; and six (6) or more symptoms indicated a severe substance use disorder.

Table 53 shows the prevalence of substance use disorders among respondents aged 15 – 65 years. According to the findings, 10.4% of the respondents have alcohol use disorders; 6.8% have tobacco use disorders; 3.1% have *khat*/ *miraa* use disorders; and 0.8% have bhang use disorders.

Table 53: Prevalence of substance use disorders (SUDs) among respondents aged 15 – 65 years

Characteristic		Tobacco use disorders	Alcohol use disorders	*Khat/ miraa* use disorders	Bhang use disorders	Total
Setting	Urban	7.9	12.1	6.5	1.3	**694**
	Rural	6.4	9.7	1.7	0.6	**1639**
Age	15 – 24 years	2.1	5.2	2.9	0.6	**657**
	25 – 35 years	5.9	12.8	4.2	1.6	**833**
	36 – 65 years	10.5	11.5	2.5	0.5	**1003**
Region	Nairobi	10.4	18.4	5.2	1.9	**201**
	N. Eastern	8.8	1.4	7.4	-	**133**
	Coast	9.2	8.7	7.3	2.8	**207**
	Central	5.8	8.3	1.0	0.3	**291**
	Eastern	8.8	10.6	6.9	0.3	**349**
	R. Valley	5.9	10.7	1.6	0.2	**599**
	Nyanza	4.4	9.6	0.6	1.8	**309**
	Western	4.9	13.1	-	0.7	**244**
Gender	Male	13.1	17.2	5.7	1.5	**1133**
	Female	0.9	4.0	0.7	0.2	**1200**
Total		**6.8**	**10.4**	**3.1**	**0.8**	**2333**

Figure 82 below shows that the prevalence of tobacco use disorders among respondents aged 15 -65 years stands at 6.8% in 2017. Nairobi region has the highest prevalence of tobacco use disorders (10.4%) followed by Coast 9.2%, Eastern 8.8%, North Eastern 8.8%, Rift Valley 5.9%, Central 5.8%, Western 4.9% and lastly Nyanza 4.4%.

7.2 Prevalence of substance use disorders among respondents aged 15 – 65 years by region

Figure 82: Tobacco use disorders among respondents aged 15 – 65 years by region (n=2520)

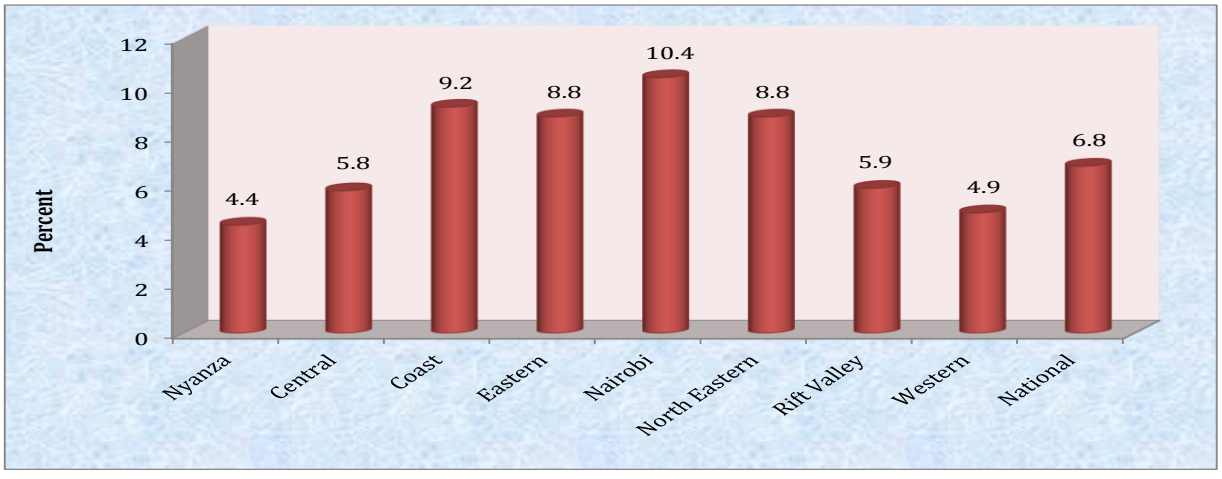


Figure 83 below shows that the prevalence of alcohol use disorders among respondents aged 15 -65 years stands at 10.4% in 2017. Nairobi region has the highest prevalence of alcohol use disorders (18.4%) followed by Western 13.1%, Rift Valley 10.7%, Eastern 10.6%, Nyanza 9.6%, Coast 8.7%, Central 8.3% and North Eastern 1.4%.

Figure 83: Alcohol use disorders among respondents aged 15 – 65 years by region (n=2520)

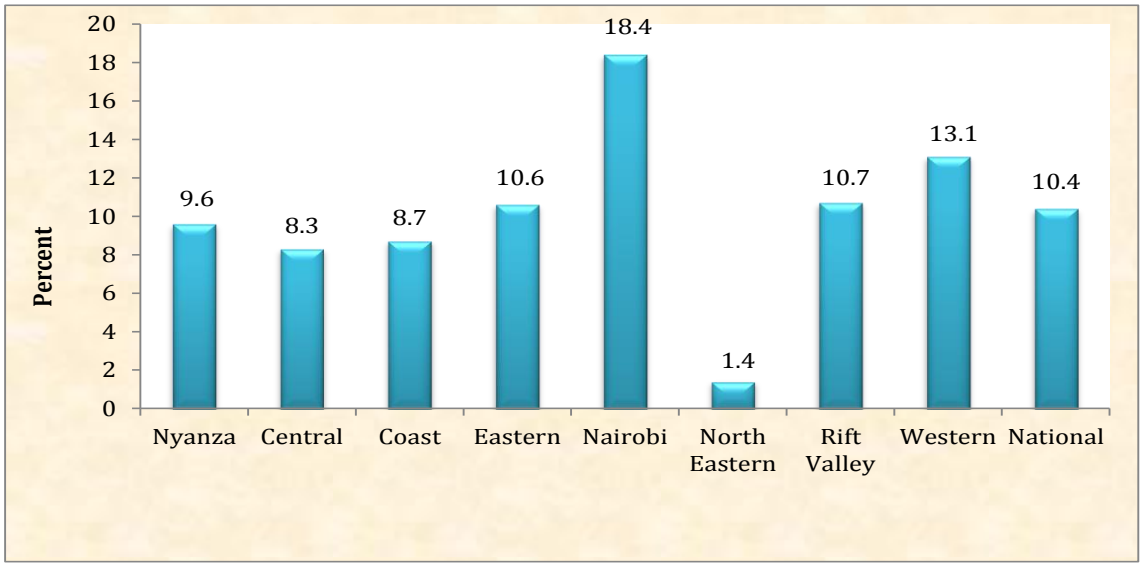


Figure 84 below shows that the prevalence of *khat/ miraa* use disorders among respondents aged 15 -65 years stands at 3.1% in 2017. North Eastern region has the highest prevalence of *khat/ miraa* use disorders (7.4%) followed by Coast 7.3%, Eastern 6.9%, Nairobi 5.2%, Rift Valley 1.6%, Central 1.0% and Nyanza 0.6%.

Figure 84: Khat/ miraa use disorders among respondents aged 15 – 65 years by region (n=2520)

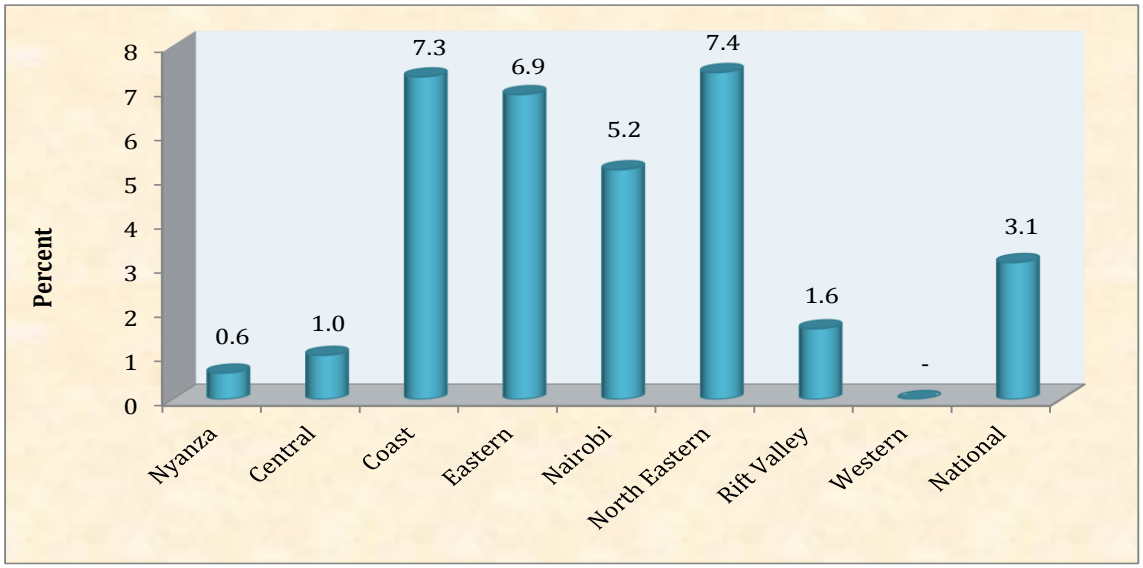
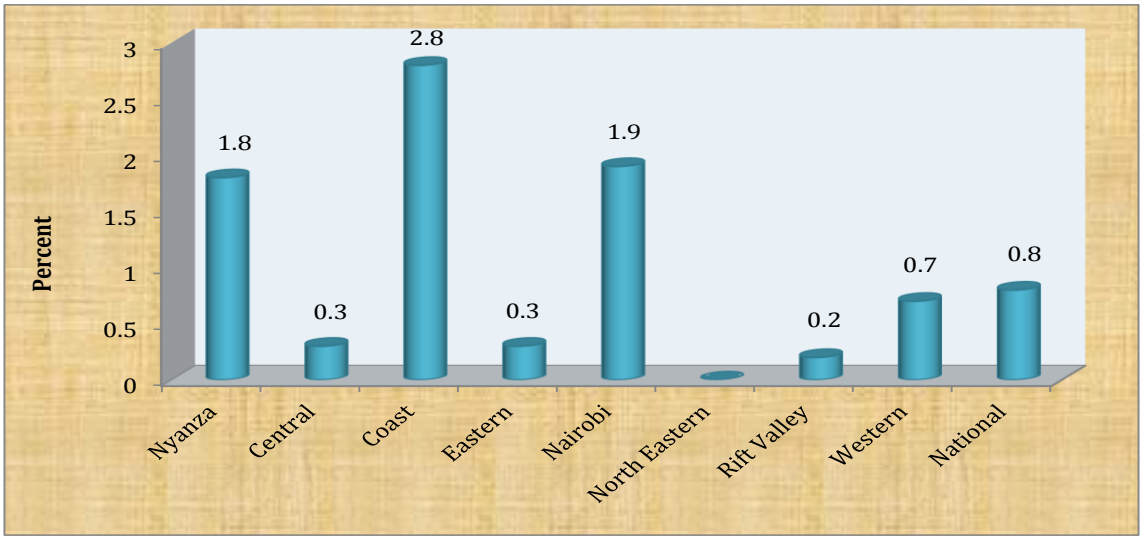


Figure 85 below shows that the prevalence of bhang use disorders among respondents aged 15 -65 years stands at 0.8% in 2017. Coast region has the highest prevalence of bhang use disorders (2.8%) followed by Nyanza 1.8%, Nairobi 1.9%, Western 0.7%, Central 0.3%, Eastern 0.3% and Rift Valley 0.2%. North Eastern region recorded the lowest prevalence of bhang use disorders.

Figure 85: Bhang use disorders among respondents aged 15 – 65 years by region (n=2520)



7.3 Categories of substance use disorders among respondents aged 15 – 65 years

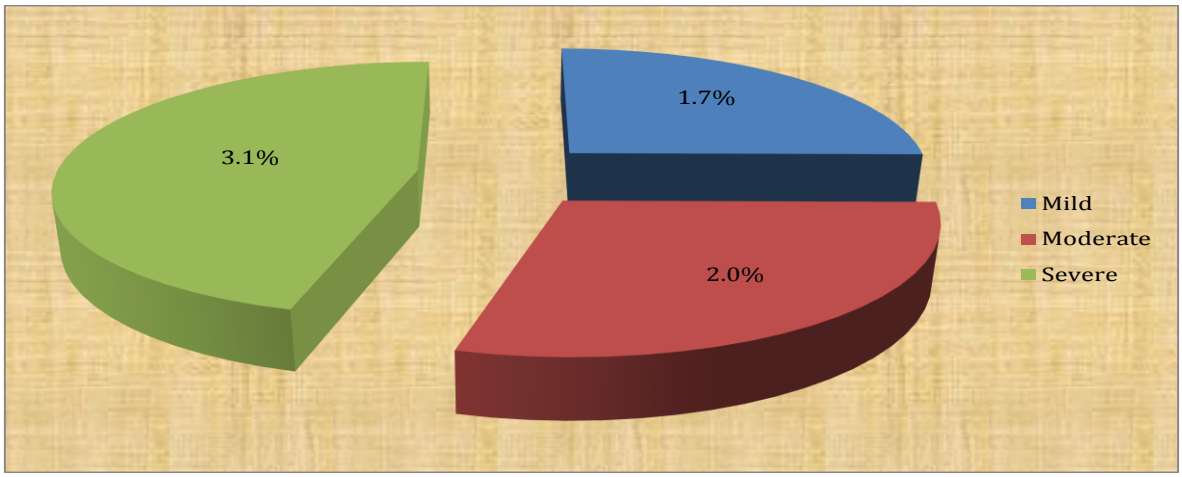
According to Table 54 on tobacco use disorders, most regions have higher levels of severe cases compared to mild and moderate cases. Data shows that there is a higher prevalence of tobacco use disorders in urban areas (7.9%) compared to rural areas (6.4%). Prevalence of tobacco use disorders is higher among respondents aged 36 – 65 years (10.5%) followed by those aged 25 – 35 years (5.9%) and those aged 15 – 24 years (2.1%). Males have a higher prevalence of tobacco use disorders (13.1%) compared to females (0.9%).

Table 54: Categories of tobacco use disorders among respondents aged 15 – 65 years

Characteristic		Category of tobacco use disorders			Prevalence of tobacco use disorders
		Mild	Moderate	Severe	
Setting	Urban	1.6	2.7	3.6	**7.9**
	Rural	1.8	1.7	2.9	**6.4**
Age	15 – 24 years	0.4	0.7	1.0	**2.1**
	25 – 35 years	1.7	1.6	2.6	**5.9**
	36 – 65 years	2.5	3.1	4.9	**10.5**
Region	Nairobi	2.4	3.3	4.7	**10.4**
	N. Eastern	2.7	1.4	4.7	**8.8**
	Coast	2.8	4.1	2.3	**9.2**
	Central	1.3	1.6	2.9	**5.8**
	Eastern	3.5	2.4	2.9	**8.8**
	R. Valley	0.9	1.2	3.7	**5.9**
	Nyanza	0.3	2.3	1.8	**4.4**
	Western	1.5	0.8	2.6	**4.9**
Gender	Male	3.3	4.0	5.8	**13.1**
	Female	0.2	0.1	0.6	**0.9**
Total		**1.7**	**2.0**	**3.1**	**6.8**

According to Figure 86 on tobacco use disorders among respondents aged 15 – 65 years, 3.1% of the cases were categorized as severe, 2.0% were moderate while 1.7% were mild.

Figure 86: Categories of tobacco use disorders among respondents aged 15 – 65 years



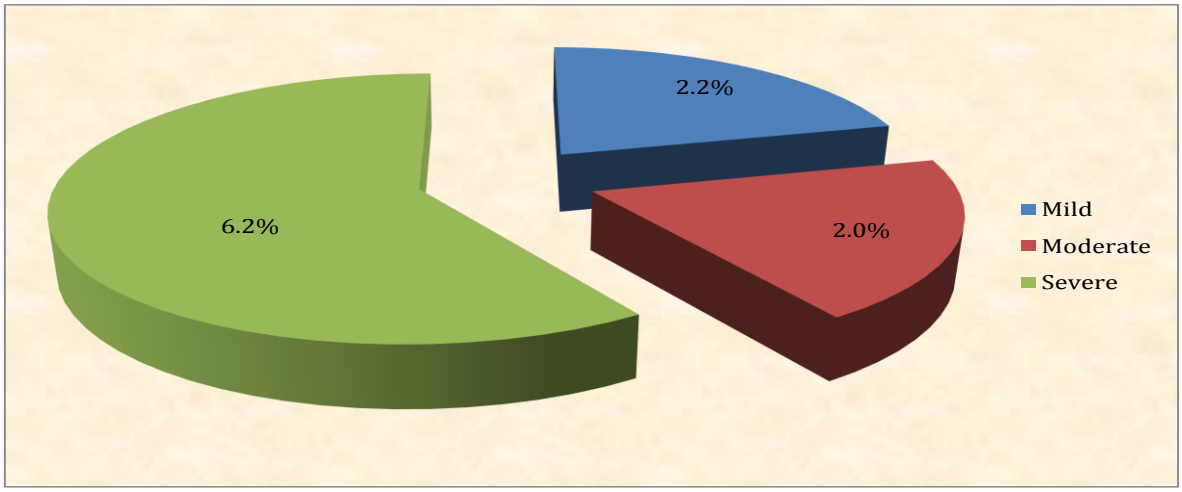
According to Table 55 on alcohol use disorders, most of the regions have higher levels of severe cases compared to mild and moderate cases. Data shows that there is a higher prevalence of alcohol use disorders in urban areas (12.1%) compared to rural areas (9.7%). Prevalence of alcohol use disorders is higher among respondents aged 25 – 35 years (12.8%) followed by those aged 36 – 65 years (11.5%) and those aged 15 – 24 years (5.2%). Males have a higher prevalence of alcohol use disorders (17.2%) compared to females (4.0%).

Table 55: Categories of alcohol use disorders among respondents aged 15 – 65 years

Characteristic		Category of alcohol use disorders			Prevalence of alcohol use disorders
		Mild	Moderate	Severe	
Setting	Urban	1.5	1.6	9.0	**12.1**
	Rural	2.5	2.2	5.0	**9.7**
Age	15 – 24 years	1.4	1.2	2.6	**5.2**
	25 – 35 years	2.6	2.4	7.8	**12.8**
	36 – 65 years	2.4	2.2	6.9	**11.5**
Region	Nairobi	1.9	3.3	13.2	**18.4**
	N. Eastern	-	-	1.4	**1.4**
	Coast	2.8	1.8	4.1	**8.7**
	Central	2.6	2.6	3.1	**8.3**
	Eastern	3.2	1.6	5.8	**10.6**
	R. Valley	1.9	2.2	6.6	**10.7**
	Nyanza	2.1	1.7	5.8	**9.6**
	Western	2.7	2.2	8.2	**13.1**
Gender	Male	3.6	3.0	10.6	**17.2**
	Female	0.9	1.1	2.0	**4.0**
Total		**2.2**	**2.0**	**6.2**	**10.4**

According to Figure 87 on alcohol use disorders among respondents aged 15 – 65 years, 6.2% of the cases were categorized as severe, 2.0% were moderate while 2.2% were mild.

Figure 87: Categories of alcohol use disorders among respondents aged 15 – 65 years



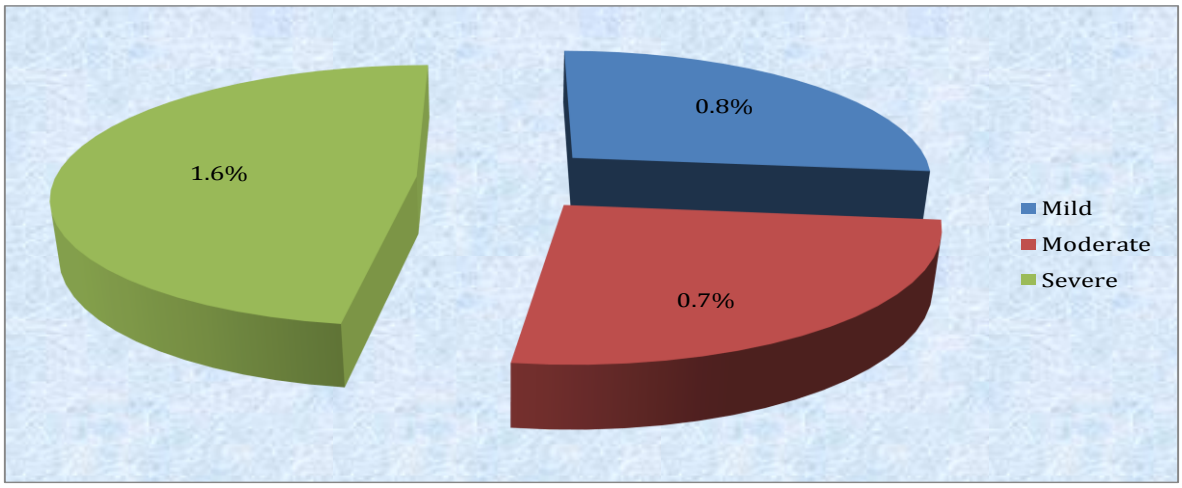
According to Table 56 on *khat/ miraa* use disorders, most of the regions have higher levels of severe cases compared to mild and moderate cases. Data shows that there is a higher prevalence of *khat/ miraa* use disorders in urban areas (6.5%) compared to rural areas (1.7%). Prevalence of *khat/ miraa* use disorders is higher among respondents aged 25 – 35 years (4.2%) followed by those aged 15 – 24 years (2.9%) and those aged 36 – 65 years (2.5%). Males have a higher prevalence of *khat/ miraa* use disorders (5.7%) compared to females (0.7%).

Table 56: Categories of khat/ miraa use disorders among respondents aged 15 – 65 years

Characteristic		Category of *khat/miraa* use disorders			Prevalence of *khat/ miraa* use disorders
		Mild	Moderate	Severe	
Setting	Urban	1.4	1.5	3.6	6.5
	Rural	0.6	0.4	0.7	1.7
Age	15 – 24 years	0.5	1.1	1.3	2.9
	25 – 35 years	1.7	0.6	1.9	4.2
	36 – 65 years	0.5	0.6	1.4	2.5
Region	Nairobi	0.5	1.0	3.7	5.2
	N. Eastern	1.4	0.7	5.3	7.4
	Coast	1.8	3.2	2.3	7.3
	Central	-	0.3	0.7	1.0
	Eastern	2.7	1.1	3.1	6.9
	R. Valley	0.6	0.4	0.6	1.6
	Nyanza	-	0.3	0.3	0.6
	Western	-	-	-	-
Gender	Male	1.3	1.4	3.0	5.7
	Female	0.4	0.1	0.2	0.7
Total		**0.8**	**0.7**	**1.6**	**3.1**

According to Figure 88 on *khat/ miraa* use disorders among respondents aged 15 – 65 years, 1.6% of the cases were categorized as severe, 0.7% were moderate while 0.8% were mild.

Figure 88: Categories of khat/ miraa use disorders among respondents aged 15 – 65 years



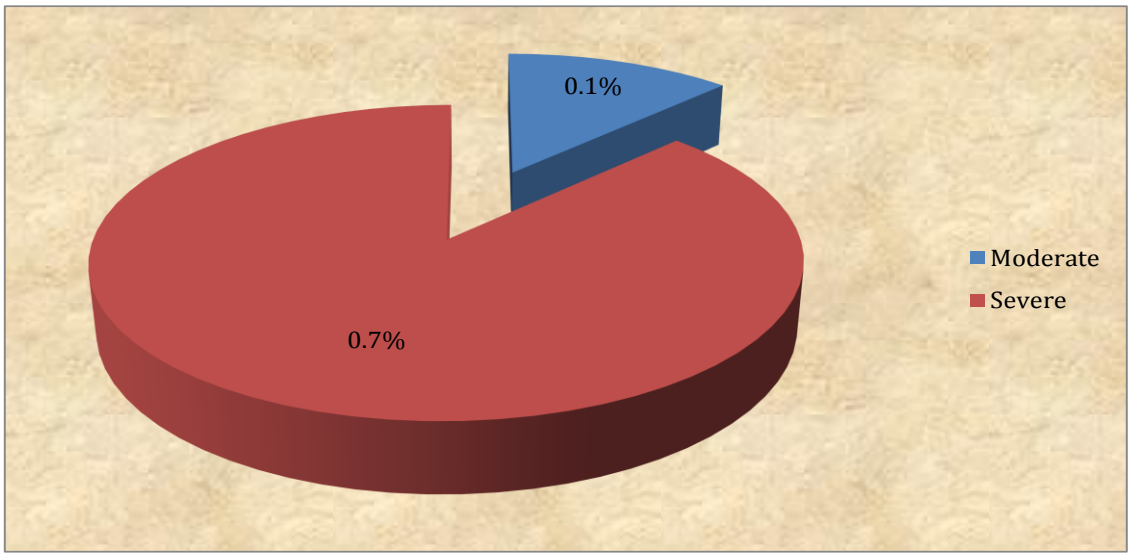
According to Table 57 on bhang use disorders, most of the regions have higher levels of severe cases compared to mild and moderate cases. Data shows that there is a higher prevalence of bhang use disorders in urban areas (1.3%) compared to rural areas (0.6%). Prevalence of bhang use disorders is higher among respondents aged 25 – 35 years (1.6%) followed by those aged 15 – 24 years (0.6%) and those aged 36 – 65 years (0.5%). Males have a higher prevalence of bhang use disorders (1.5%) compared to females (0.2%).

Table 57: Categories of bhang use disorders among respondents aged 15 – 65 years

Characteristic		Category of bhang use disorders			Prevalence of bhang use disorders
		Mild	Moderate	Severe	
Setting	Urban	-	-	1.3	**1.3**
	Rural	0.1	0.2	0.3	**0.6**
Age	15 – 24 years	0.2	-	0.4	**0.6**
	25 – 35 years	0.2	0.2	1.1	**1.6**
	36 – 65 years	-	0.1	0.4	**0.5**
Region	Nairobi	-	-	1.9	**1.9**
	N. Eastern	-	-	-	**-**
	Coast	0.5	0.5	1.8	**2.8**
	Central	-	0.3	-	**0.3**
	Eastern	-	-	0.3	**0.3**
	R. Valley	-	-	0.2	**0.2**
	Nyanza	-	-	1.8	**1.8**
	Western	-	-	0.7	**0.7**
Gender	Male	0.1	0.2	1.2	**1.5**
	Female	-	-	0.2	**0.2**
Total		**-**	**0.1**	**0.7**	**0.8**

According to Figure 89 on bhang use disorders among respondents aged 15 – 65 years, 0.7% of the cases were categorized as severe while 0.1% were moderate.

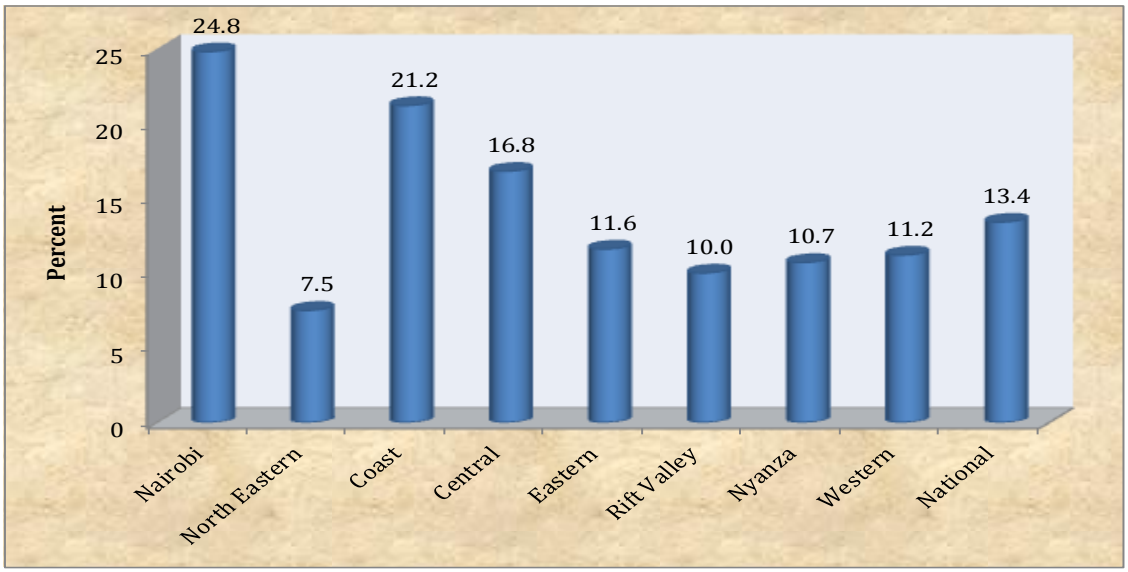
Figure 89: Categories of bhang use disorders among respondents aged 15 – 65 years



7.4 Awareness of a treatment and rehabilitation services

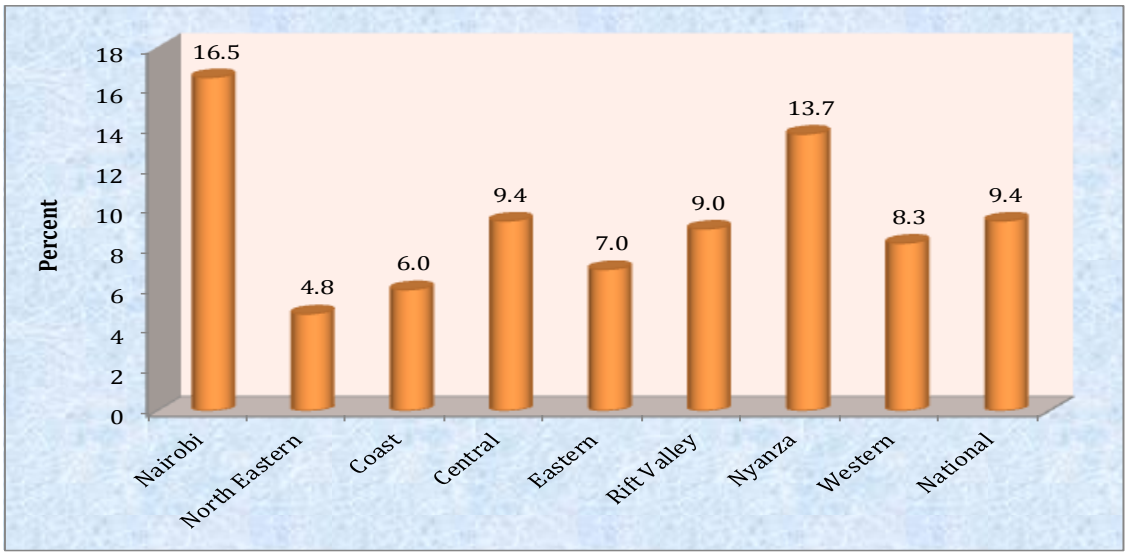
Respondents were asked if they know of a facility where a person with substance use disorders can be referred for treatment and rehabilitation. Figure 90 below shows that awareness level of a treatment and rehabilitation facility among respondents aged 15 – 65 years stands at 13.4%. Nairobi region has the highest prevalence of awareness levels (24.8%) followed by Coast 21.2%, Central 16.8%, Eastern 11.6%, Western 11.2%, Nyanza 10.7%, Rift Valley 10.0% and North Eastern 7.5%.

Figure 90: Awareness of a treatment and rehabilitation facility among respondents aged 15 – 65 years



Respondents were asked if they have ever heard about NACADA's toll free helpline service (1192). Figure 91 below shows that awareness level of NACADA's toll free helpline service among respondents aged 15 – 65 years stands at 9.4%. Nairobi region has the highest prevalence of awareness levels (16.5%) followed by Nyanza 13.7%, Central 9.4%, Rift Valley 9.0%, Western 8.3%, Eastern 7.0%, Coast 6.0% and North Eastern 4.8%.

Table 91: Awareness of NACADA's toll free helpline service among respondents aged 15 – 65 years



CHAPTER 8: STATUS OF ALCOHOL AND DRUG CONTROL BY COUNTY GOVERNMENTS

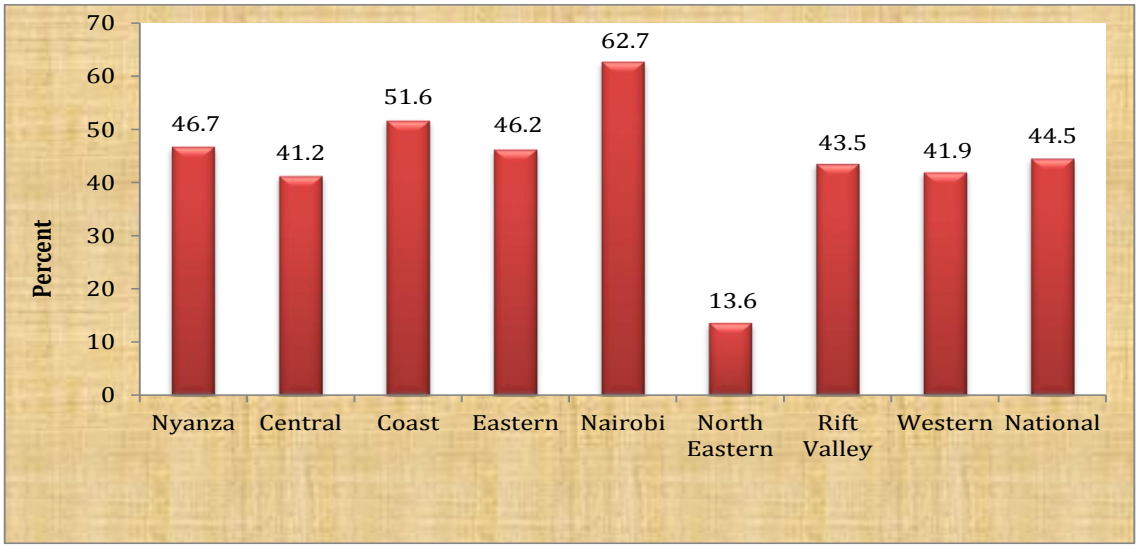
8.0 Introduction

There are three main functions of the county government under the Constitution that directly relate to the functions of NACADA. These are promotion of primary healthcare (Section 2 (c) of part 2) where alcohol and drug abuse issues fall, liquor licensing (Section 4 (c) of part 2) and control of drugs (section 13) especially education and awareness and research. Further, with the promulgation of the Constitution of Kenya 2010, licensing and drug control is now a devolved function. This section therefore presents findings on the aspects related to liquor licensing by county governments.

8.1 Perceptions on the production, sale and consumption of illicit brews in the community

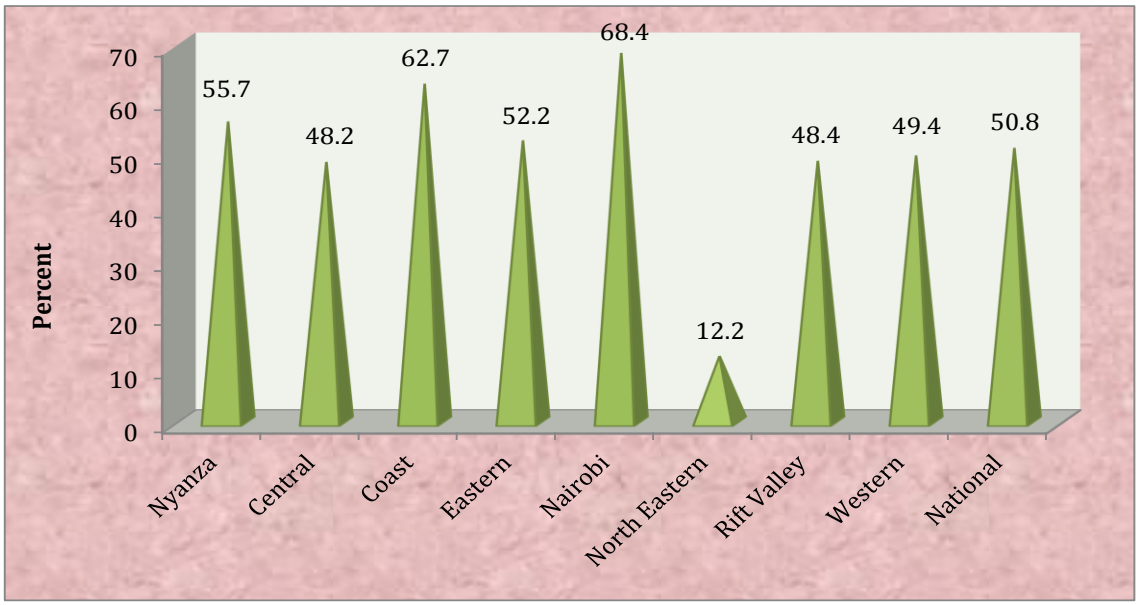
Respondents were asked if they think that the production of illicit brews was widespread in their area. According to Figure 92, 44.5% of the respondents aged 15 – 65 years think that the production of illicit brews is widespread in their areas. The prevalence is highest in Nairobi (62.7%) followed by Coast 51.7%, Nyanza 46.7%, Eastern 46.2%, Rift Valley 43.5%, Western 41.9%, Central 41.2% and North Eastern 13.6%.

Figure 92: Do you think that the production of illicit brews is widespread in this area?



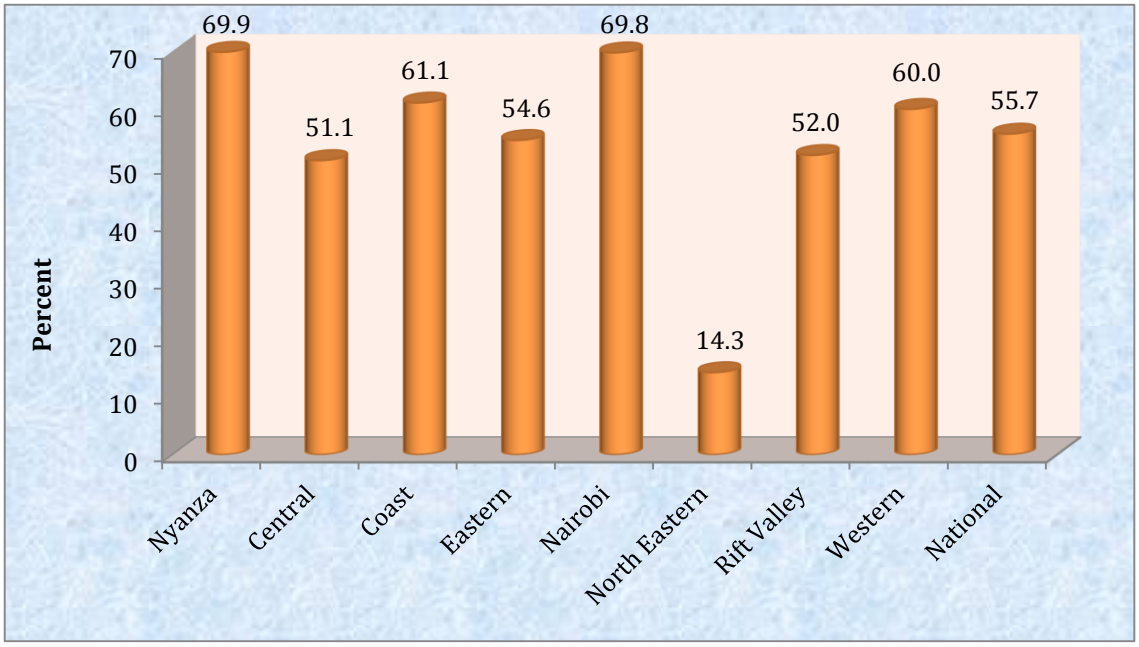
According to Figure 93 below, 50.8% of the respondents aged 15 – 65 years think that the distribution and sale of illicit brews is widespread in their areas. The prevalence is highest in Nairobi (68.4%) followed by Coast 62.7%, Nyanza 55.7%, Eastern 52.2%, Western 49.4%, Rift Valley 48.4%, Central 48.2% and North Eastern 12.2%.

Figure 93: Do you think that the distribution and sale of illicit brews is widespread in this area?



Respondents were asked if they think that the distribution and sale of illicit brews is widespread in their area. According to Figure 94, 55.7% of the respondents aged 15 – 65 years think that the consumption of illicit brews is widespread in their areas. The prevalence is highest in Nyanza (69.9%) followed by Nairobi 69.8%, Coast 61.1%, Western 60.0%, Eastern 54.6%, Rift Valley 52.0%, Central 51.1% and North Eastern 14.3%.

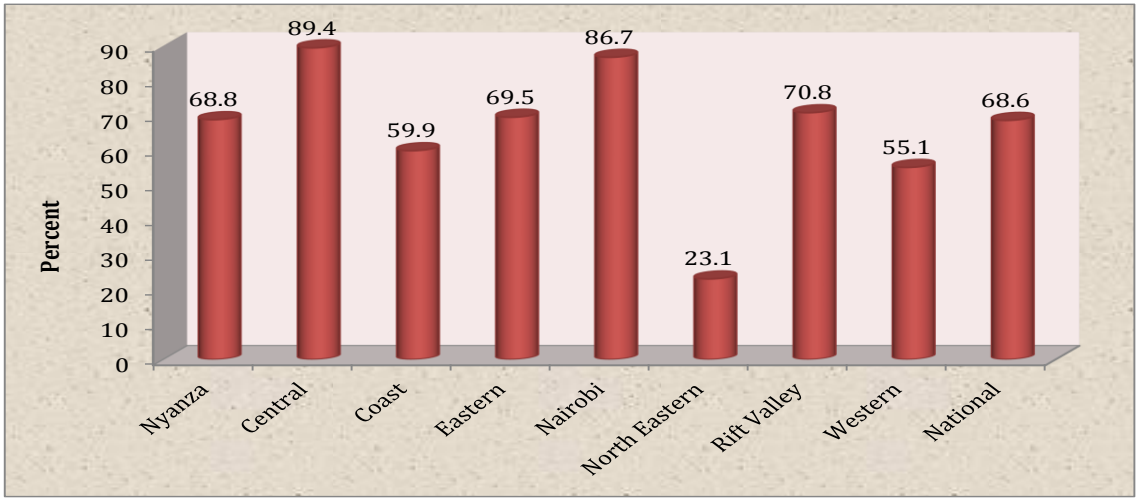
Figure 94: Do you think that the consumption of illicit brews is widespread in this area?



8.2 Implementation of the Alcoholic Drinks Control Act 2010

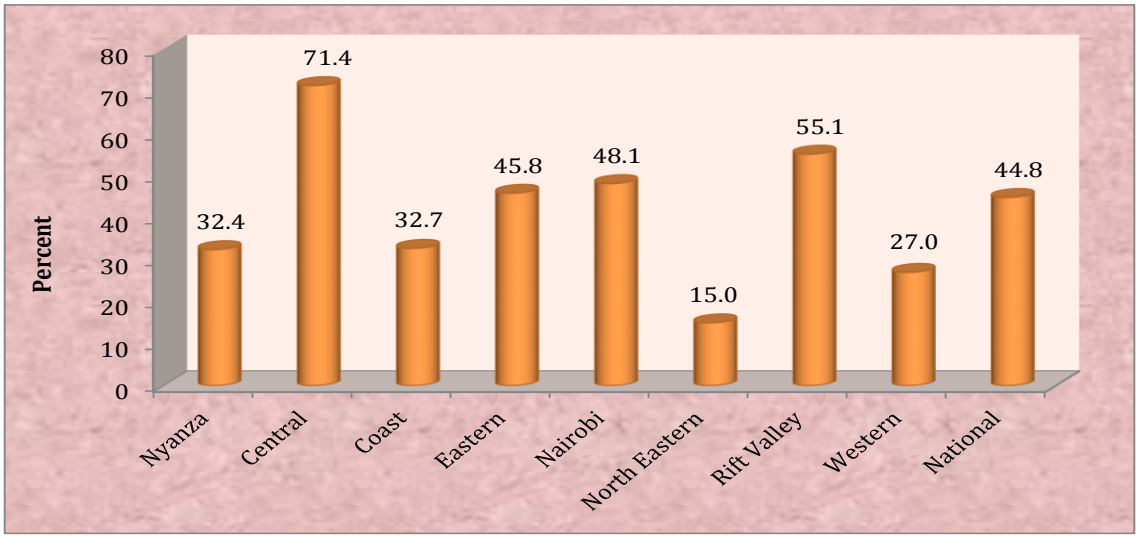
Respondents were asked whether they have ever heard about the Alcoholic Drinks Control Act 2010. According to Figure 95, 68.6% of the respondents aged 15 – 65 years have ever heard about the Alcoholic Drinks Control Act 2010. The prevalence of awareness is highest in Central (89.4%) followed by Nairobi 86.7%, Rift Valley 70.8%, Eastern 69.5%, Nyanza 68.8%, Coast 59.9%, Western 55.1% and North Eastern 23.1%.

Figure 95: Have you ever heard about the Alcoholic Drinks Control Act 2010?



Respondents were asked whether they have ever heard about the County Alcoholic Drinks Control Act. According to Figure 96, 44.8% of the respondents aged 15 – 65 years have ever heard about the County Alcoholic Drinks Control Act for their counties. The prevalence of awareness is highest in Central (71.4%) followed by Rift Valley 55.1%, Nairobi 48.1%, Eastern 45.8%, Coast 32.7%, Nyanza 32.4%, Western 27.0% and North Eastern 15.0%.

Figure 96: Have you ever heard about the "County Alcoholic Drinks Control Act" for your County?



Respondents were asked the period when people usually start to drink in their community. Figure 97 shows that most people usually start drinking all the time (33.8%) followed by those who start drinking from 6pm to 11pm (33.1%), before noon (12.2%) and 12 noon to 6pm (9.0%).

Figure 97: When do people usually start drinking in this community? (n=2483)

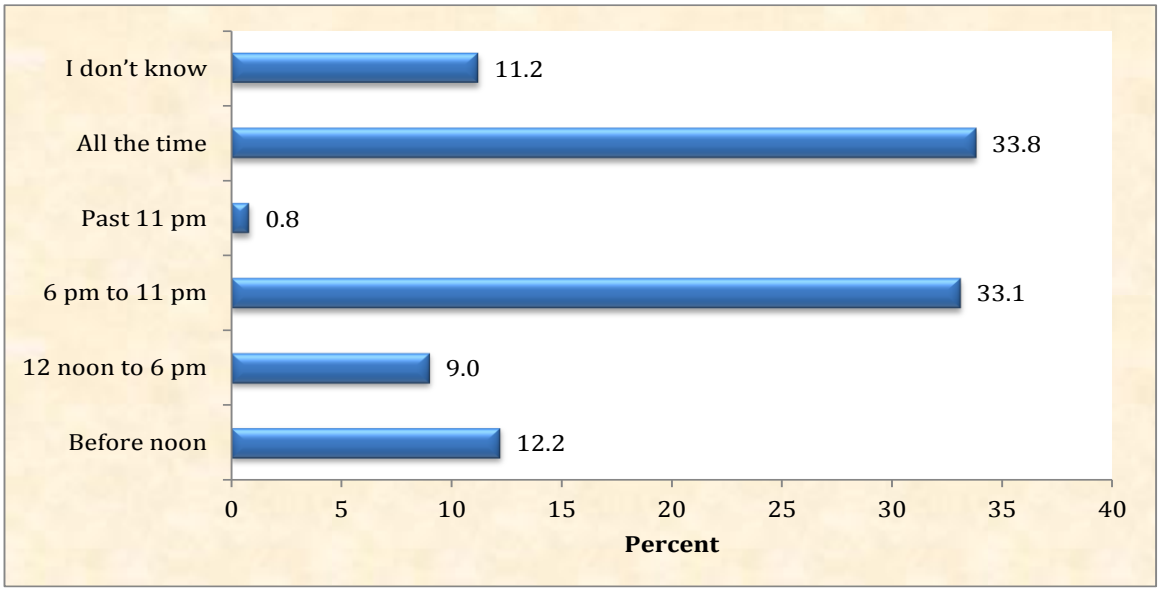
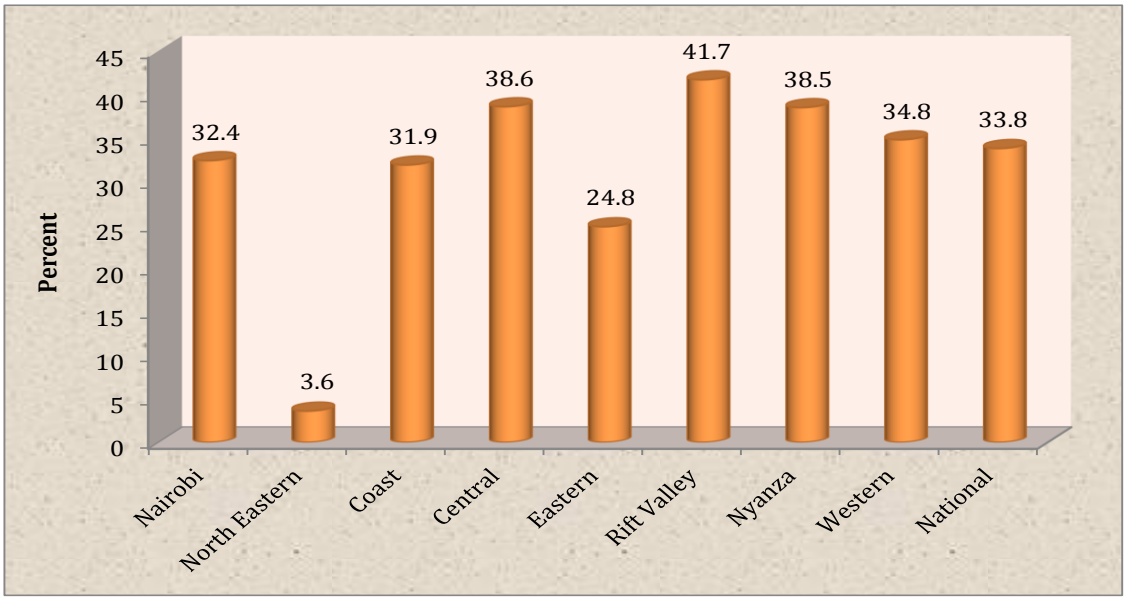


Figure 98 below evaluated the respondents who reported that people usually start to drink at any time across the eight regions. Data shows that 33.8% usually drink at any time. In terms of regional variation, Rift Valley has the highest prevalence (41.7%) followed by Central 38.6%, Nyanza 38.5%, Western 34.8%, Nairobi 32.4%, Coast 31.9%, Eastern 24.8% and North Eastern 3.6%.

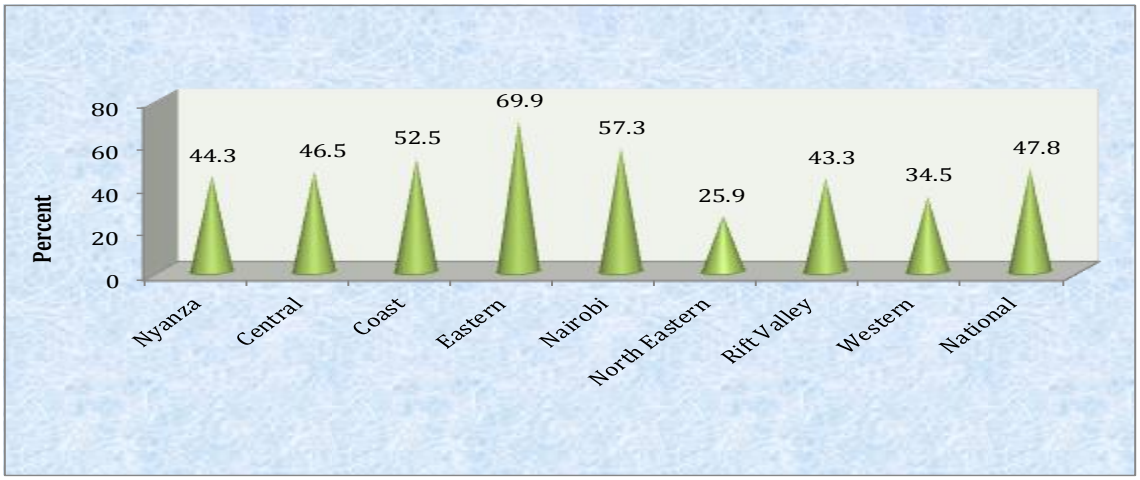
Figure 98: People usually start to at any time



8.3 Perceptions on the level of alcohol consumption

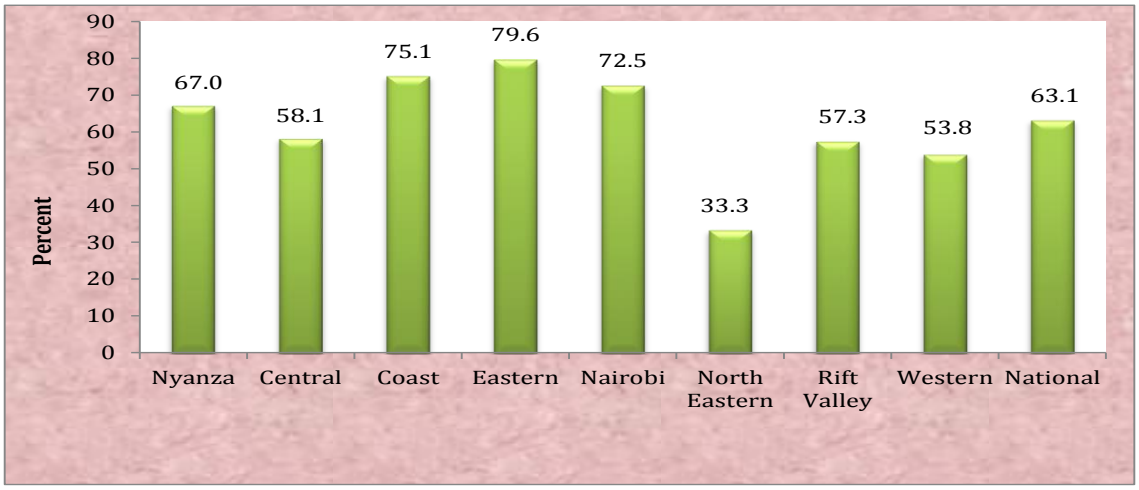
Respondents were asked whether they felt that the number of licensed bars has increased in their area in the last 5 years. According to Figure 99 below, 47.8% of the respondents aged 15 – 65 years feel that there is an increase in the number of licensed bars in their areas in the last five (5) years. The prevalence is highest in Eastern (69.9%) followed by Nairobi 57.3%, Coast 52.5%, Central 46.5%, Nyanza 44.3%, Rift Valley 34.5% and North Eastern 25.9%.

Figure 99: Do you feel that there is an increase in the number of licensed bars in the last 5 years in this area?



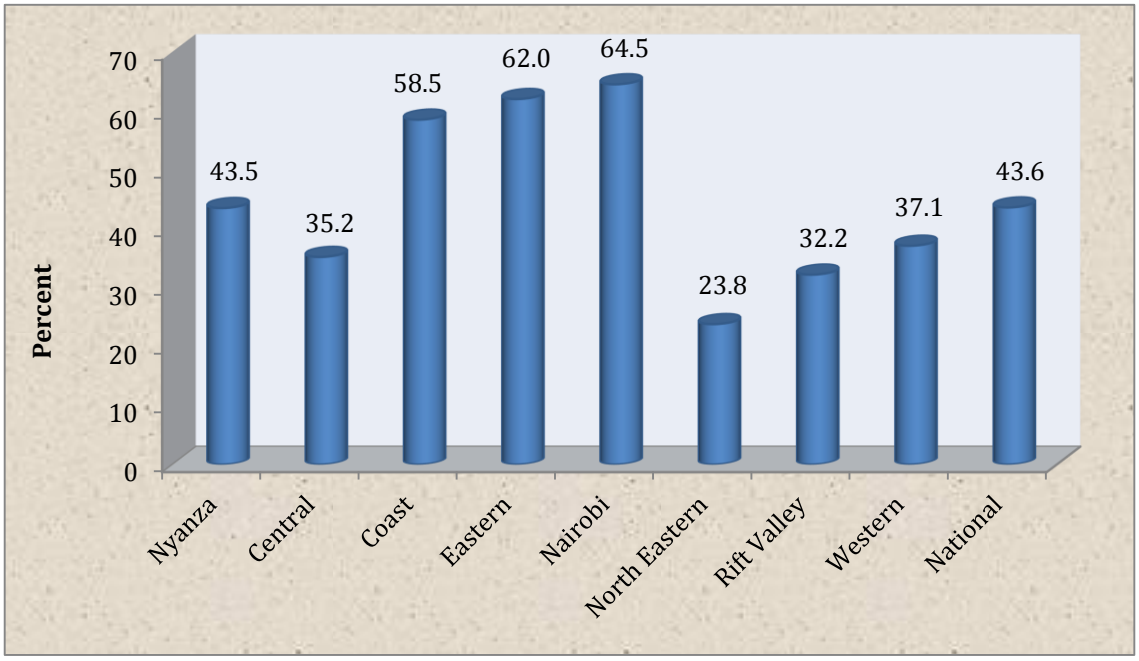
Respondents were asked whether they felt that the number of alcohol consumers has increased in their area in the last 5 years. According to Figure 100 below, 63.1% of the respondents aged 15 – 65 years feel that there is an increase in the number of consumers in their areas in the last five (5) years. The prevalence is highest in Eastern (79.6%) followed by Coast 75.1%, Nairobi 72.5%, Nyanza 67.0%, Central 58.1%, Rift Valley 57.3%, Western 53.8% and North Eastern 33.3%.

Figure 100: Do you feel that there is an increase in the number of alcohol consumers in the last 5 years in this area?



Respondents were asked whether they felt that underage drinking has increased in their area in the last 5 years. According to Figure 101 below, 43.6% of the respondents aged 15 – 65 years feel that there is an increase in the number of underage drinking in their areas in the last five (5) years. The prevalence is highest in Nairobi (64.5%) followed by Eastern 62.0%, Coast 58.5%, Nyanza 43.5%, Western 37.1%, Central 35.2%, Rift Valley 32.2% and North Eastern 23.8%.

Figure 101: Do you feel that there is an increase in underage drinking in the last 5 years in this area? (n=2493)



CHAPTER 9: DISCUSSION

9.0 Introduction

This chapter discusses the findings in the context of survey objectives. It is divided into five parts focusing on awareness of psychoactive substances of abuse; prevalence of alcohol and substance abuse; health and social-economic consequences of ADA; extent of substance use disorders; and status of alcohol and drug control by county governments.

9.1 Awareness of psychoactive substances of abuse in Kenya

Spontaneous awareness was used to measure the knowledge of psychoactive substances of abuse among the interviewed respondents. Data among the 15 – 65 respondents shows that spontaneous awareness of tobacco and alcohol is generally high while spontaneous awareness of narcotics, inhalants and prescription drugs is very low. An in-depth analysis of tobacco products shows that spontaneous awareness of emerging drugs like *shisha* and *kuber* is still very low. For alcohol products, spontaneous awareness of second generation alcohol/ potable spirits, *chang'aa* and traditional liquor is also low. *Khat/ miraa* is fairly well known though its variant *muguka* recorded very low spontaneous awareness. For narcotic drugs, bhang has the highest spontaneous awareness compared to heroin, cocaine and hashish which recorded very low awareness. These findings mirror those of the 10 – 14 year old respondents.

9.2 Prevalence of alcohol and substances of abuse in Kenya

Prevalence of alcohol and substance of abuse was determined through application of two indicators; lifetime use (ever use) and current use (use in the last 30 days prior to the survey).

9.2.1 Lifetime prevalence of alcohol and substances of abuse in Kenya

Analysis of lifetime alcohol use among respondents aged 10 – 14 years, 10 – 19 years (adolescents), 15 – 24 years, 18 – 65 years and 15 – 65 years shows that the prevalence is highest in Nairobi and Western regions. Findings also show that the prevalence of lifetime use of alcohol is highest among male respondents and those from urban areas. The survey also shows evidence of underage lifetime use of alcohol, a major public health concern among this age group. Analysis of lifetime alcohol use among respondents aged 15 – 65 years shows a decline from year 2007 to year 2012. There is however a slight increase in lifetime use of alcohol from year 2012 to year 2017.

Lifetime usage of tobacco shows a declining trend. Nairobi, Eastern and Coast regions have recorded the highest prevalence of tobacco use across all the age categories. For *khat/ miraa*, findings also show a declining trend. Analysis of the younger age categories i.e. respondents aged 10 -14 years, 10 – 19 years and 15 – 24 years shows that Eastern and Coast regions have the highest lifetime prevalence.

For respondents aged 15 – 65 years and 18 – 65 years, Coast, Eastern and North Eastern regions recorded the highest prevalence of lifetime usage of *khat/ miraa*. Lifetime usage of narcotics is low, especially cocaine, heroin and hashish.

Statistics on bhang also reveals a declining trend with Nairobi and Coast regions recording the highest lifetime prevalence across all the age categories.

Statistics on lifetime abstainers (never use) shows that the trend has improved from year 2007 to year 2017. However, analysis across the regions shows that North Eastern has the highest prevalence of lifetime abstainers across all the age categories. For respondents aged 10 – 14 years, 10 – 19 years (adolescents) and 15 – 24 years, Nairobi and Western regions have the lowest lifetime abstainers. For respondents aged 15 – 65 years, Nairobi, Western and Coast regions have the lowest prevalence of lifetime abstainers compared to other regions. The findings also show that among the respondents aged 10 -14 years, the age of initiating alcohol and drug use is 12 years for most of the drugs.

9.2.2 Current prevalence of alcohol and substances of abuse in Kenya

Analysis of current alcohol use among respondents aged 10 – 14 years, 10 – 19 years (adolescents), 15 – 24 years, 18 – 65 years and 15 – 65 years shows that the prevalence is highest in Nairobi, Western and Eastern regions. Findings also show that the prevalence of current use of alcohol is highest among male respondents and those from urban areas. Analysis of current alcohol use among respondents aged 15 – 65 years shows a decline from year 2007 to year 2017. However, increasing trend of current alcohol prevalence was recorded in Western region. For Eastern region, the trend of current alcohol use in Eastern region has not changed from year 2007 to 2017.

Current usage of tobacco shows a declining trend. Coast and Eastern regions have recorded the highest prevalence of tobacco use across all the age categories. For *khat/ miraa*, findings also show a declining trend. Analysis of respondents aged 15 – 24 years shows that Coast, Eastern and North Eastern regions have the highest current prevalence of *khat/ miraa*. For respondents aged 15 – 65 years and 18 – 65 years, North Eastern, Coast and Eastern regions have the highest prevalence of current usage of *khat/ miraa*. Current usage of narcotics is low, especially cocaine, heroin and hashish. Statistics on bhang also reveals that the trend has not changed from 2007 to 2017. Among respondents aged 15 – 24 years, Coast and Central regions have the highest prevalence of current bhang use. Among respondents aged 15 – 65 years, the current prevalence is highest in Coast, Nyanza and Eastern regions. It is also important to note that Nairobi, Coast and Nyanza regions have recorded increasing trend of current bhang use from 2007 to 2017.

Statistics on current usage of at least one substance of abuse shows a declining trend. Among respondents aged 15 – 24 years, Coast, Western and Eastern regions recorded the highest prevalence. Among the respondents aged 15 – 65 years, Coast, Eastern and North Eastern regions recorded the highest prevalence.

Findings on polydrug use (multiple drug use) show that the prevalence among respondents aged 15 – 24 years is highest in Coast, Eastern and North Eastern regions. Analysis among respondents aged 15 – 65 years shows that the current prevalence of polydrug use is highest in Coast, Eastern and North Eastern regions.

9.3 Health and social-economic consequences of alcohol and drug abuse

Health consequences of alcohol and drug abuse were determined through analysis of the relationship between ADA and seeking medical attention, risky sexual behaviour, mental disorders and mortality. Findings showed that among those who were likely to seek medical attention as a result of the drug or substance that they were using, majority are users of alcohol (especially *chang'aa* and traditional liquor) and cigarettes.

In terms of risky sexual behaviour, sex as a result of the influence of alcohol and drug abuse was reported. The prevalence is highest in Eastern, Nairobi and Coast regions among respondents aged 15 – 65 years. For respondents aged 10 – 14 years, the prevalence is highest in Eastern, Coast and Rift Valley regions.

Analysis on alcohol-related mortality in the last one year shows that the prevalence is highest in Nairobi and Central regions both at the community and family levels. Analysis on morbidity (mental disorders) as a result of drug and substance abuse shows that the prevalence is highest in Nairobi and Central regions.

Socio-economic consequences of alcohol and drug abuse was analysed through absenteeism, diverting of family resources, harm to self and harm to others (e.g. violence towards spouse). Data on absenteeism reveals that majority of those affected are users of *chang'aa* and bhang. In terms of diverting family resources in order to purchase drugs, majority are users of *chang'aa* and bhang. Data on harm to self where an individual was injured as a result of their alcohol and drug usage, majority are users of *chang'aa* and bhang. Similar findings were recorded on harm to others where majority are also users of *chang'aa* and bhang.

9.4 Extent of substance use disorders

Under Sustainable Development Goals (SDG 3) sub-section 3.4, it mandates countries to reduce by one third premature mortality and non-communicable diseases through prevention and treatment and promote mental health and well-being by 2030.

Findings on substance use disorders (dependence) shows that the country is struggling with an increasing burden of persons who require treatment and rehabilitation. Alcohol use is the major contributor to the burden of substance use disorders in Kenya. It is followed by use of tobacco, *khat/ miraa* and lastly bhang. Analysis of alcohol use disorders shows that Nairobi and Western are most affected regions. For tobacco use disorders, Eastern and Central regions have the highest prevalence. In terms of *khat/ miraa* use disorders, North Eastern and Coast regions have the highest prevalence. For bhang use disorders, Coast and Nyanza are the most affected regions. Data also shows that most of the substance use disorders fall under the category of severe compared to the mild and moderate cases.

Data also shows that awareness to treatment and rehabilitation facilities in the country is very low. Analysis across regions shows that North Eastern, Rift Valley and Nyanza have the lowest awareness levels. Awareness on NACADA's toll free helpline is also very low. Awareness levels are lowest in North Eastern, Coast and Eastern regions.

9.5 Status of alcohol and drug control by county governments

With the promulgation of the constitution of Kenya 2010, licensing and drug control are now devolved functions. Perceptions on production and sale of illicit brews; distribution and consumption of illicit brews show that Nairobi and Coast regions are the most affected. The survey also shows that the enforcement of the Alcoholic Drinks Control Act, 2010/ County Alcoholic Drinks Control Act has not been adequately implemented. Data on drinking hours shows that in most areas, alcohol is being used without the regulation of time. The most affected regions are Rift Valley, Coast and Nyanza. In terms of awareness of the Alcoholic Drinks Control Act, 2010/ County Alcoholic Drinks Control Act, Central, Nairobi and Rift Valley have the highest levels of awareness. In terms of increase in the number of licensed selling outlets in the last 5 years, data shows that Eastern, Nairobi and Coast regions are the most affected. In terms of the increase in the number of alcohol consumers in the last 5 years, data shows that Eastern, Coast and Nairobi regions are the most affected. Finally, in terms of the increase in the number of underage drinking in the last 5 years, data shows that Nairobi, Eastern and Coast regions are the most affected.

9.6 Limitations of the survey

The survey coincided with the Government's renewed efforts to curb drug barons in the country. This resulted to a very low response rate among heroin and cocaine users for fear of arrest.

It is also important to appreciate that heroin and cocaine users are categorized as hidden populations. These populations are characterized by unknown sampling frame and there exists privacy concerns because their membership is based on a criminalized behavior. Household surveys cannot therefore produce reliable samples. A more targeted survey is therefore recommended to study these populations.

CHAPTER 10: CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions

From the survey findings, it is evident that the trend of alcohol and drug abuse nationally is on a slow downward shift. On the contrary, across the regions, Eastern, Nairobi and Coast regions have recorded increasing trends of alcohol and drug abuse. Notably, there is a shift in Eastern region concerning *khat*/ *miraa* use. The region has now shifted from being a supplier into a major consumption market for *khat*/ *miraa*.

Also notable is Western region where an upsurge of traditional liquor (*busaa*) and *chang'aa* was recorded. The region has also recorded the highest prevalence of alcohol use among the youth aged 15 -24 years and adolescents (those aged 10 – 14 years).

Although findings on usage point to a slow downward trend, the burden of substance use disorders is increasing. Alcohol use has been associated with the highest burden of substance use disorders. Majority of the substance use disorders are also categorized as severe.

The findings also show that the enforcement of the Alcoholic Drinks Control Act 2010 or the County Alcoholic Drinks Control Act is inadequate. This has led to the proliferation of illicit brews and the number of liquor selling outlets. Further, enforcement of the regulations on drinking hours is also inadequate. Nairobi, Coast and Eastern regions are the most affected.

10.2 Recommendations

Given the emerging evidence on the alcohol and drug abuse situation in Kenya, the survey draws the following recommendations;

- NACADA in collaboration with county governments should undertake elaborate public education and awareness campaigns aimed at sensitizing the community and families about the risks, protective factors and dangers of alcohol and other substances of abuse;

- There is an unmet need for treatment and rehabilitation services in the Kenya. There is need for NACADA and the county governments to allocate more resources to establish more treatment and rehabilitation centres across the country. In addition, there is need to explore community based out-reach services targeting the mild and moderate cases of substance use disorders;

- NACADA in collaboration with the Faith Based Organizations (FBOs) should strengthen parent-child communication about drugs and substances of abuse, enforce prevention in the home environment, promote parental role modeling and strengthen the general parenting skills;

- NACADA in collaboration with the Ministry of Education, Science and Technology should support learning institutions to come up with institution-based alcohol and drug abuse policies that holistically address the aspects of promoting free drug environments; early identification of persons with substance use disorders; focus on extra-curricular activities; and evidence based preventive strategies of dealing with cases of drugs and substances abuse in learning institutions;

- There is a general inadequacy of targeted "out of school" youth friendly ADA programs that are channeled by the right people through the relevant modes of communication. NACADA in collaboration with the county governments should undertake audience segmentation to enhance effective messaging and programming;

- The media plays a critical role in increasing public awareness and shaping community perceptions. NACADA should work more closely with the media during its campaigns in order to change the negative perceptions of the public about NACADA;

- NACADA, county governments and other relevant enforcement agencies should collaborate to fast track enforcement of the existing legal and policy framework to suppress production, sale, distribution and consumption of licit and illicit alcohol; curb underage drinking; regulate promotion and advertisements; and suppressing drug trafficking.

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NACADA (National Authority for the Campaign against Alcohol and Drug Abuse 2007). Rapid situation assessment of drug and substance abuse in Kenya. Nairobi: NACADA.

ANNEXES

ANNEX 1: Sampled enumeration areas

Region	County	Sampled Sub-County	Sampled Locations	Sampled Sub-Locations
Nairobi	Nairobi	Dagoreti South	Uthiru-Ruthimitu	Uthiru
		Dagoreti North	Kawangware	Gatina
		Kibera	Serang'ombe	Gatwikira
			Laini Saba	Laini Saba
		Embakasi South	Mukuru Kwa Njenga	Mukuru Kwa Njenga
		Embakasi West	Umoja II	Umoja II
		Embakasi Central	Komarock	Komarock
		Makadara	Makongeni	Mbotela
		Starehe	Kariokor/ Ziwani	Ziwani/ Kariokor
		Mathare	Mlango Kubwa	Mlango Kubwa
		Roysambu	Roysambu	Roysambu
			Kahawa West	Kahawa West
		Embakasi North	Kariobangi North	Kariobangi North
		Dagoreti North	Kilimani	Maziwa
North Eastern	Garissa	Dujis	Galbet	Galbet
			Township	Township
		Balambala	Sankuri	Medina
			Saka	Saka
		Ijara	Masalani	Muhumed Dahir
			Ijara	Ijara
Coast	Mombasa	Mvita	Majengo	Mwembe Tayari
		Kisauni	Junda	Junda
			Magogoni	Magogoni
		Changamwe	Chaani	Chaani
			Port Reitz	Port Reitz
		Likoni	Mtongwe	Mtongwe
	Kwale	Matuga	Tsimba Golini	Mbuguni
			Waa	Ng'ombeni
			Mkongani	Tiribe
	Tana River	Garsen	Garsen Central	Kipao
			Kipini East	Kilelengwani
	TaitaTaveta	Taveta	Chala	Njukini
			Mboghoni	Mboghoni
Central	Nyandarua	Kipipiri	Wanjohi	Ndemi
			Kipipiri	Miharati
		Kinangop	Njabini	Njabini
			Nyakio	Mukeu

Region	County	Sampled Sub-County	Sampled Locations	Sampled Sub-Locations
	Kirinyaga	Mwea	Wamumu	Wamumu
		Kirinyaga Central	Kerugoya	Kaguyu
		Ndia	Kiine	Kithumbi
			Mukure	Kianjanga
	Kiambu	Limuru	Limuru Central	Limuru Town
			Ngecha/ Tigoni	Ngecha
			Ndeiya	Thigio
		Juja	Juja	Milimaini
			Witeithie	Witeithie
		Thika Town	Township	Kianjau
			Kamenu	Kamenu
			Gatuanyaga	Gatuanyaga
		Gatanga	Mugumo-ini	Gathambara
			Kiumbu-Ini	Thuita
Eastern	Isiolo	Isiolo North	Bulla Pesa	Bulla Pesa
			Oldonyiro	Oldonyiro
	Tharaka Nithi	Tharaka	Marimanti	Kamatungu
			Gatunga	Kamwathu
	Embu	Mbeere North	Nthawa	Siakago
			Muminji	Gangara
		Mbeere South	Kiambere	Kiambere
			Mavuria	Kombo Munyiri
	Kitui	Kitui Central	Township	Kalundu
			Mulango	Wikililye
			Kyangwithya East	Mulundi
		Kitui East	Zombe	Ngungi
			Endau	Ndetani
		Mwingi North	Kyuso	Twimyua
			Mumoni	Ikongo
	Makueni	Makueni	Emali	Emali
			Mulala	Ngetha
			Kalamba	Ikangavya
		Kibwezi West	Makindu	Kaasuvi
			Makindu	Manyatta
		Kibwezi East	Thange	Mikuyuni
			Masongaleni	Ulilinzi
Rift Valley	West Pokot	Kapenguria	Mnagei	Psigerio
			Mnagei	Ltyei
			Riwo	Kongelai
	Trans Nzoia	Cherangany	Cherangany	Kachibora

Region	County	Sampled Sub-County	Sampled Locations	Sampled Sub-Locations
			Chepsiro	Kibuswa
			Kaplamai	Kimoson
			Sinyerere	Sinyerere
	Marakwet/ Elgeyo	Keiyo South	Chepkorio	Flax
		Keiyo North	Tambach	Kessup
	Nandi	Tinderet	Songhor	Taunet
			Songhor	Cherondo
			Tinderet	Tinderet
	Baringo	Baringo North	Barwessa	Kuikui
			Kipsaraman	Kapkoiwo
	Laikipia	Laikipia East	Nanyuki	Thingithu
			Thingithu	Marura
			Ngobit	Wiyumiririe
	Nakuru	Gilgil	Gilgil	Gilgil
			Mbaruk	Mbaruk
			Mbaruk	Eburu
			Murindat	Kanunga
			Elementaita	Elementaita
			Elementaita	Kiambogo
		Subukia	Subukia	Munanda
		Bahati	Lanet/ Umoja	Murunyu
			Dundori	Mugwathi
	Kajiado	Kajiado Central	Dalalekutuk	Majengo
			Matapato North	Bissil
			Matapato South	Meto
		Kajiado West	Iloodokilani	ElangataWuas
	Bomet	Bomet Central	Chesoen	Kapkoros
		Chepalungu	Nyangores	Itembe
		Bomet East	Longisa	Cheboin
Nyanza	Siaya	Bondo	West Sakwa	Usire
			West Sakwa	Nyawita
			South Sakwa	East Migwena
		Rarieda	East Asembo	Omia Malo
			West Uyoma	West Katwenga
	Kisumu	Kisumu Central	Kondele	Manyatta 'A'
			Shauri Moyo Kaloleni	Kaloleni
		Kisumu East	Kolwa Central	Kasule
		Nyando	Kobura	Rabuor (Kochieng)
			Awasi	Border I
		Muhoroni	Chemelil	Kibigori
	Migori	Uriri	Central Kanyamkago	Kawere II B
			West Kanyamkago	Kajulu II
		Awendo	Central Sakwa	Kanyagwala

Region	County	Sampled Sub-County	Sampled Locations	Sampled Sub-Locations
			West Sakwa	Kanyamgony
		Kuria East	Nyabasi West	Nyabikongori
			Ntimaru West	Makararangwe
	Nyamira	West Mugirango	Nyamaiya	Bonyaiguba
		North Mugirango	Bokeira	Matongo
Western	Vihiga	Sabatia	Izava North	Mbale
			Busali East	Itegero
	Bungoma	Webuye West	Matulo	Matulo
			Bokoli	Bokoli
		Webuye East	Ndivisi	Sitabicha
		Mt. Elgon	Cheptais	Chepkube
			Chepyuk	Korng'otuny
	Busia	Matayos	Bukhayo West	Mundika
		Butula	Kingandole	Kingandole
			Marachi West	Bukhalahala
			Elugulu	Bwaliro