

**“STATUS OF ALCOHOL AND DRUG ABUSE IN THE
COAST REGION, KENYA”**

BASELINE SURVEY REPORT

CONDUCTED BY:



NATIONAL AUTHORITY FOR THE CAMPAIGN AGAINST ALCOHOL AND DRUG ABUSE

IN COLLABORATION WITH

**“THE COUNTY GOVERNMENTS OF MOMBASA, KILIFI, KWALE, LAMU, TANA RIVER
AND TAITA TAVETA”**

MAY, 2016

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 world. It has been pointed out that several low cost interventions can have large scale effects on population health and productivity.

The *Drug Use Prevention Program* launched on 4th December, 2014 in Mombasa aims to promote the healthy and safe development of children and youth to realize their potential and become contributing members of their community and society. The program focus is on a range of settings to reach all populations with research-based strategies developed to strengthen families, schools and communities and other institutions. These strategies are drawn from the UNODC International Standards on Drug Use Prevention emphasize drug prevention as an integral part of a larger effort to ensure children and youth are less vulnerable and more resilient.

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 in 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 repository of data. In addition, County Governments are mandated to develop and implement policies, laws and plans of action on control of alcohol and drug abuse. Consequently, in collaboration with the County governments of Taita Taveta, Kwale, Mombasa, Kilifi, Lamu and Tana River, NACADA commissioned a '*Baseline Survey on status on Alcohol and Drug Abuse in the Coast Region, Kenya*'. The purpose of this survey was to obtain County specific trends on alcohol and drug use to inform evidence-based interventions on the '*Drug Use Prevention Program*'.

The *Drug Use Prevention Program* is a collaborative effort between the County governments of Coast region, UNODC and NACADA. It is hoped that the intervention policies and programs derived from this survey will ultimately contribute towards attainment of Vision 2030, Sustainable Development Goals and a drug-free nation.

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Chief Executive Officer
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ABBREVIATIONS AND ACRONYMS

ADA	Alcohol and Drug Abuse
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders - IV
HIV	Human Immune-deficiency Virus
KNBS	Kenya National Bureau of Statistics
NACADA	National Authority for the Campaign against Alcohol and Drug Abuse
SPSS	Statistical Package for Social Sciences

EXECUTIVE SUMMARY

With the promulgation of the constitution of Kenya 2010, licensing and drug control became a devolved function. Therefore, towards promoting evidence based alcohol and drug abuse programming at the county level, a baseline survey becomes a critical tool to provide indicators for tracking progress in the implementation of alcohol and drug abuse interventions. NACADA in collaboration with the County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta therefore undertook a baseline survey to ascertain the status of alcohol and drug use in the Coast Region.

The survey covered 1819 randomly selected residents of the Coast Region from all the six (6) counties namely; Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta. Data shows that 56.5% of the respondents are male while 43.5% are female. According to the findings, awareness of tobacco (98.8%), alcohol (97.8%), *khat/ miraa* (94.3%), bhang (86.3%), heroin (60.7%) and cocaine (61.3%) are high while awareness of hashish (25.1%), inhalants (48.3%) and prescription drugs/ sleeping pills (51.4%) are low.

According to the survey findings, 45.2% of residents in the Coast Region have ever used at least one substance of abuse. Kilifi County is leading in terms of ever use of at least one substance of abuse (55.9%) followed by Mombasa 51.0%, Kwale 44.3%, Taita Taveta 43.1%, Lamu 40.3% and Tana River 39.7%. Analysis of individual drugs shows that 25.0% of residents in the Coast Region have ever used alcohol, 24.1% tobacco, 21.7% *khat/ miraa*, 10.9% bhang, 6.2% prescription drugs/ sleeping pills, 3.5% heroin, 1.8% hashish, 1.7% cocaine and 1.2% inhalants

Findings also show that 29.3% of residents in the Coast Region are currently using at least one substance of abuse. Mombasa County is leading in terms of current use of at least one substance of abuse (34.4%) followed by Lamu 32.0%, Tana River 31.1%, Kilifi 29.7%, Kwale 26.0% and Taita Taveta 20.7%. Analysis of individual drugs shows that 12.6 % of residents in the Coast Region are currently using alcohol, 14.7% tobacco, 12.0% *khat/ miraa*, 4.5% bhang, 2.3% heroin, 1.3% prescription drugs/ sleeping pills, 0.9% cocaine and 0.4% hashish.

Analysis of alcohol and drug dependence in the Coast Region shows that 8.1% of the residents are dependent on tobacco, 7.3% are dependent on alcohol, 7.1% are dependent on *khat/ miraa*, 4.8% are dependent on bhang, 3.0% are dependent on heroin, 1.2% are dependent on cocaine while 0.7% are dependent on prescription drugs.

From the survey findings, it's evident that alcohol, tobacco, *khat* and bhang are the major substances of abuse in the Coast Region. Further, heroin, cocaine and *chang'aa* have been strongly associated with the burden of negative health and social-economic

consequences of alcohol and drug abuse in the Coast Region. The survey therefore recommends the following:

1. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should undertake elaborate public education and awareness campaigns aimed at sensitizing the community and families about the dangers of alcohol and other drugs of abuse;
2. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta in collaboration with State Department of Education should undertake preventive education in schools aimed at preventing initiation of alcohol and other drugs of abuse among school going children.
3. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should partner with other relevant stakeholders in order to control production, sale and consumption of alcohol and other drugs;
4. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should develop their alcohol and drug abuse policies in order to harmonize prevention and control efforts by the different stakeholders in their counties particularly at the workplace. These counties should also allocate an annual budget to facilitate the implementation of their ADA policy and other related programs;
5. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should consider providing affordable and accessible counselling, treatment and rehabilitation services to support persons with substance use disorders;
6. The County Governments of Mombasa, Kilifi, Kwale and Lamu which border the Coastal strip should develop appropriate programs that target the vulnerable groups of narcotic drug users especially heroin and cocaine in order to alleviate the adverse negative effects associated with their usage e.g. HIV/AIDS and Hepatitis C infection.
7. NACADA should continue to enhance the capacity of County Alcohol Control Inter-Agency Committees of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta and other relevant enforcement agencies to facilitate them to effectively respond to the challenges of alcohol and drug abuse prevention, control and management.

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's 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. In Kenya, 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

Under Article 189(1) (c) of the Constitution, the Authority is obligated to liaise with county governments for the purpose of exchanging information, coordinating policies and administration and enhancing capacity. There are three main functions of the county government under the Constitution that directly relate with the functions of the Authority. 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.

With the promulgation of the constitution of Kenya 2010, licensing and drug control became a devolved function. Therefore, towards promoting evidence based alcohol and drug abuse programing at the county level, a baseline survey becomes a critical tool for monitoring the impact and effectiveness of ADA interventions.

1.4 Objectives

General objective

To understand the problem of alcohol and drug abuse in the counties of Mombasa, Kwale, Kilifi, Lamu, Tana River and Taita Taveta to promote implementation of evidence based public education and awareness programs.

Specific objectives

1. To determine awareness levels of alcohol and drugs in the six counties of the Coast Region;
2. To determine the prevalence of alcohol and drug use in the six counties of the Coast Region;
3. To determine the health and socio-economic effects of alcohol and drug abuse in the Coast Region;
4. To determine the extent of alcohol and drug dependence in the six counties of the Coast Region;

CHAPTER TWO: METHODOLOGY

2.1 Study design

A cross-sectional survey was conducted where both quantitative and qualitative data was collected in the six counties of the Coast Region namely; Mombasa, Kwale, Kilifi, Tana River, Lamu and Taita Taveta. Cross-sectional studies are the best way to determine prevalence and are useful at identifying associations.

2.2 Study area

Coast Region is one of Kenya's former eight provinces. Coast Region covers an area of 79,686.1 km² and has a population of 3,325,307 according to the 2009 census. The Coast Region comprises of six counties namely; Mombasa, Kwale, Kilifi, Tana River, Lamu and Taita Taveta. Mombasa is the smallest county in the Coast Region covering an area of 212.5 km² and has a population of 939,370. Kwale County covers an area of 8,270.3 km² and has a population of 649,931. Kilifi County covers an area of 12,245.9 km² and has a population of 1,109,735. Tana River is the largest county in the Coast Region covering an area of 35,375.8 km² and has a population of 240,075. Lamu County covers an area of 6,497.7 km² and has a population of 101,539. Taita Taveta is the second largest county in the Coast Region covering an area of 17,083.9 km² and a population of 284,657.

2.3 Study population

The study population constituted residents of the Coast Region aged 15-65 years covering all the six (6) counties namely; Mombasa, Kwale, Kilifi, Tana River, Lamu and Taita Taveta.

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):

$$n = \frac{z^2 \cdot p \cdot q}{e^2}$$

Where:

- $z = 1.96$ (95% significance level) [standard variate at a given confidence level]
- $p = 0.5$ [sample proportion of the population with the desired characteristics]
- $q = 0.5$ [1-p]
- $e = 0.05$ [acceptable error (precision)]
- $n =$ sample size

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 +/-5.0% for a sample size of 384 households per county.

2.5 Sample distribution

The survey sampled and interviewed 1,819 respondents from the six counties of Coast region representing a response rate of 78.9%. All the sub-counties in each of the six counties were purposively selected. From each sub-county, two sub-locations were randomly selected. The comprehensive sample distribution is shown below:

Table 1: Sample distribution

County	Sampled sub-county	Sampled location	Sampled sub-locations	
Mombasa	Mombasa	Tononoka	Tononoka	
		Mwembe Tayari	Mwembe Tayari	
	Kisauni	Kisauni	Magogani	
		Bamburi	Shanzu	
	Changamwe	Changamwe	Changamwe	
		Miritini	Jomvu	
	Likoni	Likoni	Bofu	
		Shikaadabu	Vyemani	
	Lamu	Lamu West	Mokowe	Mokowe
			Witu	Witu
Mpeketoni			Central	
Lamu East		Mwajumwali	Mvabogi	
		Kizingitini	Kizingitini	
Kwale	Kwale	Mwaluvaga	Mwaluvaga	
		Golini	Golini	
	Msambweni	Kingwede/ Shirazi	Shirazi	
		Kinondo	Gazi	
	Kinango	Vigurungani	Vigurungani	
		Chengoni	Maji ya Chumvi	
Kilifi	Kilifi	Junju	Kuruwitu/ Chodari	
		Township	Sokoni	
	Malindi	Ganda	Msabaha	
		Jilore	Girimacha	
	Magarini	Gongoni	Gongoni	
		Bungale	Dakasha	
	Kaloleni	Jibana	Kwale	

County	Sampled sub-county	Sampled location	Sampled sub-locations
		Mariakani	Kawala/ Kadzozzo
	Rabai	Mwawesa	Bwagamoyo
		Kambe	M'bwaka/ Kikomani
	Ganze Vitengeni	Ganze Mwahera	Ganze/ Tsangalaweni Kaembeni
Taita Taveta	Taita	Werugha	Marumange
		Mwanda	Njawali
	Voi	Ngolia	Ghazi
		Marungu	Maungu
	Taveta	Kimorigho	Eldoro
		Challa	Challa
	Mwatate	Mwatate	Mwatate
Rong'e Juu		Kironge/ Mwakaleri	
Tana River	Tana River	Kiarikungu	Kiarikungu
		Ndura	Bondeni
	Tana North	Bangale	Bangale
		Madogo	Madogo
	Tana Delta	Ozi	Ngao
		Bilisa	Garsen

At the sub-location level, a landmark (e.g. a school, church etc.) was identified and selected to determine the starting point. The date score was used to determine the first household to be sampled.

The second stratification was done at the household level. Potential respondents were stratified based on their age (15-24 years, 25-35 years and 36-65 years) and gender categories. Subsequent households were 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 for inclusion in the survey. Only one (1) respondent was interviewed from each sampled household.

2.6 Data types

A structured questionnaire with open and closed questions was used to generate quantitative and qualitative data. Quantitative data generated trends in awareness levels and prevalence of ADA in each of the 6 Counties of the Coast region.

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 drug abuse, availability and use of different drugs, health and socioeconomic consequences of drug abuse and the status of dependence.

2.7 Training of research assistants

Given the sensitive nature of the survey, research assistants were trained in a two-day seminar specifically to familiarise themselves with ADA issues, objectives and any other unique features of the survey. Training was conducted in Mombasa at the Coast Regional Coordinator's offices in collaboration with NACADA's Regional Office.

2.8 Field work

Data was collected over a period of 12 days. There were three data collection teams comprising of four research assistants and one supervisor nominated from each of the six county governments of the Coast Region. NACADA staff provided the overall coordination of the data collection teams.

2.9 Data entry, cleaning, and analysis

Quantitative data was coded, sorted, entered and analysed using SPSS software. Descriptive statistics namely frequencies, 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 concerns

Informed consent was sought from the study participants and participation in the survey was strictly on voluntary basis. Anonymity and confidentiality of the respondents was also safeguarded. For respondents below the age of 15 years, informed consent was sought from a parent or guardian.

CHAPTER 3: AWARENESS AND USE OF ALCOHOL AND DRUGS

3.1 Background characteristics of the respondents

Background information was collected to enable categorization of respondents according to the various alcohol and drug abuse indicators of interest in this baseline survey. Table 2 presents the percentage distribution of respondents who participated in the survey according to their gender, age, religion, education and employment status.

Results show that 56.5% of the respondents interviewed are male while 43.5% are female. Besides, 39.5% of the respondents are aged 36 years and above, 35.2% are aged between 25-35 years, 21.9% are aged 18-24 years while 3.4% are aged 15-17 years. Analysis of educational background shows that 13.5% have no formal education, 46.7% have attained a primary level education, 28.4% a secondary level education and 11.4% a post-secondary level education. In terms of religion, 48.6% are Muslims, 32.3% are Protestants while 14.9% Catholics. Finally, 38.9% of the respondents are unemployed, 33.3% are self-employed, 8.1% are students and the remaining 19.6% are employed.

Table 2: Background characteristics (%)

Indicator	County						Coast Region
	Mombasa	Kwale	Kilifi	Tana River	Lamu	Taita Taveta	
Gender							
Male	67.2	50.2	58.6	56.9	61.1	42.8	56.5
Female	32.8	49.8	41.4	43.1	38.9	57.2	43.5
Age in Years							
15 - 17	1.6	3.0	4.7	4.9	4.3	1.5	3.4
18 - 24	23.2	23.2	22.3	25.7	20.9	15.5	21.9
25 - 35	38.3	25.8	31.6	41.6	35.4	35.8	35.2
36+	37.0	48.0	41.4	27.7	39.4	47.2	39.5
Religion							
Protestant	20.4	18.4	52.6	20.9	28.0	60.9	32.3
Catholic	17.9	7.4	10.4	11.5	16.6	25.4	14.9
Muslim	55.0	73.9	21.7	66.2	53.7	12.3	48.6
Others	6.7	0.4	15.3	1.4	1.7	1.4	4.1
Education status							
No formal	7.3	24.3	13.7	15.8	10.1	11.2	13.5
Primary	44.6	46.3	48.4	42.4	48.0	51.9	46.7
Secondary	33.8	20.6	25.8	29.5	31.0	27.6	28.4
Post-secondary	14.3	8.8	12.1	12.3	10.9	9.3	11.4
Employment status							
Self employed	5.1	10.0	9.0	9.2	10.3	4.7	33.3
Student	53.8	45.0	45.7	34.1	26.4	31.6	8.1
Unemployed	17.9	11.1	19.9	26.6	27.3	11.3	38.9
Employed	23.1	33.9	25.4	30.1	35.9	52.4	19.6
Total	314	273	256	350	350	276	1819

3.2 Awareness of drugs and substances of abuse

This section presents the findings on knowledge of drugs and other substances of abuse among the respondents of Mombasa, Kwale, Kilifi, Tana River, Lamu and Taita Taveta Counties.

In assessing the level of awareness of various drugs and substances of abuse, respondents were required to answer two separate but interlinked questions. The first question sought to generate spontaneously knowledge on all drugs and substances of abuse that the respondent was aware of.

After this spontaneous response, all the respondents were prompted on other drugs that one may not have mentioned. Put together, the spontaneous response and the prompted response was used to estimate total awareness level among the studied population.

3.2.1 Spontaneous recall of drugs

In terms of spontaneous recall of selected drugs, respondents were asked information relating to alcoholic drinks, tobacco products, *khat*, narcotic drugs and prescription drugs. Data shows that respondents of the Coast Region have highest spontaneous recall to alcoholic drinks (80.0%), bhang 69.0% tobacco products 64.6% and *khat* 55.1% compared to other drugs. Tana River County is leading in the spontaneous awareness of tobacco 83.4% and *khat* 76.3%. Lamu County is leading in the spontaneous awareness of alcohol 86.9%, cocaine 54.0%, heroin 65.4%, bhang 77.7%, hashish 29.1% and prescription drugs/ sleeping pills 28.9%. This information is summarized in Table 3 below.

Table 3: Spontaneous recall (%) of selected drugs

Drug/ substance	Drug/ substance sub-type	County						Coast Region
		Mombasa	Kwale	Kilifi	Tana River	Lamu	Taita Taveta	
Alcohol products	Packaged/ legal alcohol	52.2	47.6	52.3	68.6	74.6	58.0	59.9
	<i>Chang'aa</i>	36.6	24.2	25.8	23.7	36.0	40.9	31.3
	Traditional liquor	42.7	55.7	72.7	29.4	46.0	46.0	47.4
	2 nd generation alcohol	5.1	4.8	1.2	16.9	34.9	25.7	15.6
	Total alcohol	72.0	71.4	85.2	81.7	86.9	81.9	80.0
Tobacco products	Cigarettes	52.5	29.3	51.2	79.1	68.6	43.1	55.6
	Sniffed/ chewed/ piped tobacco	25.8	16.5	20.7	34.0	42.3	25.0	28.3
	Kuber	13.7	5.1	8.2	13.1	20.0	17.4	13.3
	Shisha	8.0	0.4	-	10.6	14.6	2.5	6.7
Total tobacco	62.7	39.6	62.1	83.4	78.0	52.9	64.6	
Khat	<i>Miraa</i>	45.9	37.7	48.0	68.9	61.1	35.9	50.8
	<i>Muguka</i>	33.1	13.9	21.5	33.1	37.1	9.4	25.8
	Total khat	51.0	40.3	48.8	76.3	66.6	38.8	55.1
Narcotics	Cocaine	33.8	43.2	44.9	34.3	54.0	15.9	38.0
	Heroin	35.0	33.0	43.4	26.6	65.4	15.9	37.2
	Bhang	71.3	63.7	76.6	65.4	77.7	58.3	69.0
	Hashish	6.4	1.1	8.2	8.6	29.1	3.3	10.2
Prescription drugs	Sleeping pills	14.6	0.7	7.0	26.9	28.9	1.8	14.6
Inhalants	Thinner/ glue/ petrol/ paint	8.9	6.6	9.4	19.1	19.1	4.7	11.9

3.2.2 Awareness of tobacco products

Spontaneous recall and prompted response was used to estimate total awareness. For tobacco products, *shisha* recorded the lowest levels of total awareness at 32.8%.

Generally, total awareness of tobacco products in Coast Region is high (98.8%), with no significant differences across the different background characteristics, namely, gender, age, religion, education status and employment status. Geographically, total awareness of tobacco products is highest in Kilifi County (99.6%) followed by Tana River 99.4% and Lamu 99.4% Counties, Mombasa County 99.0%, Kwale County 98.2% and lastly Taita Taveta County 97.1% (Table 4).

Table 4: Total awareness (%) of tobacco products in the Coast Region

		Cigarettes	Sniffed/ chewed/ piped tobacco	Küber	Shisha	All tobacco products	Total (n)
County	Mombasa	98.1	94.6	77.4	56.4	99.0	314
	Kwale	93.8	78.8	56.8	16.5	98.2	273
	Kilifi	99.6	96.1	67.2	22.7	99.6	256
	Tana River	97.1	70.6	56.0	38.0	99.4	350
	Lamu	96.6	91.4	69.4	44.9	99.4	350
	Taita Taveta	94.6	76.8	55.4	9.4	97.1	276
Gender	Male	97.3	87.3	75.0	43.0	99.3	1028
	Female	96.1	81.1	49.6	19.6	98.5	791
Age in years	15 – 17	95.1	83.6	57.4	14.8	96.7	61
	18 – 24	98.7	86.1	69.9	36.9	99.5	396
	25 – 35	96.1	82.7	66.9	37.5	98.9	635
	36+	96.2	85.4	58.3	27.9	98.6	713
Religion	Protestant	95.9	80.5	57.4	20.9	98.3	584
	Catholic	97.0	87.8	63.0	35.9	100.0	270
	Muslim	97.0	85.6	69.0	40.5	99.0	880
	Others	97.3	93.3	58.7	24.0	98.7	75
Education status	No formal	93.9	77.5	41.0	13.5	97.1	244
	Primary	97.4	85.9	66.1	32.1	99.5	844
	Secondary	97.1	87.1	68.2	38.8	99.0	513
	Post-secondary	97.1	82.0	73.2	44.9	99.0	205
Employment status	Self employed	96.0	84.7	62.3	26.6	99.0	602
	Student	97.3	81.0	64.6	27.9	98.6	147
	Unemployed	97.0	83.5	59.9	32.8	98.6	704
	Employed	97.2	88.2	74.1	44.8	99.7	355
Coast Region		96.6	84.5	63.9	32.8	98.8	1819

3.2.3 Awareness of alcoholic products

Total awareness of alcoholic drinks in the Coast Region is generally high (97.8%), with no significant differences across the different background characteristics. However, second generation alcohol recorded lower levels of total awareness (32.8%). Geographically, total awareness of alcoholic drinks is highest in Mombasa County (99.7%) followed by Kwale County 99.3%, Kilifi County 99.2%, Lamu County 98.6%, Tana River County 96.9% and lastly Taita Taveta County 93.1% (Table 5).

Table 5: Total awareness (%) of alcoholic drinks in the Coast Region

		Packaged /legal alcohol	Chang'aa	Traditional liquor	2 nd generation alcohol	Total alcohol	Total (n)
County	Mombasa	93.9	90.8	91.1	27.4	99.7	314
	Kwale	91.6	75.1	95.6	14.3	99.3	273
	Kilifi	96.1	89.5	98.0	18.4	99.2	256
	Tana River	82.9	67.4	60.0	31.1	96.9	350
	Lamu	94.0	81.1	84.9	60.9	98.6	350
	Taita Taveta	84.1	81.2	80.8	37.0	93.1	276
Gender	Male	91.8	84.1	85.9	36.7	98.1	1028
	Female	88.5	75.8	81.6	27.7	97.5	791
Age in years	15 – 17	88.5	67.2	78.7	31.1	98.4	61
	18 – 24	88.6	80.6	83.3	31.1	97.2	396
	25 – 35	90.7	81.9	83.9	37.2	98.1	635
	36+	91.0	80.1	84.9	29.7	97.8	713
Religion	Protestant	91.3	81.8	87.8	34.1	97.3	584
	Catholic	93.0	85.6	86.7	38.1	98.9	270
	Muslim	88.6	77.0	79.8	31.5	97.7	880
	Others	90.7	89.3	93.3	13.3	98.7	75
Education status	No formal	83.2	66.0	76.2	19.3	94.3	244
	Primary	91.1	80.6	85.1	31.8	98.2	844
	Secondary	92.4	85.2	84.8	38.0	98.6	513
	Post-secondary	90.2	85.4	87.3	39.0	98.5	205
Employment status	Self employed	91.4	81.6	84.9	33.2	98.5	602
	Student	92.5	83.0	82.3	37.4	95.9	147
	Unemployed	87.1	76.6	83.7	28.0	97.3	704
	Employed	93.8	85.9	83.9	39.4	98.6	355
Coast Region		90.3	80.4	84.0	32.8	97.8	1819

3.2.4 Awareness of narcotic drugs

The survey assessed the level of total awareness with regards to narcotic drugs. The narcotic drugs assessed include: *bhanga*, cocaine, heroin and hashish. The findings are presented in Table 6. *Bhanga* recorded the highest total awareness in the Coast Region (86.3%) followed by cocaine 61.3%, heroin 60.7% and hashish 25.1%. In the case of *bhanga*, total awareness is highest in Kilifi (95.7%) and Kwale (90.8%) Counties and lowest in Tana River County (77.4%). Total awareness of cocaine is highest in Lamu (80.0%) and Kilifi (74.6%) Counties and lowest in Taita Taveta County (39.5%). Total awareness of heroin is highest in Lamu (82.0%) and Kilifi (76.2%) Counties and lowest in Taita Taveta County (42.0%). Total awareness of hashish is highest in Lamu (50.0%) and Kilifi (28.5%) Counties and lowest in Kwale County (3.7%). (Table 6).

Table 6: Total awareness (%) narcotic drugs in the Coast Region

		Hashish	Bhanga	Cocaine	Heroin	Total (n)
County	Mombasa	27.4	90.4	52.2	56.4	314
	Kwale	3.7	90.8	66.7	61.5	273
	Kilifi	28.5	95.7	74.6	76.2	256
	Tana River	26.9	77.4	54.0	46.0	350
	Lamu	50.0	86.3	80.0	82.0	350
	Taita Taveta	6.5	79.7	39.5	42.0	276
Gender	Male	32.5	86.7	67.8	67.0	1028
	Female	15.5	86.0	52.8	52.5	791

		Hashish	Bhang	Cocaine	Heroin	Total (n)
Age in years	15 – 17	27.9	86.9	73.8	62.3	61
	18 – 24	19.7	87.4	65.7	61.9	396
	25 – 35	27.9	86.3	60.0	59.4	635
	36+	25.8	86.3	59.5	61.4	713
Religion	Protestant	21.2	85.4	57.2	59.4	584
	Catholic	25.9	87.8	59.3	61.1	270
	Muslim	28.1	85.7	65.2	62.7	880
	Others	17.3	93.3	52.0	44.0	75
Education status	No formal	13.9	83.6	45.1	41.4	244
	Primary	27.5	86.5	60.8	61.5	844
	Secondary	25.9	88.3	67.6	64.5	513
	Post-secondary	26.8	84.4	67.8	70.2	205
Employment status	Self employed	24.6	86.7	59.5	55.8	602
	Student	17.7	83.7	72.1	68.0	147
	Unemployed	23.3	87.2	56.0	58.2	704
	Employed	32.7	85.4	71.3	71.5	355
Coast Region		25.1	86.3	61.3	60.7	1819

3.2.5 Awareness of *khat*, inhalants and prescription drugs in the Coast Region

The study also assessed the level of total awareness with respect to *khat* (*miraa* and *muguka*). As shown in Table 7, total awareness of *miraa* in the Coast Region is much higher compared to *muguka* (90.3% and 72.5% respectively).

Geographically, total awareness of *khat* is highest in Kilifi (97.7%) and Mombasa (95.5%) Counties and lowest in Taita Taveta County (89.9%). In terms of inhalants, total awareness in the Coast Region stands at 48.3%. Total awareness of inhalants is highest in Kilifi (79.7%) and Lamu (58.9%) Counties and lowest in Taita Taveta County (27.2%). For prescription drugs/ sleeping pills, total awareness in the Coast Region stands at 51.4%. Total awareness of prescription drugs/ sleeping pills is highest in Kilifi (90.2%) and Lamu Counties (67.7%) and lowest in Kwale County (23.8%).

Table 7: Total awareness (%) of *khat*, inhalants and prescription drugs in the Coast Region

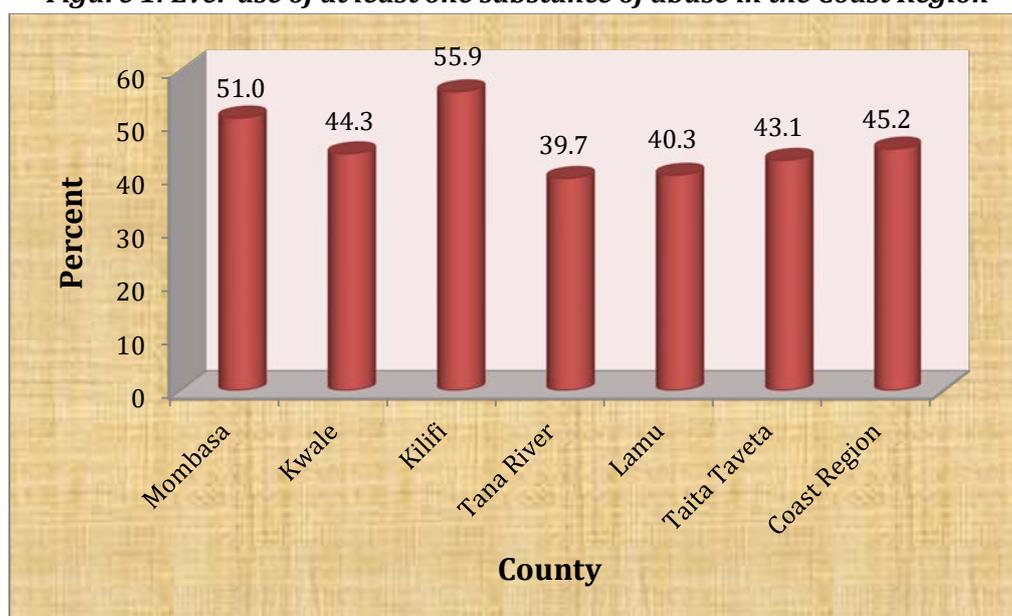
		<i>Miraa</i>	<i>Muguka</i>	Total <i>khat</i>	Inhalants	Prescription / sleeping pills	Total (n)
County	Mombasa	92.4	86.6	95.5	48.7	48.4	314
	Kwale	93.4	70.7	93.4	33.0	23.8	273
	Kilifi	96.5	82.4	97.7	79.7	90.2	256
	Tana River	86.3	65.7	94.0	43.1	49.7	350
	Lamu	89.4	73.7	94.0	58.9	67.7	350
	Taita Taveta	85.5	55.8	89.9	27.2	27.5	276
Gender	Male	91.2	76.3	95.3	55.1	53.8	1028
	Female	89.2	67.8	93.1	39.7	48.5	791
Age in years	15 – 17	86.9	70.5	95.1	45.9	57.4	61
	18 – 24	91.9	74.0	96.5	52.5	56.1	396
	25 – 35	90.9	76.7	94.6	49.3	52.6	635
	36+	89.3	68.6	92.7	46.1	48.0	713
Religion	Protestant	91.8	73.8	95.4	47.3	51.7	584
	Catholic	90.4	73.0	93.7	47.8	43.3	270
	Muslim	89.0	70.9	93.5	47.6	52.2	880
	Others	93.3	76.0	97.3	65.3	66.7	75

		<i>Miraa</i>	<i>Muguka</i>	<i>Total khat</i>	<i>Inhalants</i>	<i>Prescription / sleeping pills</i>	<i>Total (n)</i>
Education status	No formal	84.8	59.0	88.5	30.7	37.7	244
	Primary	89.9	73.8	94.8	46.9	53.4	844
	Secondary	94.2	75.0	96.5	56.7	53.8	513
	Post-secondary	90.2	78.0	95.6	55.1	55.1	205
Employment status	Self employed	92.9	69.1	95.3	41.4	46.3	602
	Student	88.4	72.1	91.8	49.0	53.7	147
	Unemployed	88.5	73.0	93.9	47.3	50.3	704
	Employed	90.7	77.5	94.9	62.3	61.7	355
Coast Region		90.3	72.5	94.3	48.3	51.4	1819

3.3 Ever use of at least one substance of abuse in the Coast Region

Respondents were asked whether they have ever used at least one substance of abuse. According to Figure 1 below, 45.2% of respondents in the Coast Region have ever used at least one substance of abuse in their lifetime. In terms of counties, Kilifi is leading 55.9% followed by Mombasa 51.0%, Kwale 44.3%, Taita Taveta 43.1%, Lamu 40.3% and Tana River 39.7%.

Figure 1: Ever use of at least one substance of abuse in the Coast Region



3.4 Ever use of alcohol

Findings show that 25.0% of residents in the Coast Region have ever used alcohol (Table 8). The median age of onset to alcohol use is 20 years. The leading county in terms of ever use of alcohol is Kilifi (39.8%) followed by Mombasa 33.8%, Taita Taveta 28.6%, Lamu 20.3%, Kwale 20.1% and Tana River 11.7%. More males have ever used alcohol (36.3%) compared to females (10.3%). In terms of age categories, majority are aged 36 years and above (30.0%) followed by 25-35 years (27.1%), 18-24 years (16.2%) and 15-17 years (4.9%).

Majority are Catholics (33.3%), followed by Protestants (32.4%) and Muslims (16.8%). In terms of education, majority have a post-secondary education (27.8%). In terms of one's employment status, majority are employed (31.0%).

The most commonly ever used type alcoholic drink in the Coast Region is packaged/legal alcohol (16.3%) and traditional liquor (16.2%) followed by *chang'aa* 7.2% and lastly 2nd generation alcohol 3.8%. In terms of ever use of the different types of alcoholic drinks across the counties, Kilifi has the highest ever use of traditional liquor (34.8%) and packaged/legal alcohol (26.2%). Mombasa County has the highest ever use of *chang'aa* (15.6%) and 2nd generation alcohol (7.6%).

Table 8: Ever use of alcoholic drinks (%) in the Coast Region

		Packaged/ legal alcohol	<i>Chang'aa</i>	Traditiona l liquor	2 nd generation alcohol	Total alcohol	Total (n)
County	Mombasa	25.5	15.6	21.3	7.6	33.8	314
	Kwale	13.6	5.5	13.6	0.7	20.1	273
	Kilifi	26.2	8.6	34.8	3.9	39.8	256
	Tana River	5.1	2.9	5.1	1.7	11.7	350
	Lamu	11.1	2.9	10.0	3.4	20.3	350
	Taita Taveta	20.3	9.1	17.4	5.8	28.6	276
Gender	Male	24.8	11.7	24.4	6.4	36.3	1028
	Female	5.3	1.4	5.5	0.5	10.3	791
Age in years	15 - 17	1.6	-	1.6	1.6	4.9	61
	18 - 24	9.8	2.3	7.3	3.5	16.2	396
	25 - 35	18.3	8.3	16.4	4.7	27.1	635
	36+	19.6	9.5	22.3	3.4	30.0	713
Religion	Protestant	22.1	7.5	22.3	5.1	32.4	584
	Catholic	20.7	11.5	21.1	4.4	33.3	270
	Muslim	11.7	5.6	9.8	3.0	16.8	880
	Others	9.3	8.0	21.3	1.3	29.3	75
Education status	No formal	7.4	4.1	14.8	1.6	18.0	244
	Primary	17.3	8.2	18.4	3.8	26.8	844
	Secondary	18.1	6.6	13.6	4.1	24.2	513
	Post-secondary	18.0	7.8	15.6	6.3	27.8	205
Employment status	Self employed	17.9	8.1	17.8	3.2	27.1	602
	Student	7.5	1.4	3.4	2.7	11.6	147
	Unemployed	15.3	7.4	16.3	4.7	23.2	704
	Employed	19.7	7.6	18.9	3.9	31.0	355
Coast Region		16.3	7.2	16.2	3.8	25.0	1819

3.5 Ever use of tobacco in the Coast Region

Survey shows that 24.1% of residents in the Coast Region have ever used tobacco (Table 9). The median age of onset to tobacco use is 18 years. The leading county in terms of ever use of tobacco is Mombasa (34.1%) followed by Kwale 27.1%, Kilifi 25.0%, Tana River 20.9%, Taita Taveta 20.7% and Lamu 18.3%. More males have ever used tobacco (37.2%) compared to females (7.1%). In terms of age categories, majority are aged 36 years and above (31.3%) followed by those aged 25-35 years (23.6%), 18-24 years (15.4%) and 15-17 years (4.9%). Majority are Muslims (27.2%), those with a primary level education (27.1%) and are employed (28.2%).

The most commonly ever used type of tobacco product in the Coast Region is cigarettes (20.6%) followed by snuff/ chewed tobacco 4.7%, *kuber* 3.4% and *shisha* 2.4%. In terms of ever use of the different types of tobacco products across counties, Mombasa has the highest ever use of cigarettes 31.8%, snuff/ chewed tobacco 8.9%, *kuber* 7.3% and *shisha* 7.0%.

Table 9: Ever use of tobacco products (%) in the Coast Region

		Cigarettes	Sniffed/ chewed/ piped tobacco	<i>Kuber</i>	<i>Shisha</i>	All tobacco products	Total (n)
County	Mombasa	31.8	8.9	7.3	7.0	34.1	314
	Kwale	23.8	5.1	4.0	0.7	27.1	273
	Kilifi	18.8	6.6	4.3	1.6	25.0	256
	Tana River	16.9	3.7	1.1	2.0	20.9	350
	Lamu	14.6	2.3	1.4	1.7	18.3	350
	Taita Taveta	18.8	1.8	2.5	0.7	20.7	276
Gender	Male	33.8	5.9	5.6	3.9	37.2	1028
	Female	3.4	3.0	0.4	0.4	7.1	791
Age in years	15 – 17	3.3	3.3	-	-	4.9	61
	18 – 24	13.1	2.8	2.8	2.0	15.4	396
	25 – 35	20.0	4.3	4.3	2.8	23.6	635
	36+	26.9	6.3	3.2	2.4	31.3	713
Religion	Protestant	19.3	3.8	3.4	1.9	22.1	584
	Catholic	18.1	2.2	3.0	1.5	20.7	270
	Muslim	23.0	5.8	3.8	3.2	27.2	880
	Others	10.7	4.0	-	-	13.3	75
Education status	No formal	13.9	9.0	2.0	0.4	21.7	244
	Primary	23.7	4.4	3.8	1.9	27.1	844
	Secondary	19.9	3.7	3.5	3.7	22.0	513
	Post- secondary	18.0	2.4	2.4	2.9	20.0	205
Employment status	Self employed	22.6	3.8	3.3	1.0	25.9	602
	Student	5.4	2.0	0.7	-	6.1	147
	Unemployed	20.3	6.3	3.1	3.4	24.1	704
	Employed	23.9	3.9	5.1	3.7	28.2	355
Coast Region		20.6	4.7	3.4	2.4	24.1	1819

3.6 Ever use of *khat*, inhalants and prescription drugs in the Coast Region

According to Table 10, ever use of *khat* in the Coast Region stands at 21.7%, that of inhalants stands at 1.2% while that of prescription drugs/ sleeping pills stands at 6.2%. Mombasa County (30.9%) and Tana River County (29.7%) are leading in ever use of *khat*. Mombasa County is leading in the ever use of inhalants (3.2%) while Kilifi County is leading in the ever use of prescription drugs/ sleeping pills (16.8%).

Table 10: Ever use of khat, inhalants and prescription drugs (%) in the Coast Region

		Miraa	Muguka	Total khat	Inhalants	Prescription drugs/ sleeping pills	Total (n)
County	Mombasa	28.7	17.2	30.9	3.2	13.7	314
	Kwale	17.6	7.3	19.0	1.8	3.3	273
	Kilifi	19.9	10.2	20.7	0.4	16.8	256
	Tana River	20.3	12.0	29.7	0.9	1.4	350
	Lamu	10.3	3.7	12.9	0.6	0.3	350
	Taita Taveta	14.9	4.7	15.9	0.4	4.0	276
Gender	Male	29.1	14.9	34.1	1.8	6.5	1028
	Female	4.7	1.9	5.5	0.4	5.7	791
Age in years	15 – 17	-	1.6	1.6	1.6	6.6	61
	18 – 24	20.7	10.6	25.0	1.3	5.8	396
	25 – 35	22.8	11.8	26.6	1.7	7.4	635
	36+	15.3	6.9	17.4	0.7	5.3	713
Religion	Protestant	13.5	6.5	15.4	0.9	7.5	584
	Catholic	13.3	7.0	15.2	0.4	3.7	270
	Muslim	23.6	11.7	28.4	1.8	5.8	880
	Others	14.7	8.0	14.7	-	2.7	75
Education status	No formal	8.6	3.3	10.7	0.8	5.3	244
	Primary	20.0	10.0	23.0	0.9	7.7	844
	Secondary	21.8	10.9	25.9	2.3	5.3	513
	Post-secondary	16.1	9.3	19.5	-	2.9	205
Employment status	Self employed	18.8	7.1	21.8	0.7	4.3	602
	Student	10.9	3.4	12.2	1.4	4.8	147
	Unemployed	17.2	11.2	21.3	1.7	8.8	704
	Employed	24.5	11.5	27.0	1.1	4.8	355
Coast Region		18.5	9.2	21.7	1.2	6.2	1819

3.7 Ever use of narcotic drugs in the Coast Region

According to Table 11, bhang is the most commonly ever used narcotic drug in the Coast Region. Findings show that the ever use of bhang in the region stands at 10.9%, heroin 3.5%, cocaine 1.7% and hashish 1.8%. Mombasa County is leading in the ever use of bhang 23.6%, heroin 15.9%, cocaine 6.1% and hashish 5.1%. Data also shows that more males have ever used bhang 18.1% compared to females 1.5%. In terms of age categories, majority are 25-35 years (13.2%) followed by 36 years and above (10.2%), 18-24 years (9.6%) and 15-17 years (1.6%).

Table 11: Ever use of narcotic drugs (%) in the Coast Region

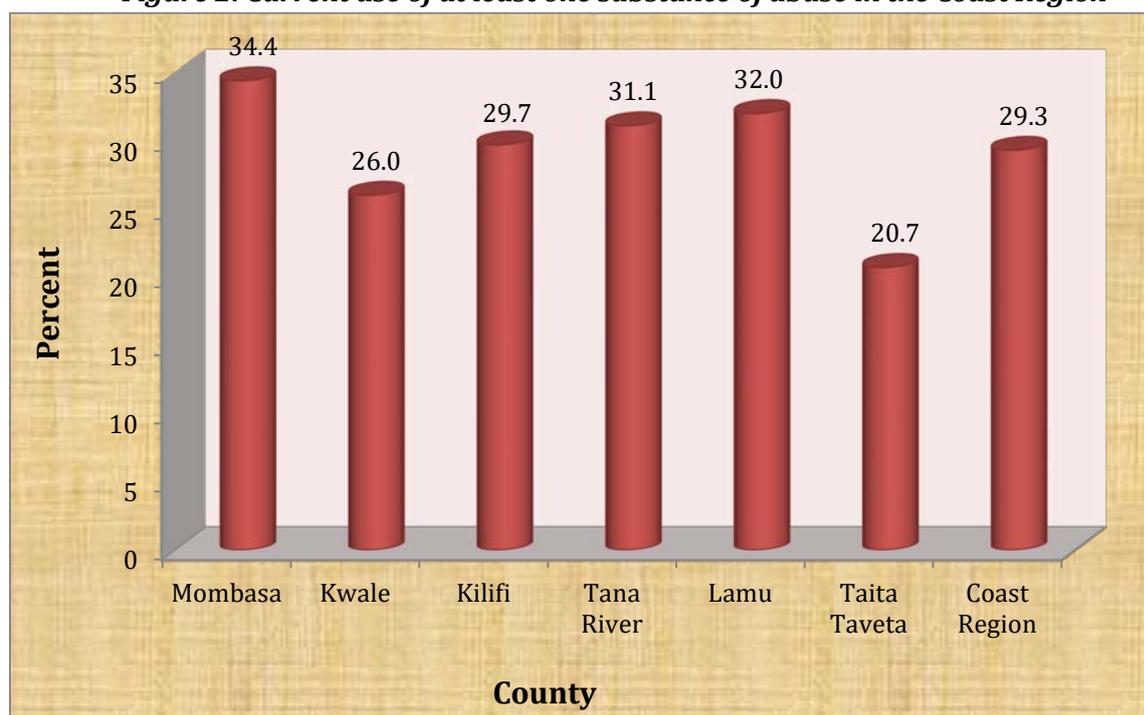
		Hashish	Bhang	Cocaine	Heroin	Total (n)
County	Mombasa	5.1	23.6	6.1	15.9	314
	Kwale	0.7	8.8	0.7	0.4	273
	Kilifi	1.6	15.2	0.4	0.4	256
	Tana River	1.1	4.3	1.4	-	350
	Lamu	2.0	8.3	0.9	2.6	350
	Taita Taveta	-	6.2	0.4	0.7	276
Gender	Male	3.2	18.1	2.9	5.9	1028
	Female	-	1.5	0.1	0.3	791
Age in years	15 – 17	-	1.6	-	-	61
	18 – 24	1.0	9.6	1.0	1.5	396
	25 – 35	2.8	13.2	2.7	3.6	635
	36+	1.5	10.2	1.4	4.8	713

		Hashish	Bhang	Cocaine	Heroin	Total (n)
Religion	Protestant	1.7	9.8	0.7	1.9	584
	Catholic	1.1	9.3	2.2	3.0	270
	Muslim	2.3	12.3	2.3	4.8	880
	Others	-	8.0	1.3	2.7	75
Education status	No formal	-	6.1	1.6	0.4	244
	Primary	2.4	12.0	2.4	4.7	844
	Secondary	1.9	11.1	1.2	3.3	513
	Post-secondary	1.0	11.7	0.5	2.0	205
Employment status	Self employed	1.0	10.5	1.2	2.3	602
	Student	1.4	6.8	0.7	-	147
	Unemployed	2.1	12.1	2.6	5.8	704
	Employed	2.8	11.0	1.4	2.3	355
Coast Region		1.8	10.9	1.7	3.5	1819

3.8 Current use of at least one substance of abuse in the Coast Region

Respondents were asked whether they have used at least one substance of abuse in the last 30 days prior to the survey (current use). According to Figure 2 below, 29.3% of respondents in the Coast Region are currently using at least one substance of abuse. In terms of counties, Mombasa is leading 34.4% followed by Lamu 32.0%, Tana River 31.1%, Kilifi 29.7%, Kwale 26.0% and Taita Taveta 20.7%.

Figure 2: Current use of at least one substance of abuse in the Coast Region



3.9 Current usage of alcohol among 15 – 65 year-olds in the Coast Region

Findings show that 12.6% of respondents in the Coast Region are currently using alcohol (Table 12). The leading county in terms of current alcohol use is Kilifi (21.5%) followed by Mombasa 14.6% and Lamu 14.6%, Taita Taveta 13.4%, Kwale 7.0% and lastly Tana River 6.3%. More males are currently using alcohol (19.4%) compared to females (3.9%) in the Coast Region.

In terms of age categories, majority are 36 years and above (16.1%) followed by 25-35 years (13.9%), 18-24 years (6.1%) and 15-17 years (3.3%).

In terms of current use of specific types of alcoholic drinks in the Coast Region, traditional liquor is the most commonly used (8.2%) followed by packaged/ legal alcohol 6.7%, *chang'aa* 2.3% and lastly 2nd generation alcohol 1.3%. Kilifi County has the highest current usage of packaged/ legal alcohol (11.3%) and traditional liquor (18.4%), Mombasa has the highest current usage of *chang'aa* (5.7%) while Taita Taveta has the highest usage of 2nd generation alcohol (2.5%).

Table 12: Current use of alcoholic drinks (%) in the Coast Region

		Packaged/ legal alcohol	<i>Chang'aa</i>	Traditiona l liquor	2 nd generation alcohol	Total alcohol	Total (n)
County	Mombasa	7.0	5.7	9.9	1.9	14.6	314
	Kwale	4.4	1.1	5.9	-	7.0	273
	Kilifi	11.3	2.0	18.4	1.2	21.5	256
	Tana River	2.6	2.0	2.6	0.6	6.3	350
	Lamu	7.1	0.6	8.0	1.7	14.6	350
	Taita Taveta	8.7	2.2	6.9	2.5	13.4	276
Gender	Male	10.4	3.9	12.7	2.3	19.4	1028
	Female	1.8	0.1	2.4	-	3.9	791
Age in years	15 – 17	0.8	-	1.6	-	3.3	61
	18 – 24	3.5	0.8	2.5	1.8	6.1	396
	25 – 35	8.3	3.1	8.7	0.9	13.9	635
	36+	7.3	2.5	11.6	1.5	16.1	713
Religion	Protestant	9.2	2.1	10.8	2.1	16.6	584
	Catholic	11.5	3.7	12.6	1.5	20.4	270
	Muslim	3.6	1.9	4.7	0.9	7.0	880
	Others	5.3	2.7	14.7	-	20.0	75
Education status	No formal	2.9	1.2	8.6	0.8	10.2	244
	Primary	6.0	2.5	9.6	1.2	12.8	844
	Secondary	7.0	2.1	5.7	1.8	11.3	513
	Post-secondary	12.2	2.4	8.8	1.5	18.0	205
Employment status	Self employed	8.1	2.3	9.0	1.0	14.6	602
	Student	1.4	-	0.7	0.7	2.7	147
	Unemployed	5.1	2.3	8.0	1.3	10.8	704
	Employed	9.6	2.8	11.0	2.3	17.2	355
Region		6.7	2.3	8.2	1.3	12.6	1819

3.10 Current use of tobacco products in the Coast Region

According to Table 13, 14.7% of respondents in the Coast Region are currently using tobacco. The leading county in terms of current usage of tobacco is Mombasa (21.0%) followed by Kwale 17.6%, Tana River 14.6%, Lamu 13.4%, Kilifi 12.1% and Taita Taveta 9.1%. More males are currently using tobacco (23.6%) compared to females (30.0%). In terms of age categories, majority are 36 years and above (19.6%) followed by 25-35 years (13.9%), 18-24 years (9.3%) and 15-17 years (4.9%). On specific tobacco products in the Coast Region, current usage of cigarettes stands at 12.8%, snuff/ chewed tobacco 1.9%, *kuber* 0.5% and *shisha* 0.4%.

Table 13: Current use of tobacco products (%) in the Coast Region

		Cigarettes	Sniffed/ chewed/ piped tobacco	Kuber	Shisha	Total tobacco	Total (n)
County	Mombasa	19.7	2.5	1.0	1.0	21.0	314
	Kwale	14.7	2.9	0.7	0.4	17.6	273
	Kilifi	9.4	2.3	0.8	-	12.1	256
	Tana River	12.6	2.0	-	0.3	14.6	350
	Lamu	10.9	1.4	0.6	0.9	13.4	350
	Taita Taveta	8.7	0.4	0.4	-	9.1	276
Gender	Male	21.5	2.1	0.9	0.8	23.6	1028
	Female	1.3	1.6	0.1	-	3.0	791
Age in years	15 - 17	3.3	1.6	-	-	4.9	61
	18 - 24	7.6	1.3	0.5	1.0	9.3	396
	25 - 35	12.1	1.4	0.5	0.2	13.9	635
	36+	17.3	2.8	0.7	0.4	19.6	713
Religion	Protestant	8.9	0.3	0.5	0.3	9.8	584
	Catholic	11.9	1.1	-	-	13.0	270
	Muslim	15.9	3.1	0.8	0.7	18.8	880
	Others	9.3	2.7	-	-	12.0	75
Education status	No formal	8.6	5.3	-	-	13.5	244
	Primary	15.6	1.8	0.7	0.4	17.7	844
	Secondary	11.5	1.4	0.6	0.2	12.5	513
	Post-secondary	9.3	-	0.5	2.0	10.2	205
Employment status	Self employed	13.5	1.5	0.7	0.2	15.1	602
	Student	2.7	0.7	-	-	1.9	147
	Unemployed	13.1	2.7	0.3	0.4	15.5	704
	Employed	14.9	1.4	1.1	1.1	16.9	355
Coast Region		12.8	1.9	0.5	0.4	14.7	1819

3.11 Current use of *khat*, inhalants and prescription drugs in the Coast Region

According to Table 14, current usage of *khat* in the Coast Region stands at 12.0% and that of prescription drugs/ sleeping pills stands at 1.3%. Tana River County is leading in terms of the current usage of *khat* (22.3%) while Mombasa County leads with the current use of prescription drugs/ sleeping pills (3.8%).

Table 14: Current use of *khat*, inhalants and prescription drugs (%) in the Coast Region

		Miraa	Muguka	Total <i>khat</i>	Inhalants	Prescription drugs/ sleeping pills	Total (n)
County	Mombasa	11.5	6.1	13.1	-	3.8	314
	Kwale	9.9	4.0	10.6	1.1	0.4	273
	Kilifi	7.8	2.7	7.8	-	3.1	256
	Tana River	14.9	8.3	22.3	-	0.6	350
	Lamu	8.0	2.0	9.7	0.3	-	350
	Taita Taveta	5.4	2.2	6.2	-	0.4	276
Gender	Male	16.1	7.2	19.9	0.3	1.1	1028
	Female	1.4	0.6	1.6	0.1	1.6	791
Age in years	15 - 17	-	1.6	1.6	-	1.6	61
	18 - 24	12.1	5.1	14.4	0.5	0.8	396
	25 - 35	12.6	6.0	15.9	0.2	2.4	635
	36+	7.0	2.8	8.4	0.1	0.7	713

		<i>Miraa</i>	<i>Muguka</i>	<i>Total khat</i>	<i>Inhalants</i>	<i>Prescription drugs/ sleeping pills</i>	<i>Total (n)</i>
Religion	Protestant	2.7	1.7	3.8	-	1.0	584
	Catholic	8.9	3.3	10.0	-	1.1	270
	Muslim	15.1	6.6	18.8	0.5	1.4	880
	Others	4.0	1.3	4.0	-	2.7	75
Education status	No formal	4.9	2.5	6.6	0.4	1.2	244
	Primary	10.8	4.6	13.0	-	1.4	844
	Secondary	10.3	4.5	12.9	0.6	1.8	513
	Post-secondary	10.2	5.4	12.7	-	-	205
Employment status	Self employed	10.1	4.3	12.6	-	0.7	602
	Student	6.1	2.0	6.8	0.7	0.7	147
	Unemployed	9.2	4.5	11.6	0.4	2.0	704
	Employed	12.1	5.1	14.4	-	1.4	355
Coast Region		9.8	4.3	12.0	0.2	1.3	1819

3.12 Current use of narcotic drugs in the Coast Region

According to Table 15, current usage of bhang in the Coast Region stands at 4.5%, heroin 2.3%, cocaine 0.9% and hashish 0.4%. Mombasa County is leading in the current use of bhang (12.4%), heroin (12.1%) and cocaine (3.5%) while Lamu County is leading in the current use of hashish (1.1%).

Table 15: Current use of narcotic drugs (%) in the Coast Region

		Hashish	Bhang	Cocaine	Heroin	Total (n)
County	Mombasa	0.3	12.4	3.5	12.1	314
	Kwale	-	3.7	0.4	-	273
	Kilifi	-	3.9	-	-	256
	Tana River	0.9	1.4	0.3	-	350
	Lamu	1.1	3.7	0.9	1.1	350
	Taita Taveta	-	1.4	-	-	276
Gender	Male	0.8	7.6	1.6	3.9	1028
	Female	-	0.4	-	0.3	791
Age in years	15 – 17	-	1.6	-	-	61
	18 – 24	1.0	5.1	0.8	1.0	396
	25 – 35	0.5	4.7	1.7	2.4	635
	36+	0.1	4.2	0.3	3.2	713
Religion	Protestant	0.2	2.2	0.5	1.0	584
	Catholic	0.4	3.7	0.7	1.9	270
	Muslim	0.7	6.4	1.1	3.4	880
	Others	-	1.3	1.3	1.3	75
Education status	No formal	-	3.7	-	0.4	244
	Primary	0.6	5.3	1.2	2.7	844
	Secondary	0.6	3.5	1.2	2.7	513
	Post-secondary	-	4.4	-	1.5	205
Employment status	Self employed	0.3	3.5	0.3	1.2	602
	Student	0.7	2.7	-	-	147
	Unemployed	0.4	6.5	1.6	4.3	704
	Employed	0.6	2.5	0.8	1.4	355
Coast Region		0.4	4.5	0.9	2.3	1819

3.13 Current drug use among youth aged 15 – 24 years in the Coast Region

As shown in Table 16 below, among the young people aged 15-24 years in the Coast Region, 5.7% are currently using alcohol, 8.8% are currently using tobacco, 12.7% *khat*, 4.6% bhang, 0.9% heroin and 0.7% cocaine. Kilifi County is leading with current use of alcohol among the youth aged 15-24 years (10.1%), Lamu County is leading with current use of tobacco (13.6%), Taita Taveta County is leading with current use of *khat* (19.6%), Kwale County is leading with current use of bhang (7.0%) while Mombasa County is leading with current use of heroin (5.2%) and cocaine (2.6%).

Table 16: Current use of alcohol and other drugs among the youth aged 15-24 years in the Coast Region

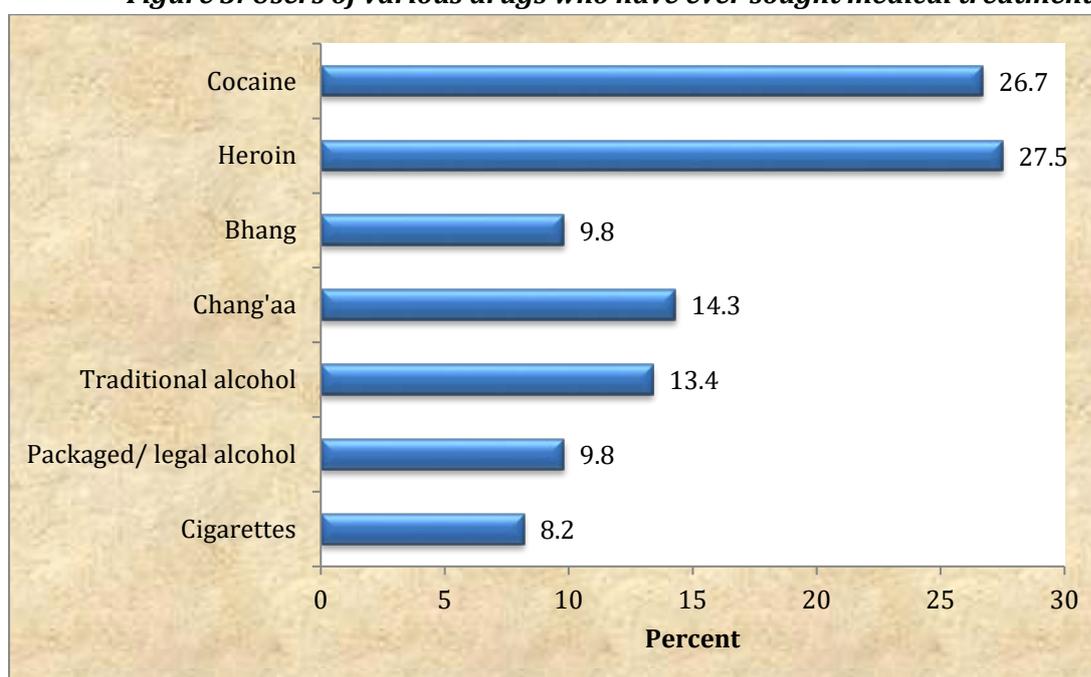
		Alcohol	Tobacco	<i>Khat</i>	Bhang	Heroin	Cocaine
County	Mombasa	3.9	7.8	10.4	5.2	5.2	2.6
	Kwale	5.6	11.3	15.5	7.0	-	-
	Kilifi	10.1	4.3	4.3	2.9	-	-
	Tana River	2.8	8.5	17.0	2.8	-	-
	Lamu	6.8	13.6	10.2	5.7	-	1.1
	Taita Taveta	6.5	4.3	19.6	4.3	-	-
Coast Region		5.7	8.8	12.7	4.6	0.9	0.7

CHAPTER 4: HEALTH AND SOCIO-ECONOMIC EFFECTS OF ALCOHOL AND DRUG ABUSE

4.1 Health problems emanating from drug use in the Coast Region

The survey sought to determine the proportion of users of various drugs who have ever sought medical attention following the use of selected drugs in the Coast Region in the last one year. Findings reveal that out of those who had used heroin, 27.5% have ever sought medical attention for problems related to its usage. This is followed by users of cocaine 26.7%, *chang'aa* 14.3% and traditional liquor 13.4%, packaged/ legal alcohol 9.8%, bhang 9.8% and cigarettes 8.2% (Figure 4). It is therefore evident that most of these health effects may be attributable to narcotic drugs and alcohol use.

Figure 3: Users of various drugs who have ever sought medical treatment



Among the respondents who had reported usage of alcohol or drugs in the last one year, 9.5% of them have ever had sex while drunk or high on drugs with someone other than their regular partner. Among those who reported ever having sex with a non-regular partner in the last one year, 27.3% used a condom all the time, 62.5% never used a condom, 6.7% used a condom sometimes while 3.5% could not remember. This was an indication that there was an increased risk of exposure to HIV and AIDS infection and other sexually transmitted infections (STIs) due to alcohol and drug abuse.

Further, the findings show that seventeen (17) respondents were injecting drugs. Analysis of individual drugs shows that 23.5% of them were injecting cocaine while 76.5% were injecting heroin. Findings also show that 55.6% had experienced infections as a result of injecting, 56.3% had experienced difficulty with injecting, 40.0% had suffered from thrombosis or blood clots, 38.9% had shared a syringe during injecting while 17.7% had injected themselves with someone else's blood (flushing).

These findings again show that injecting drug users are very vulnerable to infections like Hepatitis C and HIV and AIDS.

4.2 Socio-economic effects of drug abuse

Alcohol and drug abuse has a direct impact on an individual's productivity and the overall economic development. According to the baseline survey findings, alcohol, heroin and cocaine were singled out as three of the major drugs 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 52.4% of all heroin users had missed to go to work or school in the last 12 months followed by those using *chang'aa* 47.2%, cocaine 46.7%, packaged/ legal alcohol 32.5%, traditional liquor 24.0% and bhang 21.7%.

On diversion of family resources to fulfil one's desire for alcohol or drugs, majority were users of heroin 61.0% followed by those using bhang 51.2%, cocaine 46.7%, *chang'aa* 45.9%, packaged/ legal alcohol 42.9% and traditional liquor 35.4%.

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 heroin 61.9% followed by users of *chang'aa* 48.6%, cocaine 46.7%, traditional liquor 24.7%, packaged/ legal alcohol 20.5% and bhang 19.5%.

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 heroin 37.2% followed by users of *chang'aa* 32.4%, cocaine 26.7%, packaged/ legal alcohol 24.6%, traditional liquor 22.8% and bhang 14.3%.

CHAPTER 5: EXTENT OF ALCOHOL AND DRUG DEPENDENCE

5.1 Level of alcohol and drug abuse in the Coast Region

The 7 DSM-IV criteria was used to categorize respondents into moderate users, abusers or at the level of dependence. The criteria was applied to all respondents reporting alcohol or drug use in the last 12 months prior to the survey. A respondent who did not answer yes to any of the questions was categorized as a moderate user. A respondent with 1 – 2 positive responses was categorized as an abuser and a respondent with 3 or more positive responses was categorized as dependent.

Table 16 shows the different levels of alcohol and drug abuse in the Coast Region. According the baseline survey findings, 4.1% of respondents in the Coast Region aged 15-65 years are abusing tobacco, 3.7% alcohol, 3.2% *khat/ miraa*, and 0.8% bhang, 0.3% prescription drugs/ sleeping pills, 0.2% heroin and 0.1% cocaine. Therefore, this pool of abusers is likely to graduate into dependence stage if appropriate mitigation measures are not put in place.

Table 16: Level of alcohol and drug abuse in the Coast Region

		Alcohol	Tobacco	<i>Khat</i>	Bhang	Prescription drugs	Heroin	Cocaine	Total (n)
County	Mombasa	5.4	5.7	3.5	1.6	1.0	1.0	0.3	314
	Kwale	2.6	4.4	2.2	0.4	0.4	-	-	273
	Kilifi	5.1	3.9	2.3	0.8	0.8	-	-	256
	Tana River	2.9	4.6	6.3	0.6	-	-	-	350
	Lamu	3.1	2.6	2.6	0.6	-	0.3	-	350
	Taita Taveta	3.6	3.3	1.8	0.7	-	-	-	276
Coast Region		3.7	4.1	3.2	0.8	0.3	0.2	0.1	1819

5.2 Level of alcohol and drug dependence in the Coast Region

Table 17 shows the different levels of alcohol and drug dependence in the Coast Region. According the survey findings, 8.1% of respondents in the Coast Region aged 15-65 years are dependent on tobacco, 7.3% alcohol, 7.1% *khat*, 4.8% bhang, 3.0% heroin, 1.2% cocaine and 0.7% prescription drugs/ sleeping pills. It is therefore evident that tobacco, alcohol and *khat* are the major contributors of addiction cases in the Coast Region compared to other drugs of abuse. Mombasa is the most affected county in terms dependence to alcohol (15.9%), tobacco 20.1%, *khat* 14.0%, bhang 16.2%, heroin 15.9%, cocaine 5.7% and prescription drugs/ sleeping pills 2.2%.

Table 17: Level of alcohol and drug dependence in the Coast Region

		Alcohol	Tobacco	Khat	Bhang	Prescription drugs	Heroin	Cocaine	Total (n)
County	Mombasa	15.9	20.1	14.0	16.2	2.2	15.9	5.7	314
	Kwale	4.8	9.2	4.8	2.2	-	-	0.4	273
	Kilifi	9.0	5.5	5.1	1.6	1.6	-	-	256
	Tana River	3.1	4.0	9.7	1.4	0.3	-	-	350
	Lamu	5.7	4.3	5.1	3.7	0.3	1.4	0.6	350
	Taita Taveta	5.8	5.8	2.9	2.9	-	-	-	276
Coast Region		7.3	8.1	7.1	4.8	0.7	3.0	1.2	1819

5.3 Levels of alcohol and drug dependence by age and gender in the Coast Region

Table 18 compares the level of alcohol and drug dependence by age and gender categories. Findings show that those aged 25-35 years are more likely to be dependent on alcohol 9.1%, *khat/ miraa* 9.6% and cocaine 1.7% compared to other age categories. Those aged 36-65 years are more likely to be dependent on tobacco 10.4%, bhang 5.0% and heroin 4.2% compared to other age categories. Those aged 15-24 years are more likely to be dependent on prescription drugs/ sleeping pills compared to other age categories. In terms of gender, males are more affected compared to females.

Table 18: Levels of dependence by age and gender in the Coast Region

Drug/ substance	Background characteristic	Percentage (%)
Alcohol	15-24 years	2.6
	25-35 years	9.1
	36-65 years	8.7
	Male	11.5
	Female	1.9
Tobacco	15-24 years	4.6
	25-35 years	8.2
	36-65 years	10.4
	Male	12.5
	Female	2.3
Khat/ Miraa	15-24 years	6.3
	25-35 years	9.6
	36-65 years	5.6
	Male	11.7
	Female	1.1
Bhang	15-24 years	4.2
	25-35 years	4.9
	36-65 years	5.0
	Male	8.2
	Female	0.4
Heroin	15-24 years	1.3
	25-35 years	2.8
	36-65 years	4.2

Drug/ substance	Background characteristic	Percentage (%)
	Male	5.2
	Female	0.3
Cocaine	15-24 years	0.7
	25-35 years	1.7
	36-65 years	1.0
	Male	1.9
	Female	0.1
Prescription drugs/ sleeping pills	15-24 years	1.1
	25-35 years	0.9
	36-65 years	0.3
	Male	0.8
	Female	0.6

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusions

The following are the main conclusions from the Coast baseline survey report:

6.1.1 Awareness of drugs in the Coast Region

- Total awareness of alcohol in the Coast Region stands at 97.8%;
- Total awareness of tobacco stands at 98.8%;
- Total awareness of bhang stands at 86.3%;
- Total awareness of *khat/ miraa* stands at 94.3%;
- Total awareness of inhalants stands at 48.3%;
- Total awareness of prescription drugs/ sleeping pills stands at 51.4%;
- Total awareness of heroin stands at 60.7%;
- Total awareness of cocaine stands at 61.3%;
- Total awareness of hashish stands at 25.1%.

6.1.2. Lifetime usage of alcohol and drugs in the Coast Region

- 45.2% of residents in the Coast Region have ever used at least one substance of abuse. In terms of counties, Kilifi is leading 55.9% followed by Mombasa 51.0%, Kwale 44.3%, Taita Taveta 43.1%, Lamu 40.3% and Tana River 39.7%;
- 25.0% of residents in the Coast Region have ever used alcohol. The leading county in terms of ever use of alcohol is Kilifi (39.8%) followed by Mombasa 33.8%, Taita Taveta 28.6%, Lamu 20.3%, Kwale 20.1% and Tana River 11.7%;
- 24.1% of residents in the Coast Region have ever used tobacco. The leading county in terms of ever use of tobacco is Mombasa (34.1%) followed by Kwale 27.1%, Kilifi 25.0%, Tana River 20.9%, Taita Taveta 20.7% and Lamu 18.3%;
- 21.7% of residents in the Coast Region have ever used *khat/ miraa*. The leading county in terms of ever use of *khat/ miraa* is Mombasa (30.9%) followed by Tana River 29.7%, Kilifi 20.7%, Kwale 19.0%, Taita Taveta 15.9% and Lamu 12.9%;
- 10.9% of residents in the Coast Region have ever used bhang; In terms of counties, Mombasa is leading 23.6% followed by Kilifi 15.2%, Kwale 8.8%, Lamu 8.3%, Taita Taveta 6.2% and Tana River 4.3%;
- 6.2% of residents in the Coast Region have ever used prescription drugs/ sleeping pills. In terms of counties, Kilifi is leading 16.8% followed by Mombasa 13.7%, Taita Taveta 4.0%, Kwale 3.3%, Tana River 1.4% and Lamu 0.3%;
- 1.2% of residents in the Coast Region have ever used inhalants;
- 3.5% of residents in the Coast Region have ever used heroin;

- 1.7% of residents in the Coast Region have ever used cocaine;
- 1.8% of residents in the Coast Region have ever used hashish.

6.1.3 Current usage of alcohol and drugs in the Coast Region

- 29.3% of residents in the Coast Region are currently using at least one substance of abuse. In terms of counties, Mombasa is leading 34.4% followed by Lamu 32.0%, Tana River 31.1%, Kilifi 29.7%, Kwale 26.0% and Taita Taveta 20.7%.
- 12.6 % of residents in the Coast Region are currently using alcohol. The leading county in terms of current alcohol use is Kilifi (21.5%) followed by Mombasa 14.6% and Lamu 14.6%, Taita Taveta 13.4%, Kwale 7.0% and lastly Tana River 6.3%.
- 14.7% of residents in the Coast Region are currently using tobacco. The leading county in terms of current usage of tobacco is Mombasa (21.0%) followed by Kwale 17.6%, Tana River 14.6%, Lamu 13.4%, Kilifi 12.1% and Taita Taveta 9.1%.
- 12.0% of residents in the Coast Region are currently using *khat/ miraa*. The leading county in terms of current use of *khat/ miraa* is Tana River (22.3%) followed by Mombasa 13.1%, Kwale 10.6%, Lamu 9.7%, Kilifi 7.8% and Taita Taveta 6.2%;
- 4.5% of residents in the Coast Region are currently using bhang; In terms of counties, Mombasa is leading 12.4% followed by Kilifi 3.9%, Kwale 3.7%, Lamu 3.7%, Taita Taveta 1.4% and Tana River 1.4%;
- 1.3% of residents in the Coast Region are currently using prescription drugs/ sleeping pills;
- 0.2% of residents in the Coast Region are currently using inhalants;
- 2.3% of residents in the Coast Region are currently using heroin;
- 0.9% of residents in the Coast Region are currently using cocaine;
- 0.4% of residents in the Coast Region are currently using hashish;
- 5.7% of youth aged 15-24 years in the Coast Region are currently using alcohol;
- 8.8% of youth aged 15-24 years in the Coast Region are currently using tobacco;
- 4.6% of youth aged 15-24 years in the Coast Region are currently using bhang;

- 12.7% of youth aged 15-24 years in the Coast Region are currently using *khat/miraa*;
- 0.9% of youth aged 15-24 years in the Coast Region are currently using heroin;
- 0.7% of youth aged 15-24 years in the Coast Region are currently using cocaine;

6.1.4. Health and social-economic impact of alcohol and drug abuse in the Coast Region

- 27.5% of heroin users in the Coast Region have ever sought medical attention for problems related to its usage;
- 26.7% of cocaine users in the Coast Region have ever sought medical attention for problems related to its usage;
- 14.3% of *chang'aa* users in the Coast Region have ever sought medical attention for problems related to its usage;
- 13.4% of traditional liquor users in the Coast Region have ever sought medical attention for problems related to its usage;
- 9.8% of bhang users in the Coast Region have ever sought medical attention for problems related to its usage;
- 9.8% of packaged/ legal alcohol users in the Coast Region have ever sought medical attention for problems related to its usage;
- 8.2% of cigarette smokers in the Coast Region have ever sought medical attention for problems related to its usage;
- 9.5% of alcohol or drug users in the Coast Region have ever had sex while drunk or high on drugs with someone other than their regular partner in the last one year;
- Among those who reported ever having sex with a non-regular partner, 62.5% never used a condom, 6.7% used a condom sometimes while 3.5% could not remember. Only 27.3% used a condom all the time;
- 52.4% of all heroin users in the Coast Region had missed to report to work or school in the last one year;
- 47.2% of all *chang'aa* users in the Coast Region had missed to report to work or school in the last one year;

- 46.7% of all cocaine users in the Coast Region had missed to report to work or school in the last one year;
- 32.5% of all packaged/ legal alcohol users in the Coast Region had missed to report to work or school in the last one year;
- 24.0% of all traditional liquor users in the Coast Region had missed to report to work or school in the last one year;
- 21.7% of all bhang users in the Coast Region had missed to report to work or school in the last one year;
- 61.9% of all heroin users in the Coast Region, 48.6% of *chang'aa* users, 46.7% of cocaine users, 24.7% of traditional alcohol users, 20.5% of packaged/ legal alcohol users and 19.5% of bhang users had inflicted harm to self in the last one year;
- 37.2% of all heroin users in the Coast Region, 32.4% of *chang'aa* users, 26.7% of cocaine users, 24.6% of packaged/ legal alcohol users, 22.8% of traditional alcohol users and 14.3% of bhang users had inflicted harmed to others by being violent towards a spouse/ partner or family member in the last one year.

6.1.5. Alcohol and drug dependence in the Coast Region

- 3.7% of residents in the Coast Region are abusing alcohol;
- 4.1% of residents in the Coast Region are abusing tobacco;
- 3.2% of residents in the Coast Region are abusing *khat/ miraa*;
- 0.8% of residents in the Coast Region are abusing bhang;
- 0.3% of residents in the Coast Region are abusing prescription drugs;
- 0.2% of residents in the Coast Region are abusing heroin;
- 0.1% of residents in the Coast Region are abusing cocaine;
- 7.3% of residents in the Coast Region are dependent on alcohol; In terms of counties, Mombasa is leading in alcohol dependence (15.9%) followed by Kilifi 9.0%, Taita Taveta 5.8%, Lamu 5.7%, Kwale 4.8% and Tana River 3.1%.
- 8.1% of residents in the Coast Region are dependent on tobacco; In terms of counties, Mombasa is leading in tobacco dependence (20.1%) followed by Kwale 9.2%, Taita Taveta 5.8%, Kilifi 5.5%, Lamu 4.3% and Tana River 4.0%.

- 7.1% of residents in the Coast Region are dependent on *khat/ miraa*; In terms of counties, Mombasa is leading in *khat* dependence (14.0%) followed by Tana River 9.7%, Kilifi 5.1%, Lamu 5.1%, Kwale 4.8% and Tana River 2.9%.
- 4.8% of residents in the Coast Region are dependent on bhang; In terms of counties, Mombasa is leading in bhang dependence (16.2%) followed by Lamu 3.7%, Taita Taveta 2.9%, Kwale 2.2%, Kilifi 1.6% and Tana River 1.4%.
- 0.7% of residents in the Coast Region are dependent on prescription drugs;
- 3.0% of residents in the Coast Region are dependent on heroin;
- 1.2% of residents in the Coast Region are dependent on cocaine;

6.2 Recommendations

Given the findings summarized above, it's evident that alcohol, tobacco, *khat* and bhang are the major substances of abuse in the Coast Region. Further, heroin, cocaine and *chang'aa* have been strongly associated with the burden of negative health and social-economic consequences of alcohol and drug abuse in the Coast Region. The survey therefore recommends the following:

1. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should undertake elaborate public education and awareness campaigns aimed at sensitizing the community and families about the dangers of alcohol and other drugs of abuse;
2. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta in collaboration with State Department of Education should undertake preventive education in schools aimed at preventing initiation of alcohol and other drugs of abuse among school going children.
3. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should partner with other relevant stakeholders in order to control production, sale and consumption of alcohol and other drugs;
4. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should develop their alcohol and drug abuse policies in order to harmonize prevention and control efforts by the different stakeholders in their counties particularly at the workplace. These counties should also allocate an annual budget to facilitate the implementation of their ADA policy and other related programs;

5. The County Governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta should consider providing affordable and accessible counselling, treatment and rehabilitation services to support persons with substance use disorders;
6. The County Governments of Mombasa, Kilifi, Kwale and Lamu which border the Coastal strip should develop appropriate programs that target the vulnerable groups of narcotic drug users especially heroin and cocaine in order to alleviate the adverse negative effects associated with their usage e.g. HIV/AIDS and Hepatitis C infection.
7. NACADA should continue to enhance the capacity of County Alcohol Control Inter-Agency Committees of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta and other relevant enforcement agencies to facilitate them to effectively respond to the challenges of alcohol and drug abuse prevention, control and management.

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ANNEX 1: DATA COLLECTION TEAM

TEAMS	COUNTY	COUNTY SUPERVISORS	RESEARCH ASSISTANTS
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TEAM 3	KWALE	BINTALI KIBAMBA	IBRAHIM NYAE JOTO
			FREEMAN KAHINDI BAYA
	TAITA TAVETA	BELDINA ATIENO	JOSEPHINE MWASARU
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