Status of Drugs and Substance Abuse among the General Population in Kenya

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Abstract

This study was undertaken between November and December 2016 as a follow-up to two other studies conducted in 2007 and 2012 to assess the status of drugs and substance abuse in Kenya. The study covered respondents aged 15 – 65 years who were identified through stratified multi-stage random sampling. The 3,362 sampled households were distributed proportionately across the eight regions of Kenya. According to the findings, the prevalence of current usage of alcohol among respondents aged 15 – 65 years stands at 12.2%, tobacco 8.3%, khat 4.1% and bhang / marijuana 1.0%. Data on current use of multiple drugs and substances of abuse among respondents aged 15 - 65 years shows that the prevalence stands at 6.0%. Further, the study shows that the prevalence of alcohol use disorders among respondents aged 15 - 65 years stands at 10.4%, tobacco use disorders stands at 6.8%, khat use disorders stands at 3.1% and bhang / marijuana use disorders stands at 0.8%. Although findings point towards a downward trend on usage, the burden of substance use disorders presents a serious challenge for the country. The study therefore lays emphasis on evidence based prevention programs as well as increasing access to affordable treatment and rehabilitation services in Kenya.

Key words: *Drugs and Substance Abuse and Substance Use Disorders.*

Introduction

Globally, the harmful use of alcohol resulted in some 3 million deaths (5.3% of all deaths) worldwide and 132.6 million disability-adjusted life years (DALYs) – i.e. 5.1% of all DALYs in 2016. Mortality resulting from alcohol consumption is higher than that caused by diseases such as tuberculosis, HIV and AIDS and diabetes. Among men in 2016, an estimated 2.3 million deaths and 106.5 million DALYs were attributable to the consumption of alcohol. Women experienced 0.7 million deaths and 26.1 million DALYs attributable to alcohol consumption (Degenhardt et al, 2018).

In 2016, of all deaths attributable to alcohol

consumption worldwide, 28.7% were due to injuries, 21.3% due to digestive diseases, 19% due to cardiovascular diseases, 12.9% due to infectious diseases and 12.6% due to cancers. About 49% of alcohol attributable DALYs are due to non-communicable and mental health conditions, and about 40% are due to injuries (Degenhardt et al, 2018). There are significant gender differences in the past 12-month prevalence of alcohol use disorders. Globally an estimated 237 million men and 46 million women have alcohol use disorders (WHO, 2018).

According to Degenhardt et al (2018), 3.7% of the global burden of disease is attributable to tobacco use. Disorders due to psychoactive substance use – including alcohol, drug and tobacco dependence – are the main underlying conditions ultimately responsible for the largest proportion of the global burden of disease attributable to substance use.

A study conducted by the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) in 2012 revealed that at least 13.6 percent of Kenyans aged 15-65 years were current users of alcohol. The current usage of other drugs and substances of abuse stood at 9.1% tobacco, 4.2% khat / miraa, 1.0% bhang / marijuana, 0.1% hashish and 0.1% heroin (NACADA, 2012).

The current study is part of a five year assessment conducted to establish the trend of drugs and substance abuse in Kenya. The study provides data that is used to assess the effectiveness of the universal preventive interventions in Kenya. The study therefore aimed to establish the trends in current use of drugs and substances of abuse as well as the status of substance use disorders among the general population in Kenya.

Methodology

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

A stratified multi-stage random sampling technique was used to identify the enumeration areas for data collection. 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 (NACADA, 2012). However, due to logistical and resources limitations, a purposive sample of 31 counties was randomly selected from each stratum.

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 (NACADA, 2012). For comparison purposes of drugs and substances abuse indicators, the same sampling points identified in the two previous studies 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 used to determine the first household to be sampled (NACADA, 2012).

The second stratification was done at the household level. Potential respondents were stratified by their age (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 study (NACADA, 2012).

Data Collection

Supervisors and research assistants were trained for three (3) days in Nairobi. This involved a detailed discussion of each question in the instruments and mock interviews among themselves. Training also involved extensive discussions of street names of all drugs and substances of abuse in the country

and compilation of a list of such names for easy referencing during data collection. After training, a pre-test of the questionnaires was carried out in three sampled sub-locations that were not part of the main study. The questionnaires were revised to accommodate for any observations and variation that were made during the pre-test (NACADA, 2012).

Data was collected for a period of eight weeks from November to December 2016. Data collection was divided into three clusters namely; Nairobi/Eastern/Coast, Nairobi/Central/North Eastern/Lower Rift Valley and Nairobi/Nyanza/Western/Upper Rift Valley. Further, data on substance use disorders was captured using the fifth edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM – 5) (American Psychiatric Association, 2013).

Data Analysis

An interviewer screen was developed for data entry to minimize errors. Quantitative data was coded, sorted, entered and analysed using SPSS software version 20. Descriptive statistics were used to describe, organize and summarize collected data.

Results

Lifetime Abstainers

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 showed that the prevalence had declined slightly from 62.9% in 2012 to 62.5% in 2017. In comparison with 2007, the prevalence had greatly improved from 51.7% in 2007 to 62.5% in 2017.

Current Use Alcohol

Analysis of current usage of alcohol among respondents aged 15 – 65 years showed that the prevalence stood at 12.2% in 2017, presenting a decline from 13.6% in 2012 and 14.2% in 2007. Nairobi region was leading in the prevalence of current usage of alcohol (17.5%) followed by Eastern 14.3% and Western 13.4% regions. Western region had 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 had continued to record the highest current prevalence of alcohol usage.

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

Current Use of Tobacco

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

Current use of Khat / Miraa

Data on usage of khat / miraa showed that the current prevalence among respondents aged 15 – 65 years stood at 4.1% in 2017. The trend showed a slight decline from 4.2% in 2012 and prevalence was even lower compared to 5.5% in 2007. North Eastern region was 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 had recorded an upward trend in the prevalence of current usage of khat from 2012 to 2017. From the findings, all other regions had continued to record a decline in the current usage of khat / miraa. Statistics also showed that 4.1% of respondents aged 15 – 65 years were currently using khat / miraa; 5.5% of respondents aged 25 - 35 years were currently using khat / miraa; and 3.2% of respondents aged 15 – 24 years were currently using khat / miraa.

Current use of Bhang / Marijuana

and Hashish

The study showed that bhang / marijuana was the most widely used narcotic drug in Kenya, with prevalence stabilizing at 1.0% from 2007 to 2017. Coast region was 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 had recorded a steady increase in the prevalence of current usage of bhang from 2012 to 2017. Data also showed that 1.0% of respondents aged 15 – 65 years were currently using bhang; 1.1% of respondents aged 25 - 35 years were currently using bhang; and 1.1% of respondents aged 15 – 24 years were currently using bhang.

On its part, the prevalence of usage of hashish among respondents aged 15 – 65 years had been recording a decline from 0.2% in 2007 and 0.1% in 2012. In 2017, very low levels of current usage of hashish were recorded.

Current use of Heroin and Cocaine

The current usage of cocaine and heroin had been on a steady decline from 2007 to 2017. The study showed 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. On the other hand, the current usage of heroin among respondents aged 15 – 65 years had also declined from 0.1% in 2007, 0.1% in 2012 to levels below 0.1% in 2017.

The data also showed that the current usage of inhalants and prescription drugs among respondents aged 15 – 65 years was very low in 2017. Current usage of prescription drugs had declined from 2012 to levels below 0.1% in 2017.

Current use of at least one substance of abuse

In terms of current usage of at least one substance of abuse among respondents aged 15 – 65 years, data showed that the trend had declined slightly from 19.8% in 2012 to 18.2% in 2017. The prevalence in 2017 was lower compared to 22.2% in 2007. Coast region had 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 showed that 9.7% of respondents aged 15 – 24 years were currently using at least one substance of abuse.

Current polydrug use

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

Substance use disorders

The study showed that alcohol contributes the highest burden of substance use disorders (SUDs) in Kenya. According to the data, the prevalence of alcohol use disorders among respondents aged 15-65 years stood at 10.4% in 2017. Nairobi region had 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%). The prevalence of severe alcohol use disorders stood at 6.2%.

Analysis of tobacco showed that the prevalence of tobacco use disorders among respondents aged 15-65 years stood at 6.8% in 2017. Nairobi region had the highest prevalence of tobacco use disorders (10.4%) followed by Coast at 9.2%, Eastern at 8.8%, North Eastern at 8.8%, Rift Valley at 5.9%, Western at 4.9% and Nyanza at 4.4%. The prevalence of severe tobacco use disorders stood at 3.1%.

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

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

bhang / marijuana use disorders stood at 0.7%.

Discussion

Statistics on lifetime abstainers (never use) showed that the trend had improved from year 2007 to year 2017 (NACADA, 2012; NACADA 2007). For respondents aged 15 – 65 years, Nairobi, Western and Coast regions had the lowest prevalence of lifetime abstainers compared to other regions.

Analysis of current alcohol use showed that the prevalence was highest in Nairobi, Western and Eastern regions. Findings also showed that the prevalence of current use of alcohol was highest among male respondents and those from urban areas. On a national level, the current alcohol use among respondents aged 15 – 65 year showed a decline from year 2007 to year 2017 (NACADA, 2012; NACADA 2007). According to the WHO (2018), globally, projection to 2025 shows that alcohol consumption will increase but the prevalence rate of current use will continue to decline.

Current usage of tobacco showed a declining trend (NACADA, 2012). Coast and Eastern regions had recorded the highest prevalence of tobacco use. For khat / miraa, findings also showed a declining trend. Current usage of narcotics was low, especially cocaine, heroin and hashish. Statistics on bhang also revealed that the trend had not changed from 2007 to 2017 with the prevalence stabilizing at 1.0% (NACADA, 2012; NACADA 2007). Globally, bhang / marijuana is the major illicit drug of abuse (UNODC, 2017). Findings on polydrug use (multiple drug use) showed that the current prevalence among respondents aged 15 – 65 years was highest in the Coast, Eastern and North Eastern regions.

Under Sustainable Development Goals (SDG 3) sub-section 3.4, countries are mandated to reduce by one third premature mortality and non-communicable diseases through prevention and treatment and promotion of mental health and well-being by 2030 (UNDG, 2015). Findings on substance use disorders (dependence) showed that the country was struggling with an increasing burden of persons who require treatment and rehabilitation.

Alcohol use was the major contributor to the burden of substance use disorders in Kenya. It was followed by use of tobacco, khat / miraa and lastly bhang. Globally, alcohol dependence was the most prevalent of the substance use disorders, with 100•4 million estimated cases in 2016. The most common drug use disorders in 2016 were cannabis dependence at 22•1 million cases (WHO, 2018). Analysis of alcohol use disorders showed that Nairobi and Western were the most affected regions. For tobacco use disorders, Eastern and Central regions had the highest prevalence. In terms of khat / miraa use disorders, North Eastern and Coast regions had the highest prevalence. For bhang use disorders, Coast and Nyanza were the most affected regions.

The emergence of alcohol-attributable burden in Southern sub-Saharan Africa reflects the changing strategies of the alcohol industry, which has started to target Africa and other low-income and middle-income countries (Jernigan and Babor, 2015; Bakke and Endal, 2010; and Hanefeld et al., 2016). Many of the causes of alcohol and drug use disorder burden can be prevented or treated. Taxation and regulation of availability and marketing can substantially reduce harms associated with alcohol (Anderson, Chisholm and Fuhr, 2009). Treatment and brief interventions have been shown to be effective with a potential public health impact (Rehm et al., 2013). However, of all mental health disorders, alcohol use disorder has the lowest treatment rates globally (Kohn et al., 2004).

Conclusion

Although findings point towards a downward trend on usage, the burden of substance use disorders presents a serious challenge for the country. The study lays emphasis on evidence based prevention programs as well as increasing access to affordable treatment and rehabilitation services in Kenya.

Acknowledgement

The authors acknowledge the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) for funding the study.

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