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## Challenges, Opportunities, and Strategies for Addressing Drugs and Substance Abuse in Selected Counties in Kenya

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**Keywords:**  
*Drug and  
Substance  
Abuse,  
Strategies,  
Challenges,  
Opportunities.*

**Introduction:** Drugs and substance abuse is one of the most pervasive problems in Kenya placing a great economic, social, and health burden on the society. If left unaddressed, the country risks losing generations and development opportunities due to the diversion of resources to address the problem. Therefore in lieu of the complexities of drugs and substance abuse, difficulties, and cost of treatment, the development of effective treatment and prevention programs is a crucial part of a public health system. This study sought to identify strategies that can be embedded in the health systems framework of Kenya for the prevention and management of drug and substance abuse. **Methods:** The paper reports qualitative findings from a cross-sectional mixed method study conducted between 2017 and 2018 in four counties; Isiolo, Kajiado, Murang'a, and Nyamira selected following a review of Kenya Medical Research Institute (KEMRI) Cluster Coordinators' reports of priority research needs. Separate in-depth interviews were conducted with purposively selected; previous abusers (64), current abusers (127), opinion leaders (64), county officials (21), and health workers (64). Data was transcribed, translated, and analysed manually by identified thematic areas and by a statistical computer package, QSR NVIVO 12. **Results:** The identified strategies were: self-driven, social support, law enforcement, and rehabilitation. Self-driven strategies reported were; reduced consumption, keeping busy and off a bad company with highlighted challenges of; peer pressure, withdrawal symptoms, and idleness. The respondents suggested withdrawal management, job creation and counselling as measures to curb abuse of drugs and substances. Social support through love, acceptance, and social protection provided by family, community, faith-based, and non-governmental organisations was reported as helpful amid challenges such as stigma, familial problems, and

joblessness. Awareness creation, counselling and economic empowerment were mentioned as important for social support. Law enforcement through arrests, prosecution, and disruption of drug distributions was reported as an important strategy with barriers related to corruption, poor community-police relationships, and lack of clear laws being highlighted. Opportunities for addressing the barriers included; community involvement, stakeholders' partnerships, and devolving National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) functions. Rehabilitation was another identified strategy with funding needed to provide adequate facilities and human resources to provide such services. **Conclusion:** The identified strategies are effective in the management and control of drug and substance abuse. However, a multi-sectoral approach is needed within the public healthcare system to curb the risk of social, economic and health crises related to drugs and substance abuse in Kenya.

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## INTRODUCTION

There has been a substantial outcry about the problem of drugs and substance abuse and its rippling effects that echoes from many sectors of society today. Families, communities, learning institutions, and places of work undergo agonising consequences due to drug abuse. Complex and varied reasons attributed to drugs and substance abuse include poor family management practices, neighbourhood deterioration, economic deprivation, peer pressure, and environmental factors such as availability of drugs in the community, pricing of the substances, marketing

and promotional activities for alcohol and other drugs within the community [1].

In lieu of the complexities of indulging in drugs and substance abuse and the difficulty and cost of treating individuals already engaged in abuse, the development of effective intervention strategies has been of great appeal over the years [2]. The United States Department of Justice, Office of Justice Programs in a 2000 report, characterises these interventions into three broad categories: prevention, treatment, and law enforcement [3]. The United Nations Office on Drugs and Crime define prevention as an intervention designed to change the

social and environmental determinants of drug and substance abuse, including discouraging the initiation of drug abuse and preventing progression into more regular abuse among the at-risk population [4,5,6]. Drug and substance abuse prevention programs therefore focus on the premise of drug and substance abuse as an initiation process [3,5,6,7]. The emphasis is on promoting constructive attitudes, norms, beliefs, values, practices, and life choices [7,8]. Prevention strategies vary from school-based programs [9,10], youth outreach programs [11], community-based programs [12-16], and environmental-based programs [17,18]. The prevention interventions target the general factors thought to be linked to subsequent substance abuse by teaching broad-based personal and social skills [4,6,13,16].

Treatment strategies identify drugs and substance abuse as a disease that requires care, medication, and permanent behaviour change [3] to create productive members of the society. Substance abuse treatment is the most cost-effective way to reduce addiction, improve the health of drug abusers, and relieve the growing burden of drug-related health care costs. These strategies can be based at the family level or at a rehabilitation centre/hospital-based [3].

Law enforcement is founded on the fact that drug and substance abuse accounts for most of the criminal activity. Illicit drug and alcohol-related crimes include a broad range of illegal activities; possession or sale of illicit drugs, crimes to obtain money to buy drugs, driving under the influence of alcohol, underage drinking, child abuse, and domestic violence among others [3]. Drug and substance enforcement strategies play a role in enforcing the law in a bid to reduce drug availability, incarceration and conduct problem-oriented policing [3,11].

To help understand the complexities of alcohol, drug and substance abuse calls for emphasis in all the interventions to extend beyond single-focused programs targeting individual behaviour to include comprehensive recovery and legal and community-based approaches. The current study sought to identify challenges, opportunities, and strategies for addressing drugs and substance abuse in four selected counties of Kenya.

## METHODS

### Study Design

This was a mixed-methods cross-sectional survey. Qualitative data for which is presented in this paper was collected between 2017 and 2018.

### Study Area

The study was conducted in Four counties; Isiolo, Kajiado, Murang'a and Nyamira which were purposively selected following a review of KEMRI County Cluster Coordinators' reports of priority research needs. The four counties had drugs and substance abuse on the list of priority health concerns.

Further, given the regional variations, the counties further provided a diverse uniqueness in a geographical region, religion, culture, and population. Isiolo County is located in the former Eastern Province of Kenya and lies 285 kilometres north of Nairobi; the population is predominantly pastoralists and of the Muslim faith [19,20]. Kajiado County lies at the southern edge of the country along the Rift valley with a total population of 687,321 people with the Maasai being the dominant tribe [19,20]. Murang'a is one of the counties located in Central Kenya, with its population approximated to be 942,581 [19,20,21]. The larger majority of locals are Kikuyus who engage in mixed farming for staple food with tea and coffee being the main cash crops. Nyamira County is located in the former Nyanza Province with Abagusii and Kalenjins as the dominant tribe who practice agriculture [19,20].

### Sampling Methods

From each of the four sampled counties, one sub-county was purposively sampled; subsequently, two locations were purposively sampled from the selected sub-county, and further two villages were selected from the identified locations. Study participants were drawn from the identified villages and purposively selected.

### Study Methods

Qualitative data were collected in 2017-2018 while conducting a larger mixed-methods cross-sectional

study. Qualitative data was collected through Key Informants Interviews and In-depth Interviews.

### **In-depth Interviews**

In-depth interviews were held with current drug abusers (both minors and adults), previous drug users and opinion leaders. The current drug abusers were recruited through snowballing and were targeted to generate information on their knowledge of the implications of abuse of drugs and substances on their health and socio-economic wellbeing, their willingness to stop the abuse and mechanisms that could be used to prevent and manage drug and substance abuse. Previous abusers were selected through snowballing to provide information on reasons for abuse, experiences, and pathways to recovery. Community opinion leaders who included religious administrators of learning institutions, rehabilitation centres and social group leaders, were purposively selected and interviewed so as to elicit information on prevention and management intervention mechanisms.

### **Key Informants Interviews**

Key informant interviews were conducted with county leaders and commissioners and health workers to assess existing gaps and identify prevention and management mechanisms. The participants, i.e., health workers and county officials, were purposively selected for their knowledge and role played in the fight and treatment of drug and substance abusers.

### **Data Collection**

Data was collected using structured interview guides developed for each category; health workers, county leaders, previous drug abusers, current drug abusers, and opinion leaders. The study team integrated research assistants who were trained on the study procedures, research ethics, recruitment process and how to conduct the interviews. The interviews were conducted in the respondent's primary language, Kiswahili or English and audio recorded.

### **Data Management**

The recorded data were coded and later transcribed and translated into English. Double transcription

and translation and back translation were done so as to agree on the meaning of the transcripts and minimise bias. The hard copies of the data were stored in lockable and secure cabinets. The soft copies were stored in computers with passwords, with authorised access by the Principal Investigator.

### **Data Analysis**

The codes were entered into QSR NVIVO version 12 for management and analysis. Manual analysis was further conducted according to study themes which were determined prior to the analyses. The ideas were formulated by looking at the patterns of responses. The textual data was coded and a code sheet was created. The pre-determined themes included: rehabilitation, social support, law enforcement, and self-driven strategies.

### **Ethical Statement**

Ethical clearance was received from the Kenya Medical Research Institute (KEMRI), Scientific and Ethics Review Unit (SERU No. 3237) and written informed consent and assent were sought from all the study participants. During data capture and transcription, participant names were replaced with unique alphanumeric identifiers to ensure anonymity and confidentiality.

## **RESULTS**

### **Background Characteristics of the Study Participants**

**Current and previous drugs and substances abusers:** A total of 63 youths and 64 adults who are current abusers were interviewed. A further 64 in-depth interviews were conducted with persons who had abused drugs in the past. A majority were men (80%) who had attained primary school education with Christianity being the dominant religion (*Table 1*).

**County officials:** A total of 21 County officials, Kajiado (7), Nyamira (5), Muranga (4), and Isiolo (5), were interviewed. These included County Commissioners, Senior Public Health Officers and senior police and senior prison commanders. A majority of those interviewed were men.

**Opinion leaders:** A total of 64 in-depth interviews were conducted, 16 per county. A majority of those interviewed were men (n=42), married, with an average age of 42 years. Farming was the main dominant occupation of the study participants.

**Health workers:** A total of 64 in-depth interviews were conducted, 16 per county. The majority of the participants were men (n=41) with the dominant religion being Christianity (n=54). Nursing was the main occupation of those interviewed (n=21), followed by clinical officers (n=15).

**Table 1: Socio-demographic characteristics of Current drug abusers (youth and adults) and persons who have previously abused drugs**

		Current Abusers (adults) n = 64	Current Abusers (youth) n = 63	Previous Abusers n = 64
Gender	Male	53(82.8%)	49(77.77%)	51(79.68%)
	Female	11(17.2%)	14(22.2%)	13(20.32%)
Age	15-19		60(95.24%)	2(3.13%)
	20-24	13(20.31%)	3(4.76%)	7(10.94%)
	25-29	10(15.63%)		11(17.19%)
	30-34	16(25%)		10(15.62%)
	35-39	10(15.63%)		11(17.19%)
	40-44	8(12.5%)		6(9.37%)
	45-49	2(3.12%)		4(6.25%)
	>50	5(7.81%)		13(20.31%)
Education	No education	5(7.81%)	5(7.93%)	3(4.69%)
	Primary education	25(39.06%)	35(55.56)	35(54.69%)
	Secondary education	24(37.5%)	20(31.75%)	14(21.87%)
	College	10(15.63%)	3(4.76%)	12(18.75%)
Religion	Christian	51(79.68%)	51(80.95)	55(85.94%)
	Muslim	13(20.32%)	12(19.05%)	9(14.06%)

**Strategies, Challenges, and Opportunities for Addressing Drugs and Substances Abuse**

Analysis of the data obtained from the field using the different methods identified several challenges, strategies, and opportunities that drug and substance

abusers adopted to try to address the problem. These strategies included self-driven strategies to quit, rehabilitation, social support, and law enforcement. Each of these strategies, challenges, and opportunities are discussed. A summary of the results is shown in *Table 2*.

**Table 2: Strategies, Challenges and Opportunities for addressing drugs and substances abuse**

Strategy/Intervention	Challenges	Opportunities
Self-Driven strategies to stop drug abuse	<ul style="list-style-type: none"> <li>• Peer pressure</li> <li>• Cravings and addiction</li> <li>• Withdrawal challenges</li> <li>• Easy access to drugs</li> <li>• Idleness due to lack of employment</li> <li>• An enabling environment</li> </ul>	<ul style="list-style-type: none"> <li>• Rehabilitation</li> <li>• Counselling/sensitization</li> <li>• Economic empowerment through job creation and capital for business</li> <li>• Recreational activities</li> <li>• Law enforcement</li> </ul>
<ul style="list-style-type: none"> <li>• Cutting down on intake.</li> <li>• Keeping busy</li> <li>• Taking alternatives to quench the craving, e.g., tea</li> <li>• Seeking divine intervention</li> <li>• Avoiding peer influence.</li> <li>• Avoid places where drugs and substances are sold</li> <li>• Keeping busy</li> </ul>		

Strategy/Intervention	Challenges	Opportunities
Social Support • Love, care, and affection • Counselling • Acceptance by family and community members • Social protection from stigma	• Stigma from family and community members • Family problems • Lack of funds to start a business • Lack of employment	• Tackle stigma through community sensitisation • Structured counselling and education • Economic empowerment- financial support and employment
• Law Enforcement • Community policing • Arrest of abusers and peddlers • Prosecution of abusers and peddlers • Disruption of chains of distribution • Regulation	• Corruption and bribery • Lack of clear laws/structures • Poor relationship between community and police • Lack of community support • Social norms on certain drugs and substance • Drug trafficking across borders	• Community Involvement • National Authority for Campaign against Alcohol and drug abuse (NACADA) be advanced to the grassroots • A multi-sectoral approach • Creation of effective policies • Partnerships with other stakeholders
Rehabilitation • Treatment • Counselling • Support groups	• Lack of knowledge of the rehabilitation services and centres • Unavailability of rehab centres • Lack of funding • Lack of requisite human resource	• Community and individual sensitisation on rehabilitation • Government build and equip rehab centres • Train and increase personnel

**Self-Driven Strategies “I tried to stop....”**

Many of the reports from current drug abusers (Adults and youth) and previous drug abusers reported that they wanted to quit drugs and substances abuse due to; the negative impact of drugs on the individuals such as poor health, destabilised family relations, poor dignity, children lacking basic needs, being poor role models to the children, wasted money and lost income.

A previous drug abuser stated that;

*“What made me stop abusing drugs? I saw firstly, my dignity was slowly going down, and my education performance was poor compared to how I was performing earlier. Sometimes I was even using or wasting a lot of my money. Now what made me stop abusing drugs, it happened there was another party, and as usual we were called by our sponsors and that night, I happened to drink a lot, the following morning I woke up and realised that I was not in my place*

*and I had been raped”* (Previous Abuser\_Muranga).

The reports from previous drug abusers and current abusers indicated that they had explored several strategies to try to stop the use. The reported strategies included; avoiding bad company, cutting down on the amount taken per day, avoiding places where drugs are sold, seeking divine intervention, and using alternatives when cravings strike.

A current youth drug and substance abuser from Kajiado stated that;

*“I have tried to reduce the number of cigarettes in a day, like smoking only one cigarette in a day”* (Current Abuser\_Kajiado).

However, despite trying to quit, reports from the Current drug and substance abusers showed that many were unable to completely stop taking drugs. This was due to addiction and cravings, lack of jobs leading to idleness, withdrawal symptoms, stress,

peer pressure, and easy availability of drugs and substances.

A current mature minor drug and substance abuser stated that;

*“I tried to stay away from girls who introduced me to the abuse of these drugs, but I am unable to do so because we are in the same school, the same village and also we take the same road on our way from school, so I see them smoke bhang and I find it difficult to stop. I can stay away from them, but I crave for bhang a lot when I see them and I find myself feeling very bored” (Current Abuser Mature\_Minor\_Isiolo).*

To help tackle the issue of drug abuse, the majority of the current drug abusers indicated that they would require help and care strategies which included; the creation of easily accessible rehabilitation centres, empowerment of the youth in terms of job creation, and provision of capital to set up businesses. Other strategies mentioned included: law enforcement agencies to curtail the supply and sale of drugs and substances, sensitisation on the effects of drug and substance abuse, especially to the youth, the building of recreation centres for the youth like sports facilities, and strengthening parenting skills.

A current adult drugs and substance abuser stated that;

*“The government should come in and bring projects to help us, bring rehabs closer to us, and create jobs for us to keep us busy. The government hospitals should advocate areas for consultations in that facility. The only help I can get is from rehab since I am an addict” (Current Adult Abuser\_Isiolo)*

### **Social Support**

Previous and current drug abusers stated that social support played a major role in their decision to either quit or try to quit the abuse of drugs and substances. Social support was indicated as being provided through counselling, love, care, affection, encouragement, acceptance, and social protection from stigma. The reports indicated that the family was the primary provider of social support with others being friends, religious/faith-based organisations, the community members, and the

county governments. It was indicated that these provided a role model for change, economic support for sustainability, counselling, and a form of acceptance for drug abusers.

A Previous drug abuser stated that;

*“Yeah, my family supported me a lot when they realised I had changed my behaviour a lot, and I started behaving nicely; they started bringing me closer to them, and they asked me if I had stopped the abuse of drugs and I told them the truth that I have stopped any. They gave me more support and more love” (Previous drug abuser\_Isiolo).*

A previous drugs and substance abuser further stated that;

*“What I liked most was about the church. It made me realise that I had something good in me and would help me. I liked those who had stopped earlier to abuse drugs and wanted to emulate them” (Previous drugs and substance abuser\_Nyamira).*

The reports from county officials reported that the counties through the Ministry of Health played a role in sensitising and educating the communities on the risks of drugs and substance abuse. This was reported to have been facilitated through community health volunteers in partnership with local administration, i.e., chiefs and village elders.

A county leader stated that;

*“Currently in the ministry, the department of health services, we do social mobilisation on the effects of drugs and substance abuse and this we are doing at the village level through the public health offices and community health extension workers and community health volunteers at the village level” (County Leader\_Nyamira).*

The reports from in-depth interviews with healthcare workers further indicated that the health facilities had created community-based support programs in a bid to rehabilitate the drugs and substance abusers and sensitise.

A health worker stated that;

*“When we have community-based support groups for clients accessing care at the hospital or for purposes of general outreach services, we share information concerning the dangers of drugs and substance abuse. We also get to educate the community members on the long-term harm to their individual health and that of their families, as per the individual and also to the family” (Health Worker\_Isiolo).*

The reports from all categories of the study participants identified several challenges to effective social support. Some of the indicated challenges are; familial problems, stigmatisation, lack of adequate information on social support forums, lack of structured and sufficient counselling and community sensitisation forums, the inadequacy of resources to start a business, and lack of training and education and discrimination in employment opportunities.

A current drugs and substance abuser stated that;

*“The young people are discriminated when looking for casual jobs. They should also be given work” (Current drug abuser\_Muranga).*

A county leader stated;

*“They are not sufficient; more effort and information are needed. The community should be taught how to tackle them without stigmatising and isolating them. They need much acceptance in the community” (County Leader\_Kajiado).*

The suggested strategies to improve social and community support included; changing community perceptions and attitudes towards drugs and substance abusers, providing counselling and education services to providing financial support, and employment opportunities to them.

A previous drugs and substance abuser stated that;

*“It is all about education, creating awareness, drugs are being abused because of lack of jobs, try to make them busy at least by financing them with some capital to start their own businesses like car wash and let them be in some organisation, where they can benefit, let them do some agriculture and encourage them, bring*

*them some seeds to plant and make themselves busy in one way or another, make them utilise their time well and they will not get any time to go and abuse drugs” (Previous drugs and substance abuser\_Kajiado).*

The reports further indicated that adequate funding was necessary to strengthen the education and engagement activities, establish self-help groups and rehabilitation centres, and enhance research on drugs and substance abuse.

A county leader stated that;

*“.....so basically, I think the county government may need to invest more in public education on the risks that are exposed to them by drugs and substances, and another thing the county government should do is the research so that there is information on a number of people abusing drugs and substances out there, whether they know the dangers of abuse and the interventions that need to be put in place to curb the vice” (County Leader\_Nyamira).*

Further, the devolving of functions of the National Authority for Campaign against Alcohol and drug abuse (NACADA) to the grass root was indicated as an effective way to support the efforts for awareness creation on drugs and substances.

A health worker stated that;

*“More sensitisation on the effects of drugs and substance abuse should be done. This requires intervention and more involvement by the ministry of health in terms of devolving of the NACADA functions and providing resources including funding and training of HWs to effectively deal with the problem at the community level” (Health Worker\_Isiolo).*

### **Law Enforcement and Legislation**

Drugs and substance abuse was reported as an indicator of increased insecurity in the various counties. In regards to these, a strict and serious crackdown on drugs and substance chains of distribution and the arrest of abusers were reported as major strategies to curb the vice. It was further suggested that the crackdown should be conducted



by the police in collaboration with the local administration.

A county leader stated that;

*“Chiefs, sub-chiefs, and the clan elders at times mostly raid the chang’aa (alcohol) dens, follow the perpetrators and arrest them”* (County Leader\_Nyamira).

A county leader further stated that;

*“We make arrests, we have made very many arrests; therefore, the main action we have taken is the crackdown, arrest those people ferrying the drugs and take them to court. Then within town also, we have done a number of raids, we have drug dens in various points in towns like Bisil, Kajiado town and other towns, we target those people who are selling these drugs. Those others who are peddling, we have also arrested them and taken them to court. So that is how we are addressing the problem”* (County Leader\_Kajiado).

Reports further indicated that there was some co-operation between the communities and the law enforcers, i.e., police. This was realised through the local set-up community policing commonly known as the *nyumba Kumi* initiative. Through the initiative, the community provides information to the police on drug dens, dealers, and abusers.

A county opinion leader stated that;

*“...local leaders, especially our nyumba Kumi elders and village elders, volunteer such information on these bhang peddlers and we conduct investigations and crackdowns”* (County leader\_Muranga).

Some of the indicated challenges to law enforcement from the interviews were; once prosecuted, the accused post bail and after release, resume peddling of drugs, corruption, poor co-operation from the community, social norms on drugs and substances and lack of clear legislation on drug and substance abuse.

An opinion leader further stated that;

*“I will start by stating that countrywide there is a lot of corruption. The rule of the government*

*says that a bar should be opened at 5:00 pm, but they are opened very early here and you cannot talk because the person you are reporting to, instead of coming to help, takes bribes from the bar owners so that they cannot be arrested”* (Opinion Leader\_Muranga).

Reports from county leaders further emphasised the role of social norms where certain substances like miraa and bhang are not considered drugs and are freely acceptable within the community, thus being a setback in the fight against drug abuse.

A county leader stated that;

*“Okay, Kajiado County has a problem of bordering Tanzania in terms of drug supply. You know, in Tanzania, drugs like bhang are not legally prohibited. People in Tanzania consider miraa a bigger problem than bhang”* (County Leader\_Kajiado).

Failure to enact drug and substance legislation was exemplified by reports from county leaders as a major hindrance to law enforcement and control of drugs and substance abuse.

A county leader stated that;

*“It is dangerous, is very dangerous since this government was in inception, it has never enacted any law on liquor. They are using the old system. They have never enacted any law, which is a very big problem we have had as the enforcement officers”* (County Leader\_Isiolo)

Reported opportunities for law enforcement were; community engagement and sensitisation to reduce fear and having clear laws and guidelines to govern drug and substance abuse. Emphasis was also put on the need for local leaders to work closely with the police. A multi-sectoral collaboration between the national government and county government in the efforts against drug and substance abuse was further suggested as a measure to foster law enforcement.

A county leader stated that;

*“What we have done we have three approaches...one we have partnered with relevant authorities like NACADA, number two; the village elders, the chiefs, assistant chiefs who are active and operate on the ground and then*

*number three we have a special police unit which comprises of administrators and police and they do the crackdown regularly actually they are dispatched to the Chania River where we still have the preparation of those illicit brews” (County Leader\_Muranga).*

### **Rehabilitation**

Reports from In-Depth Interviews with all groups interviewed emphasised the need for rehabilitation centres within the community and the available health facilities where abusers would receive treatment, care, and counselling.

A previous drug abuser stated that;

*“I would want a treatment that can help people stop abusing drugs to be introduced, the Government to establish rehabilitation centres in hospitals to help the affected” (Previous drugs abuser\_Kajiado).*

The results of the IDIs with health care workers further emphasised the need for rehabilitation centres which are well equipped with enough trained personnel, drugs, and facilities within the communities. They reported that the availability of such facilities would also empower the communities economically as it provides employment opportunities.

A health worker stated that;

*“There should be a facility like a rehabilitation centre in a community because this would provide job opportunities and extend service to people around who are seriously affected by drugs” (Health Worker\_Isiolo).*

One of the challenges raised by a majority of the previous and current abusers of drugs and substances is a lack of awareness of existing rehabilitation centres or support groups within their localities which results in a major setback in seeking rehabilitative care.

A current drugs and substance abuser stated that;

*“I have never heard of any in Isiolo. Even Isiolo General Hospital does not provide enough facilities and medication” (Current Adult drugs and substance abuser\_Isiolo).*

A current mature minor drugs and substance abuser further stated;

*“No, there is no such facility in this community. If there is any, then I have never heard of it” (Current Abuser Mature Minor\_Nyamira).*

However, Murangá county leaders’ reports revealed that the county government had started a rehabilitation camp in the Kambirwa sub-location, which closed after six months, pending renovations.

A county leader stated that;

*“Again, the county government has come up with a rehabilitation centre in a place called Kambirwa. Although right now we do not have patients there because we actually wanted to carry out some renovation because it was not in a good state ... again we are having some other private rehabilitation centres and actually like now we have one in a place called Musogocha” (County Leader\_Muranga).*

Further, reports from the county leaders, health workers as well as opinion leaders indicated that there was a lack of requisite human resource capacity to address the problem of drug and substance abuse within the health facilities.

A health worker stated that;

*“In terms of workforce, trained psychiatric nurses are very few; in fact, they are only 3 in this hospital. So, handling the main psychiatric cases and abusers and street boys becomes a problem. More staff should be trained on how to handle drugs and substance abuse. About information and awareness creation, this can be done at least on a quarterly basis and also establish community dialogue days. In fact, the major problem in many facilities is that the psychiatric department does not get any funding at all” (Health worker\_Muranga).*

Interviews with health workers further highlighted the lack of funding for community outreaches, and the majority felt that they lacked the necessary training and skills to deal with issues related to drugs and substance abuse.

An opinion leader stated that;

*“The community experiences instability of financial support to build rehabilitation centres where those people who are much affected can be taken. Also, there are no resource persons in the community who can involve himself or herself to educate youth on bad effects of drugs and substance abuse” (Opinion Leader\_Isiolo).*

The in-depth interviews with opinion leaders, health care professionals and current and previous drugs and substance abusers gave the following suggestions for improving rehabilitation; creation of rehabilitation centres increased funding and training of the staff and collaboration with NACADA and other NGOs working within the counties.

A county leader stated that;

*“Yes, the County Government is also partnering with NGOs, since they are quite a number in Isiolo, like eh we have the Red Cross, we have the Afya Plus, Peace Link, you know all these organisations bring youth together and talk to them on issues pertaining to drug and substance abuse. There is also the Government programme, the National Youth Service programme which not only targets to empower young people in terms of economic growth but also gives them an opportunity to engage on matters pertaining to drug and substance abuse, such partnerships need to be strengthened” (County Leader\_Isiolo).*

Reports from health workers further stated the need for adequate medical supplies within the rehabilitation centres and community advocacy for drug and substance abuse management as well as a need for partnership between various government and non-governmental organisations.

A health worker stated;

*“That one can be improved by putting up several structures within reach of the community, enough drug supplies in the medical facility, employing more health workers or people who are knowledgeable of drugs and substance abuse, advocating for those doing community advocacy frequently so that they can know what causes this drug and substance abuse, signs and symptoms which are manifested by this earlier so that they are able to manage*

*them and also involve the other law enforcement people like the officers, the chiefs, we need them in the community” (Health worker\_Nyamira).*

## DISCUSSION

In our current study, it is evident that drug and substance abuse is a problem in the four study counties and should be a focus of concern in and out of our communities since it affects various aspects of society. The study explored strategies, challenges, and opportunities for addressing drugs and substance abuse in selected counties of Kenya.

From the study, drug and substance abusers reported a willingness to stop the abuse of drugs and substances through self-driven strategies such as changing one’s environment and company, cutting down on consumption, and keeping busy. These strategies are similar to those reported in a study among marijuana abusers [22, 23]. Further, a meta-analysis conducted in 2000 of 38 studies found that 17.5% of the studies had the subjects do a “lifestyle change” and “avoidance of substance abuse situations” [2]. Cutting down on consumption was further reported as an effective self-driven strategy for drug and substance abuse, similar to results from several other studies [24,25,26].

The current study results reported several factors that were a hindrance to the complete stopping of abuse of drugs and substances, which included: peer pressure, idleness, and cravings/ addiction. These results are similar to those of a study conducted with habitual cannabis smokers at the University of California, Los Angeles (UCLA) [22,23] and another on adolescents’ remission where social pressure, withdrawal and negative effects were indicated as reasons for the remission [27]. The study results further indicated that rehabilitation, social support, economic empowerment, and sensitisation are pivotal in maintaining and reinforcing change, and the findings are similar to those of a quantitative review of substance abuse literature [28].

Results of the current study further showed that social support and economic empowerment are supportive therapy strategies in the management of drug and substance abuse. Social support was reported to create a conducive and restrictive environment which motivated the abusers to quit or

reduce drug and substance abuse and gave a sense of belonging and identity as pivotal in maintaining the change. This is in line with several studies where alcohol abusers, marijuana abusers, and cigarette abusers indicated that getting encouragement from family, friends, self-help groups, and community members were instrumental in their decision to quit using [2,17,24,29,30]. Social support was further indicated as an important component in handling societal withdrawal symptoms and any serious medical consequences [31]. Further, to prevent individual relapses, the individual family and appropriate support system should be involved in the person's treatment process [31]. However, the social support given should be structured and still needs conceptual refinement before it may be applied effectively in the intervention [32].

The study results also showed the importance of economic empowerment in building self-efficacy. According to Peterson 2011, economic wellbeing contributes to "recovery capital" as the internal and external resources sustain long-term sobriety. Economic empowerment provides job opportunities, financial support, and vocational training. However, lack of capital, funding for employment and stigma were indicated as a challenge to economic empowerment findings similar to other studies [14].

Findings from the study also emphasised the importance of advocacy and community sensitisation as a forum for information, education and communication campaigns and stigma reduction in a population. Devolvement of the functions of NACADA was indicated as a forum that would create an opportunity for social mobilisation and sensitisation. This would create an environment for psychological empowerment to equip the addicts to deal with the social and physical impact of drug and substance abuse [14, 32]. Other studies found educational campaigns, mass public awareness and advocacy forums to be most effective as sensitisation agencies [33]. Further, sports and recreational activities were indicated as a way to motivate young people to build confidence and extend social networks, improve health, reduce anti-social behaviours, re-offending and develop skills and goals for moving forward [29].

Results of the current study further showed that rehabilitation is the most effective way of dealing with drugs and substance abuse as it provides a forum for treatment, social support groups and rehabilitative care; although several reasons including little knowledge of rehabilitation facilities, distance to the facility, lack of enough personnel, poor funding of available facilities and cost of treatment were indicated as hindrances to effective rehabilitation. These reasons are similar to those identified by a 2015 and 2018 National Survey on Drug Abuse and Health USA (Centre for Behavioural Health Statistics and Quality, [4,5] where lack of requisite human resources and limited funding for rehabilitation were identified in the study findings. However, efforts to address drug and substance abuse have been limited to NGOs and on a small scale, to psychiatric hospitals with the services being scattered and staff ability largely lacking [4,5,11].

Law enforcement and regulation were indicated as another strategy in the fight against drug and substance abuse. The two were indicated to provide a restrictive environment through enforcing laws and policies on drug prevention and providing effective preventive drug education. Results further indicated that a number of counties had taken steps to strengthen their drug control legislation and to improve their internal mechanisms for administrative monitoring and control of drug and substance abuse. However, corruption, bribery, lack of clear laws and structures, poor-police-community partnership, and negative attitudes toward law enforcement are a hindrance to effective law enforcement. It is, therefore, important for law enforcement to incorporate activities that specifically address a sense of community and police responsiveness to drug and substance abuse [9, 11, 32,33].

The *Nyumba Kumi* initiative was indicated as a forum to foster community and police partnership in dealing with community policing and control of drug and substance abuse. However, there is a need to recognise, anticipate, and address possible conflicts in collaborations between community organisations and institutions like the police as they confront crime or substance abuse [14], thus promoting positive attitudes towards law enforcement [16,34]

## CONCLUSION

The study results indicated willingness by drug and substance abusers to quit abuse despite the identified challenges. The identified strategies if strengthened using the indicated opportunities, would be effective measures to address the vice. Further, a multi-sectoral, multi-disciplinary approach and establishment of an integrated community, social, law enforcement and national programmes are necessary to support and integrate the identified strategies to improve effectiveness and efficiency. Mechanisms should also be put in place within the public healthcare system to curb the risk of social, economic and health crises related to drugs and substance abuse in Kenya.

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