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Alcohol and Substance Use Harm Reduction Through Prevention and Advocacy: A Child-To-Child Based Approach.

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Abstract

According to Blue Cross Kenya (BCK) project's theory of change, a comprehensive prevention approach can produce mutually reinforcing effect to reduce risk factors and enhance protection factors related to substance use and mental health. The three main areas are: 1) Influencing leaders and authorities on policy issues regarding alcohol and mental health. 2) Life-skills education through 30 school clubs and 4 youth centers, with about 2,000 participants. Life skills include processes that contribute positively in the development of children and young people and thus also give them resources to withstand challenges in life. Parents and teachers also receive guidance to strengthen protection factors. 3) Mobilization of children and young people, parents, communities, and other organizations. The purpose of this study conducted on 13 October 2022, was to assess the impact, significance and effectiveness of using a comprehensive Child-To-Child Approach in prevention and advocacy. The study targeted children and young people aged 10–22 in lower primary school and secondary schools in Kisumu County. The study adopted a mixed method and exploratory approach involving use of both quantitative and qualitative methods in data collection. A total of 360 children were sampled from 24 clubs. 240 parents linked with the same clubs were also sampled. Majority of the parents mentioned that their children were able to manage their emotions better (72.1%); were more confident (76.7%) and made better life choices (79.5%). On effectiveness, the study established that a majority of the expected results (81%) were achieved making the project highly effective. Concerning impact, almost all parents (95.6%) reported that there were changes from the life skills training and 95.2% of them said they experienced positive changes. The study recommended implementation of a similar approach in alcohol prevention and eradication in the non-project schools and the surrounding communities in the country.

Key words: *Prevention, Advocacy, Awareness, Child-To-Child, Children & Youths, Life skills, Duty bearers.*

Introduction

Children and young people are vulnerable to the consequences of drug use both at home and in society in general. Alcohol is the fifth largest risk factor for death, disability and illness in Kenya in the age group 15-49 years. In addition, alcohol has been identified as a major driver and perpetuator of chronic poverty in Kenya. There is a close connection between mental health, life skills and substance abuse. Alcohol and other drug use are also considered a risk factor for a number of mental disorders. In Kenya, the stigma of mental illness is high, and local expertise and follow-up of drug and mental health rights are in short supply. Promoting

drug prevention, mental health and quality of life is one of the sub-goals under the UN's sustainability goal 3 on good health.

Alcohol and alcoholic drinks are considered psychoactive substances with high dependence producing properties. These products have been universally used across many cultures as essential elements of festivities. Despite their long-term existence and use, alcohol harmfulness is a leading risk factor to individual's, families' and the society's health. (Global status report on alcohol and health 2018). There are direct negative impacts on all aspects of health and well-being i.e. social health as violence, child neglect, child abuse and domestic violence. Physical health as morbidity and mortality linked to heart disease, liver disorders, hypertension and chronic diseases. Psychological and emotional wellbeing as suicide, depression, anxiety, stress, murders and increased risk of accidents, and economically as poor/ inability academic and work performance, low self-esteem. The alcohol related effects and complications vary depending on the type, strength, amount and duration of alcohol consumption. They manifest as headache, irritability, anxiety, hallucinations, fatigue, inactivity, reduced concentration and sometimes even death(Gichangi, P; Thenya, S; Kamau, J; Kigondu, C; Ngugi, E; Diener, L, 2002)

2.0 Methodology

Blue cross Kenya indicator manual describes how indicator data should be disintegrated i.e by age, gender and disability status. It also gives a guide to implement inputs that yield impact of set activities on the disintegrated units. The study adopted a mixed method and exploratory approach, which involves use of both quantitative and qualitative methods of data collection. The objective was to outline beneficiary knowledge attitudes and perceptions/practices, as well as project specific needs. The methods were used concurrently and data triangulated during analysis, augmented by secondary data collected through desk review. The following study questions guided in coming up with findings and recommendations:

a) Relevance: Are the right things being done to improve the well-being of beneficiaries?

b) Effectiveness: How effective is the intervention with a view to the planned results?)

c) Efficiency: Are things done well, in an efficient way?

d) Impact: What are the direct and indirect effects of the project?

e) Sustainability: How can sustainability be assured in the project?

The study used both quantitative and qualitative methods in data collection and analysis. Multistage cluster sampling was used to select the respondents where in the first stage, 9 schools out of 24 schools and 2 basecamps were selected as primary sampling units (PSUs). Secondly, 22 clubs in school and 2 clubs from base camps were selected using simple random sampling as secondary sampling units (SSUs). In the third stage, lists of all students in the selected clubs was developed as final sample or ultimate sampling units (USUs). The study reached 228 and 335 out of the 240 parents and 360 children who were sampled at 90% Confidence Level and 95% Confidence Levels respectively. Quantitative data was analyzed using SPSS software while qualitative data was analyzed using NVIVO by consolidating emerging themes from focus group discussions and comparing with quantitative data. The quantitative data was exported from

KOBO server into the Statistical Package for the Social Sciences (SPSS) software for analysis. Quantitative data analysis was done using descriptive statistics including proportions and percentages. All quantitative results were disaggregated by relevant variables including age, sex, location, and targeted response groups on each section/ indicator item(s) of the questionnaire. The qualitative primary data collected during participatory FGDs and KIIs were analyzed on an ongoing basis throughout the stages of the Study. Qualitative data was analyzed using a comprehensive thematic matrix that facilitated identification of common patterns on key study questions

3.1: Findings

3.1.1 Gender characteristics of the respondents

Of the 228 parents reached, 18.0% were male and 82.0% female. The survey reached 335 children and youth with 55.5% being girls and 44.5% being boys.

Figure 1: Gender distribution of parents

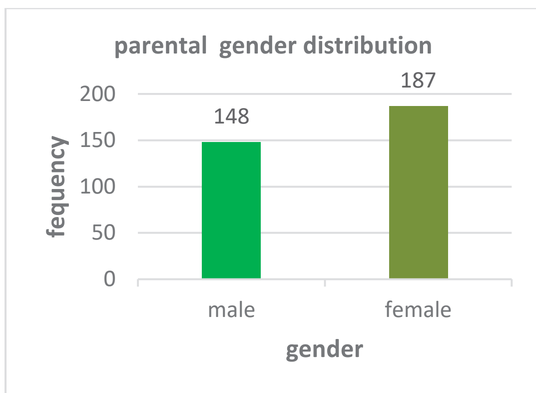
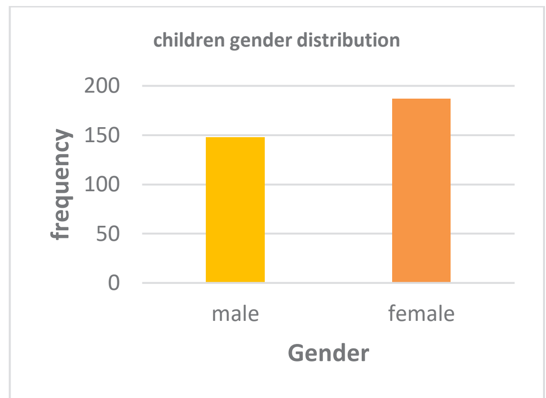


Figure 2: Gender distribution of children and youths

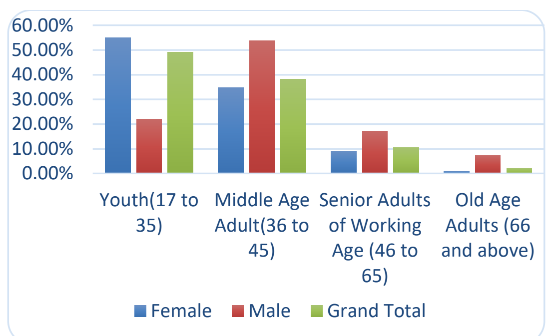


The data shows low levels of participation of men in the study, since most of them are household heads or breadwinners and were likely to be absent from their homes during the study. In the case of children, the data represents a slightly higher level of girl participation than boys in club activities.

3.1.2 Ages of the parents and children

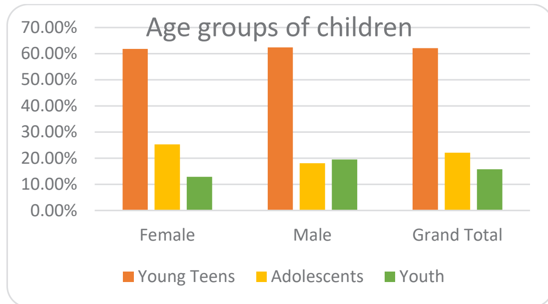
The average age for all respondents was 37 years, the minimum age was 18 and maximum age 79 years. The table shows that most of the females who were interviewed were between the ages of 18 and 35 and therefore youthful, while half of the men were middle age adults. With regards to children, most of those who participated in the survey were young teens

Figure 3: Age groups of parents



The average age of the Children and Youth participants was 15 years, with younger Children and Youths aged 10-14 years constituting 62.1% of the Children and Youth sample and 22.1% being adolescents

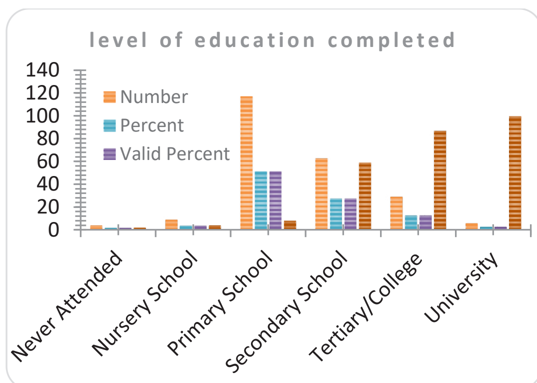
Figure 4: Age groups of children



3.1.3 Educational level of the respondents

The study revealed that (5.7%) of the respondents had not completed primary level of education, while 51.3% had completed primary school level of education. Those who had completed secondary education accounted for 27.6% of the respondents. Only a few of the respondents had attained college education (12.7%) with another 1.8% having no basic education at all. Only a paltry 2.6% of the respondents had attained university education.

Figure 5: Level of Education Completed

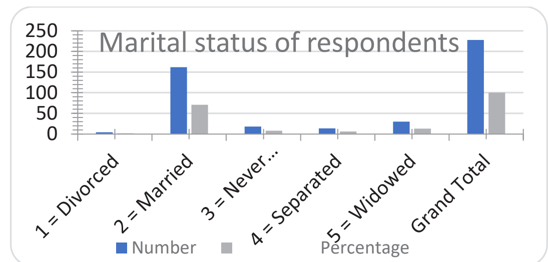


In general, household heads had higher education attainment levels. Most of the respondents (66.7%) could read and write. All the children and youth interviewees could read and write in English. however, 99.4% of respondents could read and write in Swahili. 99.7% of the interviewees were currently in school and were either members of a school-based club or of a base camp supported by Blue Cross Kisumu. About 4 out of 10 respondents had been members in the club or base camp for 3 years or more having joined between 2019 and 2020.

3.1.4 Marital status of the respondents

The study established that 71.1% of the adults interviewed were married, followed by 13.2% who were widowed. The rest were either separated (6.1%), never married (7.9%) and divorced (1.8%).

Figure 6: Marital status of respondents



3.1.5 Awareness, access and participation in project activities

As shown, most respondents were aware of the alcohol and substance abuse project as other BCK projects were less popular. 87.5% of the children were very much aware of the aims of the project. Parents and teachers in the FGDs were aware of the project and its aim of reducing alcohol and substance abuse among the children and youth in the community.

3.1.6 Type of activities in which beneficiaries who were interviewed participated

A majority of the children and youth (88.3%)

participated in club activities relating to alcohol and drugs prevention at least four times a month, while 11.0% participated once or twice a month. Most of the children (81.8%) attended the sessions on alcohol and drugs prevention always or very often i.e. a month, 10.4% of them attended once or twice a month

Table 1.1: Type of activities in which beneficiaries who were interviewed participated

Activities	% attendance
Life skills sessions in schools	85.1
One day event / celebration e.g. sports	40.1
Training Workshops	60.5
Theatrical production	40.8
Peer to peer education	65.3
Volunteering	44.7

3.1.8. Prevalence of incidences in schools

Table 1.2: Prevalence of incidences in schools

Attitudes on school incidences	Parents	Children
There are fewer reported incidents of educational staff affected by alcohol or any other substances at the school	50.9	69.2
Children and youth are no longer expelled for using alcohol and drugs and alcohol but counselled and followed-up to promote their continued education at the school	65.3	55.4
Educational staff are aware of their responsibility to protect children and youth from the physical, mental, economic, and social harms caused by alcohol and other substances and implement the guidelines	91.7	76.2

More than two thirds of the children were aware of a decrease in incidences amongst educational staff since their involvement in the project and over three quarters of the children opined that the staff was aware of their protection responsibilities. Almost half of the children did not agree that the idea of expulsion had stopped. According to 91.7% of the parents, educational staff was aware of their responsibility to protect children and youth from the physical, mental, economic, and social harms caused by alcohol and other substances and implement the guidelines. 50.1% of the parents believed that alcohol and substance abuse in school had reduced in the course of the project. 65.3% of parents confirmed that children were no longer expelled for using drugs, but counselled and followed up.

3.2 Project Effectiveness

3.2.1 Outcome 1: Children and youth act as change agents

The first project outcome was that children and youth in Kisumu East, Central and Muhoroni act as change agents for local communities free from alcohol and other substance related harm. This would be achieved through various outputs.

Table 1.3: Concept for youth change agents developed and implemented

Indicator Description	Final Target	Actual	Variation	Achievement	Variance
Number of Life Skills Manuals available and in use	1	1	0	100%	0.0%
Number of Trainer of Trainers Manuals available and in use	1	1	0	100%	0.0%
Number of facilitator's trainings conducted by master trainers.	6	6	0	100%	0.0%
Number of life skills session conducted by life skills facilitators	115	122	7	106%	6.1%
Number of peer leaders trained.	100	132	32	132%	32.0%

Child to child was adopted and used to train 18 facilitators, out of whom 6 master trainers were selected and trained with the trainer of trainer manual. The 6 master trainers were then used to train facilitators. They conducted 6 facilitator trainings. The 18 facilitators eventually conducted 122 life skills sessions and trained 132 peer leaders.

Table 1.4: Children and youth mobilize community and influence leaders

Children and youth mobilize local communities and influence local leaders	Final Target	Actual	Variation	Achievement	Variance
Number of, and description of, child- and youth-led activities supporting measures to reduce risks of alcohol and other substance related harms using their own resources	120	90	-30	75%	-25.0%
Number of persons (children/ youth) trained on advocacy skills and/ or human rights over total # of direct beneficiaries	3727	2550	-1177	68%	-31.6%

Number of persons (children/ youth) taken part in activities to advocate/ influence decision makers for good implementation of alcohol policy over total # of direct beneficiaries	3900	2112	-1788	54%	-45.8%

A review of secondary data shows that three quarters (75%) of the expected activities by children and youth were implemented to reduce risks of alcohol and other substance related harms. The project then trained over 2,500 beneficiaries on advocacy, 2112 (82%) of whom were able to influence decision making specifically in petitioning the county assembly to fully implement Kisumu County Alcoholic Control Act 2014.

Table 1.5: Schools adopt and implement substance free school guidelines

Schools adopt and implement substance free school guidelines to ensure substance free learning environments.	Final Target	Actual	Variation	Achievement	Variance
Number of schools with a written guideline adopted by school management board over # of schools in the project	34	15	-19	44%	-55.9%
Number of educational staff trained.	80	108	28	135%	35.0%

44% of the school boards were able to adopt written guidelines on alcohol and substance in schools. The project trained over 100 educational staff, 35% more than was expected and this made working with schools easier.

3.2.3: Outcome 2 Positive and healthy choices

The following were the two main indicators for the outcome

i. Outcome results on how youth and children have gained self-esteem, ability to strengthen and address risk through the life skills education

ii. Outcome results on how youth and children have changed their behaviors in regard to alcohol and other harmful substances

An internal study found out that the values from life skills were helpful in solving life challenges and to fit within the community. Those who had been taught the values and life skills showed high levels of self-esteem, self-awareness, confidence, self-control and assertiveness. They also exhibited good habits or morally acceptable behaviors. The study showed that children had a sense of purpose and aspirations regarding what they had learnt in the life skills education sessions and what they could do with the knowledge. There also appears to be a group

bonding – children coming together to discuss in a safe space, helping each other and plan action. Children had also expressed changes in themselves; they were able to identify and articulate precisely what changes had occurred. The parents reported a good progress in terms of these indicators in their children

3.3: Discussion

According to 13.6% of the parents, their spouses took alcohol or drugs, 4.4% said they themselves took alcohol and drugs, 2.6% mentioned either a male child or a male relative. Those who took drugs did so less than once a month (24.1%), daily (9.6%), once a month (5.3%), two to four times a week (3.9%), once a week (3.1%) or five or more times a week (1.8%). In other words, 15.3% of the parents said that a household member took alcohol frequently i.e. more than once a week.

Table 1.6: Household member taking alcohol or drugs

	Spouse	Myself	Male child	Female child	Male Relative	Female Relative	Male stranger	Female stranger
No	10.1	19.3	21.1	23.7	21.1	22.8	23.7	23.7
Yes	13.6	4.4	2.6		2.6	.9		
NA	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3

What kind of changes have you noticed?	Positive response	No response
Can handle their emotions better	72.1	27.9
They are more confident	76.7	23.3
They don't drink alcohol	25.6	74.4
They don't take drugs	24.2	75.8
They follow their dreams	38.1	61.9
They make better life choices	79.5	20.5
Have better leadership qualities	41.4	58.6

The parents in the survey were asked what changes they had noticed amongst their children.

A majority of the parents opined that their children were able to manage their emotions better (72.1%), they were more confident (76.7%) and made better life choices (79.5%).

The parents were also asked about the level of gender based violence and other ills in the community during the project period and the changes experienced. This would measure the indirect effects of the project. As shown below, over 70% of the parents believed that the situation improved during the project period

Table 1.7: Behaviour changes in the last four years

Changes	Physical Violence	Sexual Violence	Emotional Violence	Alcohol and Substance Use	HIV and AIDs	Sexual and Reproductive Health
Much better	72.8	72.8	75.4	75.0	75.9	77.2
Much worse			.4			
Somewhat better	12.7	10.5	10.5	8.3	11.0	9.6
Somewhat worse	.4			.4		
Stayed the same	14.0	16.7	13.6	16.2	13.2	13.2

There were still relatively high levels of alcohol and substance use, HIV and AIDs, poor sexual and reproductive health and sexual and gender based violence in the community. The children and youth (99.4%) also noted positive changes amongst themselves and other children after taking part in the life skill sessions. Figure1.9: Changes in children as a result of the project

Conclusion

More than 50,000 beneficiaries were reached using the Child to Child Approach. The organization established 112 clubs and set up at least 3 club houses in the implementation period. Further scrutiny shows that 112 clubs (73%) of which 5 were base camps outside school were functional. Initial results showed that 1682 (778 Male and 894 Female) children and youth in 24 schools were trained in Kisumu East, Central and Muhoroni with the CtC manual out of the 1715 who were recruited a 98% output success. Once trained the beneficiaries mobilized community members and influence local leaders.

A review of secondary data shows that three quarters (75%) of the expected activities by children and youth were implemented to reduce risks of alcohol and other substance related harms. The project then trained over 2,500 beneficiaries on advocacy, 2112 (82%) of whom were able to influence decision making.

In the parents' survey, 62.5% of the parents said their children were taking part in advocating or influencing decisions for good implementation of alcohol policy. Around half (48.6%) noted that their child had actually influenced change in policy, law or legal frameworks. Out of these 42.1% said their children influenced laws against alcohol and substance use. More than two thirds (69.9%) of the parents reported having been trained on advocacy skills and/ or human rights and 68.5% said they were able to use the skills. Further, 68.2% said they had tried to influence guidelines on alcohol and substance abuse. This is an indication of how effective and efficient the training by use of child to child approach was.

Recommendations

Based on this study, we would wish to recommend that:

- A similar approach be applied in other counties in the country to stem the fight against alcohol and substance use.
- We recommend policy makers and non -state actors to pull together in empowering children to help fight alcohol and substance abuse in the country.
- More children should be brought on board through advocacy and awareness creation to champion for Alcoholic Act domestication in counties where it is yet to be done in Kenya.

Acknowledgement

We express sincere gratitude to Mr. Ishmael Shem, the Director of Blue Cross Kenya for his overall strategic leadership. We are beholden to the BCK staff for whole-heartedly supporting the data collection. We acknowledge SoKA for conducting End line project evaluation that to a great extent conformed with our study findings. We also thank the BCK field officers and field assistants for participating in this study.

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Barriers to Utilization of Harm Reduction and Drug Rehabilitation Services among Female Drug Users in Kenya

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Abstract

There are an estimated 3.2 million women who inject drugs (WUD) globally, constituting 20% of all people who inject drugs. Notwithstanding the significant proportion of female drug users (FDUs) in Kenya, anecdotal reports from harm reduction and drug rehabilitation facilities have continued to record low utilization rates of the existing support services. Despite these alarming reports, there is limited data attempting to understand the barriers facing FDUs in need of harm reduction and drug rehabilitation services (HRDRS) in Kenya. The study therefore endeavored to investigate the barriers hindering access to HRDRS among FDUs in Kenya. A cross-sectional study was conducted using triangulation of multiple data collection methods. Findings showed that FDUs were primarily exposed to systemic barriers; socio-economic barriers; cultural and societal barriers. The most commonly reported systemic barriers were inadequate female friendly facilities; unavailability of baby friendly needs; recruitment challenges; and access challenges by pregnant or breastfeeding FDUs. The key socio-economic barriers were parenting responsibilities; challenges of physical access; lack of opportunities for income generation; and high cost of drug rehabilitation. The cultural and societal barriers were manifested through stigma associated with the family, community, religion as well as the healthcare personnel. The study therefore concluded that the complex interplay of the systemic barriers; social economic barriers; and cultural and societal barriers were the main underlying risk factors impeding utilization of HRDRS in Kenya.

Key words: *Harm reduction and drug rehabilitation services (HRDRS), female drug users (FDUs); and women using drugs (WUDs)*

Introduction

In 2019, an estimated 275 million people globally aged 15–64 years had used drugs at least once in the past year. Between 2010 and 2019, the estimated number of users of any drug in the past year globally increased by 22 percent from 226 million to 274 million. Among the estimated 275 million users of any drug in the past year, approximately 36.3 million (13%), are estimated to suffer from drug use disorders. Among opioids users, nearly 31 million had used opiates in the past-year in 2019. Further, an estimated 20 million people had used cocaine in the past year in 2019 (UNODC, 2021). There are an estimated 3.2 million women globally who inject drugs, constituting 20% of all people who inject drugs (Degenhardt et al, 2017).

Despite a clear need for harm reduction services (HRS) targeting women, they continue to face "masculinist" concerns and do not meet the needs of women (Ettorre, 2004). In Europe, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) indicates that women make up approximately 25 percent of all people with drug dependence (EMCDDA, 2017).

Women who use drugs (WUD) are extremely hard to reach and they maintain a relatively inferior position to men in the drug-using sub-culture (Roberts, Mathers and Degenhardt, 2010). WUD face greater stigma and other harms at levels higher than men who use drugs (Roberts, Mathers and Degenhardt, 2010). The effects of entrenched gender inequities and norms are reflected in the support of services existing in the harm reduction and addiction treatment facilities (Azim, Bontell and Strathdee, 2015; Kushner, Chappell and Kim, 2019; Braitstein et al, 2003; Greenfield et al, 2007). With the responsibilities of parenting disproportionately falling to women, support services that fail to meet their needs including childcare facilities presents a significant access barrier for WUD (Pinkham and Malinowska-Sempruch, 2008; Malinowska-Sempruch, 2015; Otiashvilli et al, 2013; Copeland, 1997; Flavin, 2002; Esmaeili et al, 2018). Therefore, the lack of comprehensive and integrated HRDRS hinders access by FDUs (Malinowska-Sempruch, 2015). Another barrier relates to the limited availability of women-only spaces and services which help to guarantee the personal safety of women and reduce the impact of imbalanced gender power dynamics leading to improved health outcomes (Iversen et al, 2015).

Globally, studies exploring barriers to utilization of existing support services among FDUs have placed emphasis on harm reduction programs. Whereas HRS are offered mainly through drop-in centres, few studies have attempted to examine the barriers related to utilization of cessation programs implemented through drug rehabilitation facilities where clients are confined over a 90-day period. Notwithstanding the significant proportion of FDUs in Kenya (NASCOP, 2019), anecdotal reports from harm reduction and drug rehabilitation facilities have continued to record low utilization rates of existing support services. Despite these alarming reports, there is limited data on utilization barriers facing FDUs in need of HRDRS in Kenya. Further, there is limited data on utilization barriers specific to FDUs accessing drug rehabilitation services (DRS). Finally, context specific data is desired to inform tailored interventions addressing utilization barriers related to HRDRS among FDUs in Kenya. The study therefore endeavored to investigate the barriers hindering access to HRDRS among FDUs in Kenya.

Methodology

Study design

A cross-sectional study was conducted using triangulation of multiple data collection methods where both qualitative and quantitative data was generated.

Study area

The study was conducted in the Coast region, one of the eight (8) regions of Kenya. The region is Kenya's most popular international tourist destination characterized by a wide and porous border extending across the counties of Mombasa, Kwale, Kilifi and Lamu.

Sample size

The study targeted a purposive sample size of 110 respondents. Data was collected in the month of December 2021. The primary respondents were FDUs in program and FDUs out-of-program. Key informants

included centre managers; community members namely – women leaders, youth leaders and religious leaders; and NASCOP/ Ministry of Health (MOH) officials. Table 1 presents the sample size distribution:

Table 1: Sample size distribution

Category of respondent	Proposed sample size
FDUs in program (focus group discussions (FGDs))	35
FDUs out-of-program (FGDs)	35
FDUs in program (in-depth interviews (IDIs))	7
FDUs out-of-program (IDIs)	7
Centre managers (key informant interviews (KIIs))	7
Community members (KIIs)	10
MOH officials (KIIs)	7
Total	110

Sampling procedure

The study relied on non-probability sampling methods given the hidden and criminal nature of narcotic drug use. Coast region was sampled purposively with evidence showing that the region has continued to record the highest prevalence of narcotic drug use over the years in Kenya (NACADA, 2017). Within the Coast region, Mombasa, Kilifi and Kwale counties were purposively selected with available data listing them as key hotspots for drug use in Kenya (NASCOP, 2019). The first stratification was conducted where all the facilities providing HRDRS were mapped. Given that the mapped facilities were few in number, all the seven facilities were purposively selected. The second stratification involved allocation of the mapped facilities by the three sampled counties. In each facility, two focus group discussions (FGDs) were conducted targeting FDUs in program and FDUs out-of-program. The potential respondent was either a current drug user (FDU out-of-program) or a recovering drug user (FDU in program). The study was also limited to current or past users of narcotic drugs especially heroin or cocaine. Each FGD comprised 5 participants. For FDUs in program, the sample was selected through a simple random sampling method from a pool of FDUs currently in the programs. In addition, one FDU in program was also sampled to participate in the in-depth interview (IDI).

For FDUs out-of-program, community health workers were used to recruit the potential respondents. After identification of the seed respondent (FDU out-of-program) meeting the inclusion criteria, snow balling sampling method was used to identify the next respondent within their network through peer referral. Each respondent was allowed to recruit one respondent from their networks until a threshold of 5 FDUs was achieved.

The recruitment was only limited to FDUs. Besides, one FDU out-of-program was recruited to participate in the IDI. The sampled facility was also used as the study centre where key informant interviews (KIIs) were conducted with purposively selected centre manager of the facility, community member (women, youth and religious leaders) and the MOH official. The same procedure was replicated in all the seven sampled facilities.

Research instruments

The primary data collection methods were FGDs and IDIs targeting FDUs in program and FDUs out-of-program; as well as KIIs with the key stakeholders including community, youth and religious leaders. These qualitative methods explored the in-depth understanding

of barriers hindering utilization to HRDRS as well as examining gaps and weaknesses in the existing legal framework. Quantitative data was captured using a structured questionnaire that was meant to document the demographic characteristics and drug use behavior of FDUs recruited into the study. The responses from FGDs, KIIs and IDIs were tape recorded.

Data analysis

Descriptive statistics particularly frequencies and percentages were used to describe and summarize the background characteristics and drug use behaviour of the FDUs. FGDs, IDIs and KIIs were transcribed and translated into English. All interviews conducted were transcribed verbatim including the removal of individually identifiable information for the respondents so as to safeguard privacy and anonymity. Content analysis of the interview data was conducted using the qualitative software program NVivo 10. Content analysis of qualitative data is a research method employed for the subjective interpretation of data through systematic classification process of coding and isolating emerging themes (Hsieh and Shannon, 2005). For analysis of the interviews and coding them in a similar pattern, each of the two researchers developed a coding tree. The two coding trees were then compared and discussed in detail exploring similarities and variations in order to develop a final common coding tree. This approach assisted to isolate a number of key themes and patterns in the data. During coding of the interviews, categories were linked to their sub-categories and were then arranged around a common cluster. Finally, the major theme was extracted. Direct quotes were also generated to capture mood, opinions and experiences of the respondents.

Ethical consideration

Ethical approval to carry out the study was granted by the Institute for Security Studies Research Ethics Committee. Informed consent was sought from all the study participants and centre managers. Anonymity, confidentiality and privacy of the study participants were also safeguarded.

Results

According to Table 2, analysis of FDUs in program and FDUs out of program showed that majority were aged 25 – 35 years; affiliated to the Muslim religion; unemployed; divorced; and with a primary level education.

Table 2: Background characteristics of FDUs

Characteristic	Category	In-program (n=32)	Out-of-program (n=32)
		Percent (%)	Percent (%)
Age	18 – 24 years	9.4	9.4
	25 – 35 years	62.5	56.3
	36 – 45 years	28.1	25.0
	46 years and above	-	9.4
Religion	Protestant	28.1	15.6
	Catholic	18.8	18.8
	Muslim	53.1	62.5
	Others	-	3.1

Education	No formal education	6.3	6.3
	Primary level	68.8	65.6
	Secondary level	18.8	25.0
	Post-secondary level	6.3	3.1
Employment status	Unemployed	50.0	81.5
	Employed	21.9	-
	Self-employed	15.6	14.8
	Others	12.5	3.7
Marital status	Married	22.6	21.9
	Single	29.0	31.3
	Widowed	6.5	6.3
	Divorced	41.9	40.6

Drug use behavior

Analysis of drug use behavior among FDUs out-of-program showed that 96.8% were current users of heroin and 3.2% were current users of cocaine. For FDUs in program, findings showed that 100% were former heroin users. Data on injecting drug use also showed that 61.3% of FDUs out-of-program were injecting with the main drug while 43.8% of the FDUs in program were formerly injecting with the main drug. The median age of injecting with the main drug among FDUs out-of-program was 24 years while FDUs in program was 29 years.

Onset age for the main drug

Data showed that majority of FDUs out-of-program initiated drug use at the age of 18 – 24 years (58.1%) with a median initiation age of 21 years. For FDUs in program, the onset age for the majority was 18 – 24 years (34.5%) with the median initiation age of 20 years.

Data on onset age of injecting among FDUs out-of-program showed that the age of 18 – 24 years was the most critical age to initiate injecting of drugs (52.6%) while for FDUs in program, age 25 – 35 years was most vulnerable age of injecting drugs (64.3%).

Barriers to utilization of HRDRS

The barriers to utilization of HRDRS were classified into four broad categories namely systemic barriers; socio-economic barriers; and cultural and societal barriers.

Systemic barriers

This category of barriers was responsive to policies, procedures and practices hindering FDUs from accessing HRDRS. The main systemic barriers reported were inadequate female friendly facilities; unavailability of baby friendly needs; recruitment challenges; and access challenges by pregnant or breastfeeding FDUs.

Inadequate female friendly facilities

Inadequate availability of female friendly facilities was reported as a barrier to utilization of HRDRS. It was reported that female friendly drug rehabilitation facilities were almost non-existent thereby hindering FDUs seeking to access these support services.

"The other challenge is that we only have one female rehab if I am not wrong in the entire Coast region. One thing we need is to have these female rehabs like as soon as yesterday" (Key informant, MOH)

Recruitment challenges

The study observed that the complex and long recruitment processes for FDUs seeking enrolment to HRS was a key utilization barrier. In some cases, the harm reduction facilities were only admitting cases of relapse due to over-utilization of the available support services. This resulted to a long waiting time for intake of new clients leading to attrition of FDUs seeking admission to these facilities.

"Patience for drug users is low and therefore long procedures result to low enrolment for methadone program" (Key informant, Centre Manager)

"I hope that all those who are in the dens can also be taken into the methadone program. We have all been abandoned. Right now, they are taking defaulters only. What do we do?" (FDU out-of-program)

Further, unavailability of MAT services for children below the age of 18 years was another commonly reported recruitment barrier due to the exiting policy requirement.

"We cannot reach to children below 18 years because of the legal implications. Linking them for HRS is a challenge because that is considered not a legal age yet. So I think we need to have laws to reach out to this age group, because we are seeing a lot of children getting into drug use" (Key informant, MOH).

Access challenges by pregnant or breast-feeding FDUs

The study also revealed unique challenges facing pregnant and breastfeeding FDUs who were already enrolled in the methadone programs. It was reported that these FDUs have to present themselves in person in order to access methadone assisted treatment (MAT). In case it reaches a point where these women were so challenged to present themselves, there was no option of getting treatment through a third party. Majority of the FDUs were therefore defaulting treatment when faced with the challenges of pregnancy and breastfeeding.

"When you are sick or maybe you've just given birth, you are not given medicine until you come here yourself to take. Maybe you are in so much pain but you have to get to the centre yourself" (FDU in program).

Unavailability of baby-friendly services

FDUs expressed challenges related to unavailability of baby friendly HRDRS. There was limited provision of safe spaces for babies and young children when the mothers were seeking support services.

"Children are interacting with addicts attending the methadone program. I don't like what they are witnessing because they will end up being addicts" (FDU in program)

Socio-economic barriers

This category of barriers was limited to the aspects of income, employment or occupation. The key social-economic barriers to utilization of HRDRS reported were parenting responsibilities; challenges of physical access; lack of opportunities

for income generation; and high cost of drug rehabilitation.

Parenting responsibilities

One of the emerging social-economic barriers relates to the gender roles associated with women as caregivers. The findings showed that majority of the FDUs were single and therefore they were the sole bread winners for their children. This vulnerability of single headed families was identified as a key barrier to accessing support services meant for FDUs especially the in-patient programs.

"You are a parent, you want to wash clothes, you want to look for food for your children, you want to do this you want to do that. When you take me for rehab, who will look after my children?" (FDU out-of-program)

Challenges of physical access

The study established that some facilities were inaccessible due to the long distances that FDUs were required to cover in order to access HRS. In this case, lack of daily transport facilitation was a barrier to utilization of HRS. Majority of the FDUs resulted to covering long distances by foot to access support services due to the high cost of meeting daily transport needs.

"Mine is just to ask the government to build us another hospital because for us to access the facility we have to pay fare which is close to Ksh. 500 in a day" (FDU in program)

Safe spaces

Due to the stigma and rejection facing FDUs, it was reported that they only sort refuge in the drug dens.

"There is nowhere that is safe because in short, we are not loved. So the only place you will feel safe is in the dens. That is where my friends are" (FDUs out-of-program)

Lack of opportunities for an income generation

Generally, the FDUs reported that facilitation to engage in an income generating activity was a crucial component of relapse prevention. Idleness was reported as a major risk factor associated with relapse after completing a harm reduction or drug rehabilitation program. It was reported that most of the FDUs enrolled to support programs had returned to the drug dens and relapsed for lack of employment or income generating activities. This was therefore reported as the main barrier why FDUs fail to utilize available support programs.

"After 3 months of recovery, you go back to stay idle with nothing to do. So there is no benefit with this program because I will end up being an addict again" (FDU out-of-program)

"Some of my friends have been on methadone program for 6 years because they have nowhere to go. They fear that if they leave and they have nothing to do, they will relapse again" (FDU in program)

Cost of rehabilitation services

The high cost of addiction treatment charged by drug rehabilitation facilities was a major barrier for FDUs in need of these services. The study noted that majority of the FDUs had no identification cards to facilitate them to access the National Hospital Insurance Fund (NHIF) in order to acquire cheaper rehabilitation

services. In addition, majority were not formally employed to allow them to access other health insurance schemes.

"The programs that are available especially for the rehabilitation of women are meant to be paid for. So I see no need to go because I do not have money to pay for the program" (FDU out-of-program)

Cultural and societal barriers

Cultural and societal barriers were restricted to myths and misconceptions, attitudes and perceptions of FDUs. Results showed that cultural and societal barriers were manifested through stigma associated through the family, community, religion as well as the healthcare personnel.

Family related stigma

The family is the primary source of hope, encouragement, strength and comfort. Family rejection may therefore lead to the worst form of stigma. Most of the FDUs acknowledged that family related stigma was as a result of misconceptions about addiction.

"The family I have, first of all, they call me insane. Even now I don't know how my father will get counselling in order to understand. Because he knows that an addict is an insane person who cannot change" FDU out-of-program)

Community related stigma

FDUs also reported that stigma perpetrated by the community was the most difficult to cope with and this rejection had led even to loss of lives of FDUs manly through mistaken identity just because they were known drug users.

"There are challenges in the community. If something gets stolen, "it is the addict. Our children have no friends. They are usually called children of drugs users and prostitutes" (FDU out-of-program)

"You will hear people say, "we have seen two people and one addict". So an addict is not a human being, or an addict is an animal?" (FDU in program)

Healthcare personnel related stigma

Another form of stigma facing FDUs was that perpetrated by the healthcare personnel. It was reported that FDUs were perceived as criminals and people who deserve being in jail.

"And I think attitude amongst our healthcare personnel is that these are offenders. Even when they come to the facility, we will hide our things, because they're going to steal them" (Key informant, MOH).

Religion related stigma

Although it was expected that churches were safe spaces, the study established that they were indeed perpetrators of stigma targeted at the FDUs where drug addiction was viewed as a curse.

"We don't go to church. They always tell us that we are cursed" (FDU out-of-program)

Partner influence

The study also reported that many FDUs drop out of enrolment due to partner disapproval of the treatment program. Partner influence was a major barrier to utilization of support services.

"We have seen many women being drugged out of a program because it is against the will of their boyfriends and

they never come back again" (FDU in program).

Discussion

Drug use behaviour among FDUs in Kenya

The study examined the drug use behaviour among FDUs in order to identify risk factors associated with drug use. Findings revealed that majority of the FDUs were aged 25 – 35 years, had a Muslim religious background, with a primary level education, and were divorced, single or widowed. Data on employment showed that majority of FDUs were unemployed. According to a previous study conducted in Kenya, findings showed that FDUs had a mean age of 28.4 years; majority had a primary level education; and mostly single or not living with a partner (Ayon et al, 2018). Findings on drug use showed that heroin was the most commonly used drug. Similar findings were reported by Ayon et al (2018). The onset age of drug use was 18 – 24 years with a significant proportion of FDUs initiating drugs below the age of 18 years. In addition, majority of the FDUs were currently injecting with the onset age of injecting being 18 – 24 years. Findings also showed evidence of FDUs initiating injecting of drugs before the age of 18 years. These findings lay emphasis on the need to focus on programs targeting under-age children with the ultimate goal of delaying early initiation to drugs.

Barriers to utilization of HRDRS

Systemic barriers

Systemic barriers were the most commonly reported factors hindering utilization of HRDRS among FDUs. They included inadequate female friendly facilities, unavailability of baby friendly needs; recruitment challenges; and access challenges by pregnant or breastfeeding FDUs.

Inadequate female friendly facilities

Unavailability of female friendly facilities was one of the most commonly reported systemic barriers especially inadequate female only drug rehabilitation facilities providing in-patient services. Access to in-patient DRS was extremely challenging for FDUs given that majority were the sole providers for their families. Further, majority were residing in the drug dens and without a family, relative or rescue centre, and there was nobody to look after their young children. It has been established by Iversen et al (2015) that spaces and services exclusive for women guarantees the personal safety of women, reduce the impact of imbalanced gender power dynamics leading to improved health outcomes. In addition, other studies have demonstrated that treatment programmes centered on women may translate to improved treatment outcomes (Greenfield et al, 2007; Kissin et al, 2014).

Unavailability of baby friendly needs

Findings showed that most FDUs accessing HRDRS were either breast feeding or in the company of their young children. These facilities were not designed to provide safe spaces for children leaving them to interact with other drug users seeking HRDRS. In a similar study, it was noted that fear and lack of trust by FDUs towards childcare welfare services was a barrier to accessing and utilizing substance use services (Wolfson et al, 2012). Another study showed that the threat of FDUs losing custody of their

children was a major barrier to treatment (Schamp et al, 2021). Similarly, a study investigating women seeking addiction treatment identified childcare concerns as a barrier to access (Copeland, 1997). Other studies reveal that mothers who use drugs are unwilling to access health and HRS due to the risk of losing custody of their children (Boyd and Faith, 1999; Olsen et al, 2012; Taplin and Mattick, 2015). These findings therefore imply that support programs that intend to separate the FDUs and their babies may experience serious utilization challenges.

Recruitment challenges

Problems relating to recruitment of FDUs to HRDRS were reported as another barrier hindering FDUs from utilizing support services. First, there were limited spaces for admission of new clients with priority being accorded to FDUs with a history of relapse. Secondly, the recruitment process was so long and elaborate making FDUs to make several trips to the facility before securing an admission. Part of the recruitment process also involved presenting of a family member, relative or guardian to give consent for enrolment of FDUs. However, majority of FDUs were homeless and living in the drug dens and had been rejected by their families. Similar findings show that multiple appointments and parental consent requirement were barriers to accessing HRS (Ayon et al, 2018; Krug, Hildebrand and Sun, 2015). In contrast, a study on "open-access model" for rapid enrolment of people with opioid use disorder in methadone treatment showed improved treatment access without evidence of harmful effects on treatment outcomes (Madden et al, 2018). Therefore, there was need to review the threshold of recruitment procedures in order to realize higher enrolment and retention rates of FDUs to available support services.

Another recruitment barrier was unavailability of MAT services for children below 18 years. The study findings showed that a significant proportion of FDUs were initiating drug use as well as injecting drugs before the legal age. This therefore presented a major barrier to utilization of HRS for FDUs below the age of 18 years. Comparable findings have shown that age restriction was a key barrier to accessing support services by drug users (Krug, Hildebrand and Sun, 2015).

Access challenges by pregnant or breast-feeding FDUs

Another systemic barrier revealed by the study relates to the limitation of experienced FDUs who were either pregnant or breastfeeding. It was reported that in circumstances where a FDU was unable to present oneself to collect their daily methadone ration because of pregnancy or during breastfeeding, they ended dropping out of the program. Similar results showed that FDUs were likely to skip or avoid treatment or appointments during their pregnancy (Stone, 2015).

Socio-economic barriers

To a large extent, socio-economic factors were reported as key barriers to accessing HRDRS. They included parenting responsibilities; challenges of physical access; lack of opportunities for income generation; and high cost of drug rehabilitation.

Parenting responsibilities

Parenting responsibilities was reported as a major barrier for utilization of services by FDUs. This therefore meant that FDUs have to navigate through a delicate balance of parenting and meeting the daily needs for their families as well as utilizing support services. Therefore out-patient services tailor made to meet the needs of FDUs would be a better alternative compared to in-patient support services unless adequate mechanisms were put in place to address the challenges of parenting. With the responsibility for parenting disproportionately falling to women, HRS that do not meet the needs of mothers including lack of childcare facilities presents a significant barrier to utilization of HRS (Pinkham and Malinowska-Sempruch, 2008; Malinowska-Sempruch, 2015; Otiashvilli et al, 2013; Copeland, 1997; Flavin, 2002; Esmaeili et al, 2018). Parenting obligations by women also imply that they may be unable to utilize services during fixed hours of operation or at fixed intervals, underscoring the importance of flexible services (Olafsson et al, 2018).

Challenges of physical access

The study showed that harm reduction and drug rehabilitation facilities were skewed towards urban centres and were also very few in number. This therefore resulted to FDUs walking for long distances to access the services. Others who relied on public transport in order to access the services were vulnerable to relapse or reported higher attrition rates for lack of finances to meet their daily transport needs. A Kenyan study has also showed that the issue of long distances to harm reduction facilities was a major utilization barrier (Ayon et al, 2018).

Lack of opportunities for income generation

The most commonly reported social-economic barrier was lack of opportunities for one to engage in an income generating activity. This led to fear of leaving treatment or support services thereby opting to overstay in the programs. There was no existing post treatment programs meant for FDUs including training skills and facilitation of earning a living so as to reduce the exposure for relapse and retreating to the drug dens. Lack of an income generating activity has also been acknowledged as a risk factor for drug addiction treatment (Henkel, 2011).

High cost of drug rehabilitation

Whereas drug cession would be the ultimate goal of any support program, the study showed that DRS were unaffordable. This barrier was further complicated by the fact that most FDUs had no national identification cards which could facilitate them to acquire the NHIF card to enable them acquire cheaper and more affordable services. A comparable study has reported that the cost of recovery services was a key barrier to uptake of DRS (McQuaid, Jesseman and Rush, 2018). In addition, the cost of residential treatment among women seeking addiction treatment was also identified as a major utilization barrier (Copeland, 1997).

Cultural and societal barriers

Stigma was the most widely reported cultural and societal barrier. Stigma was manifested from the perspective of the

family, community, religion as well as the healthcare personnel. The study revealed that rejection of FDUs by the family, community and religion was the major motivation to move to the drug dens as the only available safe space for existence. Other studies have also identified stigma and discrimination as barriers to positive health seeking behaviour, engagement in care and compliance to treatment (Stengel, 2014; Stangl et al, 2019; Chaudoir, Earnshaw and Andel, 2013; Williams et al, 2019). Qualitative studies in Georgia, Indonesia, South Africa and Tanzania have concluded that women face greater stigma related to drug use than men leading to fears of disclosure and engaging with treatment (Zimudio-Hass et al., 2016; Myers, Carney and Wechsberg, 2016; Otiashvili et al., 2013; Spooner et al., 2015).

The study showed that healthcare personnel perceived FDUs as criminals and people who deserved to be incarcerated. It has been shown that one of the barriers women and young girls face regarding access to health facilities is stigma and discrimination from healthcare workers (Nyblade et al, 2019). A systematic review of stigma towards people who use drugs from health professionals established that the negative attitudes are pervasive making people who use drugs to avoid health and HRS (van Boekel et al, 2013). Evidence also shows that women face more restrictions than men, including hostile and judgemental attitudes and perceptions from healthcare professionals (Esmaeili et al, 2018).

Conclusion and recommendations

The study has provided evidence that indeed FDUs were being confronted with multiple barriers hindering utilization to HRDRS. The complex interplay of the systemic barriers, social economic barriers, cultural and societal barriers were the main underlying risk factors impeding utilization of available support services targeting FDUs. Therefore, towards achievement of better outcomes leading to improved access, utilization, enrolment and retention rates of FDUs into harm reduction and drug rehabilitation programs, there is need for integration with female friendly services. Further, given the delicate balance between the need for support services and fulfilment of parenting responsibilities, there is need to tailor an out-patient program that would be attractive and adoptable to FDUs. Finally, there is need to integrate harm reduction and drug rehabilitation programs with a strong component of supporting FDUs with skills and linking them with opportunities for income generation.

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Exploration and description of challenges experienced by social workers when providing out-patient treatment services to individuals with Substance Use Disorders in Gauteng Province, South Africa.

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Abstract

Social workers are increasingly becoming primary service providers to people with substance use disorders (SUDs) and their families. Hence, they face many challenges when providing treatment services. This qualitative study adopted an exploratory descriptive research design to explore challenges experienced by ten social workers during the provision of outpatient treatment services to individuals with substance use disorders in the Gauteng province. The study utilized non- probability purposive sampling to recruit and identify participants. Data collection was conducted through zoom meetings and one-on-one interviews using a semi-structured interview guide. Thematic data analysis was conducted manually to analyze the data collected from participants. This study indicated that outpatient treatment social workers are challenged by relapse, noncompliance, denial, reluctance and involuntary service users; poor family involvement and unrealistic expectations; safety issues and lack of organizational support. Thus, it is recommended that outpatient treatment organizations employ employee assistance practitioners to support social workers towards coping with challenging workplace experiences.

Key words: *Experiences, outpatient treatment services, substance use disorders, social workers.*

Introduction

Substance Use disorder (SUD) is the most challenging social illness with detrimental ramifications experienced worldwide (Yang, Wong, Grivel & Hasin, 2017). Since the 1980s, there has been a ceaseless and uncontainable increase of SUD. UNODC World Drug Report 2022 highlights that approximately 284 million people between the ages of 15-64 years used drugs while 11.2 million people were injecting drugs worldwide. In South Africa (SA) more than 15% of the population has substance use disorder. Consequently, in SA, SUD has long been a primary factor contributing to multiple challenges counting crime, high rate of traffic injuries, domestic violence, escalation of chronic diseases and poverty (Stewart, 2021). Similarly, other people with SUDs experience inter alia, unplanned pregnancies; dropping out of school; academic failure; contracting diseases; showing antisocial behaviors or violent; poor work performance and personal relationships failure; often having focusing, remembering and thinking problems; as a result, their lives become chaotic and stressful (National Institute on Drug Abuse, 2018). In response to the above highlighted challenges of SUD,

multiple methods have been implemented to curb it with social workers being in the forefront.

South Africa has low capacity of inpatient services, therefore, the overwhelming demand become a burden to outpatient treatment settings, even though other users' level of addiction requires inpatient treatment. Nevertheless, most inpatient treatment centers are private and not affordable to a large number of the population. As a result, the South African Drug Advisory Board (SADAB) stipulated a growing need for interventions towards combating substance use disorder.

The National Institute on Drug Abuse outlines a range of substance abuse treatment services, including long- and short-term inpatient treatment programs, individualized counselling, group therapy, treatment for substance users involved with criminal justice, and outpatient treatment programs (NIDA, 2018). The background of outpatient treatment services in South Africa is rooted on the Prevention of and Treatment for Substance Abuse Act 70 of 2008. The act serves as a state response to fight against substance dependency through treatment, early intervention, prevention, and re-integration services. It also encourages the establishment of public outpatient and in-patient treatment facilities for rehabilitation purposes, skills development and treatment of people with SUDs. Public outpatient treatment centers offer a range of services including screening and assessment, individual and group counselling, family intervention and drug testing (Department of Social Development, 2016).

Social workers employed in outpatient treatment centers works within a multidisciplinary team of doctors, nurses, and sometimes psychiatrist to provide extensive treatment services to SUD clients, but social workers are the primary entry and the ultimate exit point of the treatment programme (Khanyi & Malesa, 2022). When SUDs are treated holistically, there is a low risk of relapse, leading to a successful adaptation of an individual to the environment. Ndou and Khosa (2019) reported that in providing substance abuse treatment, social workers are regarded as essential service providers because of their knowledge in biopsychosocial intervention.

The South African Community Epidemiology Network on Drug Use asserts that out-patient treatment social workers work with diverse population referred by their families, friends, employers, courts, schools, health care professionals, religious groups and other stake holders (SACENDU, 2018). Social workers are expected to provide holistic interventions to assist and support individuals with SUD and their families (Gxotelwa, 2020), hence, there are numerous challenging experiences attached to working with clients with SUDs.

Stewart (2021) indicated multiple challenges experienced by social workers counting high workload, inadequate work resources, lack of organizational support and low compensation.

Viljoen (2020) also highlights high workload, secondary trauma, and empathy exhaustion as challenging experiences of social workers in treatment of SUDs. Authors indicated that such challenges experienced by social workers are likely to result in occupational stress and sometimes burnout, which again hinders social workers' ability to provide quality services.

Although, it is evident that social workers experience many challenges and high levels of emotional discomfort when performing

their daily duties, which are worsened when they are working with vulnerable individuals with mental health or SUD (Moret, 2019; Ndlela, 2020; Khanyi & Malesa, 2022), yet, the existing knowledge does not accommodate social workers in outpatient treatment settings for SUDs. Since the field of SUDs is unique, demanding and complex in nature, it necessitates specialized personnel adequately trained to render specialized treatment services to the individual they serve (Department of Social Development, 2019).

Some studies explored experiences of social workers in treatment of SUD without paying attention to the experiences of social workers providing out-patient treatment services. Therefore, as the experiences of social workers differs according to their working environment and nature of their client system, this study sought to explore and describe challenges experienced by social workers when providing out-patient treatment services to individuals with SUDs in Gauteng Province. Findings from this study will provide employers and social workers with understanding of various challenges affecting social workers' daily functioning and competency in the out-patient treatment settings, as well as recommended strategies towards supporting social workers in out-patient treatment centers for SUDs.

Methodology

Research approach and design

The study adopted an exploratory qualitative research design to explore and describe the challenges of social workers in the outpatient treatment of SUDs. Exploratory research design allowed the researcher to be flexible towards exploring the perceived, identified and lived experiences of participants in their own environment (Engel & Schutt, 2013). Employing exploratory design also assisted the researcher not only to explore challenges experienced by social workers, but also to gain subjective understanding of how these challenges impact social workers professional and personal well-being.

Population, sample and sampling

The population of the study was drawn from non-profit organizations providing outpatient treatment services to people with SUDs in Gauteng province. Six out-patient treatment centers were sampled, counting SANCA central rand Diepsloot, SANCA central rand Nuclear, SANCA central rand Eldorado Park, SANCA central rand Alexandra, SANCA central rand Rosettenville and SANCA central rand Westbury. Non-probability purposive sampling was used to recruit and identify participants. In purposive sampling, the sample is selected by carefully taking into consideration parameters of the population (Babbie, 2017).

Ten social workers were purposively selected from the above-mentioned outpatient treatment centers. Social work professionals provide outpatient treatment services to people with SUDs, therefore, are viewed as appropriate participants for the study (Schutt, 2018). All participants were registered with the South African Council for Social Service Professions, employed for two years or more in an outpatient treatment center for SUD in Gauteng Province and willing to participate in the study.

Research instrument and pre-testing

The study used semi-structured interviews as a research instrument for data collection. Interviews were conducted through open-ended questions in the interview guide; hence, the researcher was able to stray from the interview guide in order to follow up on certain issues arose from the conversation (De Vos et al., 2012). The instrument was

used because it allowed participants to present their experiences based on their own perceptions and the interviewer to use probes in a flexible manner.

The pre-testing of the research instrument was conducted with two social workers who met the selection criteria to determine whether respondents understand the questions correctly and to ensure that questions on the guide are not directing participant's responses (Strydom, 2011). However, data collected from the pretesting participants was not included in the report.

Methods of data collection

The process of data collection was conducted through semi structured interviews with social workers in their workplace as permitted by the organization's management, to ensure a peaceful and comfortable environment. Face-to-face interviews were conducted with two participants in their respective offices by making use of an interview guide with open-ended questions, which allowed the researcher to probe for clarity on given responses. This form of data collection also allowed the researcher an opportunity to observe participant's facial expression and body language (Marshall, 2016). However, as social workers were in their offices, there were multiple destructions in relation to colleagues moving around and phones ringing, resulting in participants' poor concentration.

Eight participants were interviewed through zoom virtual meetings which also posed various challenges in relation to poor network, load shedding, and other connection problems, which delayed the data collection process. All interviews were audio recorded with consent given by participants and stored in a password protected audio recording device to ensure the safety and confidentiality of the recordings.

Method of data analysis

The study employed a thematic method of data analysis. Thematic analysis centers on categorizing common themes including ideas, topics and meanings which appear more than once across data collected in response to the research question (Braun & Clarke, 2006). The study engaged this data analysis method because it is relevant to qualitative data analysis especially when researching about people's experiences, knowledge and opinions (Mclellan-Lemal, 2008). Braun and Clarke (2006) six steps were followed when analyzing data through the thematic method including familiarization, coding, generating themes, reviewing themes, defining and naming themes, writing up data analysis section.

Ethical considerations

The researcher took full responsibility to ensure that participation in the study was safe and all the rights of participation were explained and respected. Participants were allocated time to read and sign the informed consent forms for voluntary participation in the study prior to the interview. This is in line with the assentation by Rubin and Babbie (2014) that researchers must not force participants to take part in the research project. Permission to conduct the study in the six organizations was obtained from the South African National Council on Alcoholism and Drug Dependence (SANCA) Central Rand organization. The ethics clearance certificate was granted by the Departmental Human Research Ethics Committee from the University of Witwatersrand.

RESULTS

Demographic data of participants

A total of ten social workers employed by six different outpatient treatment centers

participated in the study. Of the ten participants, three were between the ages of 20 and 29, five were between 30 and 39, and the other two were between the ages of 40 and 49 years old. All participants were black African, of which 2 were males and 8 were females. Data collected demonstrated that only one social worker has six years' working experience, four have between two to three years, while five have between four and five years working experience in treatment of SUDs.

Themes

The crisis of relapse among service users

The study essentially found that an individual with SUD completes the treatment programme, stays clean for some time but relapse immediately or at a later stage. Such recurring patterns evoke feelings of demotivation among social workers and make them feel like their effort are worthless. This is supported by the following participants' narratives:

"One of the biggest challenges is when a client successfully completes the treatment programme but few years later, they come back seeking assistance for SUD again and again". (P-4)

"I would say it will be the returnees, always having the same person every year, it actually makes you feel like you're not doing enough, in fact it is demotivating." (P-5)

"Sometimes I feel like I can establish my own land where I can put all those who test negative, so they will not relapse because some of them relapse during the aftercare programme, then you send them for inpatient treatment, but they still come back and relapse again." (P-8)

Findings also revealed that most service users discharged from the in-patient treatment center experiences relapse than those undergoing out-patient treatment for SUD. One participant narrates:

"Service users' relapse is challenging in this field; we have been trying to implement strategies to deal with relapse but none of them seem to be helping because our relapse rate is still increasing. Mostly, our clients from the in-patient treatment centers experiences relapse more than those completed the out-patient treatment." (P-2)

Inpatient treatment centers prioritize first time applicants, therefore, relapsed users become a burden to service providers. Therefore, relapse can be viewed as the most challenging and disappointing feature affecting social workers in treatment of SUDs.

Service user's non-compliance

Participants reported to be experiencing multiple forms of non-compliance including late arrival, not attending sessions, lack of motivation and inadequate readiness to change. The following narratives were quoted from participants:

"Our clients want to be baby sited; you must follow up with them all the time. They will forget their appointment, if they are not late or out of town." (P-1)

"Sometimes you find those who are always in the office just to see the nurse for medication but does not want to attend therapeutic sessions, they keep on rescheduling until they complete the medical therapy and disappear." (P-6)

"Some are motivated to attend the first few sessions, but they are not willing to complete the entire treatment program. They believe that they can become clean without completing the treatment, which leads to non-compliance." (P-10)

This finding indicates that non-compliance and unmotivated service users have no intention of completing or complying with the requirements of the outpatient treatment programme, which negatively affects the

outcome of the treatment process. These malpractices subvert the efforts of social workers and resources put in place to heal users. Most of the expenditure gets wasted in this process.

Denial, reluctant and involuntary service users

Findings reveals that working with involuntary service users is the most challenging undertaking since they are forced either by court, families, employers or situations to be in the treatment programme, as a result they take out their frustrations on social workers. Participants shared their narratives as follows:

"When a client is in denial, it is challenging to motivate him to change, because that person is not keen to receive the treatment. Some are forced by their families, workplaces or circumstances to enter the treatment, so it becomes a challenge to social workers to work with denial or reluctant clients." (P-2)

"Client referred from court for diversion and clients forced by their families to attend the treatment program are the biggest challenge. They do as they wish and do not comply with the requirements of the treatment program.... so we fail with them since they do not follow our procedures towards changing their addiction behaviors". (P-7)

Participant's narratives also indicated that working with involuntary, reluctant and resistant service users discourages social workers, as such, interventions are less likely to produce positive outcomes.

Poor family involvement

Participants also reported poor family involvement and support as a challenge in the treatment process. Some families are not willing to support the recovering individual because of the difficulties they have put them through. Participant annotations were quoted:

"Some families prohibit any form of communication with the social worker as they do not want to hear anything about the recovering individual." (P-1)

"As much as the client may want to change their life, but due to some circumstances at home, community or family, it becomes very hard for them. They find it difficult to stop using substances or relapse when there is no social support." (P- 5)

"Even if I try to contact the family, they do not come, when doing home visits, they are not available. Sometimes contacting the family does not help as they are not supportive, and they won't even try to be involved." (P-6)

"Some families don't even bother coming for family sessions, they just complain about whatever the client has put them through, and they do not want to be involved in anything concerning the client. Even when you visit their home, you are not welcomed as a social worker, it is a struggle to convince them to support the client." (P-9).

Participants established that lack of family involvement, family withdrawal and stigmatization associated with SUDs leaves the recovering individual vulnerable and prone to relapse.

Additionally, findings also indicated that some families avoid any form of communication with social workers because they have lost hope for the recovering individual. Analytically, lack of family supports derail holistic modus operandi used by social workers to address the problem.

Unrealistic family expectations

Findings from the study indicated that a number of families and community members expect social workers to ensure that service users recover immediately when entering the treatment programme. Those family ideologies constitute unrealistic expectations; therefore, social workers are blamed when those unrealistic expectations are not met. Following are the participant's citations to contrast:

"The community is demanding, they think that we are miracle workers, after bringing a client to us, they want a client to stop smoking immediately, they want to see them changing sooner without considering all the factors involved in the treatment" (P- 4)

"One day I had a client's mother shouting at me that I don't know my work just because I conducted an assessment with his son and scheduled the next appointments with him to continue with the treatment programme. The parent got so angry and made me felt like I was not going to assist his son, I tried explaining the requirements of the treatment, but she was not willing to listen." (P-6)

"Some clients don't want to be helped, but families are blaming the social worker thinking that you can just perform magic so the client can stop smoking. So, if the client does not comply with the treatment or doesn't show interest in changing their addiction habit, family members become frustrated and think that there is something wrong you are doing as a social worker and put pressure on you to fulfil their unrealistic expectations." (P-8)

The result shows a considerable confusion about the roles and responsibilities of social workers in out-patient treatment centers for SUDs and expectations of those in need of assistance including service users, families and the community. Thus, such confusion may be the foundation of those unrealistic expectations from the community or families.

Safety issues

The study disclosed that social workers do not feel safe when providing outpatient treatment services. Social workers feel threatened by service users attending sessions while intoxicated, they feel like targets of any action of crime and that their safety is compromised. Following are the quotes from participants:

"I don't feel safe in the office because there's no security, we must open the gate in the morning and close it when we knock off by ourselves. Our service users cannot be trusted, they view us as targets because sometimes there is no one else you are all alone in the office with no panic button." (P-1)

"As we are dealing with clients who are having a substance abuse problem, some come to the office while intoxicated. As a social worker I am also a target for the client. The worst part is that our organization does not have security guards who can see when a person is under the influence or carrying a dangerous weapon. So sometimes it becomes difficult for us to work because our safety is compromised". (P-4)

Participant's responses indicated some notable concerns regarding the safety of social workers in treatment of SUDs, which exposes social workers to helplessness as they are fearing for their lives instead of providing quality services.

High case load vs low human resources

Participants reported to be challenged by high case load which hinders their ability to focus more on an individual client since they have many clients to attend to. The participants also expressed shortage of social workers which make huge workload become burden to the few. Following are what participants have reported:

"We have lots of cases to deal with, so it is challenging to work with unmotivated clients because motivating the client to attend their sessions is time consuming and increases our workload. In a day we work with twelve to sixteen clients, and remember we are only working for eight hours, so squeezing in all clients and provide quality service is difficult." (P-4)

"Our case load is hectic. In fact, I feel like we are chasing numbers because we need stats, so we end up with so many cases but few social workers to attend to those cases." (P-6)

"I personally have a crazy workload and it even hard to focus on the quality of services provided, I turn to work to get the work done because the center is operating with only two social workers but servicing several high-risk communities" (P-8)

Since social workers in outpatient patient treatment centers serves as a primary point of entry to the other forms of SUD treatment including inpatient, aftercare and halfway houses, their case load will continue to rise because of the increase in drugs supply and accessibility.

Lack of organizational support

Participants reported lack of organizational support as another challenge confronting out-patient treatment social workers in SUDs. Some participants added that only supervision is provided by the organization. Following are what participants had to say:

"There is no support from the organization and there is no program being offered by the organization to assist us with our daily challenges. The only support I get is from my supervisor and is not enough." (P-5)

"Even when you seek organizational support, nothing is offered. If we can have more forms of supports from the organization, the treatment would be very effective." (P-6)

"There's no support from the organization because even with our supervisor, we don't do debriefing. Yeah, we are stuck with all the challenges from our work and our client's traumatic stories. It's a difficult experience and we don't debrief; we continue on our own with no support. We get stressed by your personal issues and our work experiences at the same time, it hard." (P-9)

These sentiments indicate poor organizational support as a challenging feature affecting social workers in the outpatient treatment of SUDs. It also appears that social workers are susceptible to secondary trauma from the adversities of their clients, which highly compromises their personal and professional psychosocial wellbeing.

Discussion

Findings from the study demonstrated that social workers are experiencing many challenges when providing outpatient treatment services to individuals with SUDs. Among many issues social workers battle includes the issue of relapse among service users, which has been an ongoing and disappointing challenge facing counsellors in the field of addiction treatment (Ndou & Khosa, 2019). On the same note, most service users go through the relapse stage during the process of recovery or post successful completion of the treatment service, which drains a lot of energy out of social workers and sometimes results in feelings of self-doubt. Findings from this study align with those of a study conducted by Viljoen (2020) stating

that post addiction treatment, above 50 per cent of individuals go through relapse and return to treatment. Other studies highlight that internationally, over 75% of service users relapse in the 3- to 6-month period after treatment (Swanepoel, Geyer & Crafford, 2016). The study conducts by Kabisa, Biracyaza, Habagusenga and Umubyeyi (2021) discovered that in South Africa, 22% of the admitted users relapsed in 2013.

The study also established that most service users discharged from the in-patient treatment center experiences relapse because of non-compliance with the requirements of the treatment programme. Such relapsing patterns seem to evoke feelings of demotivation among social workers (Ndou & Khosa, 2019), and make them feel like their effort towards assisting service users are worthless. Nevertheless, social workers continue to work with the same person over and over due to the nature of social work value of a non-judgmental attitude. Even though relapse is viewed as part of the recovery process (Sekgobela, 2020), clients' patterns of relapse and returning to treatment multiple times could result to dependency in the treatment process.

The study also revealed a challenge of reluctant, denial and involuntary clients that are characterized by lack of motivation, non-engagement and unwillingness to positively participate in the recovery process (Okamoto et al., 2019). Such service users do not acknowledge their addiction problem, have no intention to change, nor to comply with the terms and conditions of the programme. Thus, reluctance, denial and involuntary service users negatively impact the social worker, the recovery journey and the outcome of the intervention process. Rooney (2018) also revealed that the most prominent challenge of social workers in SUD is to engage with an individual who is forced to undergo an involuntary treatment process. As a result, such service users are exhausting and discouraging to social workers' because such interventions are time consuming and less likely to be successful.

Consequently, the study discovered that families are not willing to support individuals in treatment because of the difficulties that they have put them through, no matter how much the social worker invites them for family therapy. Families either prohibit any form of communication with the social worker or chase them out of their homes during home visits. A study conducted by Ndou and Khosa (2019) also found that family support plays a major role in the recovery process and the positive outcome of the intervention, hence lack of family involvement, family withdrawal and stigmatization leaves the recovering individual vulnerable to relapse due to feelings of being isolated. Experiences of poor family involvement and stigmatization of service users pose a negative impact on the recovery process and put more pressure on the responsible social worker.

Families and communities' unrealistic expectations with the recovery process were also reported amongst the other challenges of social workers in SUD treatment. While recovery from SUD can be understood as a long-term commitment where the user needs to be committed to the recovery journey to benefit from the treatment process (Appiah et al., 2017), on the other hand it is noted that some families of the recovering individuals expect immediate results. Therefore, social workers are overwhelmed by community demands for services while also frustrated by challenges of inadequate resources and poor organizational support to render necessary services (Viljoen, 2020). Moreover, there is a notable confusion about the roles and responsibilities of social workers in addiction treatment centers and expectations of those in need of assistance including service users,

families and the community, which constitute those unrealistic expectations.

Since SUD is a mental illness, therefore the origins of safety for those working with SUD cannot be guaranteed unless there are measures in place towards ensuring the safety of employees. A study conducted by Unegbu (2020) also identified challenges with safety issues along with poor wages as some of the stressful challenges encountered by social workers. Feelings of being unsafe

due to working with intoxicated clients, clients carrying dangerous weapons, and those with mental health issues exposes social workers' vulnerability as they are fearing for their lives, which could also compromise the quality of their services. The absence of security officers and panic buttons in outpatient treatment organizations highly contributes to social workers' vulnerability to become victims of crime and may perhaps increase the emotional burden social workers carry on their workplaces.

Furthermore, the result confirmed that higher caseloads are continuously becoming a concern to outpatient treatment social workers in the field of addiction treatment. The number of social workers in treatment of SUDs is far lesser than the growing number of individuals with SUDs. Therefore, social workers find themselves working with higher numbers of clients, at the same time, prioritizing quantity over quality and compromising the outcome of the treatment service (Hope & Van Wyk, 2018). They become overwhelmed by attending to many cases with little to no organizational support, putting them at a higher risk of experiencing occupational stress or burnout.

Moreover, the findings also demonstrated lack of organizational support as a fundamental challenging experience encountered by out-patient treatment social workers in SUDs. Consistent with these findings, Biggart (2016) emphasized the importance of organizational support, specifically debriefing, due to the emotionally draining nature of social work. It appeared that case supervision is the only source of support provided by the organization and does not entail any aspect of debriefing. Since the treatment of SUDs is characterized with high levels of secondary traumatic stress, Hall et al (2021), asserted that organizational support must be prioritized to maximize care and support of social workers. Lack of organizational support and neglected support function of supervision affect social workers in delivery of quality services. As a result, outpatient treatment social workers suffer from occupational stress, emotional exhaustion and sometimes burnout due to workplace challenges, which also negatively affects the quality of treatment services provided for SUDs.

Conclusions

In conclusion, social workers providing outpatient treatment services to individuals with SUDs encounter multiple challenges when performing their daily duties. Their challenges include service users' relapse, issues of non-compliance, denial, reluctant or involuntary service users, poor family involvement in the recovery process, unrealistic expectations from the community and family members, compromised safety of social workers and lack of organizational support to social workers. These challenges are perceived to have a remarkable impact on social workers' psychosocial well-being at the personal and workplace level, putting them at a high risk of experiencing emotional exhaustion and professional burnout.

It is recommended that outpatient treatment organizations for SUDs apply extensive

measures to improve social workers psychosocial well-being. The organization should employ employee assistance practitioners for debriefing and other psychosocial needs of social workers, appoint qualified security officers to ensure the safety of social workers in the workplace, ensure the availability of panic buttons for social workers in their offices and while conducting home visits, introduce various team-building activities to ease the impact of work-related stress and enhance interaction levels for social workers to share experiences and learn from each other, as well develop a supervision policy that will ensure that social workers educational, support and developmental needs are addressed.

Further, it is also recommended that future research focus on exploring the challenges of social workers when providing inpatient treatment services to individuals with SUDs. This is because it was evident from this study that inpatient and outpatient treatment social workers do not work under similar conditions; therefore, their experiences are likely to differ from each other, because of their employment setting. Such research would assist in broadening the scope of this research to include other provinces and understanding the overall experiences of social workers when rendering treatment services to individuals with SUDs. Longitudinal studies to explore this phenomenon over time for better understanding are also recommended.

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Feasibility, Acceptability and Utility of the Evidence-based "keepin' it REAL" Substance Use Prevention Program for Early Adolescents in Kenyan Schools

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Abstract

The growing prevalence of youth substance use in Kenya calls for the implementation of efficacious substance use prevention programs. The overall aim of this study was to evaluate the feasibility, acceptability, and utility of an evidence-based substance use prevention program, keepin' it REAL (kiR), in Kenyan secondary schools. The study had three objectives: (1) Test if the program can be successfully delivered by assessing whether teachers agreed that kiR was well suited to their educational context and engaged student participation (i.e., feasibility); (2) Test if teachers and students found the prevention program's components applicable, appropriate and satisfactory (i.e., acceptability); (3) Test if teachers and students found the kiR program useful in imparting knowledge and motivating changes in attitudes and behaviors related to substance use (i.e., utility). Data were drawn from post-test evaluations completed by kiR students (N=348) and teacher-implementers (N=7) during a pilot test in two Nairobi-area secondary schools. Quantitative data were analyzed using descriptive statistics. Qualitative data were coded and content-analyzed. Students evaluated kiR positively: large majorities participated highly (feasibility); viewed kiR as highly satisfactory, interesting, and capturing their attention (acceptability); and reported it provided useful and highly applicable information (utility). Teachers were nearly unanimous that kiR was feasible, addressed youth substance use well and engaged student interest, but also noted technical issues in delivery (equipment, power interruptions), insufficient time to complete lessons, and a need for more training. Findings demonstrated that kiR is feasible for implementation in Kenya with attention to technical and class size challenges; with highly acceptable, applicable and satisfactory content; and demonstrable impact on acquiring knowledge and skills to help adolescents resist substance use. Future research is needed to adapt the implementation model for Kenya and test the efficacy of kiR in a randomized controlled trial with a larger and more representative sample of schools.

Keywords: *Early adolescence, Substance Use, Prevention, Feasibility, Acceptability, Utility*

Introduction

Adolescence is a phase of development when youth establish patterns of behaviors and life skills that may protect them from negative health outcomes (Steinberg, 2017). From a health promotion and disease prevention perspective, it is a window of opportunity to intervene and prevent negative health behaviors that frequently begin during this phase and may continue into adulthood, such as substance use (Stanis & Andersen, 2014). Early substance use remains a global public health concern. Substance use has been associated with poor health and overall well-being, increased risk for development of cognitive deficits (e.g., poor academic performance), development of aggressive behavior, subsequent substance use disorders, and has been identified as a leading risk factor for premature death among adolescents (Hamidullah et al., 2020; Ozeylem et al., 2021).

To address the prevalence and negative consequence of adolescent substance use, researchers have developed evidence-based substance use prevention programs for delivery in schools (Tremblay et al., 2020). An important early phase in intervention research is a feasibility study in which the intervention is delivered with a small number of participants from the target setting or community to assess if implementation is possible, and whether the intervention is considered feasible, acceptable, and useful to participants and implementers. These preliminary assessments determine if an intervention is appropriate for further testing (Melnyk & Morrison-Beedy, 2018). Feasibility assessment helps establish whether the structure, content, strength and delivery of the intervention are appropriate for the cultural and contextual background of the target audience (Bowen et al., 2009; Weiner et al., 2017). These are considerations of the intervention's social validity, the extent to the key stakeholders view the intervention's goals as socially significant, its procedures as socially acceptable, and its outcomes as socially important (Carter & Wheeler, 2019; Gadke et al., 2021). As a result of feasibility studies, some program components may be modified to better meet the needs of the community in which the intervention is implemented. However, core elements that build effective evidence-based substance use prevention programs need to be retained intact (Pearson et al., 2020). By balancing the need for adaptation with that of ensuring fidelity to the intervention's core components, programs are able to better address the distinct needs of the community and produce the desired outcomes.

In Kenya, a lower-middle-income country located in Eastern Africa, one in five adolescents are reported to have used at least one psychoactive substance in their lifetime (National Authority for the Campaign against Alcohol and Drug Abuse [NACADA], 2019). Approximately 25% of students entering university-level education in Kenya report having consumed alcohol and/or other substances, demonstrating a need for earlier intervention strategies to delay and/or prevent the initiation of alcohol and substance use (Musyoka et al., 2020). Moreover, research has also identified an increasing trend of substance use among Kenyan youth (Masese, 2020). Several strategies, coordinated by the NACADA, have been implemented by Kenyan authorities to mitigate alcohol and substance use among adolescents, such as restricting alcohol sales to minors or limiting sales around schools (Kageha, 2015; Ondieki, 2017). However, evidence-based prevention interventions are lacking; schools typically include only one-shot health education sessions addressing myths and facts of alcohol and drug abuse (NACADA, 2021). Further efforts are needed

to prevent the early onset of substance use in Kenya.

The overall aim of this study was to assess the feasibility, acceptability, and utility of implementing an evidence-based substance use prevention program in secondary schools in Kenya. Keepin' it REAL (kiR) is a school-based universal substance use prevention program for adolescents originally developed and tested in the U.S. (Marsiglia & Hecht, 2005; Kulis et al., 2005). Subsequently, kiR has been culturally adapted to serve the needs of diverse populations and tested extensively in the U.S., several countries in Latin America and Spain, and has proven effective at preventing and reducing substance use among adolescents (Cutrín et al., 2021; Kulis et al., 2021; Marsiglia et al, 2019). The kiR curriculum focuses on building specific life skills in order to manage social pressures to use substances and prevent other risk behaviors (Gosin et al., 2003). The behavioral skills learned in this intervention aim to empower adolescents to successfully resist substance use through a variety of strategies (Kulis et al., 2011; Marsiglia et al., 2009) which correspond to the acronym REAL: Refuse, Explain, Avoid and Leave. Refuse refers to declining substance offers, verbally or non-verbally, in a clear, direct and respectful manner. Explain involves providing reasons for not accepting the offer. Avoid refers to deciding to stay away from settings, situations or people where alcohol or drugs might be offered or available. Leave consists of exiting situations where alcohol or drugs are offered.

In 2019, the African Institute for Children Studies (AICS) and Arizona State University researchers and curriculum experts partnered to pilot the kiR program in secondary (middle) school settings in Kenya. In this partnership, technical support was provided by the research team to develop curriculum adaptations, design research methods and data collection protocols, and conduct statistical analyses. AICS managed the field operations, survey data collection, and coordinated the school partnerships where the intervention was piloted. Linguistic modifications were applied to the curriculum in order to make it appropriate within the Kenyan context and to meet national curriculum requirements. The program review process, prior to conducting the feasibility study, included an assessment of all materials, identification of specific elements requiring linguistic adaptation, implementation of the changes, and government approval (Marsiglia et al., 2023).

The overall aim of the current analyses is to assess the feasibility, acceptability, and utility of the kiR program, with linguistic modifications, for implementation in middle-school settings in Kenya. We examined three specific objectives: (1) Test if the program can be successfully delivered by assessing whether teacher-implementers agreed that kiR was suited to their educational context and engaged student participation (i.e., feasibility); (2) Test if teachers and students found the prevention program's components applicable, appropriate and satisfactory (i.e., acceptability); (3) Test if teachers and students found the kiR program useful in imparting knowledge and motivating changes in attitudes and behaviors related to substance use (i.e., utility).

Methods

Study design

A convenience sample of two Nairobi-area secondary schools was recruited for the study based on the following selection criteria: willingness and ability of principals and teachers to implement the kiR program, expressed

concern about student access to and use of substances in the school, and school enrollments (size, socio-economic profile) typical of the area. Regular teachers of students in the equivalent of 7th grade delivered the 10 lessons of the kiR curriculum during scheduled school hours between June and November 2019. Schools received projector equipment to deliver the videos that accompany the curriculum.

The study utilized mixed methods (Cresswell & Clark, 2017), drawing on responses from kiR students on a self-administered post-test questionnaire in January 2020, and written evaluations of kiR on a questionnaire completed by their teachers after they finished implementing the program. The initial research design called for focus groups and face-to-face interviews with kiR teachers in early 2020, but was changed due to COVID-19 interruptions to questionnaires completed by the teachers in January/ February 2021 as schools began to re-open.

Participants

The student respondents (n = 348) were enrolled in two Nairobi-area secondary schools in the equivalent of 7th grade. They ranged in age from 11 to 16 (M = 12.9; SD = 0.97), with slightly more female (55.2%) than male (44.8%) students. About half resided with both parents (52.4%) and most of the rest with one parent (42.4%). Students had an average of 2.8 siblings and their households contained an average of 4.9 people. One-third of the students reported that they went hungry due to a lack of food at home, either "sometimes" (26.2%), "most of the time" (4.6%) or "always" (2.3%).

Seven of the eight teacher-facilitators of the kiR program provided written kiR feedback. They were mostly female (6/7), had either a university degree or a college certificate in teacher training, and an average of 20 years of teaching experience. Their main subject areas were social studies and language, science, or math.

Data collection

The student and teacher questionnaires each contained both closed-ended and open-ended questions. The closed-ended questions were used to assess multiple facets of feasibility, acceptability and utility. Content analysis of the open-ended questions provided verification of the quantitative results, identified the more commonly- and strongly-held views, and identified areas of enthusiasm and concern about the kiR program.

Quantitative data collection

The 18 questions for teachers had identically scored responses (1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree). Student questions had several types of response options, detailed below.

Feasibility. 1) Intervention Fit (3 items): Teachers reported if they felt the kiR program met its prioritized goal of addressing student use of alcohol and drugs, whether they would recommend its continued implementation in their school and in other primary schools, and whether they experienced problems or technical issues in the implementation. 2) Practicality-Student Participation (3 items): Students reported in two items how much they participated in kiR class activities (1 = not at all, 2 = a little, 3 = some, 4 = a lot), and how many of the five kiR videos they remembered seeing (0 to 5). Teachers reported in one item whether they agreed that students were excited to participate in kiR. 3) Practicality-Facilitator Engagement (1 item): Students assessed whether their

teacher taught the lesson enthusiastically (1 = strongly disagree to 4 = strongly agree).

Acceptability. 1) Satisfaction (10 items): students indicated in 4 items how much they liked the kiR program (1 = did not like it at all, 2 = did not like it much, 3 = liked it, 4 = liked it a lot), including its various components (videos, homework, classroom activities) and overall. Teachers reported in 6 items their level of satisfaction with kiR overall, and specifically with the teacher manual, student manual, lesson activities, homework, and lesson timing/pacing (strongly disagree to strongly agree). 2) Comfort with topics and activities (6 items): students reported in 4 items whether kiR was interesting, fun, easy to pay attention to, or boring (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). Teachers reported in two items whether their students liked the materials in the program, and whether students reacted positively to the videos (strongly disagree to strongly agree). 3) Understanding of content (1 item): Teachers assessed whether students understood the materials in the program.

Utility. 1) Knowledge (4 items): students reported in two items whether kiR gave them useful information (1 = strongly disagree to 4 = strongly agree), and how much they learned from it (1 = not at all, 2 = a little, 3 = some, 4 = a lot). Teachers reported in two items whether the kiR program was valuable to their students overall, and specifically whether they believed their students learned valuable skills. 2) Applicability (6 items): students assessed in 3 items the relevance of the kiR content, whether it was "like my life", "like youths I know", and like situations that students they know get into. Three additional student items assessed authenticity, whether the situations portrayed in the kiR curriculum were realistic, whether characters in the kiR videos seemed real, and whether kiR was believable (1 = strongly disagree to 4 = strongly agree). 3) Impact (7 items): Students reported whether they talked about the kiR program with various people in their social network: parents, siblings, cousins, other family members, friends, and others. These 6 items were assessed separately (0 = no, 1 = yes) and through a count of the number of different types of people they had talked to (0 to 6).

Qualitative data collection

Teachers who facilitated kiR lessons at the two intervention schools responded in writing to ten open-ended questions (see Table 4). Questions addressed general ("What was your experience as facilitators of the keepin' it REAL program?") as well as specific ("What lessons and activities were your favorites to teach/facilitate?") reactions to teaching the curriculum lessons. While the majority of the teachers completed the open-ended evaluation in its entirety, two respondents left a portion (5 questions) blank. Responses to each question were typically one or two sentences in length.

The post-test questionnaire completed by kiR student participants included one final open-ended question: "Please tell us the most important thing you learned from keepin' it REAL." Students wrote in an open-ended response, usually providing one or two sentences or phrases (average of 15 words).

Data analyses

The quantitative data were analyzed using descriptive statistics (means, standard deviations and frequencies) in SPSS 27. The qualitative data from the post-test questionnaire completed by kiR student participants were coded by two independent coders from the research team in three

sequences: (1) an initial inductive open coding session of the 308 responses; (2) checks on interrater reliability, resolution of responses coded differently by the two coders (fewer than 8% of responses), and identification of final primary codes by consensus; and (3) re-coding to add additional secondary codes and analysis layers. If responses contained elements of more than one code, the two coders reached consensus on the primary code. The first two coding sequences established five primary codes for the student responses: 1 - REAL Strategies/ Skills; 2 - Strategies/Skills (Not REAL); 3 - Substance use effects/consequences; 4 – Attitudes; and 5 - Program comments. The third sequence delineated secondary codes under the primary codes. Under the primary code of REAL Strategies/Skills there were five secondary codes: 1-1 Mention of R(efuse); 1-2 Mention of E(xplain); 1-3 Mention of A(void); 1-4 Mention of L(eave); 1-5 General mention of REAL. Secondary codes for the primary code of Substance use effects/ consequences were: 3-1 Individual; 3-2 Social (peer, family, and social). The primary code of Attitudes had two secondary codes: 4-1 Towards substances; 4-2 Towards self-value. The Program comments primary code had three secondary codes: 5-1 Positive; 5-2 No comment or Negative; 5-3 Other. Multiple codes were applied to the student responses if students mentioned more than one thing that they learned, including multiple overall primary codes and more specific secondary codes, when possible. The qualitative data from teachers who facilitated kiR lessons at the two intervention schools were independently coded by two members of the research team. One coder developed a conceptual scheme from a literature review, including major codes of feasibility, acceptability, and utility, and sub-codes under each one, such as intervention fit, resource implications, implementation characteristics, practicality, and fidelity (under feasibility). The other coder applied the conceptual framework to complete the coding work and categorized verbatim quotations from the teacher's post-intervention self-evaluation. Once the two coders independently completed coding, the analyses were then compared to assess intercoder reliability. The few discrepancies were resolved by consensus of the two coders and verified by a third researcher.

Results

Quantitative findings

Table 1 summarizes the students' quantitative assessments of kiR. Students participating in kiR evaluated the program very positively overall, as indicated by large pluralities answering with the two most favorable responses and means midway between those responses. As indicators of program practicality (participation, engagement), measuring feasibility, two-thirds (66%) of students reported that they participated "a lot" in kiR, and 84% viewed their teachers as highly engaged by agreeing that the lessons were taught enthusiastically by their teacher. On average, however, students recalled viewing only about half of the 5 program videos. Regarding program acceptability, students reported being highly satisfied and feeling comfortable with the kiR topics. Large majorities (85% or more) said that they liked or loved kiR overall, as well as its separate components. Over 80% found the program topics to be highly acceptable: interesting, fun, and easy to pay attention, as well as not boring (about 55%). In assessing the program's utility, over 80% said the program provided useful information and that they learned "a lot" from it; these reports show that students understood the curriculum contents, an indirect indicator of acceptability. More than two-thirds agreed or agreed strongly

that kiR was applicable to their own lives and that of other youth they knew, as well as authentic (realistic, believable). An indicator of the impact of the program was that nearly all students (all but 3%) talked about it with family members and/or with friends, most of them talking to three or more different categories of people in their social networks.

Table 2 contains the teachers' assessments of kiR on closed-ended questions. Large pluralities reported that the intervention was highly feasible: a very good fit in addressing substance use issues, recommended for future use in their own and in other primary schools, and engaging the participation of their students. However, most teachers also reported experiencing technical problems in implementation that would need to be addressed to make the intervention more feasible. On the other hand, teachers viewed the curriculum quite favorably on multiple dimensions of acceptability. They reported high levels of satisfaction with the program overall and each of its components, with somewhat less consistent satisfaction with the lesson activities and videos than with the manuals and assignments. Large majorities, however, expressed dissatisfaction with the timing or pacing of the lessons: 14% expressed strong dissatisfaction and another 57% expressed dissatisfaction. All the teachers found kiR to be acceptable to their students in terms of feeling comfortable with the topics in the program and its videos, and a large plurality thought students understood the contents well. Finally, regarding utility, all the teachers agreed that kiR provided students with valuable knowledge and skills.

Qualitative findings

Students

The student responses to the question about the most important thing they learned from kiR were coded in two ways: 39% of the responses could be coded unambiguously into a single theme, but the remainder mentioned two (41%) or three (10%) things that the student learned. The independent coders agreed on a theme for the single or first mention, as well as noting themes for any second or third mentions. Table 3 enumerates the responses, breaking them down into major theme categories.

Whether examining distributions for the first mention or for all mentions, the most common response was that students thought the most important thing they learned was the REAL drug resistance strategies. This theme described nearly two-thirds of the first mentions (65%) and about half of all mentions (49%). The theme emerged in different configurations. Most common was to mention all four REAL strategies by name: refuse/refusing, explain/explaining, avoid/avoiding, and leave/leaving (23% of first mentions and 17% of all mentions). The second most common configuration referenced only the program's name or the REAL acronym, e.g., keeping it REAL, or using REAL (17% of first and 13% of all mentions). Remaining responses under this theme mentioned 1, 2, or 3 of the REAL strategies specifically. The following are representative of the responses under the overall theme of the REAL strategies:

> *"It taught me how to: refuse and avoid drugs, explain why I don't want to use drugs, in case of anything I should leave."*
>
> *"I learned that your friend gives drugs you must avoid leave and then explain to her or him and he and she will understand you."*

In another breakdown across all the instances

where students cited specific REAL strategies, whether alone or in combination, the strategy mentioned most often by students was avoid (by 57% of the students), followed by refuse (47%), explain (42%), and leave (37%) (data not presented separately in Table 3).

The second overall theme mentioned most commonly by students was that they learned about the effects of substance use (16-17% of first mentions and all mentions). The comments made references to undesirable effects of substance use, including (1) general statements that drugs are bad, dangerous, or a threat ("Drugs are very harmful substances and can destroy my life"); (2) specific negative health consequences of drug use ("Don't take drugs because they are bad and they can affect our body and may lead to death"); and (3) unwanted social consequences ("Drugs are not helpful at all and they will only ruin your life and your future plans and goals").

A third overall theme consisted of references to general or specific life skills learned through the kiR program, such as risk assessment (11-12% of first and of all mentions).

> *"It showed me the right way of life and how I will face the situations that will come in my life and it help me in situation[s] when my friends come with something bad I can use real.*

> *"We [must] be careful with the choices we make because others may destroy our future."*

The fourth student theme referred to important social relationships connected to substance use risk, such as parents, extended family, neighbors, friends and other peers (5% of first mentions and 20% of all mentions).

> *"That we should be careful in what I am being given and to whom is the person giving…*

> *"Doing wrong things. It will prepare my future. It will make me stop walking with bad company…"*

The few remaining miscellaneous student comments (2%-3% of first and of all mentions) either mentioned aspects of the curriculum that they liked ("watching to videos"), or were responses of "don't know" and "nothing."

Teachers

Information from teacher open-ended questions is summarized in Table 4.

On feasibility, teachers had overall positive opinions about the kiR program implementation and their teaching experience. Overall, kiR was perceived as practical for implementation in Kenyan schools. Teachers viewed kiR as fitting the main intervention objective of preventing substance use among students, and viewed their students as open to participation in the program.

> *"it was a good experience as it gave an opportunity I saw long missed because I have witnessed the effect of drugs in school children and have not been able to address to this." [Teacher #5]*

Teachers mentioned other implementation characteristics of the kiR program to express their perception of how easy or difficult it was to implement. For example, the complexity of demands from other school activities could complicate or interrupt delivery of the kiR curriculum, requiring flexibility and the adoption of alternative strategies, yet the manualized structure of the curriculum was

viewed as positive feature.

> *"The sessions were completed. It was smooth but fast due to other formal and non-formal activities in the school." [Teacher #4]*

> *"The sequence in lessons delivery were structured and showed how each strengthened the other" [Teacher #7]*

Other positive implementation characteristics perceived by teachers related to student engagement. Teachers noted student participation in the kiR lessons and aspects of the curriculum that students enjoyed the most, especially lessons with interactive group activities, such as role-playing, singing, or drawing.

> *"Dramatization and watching the programmes. This is because it was real to them." [Teacher #1]*

> *"role playing because it reflects to me the pupils' feelings about some issues and through this they may understand other feelings and also be willing to learn ways of responding to issues without adding more problems" [Teacher #5]*

However, teachers identified some barriers that could affect program feasibility. For example, teachers thought needed technical resources were sometimes insufficient, including utilities and technology use issues.

> *"Electricity was a challenge sometimes but we postponed the programme to a different date. The learners are very many in our school we have no hall, so we used the school field for our meetings mostly. When watching, I grouped the students to be able to fit our IT room." [Teacher #1]*

> *"equipment use challenges especially flash disk jamming and lack of consistent power during some lessons" [Teacher #7]*

Some comments identified challenges to feasibility related to teacher training and teaching materials, with recommendations for more extensive and detailed teacher preparation and more technical learning materials.

> *"Teachers to be trained two to three days. More teaching guide and learners to be added enough time to be trained." [Teacher #2]*

> *"teachers didn't get enough training before starting implementing the program in our school." [Teacher #5]*

In addition, most teachers reported time concerns because of rushed and limited time to deliver the lessons considering the other learning activities in school.

> *"Time was a challenge to many activities in the school, though I was able to complete the sessions in the prescribed time. Sometimes I had to use some few minutes during lunch time break." [Teacher #1]*

> *"we worked as a team but felt that time was actually not enough because in the case of those weeks there were so many other school activities that interfered with our planned days. Sincerely speaking we really squeezed the time available for it" [Teacher #5]*

On the other hand, teachers confirmed the acceptability of kiR as a prevention program in Kenya. Most of the teachers thought their students were satisfied and enjoyed

the curriculum lessons. Acceptability was reflected in teacher reports of a high level of student satisfaction and comfort with topics/activities.

> *"Fun and real because the learners were affected and really enjoyed the program." [Teacher #3]*

> *"Learners enjoyed learning to solve life conflicts." [Teacher #2]*

Although most teachers thought their students understood the concepts and activities in the curriculum, two teachers offered suggestions for increasing the understanding of content. One proposed the curriculum content should be improved by extending beyond substance use related issues ("adding awareness of sexual abuse and child rights in our country" [Teacher #1]). Another teacher reminded the research group of nuances in local worldviews ("some of the norms and values are not in African culture." [Teacher #1]).

Teachers championed the utility of the kiR prevention program in Kenya highlighting that kiR brought helpful knowledge and information to students. In addition, teachers viewed the situations presented in the program as very real to their students. These authentic scenarios help students to apply the knowledge and strategies in their own lives.

> *"the program was very informative and educative and varied ways of seeking solutions to issue of drugs and alcohol abuse in adolescents" [Teacher #6]*

In addition to the teachers' reports that kiR imparted needed knowledge and skills that were applicable to their students' lives, they noted its impact on changing students' and teachers' cognition or behavior. According to teachers, the influence of kiR on students went beyond the class, and even parents reported the positive change in students' behaviors.

> *"They applied what they learnt because some of the parents spoke during parents' day on how their kids have improved behaviour wise. Even some teachers have noticed the difference." [Teacher #4]*

For teachers themselves, the experience of delivering kiR also prompted them to integrate knowledge of substance use into their teaching and expanded their classroom- and conflict management skills.

> *"when going on with normal lessons we integrate parts of this pro-gramme. For example, dangers of drugs and sub-stance abuse and self-valuing" [Teacher #5]*

> *"I have learned how best to manage some situations while dealing with children" [Teacher #6]*

Discussion

The aim of this study was to assess the feasibility, acceptability, and utility of the kiR curriculum for use with early adolescent in Kenyan secondary schools from the perspective of students and teacher-implementers, who provided both quantitative and qualitative evaluations. Several key aspects of kiR were highlighted as enhancing its feasibility, particularly by teachers: its good fit in addressing youth substance use in a manner understandable to students; ability to engage students through role plays, narratives and dramatization; and the manualization of the curriculum, which aided practical delivery. Highly interactive instructional methods are not common in the public schools participating in the study, which may have contributed to the enthusiastic student reception of the program.

However, most teachers noted a similar set of barriers to feasibility in schools serving these low income populations: technical problems such as equipment failure and electricity outages; difficulties completing lessons within the allotted time and implementation schedule; a desire for more extensive training on curriculum delivery; and interference or interruptions due to other school activities. Some problems were exacerbated by very large class sizes, which complicated delivery of the highly interactive lessons. These challenges, and potential solutions to them, have also been reported in other implementations of kiR in settings outside the U. S. (Cutrín et al., 2023; Marsiglia et al., 2018, 2022).The original design of the curriculum for U. S. classrooms of 25 or fewer students may require adjustments in Kenyan classrooms of double that size, perhaps by dividing lessons into multiple sessions, using breakout groups to practice the interactive lesson activities, and/or alternating groups of students to enact or demonstrate the activities.

Students provided strong and extensive endorsements of the acceptability of kiR, including high ratings of satisfaction with the program and each of its components, and comfort with its topics and activities. In open-ended responses, some students also made specific mention of their satisfaction with the program and its topics. Teachers were also very satisfied with the curriculum overall, especially the manuals, assignments and accompanying videos, and reported that their students also liked the materials. There were, however, suggestions for local community theater groups to re-enact the videos to contextualize the examples and language for youths in Kenya. Most teachers were not satisfied with the timing or pacing of the lessons. In addition to the challenges of large class sizes, teachers faced pressures to restrict the allocation of lesson time for a training program viewed as extra-curricular.

The utility of interventions like kiR reflects their ability to promote learning and influence changes in behaviors. Students reported that they learned useful information about substance use that was highly applicable to themselves and their peers, including learning the drug resistance skills that are the core of the curriculum, knowledge which impacted them enough to want to share it with their family and peers. Nearly all the students' open-ended responses addressed the utility of the intervention, specifically the usefulness of the knowledge that was learned. These included the REAL resistance strategies—either all together, a subset, or a single strategy—as well as knowledge the student acquired about drugs or their effects, and related life skills. Students also mentioned specific actions prompted by participation in the intervention: how they planned to employ the knowledge of drugs and coping skills that they gained from kiR in their lives. Teachers echoed these sentiments, noting their students learned valuable knowledge and life skills, which they saw the students applying outside class and which the teachers incorporated into their other classes.

There are notable study limitations to consider in assessing the findings. Only two schools were in the implementation arm of the study, which was carried out only in the Nairobi area, limiting the ability to generalize findings to that or other regions of Kenya. Information from a wider selection of Kenyan schools could reveal variations in the social validity of kiR and surface more implementation barriers to be addressed. Data about the implementors of kiR was limited to self-reports from the teachers who delivered the curriculum and a single item where students reported teacher enthusiasm.

Due to COVID-19 disruptions, the original plans to conduct focus groups and intensive interviews with the implementing teachers were changed to soliciting their written feedback, sacrificing opportunities to follow-up on open-ended questions. The views of other stakeholders, such as school principals and educational system authorities, would help expand assessment of the fit of kiR curriculum within institutional structures.

Conclusion

According to our findings, students and teachers in Kenya voiced strong and largely consistent views that kiR: could be implemented feasibly, although needing to address technical, training and time-constraint barriers; had highly acceptable and satisfactory content; and provided impactful learning of useful knowledge and skills to help early adolescents resist substance use. Given these favorable results, future research needs to focus on making adaptations to kiR to address identified implementation challenges, and conduct a randomized controlled trial with a larger and more broadly representative sample of schools to test the efficacy of the program before scaling up the intervention in Kenya.

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Table 1

Student Posttest Evaluation of keepin' it REAL

	M	SD	% in strong accordance	N	Range
Feasibility-Practicality:					
Number of program videos viewed by student	2.43	1.59	–	346	0 - 5
How much did you participate in the program?	3.33	1.06	66% [a]	346	1 - 4
My teacher taught the lessons enthusiastically	3.22	0.89	84% [b]	341	1 - 4
Acceptability-Satisfaction:					
Liked the program overall	3.65	0.61	94% [c]	342	1 - 4
Liked the videos	3.53	0.68	85% [c]	321	1 - 4
Liked the homework	3.49	0.73	85% [c]	342	1 - 4
Likes the classroom activities	3.61	0.62	92% [c]	335	1 - 4
Acceptability-Comfort with Topics:					
The program was interesting	3.33	0.85	87% [b]	342	1 - 4
It was fun	3.18	0.94	81% [b]	348	1 - 4
It was easy to pay attention to	3.28	0.85	83% [b]	344	1 - 4

The lessons bored me	2.41	1.12	45% [b]	347	1 - 4
Utility-Knowledge:					
The program gave me useful information	3.43	0.77	89% [b]	344	1 - 4
How much did you learn from the program?	3.58	0.93	80% [a]	346	1 - 4
Utility-Applicability:					
It was like my life	3.05	0.96	72% [b]	348	1 - 4
It was like kids that I know	2.94	0.99	67% [b]	345	1 - 4
I know youth who get into situations like these	3.12	0.90	79% [b]	345	1 - 4
The situations were realistic	3.21	0.91	84% [b]	344	1 - 4
It was believable	3.33	0.83	86% [b]	340	1 - 4
The video characters seemed real	3.14	0.97	79% [b]	338	1 - 4
Utility- Impact:					
Talked about program with parents	0.83	0.38	–	336	0 - 1
Talked about program with siblings	0.62	0.49	–	326	0 - 1
Talked about program with cousins	0.57	0.50	–	321	0 - 1
Talked about program with other family members	0.59	0.49	–	319	0 - 1
Talked about program with friends	0.87	0.34	–	342	0 - 1
Talked about program with others	0.63	0.48	–	306	0 - 1
Talked about program with no one	0.03	0.43	–	300	0 - 1
# of different people R talked to about program	3.81	1.77	–	352	0 - 6

[a] % 'a lot.' [b] % 'agree' or 'strongly agree.' [c] % 'liked it' or 'loved it.'

Table 2

Teacher Evaluation of keepin' it REAL (N = 7)

	M[a]	SD	% "Agree" or "Strongly Agree"
Feasibility-Intervention Fit-Resource Implications:			
kiR addressed student issues with alcohol and drugs	4.57	0.79	86%
Would recommend implementing kiR in future in my school	4.86	0.38	100%
Would recommend implementing kiR in other primary schools	4.86	0.38	100%
Experienced problems or technical issues while implementing kiR	4.43	0.79	86%
Feasibility-Practicality:			
Students were excited to participate in kiR activities	4.71	0.76	86%
Acceptability-Satisfaction:			
Overall satisfaction with the kiR curriculum	4.43	0.54	100%
Satisfaction with the teacher manual	4.29	0.49	100%
Satisfaction with the student manual	4.29	0.49	100%
Satisfaction with the lesson activities	3.86	0.39	86%
Satisfaction with the homework assignments	4.29	0.49	100%
Satisfaction with the videos	4.00	1.00	100%
Satisfaction with the timing (or pacing) of the lessons	2.29	0.95	14%
Acceptability-Comfort with Topics:			
Students liked the materials in the program	4.43	0.54	100%
Students reacted positively to the videos	4.86	0.38	100%
Acceptability-Understanding Content:			
Students understood the materials in the program	4.29	0.76	86%
Utility-Knowledge:			
Overall, the kiR program was valuable to my students	4.86	0.38	100%
My students learned valuable skills from the program	4.71	0.49	100%

[a] *All items scored 1='strongly disagree', 2='disagree', 3='neither', 4='agree', 5='strongly agree'.*

Table 3

Student Open-ended Responses: Most Important Thing You Learned from keepin' it REAL

	1st	2nd	3rd	All mentions	% of 1st	% of all
REAL strategies						
General "REAL"	52	12		64	16.88	12.93
Mention of all 4 REAL strategies	71	12	2	85	23.05	17.17
Mention of 3 REAL strategies	23	1		24	7.47	4.85
Mention of 2 REAL strategies	25	4	2	31	8.12	6.26
Mention of 1 REAL strategy	30	7	1	38	9.74	7.68
Subtotal REAL	**201**	**36**	**5**	**242**	**65.26**	**48.89**
Substance use effects	51	23	6	80	16.56	16.16
Life Skills	35	22	5	62	11.36	12.53
Social relationships	15	70	12	97	4.87	19.60
Program comments	3	6	2	11	0.97	2.22
Nothing, don't know	3			3	0.97	0.61
Total	**308**	**157**	**30**	**495**	**100.00**	**100.00**

Table 4.

Teacher Open-ended Questions and Summary of Reponses

	Question	Summary / main idea (# of teachers)
Acceptability - Satisfaction	In general, what was your experience as facilitators of the keepin' it REAL program?	fun, real and/or enjoyable to students (5); addresses/provides solutions to drug use problems of school children (2)
Acceptability – Comfort with topics	What lessons and activities were your favorites to teach / facilitate? Why? What activities were the most stimulating for your students? Why?	Reasons: interactive (role plays), students interested and ask questions (2); providing needed skills, solving life conflicts, making choices (2); teaching drug resistance strategies (2) Role playing, dramatization, imagining (6); singing (1)
Feasibility – Resources, training, time	Are there any additional skills, training, or content (supplemental materials) that would have been helpful to you as a keepin' it REAL facilitator? How was the rhythm of the sessions while you were doing them? To what extent were you able to complete the sessions in the prescribed time?	Insufficient time, tight schedule, rushed, too fast (7); interference from/with other formal activities (2); compensating by using lunch time, homework assignments (1)
Feasibility – Implementation complexity	What logistical issues did you have to deal with (for example: technical equipment not working) and how did you solve it?	Power outages (4); equipment (flash drive) failures (2)
Utility – Impact on students	What are your evaluations of the impact of the programme on the students? Did students apply what they learnt from the programme outside of class?	Yes-solved conflicts outside school (1); parents noted effects, e.g., improved behavior (2); students very enthused; looked forward to next lesson (2)

Utility – Impact on teachers	Has giving the keepin' it REAL program caused any change in you as professionals? Has there been a change of perspective in the learning approach?	Increased my interaction with students (1); Improved understanding of how students make own choices (1); improved classroom management (1); integration of kiR content in regular lessons (1)
General	If you were to facilitate the lessons and activities again, which lesson or activity would you significantly improve and why?	Incorporate African norms/values (1); more time for videos, activities (3); students to explore: personal values/decision-making/ consequences, reasons to not use drugs; and ways to avoid (and not avoid) trouble (3)
General	Please indicate the three things that you liked the most about keepin' it REAL	Role playing, dramatization (videos)(4); teaching/learning about drugs without "forcing it" on students (1)
General	...and the three things that you liked the least about the program	Lesson timing (3); need more training (2); videos not African (1); equipment problems (1)

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Influence of Codeine and Toluene Abuse on Criminal Behaviour among Youths in Minna Metropolis, Niger State, Nigeria

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Abstract

Criminal behaviour has increased in recent years in Nigeria. Violent crimes have graduated from the common petty offences to sophisticated crimes of mass killings, banditry, kidnapping, armed robbery to bombing activities across the landscape. This study investigated the influence of Codeine and Toluene abuse on criminal behaviour among youths in Minna, Niger State, Nigeria. A cross-sectional survey design was used in this study. Two Local Government Areas were purposively selected while accidental sampling technique was used to select 249 youths (154 males, 95 females) with age ranges from 15-35 years to respond to two adapted questionnaires: The Alcohol Abuse Disorders Identification Tests (AUDIT) and Comprehensive Misconduct Inventory (CMI) 58 (Update F). Data collected were screened, coded and analysed using SPSS Version 23. Descriptive statistic and t-test of independent sample means were used to summarize the data where the value of p <.05 was considered significant. The results indicated that prevalence of Toluene abuse among youths in Minna was 33.7% and Codeine 20.5%. The results further showed a significant difference in criminal behaviour between youths who abused Toluene and those who did not abuse Toluene [t (199) = -4.991, p <.05]. However, there was no significant difference in the level of criminal behaviour between youths who abused Codeine and those who did not abuse Codeine [t (199) = -.159, p >.05]. The study concluded that Toluene and Codeine abuse among youths tend to be progressively high in the study population. The study recommended that more attention should be given toward the possession, sale and abuse of Codeine and Toluene among youths by both law enforcement agencies and health institutions in Niger State and Nigeria.

Keywords: *Codeine, Toluene, Substance abuse, Criminal Behaviour, Minna/ Nigeria*

Introduction

Criminal behaviour is any kind of antisocial behaviour which is punishable by laws or norms as stated by the society. These behaviours range from offences such as bullying, domestic violence, stealing, pick-pocket to sophisticated crimes of mass killings, banditry, kidnapping, armed robbery, bombing activities, etc. Psychologists have confirmed that criminal behaviour is caused by nature and nurture (Ikoh et al., 2019). The nature causes of criminal behaviour is attributed to individuals' genetic makeup while the nurture causes of criminal behaviour emanated from the environment in which individuals were brought up (Ikoh et al., 2019).

One of the nurture causes of criminal behaviour is when individuals come in contact with, used and abused substances (or drugs). The World Health Organisation (WHO, 2014) defines substance abuse as the harmful or hazardous use of psychoactive substances which include alcohol and other illicit drugs. In the context of this study, substance abuse is described as when an individual takes non-prescribed drugs to the extent that the individual becomes dependent on such drugs so much that it causes the individual to commit crimes.

The prevalence of drug abuse in Nigeria is estimated at 14.4% or 14.3 million among people aged between 15 and 64 years (Olanrewaju et al., 2022). One of the drugs commonly used and abused in Nigeria investigated in this study is Codeine which is an opiate medically prescribed to treat pain, cough and diarrhoea (Akande –Sholabi et al., 2019). Codeine as a depressant causes drowsiness, impaired judgment, blocked speech, causes confusion and loss of coordination to the users. It contains a small amount of narcotics. According to global report on drug abuse, Codeine is considered as the most consumed opium based on tonnage (INCB, 2018). Also, it is widely abused substance because it has short acting, weak and a mild opiate content (Ogundipe, 2016). A study that used social media to analyse the trend in substance use suggested that Codeine abuse would likely become normalised and commercialised (Cherian et al., 2018) since it is readily available to purchase and use. In a qualitative study, Dankani (2012) examine the trend of substance abuse among youths in some states in Northern Nigeria. The result revealed that Codeine cough syrup was among those drugs that were frequently abused. The result further revealed that more females (95.5%) than males (23.4%) abused Codeine cough syrup among the study participants.

The second drug that is frequently abused among youth examined in this study is Toluene which is an aromatic hydrocarbon used in paint thinner and glue (Ogundipe, 2016). Toluene has been abused as a recreational inhalant by many youths. It has high potential to cause severe neurological harm to the users (Camara-Lemarroy et al., 2015). Toluene abuse affects the normal functions of the body system. Many youths who are between the age group of 15 and 27 both males and females are presently using Toluene More males (76.5%) than females (31.3%) youths abuse Toluene among the study participants in Northern Nigerian states (Ajayi, 2020). This goes to show the prevalence of Toluene use and abuse in Nigeria.

Codeine and Toluene are easily accessible opiates Over the Counter (OTC) drugs used for treatment of mild pain and as recreational drugs, respectively, which are prone to misuse and abuse even with the several side effects to the users (Chekezie & Ebuenyi, 2019; Osuh et al., 2021; Tiwari, 2020). The indiscriminate use and abuse of Codeine and Toluene have been directly linked to elements of criminal behaviours across various settings among youths of different age brackets (Olanrewaju et al., 2022), gender (Idowu, 2018). Onyeneke and Karam (2022) have confirmed the medical, psychological, social, economic, and security implications of substance abuse in Nigeria. Because of the increased Codeine and Toluene abuse, and no current empirical studies on the effects of these drugs among youths, there is a need to investigate the influence of Codeine and Toluene abuse on criminal behaviours especially in Minna metropolis.

Therefore, the general objective of this study was to examine the influence of Codeine and Toluene abuse on criminal behaviour among youths in Minna

metropolis. The specific objectives were to determine whether age, gender, religious affiliation, and occupational status influence Codeine and Toluene abuse that would cause criminal behaviour, while the hypothesis is whether Codeine and Toluene abuse would significantly have influenced criminal behaviour among youths in the study population.

Results from this study would help to improve understanding of these socio-demographic factors that influence youths into substance users and non-substance users in Minna metropolis. Also, the study findings would help forensic psychologists to design and implement psycho-education programmes to assist youths who have been affected by substance use in Minna metropolis. Finally, findings from this study would provide solutions on how the government could strengthen drug laws to curb drug use and abuse in the country.

Methodology

Research design:

This study was an ex-post facto study which adopted cross-sectional survey for data collection from a sample of youths in Minna metropolis. The researchers did not manipulate independent variables on dependent variable. The independent variables were self-reported abuse of Codeine and Toluene while the dependent variable was self-reported criminal behaviour among the participants.

Setting

The study was carried out among youths in Minna metropolis, Niger State, Nigeria. Minna is the capital of Niger State, in North-Central, Nigeria.

Sample and sampling technique

Purposive sampling was used to select two Local Government Areas (LGAs): Bosso and Chanchaga in Minna metropolis. Cluster sampling was used to select markets, schools and recreational centres with high concentration of youths from each of the two LGAs. Convenience sampling method was used to select participants for the study.

Instruments

Two instruments were used for data collection.

Drug Consumption:

This was measured using Alcohol Abuse Disorders Identification Test (AUDIT) to determine the rate of consumption of Codeine and Toluene. AUDIT screening test was developed in 1982 in collaboration with the World Health Organization to determine if a person is at the risk of abuse problem. Participants were asked to answer the questions in terms of their experiences in the past six months on the abuse of Codeine and Toluene. The first section measures abuse of Toluene which consists of 11-item. Items include: 'How often do you sniff gum/glue?' and 'How often during the last six months have you had a feeling of guilt or remorse after sniffing gum/glue?' The second section measures Codeine abuse and this consists of 11-item. Sample items include: 'How often do you abuse substance containing Codeine?' and 'Have you or someone else was injured as a result of your Codeine consumption?' the scores ranging from 0 to 28. For both subscales, the scoring are as follow: Low risk (0 to 10), i.e., no problem with Codeine or Toluene; Medium risk (11 to 16), i.e., take too much on occasion; high risk (176 to 20) of taking Codeine or Toluene could lead to causing harm; and addiction likely (21+), i.e., taking Codeine or Toluene is causing

harm. Alvarado et al. (2009) reported the scale Cronbach's alpha of 0.93 (test-retest reliability of 0.97). The scale Cronbach's alpha for the present study was established at 0.86.

Criminal Behaviour:

This was measured using Comprehensive Misconduct Inventory (CMI) 58 (Update F). Participants were asked to tick how many times they have taken part in certain activities during the last six months. Some of the questions include: 'How many times they have purposely damaged or destroyed property that did not belong to them, broken into a building to steal something or mess it up, abused soft drugs, done things just to bother authority figures (e.g. teachers, parents, other adults), joined a gang that was known to commit crimes...?' The CMI 58 (Update F) consists of six subscales:

- Soft Drug Abuse (SDA)
- Hard Drug Abuse (HAD)
- Minor Criminality (MC)
- Serious Criminality (SC)
- Driving Misbehaviour (DM)
- Bullying/Harassing (BH)
- Anti-Authority Misbehaviour (AA)

The subscales reflecting soft/hard drug abuse measured substance abuse factor, while the two modes of criminality were combined to give a general criminality factor. The CMI subscales have been found to be fairly reliable with Cronbach alphas ranging from 0.56 to 0.83 (Nathanson et al., 2006a). The overall index called Total Misbehaviour, has been found to have good reliability (= 0.89; Paulhus & Williams, 2002). Cheiffetz (2017) reported CMI Cronbach's alpha of 0.83. The scale Cronbach's alpha for the current study was established at 0.89.

Inclusion Criteria:

Youths within the ages of 15 and 35 living in Minna metropolis, Niger State met the inclusion criteria.

Procedure

Researchers were identified with the letter of introduction from the Department of Psychology, University of Ibadan, Nigeria. Participants were approached by the researchers to obtain their inform consents to participate in the study. The researchers briefly explained to them the purpose of the study and then asked for their consent to participate in the study. Participants who gave their consents were assured that their responses would be treated confidentially. Participants who can read were given the questionnaires to fill while those who were not able to read were interviewed by the researchers using the questionnaires (Those interviewed were 1% of the total participants). The self-administered questionnaire took less than 15 minutes to complete while the interview method took between 20 and 25 minutes to complete. 250 questionnaires were administered; one questionnaire was incompletely filled and was removed, left with 249 which were used for the analysis.

Data analysis

SPSS version 23.0 was used for data analysis. Descriptive statistic of frequency and percentage were used to summarise the research questions while t-test for independent samples mean was used to test the two hypotheses at a 0.05 level of significance.

Results

The study examined the influence of Codeine and Toluene on criminal behaviour among youths in Minna, Niger State, Nigeria. The results are presented in line with the stated research questions and hypotheses. First, the demographic variables of the study are presented.

Socio-Demographic Variables

Descriptive analysis of the data showed that 154(62%) of the participants were males while 95 (38%) were females. In term of age, 28% were between 15 and 19 years of age; 29% between 20 and 24 years of age; 25% between 25 and 30 years of age and 18% were between 31 and 35 years of age. In terms of their religious affiliations, 33% were Christians while 47% were Muslims, 14% were traditional worshippers while 6% did not indicate their religions. With respect to their marital status, 53% were singles while 47% were married and by extension, 59% of the participants belonged to monogamous family while 41% belonged to polygamous family. Educationally, 5% of the participants attended primary school, 18% secondary, 32% tertiary and 45% attended vocational institutions. In term of occupation, 39% were students, 6% civil servants and 55% were traders.

The results are presented in line with the specific objectives of this study.

Specific objective 1 examined whether gender would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis. The results as presented in Table 1 showed that 33.7% of the participants abused Toluene among whom 65.5% were males while 34.5% were females. Also, 20.5% of the participants abused Codeine, of whom 62.7% were males while 37.3% were females. This infers that Codeine and Toluene abuse were higher among male than female participants.

Specific objective 2 explored whether age would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis. The result as presented in Table 2 showed that 33.7% of the participants abuse Toluene among which 31% were between ages 15 and 19; 28.6% were between 20 and 24 of age; 28.6% were between 25 and 30 of age, and 11.9% were between 31and 35 of age. Also, 20.5% of the participants abuse Codeine among which 21.6% were between 15 and 19 of age; 23.5% were between 20 and 24 of age, 29.4% were between 25 and 30 of age, and 25.5% were between 31 and 35 of age. This infers that Toluene abuse is highest among participants between the ages of 15 and 19 while Codeine abuse is highest among participants between the ages of 25 and 30. This finding supported previous studies that these age brackets tend to be among the age groups that frequently used and abused substances.

Specific Objective 3 investigated whether religious affiliation would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis. The result as presented in Table 3 indicated 33.7% of the participants abused Toluene among whom 25% were Christians, 56% were Muslims, 13.1% were traditional worshippers and 6% belong to other religions. Also, 20.5% of the participants abused Codeine of whom 31% were Christians, 45.1% were Muslims, 14% were traditional worshippers and 10% belong to other religions. This infers that Toluene and Codeine abuse were higher among the Muslims.

Specific Objective 4 aimed to establish whether occupational status would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis. The result as presented in Table 4 showed that 33.7% of the participants abused Toluene among whom 46.4% were students, 3.6% were civil servants and 50% were traders. Also, 20.5% of the participants abused Codeine among whom 25.5% were students, 9.8% were civil servants and 64.7% were traders. This infers that Toluene and Codeine abused is highest among participants who were traders followed by students whereas civil servants were the least.

Now, the testing of the hypotheses:

Hypothesis 1 stated that Toluene use significantly influences criminal behaviour among youths in Minna metropolis. This was tested using t-test of independent sample means and the result is presented in Tables 5. The results showed significant difference in criminal behaviour between Toluene abusers and Non-Toluene abusers among youths [t (199 = - 4.991, p < .05] such that those who abused Toluene (M = 33.2, SD = 15.5) had higher criminal behaviour than those who do not abused Toluene (M = 16.7, SD =24.3). The hypothesis was supported.

Hypothesis 2 stated that Codeine use significantly influences criminal behaviour among youths in Minna metropolis. The hypothesis was tested using t-test of independent sample means and the result is presented in Table 6. The results indicated that there was no significant difference in criminal behaviour between Codeine abusers and non-Codeine abusers among youths [t (199) = -.159, p >.05]. However, observation of the mean difference shows that those who abuse Codeine (M = 22.6, SD =20.6) had higher criminal behaviour than non-Codeine abusers (M = 21.9, SD = 23.7). This hypothesis was partially accepted.

Discussion

The general purpose of this study was to examine the influence of Codeine and Toluene on criminal behaviour among youths in Minna metropolis, Niger State, Nigeria. Four specific objectives and two hypotheses were tested using descriptive statistic and t-test of independent sample mean, respectively.

The first specific objective that examines whether gender would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis shows high prevalence of Toluene (33.7%) and Codeine (20.5%) abused among youths in Minna metropolis which are higher compared to 10.9% of Toluene and 9.12% of Codeine abused reported by Ogundipe (2016) among youths in Minna, Niger State. This means Codeine and Toluene abused in Minna metropolis are progressively higher over the years. Also, the prevalence of Codeine abused in Minna is higher compared to the prevalence reported in the United States (0.57%) and South Africa (0.3%). Youths see Codeine and Toluene as 'thing of pride' to them such that those who do not use Codeine and Toluene are seen as outcasts and non-conforming to the standards of their peers. This finding supported the results obtained by Egbuonu et al. (2017) on the prevalence of Codeine and Toluene in the present study area. This increment requires urgent actions to prevent youths from being addicted to these drugs considering the health, social and occupational effects on them.

The second specific objective that explores whether age would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis reveals that Codeine abuse was highest among youths between the 25 and 30 age bracket

while Toluene abuse was highest among youths between the 15 and 19 age bracket. The variation in age observed infers that taking Codeine in the locality is more in vogue among middle adolescents and young adults than others age brackets. The finding in this study supported the previous studies (Ikoh et al., 2019; Olanrewaju et al., 2022) that youths of age bracket of between 15 and 30 were mostly those that abuse Codeine and Toluene substances. This result is worrisome considering the fact that the most affected age brackets are the most formative years of youths growing into adulthood and possibly marrying and raising family.

The third specific objective that investigates whether religious affiliation would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis indicates that Codeine and Toluene abused were highest among the Muslims compared to Christians and those of other faiths. This is expected as more than 75% of the population in Minna metropolis are predominantly Muslims. However, about 40% of the total population of Muslims in this study reported the abused of Toluene, a proportion that is higher than what is obtained in other religions. Also, about 20% of the Muslim population abused Codeine, a prevalence that is highest when compared to other religions. However, it will not be accurate to assume that Islam is a reason for using these substances since there are no Islamic doctrines or customs that encourage the abused of these substances. Previous studies (Okafor, 2019; Olanrewaju et al., 2022) did not support this study finding that one religion was mainly involved in substance abuse including Codeine and Toluene. The study sees it as coincidence that the dominant participants in Minna metropolis happen to be of one particular religious sect.

The fourth specific objective that aims to establish whether occupational status would influence Codeine and Toluene abuse toward criminal behaviour among youths in Minna metropolis confirms that Codeine and Toluene abused was highest among participants who are traders, followed by students whereas civil servants are the least. This is also in line with the findings that many traders received vocational education. Hence, traders can be said to have more laxity and attitude to engage in the use of these substances. Students were the next in line, since the population of the students is dominated by teenagers, adolescents and young adults. The motives behind the use of these substances by these groups would be difference since they experience different challenges and function in different environments. Probably, the students used these drugs to deal with their academic challenges; traders used them as a mean of dealing with stress in the market place. The finding supported previous studies that occupational status of substance users cut across many strata including traders, students and the unemployed who are unhappy with their situations in life (Okafor, 2019; Olanrewaju et al., 2022).

Also, two hypotheses were generated and tested in this study. The first hypothesis that Toluene abuse would significantly influence criminal behaviour among youths in Minna metropolis was supported. Youths who abuse Toluene reported higher in criminal behaviour than those who do not abuse Toluene. When drugs are used in this way, it tends to lure users to criminal activities. This result supported finding by Ogundipe (2016) who found youths to be among those who use and abuse Toluene as a means of recreational drugs to feel the sense of belonging among their peers.

And the second hypothesis that Codeine abuse would significantly influence criminal behaviour among youths in Minna metropolis was not confirmed. However, further analysis shows that those who abuse Codeine had a mean difference higher (M = 22.6, SD =20.6) than those who do not abuse Codeine (M = 21.9, SD = 23.7). Thus, the hypothesis was partially supported. This finding supported previous studies (Osuh et al., 2021) that Codeine has become drug of common use and abuse which could lead to criminal behaviour among youths.

Conclusion

The results of this study have shown that more males than females who are in the age bracket between 15 and 30 years were mostly involved in the abuse of Codeine and Toluene among the study population. Also, the findings show that the prominent population of youths who were Muslims and traders were those engaged in Codeine and Toluene abuse in Minna metropolis. Finally, the findings of this study confirmed that youths who abuse Codeine and Toluene were more involved in criminal behaviours than non-abusers of these substances. The implication of these findings is for all stakeholders-the parents, the school authority, the NGOs and the government- is to be alive to their respective duties to help reduce the use and abuse of Codeine and Toluene among youth across the state to avert more abuse and criminal behaviours. Therefore, Codeine and Toluene should be taken off the counter and only be accessible on doctor's prescription. The government should create awareness on the deleterious effects of Codeine and Toluene and put intervention programmes in place that focus on students and traders found in this study to be the most abusers of these substances.

Acknowledgement

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Conflict of Interest

We hereby declare that there is no conflict of interest in the execution of this study.

Tables

Table 1: Prevalence of Codeine and Toluene abused by gender among Youths in Minna metropolis

Variables		Male	Female	Total
Toluene	No	60%	40%	66.3
	Yes	65.5%	34.5%	33.7%
	Total	61.8%	38.2%	100%
Codeine	No	61.6%	38.4%	79.5%
	Yes	62.7%	37.3%	20.5%

	Total	61.8%	38.2%	100%

Table 2: Prevalence of Codeine and Toluene Abused by Age among Youths in Minna metropolis

Variables		1 15-19	20-24	25-30	31-35	Total
Toluene	No	26.1%	29.7%	22.4%	21.8%	66.3%
	Yes	31.0%	28.6%	28.6%	11.9%	33.7%
	Total	27.7%	29.3%	24.5%	18.5%	100%
Codeine	No	29.3%	30.8%	23.2%	16.7%	79.5%
	Yes	21.6%	23.5%	29.4%	25.5%	20. 5%
	Total	27.7%	29.3%	24.5%	18.5%	100%

Table 3: Prevalence of Codeine and Toluene Abused by Religious Affiliations among Youths in Minna metropolis

Variables		Christian	Muslim	Traditional	Others	Total
Toluene	No	37%	42.4	14.5%	6.1%	66.3%
	Yes	25%	56%	13.1%	6.0%	33.7%
	Total	32.9%	47%	14.1%	6.0%	100%
Codeine	No	33.3%	47.5%	14.1%	5.1%	79.5%
	Yes	31.4%	45.1%	13.7%	9.8%	20.5%
	Total	32.9%	47%	14.1%	6.0%	100%

Table 4: Prevalence of Codeine and Toluene Abused by Occupational Status among Youths in Minna metropolis

Drug		Students	Civil servants	Traders	Total
Toluene	No	35.2%	7.9%	57.0%	66.3%
	Yes	46.4%	3.6%	50%	33.7%
	Total	39%	6.4%	54.6%	100%
Codeine	No	42.4%	5.5%	52.0%	79.5%
	Yes	25.5%	9.8%	64.7%	20.5%

	Total	39%	6.4%	54.6%	100%

Table 5: T-test Showing Differences in Criminal Behaviour due to Toluene Abused among Youths in Minna metropolis

DV	Toluene	N	M	SD	df	t	p
	No	136	16.7	24.3			
CB					199	-4.991	<.05
	Yes	65	33.2	45.5			

DV= dependent Variable, CB = Criminal Behaviour

Table 6: T-test showing differences in Criminal Behaviour due to Codeine abuse among Youths in Minna metropolis

DV	Codeine	N	M	SD	df	t	p
	No	**163**	**21.9**	**23.7**			
CB					**199**	**-.159**	**>.05**
	Yes	**38**	**22.6**	**20.6**			

CB = Criminal Behaviour

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The Influence of Drugs and Substance Use On Gender Based Violence Among Intimate Partners in Central and Coast Regions, Kenya

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Abstract

Gender Based Violence (GBV) is a worldwide public health problem posing challenges in human health, with a higher prevalence in developing countries. Despite the growing problem of GBV globally, regionally and within the country, evidence on attribution of drugs and substance use (DSU) is limited. The study therefore endeavored to assess the influence of DSU on GBV among intimate partners (IPs) in Kenya. The study utilized a cross-sectional design where a total of 1374 respondents were interviewed targeting Central and Coast regions. Findings on GBV experience in last the last one year showed that psychological violence was the most commonly perpetrated form of GBV among IPs with a prevalence of 33.3% followed by economic violence 16.6%, physical violence 15.1% and lastly sexual violence 7.1%. Analysis of risk factors showed that region, gender, education and monthly income were significantly associated with physical violence; age and education were associated with psychological violence; religion was significantly associated with sexual violence; and gender, employment and education were significantly associated with economic violence among IPs. Results also showed that past month use of alcohol, tobacco, khat and cannabis were associated with physical violence; alcohol, tobacco and khat use were associated with psychological violence; alcohol, tobacco and khat use were associated with sexual violence; and alcohol and tobacco use were associated with economic violence. The study demonstrates the role of DSU towards aggravating the problem of all forms of GBV among IPs. The study therefore underscores the importance of DSU demand reduction and supply suppression interventions and programs as integral measures for the control of GBV.

Key words: *Gender based violence (GBV), intimate partners (IPs, intimate partner violence (IPV) and drugs and substance use (DSU).*

Introduction

Gender-based violence (GBV) refers to violence directed against individuals on the basis of their sex or gender identity, resulting in psychological, physical, or sexual trauma, either directly or indirectly (WHO, 2014). The key forms of GBV are sexual, physical, psychological or emotional violence (Campbell, 2002).

GBV is one of the most prevalent and under-reported human rights violations globally. GBV is a worldwide public health problem posing serious problems in human health and the burden is higher in developing countries (Pallitto et al., 2006; García-Moreno and Pallitto, 2006). GBV transcends through culture, socio-economic class or religion (USAID, IGWG, PRB, 2010; Abrahams et al., 2014). The consequences of GBV include

high rates of morbidity, mortality, depression, suicide, substance use dependence, and post-traumatic stress disorder (WHO, 2007; Campbell, 2002). It has been shown that the risk factors for GBV are strongly related to social determinants such as weak legal framework, gender inequality, poor governance, unemployment, income, cultural, social, and gender norms, and limited opportunities to access education (Palermo, Bleck and Peterman, 2014).

One-third of all women globally experience harms related to physical, sexual, mental, and social well-being as a result of violence against women (Shahpar and Kirsch, 2018). Globally, 10 percent of women who have been ever-married/ partnered over 15 years of age have also been subjected to physical and/ or sexual violence at least once in the past one year (WHO, 2021). Sexual violence is the most studied form of GBV with majority of the victims being women though anyone can be affected (CDC, 2016). In Kenya, statistics on sexual violence among intimate partners (IPs) showed that females had a lifetime prevalence of 15.2% and males had a lifetime prevalence of 7.4% (National Crime Research Centre, 2014). Another national survey showed that the prevalence of lifetime physical and sexual violence perpetrated by IPs among women aged 15 – 49 years was 33.3% and 2.6% respectively; and 39.6% and 1.4% respectively among men aged 15 – 54 years (KDHS, 2014).

Although studies to determine the relationship between DSU and GBV are limited, available evidence shows that DSU may be a risk a factor for both perpetration and victimization of IPV (WHO, 2017; WHO and LSHTM, 2010). Equally, experiencing violence may increase an individual's risk for DSU (Abramsky et al., 2011). Therefore, despite the growing problem of GBV globally, evidence of attribution of DSU to the different forms of GBV among IPs is limited. Moreover, there are limited studies that have attempted to undertake in-depth analysis on the effect of individual substances namely; alcohol, tobacco, khat, cannabis, prescription drugs, heroin and cocaine on the different forms of GBV. Further, previous context specific studies on GBV in Kenya have laid emphasis on the prevalence of GBV with limited evidence on the underlying risk factors, especially DSU. This study therefore seeks to establish the influence of DSU on GBV among IPs in Coast and Central regions in Kenya.

Methodology

Study design

The study utilized a cross-section design targeting the population aged 15-64 years. The study was conducted in August 2021.

Sampling procedure

A total of 1374 respondents were interviewed translating to a response rate of 89.6%. The sample size was informed by Kothari (2003). The study sampled and interviewed respondents from Coast and Central regions. Coast region was purposively sampled being the most affected by narcotic drugs. Central region was purposively sampled due to the challenges related to alcohol use (NACADA, 2017). In the Coast region, the counties were stratified based on urban – rural dichotomy and proximity to the coastal strip where Mombasa, Kwale, Kilifi, Taita Taveta and Tana River were selected. In the Central region, stratification was based on the urban – rural dichotomy where Kiambu, Nyeri, Murang'a and Nyandarua counties were selected. From each selected county, three sub-counties were randomly sampled. From each sub-county, 2 locations and 2 sub-locations were also randomly sampled. The

sub-locations were considered as the primary unit for data collection.

At the sub-location level, a landmark was identified as the initial sampling point for the first household using the date score. The second level of stratification occurred at the household where respondents who met the inclusion criteria were categorized based on age (15-24 years, 25-35 years and 36-64 years) and gender. The Kish Grid was then used to randomly identify the respondent to be interviewed. After concluding the first interview, systematic random sampling was applied where every 2nd household was selected to participate in the GBV study. Only one (1) respondent participated in the interview from each sampled household.

Data collection

A structured questionnaire was used to generate quantitative data to inform on the prevalence of the different forms of GBV and risk factors associated with GBV. The types of GBV assessed were physical, psychological, sexual and economic. These forms of GBV were defined as follows:

Physical violence

This referred to at least one of the following experiences perpetrated by an IP in the last one year: pushed you or shoved you; slapped you or threw something at you that could hurt you; hit you with his fist or something that hurt or could hurt you; kicked you, drugged you or beat you up; strangled you or burnt you on purpose; and threatened to use or actually used a gun, knife or other weapon against you; (WHO, 2005).

Psychological violence

This referred to at least one of the following experiences perpetrated by an IP in the last one year: forced you or your children to leave the place you were living; insulted you or made you feel bad about yourself; belittled or humiliated you in front of other people; tried to prevent you from seeing family or friends; tried to prevent you from speaking with other men or women; boasted about or brought home girl or boy friends; done things to scare or intimidate you on purpose, for example, by the way he looked at you, yelling at you or smashing things; and threatened to hurt you; (WHO, 2005).

Sexual violence

This referred to at least one of the following experiences perpetrated by an IP in the last one year: forced you to have sex when you didn't want to; had sex when you did not want to because you were afraid of what he might do; and forced to do something sexual that you found degrading or humiliating; (WHO, 2005).

Economic violence

This referred to at least one of the following experiences perpetrated by an IP in the last one year: failed to provide money to run the house or look after the children but had money for other things; taken your earnings or pay from you; and tried to prevent you from going to work, selling or making money in any other way; (WHO, 2005).

Field work

Acknowledging the sensitivity of the study, research assistants were trained in a five-day seminar to familiarise themselves with the questionnaire, GBV issues, objectives of the study and other principals of undertaking a research. The research assistants were also trained counsellors. Data was collected over a period of 30 days. There were two data collection teams with each team comprising of 8 research assistants and supervisor. One team was allocated the Coast region while the second team was allocated the Central region.

Data analysis

Data that was quantitative in nature was first coded, sorted, entered and analysed using SPSS software. Descriptive statistics particularly were used to describe, organize and summarize fieldwork data. Cross tabulation was used to assess the association between two variables. Chi-square statistics were used to assess the significance of the association between GBV and background characteristics and DSU. A value of $p<0.05$ was considered significant.

Ethical concerns

Informed consent was sought from the study participants and participation was strictly voluntary. Anonymity of the respondents was guaranteed and confidentiality of the study participants was equally safeguarded. For respondents below the age of 18 years, informed consent was sought from a parent or guardian.

Results

Background characteristics

Data showed that 44.8% of respondents were from Coast region and 55.2% Central region. In terms of gender, 44.5% were male while 55.5% were female. Majority of the respondents were aged 36 – 64 years (40.2%); self-employed (48.4%); Protestants (57.7%); and with an average income below Ksh 29,999 (Table 1).

Table 1: Background characteristics of respondents

Characteristic	Category	Percentage (%)
Region	Coast	44.8
	Central	55.2
Gender	Male	44.5
	Female	55.5
Age	15 – 24 years	23.1
	25 – 35 years	36.7
	36 – 64 years	40.2
Education level	No formal education	6.6
	Primary level	39.0
	Secondary level	38.2
	Post-secondary level	16.2
Employment status	Employed	12.8
	Self-employed	48.4
	Unemployed	32.0
	Student	6.8
Religious background	Protestant	57.7
	Catholic	17.9
	Muslim	21.6
	Non-affiliated	2.8

Household income	50,000 +	3.5
	30,000 – 49,999	9.2
	10,000 – 29,999	43.3
	< 9,999	44.0

Prevalence of past month DSU

Analysis showed that alcohol was the mostly widely used substance in Coast and Central regions where 18.7% of the respondents had used alcohol in the past one month. This was followed by past month use of tobacco (14.2%), khat (10.0%), cannabis (4.1%), prescription drugs (0.2%), heroin (0.2%) and lastly cocaine (0.1%).

Prevalence of past year GBV experience by IP

Findings on GBV experience in last the last one year showed that psychological violence was the most commonly perpetrated form of GBV among IPs with a prevalence of 33.3% followed by economic violence 16.6%, physical violence 15.1% and lastly sexual violence 7.1%.

Factors influencing GBV

The study also endeavored to examine the factors influencing the physical, psychological, sexual and economic violence by background characteristics and DSU.

Relationship between past year physical and psychological violence and background characteristics among IPs

Analysis showed that region (p=0.009), gender (p=0.011), education (p=0.013) and monthly income (p=0.006) were associated with physical violence among IPs.

The study showed that respondents residing in Central region; female gender; those with no formal education or primary level education; and those with lower monthly income had a higher prevalence of experiencing physical violence.

Results also showed that age (p=0.022) and education (p=0.006) were associated with psychological violence among IPs. Findings revealed that respondents aged 15 – 35 years; and those with no formal education had a higher prevalence of experiencing psychological violence (Table 2).

Table 2: Relationship between past year physical and psychological violence and background characteristics among IPs

Characteristic		Prevalence			
Physical		p-value	Psychological	p-value	
Region	Central	17.3	0.009	33.6	0.769
	Coast	12.2		32.8	
Gender	Male	12.3	0.011	33.5	0.868
	Female	17.2		33.1	

Age	15 – 24	14.8	0.372	36.2	0.022
	25 – 35	16.7		36.1	
	36 - 64	13.6		29.0	
Religion	Catholic	15.9	0.862	36.6	0.410
	Muslim	13.5		34.0	
	Protestant	15.3		31.7	
	Non-affiliated	15.8		39.5	
Employment	Employed	14.2	0.505	35.2	0.072
	Self-employed	14.1		30.2	
	Unemployed	17.1		37.6	
	Student	12.8		30.9	
Education	No formal education	22.2	0.013	43.3	0.006
	Primary	17.5		36.6	
	Secondary	12.6		31.0	
	Post-secondary	11.7		26.5	
Monthly income	50,000 +	9.1	0.006	18.2	0.078
	30,000 – 49,999	6.9		27.6	
	10,000 – 29,999	13.8		32.9	
	0 - 9,999	18.3		34.9	
Prevalence		15.1		33.3	

Relationship between past year sexual and economic violence and background characteristics among IPs

Table 3 showed that religion (p=0.002) was associated with sexual violence among IPs. Results showed that those who were not affiliated to any religion had a higher prevalence of experiencing sexual violence.

Data also showed that gender (p=0.0001), employment (p=0.009) and education (p=0.003) were significantly associated with economic violence among IPs. Analysis revealed that the female gender; those who were unemployed or self-employed; and those with no formal education had a higher prevalence of experiencing economic violence.

Table 3: Relationship between past year sexual and economic violence and background characteristics among IPs

Characteristic		Prevalence			
Sexual		p-value	**Economic**	p-value	
Region	Central	7.5	0.546	16.7	0.878
	Coast	6.7		16.4	
Gender	Male	7.5	0.620	12.4	0.0001
	Female	6.8		19.9	
Age	15 – 24	7.9	0.741	12.9	0.116
	25 – 35	7.3		18.3	
	36 - 64	6.5		17.2	
Religion	Catholic	10.6	0.002	15.9	0.976
	Muslim	7.4		16.5	
	Protestant	5.4		16.8	
	Non-affiliated	18.4		18.4	
Employment	Employed	7.4	0.259	13.6	0.009
	Self-employed	6.6		17.6	
	Unemployed	8.7		18.7	
	Student	3.2		5.3	
Education	No formal education	13.3	0.097	27.8	0.003
	Primary	7.1		18.5	
	Secondary	6.9		14.5	
	Post-secondary	5.4		12.6	
Monthly income	50,000 +	2.3	0.236	18.2	0.057
	30,000 – 49,999	4.3		11.2	
	10,000 – 29,999	6.8		15.1	
	0 - 9,999	8.3		19.9	
Prevalence		7.1		16.6	

Relationship between past year physical and psychological violence and past month DSU among IPs.

Table 4 showed that past month use of alcohol (p=0.0001), tobacco (p=0.001), khat (p=0.017) and cannabis (p=0.012) were associated with physical violence among IPs.

Results also showed that past month use of alcohol (p=0.0001), tobacco (p=0.001) and khat (p=0.010) were associated with psychological violence among IPs.

Table 4: Relationship between past year physical and psychological violence and past month DSU among IPs

Characteristic		Prevalence			
Physical		p-value	Psychological	p-value	
Alcohol	Past month user	24.1	0.0001	45.5	0.0001
	Non-user	12.9		30.4	
Tobacco	Past month user	22.6	0.001	43.6	0.001
	Non-user	13.7		31.6	
Khat	Past month user	21.9	0.017	43.1	0.010
	Non-user	14.2		32.2	
Cannabis	Past month user	26.8	0.012	33.9	0.914
	Non-user	14.5		33.2	
Prescription drugs	Past month user	-	0.466	66.7	0.219
	Non-user	15.0		33.2	
Heroin	Past month user	-	0.466		0.221
	Non-user	15.0		33.3	
Cocaine	Past month user	-	0.552	50.0	0.615
	Non-user	15.0		33.2	
Prevalence		15.1		33.3	

Relationship between past year sexual and economic violence and past month DSU among IPs.

Table 5 showed that past month use of alcohol (p=0.0001), tobacco (p=0.002) and khat (p=0.029) were associated with sexual violence among IPs.

Additionally, past month use of alcohol (p=0.001) and tobacco (p=0.001) were associated with economic violence among IPs.

Table 5: Relationship between past year sexual and economic violence and DSU among IPs

Characteristic Sexual		Prevalence			
		p-value	Economic	p-value	
Alcohol	Current user	14.4	0.0001	23.7	0.001
	Past month user	5.5		15.0	
Tobacco	Past month user	12.3	0.002	23.1	0.009
	Non-user	6.3		15.5	
Khat	Past month user	11.7	0.029	19.0	0.429
	Non-user	6.6		16.3	
Cannabis	Past month user	10.7	0.288	12.5	0.400
	Non-user	7.0		16.8	
Prescription drugs	Past month user	-	0.631		0.439
	Non-user	7.1		16.6	
Heroin	Past month user	-	0.631		0.439
	Non-user	7.1		16.6	
Cocaine	Past month user	-	0.695		0.528
	Non-user	7.1		16.6	
Prevalence		7.1		16.6	

Discussion

Generally, the study showed that alcohol was the most widely used substance followed by tobacco, khat and cannabis. However, the use of prescription drugs, heroin and cocaine was generally low. This finding is consistent with the trend at the national level where the prevalence of "legal highs" namely alcohol, tobacco and khat are the most widely used substances followed by cannabis, prescription drugs, heroin and cocaine (Kamenderi et al, 2019).

Findings on GBV experience in last the last one year showed that psychological violence was the most commonly perpetrated form of GBV among IPs with a prevalence of 33.3% followed by economic violence 16.6%, physical violence 15.1% and lastly sexual violence 7.1%. The findings are consistent with previous studies where emotional and physical violence were the most commonly perpetrated forms of GBV (Brooks et al, 2019; Emenike, Lawoko and Dalal, 2018). Analysis on the association between background characteristics and GBV showed that region, gender, education and monthly income were associated with physical violence; age and education were significantly associated with psychological violence; religion was associated with sexual violence; and gender, employment and education were associated with economic violence among IPs. From the findings, even though overwhelming evidence shows the vulnerability of women to experience sexual violence (CDC, 2016; National Crimes Research, 2014; KDHS, 2014), this study established that there was no significant difference between gender and the prevalence of sexual violence among IPs. This finding may be indicative of the changing gender power dynamics where women are becoming increasingly empowered to perform roles that were previously the preserve of men.

The study also showed that lack of formal education or having primary level education; lower monthly income; and unemployment were risk factors for the different forms of IPV. Similar deductions show that lower education levels and low socio-economic status are risk factors for GBV (Abramsky et al, 2019; Abramsky et al., 2011; Capaldi et al., 2012; WHO, 2012). It has also been shown that all forms of GBV are strongly linked to social determinants such unemployment, income, and limited opportunities to access education (Palermo, Bleck and Peterman, 2014). Data also showed that non-affiliation to religion was a risk factor for GBV especially IP sexual violence. Evidence has shown that engagement and involvement in religion is protective against lowering the risk of GBV (Ellison et al, 2007; Ellison and Anderson, 2001). Age was another risk factor for GBV where the study indicated that 15 – 35 years was the vulnerable period for GBV especially psychological violence. This category mirrors the age most affected by DSU in Kenya (NACADA, 2017) and is equally confronted by high rates of unemployment.

Overwhelming evidence from the study revealed that DSU was a risk factor for all forms of GBV. Results showed that past month use of alcohol, tobacco, khat and cannabis were associated with physical violence; alcohol, tobacco and khat use were associated with psychological violence; alcohol, tobacco and khat use were associated with sexual violence; and alcohol and tobacco use were associated with economic violence. Comparatively, available evidence shows that DSU may be a risk a factor for both perpetration and victimization of IPV (Cadri et al, 2023; WHO, 2017; WHO and LSHTM, 2010). Even though studies investigating the association between DSU and GBV are limited, the focus has largely centered on alcohol use. Thus, this study reveals emerging

evidence where the use of other substances especially khat and cannabis were risk factors for the different forms of GBV among IPs. Further, it is important to highlight that although tobacco was positively associated with the different forms of GBV, this may be the effect of polydrug use among people using alcohol and khat.

Conclusions

The study reveals worrying rates of emotional, physical, psychological and sexual violence in the general population among IPs despite the robust interventions to eradicate GBV including continued public education and awareness programs. This is indicative of a missing link in the programming and implementation of interventions designed to address the chronic problem of IPV. An in-depth analysis provided evidence on the role of DSU towards aggravating the problem of all forms of GBV among IPs. The study also showed that beyond exposure to alcohol, other substances especially khat and cannabis were potential risk factors for GBV. These results may therefore explain the shortcomings facing GBV intervention programs leading to sustained high prevalence rates of GBV.

Unusual findings also revealed that sexual violence among IPs was no longer a female dominated problem with equally more men emerging as victims of this form of GBV. DSU is a growing problem in Kenya affecting more men than women. It is therefore plausible to conclude that the gender power dynamics are equally likely to change as a result of DSU, consequently negating the traditionally appreciated gender norms especially in DSU prone settings. The study therefore underscores the importance of DSU demand reduction and supply suppression interventions and programs as integral measures for the control of GBV.

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Policy Brief on Cannabis Use in Kenya

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1.0 Introduction

The Government of Kenya recognizes drugs and substance abuse (DSA) as a major threat to the wellbeing of its citizens and national development. DSA has increased in magnitude and threatens to undermine the social, economic, and political transformation achieved over the years. Prevention and control of DSA is critical for national development and the realization of the Kenya Vision 2030 and Bottom-Up Economic Transformation Agenda (BETA). The national survey on the "Status of Drugs and Substance Use in Kenya, 2022" is a five-year survey conducted to assess the trends of DSU programing indicators.

The campaign against DSA in Kenya is premised on a two-pronged approach namely, demand reduction and supply suppression strategies. Demand reduction involves a wide range of activities that aim to reduce individuals' desire to use drugs. The ultimate desired outcome of demand reduction initiatives is to delay or sustain abstinence, encourage drug-free lifestyles, or create awareness of the risks of DSU. Supply suppression aims at preventing or reducing harm by controlling the availability and accessibility of drugs and substances of abuse, both licit and illicit. For licit drugs, this involves restricting their sale, distribution, and consumption. On the other hand, control of illicit drugs focuses primarily on supply suppression activities especially drug cultivation and trafficking.

The overall objective of the survey was to determine the status of drugs and substance use in Kenya.

2.0 Methodology

The survey used a cross-sectional study design to provide reliable estimates to track the national, regional, urban and rural drugs and substance use indicators. This was achieved through the use of Kenya Household Master Sample Frame (K-HMSF) maintained by the KNBS. The survey was carried out across the 47 counties of the Republic of Kenya. The study sampled Kenyans aged 15 to 65 years. The total number of individual interviews received was 3,314 translating to an individual response rate of 87%. The data was weighted to compensate for unequal selection probabilities and unit non-response in order to conform to known population distributions and eliminate any possible bias;

3.0 Findings

Lifetime use of narcotics for the population aged 15 – 65 years

The lifetime use of narcotics for the population aged 15 – 65 years shows that 3 percent

had ever used cannabis in their lifetime. The highest prevalence of lifetime use of cannabis was reported by those aged 18 – 24 years at 6 percent. Males reported the highest prevalence of lifetime use of cannabis at 7 percent compared to females at less than one percent. The prevalence of lifetime use of cannabis was highest in urban areas (5.1%) compared to rural areas (2.4%). Nairobi region reported the highest prevalence of lifetime use of cannabis (6.9%) followed by the Coast region (5.7%).

Lifetime use of cannabis for the population aged 15 – 24 years

The lifetime prevalence of cannabis use for the population aged 15 – 24 years was 4 percent. Males had a higher prevalence of lifetime use of cannabis (8.0%) compared to females (1.1%). The prevalence of lifetime use of cannabis was higher in the urban areas (7.8%) compared to the rural areas (2.4%). Nairobi region had the highest prevalence of lifetime use of cannabis (9.7%) while the Western region had the lowest prevalence (2.2%).

Lifetime use of cannabis for the population aged 25 – 35 years

The survey results reveal that the prevalence of lifetime use of cannabis for the population aged 25 – 35 years was 3.7 percent. Males had a higher prevalence of lifetime use of cannabis (7.8%) compared to females (0.6%). Those in the urban areas had a higher prevalence of lifetime use of cannabis (5.6%) compared to those in the rural areas (2.4%). The Coast region had the highest prevalence of lifetime use of cannabis (7.7%) followed by the Nairobi region at (5.0%).

Past-month use of cannabis for the population aged 15 – 65 years

The survey results show that 2 percent of the population aged 15 – 65 years had used cannabis in the past month. The past-month use of cannabis was 3 percent in urban areas and 1 percent in rural areas. Nairobi region had the highest prevalence for use of cannabis at 6 percent.

Trend in the past-month use of cannabis for the population aged 15 – 65 years

The past-month use of cannabis was stable at one percent from 2007 to 2017. However, there was a sharp increase of 90 percent in the prevalence of past-month use of cannabis between 2017 and 2022.

Past-month use of cannabis for the population aged 15 – 24 years

The survey results reveal a 3 percent prevalence in the past-month use of cannabis for the population aged 15 – 24 years. Past-month use of cannabis for males was 5 percent compared to one percent for females. Urban areas had a higher prevalence of past month use of cannabis (5.5%) than rural areas (1.1%). Nairobi region had the highest prevalence of past-month use of cannabis (9.7%).

Past-month use of cannabis for the population aged 25 – 35 years

In this age cohort, the prevalence of past-month use of cannabis was 2.1 percent. Past month use of cannabis was higher for males (4.7%) than females (0.2%). There was a higher prevalence in the past month use of cannabis in the urban areas (3.0%) than in rural areas (1.5%). Nairobi region had the highest prevalence of past-month use of cannabis at 5 percent.

Relationship between depressive disorder and past-month DSU

The findings on the relationship between depressive disorder and past month user of drugs and substances of abuse showed that the risk of depressive disorder among users past month users of cannabis was 2.3 times higher compared to non-users;

Prevalence of severe cannabis use disorders (addiction)

The findings show that 1 in every 111 Kenyans aged 15 – 65 years (234,855) were addicted to cannabis use; 1 in every 77 youths aged 15 – 24 years (90,531) were addicted to cannabis use; and 1 in every 83 youths aged 25 – 35 years (100,468) were addicted to cannabis use.

4.0 Conclusions

i. Results showed that the prevalence of cannabis use almost doubled over the last five years. The growing demand for cannabis especially among the youth could be attributed to the low perception of harm due to myths, misinformation, and misconceptions;
ii. The 25-35 years age group representing youth out-of-school was identified as a vulnerable group for cannabis use and dependence;
iii. The survey showed evidence of underage use of cannabis despite the well-documented negative implications and consequences of early initiation; and
iv. Cannabis use was identified as a key risk factor for depressive disorders. This finding presents addiction professionals with an evolving challenge of co-occurring cannabis use and mental health disorders.

5.0 Policy Recommendations

Based on the findings of the survey, the following recommendations are made. There is a need for:

i. NACADA in collaboration with the FBOs to scale up "positive parenting" and "strengthening families" programs to moderate risks of early exposure to cannabis by children and young adolescents;
ii. NACADA to leverage on the social media and other online platforms to reach the youth with tailored prevention programs and regular factual messaging to counter myths, misinformation, and misconceptions related to cannabis;
iii. Deliberate measures to be put in place to address the myths, misinformation, and misconceptions of cannabis use among the youth;
iv. NACADA to collaborate with MoH, County Governments, CSOs, NGOs, FBOs, and other partners to expand addiction treatment services with an emphasis on a community-based model anchored through out-patient services to address the challenges of affordability and physical access; and
v. Cannabis use was identified as a key risk factor for depressive disorders. This finding presents addiction professionals with an evolving challenge of co-occurring substance use and mental health disorders;

Policy Brief on Drugs and Substance Use as a Risk Factor for Gender Based Violence among Intimate and Non-Intimate Partners.

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1.0 Introduction

Gender based violence (GBV) is a global public health problem that poses challenges in human health, with a higher prevalence in developing countries. GBV is an abuse of human rights that occurs internationally, in both developing and developed countries, regardless of culture, socio-economic class or religion. GBV is caused by systemic gender inequalities and encompasses all acts of physical, emotional, sexual and psychological violence perpetuated against a person due to their gender.

Use of illicit drugs and alcohol have been identified as risk factors for both perpetration and victimization of intimate partner violence (WHO, 2017; WHO and LSHTM, 2010). Intimate partner violence occurs as a result of one or both partners using substances leading to intoxication, withdrawal or arguments about substance use (Harm Reduction International, 2013; Radcliffe et al., 2019). It has also been noted that experiencing violence can also increase an individual's risk for drug use (Abramsky et al., 2011). It has also been shown that mental health problems, lower levels of education, low socio-economic status and family conflict are all shared risk factors for drug use and GBV (Abramsky et al., 2011; Capaldi et al., 2012; WHO, 2012).

In Kenya, statistics on sexual violence among intimate partners showed that females had a lifetime prevalence of 15.2% and males had a lifetime prevalence of 7.4% (National Crime Research Centre, 2014). Statistics from KDHS showed that the lifetime prevalence of physical and sexual violence perpetrated by intimate partners among women aged 15 – 49 years was 33.3% and 2.6% respectively; and 39.6% and 1.4% respectively among men aged 15 – 54 years (KDHS, 2014).

Despite the growing problem of GBV globally, regionally and within the country, evidence on the attribution of drugs and substances of abuse is limited. Even though drugs and substance use has been mentioned as a possible risk factor for GBV, there are limited studies that have attempted to undertake in-depth analysis on the effect of individual substances on the different forms of GBV. Further, in Kenya particularly, previous studies on GBV have laid emphasis on the prevalence of GBV with limited evidence on the underlying factors, especially drugs and substance use. This study therefore endeavours to provide the much-needed evidence to inform appropriate targeted interventions to address the problem of GBV especially in the context of the growing

problem of drugs and substance use in Kenya. The General objective of the study was to determine the influence of drugs and substance use on gender-based violence in central and coast regions in Kenya

2.0 Methodology

The study adopted a cross-sectional survey design where both quantitative and qualitative data was collected. In addition, the study targeted Coast and Central regions of Kenya. These two regions are known hotspots for alcohol and narcotic drug use. In Coast region, data was collected in Mombasa, Kilifi, Tana River and Taita Taveta counties while in the Central region, data was collected in Kiambu, Murang'a, Nyeri and Nyandarua counties.

3.0 Findings

The data showed that 44.8% of respondents interviewed were from Coast region and 55.2% Central region. In terms of gender, 44.5% were male while 55.5% were female. Findings showed that alcohol was the mostly widely used substance in Coast and Central regions where 18.7% of the respondents had used alcohol in the last 30 days (current use). The second most widely used substance was tobacco with a current prevalence of 14.2% followed by khat 10.0%, cannabis 4.1%, prescription drugs 0.2%, heroin 0.2% and cocaine 0.1%.

The study also established GBV experience in lthe last one year among the respondents interviewed. According to the findings, psychological violence was the most commonly perpetrated form of GBV among intimate partners with a prevalence of 33.3% followed by economic violence 16.6%, physical violence 15.1% and lastly sexual violence 7.1%. Further analysis of GBV experience by non-intimate partners in the last one-year, psychological violence was the most commonly perpetrated form of GBV with a prevalence of 31.4% followed by physical violence 18.6%, economic violence 13.1% and sexual violence 4.6%. The most commonly reported perpetrators of GBV among non-intimate partners were friends, strangers, members of immediate family, members of extended families and neighbours.

Results on one-year prevalence of GBV revealed that generally psychological violence was the most widely experienced form of GBV followed by physical violence, economic violence and lastly sexual violence. This observation was applicable to both intimate and non-intimate partner experiences. Further analysis showed interesting findings where psychological violence, economic violence and sexual violence were more prevalent among intimate partners while physical violence was more prevalent among non-intimate partners though the differences were marginal.

Findings also showed that Central region reported higher prevalence of physical violence. However, for non-intimate partners, Central region reported higher prevalence of physical, psychological, sexual and economic violence. In terms of gender, evidence showed that females were the major victims of GBV among intimate partners while males were the main victims among non-intimate partners. Results across age, employment, education and monthly income generally showed a common trend where rates of the different forms of GBV among intimate and non-intimate partners were higher among those aged 15 – 35 years, unemployed, with no formal education, non-affiliated to any religion and those earning the lowest average monthly income.

The primary aim of this study was to assess how substance use influences the different forms of GBV among intimate and non-intimate partners. Results among intimate

partners showed that alcohol, tobacco, khat and cannabis use were associated with higher prevalence rates of physical violence; alcohol, tobacco and khat use were associated with higher prevalence rates of psychological violence; alcohol, tobacco and khat use were associated with higher prevalence rates of sexual violence; and alcohol and tobacco use were associated with higher prevalence rates of economic violence. Results among non-intimate partners showed that alcohol, tobacco, khat, cannabis and heroin use were associated with higher prevalence rates of physical violence; alcohol, tobacco and khat were associated with higher prevalence rates of psychological violence; alcohol use was associated with higher prevalence rates of sexual violence; and alcohol, tobacco, khat and prescription drugs were associated with higher prevalence rates of economic violence. The findings revealed that all forms of GBV among intimate and non-intimate partners were attributed to alcohol use. Self-reported involvement of substance use on GBV also showed that at least 50 percent of the different forms of GBV experiences among intimate partners and nearly 70 percent among non-intimate partners were as a result of drugs and substance use. The study therefore provides undeniable evidence on the role of drugs and substance use towards aggravating the rising problem of GBV in the country.

4.0 Conclusions

i. Drugs and substance use was identified as a risk factor for GBV among intimate and non-intimate partners;
ii. Minimizing the risks posed by the perpetrators of GBV may be a key strategy towards GBV prevention.

4.0 Policy Recommendations

i. Based on the findings of this study, the following policy recommendations are proposed:
ii. There's need for integration of drugs and substance use prevention programs in GBV control and management interventions;
iii. There's need for positive parenting programs to provide the much-needed information and skills to mitigate risks of GBV among intimate and non-intimate partners.

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