Original Research

AN INVESTIGATION ON THE PREVALENCE OF DRUG AND SUBSTANCE ABUSE IN MATHARE SLUMS, NAIROBI COUNTY, KENYA.

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ABSTRACT

This study sought to investigate the prevalence of drug and substance abuse in Mathare slums, Nairobi County, Kenya. Drug and substance abuse involves the misuse of drugs or chemicals, leading to addiction. It affects the general populace by increasing healthcare costs, reducing productivity, contributing to crime, and causing social and familial disruptions. The theoretical framework applied in this study was Bowen's Family System Theory. The theory provides an invaluable perspective for analyzing the intricate relationships among families dealing with drug and substance dependence. The descriptive research design guided the study in collecting, analyzing and interpreting both the quantitative and qualitative data. Households were chosen from 13 villages in Mathare slums in Nairobi involving a total target of 42997 households. The researcher adopted both non-probability and probability sampling techniques where Yamane (1967) formula was used to calculate a sample size of 396. The study identifies high rates of substance abuse, particularly alcohol and cannabis, and examines their detrimental effects on family communication, financial stability, and domestic harmony. The findings highlight the socio-economic challenges faced by affected families and underscore the need for targeted interventions. Recommendations include enhancing awareness and education programs, establishing accessible rehabilitation and counseling services, engaging and empowering the community through youth initiatives and job creation, and strengthening law enforcement and policy regulations. Collaborative efforts between government, NGOs, and the private sector, alongside continuous research and impact assessments, are essential for effectively reducing substance abuse and improving the socio-economic well-being of families in Mathare. The study also calls for stringent government policies to control drug use in slum areas.

Key Words: Drugs, Adiction, Bowen's Family System Theory and Drug Abuse.

STUDY BACKGROUND

Mathare is one of the oldest and largest informal settlements in Nairobi County in Kenya, and the population is highly congested and beset by significant socio-economic vices. This giant slum which is highly congested, lacks basic necessities and social amenities and operates at a very low-income bracket is a fertile breeding ground for various social vices like the use of drugs and other related substances. Drug and substance abuse involves the misuse of drugs or chemicals, leading to addiction. It affects the general populace by increasing healthcare costs, reducing productivity, contributing to crime, and causing social and familial disruptions.

In Mathare, substance abuse is a social issue, closely linked with poverty, unemployment, and limited educational possibilities. Some of the residents both young and old engage in the use of drugs in order to run away from what goes on in life. Currently, the spread of drugs in this community is made easier by the access to easily available substances like alcohol drugs, marijuana and other harder drugs like heroin and cocaine sold by dealers whose den operate in the crisscross of the slum.

The effects or implications of drug and substance abuse in Mathare are very severe. These comprise of high incidences of crime, social health decisions, breakage of families, and inhibited economic growth. Dependence also worsens the poverty cycle, since substance abusers often have a hard time getting and holding a job, put additional pressure on their already scarce resources, and spend more of their time relying on drugs. It is therefore important to establish the extent of drug and substance abuse in Mathare that can guide efforts at addressing this major social problem. That means effective ways must be found to respond not only to the need for precise drugs and structures of addiction treatment but also to the socio-economic environment which triggers drug use. Therefore, this study seeks to establish the prevalence and characteristics of this problem with a view of developing a grounded strategy for dealing decisively with the problem and bringing about desired positive change in the quality of life in Mathare.

This paper will explore the specifics of substance dependence in Mathare including demographics, (age and gender) and type of drug/substance. It is also aimed at assessing the current support being offered in the country and whether they are efficient or not and where there is room for improvement. Furthermore, this study aims at arousing an understanding of the real picture of drug abuse within Mathare community through an application of both quantitative and qualitative research approaches to provide useful information towards the conquest of this rampant vice.

LITERATURE REVIEWS

The United Nations Office on Drugs and Crime (UNODC's) world drugs report 2022 estimates that 284 million people aged between 15- 64 use drugs globally – a 26% increase over the past decade. There are 2 million people in the world who inject drugs. In Latin America, the majority of people being treated for drug use disorders are under 35 years old (Tayyiba, 2009). The largest number of people in treatment for drug use disorders in South and Central America are mainly for cannabis use disorder. Prevalence of illicit drug users was estimated for 12 Asian and 6 Pacific Island countries. The number of those using illicit drugs is said to be less than 01% to 4. 2%. Some other countries that are expected to have prevalence rates that are higher than 2% include the following: Cambodia, Hong Kong, Philippines, Thailand, Indonesia, Laos and Malaysia. Consequently, though alcohol or drug abuse and dependence are prohibited by religion, culture, and by law in theocratic Muslim Arab nations of the Middle East, alcohol or drug use and dependence still takes place (Tayyiba, 2009).

Among the various substances used in Saudi Arabia, amphetamine 4 - 70% and heroin 6% are the most abused. 6-83. 6%, alcohol 9-70. Seasoning: Salt 1-3% and Soybean 1-2% – Tobacco 1-5% and Cannabis 1-60% (Bassiony, 2013). In Germany, 2.8% of adults use psychoactive substances, while 2.2% of young adults (aged 18-25 years) use drugs and substances, with alcohol at 70.1% and tobacco at 22.7% (Seitz, 2021). The highest number of cases and rise in use is also being reported in west and central Africa with a rate of 5 to 6%. and 2% and 13%. The prevalence rates for substance abuse in South Africa are extremely high, as the drug usage rate is double the world average (Mishra, 2019).

The high rates of drug use among family members in Kenya can be attributed to various factors, including poverty, unemployment, and social disorganization. Poverty is a significant predictor of drug use in Kenya, with individuals and families turning to drugs to cope with their economic hardships (Ayuku, 2018). Social disorganization, including high levels of crime and violence in Kenya, also contributes to drug use among family members (Kuria, 2017). Drug use among family members in Kenya has significant implications for family stability, with studies reporting a strong correlation between drug use and family conflicts. For example, Ayuku, (2018) found that drug use was a significant predictor of domestic violence in Kenya, with 57% of the respondents reporting experiencing domestic violence due to drug use. Similarly, Kuria (2017) reported that drug use was associated with communication breakdown, financial strain, and domestic violence within families.

THEORETICAL FRAMEWORK: BOWEN'S FAMILY SYSTEMS THEORY
In order to comprehend and analyze the impact of drug and substance use on the psychological welfare of families in the Mathare Slums, this study applies Bowen's Family Systems Theory. Bowen's Family Systems Theory provides an invaluable perspective for analyzing the intricate relationships among families dealing with drug and substance dependence. According to the notion, a family is an emotional unit in which the experiences of any one member may have a significant impact on the system as a whole (Keller & Mignonette, 2019).

According to Bowen's hypothesis, every family member has a distinct degree of differentiation shaped by their early experiences. There may be less difference among drug-using family members in homes with substance use. This may lead to unhealthy behaviors like codependency or enabling, which could harm family members' psychological well-being. Bowen's theory also presents the notion that people are more inclined to choose mates who have a comparable degree of distinction. Families where drug misuse runs in the family may be more likely to experience the adverse effects of addiction on psychological health in the long run.

Bowen's Family Systems Theory offers an all-encompassing framework for investigating the complex effects of drug and substance use on families' psychosocial well-being in Kenya's Mathare Slums and Nairobi County. This idea shows how drug misuse ruins family relationships, impacts mental health, and feeds dysfunctional cycles that last for generations. Comprehending these dynamics is crucial to formulating efficacious treatments and support frameworks customized to families' distinct obstacles within this milieu. Researchers and practitioners may improve the lives of families in Mathare Slums and similar communities throughout the globe by using Bowen's theory to get critical insights into the intricate relationship between drug use and family life (Keller & Migonette, 2019).

Research Design
The study used descriptive research design. Descriptive research design systematically obtains information to describe a phenomenon, situation, or population. Descriptive research design helps the researcher have answers to the "what," "when," "how," and "where" before understanding the "why." It assisted the researcher in seeking the respondents' opinions without manipulating the study variables.

Target Population
The target population in a study is the entire set of units for which the study data is used to make inferences (Cox, 2013). The target population for this study was therefore taken from Mashimoni,

Mabatini, Kosovo, village 1, Kwa Kariuki, Kiamutisya, and village 2 in Mathare slums, Nairobi County. The target population was therefore totaling to 42,997 households residing in the twelve wards in Mathare slums, Nairobi County, Kenya.

Sampling Procedures and Sample Size

The sample size is the number of participants or observations included in a study. The sample size for this study was 396, calculated using both probability and non-probability sampling techniques. The researcher used Yamane's (1967) formula to calculate the sample size.

$n = N/1 + N*(e)^2$
Where; n = Sample size
N = Population size
e = Margin of error
* = 95% confidence level and p = 0.05 are assumed
$n = 42297/1 + 42297(0.05)^2$
n = 396

Table 1: Sample size and Target Population

Total numbers of villages	Target population for the study	Sample size of the study	Ratio of sample size to target population in %
12	42297	396	0.94

Research Instruments

The data collected were both primary and secondary, whereby, the primary data collection included the use of structured interviews and questionnaires. Questionnaires were administered after explaining the purpose of the research through a consent letter. The data collection was conducted through drop and pick method to allow the respondents adequate time to go through the questionnaires and conceptualize the content to avoid any response error. The questionnaires were divided into different sections depending on the research objectives. The sections include; section (A) Demographics information, section (B) prevalence of drugs and substance use, section (C) influence of drug use, section (D) influence of substance use, section (E) Intervention measures to minimize drugs and substance abuse. The questionnaires also adopted Likert- scale for measuring effective variables in a scale of 1-5 where; 1- strongly disagree, 2- disagree, 3- not sure, 4- agree, 5- strongly agree. The structured interviews were conducted with the area chiefs, hospital counselors and household heads. Secondary data collection methods involved reviewing existing literature such as journals, reports, published studies and policy documents on drug and substance abuse.

Data Collection Procedures

Data was collected with both primary and secondary methods. Once cleared by the University, the researcher sought permission for data collection from the graduate school. The researcher also sought permission for the research area from National Commission for Science, Technology and Innovation (NACOSTI) and associated authorities from the county government. Primary data collection methods included structured interviews and questionnaires. Questionnaires were

administered after explaining the purpose of the research through a consent letter. The data was collected through drop-off and pickup later to allow the respondents adequate time to go through the questionnaires for clearer understanding before responding. The structured interviews were conducted with the heads of households to collect data on the influence of drug and substance use on the psychosocial well-being of families. Additionally, in order to investigate and comprehend the underlying reasons for drug use among these families, focus group discussions engaged a variety of family members, including parents, siblings, and other pertinent persons. Secondary data collection methods involved reviewing existing literature through peer reviewed journals, reports, and policy documents on the influence of drugs and substance abuse on the psychosocial wellbeing of families in Mathare slums.

FINDINGS

Respond rate

A total of 275 participants took part in the study from a study sample size of 396. This means that the study respond rate was 69.44%. Understanding the demographic makeup of the participants provides valuable insights into the diversity and representativeness of the sample, which is essential for interpreting the study's findings.

Prevalence of Drug and Substance Use

The prevalence of drug and substance use among families in Mathare slums was determined through structured interviews and questionnaires. Table 2 summarizes the findings related to the prevalence of drug use. In this section, we present an analysis of the prevalence of drug and substance use based on data collected.

Table 2: Prevalence of Drugs and Substance Use

Substance	Prevalence	%
Alcohol	85	31%
Cannabis	65	24%
Tobacco	52	19%
Wines and spirits	45	16.1%
Methamphetamine	28	10%

The prevalence of alcohol use among families in Mathare slums is notably high, with 31% of the participants reporting alcohol consumption. Alcohol is a widely available and socially accepted substance, often used for recreational and coping purposes. Its high prevalence suggests its significant role in the community's substance use landscape.

Cannabis, including marijuana and bhang came in second, was reported by 24% of participants as being used within families in Mathare slums. Cannabis is known for its psychoactive effects and is commonly used for recreational purposes. Its prevalence suggests its widespread availability and acceptance within the community. Tobacco use was reported by 19% of the participants, indicating a considerable portion of families engaging in smoking habits. Tobacco is often consumed through smoking and is associated with various health risks, including cardiovascular

diseases and cancer. Its prevalence underscores the need for tobacco control measures within the community. Methamphetamine use is reported by 10% of participants, representing a significant but relatively lower prevalence compared to other substances. Methamphetamine is a potent stimulant with a high potential for abuse and addiction. Its prevalence suggests the emergence of stimulant use within the community, warranting proactive prevention and intervention efforts. The findings on the prevalence of drugs and substance use in Mathare are similar with those of Kuria, (2017) who reported high rates of alcohol use in Majengo slums with 57% of the respondents reporting alcohol use in the last year. High rates of alcohol and cannabis use underscore the need for interventions addressing these substances' availability and associated harms. Tobacco, heroin, and methamphetamine, while less prevalent, still pose significant health and social risks and necessitate targeted prevention and treatment initiatives. The prevalence of drug use among families in Mathare slums reflects a complex interplay of socio-cultural, economic, and environmental factors, highlighting the importance of tailored interventions to address the diverse substance use landscape and its associated impacts.

CONCLUSIONS

The study reveals that alcohol is widely consumed among families in Mathare slums, with 31% of participants reporting its use. It serves both recreational and coping purposes, reflecting its entrenched role in community dynamics. Cannabis follows closely at 24%, known for its psychoactive effects and widespread availability. Tobacco, reported by 19% of participants, highlights a prevalent smoking habit linked to serious health risks like cardiovascular diseases and cancer. Methamphetamine, reported by 10%, indicates emerging stimulant use, necessitating proactive intervention due to its addictive nature. These findings mirror those in Majengo slums (Kuria, 2017), emphasizing the urgent need for targeted interventions addressing substance availability and associated health and social impacts in Mathare.

The research has covered and dissected many dimensions of the subject under review based on finding, understanding and interpreting emerging data. It has achieved a lot in developing understanding on the impact of drugs and substance use on facial psychosocial well-being of families in Mathare slum, Nairobi County, Kenya.

RECOMMENDATIONS

To address the high prevalence of drug and substance abuse in Mathare slums, the study recommends; enhance awareness and education programs, establish accessible rehabilitation and counseling services, engage and empower the community through youth initiatives and job creation, strengthen law enforcement and policy regulations, and foster collaborations between government, NGOs, and the private sector. Continuous research and impact assessments should guide these efforts, ensuring they effectively reduce substance abuse and improve the socio-economic well-being of affected families. The study also recommends that the government should come up with tight policies that controls the usage of drugs among family members in slum areas.

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