

**EPIDEMIOLOGY OF SUBSTANCE ABUSE AMONG THE YOUTHS IN
MAKUENI COUNTY, KENYA**

VINCENT KIILU KAVITA (BSc.N)

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DECLARATION

Student

I declare that this thesis is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature: _____ Date: _____

Vincent Kiilu Kavita (BSc.N)

Reg No: R50/28635/2019

SUPERVISORS

This thesis has been submitted for consideration with our approval as University Supervisors.

Signature: _____ Date: _____

Dr. Priscilla Kabue

Department of Community and Reproductive Health Nursing
Kenyatta University

Signature: _____ Date: _____

Dr. Jacob Masika

Department of Medical Surgical Nursing
Kenyatta University

DEDICATION

I dedicate this Thesis to the County Governments of Machakos and Makueni for their dedication and commitment in fight against substance abuse among the youth.

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I would like to take this opportunity to express my heartfelt gratitude to the individuals who have played a significant role in my academic journey.

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LIST OF ABBREVIATIONS

KDHS	-	Kenya Demographic Health Survey
KII	-	Key Informant Interview
KNBS	-	Kenya National Bureau of Statistics
KU	-	Kenyatta University
NACADA	-	National Authority for Campaigns Against Drugs Abuse
SANCA	-	South African National Council in Alcoholism
UNDCP	-	United Nations Drug Control Program
UNODC	-	United Nations Office on Drugs and Crime
UN	-	United Nations
WDR	-	World Drug Report
WHO	-	World Health Organization

OPERATIONAL DEFINITIONS

Drug	Any substance that causes physical, mental and emotional changes in the body.
Epidemiology	The distribution and pattern of substance abuse in Makueni County
Market	Major shopping centre with scheduled market days by the county Government of Makueni.
Mitigation	Any prevention strategies applied to counter the increase of substance abuse among the youths in Makueni County.
Substance/ Drug abuse	It is the inappropriate use of a drug
Youth	Any male and female aged 18-33 years found in Makueni County.

ABSTRACT

Majority of youths all over the world ignorantly rely on one or more types of drugs for their everyday activities, including Mandrax, Cocaine, Tobacco, Heroin, Khat, Morphine, Alcohol, Amphetamines, Ephedrine, and Glue among others. This study's purpose was to evaluate the epidemiology of substance abuse among the youths in Makueni County, Kenya. The broad objectives that guided the study were; to determine the epidemiology of substance abuse among the youths in Makueni County, Kenya. A Cross-sectional mixed-method design study was undertaken, with the target population consisting of all youths from Makueni County's eight main marketplaces. To get 384 participants for the research, purposive sampling was employed to obtain the 8 Major urban centres while simple random selection approach was employed to obtain respondents in each market. Qualitative data was collected using 8 key informants to supplement the quantitative data collected from the youths. To obtain primary data, a self-administered questionnaire was employed. Quantitative data was analysed using Descriptive as well as inferential statistics while qualitative narrative data was grouped into themes and was presented in form of texts with verbatim quotes used to amplify the voice of the informants. Majority of research participants were male 64% with age ranging from 18-21yrs (35%). Majority of participants had primary education 38.6% with the lowest 12.6% having University education. Prevalence of Drug/Substance abuse stood at 62.3 % with alcohol (58.3%) being the most commonly abused drug/Substance. Hard Drugs e.g cocaine and heroin was the least abused with 96.9% reporting they had never abused. Pearson correlation between gender, age and education level on prevalence of drug abuse in Makueni showed a weak positive relationship($r=0.032$), weak negative relationship($r=-0.064$) and a significant negative relationship($r=-0.212$) respectively. The study also established that high unemployment rates 62.3%, easy availability of drugs 34.3%, Peer pressure 72.3%, cheap cost of drugs 28.3% and poverty level 15.1% are main contributory factors to drug abuse. A chi square run on the factors contributing to drug abuse also indicated a significant relationship between the factors and prevalence of drug abuse in Makueni County ($\chi^2(1 N=350) = .73 p > .05$). The study concludes that there is high prevalence of Drug/Substance abuse among the youths in Makueni County and both the County Government, national Government and the community in general must put stringent measures to curb the easy availability, sale and buying of abusive Drugs and other substances in the county.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Substance and drug abuse has risen dramatically and is now a worldwide issue exacerbated by complicated socioeconomic issues such as unemployment and poverty, among other things (World Drug Report, 2019). Self-administering substances for non-medical reasons in amounts and Frequency that may cause social, bodily or emotional damage is referred to as substance abuse (Olatuwra & Odejide, 2016). In Europe and Asia, the primary narcotics that are still on the increase are cocaine and Heroin. In 2015, Heroin remained the most problematic drug, accounting for 62% of all treatment (U.N. Office on Drugs and Crime (UNODC), 2021). Reports from 95 countries throughout Europe and Asia, drug seizures climbed fourfold in 2015, with cannabis accounting for more than half of all seizures. Drugs are psychoactive substances permitted for use by the general population, either socially or for medical purposes (WDR, 2019).

According to the United Nations Office on Drugs and Crime's 2019 World Drug Report on Pandemic Impacts, 278 million people used drugs in the preceding year, with more than 36 million experiencing drug-related difficulties (UNODC, 2019). In the same Report, Substance abuse is said to have spread across American homes, schools, and businesses, wreaking havoc on individuals of all ages and socioeconomic backgrounds (UNDCP, 2019). Over 200 million people between the ages of 15 and 64, or roughly 6% in the world, abused drugs in the preceding three months, (World Drug Report 2019). More than a fifth (31.9%) of adolescent students in Nova Scotia, Canada, reported using alcohol, nicotine, or cannabis in surveys conducted in 2016 and 2017 (UNODC World Drug Report, 2021). In Europe, 27 percent of students in grade ten were reported to participate in smoking

cigarettes, while 61 percent had used illicit substances other than marijuana (Narrusk, 2017). In a survey done by UNODC (2021), it was reported that 31.9% of adolescent students in Nova Scotia, Canada, reported use of alcohol, nicotine, or cannabis in 2016 and 2017.

In Africa's developing nations, the usage of socially harmful drugs such as alcohol and miraa, among others, creates communal alienation of youths (NACADA, 2017). Despite the intentions and efforts of African states to eradicate drugs, Africa continues to be a major supply of illegal substances like cannabis, one of the most widely abused narcotics. (NACADA, 2015). According to a survey report by Fatoye and Marakinyo (2017) on teenage use of drugs in Nigeria, it was found that most of these teenagers began use drugs as early as fourteen years. In research on Zambian students conducted by Olatuwara and Odejide (2015), it was shown that Students who took drugs were absent from school, significantly impacting their grades.

Substance addiction among teenagers and young people in Kenya has cost the government money yearly in all counties, including Makueni (Ratts & Hutchins, 2017). According to a study by NACADA (2016), drug abuse is prevalent in post primary education institution.

In the tenth yearly Report on the Status of Drug and Alcohol Abuse submitted to the Kenyan National Assembly by NACADA (January 1st to June 30th, 2019), 1490 litres of illegal alcohol were recovered, and 119 persons detained in Makueni County (Kenya Police Headquarters, 2019). In a report by NACADA (2019), Makueni County was rated sixth, with 726.1 kg of cannabis/bhang confiscated. This shows that the threat of substance and drug misuse in Makueni County is significant and still growing. This study is being carried

out to determine the epidemiology of substance usage among youths in Makueni County to have a basis for solving the problem.

1.2 Problem statement

Substance and drug abuse among school-going children and youths has recently been a major public problem of concern in Kenya. Substance abuse contributes to more health problems that increase morbidity and mortality in the Kenya (Health Ministry Report, 2019). According to the Government of Kenya, young people are at risk since peddlers target them as a ready market for their drug business. Despite the efforts by the governments and development partners to end substance abuse among the youths, reports indicate that the abuse of substances is still rising. The abuse has been a great challenge to many people in Kenya, especially youths with hostile and bad youthful activities that are widespread all over Kenya (Waithima, 2017). Despite causing deleterious consequences on physical, mental, social and quality of life, there is a high prevalence of people having substance abuse related conditions in Kenya (Kamenderi et al., 2019).

The 10th Bi-Annual Report (January 1st to June 30th, 2019) on the situation of substances/drugs and Alcohol misuse in Kenya by NACADA to the National Assembly 1490 litres of illicit alcohol was seized, and 119 people arrested in Makueni County (Kenya Police Headquarters, 2019). In the same Report, Makueni County was ranked position six with 726.1kgs of Cannabis/Bhang having been seized. Despite this information from the Police, the menace of substance & drug abuse in the youthful generation in Makueni County is not well documented, and the problem of drug abuse is rising.

Table 1.1: Cases of Substance/ Drug Nabbed by Police in Makueni County

Incidence	Date of occurrence	Place of incidence
Two vehicles impounded with thousands of Bhang packed in bags	Saturday, April 16th, 2022	Mtito Andei
74 year Old Woman found in possession of 38 roles of Bhang	Monday, November, 29 th 2021	Kibwezi
The motorcycle caught with Bhang concealed in a sack of cabbages, potatoes and carrots	Friday, May, 21 st 2021	Kibwezi
53 sacks of Bhang destroyed by Court in Kilungu	Thursday, May 6 th , 2021	Kilungu
6180 rolls of Bhang netted in a saloon care	Tuesday, February 19 th , 2019	Email

Source: National Police Service, 2022

Many types of research by individuals and NACADA have concentrated on the coastal counties and major urban areas than Rural Counties. This revelation from the Police in Makueni County indicates a problem of substance abuse and drug abuse. It forms the reason this study is carried out, forming the basis of evaluating the epidemiology of substance/drug abuse among young people in Makueni County.

1.3 Justification

Youths require special attention because they are prone to drugs and substance abuse. For instance, peer influence has made young people engage in substance abuse, such as chewing khat (Muguka), Bhang, and alcohol. Despite the various government regulations to prevent drug abuse among the youths, the problem has grown deeper with youths of all ages consuming substances (NACADA, 2019). Understanding the epidemiology of drug & substance abuse in the youths in Makueni will help the government understand how to provide strategies to reduce the abuse of substances within the County. This will, in turn,

result in minimal use of substances and drug abuse, reducing substance addiction/substance abuse disorders, improving academic and job performance and reducing crime engagement among the youths of Makueni County. The information from the study will also play critical role towards creating public education and awareness, life skills training programs and compliance with policies, thus helping the youths and the general people of Makueni .

1.4 Research Questions

The Research Questions below have enabled the study;

1. What is the prevalence of substance abuse among the youths in Makueni County?
2. What factors contribute to substance abuse among the youths in Makueni County?
3. What is the association between substance abuse and the social demographic factors among the youths in Makueni County?
4. How is the youths' awareness of Substance Abuse Mitigation Strategies in Makueni County?
5. What is the community leaders' perception of substance abuse among the youths in Makueni County?

1.5 Research Objectives

1.5.1 General Objective

To determine the epidemiology of substance abuse among the youths in Makueni County, Kenya

1.5.2 Specific Objectives

1. To assess the prevalence of substance abuse among the youths in Makueni County.
2. To determine the factors contributing to substance abuse among the youth in Makueni County
3. To identify the association between substance abuse and the sociodemographic factors
4. To assess the youths' awareness of Substance Abuse Mitigation Strategies in Makueni County.
5. To determine the community leaders' perceptions of substance abuse among the youths in Makueni County.

1.6 Significance of the study

Substance/drug abuse poses a dangerous problem globally. In its Report World Drug Report (2017), twenty-nine point five million people are affected by addiction. This study's findings will help the government of Kenya and other key leaders to better understand scope of substance Abuse in the county of Makueni, allowing them to develop effective strategies and policies to combat the issue and help to prevent substance abuse disorders that can be traced to initiation of substance abuse during adolescence. This will include identifying sources of drugs/substances and the sorts of drugs/substances often utilized by youngsters to shut off the supply route. The results shall be valuable to parents who don't have enough knowledge of their youth's drug usage. They will now have easy access to information that will assist them in determining the reasons for drug misuse and how it impacts their children's university and college performance.

The results will assist educational institutions to be more vigilant and sensitive to the problem of drug usage among youths in their institutions. The results also will help the Department of Health in the County in promoting community psychiatry in the prevention of substance abuse disorders and drug-induced psychosis caused by early drug use by the youths, including identifying substance abuse cases and setting up support mechanisms that may include informing parents and the community about drug abuse with the objective of creating a drug/substances free society.

1.7 Theoretical Framework

1.7.1 Social influence theory

Corporate missions and objectives define a theoretical review of the status of substance abuse in young people, and these can be explained further by the social influence Theory. The theory views that people are influenced by what they see as the norm. It hypothesises that the human being is a social being who can change his behaviour according to those around him, and thus, this can alter the individual's perception of something and thus affect his /her behaviour. (Theories on drug abuse Selected Contemporary Perspectives, 1980). Humans are addicted to a substance, and drug abuse is influenced by what they see as normal, such as peer pressure and copying of behaviour from parents. The Social Influence Theory is pertinent to this research since it applies to young people, particularly those who have engaged in drug use through peer pressure and copying behaviour seen as a norm. The hypothesis also informs this research since it is connected to peer pressure impact, as proven by the fact that drug providers and users have used increasingly diversified methods to sell and receive drugs. The application of social influence theory in this research suggests

that the substance abuser's patterns and environment may be analysed to understand substance abuse health behaviour better.

1.8 Conceptual Framework

The conceptual framework for this study is displayed in Figure 1.1 below. A paradigm that identifies and links the concepts under investigation is referred to as a conceptual framework. The structure connecting the independent and dependent variables served as the investigation's direction. The dependent variable is juvenile drug addiction, whereas the independent variables are substance prevalence, contributory factors, and mitigation techniques.

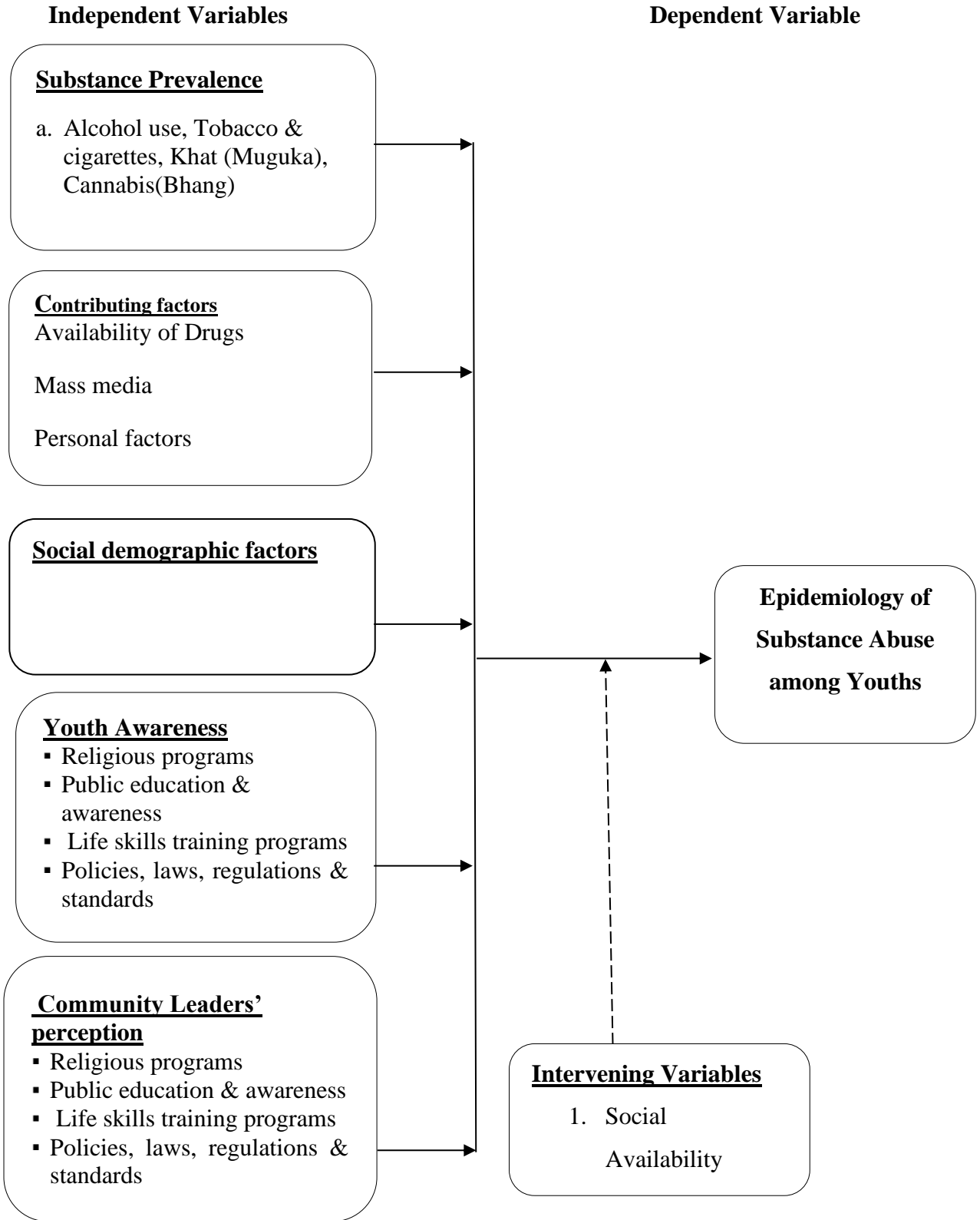


Figure 1.1: Conceptual Framework of the Study

Source: (Author, 2021)

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The empirical review and knowledge gap are presented in this chapter. The theoretical framework encapsulates the numerous ideas used to guide the research. The empirical literature review is also included in this chapter. The outcomes of the empirical literature review are analysed to identify knowledge gaps.

2.2 Prevalence and Substance Abuse among Youths

Substance prevalence is a major risk factor in drug abuse among youths, and it occurs during major transitions in young people's life. A study by Johnston et al. (2017) reports that alcohol abuse was the highly common and preferred drug among adolescents, with the use of cigarettes and marijuana following it closely.

A research study by Pieper et al. (2016) found that a prevalence rate of cannabis among adolescents ranged from 14% to 22%, while alcohol stood at 74% and was the most used among adolescents and youths.

In most countries of Africa, cannabis (Bhang) is the most abused illicit substance (World Drug Report, 2016). A survey done by Dada et al. (2018) found that admission for treatment due to bhang abuse increased to 74% of all cases admitted in South Africa. Another study by Odejide et al. (2017) in Nigeria recorded that alcohol and cigarettes are mostly abused among adolescents. Okonza (2018) observed that alcohol and cigarettes were highly abused due to their availability.

In East Africa community countries, Uganda scored the highest consumption of alcohol of 19.5 litres per capita. The consumption of narcotics has increased rapidly across East Africa, especially among youngsters. Uganda had the greatest per capita alcohol

consumption (International Narcotics Control Board, 2019). In the same study, the use of illicit narcotics in East Africa was rapidly increasing. In Kenya, Kuria (2019) reported that the abuse of drugs follows a logical pattern. He records that individuals usually begin with legal substances such as alcohol and cigarettes before progressing to more illegal substances as Heroin among others. As per comparative research done by Odek and Pande (2015), cigarettes and alcohol were found to be widely utilized. Further, the report records that undergraduate students in Kenya consume alcohol at 84.22%, tobacco at 54.7%, bhang/cannabis at 19.7%, and inhalants at 7.2%.

According to a study done by Kingala (2019), Kenyan adolescents begin taking drugs during school, with alcohol being the most often abused, while according to NACADA (2015), cigarettes, cannabis (Bhang), Miraa (khat), inhalants, and other drugs are the most commonly used substances in Kenya.

2.3 Factors Likely to Contribute to Substance Abuse among the Youth

Globally, the rate at which substance and drug abuse among nations has risen is witnessed in almost every part of the globe. The drug menace has not spared any country and has posed a challenge and a devastating problem (WHO, 2019).

In America and Europe, actors who smoke influence their fans on whether they will smoke (Goodman & Huang, 2018). According to research by Sullivan et al. (2019), alcohol remained the highly popularised drug on American television. The Authors reported that every 14 minutes, youths watch alcohol consumption on Music Television (MTV).

Heroin addiction is frequent among fashion photographers and models (Needle et al. (2019). According to research conducted by Jackson et al. (2020), the alcohol and cigarette industries spend billions of dollars on advertising, which seems to significantly influence

the adolescent population. Another study by Sullivan et al. (2019) found that alcohol addiction is often shown in movies, music, video, and television shows, reinforcing peer pressure on substance abuse.

A study conducted by Tsitsi & Simbarashe (2018) revealed that celebrity endorsers, comedy, rock music, and beautiful young models influenced children, adolescents, and youths into substance abuse. Advertisements of abusive substances made smoking and drinking alcohol look like normal habits and quietly encouraged teenagers to try these drugs.

In Kenya, Koech L (2021) observed that youngsters who listened to Genge-tone music were more likely to abuse drugs. External factors such as the media, local music, and peer pressure, according to a report by Shaw (2017), contribute to the rise in substance and drug addiction among teenage youths. According to a preliminary assessment published by the Kenya Film Classification Board in 2016 on the impact of obscene music on children in Kenya, many songs laud and display the use of drugs and other substances (Kenya Film Classification Board, 2016).

2.4 Sociodemographic factors

Gender, age, religion, occupation, education, and marital status are all socio-demographic factors that can lead people to use substances. According to a study by Kingendo (2018), age plays a significant role in the first use of drug. Educated people are more likely to make self-improvement selections that are less destructive to them than those who are illiterate and seek consolation via substance misuse. Religion also plays a significant part in socialization by guiding one's conduct and social relationships by offering benefits and drawbacks.

A study conducted by Mbatia and Kilonzo (2019) observed that males smoke more than females. A study by Kaduri (2018) found that men were substantially more likely than females to have ever smoked. On the opposite, research of South African and American teens, Priscila (2017) revealed that females had greater prevalence rates of alcohol usage than males.

In South Africa, the trend was reversed. Males smoked more cigarettes and drank more alcohol than females. In addition, men reported more marijuana usage than females. Horta et al., (2017).

The role of religion in culture cannot be overstated. Lack of religious beliefs was found to be a risk factor for increasing substance and drug abuse, and it stimulates behaviour checks, a substantial predictor of substance abuse (Sadiq et al., 2016).

Positive role models whom youths and teenagers can emulate influences abstinence to drugs & Substances. According to research by Hali, 66.3% of the 240 students in a university in Lagos, Nigeria, had never taken alcohol since it was not against their religious beliefs (Hali, 2018).

Families where parents abuse substances are a risk factor for children who may learn by watching and copying their parents. According to a report by NACADA (2017) and Asma (2019), the presence of drug abusers in the home is strongly linked to the likelihood of children aged 10 to 14 years abusing alcohol.

Drug/substance abuse has mostly been influenced by peer pressure among youths since the victims or drug addicts lure their innocent friends to join and experiment with substance abuse (Kinard & Webster, 2017).

Due to peer pressure, the American Medical Association Board of Trustees (2018) concurs that peer influence is a major factor in drug use among American teenagers. A study done by Jenkins (2020) showed that connotation with drug-using peers is still the most powerful predictor of alcohol and marijuana abuse. According to a study by Visser (2018), teenagers look up to their friends for direction rather than family members, leading to dangerous behaviours such as drug and substance abuse. The peer group with whom most drug addiction occurs, according to Catlin (2016), reinforces poor parental advice to the youngster. Peer influence was identified as a major source of vice reported in research on the impact of drugs and substances on teenagers in affluent nations (WHO, 2017).

In a study by Steinberg and Mohanan (2017), it was reported that friends have a significant role in starting marijuana drug consumption in Africa. Similarly, according to a study by NACADA (2018), being associated with delinquent peers was linked to varied degrees of substance abuse influence. In their Study, Patricia et al. (2019) found that peer pressure had the greatest response in research exploring social factors affecting substance abuse among Machakos Universities' youths. Furthermore, the research revealed that parental and other environmental factors (20%) impact youths' substance and drug abuse. In their Study, Rusby et., al (2018) found that construed parent and youth relationships and failed parental monitoring expose the youth to alcohol use.

2.5 Awareness of Substance Abuse Mitigation Strategies among Youths

There exist different substance abuse prevention strategies aimed at the youth, and this has evolved in the last ten years. According to a report by NACADA (2018), knowledge and awareness of the available policies, programs and services that aim at substance abuse

mitigation or prevention help the youth in knowing the limits of involvement in Drug and Substance abuse.

According to Das et al.'s (2016) systematic assessment of the efficiency of substance abuse prevention initiatives, these programs have a protective impact against drug use, which benefits the adolescents who are aware of them.

In a previous study, school-based drug usage prevention programs had been recommended targeting children's social and academic abilities, social behaviours, self-control, coping skills (such as peer connections) and drug offer rejection skills. Further, preventing drug use is the easiest and most cost-effective way to reduce personal and social expenses. This suggests that school-based drug addiction intervention and prevention programs should concentrate on children's social and academic abilities, drug offer rejection skills, coping skills, and self-control (Abdi, 2017).

A study carried out by Achukwu et al. (2017) found that establishing early detection programs in schools was an effective method for preventing the abuse of drugs among the youth. Preventing the initial use of illicit drugs and substances, according to Sidiq et al. (2016), is critical.

According to a study by Takalani (2016), parental counselling is critical in preventing drug abuse before peers affect children. All people in all aspects of the life of these youths, including religious leaders, teachers and mentors, made a lasting impact on the path of a child's life (WHO, 2019). The media was reported to educate and empower youth to reject dangerous substances because of its extensive reach and potential to impact behaviour (UNODC, 2019 & Uganda Adolescent Development Link, 2017).

2.6 Perception of Community Leadership on Drug and substance abuse

Given that the problem directly affects the community, it is imperative to enlist its citizens' support in the battle against drug abuse. The Phenomenon of drug misuse and substance abuse can be addressed using a comprehensive, interdisciplinary approach. This is where community efforts that might assist in reducing the drug usage problem can start.

Drug misuse is an issue that cannot be taken lightly and must be combated by all individuals and organizations working together. Therefore, if a solution is needed, the requirement for community involvement to deal with the situation is a very desirable move. 42% of the parents surveyed in a 1992 study on parents' perspectives regarding who should be in charge of preventing, regulating, and ending substance usage said that schools were responsible for doing so.

Few parents believed that they could make a significant difference in reducing drug misuse. Additionally, they believed that the community had a bigger role to play in controlling substance misuse than they did, at 12%. Without comprehending that the issue is more deeply ingrained and that prohibitionist measures would not be effective, they also believed that the authorities (civil) had a 28% obligation to stop the problem. The community is made up of several organizations, and they can get involved in various activities. It is clear from the 1992 study that a multidisciplinary approach is required if success is to be attained. While discussing it, it is impossible to include every group that makes up a community, but we will focus on some of the major ones.

2.6 Knowledge Gap

According to the literature examined, substance abuse among youths globally is increasing, not just among teenagers but also adults in general. Previous research on drug abuse has mostly focused on the general public. As a result, this research emphasizes three variables (prevalence, factors and strategies). To begin, the results of this research influence the development of context-specific treatments and policies for the prevention and ongoing support of persons with dual diagnoses of addiction and drug use, as well as public education and awareness among the youths and the broader public. According to a study by Pieper, Ridenour, Hockwalt, and Coyne-Beasley (2016), most commonly used illicit substance was found to be cannabis, that increased from 8.2% in 1991 to 14% in 2015. This is similar to the WDR (2016), where cannabis (Bhang) was the youths' most abused illicit substance. These studies in addition to having a contextual gap, they did not suggest any intervention measures.

Despite the fact that the preferred drug used by teenagers varies by location in South Africa, cannabis is the most common substance abused by adolescents in the nation, according to the 2016/2017 SANCA. In Nigeria, Odejide et al. (2017) found that most commonly abused drugs among adolescents was alcohol and smoking tobacco because they were socially acceptable. In contrast, Sussman, Dent, and Stacy (2018) found that the transition period for teenagers when they leave home and enter elementary school is associated with the prevalence of substance abuse.

Several researchers in Kenya and worldwide have been interested in the elements that lead to drug misuse. Shaw (2017) discovered that external variables such as mass media, local music, and peer pressure increase substance and drug misuse among teenagers and

adolescents, a historical issue. According to Chia and Needle (2016), substance abuse is taking illicit or legal drugs in ways that are not encouraged and to the extent that everyday activities are adversely affected. Jorgensen and Wells (2021) discovered that young people's socioeconomic status (SES) is a factor that leads to marijuana usage. According to Jolliffe et al. (2017), television shows and movies involve significant drug usage. Children, adolescents, and youths are influenced by advertising, according to Saladino et al. (2020). In Nigeria, Patrick and Okwukwe (2019) found that conditions and family histories are critical in correctly interpreting drug-related behaviours such as evading family regulations, parental neglect, survival, and engagement in peer groups.

In Kenya, Koech (2021) observed that youths who listened to Genge-tone music would likely to use drugs. Extrinsic factors such as the media, local music, and peer pressure, according to Shaw (2017), contribute to the rise in substance and drug addiction among teenagers and adolescents. According to a preliminary assessment published by the Kenya Film Classification Board in 2016 on the impact of obscene music on children in Kenya, a substantial number of songs laud and display drug abuse. According to NACADA (2014) and Patricia et al. (2019), peer pressure and failure of parental supervision led substance and drug usage in Kenya.

None of these researches looked at the level and prevalence of drug usage among the youths. The studies also did not focus on specialized intervention programs, as the current research does. Consequently, this research indicated the need to move beyond overt prevalence and determinants to widen the conceptualization of drug abuse and its effect among teenagers in terms of realizing that influence might result from conduct in the form of rationalization. Furthermore, no research has studied the situation of drug misuse among

youths in Makueni County; therefore, this research proposes to address that lack of data by assessing the epidemiology of substance abuse among Makueni County youths.

2.7 Chapter Summary

This chapter was based on the research objectives of determining the prevalence of substance abuse among youths, determining the factors that contribute to substance abuse among youths, and establishing strategies to prevent substance abuse among youths in Makueni County. The method used by the researcher to collect data in this study will be discussed in the next chapter.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter highlights the research methodology. The section covers the population of study, design, and sample size, method of data analysis, data collection methods, and data presentation.

3.2 Design of the Study

A Cross-sectional mixed-method design study was used in this research. This is appropriate for this research since it enables the collection of both quantitative and qualitative information from different individuals at a single point in time without influencing the variables. This research design was important since the researcher needed to use both quantitative and qualitative data for triangulation purposes. Due to the nature of the stigma associated with drug abuse and the legal implications of people using drugs, the qualitative study was used to help a better perspective of the drug abuse problem among the youth. Mutahi (2022) employed Cross-sectional mixed-method design to do her study on Psychopathology, Resilience, and Risk Factors Among Deaf and Hard of Hearing Adolescents.

3.3 Area of Study

The study area was major Urban Centres of Makueni County. Makueni County has Machakos on the north, on the east by Kitui, on the south by Taita Taveta, and the west by Kajiado. The County has 8 major markets namely: - Kikima, mukuyuni, Kathonzweni, Wote, Makindu, Mbumbuni, Emali and Nunguni. The study respondents were youths conveniently accessed in these eight Major Urban Centres.

The County was selected because most youths have been increasingly engaging in substance abuse, for example, khat (muguka), alcohol, cigarettes, and Bhang, among other used drugs. No documented study was conducted to assess the substance abuse status.

3.4 Study Population

The participants in this research were both genders of female and male youths ranging from 18 years and 33 years and chairpersons of the urban centres where the study was conducted. The targeted population came from eight major Urban Centres of Makueni County. Urban centres were selected because they have a higher population of people, and they are easily accessible compared to rural areas. The County has a 275,028-youth population (KNBS, 2020). Although the exact population of targeted youths abusing drugs currently in the area is unclear and unrecorded, drug use is widespread (NACADA, 2017).

3.5 Sampling procedures

Purposive sampling was used to select the urban centres where drug abuse is more rampant compared to rural centres, according to the reports obtained from the Police (National Police H.Q., 2019). In this study, simple random sampling was used to select the 384 participants who were residents of the area for one year and were willing to participate. The random sampling method was used to select the participants in each Research centre. Purposive sampling was used to identify each urban centre's eight key informants (chairpersons).

3.5.1 Determination of Sample Size

For Quantitative data, the study used Fisher's formula to calculate the sample size, which represents the population (Fisher et al., 1998).

$$n = \frac{Z^2 Pq}{d^2}$$

In this case:

Z = level of confidence according to the standard normal distribution. It was 95%,

n = Sample size [for population >10,000]

P = Proportion of the population estimated to have a characteristic of interest.

Q = Proportion of the population without characteristics of interest.

d² = Tolerable margin of error; was at 5%

The z-Value at 95% is 1.96.

The percentage of the youths in Makueni County who abuse substances/Drugs is unknown;

hence 50% of the population was included

$$n = \frac{Z^2 P(1 - P)}{d^2}$$

$$n = \frac{1.96^2 * 0.5 * [0.5]}{[0.05]^2}$$

$$= 384$$

The sample size per market is tabulated below

Table 3.1: Sample Size Calculation

Markets in Makueni County	Total Number	Sample size ((n/83502)*384)
Kikima	10,585	49
Mukuyuni	12,108	57
Kathonzweni	9,544	43
Email	8,833	40
Mbumbuni	8,563	39
Wote	9,698	45
Makindu	14,130	65
Nunguni	10,041	46
Total	83,502	384

Source: KNBS, 2020

By virtue of their position in the Centres, eight (8) Key informants' interviews were conducted with eight chairpersons of the Centres to supplement the information that was provided by the youths.

3.6 Study Variables

The study measured all the variables; the prevalence of substance abuse, influencing factors and strategies put in place.

Table 3.2: Measuring of research variables

Variable	Variable type	Indicator	Measurement	Scale	Tool of Analysis
Prevalence	Independent	Alcohol use, Tobacco & cigarettes, Khat (Muguka), Cannabis (Bhang)	Number of youths engaging in drug abuse	Percentage	Descriptive, Bivariate analysis
Influencing factors	Independent	Social demographic factors Mass media, Peer pressure, weak parental role and guidance	Factors that influence the youth to engage in drug abuse	Ratio	Descriptive and Inferential (Chi-Square)
Strategies	Independent	Public education & awareness Life skills training program Compliance with policies, laws, regulations & standards	Mitigation put in place to curb the youth from abusing drugs	Nominal	Descriptive
	Substance Abuse	Levels of Addiction	The extent to which the youth have abused drugs in Makueni	Nominal	Descriptive

3.7 Data Collection Instruments

In order to collect quantitative data, the research utilized a semi-structured questionnaire. This method was chosen for its ability to ensure confidentiality, cost-effectiveness, and ease of administration. The questionnaire was designed in clear and simple language, consisting of both closed and open-ended structured and standardized questions. Closed questions gave respondents multiple options, enabling them to make decisions quickly. Open-ended questions, on the other hand, allowed respondents the freedom to answer in their own words and provide additional comments on aspects that the closed questions may not have fully covered. Both types of questions were used to complement each other. The Likert scale, which assigns values of 1-5 to items, was employed to gauge respondent opinions and agreement or disagreement with the measured variables (McNabb, 2018). Additionally, a dichotomous scale was used to elicit simple Yes or No responses, facilitating quick completion of the questionnaire, particularly in large groups.

The questionnaire structure followed a funnel approach, starting with general questions and gradually progressing to more specific and potentially challenging ones. Leading questions, double-barrelled questions, and confusing inquiries were consciously avoided to ensure clarity. The conclusion of the questionnaire included open-ended questions to allow respondents to provide feedback on matters that may not have been addressed.

The questionnaire designed for this study consisted of four parts, each capturing unique data. Part A focused on gathering background information and demographic factors of the respondents—part B aimed to assess the prevalence of substance abuse among youth. Part C sought to obtain data on the factors contributing to substance abuse among youths.

Finally, Part D collected information on youths' knowledge regarding the strategies to control substance abuse among their peers.

Interviews were conducted with key informants using an interview guide containing open-ended questions to collect qualitative data. Eight key informants, who were chairmen of the Centres, provided their perceptions and opinions on the issue of substance abuse among youth. The interview guide helped structure the discussion by providing a predetermined list of questions.

3.8 Pilot Study

This was carried out in Machakos County's Masii market. Masii Market was selected as the demographic characteristics of Masii Market mirrors that one of Makeni County. A small representative sample that was comparable to the study group but not exactly the same as it was used to evaluate the research tool. A total of 38 (38) young people were chosen at random, contacted through a phone call, and interrogated. The pilot study gave the researcher the opportunity to determine if the items were valid and trustworthy, to address any small problems, misconceptions, and language barriers, and to remove ambiguity as necessary. Respondents' quick input throughout the piloting process improved the instruments by modifying and clarifying the offered instructions to reduce misunderstandings during data collection. Reliability of the research instruments was tested through the split half method, where the pilot study questionnaires were

3.9 Data Collection Process

The quantitative data was gathered through a self-administered questionnaire. Those conversant with the language did not need assistance completing the questions on their own. The researcher aided anyone who needed assistance. The respondents were contacted

through a phone conversation. First, the researcher explained to them the purpose of the study, and then gave them a consent form to sign. The questionnaire was then administered using the drop and pick method. Once the respondents were identified, they were given a questionnaire to fill in. Each respondent was given three days to complete the questionnaire. After that, the questionnaires were collected after being filled out for analysis.

Discussions with Key Informant interviews were taken in terms of notes by recording the answers, autotype, and transcribing, then stored on a hard disk with password protection. Essential information about the time, day and place of the interview was recorded in the interview guide.

3.10 Data Analysis

Quantitative data were analysed using descriptive and inferential statistics and presented through means, percentages, frequencies and standard deviations. Bar charts, graphs and pie charts with the help of Statistical Package for Social Scientists (SPSS) Software Version 26. Data was first checked for completeness and then coded to SPSS software. The researcher also conducted a correlation between the age, sex and education level of the youth and the prevalence of substance abuse. In order to check the association between factors contributing to the prevalence of drug abuse and the prevalence of drug abuse among the youth in Makueni County, a Chi-Square test was conducted. Qualitative data from the notes narrated by Key Informants were typed into a computer and then stored on a hard disk with password protection. Data were analysed through a thematic approach, a commonly used method for qualitative research by going through the data, and common

themes were identified. These common themes were used to supplement the quantitative data obtained from the questionnaires.

3.11 Eligibility Criteria

3.11.1 Inclusion Criteria

All individuals between the ages 18 to 33 who agree to take part in the study by signing the consent form and have lived in the market for a year.

3.11.2 Exclusion Criteria

Youth that were drunk were not included in the research. Also not included in the research were the young people who declined to sign the permission form. Additionally, the research did not include children under 18 or those older than 33.

3.12 Ethical Considerations

Permission from the Graduate School, K.U. Ethics Committee and National Commission for Science, Technology and Innovation were required. Second, the Makueni County Public Health Department was consulted. Participants were educated about the study so they may make an informed choice about whether or not to join. Participants' privacy was protected by assuring them that their information was only used for academic purposes and was not shared with anyone else. As a result, the researcher acknowledged all sources of information.

3.13 Study Limitation

Some respondents may not have answered some of the questions in the questionnaire honestly. To reduce social desirability bias, an emphasis on respondents being as truthful as possible was done before filling out the questionnaire, and they were assured of confidentiality.

Another limitation was financial resources for the study in the wide area of the County.

This being an academic study, time constraints affected the study.

CHAPTER FOUR: RESULTS

4.1 Introduction

The crucial facets of data presentation, analysis, and interpretation are covered in this chapter. The purpose of the study is to determine the prevalence of substance addiction among young people in Makueni County. A description of the study population has been provided using the demographic details of the participants. The results in relation to the study's main goals have been presented and analysed. For the quantitative data, a combination of descriptive and inferential statistics was utilized to examine the replies; for the qualitative data, a thematic approach was used. While inferential statistics allowed for conclusions to be drawn and inferences to be made about the wider population based on the sample, descriptive statistics provided for the meaningful summation and presentation of the data. The data was structured and visually presented using tables and graphs, which improved comprehension and interpretation of the results. The patterns, trends, and linkages found in the data were clearly shown by these graphic depictions.

4.2 Response rate

Three hundred and eighty-four respondents made up the study's target population. A response rate of 50% is deemed adequate, a rate of 60% or more is deemed acceptable, and a rate of more than 70% is deemed great, according to Mugenda & Mugenda (2003). This is consistent with Kothari's (2003) claim that a response rate of 50% is acceptable and a rate of more than 70% is desirable. According to these standards, the response rate in this instance was 91.1%, which is regarded as being extremely good. The response rate's findings are shown in Table 4.1.

Table 4.1: Response rate of the Questionnaires

Response Rate	Frequency	Percentage
Filled and returned	350	91.1
Unreturned	34	8.9
Total	384	100.0

4.3 Social and Demographic Information.

The study participants were residents of Makueni County, representing various categories based on their gender, age, marital status, academic achievement, religion, type of occupation, and place of residence. The distribution of respondents according to their social and demographic information is summarized in Table 4.2.

Table 4.2: Distribution of Social and Demographic Information of the Respondents

		Frequency	Percentage
Gender	Male	226	64.6
	Female	124	35.4
Age	From 18 years to 21 years	125	35.7
	From 22 years to 25 years	103	29.4
	From 26 years to 29 years	87	24.9
	From 30 years to 33 years	35	10.0
Level of Education	Primary	135	38.6
	Secondary	101	28.9
	Tertiary	70	20.0
	University	44	12.6
Occupation	Unemployed	147	42.0
	Self-Employed	96	27.43
	Employed	69	19.71
	Student	38	10.86
Religion	Christian	140	40.0
	Muslim	106	30.3
	Hindu	32	9.1
	Non-Religious	72	20.6
Residence	Rural	162	46.3
	semi-Urban	122	34.8
	Urban	66	18.9

According to the information in Table 4.2, of the 350 young people who took part in the study, 35.4% were female and 64.6% were male. This shows that more men than women participated in the research, which points to a gender gap in the young population of Makueni County.

According to the data' analysis of age distribution, the bulk of the young participants (35,7%) belonged to the 18–21-year age group, followed by the 22–25-year (29.4%), the 26–29 year (24.9%), and the 30-33 year (10%) age groups. This shows that the majority of young people in Makueni County are between the ages of 18 and 21.

Regarding education, it is evident from the data that a significant proportion of the youth participants (38.6%) had completed primary education. In comparison, 28.9% had completed secondary education, 20.0% had completed tertiary education, and 12.6% had completed university education.

Regarding occupation, the results show that most youth participants (42.0%) were unemployed, 27.4% were self-employed, 19.7% were employed, and 10.9% were students.

Concerning religion, the findings indicate that the majority of the youth participants in Makueni County (40.0%) identified as Christians, followed by Muslims (30.3%), non-religious individuals (20.6%), and Hindus (9.1%).

Lastly, the results reveal that the majority of the youth participants (46.3%) resided in rural areas within Makueni County, while 34.8% lived in semi-urban areas and 18.9% lived in urban areas.

4.4 Prevalence of substance abuse among the youths in Makueni County.

This section of the study focused on figuring out how common drug misuse was among young people in Makueni County. The next subsections include a presentation of the findings.

4.4.1 Prevalence of drug abuse among the youth.

Respondents were asked whether they had taken abusive drugs, and their responses are shown in Figure 4.3.

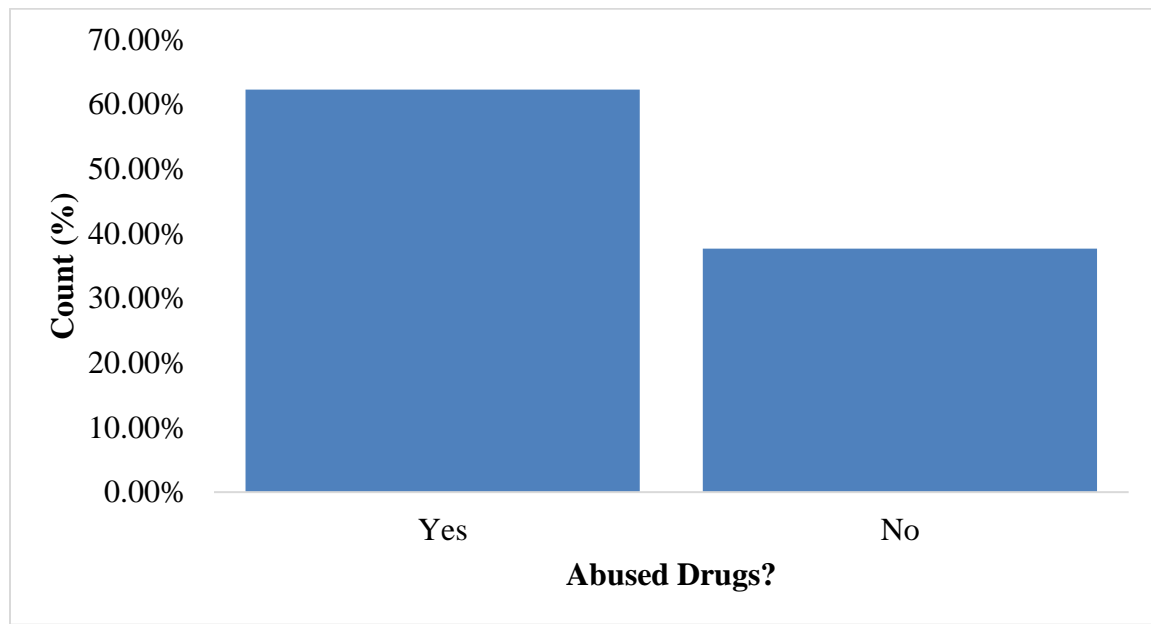


Figure 4.1: Prevalence of drugs among the youths in Makueni County

Respondents were asked whether they had ever abused drugs, and 218 (62.3%) of the youths accepted to have ever abused drugs, while only 132 (37.7%) responded that they had never abused drugs.

Findings from the interviews with community leaders corroborated these results. Most community leaders agreed that drug and substance abuse among the youths is rampant in Makueni County. One of them supported this view, who said: **KII 1** “..... *there is a*

very high rate of substance abuse in this area, approximately 40% of the youths abuse drug."

The youths involved in the abuse of drugs were found to be cutting across both genders, and very young people were abusing drugs or substances. One of the community leaders said this during the interview: **KII 2** “.....we found a group of young girls as young as 20 years taking alcohol and smoking cigarettes.....”

4.4.2 Frequency of drug abuse.

The respondents were next asked to specify how frequently they used drugs during a given week, and their replies are displayed in Table 4.3.

Table 4.3: Frequency of drug abuse among the youth in Makueni County

	Frequency	Percentage
Seven or more times a week	146	41.7
5 - 6 times a week	94	26.9
3 - 4 times a week	61	17.4
1 - 2 times a week	16	4.6
never use drugs	33	9.4
Total	350	100.0

The findings of the study, as shown in Table 4.6, show that 41.7% of the youths abused drugs and substances 7 or more times a week, 26.9% abused 5-6 times a week, 17.4% abused 3 - 4 times a week, 4.6% abused 1-2 times a week and the 9.4% do not abuse drugs.

4.4.3 ease of Access to Drugs

Respondents were further asked to indicate their easiness of getting drugs, and their responses were as shown in Table 4.4

Table 4.4: Ease of access to drugs among the youth in Makueni County

Entry	Frequency	Percentage
Yes, easily	162	46.2
Not all the time	108	30.9
yes, but with difficulty	80	22.9
Total	350	100.0

The majority of Respondents, 46.2% (162), indicated that they easily accessed abusive substances, and 30.9% (108) indicated that they do not always get those substances. Only 22.9% (80) admitted difficulty in accessing drugs.

Interviews with community leaders also established that the increased rate was attributed to the easy availability of abusive substances and the low cost of the drugs. This was confirmed by one community leader who said that:

KII 6 "...the drugs are readily available...the cost is so cheap that even with sh.50 you can purchase alcohol."

4.4.4 Commonly Abused Drugs

The prevalence of the medicines and substances listed, as well as how frequently they were used each week in Makueni County, were questioned of the respondents. Table 4.5 shows the results of the Likert scale used to evaluate their replies.

Table 4.5: Commonly abused drugs among the youth in Makueni County

Variable	Seven or more times a week (5)	5-6 times a week (4)	3-4 times a week (3)	1-2 times a week (2)	Not All (1)
Cocaine	1 (0.3%)	2 (0.6%)	4 (1.1%)	4 (1.1%)	339 (96.9%)
Heroin	2 (0.6%)	2 (0.6%)	3 (1%)	4 (1.1%)	339 (96.9%)
Tobacco	101 (28.9%)	110 (31.4%)	56 (16%)	48 (13.7%)	35 (10%)
Miraa/khat	96 (27.4%)	83 (23.7%)	70 (20%)	90 (25.7%)	74 (21.1%)
Bhang	96 (27.4%)	81 (23.1%)	65 (18.6%)	45 (12.9%)	63 (18%)
Alcohol	204 (58.3%)	134 (38.3%)	1 (0.3%)	7 (2%)	4 (1.1%)

N=350

As shown in the table above, the most prevalent substance was alcohol, with 204 youths (58%) abusing alcohol at least daily per week; Tobacco was used by 101 youths (28.9), while Bhang and Miraa were used by 96 youths (27.4%). Cocaine and Heroin were the least abused drugs, with 339 youths (96.9%) and 339 youths (96.9), respectively. The community leaders also believed that the commonly used drugs by youths in Makueni county included: Miraa (Muguka), Alcohol, Bhang, and Tobacco.

KII 4: “..... we found a group of young girls as young as 20 years taking alcohol and smoking cigarettes. That is how I knew that most youths in this area use different varieties of drugs and substances.”

4.4.5 Factors Contributing to Substance abuse

Based on a Likert scale, respondents were asked to assess how much they concur with specific drug prevalence indicators. The results are shown in Table 4.6.

Table 4.6: Indicators of the high prevalence of substance abuse among the youth in Makueni County

Variable	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
The availability of illegal drugs contributes to their use among the youth in Makueni County.	176 (50.3%)	143 (40.9%)	14 (4.0%)	13 (3.7%)	4 (1.1%)
Drug substances in Makueni County are easily accessible at affordable prices.	56 (16.0%)	74 (21.1%)	93 (26.6%)	73 (20.9%)	54 (15.4%)
Local individuals in Makueni County are involved in the sale of drugs.	72 (20.6%)	159 (45.4%)	45 (12.9%)	51 (14.6%)	23 (6.6%)
There is significant involvement of households in Makueni County in brewing, purchasing, and reselling of brews and other drugs, leading to increased accessibility.	159 (45.4%)	53 (15.1%)	112 (32.0%)	20 (5.7%)	6 (1.7%)
Selling drugs serves as a means of livelihood for economically disadvantaged households in Makueni County.	72 (20.6%)	57 (16.3%)	56 (16.0%)	42 (12.0%)	123 (35.1%)

N=350

The majority of the respondents, 176(50.3%), strongly agree that Youths in Makueni County use illegal drugs because of their availability. 73(20.9%) respondents disagreed that drug substances are cheaply sold within the County. Respondents also agreed 159(45.4%) that Individuals who sell drugs are locals in Makueni County. The majority of respondents, 159(45.4%), concurred that manufacturing, purchasing, and reselling alcohol and other drugs by families in Makueni County increases access to these substances. In contrast, 123 respondents (35.1%) strongly disagreed that drug sales are a source of income for low-income households.

The researcher also conducted a Pearson correction to check the relationship between gender, age and education level with the prevalence of drug abuse among the youth in Makueni County. The results are presented in Table 4.7 below.

Table 4.7: Pearson Correlations between gender, age and education level with the prevalence of drug abuse among the youth in Makueni County.

Correlations

		gender	age	Religion	Occupation	Education level	The extent of drug abuse in the County
gender	Pearson Correlation	1	.004	.012	.033	.074	.032
	Sig. (2-tailed)		.941	.827	.535	.169	.556
	N	350	350	350	350	350	350
age	Pearson Correlation	.004	1	.077	.076	.239**	-.064
	Sig. (2-tailed)	.941		.151	.157	.000	.235
	N	350	350	350	350	350	350
Religion	Pearson Correlation	.012	.077	1	-.046	.047	-.076
	Sig. (2-tailed)	.827	.151		.392	.379	.153
	N	350	350	350	350	350	350
Occupation	Pearson Correlation	.033	.076	-.046	1	.244**	-.184**
	Sig. (2-tailed)	.535	.157	.392		.000	.001
	N	350	350	350	350	350	350
Education level	Pearson Correlation	.074	.239**	.047	.244**	1	-.212**
	Sig. (2-tailed)	.169	.000	.379	.000		.000
	N	350	350	350	350	350	350
The extent of drug abuse in the County	Pearson Correlation	.032	-.064	-.076	-.184**	-.212**	1
	Sig. (2-tailed)	.556	.235	.153	.001	.000	
	N	350	350	350	350	350	350

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.7 shows a weak positive correlation between gender and the extent of drug abuse in Makueni County ($r=0.032$). The significance level of 0.556 is greater than 0.05, indicating that the relationship is insignificant. The correlation between age and the extent

of drug abuse indicates a weak negative correlation ($r = -0.064$), which was also insignificant ($\text{Sig. } 0.235 > 0.05$). The correlation between religion and the extent of drug abuse in Makueni County indicated a weak, insignificant negative correlation ($r = -0.076$; $\text{sig. } 0.153 > 0.05$). The correlation between occupation and the extent of drug abuse in Makueni County indicated a weak but significant negative correlation ($r = -0.184$; $\text{sig. } 0.001 < 0.05$). The correlation between education level and the extent of drug abuse in Makueni County indicated a significant negative correlation ($r = -0.212$; $\text{sig. } 0.000 < 0.05$). From the interviews with community leaders, the wrong company, fear of rejection, Home environment, peer pressure, unemployment, lack of punishment and poverty contributed to substance abuse in Makueni County.

KII 3 "Some home environments influence drug and substance abuse....."

KII 4” Most innocent individuals join these groups out of fear of rejection, which may frustrate them more.”

KII 5 "The problem with the youths nowadays is the lack of jobs. Most youths are looking forward to securing white collar jobs, which are not available in the current world.

4.5 Contributing factors to substance abuse among the youths in Makueni County.

In this section, the Study aimed to investigate the factors contributing to substance abuse among youth in Makueni County. The findings related to these factors are presented in the following subsections.

4.5.1 knowledge of the factors that contribute to substance abuse.

Table 4.8 illustrates respondents' knowledge about factors contributing to drug usage in Makueni County.

Table 4.8: Contributing factors to substance abuse by youths in Makueni County

Contributing Factor	Frequency	Percentage
Availability of drugs	120	34.3
Friends influence	93	26.6
Relatives influence	41	11.7
Curiosity/Experiment	43	12.3
To relieve stress	53	15.1
Total	350	100.0

Availability of drugs within the County was highly rated as the main contributing factor, with a percentage of 34.3%, while influence by friends was rated second, with a percentage of 26.6%. Influence from relatives was 11.7%, those who took drugs due to curiosity 12.3% and 15.1% abused drugs to relieve stress.

The respondents also indicated that youths use drugs to relieve stress with a percentage of 15.1%, while curiosity to use drugs was rated at 12.3%. Influence by relatives was rated least at 11.7%, indicating that most drug abusers are not very close with relatives.

4.5.2 Parental Guidance on the Use/Abuse of Drugs

Respondents were asked to indicate how their parents guided them on substance and drug abuse, and their responses are shown in Figure 4.3.

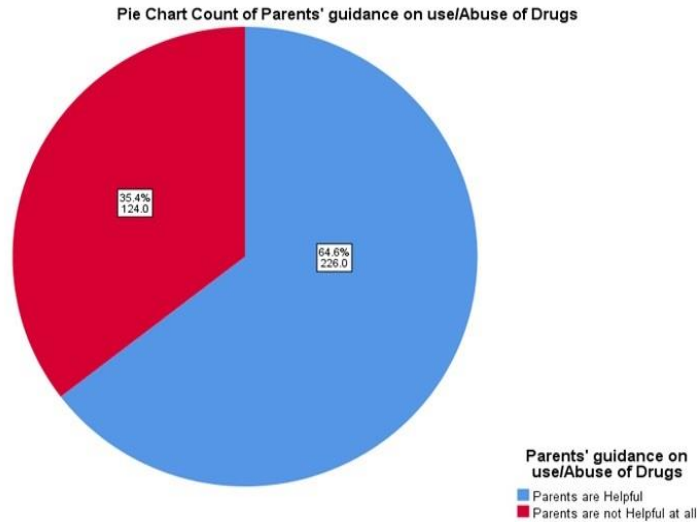


Figure 4.2: Parental guidance on the use/Abuse of drugs among the youth in Makueni County

The majority, 64.6% of the respondents, indicated that their parents talked to them about the dangers of consuming abusive substances stating their guidance was helpful. In comparison, 35.4% indicated that parental guidance was not helpful.

4.5.3 Source of drugs/substances abused by youths in Makueni County.

Respondents were asked about the source's drugs, and their Responses were as shown in Figure 4.5

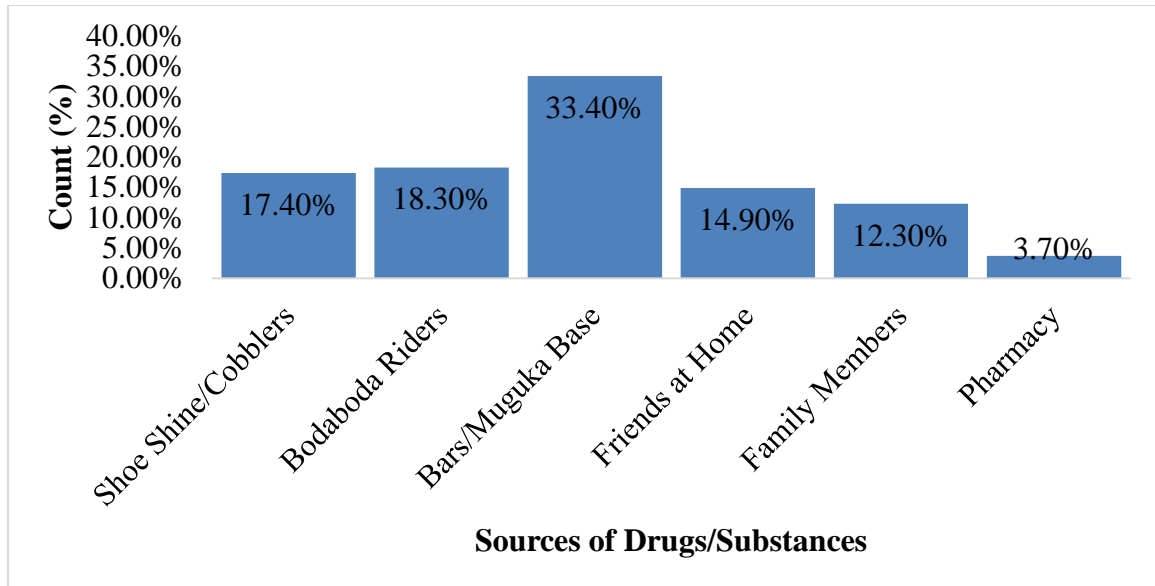


Figure 4.3: Sources of drugs/substances abused by youths in Makueni County

Bars and Muguka bases are the main sources of abusive drugs at a percentage of 33.4%, followed by Bodaboda riders, shoe cobblers, friends at home and family members with 18.3%, 17.4%, 14.9 and 12.3%, respectively. Respondents also indicated that the Pharmacy was the least contributor of addictive substances at a percentage of 3.7%, implying that the youths in Makueni County were not more prone to addictive Over-The-Counter drugs compared to other addictive substances such as alcohol, tobacco, khat, Heroin, cocaine and Marijuana which are accessible from such places like bars and Muguka bases.

4.5.4 Extent to which socioeconomic factors contribute to drug misuse in Makueni County.

Respondents were requested to rate how specific factors influence drug misuse among youth. They indicated their reactions on a 5-point Likert scale; responses are in Table 4.9 below.

Table 4.9: Socioeconomic factors contributing to drug misuse among the youth in Makueni County

Variable	0-20%	21-40%	41-60%	61-80%	81-100%
Peer pressure	1 (0.30%)	4 (1.1%)	28 (8.0%)	64 (18.3%)	253 (72.3%)
Rise in the unemployment rate	11 (3.1%)	4 (1.1%)	8 (2.3%)	109 (31.1%)	218 (62.3%)
cost of drugs being cheap	55 (15.7%)	33 (9.4%)	21 (6.0%)	142 (40.6%)	99 (28.3%)
poverty level	58 (16.7%)	94 (26.8%)	68 (19.4%)	77 (22.0%)	53 (15.1%)

N = 350

From the table above, 72% and 62% of the respondents agreed that peer pressure and the rise in the unemployment rate, respectively, contribute to 81-100% of drug abuse in Makueni County. 142 (40.6%) of the respondents opined that the cost of drugs being cheap contributes to 61-80% of the drug abuse cases in Makueni, while 94 (26.8%) of the youths also indicated that 21-40% of the substance abused is contributed by poverty level.

4.5.5 Source of information on drug abuse

The respondents were asked to indicate the degree to which drug usage among Makueni County youth depends on the below information sources. This was to determine how various variables influenced the Makueni youth into abusing drugs. The results of their response are indicated below in Table 4.10.

Table 4.10: Source of drug information among the youth in Makueni County

Variable	0-20%	21-40%	41-60%	61-80%	81-100%
Local Music	6 (1.7%)	11 (3.1%)	25 (7.1%)	47 (13.4%)	261 (74.6%)
Tv programs	11 (3.1%)	19 (5.4%)	26 (7.4%)	30 (8.6%)	264 (75.4%)
Friends	11 (3.1%)	5 (1.4%)	6 (1.7%)	83 (23.7%)	245 (70.0%)
Social media	0 (0)	2 (0.6%)	0 (0)	21 (6.0%)	327 (93.4%)
Parent	339 (96.9%)	7 (2.0%)	0 (0)	0 (0)	4 (1.1%)
Faith-based organizations	340 (97.1%)	7 (2.0%)	0 (0)	1 (0.3%)	2 (0.6%)
Local leaders	327 (93.4%)	0 (0)	6 (1.7%)	6 (1.7%)	11 (3.1%)
Religious leaders	290 (82.9%)	16 (4.6%)	8 (2.3%)	7 (2.0%)	29 (8.3%)
Non-governmental organizations	315 (90.0%)	19 (5.4%)	5 (1.4%)	8 (2.3%)	3 (0.9%)
N = 350					

Most respondents agreed that social media, T.V. programs and local music are the main sources of information about drugs at 93%, 75.4% and 74.6%, respectively, to a great

extent (81-100%). They also strongly indicated that faith-based organizations, parents, Local leaders, non-governmental organizations and religious leaders are not sources of information about drug abuse at 97.1%, 96.9%, 93.4%, 90.0% and 82.9%, respectively (0-20%).

Table 4.11: Chi-Square Results on Source of drug information among the youth in Makueni County

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	445.999 ^a	374	.006
Likelihood Ratio	277.108	374	1.000
Linear-by-Linear Association	.115	1	.735
N of Valid Cases	350		

a. 407 cells (98.3%) have an expected count of less than 5. The minimum expected count is .00.

The chi-square analysis yielded a chi-square value of 445.999 with 374 degrees of freedom and a significance value of 0.006. Since the significance value is less than 0.05, the null hypothesis that there is significant relationship between the contributing factors to substance abuse among youth in Makueni County and the prevalence of substance abuse among youth in the County is not rejected. Therefore, the researcher concluded that the factors examined in this study have contributed to the high prevalence of drug abuse in Makueni County.

4.6 Awareness of strategies to prevent substance abuse among the youths in Makueni County.

In this section, the study aimed to assess the knowledge and awareness of strategies implemented to prevent substance abuse among youth in Makueni County. The findings related to this aspect are presented in the following subsections.

4.6.1 Knowledge of youths on whether drug abuse is a problem in Makueni County

Respondents were asked to indicate if drug abuse is a problem among youths in Makueni County. The results are presented in Figure 4.6

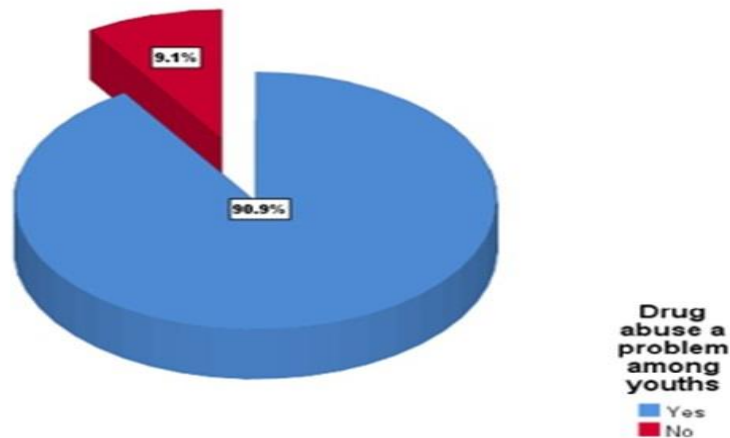


Figure 4.4: Knowledge by youths on whether drug abuse is a problem in Makueni County

From Figure 4.6, most respondents reported that drug abuse is a huge problem in Makueni County at 90.9%, while only 9.1% indicated that drug abuse is not a problem in the County.

4.6.2 Where to refer a drug user for guidance in Makueni County

The respondents were asked to indicate where to refer a colleague who uses abusive substances for guidance, and their responses were as shown in Table 4.12

Table 4.12: Where to refer drug users for help among the Youth in Makueni County

	Frequency	Percentage
Religious leader	98	28.0
Youth Center	57	16.3
Rehabilitation center	195	55.7
Total	350	100.0

From the results in Table 4.16, most (55%) of the respondents indicated that youths trapped with drug abuse should be referred to rehabilitation centres, while 28% preferred religious leaders. Similarly, 16.3% of the respondents indicated that youths who abuse drugs should be referred to Youth Centers for guidance.

4.6.3 Suggested Measures to reduce drug abuse among Youths in Makueni County

Respondents were requested to indicate what can be done to address the issue of drug misuse, and their responses are shown in Figure 4. 7

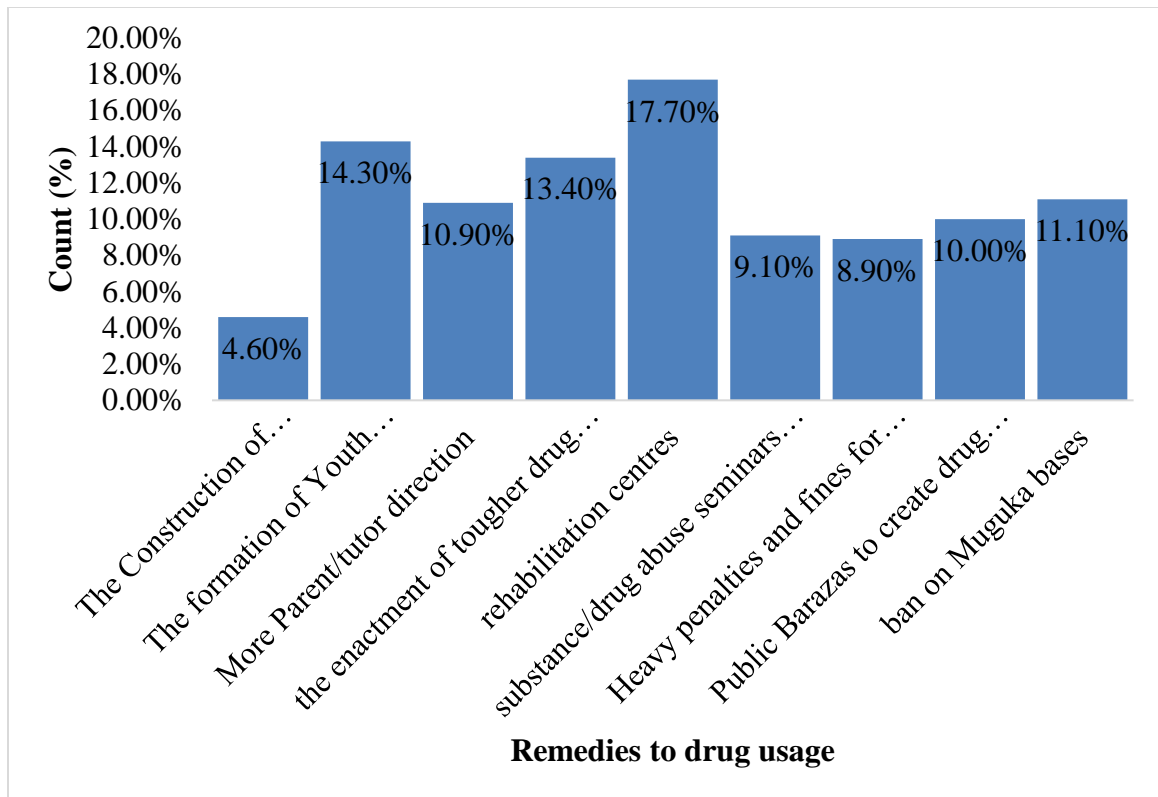


Figure 4.5: Remedies to the drug abuse among the Youth in Makueni County

From the study, a good number of respondents (17.7%) indicated that establishing rehabilitation centers was a remedy for controlling drug misuse. In comparison, 14.3% of the respondents preferred forming youth organizations and clubs. The results also indicate that 13.4% of the respondents preferred enacting tougher drug legislation, while 11.1% preferred a ban on Muguka bases. Participants further indicated that More parental/tutor direction, Public Barazas, Substance/ Drug abuse Seminars and Rallies, heavy Penalties and fines for drug offenders and the construction of recreational facilities at 10.9%, 10.0%, 9.1%, 8.9% and 4.65 respectively as strategies that can mitigate the problem of drug abuse in Makueni county.

4.6.4 Strategies put in place to prevent substance abuse among the youths in Makueni County.

Respondents were asked to rate how much they agreed with statements about measures taken to stop teenage substance misuse, and their results are displayed in Table 4.13.

Table 4.13: Strategies put in place to prevent substance abuse among the youths in Makueni County

Variable	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
In order to combat drug misuse, Makueni County uses Life Skills Training as a preventative educational strategy.	10 (2.9%)	18 (5.1%)	13 (3.7%)	15 (4.3%)	294 (84.0%)
Makueni County has implemented a plan to improve community preparedness and participation in preventative activities and initiatives to limit youth usage of abusive drugs.	255 (72.9%)	14 (4.0%)	19 (5.4%)	42 (12.0%)	20 (5.7%)
Makueni County has established youth groups and clubs in an attempt to prevent and reduce the use of harmful legal products among youth	28 (8.0%)	20 (5.7%)	54 (15.4%)	13 (3.7%)	235 (67.1%)
Makueni County employs a strategy that aims to change a community's larger physical, social, economic and physical environment in order to reduce youth substance abuse	96 (27.4%)	47 (13.4%)	42 (12.0%)	92 (26.3%)	73 (20.9%)

On whether Makueni County uses Life Skills Training as a preventative educational strategy, the majority of the respondents, only 10 (2.9%), strongly agreed, while 18 (5.1%)

agreed, 13 (3.7%) were neutral, 15 (4.3%) disagreed. The majority, 294 (84.0%), strongly disagreed. On whether Makueni County has implemented a plan to improve community preparedness and participation in preventative activities and initiatives to limit youth usage of abusive drugs, 255 (72.9%) of the respondents strongly agreed, 14 (4.0%) agreed, 19 (5.4%) were neutral, 42 (12.0%) disagreed. In comparison, 20 (5.7%) strongly disagreed. On whether Makueni County has established youth groups and clubs in attempts to prevent and reduce the use of harmful legal products among youth, 28 (8.0%) of the respondents strongly agreed, 20 (5.7%) agreed, 54 (15.4%) neutral, 13 (3.7%) disagreed. The majority, 235 (67.1%), strongly disagreed. On whether Makueni County employs a strategy that aims to change a community's larger physical, social, economic and physical environment in order to reduce youth substance abuse, 96 (27.4%) of the respondents strongly agreed, 47 (13.4%) agreed, 42 (12.0%) were neutral, 92 (26.3%) disagreed. In contrast, 73 (20.9%) strongly disagreed.

Community leaders felt that establishing rehabilitation centres, alternative employment and heavy fines for drug users were the initiatives proposed to be put in place to curb the rising problem of substance abuse in Makueni County.

KII 5 ".....*They need a change of mindset to embrace technical skills that will bring some earnings at the end of the day.*"

KII 5 ".....*These youths should be taken to legal institutions like courts and fined or even arrested.*

KII 3 ".....*We need rehab centres in our area for those addicted to drugs to get good treatment.*

4.7 Community Leaders' perception of Substance Abuse

The fifth objective of the study was to determine the community leaders' perceptions of substance abuse among the youths in Makueni County. Data for this objective was collected from the interviews with community leaders. Based on the interviews conducted, there is a consensus that the current laws aimed at combating drug and substance abuse are not sufficiently punitive or effective. Respondents highlighted several challenges undermining the legal framework. A recurring theme was the inadequate enforcement of existing laws, often attributed to corruption, resource limitations, and an insufficient number of enforcement personnel. Many felt that the penalties in place do not provide a strong enough deterrent, especially for drug suppliers and traffickers. Furthermore, respondents criticized the legal system for placing greater emphasis on punitive measures rather than adopting a rehabilitative approach that addresses the underlying causes of drug abuse.

One participant, for instance, stated: **KII 3:** “.....*The law needs to strike a balance; it's not just about punishing the users but addressing the root causes, like unemployment and peer pressure.....*” This sentiment captures the broader view that the legal framework must evolve to encompass preventive and rehabilitative strategies rather than focusing solely on punishment.

When asked about recommendations to enhance the fight against drug and substance abuse, the participants suggested a multi-faceted approach. Many emphasized the need for community-based initiatives, such as establishing rehabilitation centers and conducting awareness campaigns led by local leaders. Economic empowerment was another critical suggestion, with respondents advocating for vocational training and alternative

employment opportunities. They believed that such programs could reduce the vulnerability of individuals, particularly the youth, to drug use.

Policy reforms were also proposed, with recommendations for stricter penalties targeting suppliers and traffickers rather than only users. Additionally, respondents highlighted the importance of collaborative efforts, suggesting partnerships between the government, non-governmental organizations, and the private sector to pool resources and expertise. One interviewee remarked: **KII 4:** “.....*What we need is a clear plan that combines both strict laws and proactive community support systems to ensure sustainable change.....*”

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The findings of the study, findings from earlier research, and conclusions on the epidemiology of drug misuse among children in Makueni County are discussed in this section. Additionally, the policy suggestions and future research directions have been provided.

5.2 Discussion

Three Hundred and fifty (350) out of the 384 participants in the research completed and returned their questionnaires, yielding a response rate of 91.1%. The response rate of 91.1% is classified as excellent, as per Mugenda and Mugenda (2013). These results were similar to Njoki (2013), who achieved a 100% response rate in her study, and Abur (2014), who also achieved an 88 percent response rate.

The study findings showed that more men than women participated in the research, which points to a gender gap in the young population of Makueni County. The findings indicated a low level of education among the youth in Makueni County, with a majority having only primary education. Regarding occupation, the study suggested that many youths in Makueni County are seeking employment, resulting in a high unemployment rate among the youth population. Concerning religion, the findings indicated that Christianity is the dominant religion among the youth population in the County. Lastly, the results revealed that a significant proportion of the youth resides in rural areas, possibly in their family or matrimonial homes.

The findings provide insights into the social and demographic characteristics of the youth participants in Makueni County, highlighting gender imbalances, age distribution, educational levels, employment status, religious affiliation, and residential locations. These findings can contribute to a better understanding of the target population and inform future interventions or policies addressing substance abuse among the youth in the County.

5.2.1 Prevalence of substance abuse among the youths in Makueni County.

The study results indicated that there was a high prevalence (62.3%) of Substance abuse among the youths in Makueni County. The findings of this study corroborate research by Kemei (2018) and Magu et al. (2018) that found drug and substance misuse to be a widespread issue with an upward tendency in most developed nations. The findings of this study contrast slightly with those of a study by Musyoka, Mbwayo, Donovan, and Mathai (2020), which discovered that only 20% of first-year young adults at one university were currently using alcohol or other drugs. With a frequency of 31%, the current study's prevalence is different from that of Osman et al. (2015). Interviews with community leaders also established that there was increased rate of substance use in Makueni County that was attributed to the easy availability of abusive substances and the low cost of the drugs.

Bachand (2018) investigated drug and substance misuse among Gambia's homeless youngsters with the aim of determining the prevalence and ease of access to drug and substance addiction among them. The findings showed that there was a high prevalence of substance use among street youngsters because they had a greater accessibility to harmful chemicals.

This alignment in findings suggests a similar pattern of drug availability and accessibility, indicating a concerning issue of substance abuse among vulnerable populations. The concurrence of these findings underscores the importance of addressing substance abuse among marginalized groups and implementing effective prevention strategies to protect and support these individuals.

The study's findings showed that drug usage is very common in Makueni County. Alcohol, tobacco, bhang, and miraa were the substances that were most often abused. The community leaders also believed that the commonly used drugs by youths in Makueni county included: Miraa (Muguka), Alcohol, Bhang, and Tobacco. According to earlier research, alcohol, cannabis (also known as "bhang"), miraa (*Catha edulis*), and tranquilizers are the most often abused substances (Ndirangu, 2018; Acuda, 2018).

According to Okechukwu, E.C. (2018), drug misuse is very common among young people. Up to 10% of teenagers in their survey acknowledged to consuming alcohol more frequently than three times per week. In the (Dhadphale, 2018) research, 16% of the teenagers acknowledged to cigarette smoking more than three times per week, fourteen percent admitted to smoking marijuana (bhang), and sixteen percent admitted to using other drugs, particularly tranquilizers, to "feel high." Acuda (2018) found in a survey of Kenyan academic literature that young people commonly take miraa (*Catha adults*) to stay awake during test time.

From the results, it can be deduced that the availability of drugs within the County is the key indicator for the high prevalence of substance abuse. The researcher also conducted a Pearson correction to check the relationship between gender, age and education level with

the prevalence of drug abuse among the youth in Makueni County. From the interviews with community leaders, the wrong company, fear of rejection, home environment, peer pressure, unemployment, lack of punishment and poverty contributed to substance abuse in Makueni County.

This finding is congruent with a study by Olutende et al. (2021) found that a common reason for using substances among youth attending University is the availability of substances. However, Olutende et al. (2021) study was specifically done on university students.

5.2.2 Contributing factors to substance abuse among the youths in Makueni County.

The findings of a study conducted by Hali (2018) in metropolitan Kano, Nigeria, align well with the current study. Hali's study identified several factors that contribute to substance abuse among teenagers, which are consistent with the present study's findings. These factors include the tension, availability of drugs, early marriage, peer pressure, frustration, the influence of Western media, rivalry among co-wives, and depression. These shared findings highlight the universality of these factors and their impact on substance abuse among youth.

Olutende et al. (2021) concur with the findings of this study, where they found that poor parenting was a contributing factor to the abuse of drugs and substances among youths attending the University in Kakamega. This was also confirmed by Misango Mwaura & Naftali (2021), who found that parents have a significant influence on substance abuse among adolescents ($p < 0.05$). Another study by Musyoka, Ndiga, & Waithima (2020)

found that failure to guide adolescents on substance abuse negatively influenced them to abuse substances.

The findings of this study concur with Musyoka, Ndiga and Waithima (2020) that established that the family members who abuse drugs introduce them to their youths. In her Study, Katy (2016) records that one source of drugs for teenage youths are fellow friends and their close associates in the markets close to schools where Bars and Muguka Dens are found. Although Pharmacy as a source of substances abused by the youth in Makueni County takes the lowest score at 3.7%, a study done by Odhiambo (2018) among secondary school youth in Nakuru County pharmacy was found to be the major source of abused substances.

The results of the current study are further supported by information from a study done in South Africa and by NACADA in Kenya. The South African Study stressed that a complex interplay of family, friend, society as a whole and social variables affects drug misuse. These variables include the biological and genetic components, psychological traits, behavior, and the social and perceived environment. Similar to NACADA, various factors have been linked to teenage substance addiction in Kenya, including peer pressure, lax parental supervision, child maltreatment, mimicry, emotional stress, student absenteeism, levels of poverty, access to inexpensive drugs, and the unemployment rate.

These findings indicate that substance abuse among youth is multifaceted and influenced by various factors at different levels. The convergence of these findings across different studies and countries underscores the importance of addressing these factors

comprehensively to effectively combat substance abuse and promote the well-being of youth populations.

From the results, social media stands out as the main information source. This association was also checked using the Chi-Square. The chi-square analysis yielded a chi-square value of 445.999 with 374 degrees of freedom and a significance value of 0.006. Since the significance value is less than 0.05, the null hypothesis that there is significant relationship between the contributing factors to substance abuse among youth in Makueni County and the prevalence of substance abuse among youth in the County is not rejected. Therefore, the researcher concluded that the factors examined in this study have contributed to the high prevalence of drug abuse in Makueni County. These findings collectively emphasize the role of media, particularly television and the internet, in shaping attitudes and behaviours related to substance abuse among young people.

5.2.3 Awareness of strategies to prevent substance abuse among the youths in Makueni County.

The study results clearly indicated that most youths are burdened with substance abuse; therefore, there is a need for the youths to be aware of strategies put in place to prevent substance abuse among the youths in the County.

Rehabilitation centres are the most preferred for guidance in Makueni County. The results of this current study partly agree with Asanyo (2020) that rehabilitation centres are key in mitigating substance and drug abuse.

The research reinforces Salles and Oliveira's (2018) findings about preventative and remedial measures for teen drug misuse in Brazil. The results also showed that engaging

parents or guardians and establishing treatment facilities were successful ways to lower teenage drug use.

The results of the study established that the County is facilitating creating awareness within the study area by; implementing a plan to improve community preparedness and participation in preventative activities and initiatives to limit youth usage of abusive drugs, also employing a strategy that aims to change a community's larger physical, social, economic and physical environment in order to reduce youth substance abuse. However, the study established that the County does not provide life skills training for the youths, and no organized youth groups and clubs promote the prevention of substance/Drug use in the County.

5.2.4 Community Leaders' perception of Substance Abuse

The current laws aimed at combating drug and substance abuse are not sufficiently punitive or effective. There is also inadequate enforcement of existing laws, often attributed to corruption, resource limitations, and an insufficient number of enforcement personnel. The penalties in place do not provide a strong enough deterrent, especially for drug suppliers and traffickers. Furthermore, The legal system has placed greater emphasis on punitive measures rather than adopting a rehabilitative approach that addresses the underlying causes of drug abuse.

Policy reforms were also proposed, with recommendations for stricter penalties targeting suppliers and traffickers rather than only users. Additionally, respondents highlighted the importance of collaborative efforts, suggesting partnerships between the government, non-governmental organizations, and the private sector to pool resources and expertise.

These findings align closely with existing literature, which underscores the inadequacy of punitive measures alone in addressing substance abuse. Research by Smith et al. (2020) emphasizes that a balanced approach integrating rehabilitation, education, and stricter legal enforcement yields better outcomes. Similarly, Johnson and Green (2018) argue that economic empowerment and technical skills training can significantly reduce drug dependency by providing viable alternatives to vulnerable populations.

5.3 Summary of the Study

The research, which attempted to ascertain the epidemiology of substance abuse among young people in Makueni County, discovered that there are many young people who abuse drugs. Alcohol, tobacco, marijuana, and stimulants including cocaine, heroin, and methamphetamine were the most often abused substances respectively. Alcohol was identified as the most widely abused substance and potentially served as a gateway to other drugs, with many youths progressing from alcohol to harder drugs.

The study also examined factors contributing to substance abuse and identified various sociodemographic factors. Respondents reported being influenced by friends, using drugs to relieve stress, easy accessibility of drugs in the area, seeking the feeling of potency, cultural expectations, and influence from social media. High unemployment rates were also identified as a contributing factor, with drugs serving as a coping mechanism for unemployment-related stress and anxieties. The Chi-square analysis indicated a significant relationship between the contributing factors and the prevalence of drug abuse.

Regarding the awareness of county-level strategies to address drug and substance abuse, the study found that the County had implemented a plan to improve community preparedness and participation in prevention activities. The County also aimed to change

the larger physical, social, and economic environment to reduce youth substance abuse. However, the study revealed a lack of youth groups and clubs and the absence of life skills training as preventive measures against substance abuse. This suggests that the County's strategies might not effectively reach the youth population.

5.4 Conclusion

Adolescence and early adulthood are crucial human growth and development stages characterized by brain maturation. During this period, the harmful effects of drugs and substances on the brain and personality development are particularly impactful. The findings of this study, which indicate a high prevalence of drug use in Makueni County, should garner the attention of key stakeholders in society.

The study identified alcohol, tobacco, marijuana, and miraa as the most commonly used drugs and substances among youths in Makueni County. While hard drugs like cocaine and Heroin were not widely used, the accessibility of drugs to youths was noted as a significant issue. The study revealed that youths use drugs due to peer influence, curiosity, easy availability and affordability of drugs, unemployment, poverty, and influence from local music, television programs, and social media.

The study emphasizes that the factors identified in the research contribute significantly to the high prevalence of drug abuse in Makueni County. The study concludes that establishing rehabilitation centres and implementing plans to enhance community preparedness and participation in preventative activities are the most effective approaches to mitigate drug use in the County.

5.5 Recommendations of the study

5.5.1 Recommendations for Policy

The study offers several recommendations to address the issue of drug abuse among youths in Makueni County. These recommendations involve various stakeholders, including the government, community leaders, organizations, and individuals. Here are the key recommendations:

1. Through the county administration, the government should initiate sensitization campaigns to educate the community about the dangers of drug exposure to youths. These campaigns should focus on raising awareness and promoting a drug-free environment.
2. Administrators, such as local government officials, should actively curb drug use among youths. They can collaborate with organizations like NACADA to conduct educational programs for counsellors, parents, and adolescents, covering various aspects of drug use and trafficking.
3. Non-governmental organizations can play a role in implementing community development projects to improve people's socioeconomic status. The reliance on drugs as a coping mechanism may decrease by addressing poverty and creating alternative opportunities, such as skills training and entrepreneurship programs.

By implementing these recommendations collectively, the government, community leaders, organizations, and individuals can work towards creating a drug-free environment, providing support and guidance to the youth, and addressing the underlying factors contributing to drug abuse in Makueni County.

5.5.2 Recommendations for further studies

The study suggests that further research should be conducted to delve deeper into specific aspects of drug abuse among Makueni County youths. The following areas are recommended for further study:

1. The Study recommends exploring the potential influence of Kamba Local Benga Music on drug use among the youths. This research would aim to understand the connection between music preferences and drug abuse, investigating whether certain genres or songs contribute to drug use behaviours among youth.

By conducting additional research in these areas, policymakers, stakeholders, and organizations can better understand the factors influencing drug abuse among youths in Makueni County and develop more targeted and effective interventions to address the issue.

REFERENCES

- American School Counsellor Association. (2015). *The ASCA national model: A framework for school counselling programs*. (2nd ed.). Alexandria, VA: Author.
- Arcadepani, F. B., & Fidalgo, T. M. (2023). Violent Behaviour and Substance abuse Among Adolescents—Results from the National Adolescent School-based Health Survey (PeNSE). *International Journal of Mental Health and Addiction*, 21(1), 484-491.
- Asanyo, K. L. (2020). Factors associated with substance abuse among youth in colleges (18-25 years) in Mlolongo, Machakos County (Doctoral dissertation, JKUAT-COHES).
- Bäckryd, E., Heilig, M., & Hoffmann, M. (2022). Comment on Hauser et al.: Medical use of opioids in Europe-Methodological concerns about data from the International Narcotics Control Board. *European Journal of Pain*.
- Botvin, G. J., Baker, E., Dusenbury, L., Botvin, E. M., & Diaz, T. (2015). Long-term follow-up results of a randomized drug abuse prevention trial in a white middleclass population. *Journal of the American Medical Association*, 273(2), 1106–1112.
- Bachand, D. (2018). Substance abuse among Secondary School Students in an Urban Setting in Nigeria: prevalence and associated factors. *African Journal of Medical Science*, 1(1), 123-124
- Businge, B. (2019). *An analysis of the law on the prevention of drug abuse in Uganda* (Doctoral dissertation, Kampala international University, School of Law).
- Canton, H. (2021). United Nations Office on Drugs and Crime—UNODC. In *The Europa Directory of International Organizations 2021* (pp. 240-244). Routledge.
- Cebulla, A., Heaver, C., Smith, N., & Sutton, L. (2014). *Drug and alcohol use as barriers to employment*. Sheffield: Department for Work and Pensions.
- Cooper, D., & Schindler, R. (2013). *Business research methods*. New York: McGrawHill/Irwin.
- Cutcliffe, J. R., Stevenson C, & Jackson, S. S. (2018). A modified grounded theory study of how psychiatric nurses work with suicidal people. *International Journal of Nursing Studies*, 43(7), 791-802. DOI: 10.1016/j.ijnurstu.2005.09.001
- Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Interventions for adolescent substance abuse: An overview of systematic reviews. *Journal of Adolescent Health*, 59(4), S61-S75.

- European Monitoring Centre for Drugs and Drug Addiction. (2009). *The state of the drugs problem in Europe*. Lisbon: Author.
- Fatoye FO, Morakinyo O. (2017). Substance abuse among secondary school students in rural and urban communities in South Western Nigeria. *East African Medical Journal*, 79(6): 299-305.
- Gay, L. R. (2014). *Education Research: Competencies for Analysis and Application*, Charles Merrill Publishing Co. Columbus.
- Government of Kenya (2019). *Kenya Education Commission*. Government Printer: Nairobi. 129
- Government of Kenya (2020). *Kenya National Bureau of Statistics*. Government Printer: Nairobi.
- Government of Kenya (2022). *National Police Service*. Police Headquarters: Makueni
- Government of Kenya (2019). *National Police Service*. Police Headquarters: Makueni
- Jackson, K. M., Janssen, T., & Gabrielli, J. (2018). Media/marketing influences on adolescent and young adult substance abuse. *Current addiction reports*, 5, 146-157.
- Jorgensen, C., & Wells, J. (2021). Is marijuana really a gateway drug? A nationally representative test of the marijuana gateway hypothesis using a propensity score matching design. *Journal of experimental criminology*, 1-18.
- Hali, M. (2018). *The Predisposing Factors of Substance Abuse among Women in Kano Metropolis*. (Unpublished MSc. dissertation) Department of Sociology, Bayero, University, Kano-Nigeria.
- He, Z., Bishwajit, G., & Yaya, S. (2019). Prevalence of alcohol and tobacco use among men and women in Namibia. *International journal of environmental research and public health*, 16(1), 59.
- Hitchman, S. C., & Fong, G. T. (2011). Gender empowerment and female-to-male smoking prevalence ratios. *Bulletin of the World Health Organization*, 89, 195-202.
- Ignaszewski, M. J. (2021). The epidemiology of drug abuse. *The Journal of Clinical Pharmacology*, 61, S10-S17.
- Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2018). Monitoring the Future national survey results on drug use, 1975-2017: Overview, key findings on adolescent drug use.

- Kaguthi, J. (2014). Youth in Peril: Alcohol and Drug Abuse in Kenya. Nairobi: *Baseline Survey report*
- Kamenderi, M., Muteti, J., Okioma, V., Kimani, S., Kanana, F., & Kahiu, C. (2019). Status of drugs and substance abuse among the general population in Kenya. *African J Alcohol Drug Abus, 1*, 54-9.
- Katy, Z. (2016). Substance abuse amongst secondary Students in rural and urban communities in South Western Kenya. *East African Medical Journal, 79* (6): 299-305.
- Kiambi, M. J. (2018). Factors influencing drugs and substance abuse among public secondary school students in Kiambu County, Kenya. *International Journal of Psychology, 3*(1), 1-23.
- Koech, L. (2021). Relationship between Watching ‘Gengetone’ Music and Drug Abuse among the Youth in Uasin Gishu County, Kenya. *East African Journal of Interdisciplinary Studies, 3*(1), 103-115
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement, 30*(3), 607-610.
- Kurui, D. K., & Ogoncho, I. M. (2021). Determinants of Alcohol Use by Students in Medical Training Colleges in South Nyanza Region, Kenya. *African Journal of Alcohol & Drug Abuse, 3*, 18-25.
- Liu, S., & Vivolo-Kantor, A. (2020). A latent class analysis of drug and substance abuse patterns among patients treated in emergency departments for suspected drug overdose. *Addictive Behaviors, 101*, 106142.
- Mathai, L. M. (2022). Addressing the prevalence of alcohol and drug abuse among the youth in the Presbyterian churches in Kenya. *Journal of Humanities and Social Sciences, 1*(1), 21-34.
- Misango N, Kimani M, Rop N (2021). Parental Influence On Drug And Substance Abuse Among Secondary School Students In Kinango Sub-County, Kenya. *European Journal of Education Studies, S.I., V.8, n.10, sep.2021.ISSN 25011111*. Accessed: 19 Dec, 2021
- Miyara, M., Tubach, F., Pourcher, V., Morelot-Panzini, C., Pernet, J., Haroche, J., ... & Amoura, Z. (2020). Low rate of daily smokers in patients with symptomatic COVID-19. *MedRxiv*, 2020-06.
- Mokaya, A. G., Mutiso, V., Musau, A., Tele, A., Kombe, Y., Ng’ang’a, Z., ... & Clair, V. (2016). Substance abuse among a sample of healthcare workers in Kenya: a cross-sectional study. *Journal of psychoactive drugs, 48*(4), 310-319.

- Mugenda, O. & Mugenda, A. (2013). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: ACTS Press
- Musyoka, C. M., Mbwanyo, A., Donovan, D., & Mathai, M. (2020). Alcohol and substance abuse among first-year students at the University of Nairobi, Kenya: Prevalence and patterns. *PLOS one*, 15(8), e0238170.
- Musyoka, M. M., Ndiga, B., & Waithima, C. W. ISSN (online): 2312-0134| Website: www.arjess.org Role of Parents in Prevention of Substance abuse among Adolescents in Selected Public Secondary Schools in Mumbuni Location-Machakos County, Kenya.
- NACADA (2017) Drug and Substance Abuse in Tertiary Institutions in Kenya. Nairobi: NACADA.
- NACADA (2019) The Biannual Report on the status of Alcohol and the drug abuse control in Kenya (10th Ed). Nairobi: NACADA.
- National Alcohol and Drug Abuse Research. (2015). *Promotion of evidence-based campaign. Kenya: Author.*
- National Police Services (2019) Annual Crime Report. Office of the Inspector General of the Police, Nairobi. Retrieved from <https://www.nationalpolice.go.ke/crime-statistics.html?download=59:crime-report>
- Nawi, A. M., Ismail, R., Ibrahim, F., Hassan, M. R., Manaf, M. R. A., Amit, N., ... & Shafurdin, N. S. (2021). Risk and protective factors of drug abuse among adolescents: a systematic review. *BMC public health*, 21(1), 1-15.
- Odeyemi, K. O. (2018). Alcohol Knowledge and Consumption among Medical Students in Lagos ,Nigeria. *Universal Journal of Public Health*, 2(4): 131-136.
- Odejide, O. A., Olatuwara, J. U., (2016). Drinking behavior and social-change among youth in Nigeria; A study of two cities. *Drug and Alcohol dependence*, 20(3), 227-233. DOI: 10.1016/0376-8716(87)90032.
- Odhiambo, O. D. (2020). Sources of the Drugs Abused by Girls in Secondary Schools in Nakuru County, Kenya. *International Journal of Science and Research (IJSR)*, 9(2), 1038-1047.
- Okechukwu. E.C., Terhemba V.P., Fiase T.M., Haruna H., Chia Terkuma C, A., (2017). Effects of Substance/Drug Abuse on the Academic Achievement of Secondary School Students in Mkar Metropolis, Gboko, Benue State. *International Journal of Psychological and Brain Sciences*. Vol. 2, No. 2, 2017, pp. 40-45. doi: 10.11648/j.ijpbs.201702

- Okonza, J. F. ajoju, S., Okhiku, I., & Aluede, O. (2018). Drug abuse among students of ambroseli. California: SAGE.
- OM Hashem Mohammed, Yossina E Hossein, Amal H.Mohammed (2021) Assessment of Knowledge and Attitudes of Secondary Schools Students Regarding Drug abuse at Minia City. *Minia Scientific Nursing Journal* (Print - ISSN 2537-012X) (Online - ISSN 2785-9797) Vol. (9) No. (1) June 2021
- Patricia M., Elizabeth M., Muema M. (2019). Social factors influencing Substance and Drug abuse in universities in Machakos County, Kenya. *Research on Humanities and social Sciences* Vol 9 (20).
- Patrick, O. U., and Okwukwe, N. N. (2019). *Drug Abuse and Criminal Behaviour In Nigeria Tertiary Institution*. Available online at: <https://www.igwebuikerresearchinstitute.org/journal/5.2.12.pdf> (December 23, 2020).
- Peiper, N. C., Ridenour, T. A., Hochwalt, B., & Coyne-Beasley, T. (2016). Overview on prevalence and recent trends in adolescent substance abuse and abuse. *Child and Adolescent Psychiatric Clinics*, 25(3), 349-365.
- Ratts, M. J., & Hutchins, A. M. (2017). ACA advocacy competencies: Social justice advocacy at the client/student level. *Journal of Counselling & Development*, 87(8), 269-275.
- Sadiq, I., Nasir, M., Iftikhar, F., Ilyas, R., & Ilyas, E. (2022). Management of Brachial Artery Pseudoaneurysms in Intravenous Drug Abusers. *Pakistan Journal of Medical & Health Sciences*, 16(06), 32-32.
- Saladino, V., Mosca, O., Lauriola, M., Hoelzlhammer, L., Cabras, C., and Verrastro, V. (2020). Is family structure associated with deviance propensity during adolescence? The role of family climate and anger dysregulation. *Int. J. Environ. Res. Public Health* 17, 9257. doi: 10.3390/ijerph17249257
- Salles, P. Chaves, S., Moreira, G., Brinito, U., Mendonça, Y., & Olivereira, O. (2018). Substance abuse among secondary school students in an urban setting: Prevalence and associated factors. *African Journal of Psychiatry*, 1(3): 52-57.
- Santor, M., Messervey T., & Kusumakar C. (2015). "The relationship between alcohol use and peer pressure susceptibility, peer popularity and general conformity in Northern Irish school children." *Drugs: education, prevention and policy*. June 2012; 19(3): 213–222
- Saunders, M. L. & Thornhill, P. (2014). *Research Methods for Business Students* (6th Ed.). Harlow, Essex: Pearson Education Ltd.

- Saunders, M., Lewis, P. & Thornhill, A. (2012). *Research Methods for Business Students* (5th Ed.). Harlow, Essex: Pearson Education Ltd – FT/Prentice Hall.
- Sidiq, T., Bhat, A., Nusrat, W., & Ahmad, F. J. (2016). Drug Addiction Causes and Awareness among People of Pulwama District of Jammu and Kashmir State. *Biomed. Res.*; Vol-1, Iss-1 (Mar-May, 2016): 30-33.
- Shaw, R. (2017). Has Kenya become a Sanctuary for drugs and dirty money? Nairobi. National Media Group.
- Steinberg, L., Monahan, K.C. (2017). Age differences in resistance to peer influence. *Developmental Psychology* 43:1531–1543. PubMed: 18020830
- Takalani G. Tshitangano, (2016). Substance Abuse among High School Learners in South Africa. *African Journal of Development Studies (AJDS) Published: 08 April 2016*
- United Nations Drug Control Programme (UNDCP), (2019). *Drug Counsellors Handbook: UNDCP, Nairobi Kenya*
- United Nations Office Drug and Crime (UNODC), (2021). *Global Illicit Drug Trends*. New York: United Nations.
- Visser, M. (2018). Risk behaviour of primary school learners in a disadvantaged community- A Situational Analysis. *South African Journal of Education: Vol 23(1)* 58 – 64.
- Visser, M. (2018). Implementing peer support in secondary schools: facing the challenges. *South African Journal of Education: Vol 25(3)*148–155.
- Volkow, N. D., Jones, E. B., Einstein, E. B., and Wargo, E. M. (2019). Prevention and treatment of opioid misuse and addiction: a review. *JAMA Psychiatry* 76, 208–216.
- Teresia, J. N. (2021). Effects of Drug Abuse in Schools and Homes in Kenya. *East African Journal of Arts and Social Sciences*, 3(1), 170-180.
- Waithima, C. (2017). Substance abuse Assessment among School Going Adolescents in Kenya. *African Journal of Clinical Psychology*, 1: 23-35.
- White H.R. (2016). To Adulthood: A Comparison of College Students. 2017;281–305.
- White, A. M. (2020). Gender differences in the epidemiology of alcohol use and related harms in the United States. *Alcohol research: current reviews*, 40(2).
- World Bank. (2018). *World development report 2019: The changing nature of work*. The World Bank.

World Drug Report (2019). *United Nations Office on Drugs and Crime (UNODC)*. Executive Summary, United Nations Publication.

World Drug Report (2021). *United Nations Office on Drugs and Crime (UNODC)*. Executive Summary, United Nations Publication

World Health and Organization. (2019). *Global Strategy to Reduce the Harmful use of Alcohol*. Geneva: World Health Organization.

World Health Organisation (2017). A Programme on Substance Abuse. Mutli-City *Study on Drug Injecting and Risk of HIV Infection*. A report prepared on behalf of one International Collaborative Group. Geneva.

APPENDICES

Appendix I: Consent Form for Participants

I am *Vincent Kavita*, A Master of Science in Nursing (Mental Health & Psychiatry) student in Kenyatta University.

Welcome and take part in research that will analyse the epidemiology of substance abuse among Makueni County youths. The Study will assist the Kenyan government, Makueni County, and other people of interest in better understanding the scale of substance abuse in Makueni County, enabling them to build effective strategies and policies to address the problem.

Participation- Participation is voluntary & you can choose to stop participating in the research any time.

Time-A minimum of 15-30 minutes of your time will be used to answer the questionnaire with the help of research assistance.

Benefits- No direct individual benefit for taking part in this study but the findings of the study will help the government and the community to plan strategies that will help in combating the drug/substance abuse in Makueni County.

Contact information- if you have any inquiry, you can contact Dr. Priscilla Kabue on 0722466297 or Dr. Jacob Masika on 0719700048 or the Kenyatta university ethics review committee on chairman.kuer@ku.ac.ke.

Risks- This study possesses no risks to the participant and you can opt not to answer questions that you deem are against you don't want.

Confidentiality- you will not be required to indicate your Name or any Identity. The information shared through this questionnaire will be kept under key and lock and shall only be accessed by the researcher and shall be confidential.

Results Dissemination-Results of this study will be shared with the relevant offices upon request and be shared during academic conferences and published in scientific journals.

Consent Confirmation

Details of this research have been conveyed, and I now have a complete understanding of the study and the contents of the information sheet provided to me. I am aware that engaging in this research is entirely free, with no advantages or hazards.

As a result, I accept to engage in the study as described.

Signature _____ Date _____

Investigator

I have informed the participants with the study's specifics, and he or she has willingly agreed to participate.

Signature _____ Date _____

Appendix II: Questionnaire for the Youth

The study seeks to establish the epidemiology of substance abuse among the youths in Makueni County.

Please check the box () with a tick that corresponds to your response to the questions and enter your answers in the corresponding places. The information you enter will be kept confidential at all times.

SECTION A: GENERAL INFORMATION

Please give the best possible response to all of the questions. Tick or fill spaces given to indicate your response.

a. Your Sex male female

b. What is your age?

18 to 21years 22 to 25years 26 to 29years 30 to 33 years

c. Marital Status

Married Divorced Widower Widowed Single

d. Occupation

Unemployed Self-employed Employed Student

e. Level of education

Primary () Secondary () Tertiary () University ()

f. Religion

Christian Muslim Hindu Other (Specify)

g. Residence

Rural Semi urban Urban

SECTION B: SUBSTANCE ABUSE PREVALENCE AMONG THE YOUTHS IN MAKUENI COUNTY.

g) Have you ever taken abusive drugs/substances ?

Yes No

If Yes, to which extent?

7 or more times a week

5 - 6 times a week

3 - 4 times a week

Never use drugs

1 - 2 times a week

(b) Where do you get your drugs?

.....

(c) Do you always get the drugs?

Yes, easily Not all the time Yes, but with difficulty

(d) If not, why?

.....

.....

.....

(e) Please indicate the frequency of drug usage in Makueni County by selecting the appropriate number on a scale of 1-5, where 5 represents 7 or more times a week, 4 represents 5-6 times a week, 3 represents 3-4 times a week, 2 represents 1-2 times a week, and 1 represents Not At All.

	5	4	3	2	1
Cocaine					
Heroin					
Tobacco					
Miraa/Khat					
Bhang					
Alcohol					
Others (Please Specify)					

(f) Please use the scale provided below to indicate your level of agreement with the statements, using a scale of 1-5 where 5 represents Strongly Agree, 4 represents Agree, 3 represents Neutral, 2 represents Disagree, and 1 represents Strongly Disagree.

	5	4	3	2	1
The availability of illegal drugs contributes to their use among the youth in Makueni County.					
Drug substances in Makueni County are easily accessible at affordable prices.					
Local individuals in Makueni County are involved in the sale of drugs.					
There is significant involvement of households in Makueni County in brewing, purchasing, and reselling of brews and other drugs, leading to increased accessibility.					
Selling drugs serves as a means of livelihood for economically disadvantaged households in Makueni County.					

SECTION C: CONTRIBUTING FACTORS TO SUBSTANCE ABUSE AMONG THE YOUTH IN MAKUENI COUNTY.

(g) What, in your view, are the causes of drug abuse?

i. Availability of drugs ()

- ii. Friends influence ()
- iii. Relatives influence ()
- iv. Curiosity/Experiment ()
- v. To relieve stress ()
- vi. Influence from relatives ()

(vii) Any Other (kindly specify)

.....

.....

.....

(h) How can you rate your Parents guidance on use/Abuse of Drugs?

Parents are Helpful () Parents are not Helpful at all ()

- (i) Where do youths get these drugs?
 - (a) Shoe Shiners/cobblers ()
 - (b) Boda Boda riders ()
 - (c) Bars/ Muguka Base ()
 - (d) Friends at home ()
 - (e) Family members ()
 - (f) Pharmacy ()
 - (g) Any other place (kindly specify).....

(j) To what percentage do the following factors in Makueni County influence drug misuse among youth? Mark the appropriate box with an X or (tick) to indicate your reaction on a 5-point scale.

	0-20%	21-40%	41-60%	61-80%	80-100%
	(1)	(2)	(3)	(4)	(5)
Peer pressure					
Rise in unemployment rate					
cost of drugs being cheap					
poverty level					
If others (specify)					

(k) To what percentage does drug usage among Makueni County youth depend on the following sources of drug information? Mark the appropriate box with a check (tick) or an X to indicate your opinion on a 5-point scale.

	0-20%	21-40%	41-60%	61-80%	81-100%
	(1)	(2)	(3)	(4)	(5)
Local Music					
Tv programs					
Friends					
Social media					

Parent					
Faith based organizations					
Local leaders					
Religious leaders					
Non-governmental organizations					

SECTION D: AWARENESS OF STRATEGIES PUT IN PLACE TO PREVENT SUBSTANCE ABUSE AMONG THE YOUTHS IN MAKUENI COUNTY.

(l) Do you consider drug abuse a problem in your life?

Yes No

(m) Do you consider drug abuse among the youth a problem?

Yes No

(n) If yes, where would you refer a friend for advice on drug abuse?

Religious leader () Youth centre () Rehabilitation Centre ()

Others

(Specify).....

(o) Do you know about the County Alcohol Control Act?

Yes () No ()

If yes, what do you know about it?

.....
.....

(p) What do you think can be done to address the county's drug usage issue among youths?

- (a) The construction of recreational facilities ()
- (b) The formation of youth organizations and clubs ()
- (c) More parental/tutor direction ()
- (d) The enactment of tougher drug legislation ()
- (e) Rehabilitation centres ()
- (f) Substance/ Drug abuse Seminars and Rallies ()
- (g) Heavy Penalties and fines for Drug offenders ()
- (h) Public Barazas to create drug awareness ()
- (i) Ban on Muguka bases ()
- (j) Others (describe).....

(q) Do you think the existing laws and regulations are enough to curb the drug/ Substance abuse problem in Makueni County?

Yes () No ()

If No, how can they be made better?.....

(r) This section is about the knowledge of youths about strategies employed by Makueni County to prevent drug abuse among the youth. Kindly tick where appropriate on a scale of 1-5 where 5-strongly agree, 4-Agree 3-Neutral, 2-Disagree and 1-Strongly Disagree

	5	4	3	2	1
In order to combat drug misuse, Makueni County uses Life Skills Training as a preventative educational strategy.					
Makueni County has implemented a plan to improve community preparedness and participation in preventative activities and initiatives to limit youth usage of abusive drugs.					
Makueni County has established youth groups and clubs in attempts to prevention and reduce use of harmful legal products among youth					
Makueni County employs a strategy that aims to change a community's larger physical, social, economic and physical environment in order to reduce youth substance abuse					

Appendix III: Key Informant Interview Guide

This interview is carried out with the aim of evaluating the epidemiology of substance abuse among the youth in Makueni County, Kenya. Give your honest opinion on the following questions.

TITLE	
GENDER	
DATE OF INTERVIEW	
TIME OF INTERVIEW	
PLACE OF INTERVIEW	

1. What are the typical types of substances or drugs that young people commonly consume in the market?
2. From your perspective, where do these substances or drugs typically originate?
3. What factors do you believe are influencing young people to engage in substance abuse within the market?
4. How frequently do you provide guidance and counselling to young people in the market?
5. Can you identify some of the difficulties faced by young individuals who aspire to reject substance abuse?
6. Are you of the opinion that young people are prepared and willing to actively support the community in combatting substance abuse?
7. What measures has the community implemented to address the issue of drug and substance abuse?

8. Which strategies have you implemented to decrease the prevalence of drugs and substance abuse within the market?
9. In your personal viewpoint, do you believe that the current laws are sufficiently punitive to combat drug and substance abuse?
10. Based on your leadership experience, what recommendations would you propose to enhance efforts in the battle against drug and substance abuse?

Appendix V: Makueni County Government Research Authorization

REPUBLIC OF KENYA



GOVERNMENT OF MAKUENI COUNTY



OFFICE OF THE COUNTY SECRETARY
 P.O. Box 78-90300 - MAKUENI Tel No.: 020-2477000\0795717885/0780717885
 Email: county.secretary@makueni.go.ke, contact@makueni.go.ke
 web: www.makueni.go.ke

Ref: ADM/12/VIII/(64)

Date: 28th October, 2022

Mr, Vincent Kavita

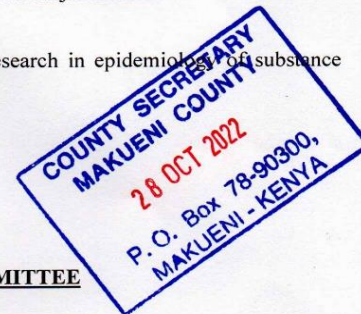
KENYATTA UNIVERSITY

REQUEST FOR RESEARCH AUTHORIZATION: EPIDEMIOLOGY OF SUBSTANCE ABUSE AMONG THE YOUTHS IN MAKUENI COUNTY, KENYA

I refer to your letter dated 28th October, 2022 and a license from the Director General, National Commission for Science Technology and Innovation Research (NACOSTI) Ref. No. NNACOSTI/P/22/20924 dated 19th October 2022 on the above subject matter.

I hereby authorize you to undertake field activities for research in epidemiology of substance abuse among the youths in Makueni County.


 Rael M. Muthoka
 Ag. County Secretary
**HEAD OF COUNTY PUBLIC SERVICE &
 SECRETARY TO THE COUNTY EXECUTIVE COMMITTEE**



Appendix VI: Makueni County Commissioner Research Authorization



**OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT**

Telegram:
Telephone: 0101-362-089
Fax:
Email: cc.makueni@interior.go.ke

**COUNTY COMMISSIONER
MAKUENI COUNTY
P.O. Box 1-90300
MAKUENI**

Ref: MKN/CC/ADM.6/1 VOL.V/43

28th October, 2022

Kavita Kiilu
KENYATTA UNIVERSITY

RE: RESEARCH AUTHORIZATION

Reference is made to Director General National Commission for Science Technology and Innovation Research License **Ref. No. NACOSTI/P/22/20924** dated **19th October, 2022** on the above subject.

You are hereby authorized to undertake research on "**Epidemiology of Substance abuse among the youths in Makueni County**" for the period ending **19th October, 2023**.

By a copy of this letter the Deputy County Commissioners are requested to give you the necessary assistance.


M. W. KAGUCIA
FOR: COUNTY COMMISSIONER
MAKUENI



c.c.
County Director of Education
MAKUENI

Deputy County Commissioners
MAKUENI COUNTY

Appendix VII: Makueni County Director of Education Research Authorization



REPUBLIC OF KENYA
MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Email: edemakueni@gmail.com
 When replying please quote

County Director of Education Office
 P.O. Box 41-90300
MAKUENI

MKN/C/ED/5/33 VOL.II/139

28th October, 2022

Mr. Vincent Kiilu Kavita
 Kenyatta University
NAIROBI

RESEARCH AUTHORISATION FOR Mr. VINCENT KIILU KAVITA

This office is in receipt of a letter from the Director General, National Commission for Science Technology and Innovation (**NACOSTI /P/22/20924**) dated 19th October, 2022 **Ref. NO. 777122** on **"EPIDEMIOLOGY OF SUBSTANCE ABUSE AMONG THE YOUTHS, in Makueni County -Kenya"** for the period ending **19th October, 2023.**

Following this authorization, you are allowed to proceed with your research as requested.


 Robinson K. Kiarji
 For County Director of Education
MAKUENI



Appendix VIII: Kenyatta University Research Authorization



**KENYATTA UNIVERSITY
CENTRE FOR RESEARCH ETHICS AND SAFETY**

Fax: 8711242/8711575
Email: chairman.kuerc@ku.ac.ke
Nairobi, 00100

P. O. Box 43844,

Tel: 8710901/12

Website: www.ku.ac.ke

Our Ref: **KU/ERC/APPROVAL/VOL.1**

Date: 30th /09/2022

Kiilu Kavita
P.O Box 43844, 00100
Nairobi.

Dear Mr. Kavita,

**APPLICATION NUMBER: PKU/2579/11705- EPIDEMIOLOGY OF SUBSTANCE ABUSE
AMONG THE YOUTHS IN MAKUENI COUNTY, KENYA**

This is to inform you that **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** has reviewed and approved your above research proposal. Your application approval number is **PKU/2579/11705**. The approval period is **30th /09/2022 to 30th /09/2023**

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE**
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.

- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

To serve you better, researchers are kindly requested to access and complete a customer feedback form and sent it back online as you continue with research and upon completion of data collection found on the following website link; https://docs.google.com/forms/d/1ytWefDwvyyz5h1oz_VIn0xbxg3uGdIDzMXFWNDsMrRPQ/edit?usp=sharing

Yours sincerely



Prof. Judith Kimiywe

Director: Centre for Research Ethics and Safety

Appendix IX: Curriculum Vitae

Mr. Vincent Kiilu Kavita, BScN

P. O. Box: 1376-90100, Machakos.

Tel: 0727 825 712

Email: kiilukavita@gmail.com

I am a devoted and extremely diligent Nursing Professional, with an in-depth knowledge in Nursing skills, Mental Health Programs & services, report management, stock taking, ward administration & leadership and conduct capacity building trainings. I have a very responsible work ethic and a preparedness to work with communities to impart knowledge & skills that can help improve health services in institutions and training colleges & other learning institutions.

Personal Details

- Date of Birth: 26th June 1986
- Marital Status: Married

Education & Professional Qualification:

Masters of Science Nursing (Mental Health & Psychiatry) Kenyatta University- September 2020 (Continuing)

Bachelor of Science Nursing, Second Class Upper Honors, University of Eastern Africa, Baraton , Kenya, September 2007-November 2012

Certificate in Peer Education and Counselling, Baraton University ,2009

Certificate in Community Based Rehabilitation, ADRA Finland in Conjunction with Baraton University

Kenya Certificate of Secondary Education, Itetani High School, Mbooni, 2002-2005

Key Professional Skills & Competencies:

- *Ability to train hospital staff and students on Nursing Skills and Procedures.*
- *Ability to encourage & model a Christian's lifestyle through word & deed*
- *Caring and friendly attitude and ability to build good relationships with staff & the community*
- *Ability to impart knowledge & confidence in a teaching role to health workers, Students & the community.*
- *Non-judgmental, flexible, creative, patient & tolerant*
- *Nursing being a noble profession I am always willing to work odd or extra hours.*
- *Experience in leading, supervising & managing others*
- *Excellent skills in coordination & organization & an ability to converse fluently in Kikamba, Kiswahili & English*
- *Highly skillful in detecting errors, analyzing problems and finding solutions*
- *Highly efficient in working under strict time constraints & pay good attention to detail*
- *Competent in establishing sound communication across different levels*

- *Able to work as part of a team & also perform desirable results independently*
- *Familiar with computer programs e.g. Microsoft Suite, Internet & Email*
- *Holds a valid Nursing practice license.*

PROFESSIONAL EXPERIENCE

September 2014 – To-Date

County Public Service Board- Government of Machakos County.

CHIEF NURSING OFFICER-MACHAKOS LEVEL 5 HOSPITAL

Key Responsibilities-

- Hospital management
- Carrying out Nursing Assessment, formulating care and implementing the care in various outpatient clinics and Inpatient wards.
- Mentoring and Teaching Student Nurses in the Clinical area
- Planning & Participation in Implementation of health outreaches and education
- Stock Taking & Management of both Pharmaceuticals and Non-Pharmaceuticals
- Continuous Nursing Education and Capacity Building Co-ordination

AMREF INTERNATIONAL UNIVERSITY

September 2023 PART TIME LECTURER

Key Responsibilities

- Teaching Nursing Students
- Setting and Marking Exams Scripts
- Clinical mentoring of Students in clinical placements.
- Assessing students in their Clinical placements

KENYA MEDICAL TRAINING COLLEGE, MACHAKOS.

2013- 2020 PARTTIME TUTOR

Key Responsibilities

- Teaching Clinical Medicine and Nursing students
- Setting and Marking Exams Scripts
- Clinical mentoring of Students in clinical placements.
- Assessing students in their Clinical placements

JOHN HOPKINS INTERNATIONAL INJURY RESEARCH UNIT-MACHAKOS LEVEL 5 HOSPITAL

REGISTRY TEAM

FEB 2014 – TO SEPTEMBER 2014 TRAUMA REGISTRY NURSE

Key Responsibilities

- Assessing trauma patients and prioritizing their care in CASUALTY
- Planning and implementing care of emergency cases
- Keeping records of all trauma cases attended in the hospital
- Submitting Data of Injured patients to JHU for Analysis

MACHAKOS LEVEL 5 HOSPITAL

2013-2014 BACHELOR OF SCIENCE NURSING (BSCN) INTERNSHIP

Key Responsibilities-

- Ward management
- Carrying out Nursing Assessment, formulating care and implementing the care in various outpatient clinics and Inpatient wards.
- Mentoring and assisting Student Nurses in the Clinical placements
- Participating in health outreaches with the district Public Health Nurse on Family planning, polio campaigns and other community health Matters.

Trainings, Seminars & Workshops

- August 12, 2012: workshop on good leadership
- October 12, 2012: workshop on Community Based Rehabilitation by ADRA Finland
- Academic Excellence Awards, 2009/2010 (dean's list academic awards)
- Certificate of a peer counselor on HIV/AIDS in I choose life Africa.
- Certificate of Membership, Baraton University Nursing Students Association
- Certificate of Participation, Community Health Leadership Nursing Water Project-Kapkechui

Interests:

- Reading, Researching, Adventure & Sports, listening to music

REFEREES

Please feel free to contact the under mentioned in regard to my competence, work ethic and performance.

Mueni H. Ndiku,DrPH

Senior Lecturer

Chair Department of Family and Consumer Sciences

University of Eastern Africa, Baraton

P.O Box 2500

Eldoret.

Tel. +254 732 513598/+254 726 404401

Email;hellenndiku@yahoo.com

Mr. Isaiah Mose

School of Nursing Sciences

Kenyatta Univerity

P.O BOX 43844-00100

NAIROBI

Tel. +254 725-413-585

mose.isaiah@ku.ac.ke

Philip kithonga

Head of Department- Clinical Medicine and Surgery

Kenya Medical Training College-Machakos Campus

P.O BOX 837-90100Machakos, Kenya

Tel +254 722-656-029