

**EFFECTIVENESS OF GOVERNMENT PROGRAMS IN MITIGATING DRUGS
AND SUBSTANCE ABUSE IN SELECTED COUNTIES OF THE COASTAL
REGION, KENYA**

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**A Thesis Submitted in Partial Fulfilment of the Requirements for the Conferment
of the Degree of Doctor of Philosophy in Disaster Management and Humanitarian
Assistance of Masinde Muliro University of Science and Technology**

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DECLARATION

This Thesis is my original work prepared with no other than the indicated sources and support, and has not been presented elsewhere for a degree or any other award.

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance of Masinde Muliro University of Science and Technology a Thesis entitled “**Effectiveness of Government Programs in Mitigating Drugs and Substance Abuse in Selected Counties in the Coastal Region, Kenya**”

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DEDICATION

I dedicate this work to my late parents, Pastor Sospeter Nyamohanga and Mama Tabitha Magoiga Nyamohanga who sacrificed their time and resources to enable me grow in a Christian value-based environment.

I also wish to dedicate this work to all victims of drugs and substance abuse in Kenya, especially those in the Coastal region who are affected by the menace.

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ABSTRACT

Drug and substance abuse has become one of the looming human-induced disasters globally, making it a profound concern among the comity of nations owing to the significant detrimental effects it has in almost every aspect of life and development. In Kenya, it has become one of the major social catastrophes with the commonest and most easily identifiable manifest in public health. It was, therefore, significant to analyse the effectiveness of various government programs in mitigating drug and substance abuse in the coastal region which continues to witness a steady rise in drugs and substance abuse. Specific objectives of the study were to examine the nature of drug and substance abuse in selected counties in the coastal region, Kenya; evaluate the government programs in mitigating drug and substance abuse in selected counties in the coastal region, Kenya, and; assess the challenges and opportunities facing government programs in managing drug and substance abuse in selected counties in the coastal region, Kenya. The study was underpinned by the interpretivism approach. The study was guided by the social learning theory and functionalism theory. The study used descriptive and evaluative research designs, with data collected through interviews, focus group discussions, observations, and questionnaires. The study was conducted in Kilifi and Mombasa Counties. Data was collected from 552 respondents, who included 384 household heads, 20 victims, 2 county education officers, 2 county commissioners, 2 county health officers, 70 administrative chiefs, 102 village elders, 9 head of NACADA officers, and 8 religious leaders. The study revealed that drug abuse is a significant problem affecting individuals of all ages and socio-economic backgrounds. Commonly abused substances include alcohol 99% (383), khat 98% (378), tobacco 97% (376), cannabis 94% (364), heroin 89% (341), cocaine 88% (337), prescription drugs 85% (326), and methamphetamine 80% (307). Both males 75% (289) and 25% (95) females engage in drugs and substance abuse. The main causes of the menace are unemployment 99% (380), poverty 98% (376), mental illnesses 97% (373) and curiosity 96% (370). Government programs in the study region focused on prevention, treatment, law enforcement, and harm reduction, proving effective to varying extents. Law enforcement and criminal justice programs 363(94%) were found to be most effective, followed by prevention 253 (66%), treatment 146 (38%), and harm reduction programs 153 (40%). Challenges revealed on the government programs included insufficient funding, limited public awareness, Lack of follow-ups and support after leaving treatment centers, and corruption among others. Opportunities identified included government's commitment, community support, and partnerships between government agencies and non-governmental organizations, and reduction of demand and supply of drugs. The study concluded that drugs and substance abuse is a significant problem in the coastal region of Kenya, affecting individuals across all age groups and socio-economic backgrounds, and the government has put in place several programs aimed at mitigating drug abuse, and these programs have been effective to a significant extent. However, there are still several challenges facing the programs, including inadequate funding, inadequate facilities, inadequate staffing in the treatment programs, limited public awareness of the programs, and corruption. The study recommended the re-evaluation of this programs including reinforcing their weaknesses and constant evaluations maximizing on the strengths of the organizations. The study also recommended extensive knowledge and awareness creation on the existence of these programs to aid in the fight against drug abuse in the coastal region.

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LIST OF ABBREVIATIONS AND ACRONYMS

- ADAPT:** Alcohol and Drug Abuse Prevention Team
- AMLATIL:** Association for the Fight against Drug Addiction and Illegal Drug Trade
- AU:** African Union
- CADCKE:** Community Anti-Drug Coalitions of Kenya
- CNTS:** National Center for Addiction Treatment
- DARE:** Drug Abuse Resistance Education
- EAC:** East African Community
- EAPCCO:** East Africa Police Chiefs Cooperation Organization
- EU:** European Union
- IGAD:** Intergovernmental Authority on Development
- ISS:** Institute for Security Studies
- KNBS:** Kenya National Bureau of Statistics
- KYEOP:** Kenya Employment Opportunities Project
- NACADA:** National Authority for the Campaign Against Alcohol and Drug Abuse
- NAFDAC:** National Agency for Food and Drug Administration and Control
- NDLEA:** National Drug Law Enforcement Agency
- NYS:** National Youth Service
- SAP:** Student Assistance Program
- SATREP:** Substance Abuse Treatment and Rehabilitation Program
- STAR:** Students Taught Awareness and Resistance
- UNODC:** United Nations Office on Drug and Crime
- WHO:** World Health Organisation

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KISAWWE/TRANSLATION

<i>Kiswahili Term</i>	English
<i>Bangi</i>	Marijuana
<i>Bei nafuu</i>	Affordable price
<i>Dawa za kuagizwa</i>	Prescription drugs
<i>Dawa za kulevya</i>	Drugs
<i>Elimu</i>	Education
<i>Familia zao kuvunjika</i>	Family breakups
<i>Familia zinashindwa kuzimudu</i>	Families cannot afford
<i>Hali ya Uchumi</i>	Economic situation
<i>Hatari</i>	Dangerous
<i>Hawaangalii mbali</i>	They don't focus ahead
<i>Historia ya familia</i>	Family history
<i>Jamii</i>	The Community
<i>Kazi</i>	Work/job
<i>Kichocheo cha raha</i>	Source of pleasure
<i>Kifo</i>	Death
<i>Kufanya maamuzi sahihi</i>	Make informed decisions
<i>Kuiga</i>	Emulate
<i>Kurejesha watu katika hali ya kawida</i>	Rehabilitation
<i>Lazimishwa na wenzao</i>	Peer pressure
<i>Madaktari</i>	Medical doctors
<i>Madhara</i>	Effects

<i>Magonjwa ya akili</i>	Mental illness
<i>Marafiki</i>	Friends
<i>Mataifa ya nje</i>	Foreign countries
<i>Matatizo ya kiafya</i>	Health problems
<i>Matibabu</i>	Medication
<i>Matokeo</i>	Consequences
<i>Mjukuu wa bibi</i>	A child from previous marriage
<i>Msongo wa mawazo</i>	Stress
<i>Mraibu</i>	Victim
<i>Njia mbadala</i>	An alternative
<i>Pombe</i>	Alcohol
<i>Pwani</i>	Coastal region
<i>Serikali</i>	The government
<i>Shughuli za kufanya</i>	Meaningful activities
<i>Sigara</i>	Cigarette
<i>Taarifa</i>	Knowledge
<i>Tatizo</i>	Problem
<i>Ugonjwa</i>	Disease/Infection
<i>Ugumu</i>	Difficulty
<i>Uhalifu</i>	Crime
<i>Umaskini</i>	Poverty
<i>Uraibu</i>	Addiction
<i>Ushawishi wa kijamii</i>	Social influence

<i>Utamaduni</i>	Culture
<i>Vijana</i>	The youths
<i>Wakijitenga</i>	Isolation
<i>Wamechangamka sana</i>	They become very active
<i>Waathiriwa</i>	Victims
<i>Wanarithi</i>	Inherit
<i>Wanavuta</i>	Smoking
<i>Wasiwasi</i>	Anxiety
<i>Wazazi</i>	Parents
<i>Wazee wa kijiji</i>	Village elders

OPERATIONALIZATION OF KEY CONCEPTS

This section explains terms and concepts as they have been used in this study.

Administrative chiefs- Administrative chiefs are government officials responsible for overseeing administrative and governance functions within a specific geographic area. In the Kenyan context, administrative chiefs are appointed by the government and serve as local administrators, responsible for maintaining law and order, resolving disputes, and implementing government policies and programs at the grassroots level.

Cognitive behavioral therapy – a psycho-social intervention that is majorly focused on talking to help an individual manage the way they think and behave

Community policing – a strategy or approach that aims at improving the relationship of the police and community by recognition of the independence of the police as well as the shared responsibility of the two, promoting their cooperation to ensure the safety of all citizens.

Contingency management – is a method of treatment that uses incentives to help individuals with substance use disorders overcome such by rewarding them due to evidence of positive behavior change.

Drug- A drug is a substance that has psychoactive properties and can alter brain function and behavior when consumed. Drugs can be legal or illegal, and they can have various effects on the body and mind. In the context of drug abuse, it refers to substances that are misused or used in a way that causes harm, such as illicit drugs, prescription medications, or even alcohol.

Effectiveness- Effectiveness refers to the degree to which a program, intervention, or policy achieves its intended outcomes and goals. It assesses whether the desired results are achieved in a real-world setting and whether the program is successful in producing the desired effects and making a positive impact on the target population or issue being addressed.

Government programs- Government programs are initiatives, policies, or interventions implemented by government entities at various levels (local, regional, national) to address specific issues or meet societal needs. In the context of drug abuse, government programs can include a range of interventions such as prevention campaigns, treatment services, law enforcement efforts, policy development, funding allocation, and regulatory measures aimed at reducing drug abuse and its associated problems. Also, if the government is directly or indirectly involved in terms of funding, infrastructure or coordination, this is still treated as a government program in this study.

Mitigation strategies- Mitigation strategies refer to actions or interventions implemented to lessen or alleviate the negative impacts of a particular problem or risk. In the context of drug abuse, mitigation strategies aim to reduce the prevalence, severity, or consequences of substance use disorders. These strategies can include prevention initiatives, treatment services, harm reduction measures, and supportive interventions to address the underlying factors contributing to drug abuse.

National programs- National programs are initiatives or interventions implemented at a national level by the government or relevant authorities to address specific issues or meet national-level objectives. In the context of drug abuse, national programs refer to government-led efforts aimed at preventing drug abuse, providing treatment and support

services, enforcing drug laws, and coordinating multi-sectoral approaches to combat drug-related problems.

Outreach programs- Outreach programs are initiatives or activities designed to reach out to specific target populations or communities to provide services, education, support, or resources. In the context of drug abuse mitigation, outreach programs aim to engage and connect with individuals who may be at risk of substance abuse or who are already struggling with substance use disorders, often providing information, referrals, counseling, and other forms of assistance.

Program effectiveness- Program effectiveness refers to the extent to which a specific program or intervention achieves its intended goals and objectives. It assesses the impact and outcomes of a program in addressing the identified problem or issue. Evaluation of program effectiveness typically involves measuring the changes, improvements, or benefits resulting from the program's activities and interventions.

Program implementation- Program implementation refers to the process of putting a program or intervention into action. It involves planning, organizing, and executing the various components and activities of the program, including the allocation of resources, recruitment of staff, training, delivery of services or interventions, monitoring of progress, and evaluation of outcomes. Effective program implementation ensures that the intended

Program scalability- Program scalability refers to the capacity of a program or intervention to be expanded or replicated to reach a larger population or geographical area. Scalable programs can be successfully implemented on a broader scale without significant loss of

effectiveness or quality. It involves developing structures, processes, and resources that can accommodate increased demand and maintain program fidelity while addressing the needs of a larger target population.

Program sustainability- Program sustainability refers to the ability of a program or intervention to continue its operations and maintain its benefits over the long term, even after the initial funding or support ends. Sustainable programs typically have mechanisms in place to secure ongoing resources, maintain stakeholder engagement, adapt to changing needs, and demonstrate their value and impact to ensure long-term effectiveness and viability.

Programs- In the context of drug abuse mitigation, programs refer to structured and organized initiatives or interventions implemented to address the issue of substance abuse. These programs can encompass a wide range of activities, including prevention, treatment, harm reduction, education, counseling, community outreach, and policy development.

Psychotropic – This refers to drugs that affect the mental state of an individual. In this case, it denotes the drugs that have the ability of affecting the nervous system function compounded by mood, behavior, perception, and cognition alterations.

Rehabilitation- Rehabilitation, in the context of substance abuse, refers to the process of assisting individuals in recovering from substance use disorders and restoring their physical, psychological, and social well-being. Rehabilitation programs typically involve a combination of medical, psychological, and social interventions aimed at helping individuals overcome their addiction, develop coping skills, and reintegrate into society. The goal of rehabilitation is to support individuals in achieving and maintaining a drug-free and productive life.

Relapse prevention- Relapse prevention refers to strategies and techniques designed to help individuals who have undergone treatment for substance use disorders maintain their recovery and avoid returning to drug or alcohol use. These strategies may involve identifying triggers and high-risk situations, developing coping mechanisms, enhancing problem-solving skills, building social support networks, and implementing ongoing monitoring and self-care practices to prevent relapse.

Rhabdomyolysis – a rare muscle injury that can occur as a result of such factors as drugs, infections, toxins, muscle ischemia, and electrolyte and metabolic disorders. The damaged muscle tissue releases electrolytes and proteins which are carried by blood and their effects can be seen in the damage caused to the heart and kidneys.

Risk reduction strategies- Risk reduction strategies are approaches or measures implemented to minimize or mitigate the potential harms and negative consequences associated with specific behaviors or situations. In the context of drug abuse, risk reduction strategies aim to reduce the likelihood of drug-related harm, such as overdose, transmission of infectious diseases, or other health and social consequences. These strategies may include education, harm reduction interventions (e.g., needle exchange programs), and access to treatment and support services.

Substance abuse- Substance abuse refers to the misuse or excessive use of substances such as drugs or alcohol, leading to negative consequences on an individual's physical health, mental well-being, social functioning, and overall quality of life. Substance abuse involves patterns of use that deviate from societal norms and may result in dependency, addiction, and various adverse effects on individuals and communities.

Substance use disorder- substance use disorder refers to a diagnostic term used to describe a pattern of problematic and excessive use of substances, such as drugs or alcohol, leading to clinically significant impairments or distress. It is characterized by symptoms such as intense cravings, tolerance, withdrawal symptoms, and inability to control substance use despite negative consequences.

Victims- In the context of drug abuse, victims refer to individuals who have experienced negative consequences or harm as a result of substance use, either directly or indirectly. This can include individuals who struggle with substance use disorders, their families and loved ones who are affected by their drug abuse, as well as the broader community impacted by drug-related issues.

Village elders- Village elders are respected individuals within a community who hold traditional leadership roles and are often considered custodians of cultural values and community decision-making. They play an important role in many societies, including Kenya, providing guidance, resolving conflicts, and influencing community behavior and norms.

CHAPTER ONE

INTRODUCTION

Introduction

This chapter presents the background to the study, states the problem of the study, research objectives and research questions. The scope of the study is also in in this chapter. It further gives the justification of the study, including the academic, policy and philosophical justifications. A chapter summary is also given.

1.1 Background to the Study

Almost all countries across the world have been contending with the endemic problem of drug abuse, especially among the young generation. Notably, drug and substance abuse has become one of the looming human-induced disasters globally, making it a profound concern among the comity of nations owing to the significant detrimental effects it has in almost every aspect of life and development. Generally, drug abuse has been conceived as the detrimental use of drugs that alters the mind (Korir, 2013). Substance abuse is exacerbated by a score of socioeconomic problems including unemployment, poverty and crime in general. As asserted by the United Nations Office on Drug and Crime (UNODC, 2018), substance abuse has been on the rise globally, especially in developing countries which have seen little intervention regarding prevention. Alarmingly, young people, who constitute at least 16 per cent of the globe's population and are critical in the realization of both a healthy and productive future, remain the most affected category of people. To tackle this global menace, various governments have

responded by coming up with policies and programs that aim to uproot the crisis (Kinuthia, 2018).

As one of the most advanced countries in the world, the United States of America has not been insulated from the menace of drugs and substance abuse. Its young population remains the most vulnerable category to substance abuse. To salvage its young population from the crisis, it has come up with strategies and programs that aim at mitigating the menace. These programs oftentimes have focused on both prevention and control reduction approaches (Robson & Salcedo, 2014). Concerning prevention, the US government has focused on children which provide technical assistance and guidance which in turn has increased accessibility to substance use prevention support and its related services. The government has also come up with funding mechanisms, particularly for organizations that are interested in expanding student assistance programs to incorporate evidence-based practices (Nkonge, 2013).

Having recognized prevention as a recipe for general health, the government has rolled out programs of screening young people in healthcare facilities as well as raising awareness of drugs and substance consumption at all levels. Furthermore, the US government has also rolled out the treatment of disorders that emanate from drugs and substance abuse. Similarly, institutions like the Higher Education Centre for Alcohol and Other Drugs Violence Prevention have as well launched programs like Drug Abuse Resistance Education (DARE), Alcohol and Drug Abuse Prevention Team (ADAPT) and, the Students Taught Awareness and Resistance (STAR). These programs have necessitated the dissemination of information as well as helping to address the psychological behaviors of students at all levels (Malinowska-Sempruch & Rychkova, 2016).

In Europe, the use of illicit drugs continues to be on the rise and it is common in most European countries. Among the most consumed drugs, substances include cocaine, heroin, cannabis, and

marijuana just to mention a few. Like any other region across the world, European's young population have been largely affected by the menace which in turn has prompted individual countries to come up with stringent measures as well as programs to mitigate the menace (Roberts & Chen, 2013). In the context of drugs and substance abuse, the region embodies a unique case. With an operational single currency system, free and open borders, and a lack of a common European Union (EU) policy on drug addiction, it is the responsibility of individual countries to deal with both illicit drug use and addiction. Regarding this, most European countries have scaled up the implementation of laws that aim at criminalizing both the possession and distribution of narcotic substances. Similarly, the operational policies have designated substance abuse as a serious public health issue. This has been further bolstered by the use of drug courts, treatment and rehabilitation programs which have been accelerated to combat substance abuse as well as addiction. For instance, Portugal through its National Drug Strategy has designated drug addicts as potential patients suffering from a disease. It further emphasises the need for prevention or keeping the potential users from the influence of illicit drugs. To enhance this, the government has embarked on education and information programs at all levels, especially in schools where families or the entire community have been involved in understanding and grasping the situations that may result in drug consumption (Odhiambo, 2020).

According to Stringer & Baker (2018), Africa as a continent represents a unique but complex case in the context of drugs and substance abuse. The continent remains one of the major supplies of some drugs such as cannabis despite the eradication efforts put in place (Stringer & Baker, 2018). The continent continues to grapple with the problem of escalation of substance abuse and trafficking. The continent's role in the drugs global supply chain continues to increase

at an alarming rate. Currently, it is the second largest producer, trafficker and consumer of cannabis, representing 26 per cent of global seizures of cannabis (Korir, 2013). Intense threats of drug trafficking have been linked to factors such as abject poverty, psychological disorders, fragile health care systems, policies on drugs that are largely focused on repression, and inadequate specialized treatment and rehabilitation facilities to mention a few (Ongwae, 2016). Muoti (2014) adds that, the response by the continent has been mixed and could be narrowed to individual countries which continue to bear the brunt of drugs and substance abuse. Most African countries have stepped up the treatment and rehabilitation programs in a bid to mitigate the crisis. However, most healthcare systems are incapacitated to meet the needs of their citizens owing to their underfunding among other things (Muoti, 2014). More precisely, the treatment and rehabilitation programs of most African countries are largely dependent on assistance from relevant international organizations such as World Health Organisation (WHO), United Nations Office on Drug and Crime (UNODC) and non-governmental organisations.

With its huge population being young people, the continent remains vulnerable to drug and substance abuse and is becoming a destined market for the thriving illicit drug industry (Schuberth, 2013). In response, the continent through the African Union (AU) has established an Action Plan for Drug Control and Crime Prevention (2019-2023). The plan mandate is to revamp the health, security and socioeconomic well-being of African citizens by addressing the trafficking of drugs and the persistence of drug use in all its forms and manifestations and ultimately prevent the onset of drug consumption. Additionally, the plan is embedded in education, prevention, treatment and recovery as well as the provision of rehabilitation services. As a collective plan, it is incumbent upon the African countries to implement and domesticate it.

However, much has not been achieved and the menace of drugs and substances continues to be an endemic problem on the continent (Kupi, 2019).

A gloomy picture on the prevalence of drugs and substance abuse was painted by a survey conducted by NACADA in 2016 with an aim of assessing the status of drugs and substance abuse in the country. From the study, it was found that 12.2% of the respondents in the age bracket of 15-65 years were consuming alcohol; 8.3%, tobacco; 4.1% and 1.0% were consuming khat and bhang respectively. Similarly, the study found that 6.0% of the total respondents were abusing multiple drugs and substances. Furthermore, alcohol related disorders were the leading with 10.4%, followed by tobacco disorders at 6.8% with khat-related disorders standing at 3.1 per cent.

Similarly, another study by Ronoh (2014) which was conducted in selected public and private universities in the country, revealed a high prevalent rate of drugs and substance abuse in higher institutions of learning. He noted that families, institutions of learning and places of work have undergone agonizing impacts of the menace (Ronoh, 2014). Particularly in the universities, he found that the problem was rampant and was being aggravated by numerous factors including personal freedom, excessive amount of free time, a wide range of demands on the students, the psychological impact of interactions and making of new friends who may lure them into drugs and substance abuse (Nyongesa *et al.*, 2021). To mitigate the situation, the study found that the universities across the country have come up with preventive programs and social support services to implement the intervention measures. These are just but a few of the numerous studies that reveal the real situation of drugs and substance abuse, especially among the youths.

Currently, Kenya is faced with serious socioeconomic problems related to the high prevalence of alcohol and drug abuse. The wider ramifications include ill-health disability, declined

productivity, unemployment, financial instability, and disintegration of families which in turn has inflicted untold suffering on parents and families as productive members become wired into drugs (Wallace, 2015). Today, substance abuse in Kenya has become rampant in urban areas owing to the liberal use of drugs and substances, especially among young people which in turn has resulted in increased crimes and domestic violence in numerous households across the country. The wider effects of drugs and substance abuse, especially among the youths in the country have prompted the government to intervene to remedy the situation. The intervention has been mixed, ranging from policies to preventive programs.

The first program launched by the Kenya government to help in tackling substance abuse is the economic empowerment and establishment of recreational facilities. Regarding the economic empowerment of young people, a significant number of them have been absorbed in the informal economic sector though they earn lower wages and oftentimes are subjected to impoverished and exploitative working environments resulting in high unemployment prevalence (Nyongesa *et al.*, 2021). Similarly, most of them enter the labour market with the hope of securing employment in the formal sector but are greatly disadvantaged since the sector tends to absorb just a few of them. While some of them are willing to employ themselves in the informal sector, they have been met with numerous obstacles including a lack of financial resources. Having been met with frustrations, some young people have been forced into crime to make ends meet while others have indulged themselves in drugs and substance abuse. This has resulted in intense idleness, insecurity and violence which has culminated in devastating impacts on society (Gitonga, 2015). In response, the government has come up with intervention measures including the reservation of 30% of the government's tenders, establishing youth empowerment centres across the country to engage young people and implementing empowerment projects such as the Kenya Youth

Employment Opportunities Project (KYEOP) which aims to provide technical training and assistance to young people to enable them to become self-reliant.

Secondly, the government initiated information and educational programs. The Kenya government through NACADA has launched education programs, especially in institutions of learning to provide prerequisite information about the drugs substances such as tobacco and alcohol with an underlying assumption that young people would behave rationally when adequately informed on the side effects of drugs and substance abuse. The antisocial behaviour, especially among drug addicts should not be left to institutions like schools, churches, police courts and professionals like psychologists, psychiatrists as well as social workers (Okello & Novelli, 2014). Instead, it should be treated as a communal problem. The Kenya government acknowledged the menace of drugs and substance abuse and established the NACADA in 2001. Since its inception, the institution has been working alongside other organizations in the campaign against drug abuse. It has ever since launched public education campaigns in institutions of learning including primary, secondary and tertiary institutions across the country. It has also developed an action plan to mitigate substance abuse among the youth. Additionally, it has also intensified the sensitisation of the public through workshops and national administration through public barazas (NACADA, 2019).

In addition, the government utilizes treatment and rehabilitation of drug addicts as a vital strategy in the prevention of drug and substance abuse. Many countries across the world, especially those that have been adversely affected by the menace of drugs and substance abuse have long embarked on treatment and rehabilitation programs as a preventive measure. Kenya is not an exception and has strived to allocate resources for these programs to mitigate the profound consequences that the menace inflicts on the affected victims (Okello & Novelli, 2014).

Empirical evidence shows that treatment has the potential of changing the destructive behaviours of people, altering relapse and ultimately removing themselves from the addiction. As one of the chronic recurring illnesses, it may require a series of treatments before being put under control. Generally, effective treatment is achieved when some appropriate treatments are prescribed. The treatment and rehabilitation of substance abuse individuals have tremendous economic benefits for the entire society or at least some sectors that drive the Kenya economy (Mwai *et al.*, 2023). In light of this, the Kenya government has also invented some modalities which have been designed to address the mitigation of drug and substance abuse among the young population across the country through treatment and rehabilitation programs.

Drugs and substance abuse continue to be thorny issues facing contemporary communities throughout the world. In Kenya, it has become one of the major social catastrophes with the commonest and most easily identifiable manifest in public health (Mbutia, 2016). Notably, it has become one of the endemic problems that have bedevilled the country. Similarly, the lucrative drug industry is governed by ruthless cartels who reap millions of shillings from the business yearly. In the views of Oguya *et al.*, (2021) drugs and substance abuse has been responsible for several predicaments such as wage loss, property destruction especially in schools, increased healthcare costs, increased domestic violence in several households and family disintegration just to mention a few. Barasa (2013) adds that, it has become a multifaceted problem that cuts across virtually all sectors of society and hinders the ability of both young and adults to realise their full potential. The reduction and uprooting of substance abuse menace has been a priority of almost every government across the globe and Kenya is not an exception (Oguya *et al.*, 2023).

It is worth noting that in the coastal region, the government of Kenya has scaled up the intervention measures to aid in curbing the menace of drugs and substance abuse having acknowledged the profound impacts of this menace to the socio-economic well-being of its people, especially the young population (Phyllys *et al.*, 2022). However, as noted by Nyongesa *et al.*, (2021) despite the existence of these intervention measures, drugs and substance abuse continue to be a stumbling block for the country's quest to be a drug free society. Therefore, it is quite essential to examine the effectiveness of the existing programs to ascertain the general performance of the Kenya government in the eradication of drugs and substance abuse.

Recently, the coastal region has seen a significant rise in the prevalence rates for drugs and substance abuse. The region has been an epicentre of illicit drugs such as cocaine, heroin, and cannabis just to mention a few. In 2017, NACADA established that 18.2% of Kenyans aged 15-65 years were using at least one drug or were hooked on substance abuse (NACADA, 2019). A survey on Alcohol and Substance abuse in the Coastal region established a prevalence rate of 29.3% with Mombasa topping the list with a prevalence rate of 34.4%, followed closely by Lamu at 32.0%, Kilifi at 29.7%, Kwale at 26.0%, Taita Taveta at 20.7% and Tana River at 31.1%. This high prevalence rate has been attributed to the accessibility, affordability and consumption of substance abuse which in turn has attracted the attention of public health professionals as well as the government of Kenya. Following this alarming prevalence rate of substance abuse, the government has been compelled to introduce some preventive programs including treatment and rehabilitation, the establishment of recreational facilities, initiating educational and information programs and ultimately creating awareness of the effects of drugs and substance abuse among others (Oguya *et al.*, 2023).

According to NACADA (2022), the government of Kenya recognizes drug and substance abuse as one of the major threats to the well-being of the citizens vis-à-vis national development. In recent decades, drugs and substance abuse has increased significantly and jeopardized the social, economic and political transformation achieved over the years. It asserts that prevention and control of drugs and substance abuse are critical to national development as well as the attainment of the ambitious Vision 2030. Nationally, the findings show that half of the population had ever used drug or substance abuse in their lifetime with alcohol and tobacco as the most abused drugs at 19% and 15% respectively. The study further revealed an incremental demand for cheaper and easily available alcoholic products, especially “chang’aa” at 3.4% and traditional brews at 3.1% (NACADA, 2022).

As reflected by the recent biannual report of the NACADA, the coastal region is one of the best-known hotbeds for drugs and substance abuse, especially among the young population. Regarding this, out of the many places identified as the epicentre of the crisis, both Mombasa and Kilifi counties stand out (NACADA, 2023). The leading counties have been found to be hit by the excessive use of hard drugs including cocaine and heroin. According to the biannual report by NACADA, at least 45 per cent of the residents in the region admitted to have abused at least one substance. Unsurprisingly, Kilifi County topped the list as regarding the abuse of at least one substance, which stood at 55.9 per cent. It was followed so closely by Mombasa County, which stood at 51 per cent (NACADA, 2023). Undoubtedly, the menace of drugs and substance abuse in the region is one of the thorny issues that have necessitated mixed responses in a bid to stabilise it before it spiralled to an unsustainable crisis. Therefore, these findings are full attestation that drugs and substance abuse in the country remains a challenge to contend with despite the interventional measures designed to curb the menace.

A number of reasons have been offered to explain the unprecedented rise in drugs and substance abuse in Kilifi and Mombasa Counties (Nyongesa *et al.*, 2021). Among them include the flourishing trade in illicit drugs and substance abuse that has aided the accessibility of these drugs with too much ease, the tourism sector has for long been regarded as one of the economic stay for both counties. However, the sector has also been criticized for buttressing the intense usage of drugs and substance use for recreational purposes as well as the intensification of drug peddling, especially among the youths (Oguya *et al.*, 2023). Another reason is the significant failure by the government to make the crisis an imminent human-induced disaster to round up serious intervention measures, most of which have been largely humanitarian. In this case, therefore, it is the prime interest of this study to analyse the effectiveness of programs the government puts in place in its pursuit to mitigating drug and substance abuse in Kilifi and Mombasa Counties.

1.2 Statement of the Problem

The coastal region has seen an exponential rise in drugs and substance abuse, especially among the young generation. Drug and substance abuse is increasingly being recognized as an emerging health issue in the coastal region alongside factors like pervasive poverty, increased unemployment rates as well as the spread of HIV/AIDs. The coastal region, especially Mombasa and Kilifi, has attracted unparalleled media coverage with significant cases and documentaries on drug trafficking and its usage. This attests to the fact that drugs and substance use is a deeply rooted problem and human-induced disaster that requires urgent attention from all the relevant stakeholders. Dozens of people have been reported to have perished as a result of this menace. In response, the government has initiated a series of mitigation and prevention programs which have been manifested in learning institutions, working places, communities, public education and

advocacy as well as providing accessibility to effective and holistic treatment and rehabilitation programs to mention a few. Notably, among the programs have been the construction of rehabilitation and treatment centres for drug addicts, awareness campaigns that focus on the issues that affect drug users, administrative programs which has seen the operationalization of the “*Nyumba Kumi*” initiative which intends to support community policing at household and community levels. Despite the intervention of the institutions such as NACADA alongside other agencies, drugs and substance in the region has been on a steady rise with over 30% of young people being hooked on drugs. The appalling situation regarding this menace is that the young people who are the main drivers of Kenya’s economy and the potential leaders of tomorrow have been adversely affected by the crisis which in turn jeopardizes Kenya’s socioeconomic prosperities. Against this backdrop, this study therefore sought to analyze the effectiveness of government programs in tackling substance and drug abuse with specific attention to the Coastal region which continues to witness a steady rise in drugs and substance abuse.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to analyse the effectiveness of government programs in mitigating drugs and substance abuse in selected counties in the coastal region of Kenya.

1.3.2 Specific Objectives

Specific objectives were to:

- (i) Examine the nature of drugs and substance abuse in selected counties in the coastal region of Kenya

- (ii) Evaluate the government programs in combating drugs and substance abuse in selected counties in the coastal region of Kenya
- (iii) Assess the challenges and opportunities facing government programs in managing drugs and substance abuse in selected counties in the coastal region of Kenya.

1.4 Research Questions

The study was guided by the following research questions:

- (i) What is the nature of drugs and substance abuse in selected counties in the coastal region of Kenya?
- (ii) How effective are the government programs employed to mitigate drugs and substance abuse in selected counties in the coastal region of Kenya?
- (iii) What are the challenges and opportunities facing government programs in managing drugs and substance abuse in selected counties in the coastal region of Kenya?

1.5 Justification of the Study

1.5.1 Academic Justification

Drugs and substance abuse is a global pandemic that transcends state borders. All countries across the world have been affected either directly or indirectly by the menace. According to Gitonga (2015), not even a single country is insulated from the wider ramifications of drugs and substance abuse as well as drug trafficking. Kenya like any advanced economy has been faced with the menace of drugs and substance abuse. This has been exacerbated by the increased high percentage of young people who have been lured into the menace despite the mitigation measures being implemented by the government. Failure to fast-track the implementation of this

problem not only affects the victims but also the economic and social development of the country. The devastating impacts of drug and substance abuse can never be ignored. Among the impacts include unprecedented unemployment, poverty, intense crimes, domestic violence and the disintegration of families among others. Empirical data admits that drug and substance abuse has remained one of the major problems confronting the country in recent days. This has necessitated the government to intervene to remedy the situation. In his study, while looking at the strategies employed by the government to tackle the menace, Gitonga (2015) restricted his research to the young population ignoring the adults who are also major victims of the menace. Regarding this, he admitted that even though the government has come up with numerous preventive measures, the problem of drugs and substance abuse has persisted and is increasing at a very alarming rate. He also failed to highlight the impacts of the menace in hotspots areas such as the Coastal region. This, therefore, provides a lacuna for further exploration of the devastating impacts of the menace, particularly in the Coastal region of Kenya.

Kenya's coastal region is a hotbed of drugs and substance abuse, especially among young people. However, most of the studies dedicated to the region have failed to take into consideration the relevance of government programs as a mitigation measure to the menace. This is demonstrated by some studies including that of Masudi (2011) and Korir (2013). For instance, Korir restricted his research to the analysis of drugs and substance abuse along Kenya's Coastal region with a special focus on the nexus between youth and drug abuse. Similarly, a study conducted by Masudi (2011) in Mombasa Old Town revealed that, drugs and substance abuse was a persistent predicament. The study acknowledged that several robust preventive measures have been taken by both national government and county government of Mombasa. Among the programs identified by the study were the Narcotics Anonymous that targets drug addicts

through public meetings as well as interactions with non-users, sensitisation and rehabilitation programs to mention a few. However, the study was restricted to Old Town, failing to shed light on the effectiveness of some of these preventive programs in other areas of the County. Despite Kilifi County being the hotbed of drug and substance abuse, it is yet to attract significant scholarly attention which again makes the current study relevant. These among other studies demonstrate the scanty research on the effectiveness of government programs in tackling drug abuse. This study comes at a time when the region is witnessing a high prevalence rate of drugs and substance abuse as admitted by NACADA's survey on the drugs and substance abuse prevalence in the country. Therefore, the analysis of the preventive programs could help to identify the strengths and the weaknesses of the preventive programs which would help in the readjustment.

1.5.2 Policy Justification

The government of Kenya mandated NACADA with the duty to come up with strategies and programs which may help tackle the menace. Since its inception, numerous preventive measures have been initiated in institutions of learning, rehabilitation centres, and public health facilities among others. Concerning policy recommendations, the institution has pushed for the legislation of laws that aims to curb the use and the spread of drugs and substance abuse. A remarkable milestone was made in 2010 when the Alcoholic Drinks Act was established and became famously known as the "*Mututho Law*". This Act sought to prohibit the sale, production and the drink of alcoholic substances to protect consumers of alcoholic drinks. Notably, most of the preventive programs are anchored on some of these policies. Furthermore, National Alcohol and Drug Policy were also adopted to address the underlying threats posed by drugs and substance abuse in the country. The findings of this study will help both the national and county

governments with a better comprehension of the effectiveness of the intervening government programs in tackling drug abuse. The study will help them to decide whether or not they should continue or discontinue the existing programs. Again, based on the findings, the policymakers and administrators may find the findings useful which they may in turn use to improve the existing programs and develop new ones which are more effective and easily implementable.

Based on the National Alcohol and Drug Policy, the Kenya government has come to recognize the profound threats posed by alcohol and substance abuse to the socioeconomic development and prosperity of the country. In cognizance of the underlying threats to life and national socioeconomic prosperity inflicted by drugs and substance abuse, the government remains at the forefront in the mitigation of the menace (Gitonga, 2015). Concerning policy, the Kenya government decided to focus on four strategic concerns namely; the reduction of demand, suppression of supply, harm reduction and ultimately the coordination of framework, legislations and implementation frameworks. This policy remains a hallmark of most of the preventive measures that the Kenya government is pushing. Similarly, the study also considered the devolution of these policies at both Mombasa and Kilifi counties alongside the existing county-based policies on drug and substance abuse. Therefore, this study reviewed the strengths and the weaknesses of this policy in the context of mitigation which will then compel it to relook at the policy and work on easily implementable programs to curb the further spread of drugs and substance abuse in the country.

1.5.3 Philosophical Justification

The study was underpinned by interpretivism philosophy. The interpretivism approach emerged in the early 20th century as an antithesis of positivism. It was championed by influential scholars from the Chicago School of thought including Weber, Goffman, Cooley, among others. It is

inherently linked to idealism that advocates for freedoms and it is utilised to influence diverse approaches (Ryan, 2018). The approach postulates that truth and knowledge are subjective, culturally, and historically located based on actual experiences and their comprehension. It is anchored in three major approaches namely: hermeneutics; symbolic interactionism; and, phenomenology. Hermeneutics concerns the interpretation and comprehension of texts to ascertain their deeper meanings. As conceived by Blumer (1969), symbolic interactionism is embedded in three core principles; humans behave based on their meanings, meanings are generated from social interaction and finally, meanings may be adapted based on an individual perception of their experience. Lastly, phenomenology concerns the interpretation and description of people's live experiences.

In the context of the study, the abuse of drugs and related substances is influenced by people. Consequently, the persistent uptake of illegal drugs remains detrimental to people's general health as well as their socio-economic well-being, especially the victims of drugs and substance abuse. Imperatively, interpretivism is a people-centered approach to research thus, it made it easy to adapt and incorporate people's opinions on drugs including the positive and negative consequences of the menace. People's opinions were essential for the research to ascertain the magnitude of the impacts of drugs and substance abuse in the Coastal region. Again, because of its people-centeredness, it was crucial to throw weight on the people's perceptions on the effectiveness of the governmental efforts to mitigate the profound impacts of drugs and substance abuse thus, helped to achieve in-depth information on the study. Additionally, the approach is also embedded in social interaction. This was beneficial to the researcher since it helped to unearth the dynamic trends in the uptake of drugs coupled with the harness of people's

perceptions on the ongoing programs to mitigate the menace of drug abuse in both Mombasa and Kilifi Counties.

1.6 Scope of the Study

This study was conducted in the Kilifi and Mombasa counties in the coastal region of Kenya. The selection of these counties was informed by the fact that they have continued to witness high prevalent rates of drug and substance abuse, especially among the young population. Since the area has been regarded as a hotbed for drug abuse, it has attracted the attention of the government, making it relevant for the study to analyze the effectiveness of government programs in mitigating the menace of drug abuse. The study focused on the programs existing from 2001 to 2023. This period has witnessed an exponential rise of drugs and substance abuse in the country which was further evidenced by the establishment of NACADA to prevent, control and mitigate the devastation resulting from drug and substance abuse in the country, and the legislation of robust policies intended to address the menace. The study was restricted to the analysis of the initiated government programs, their effectiveness and ultimately the challenges and opportunities that may arise from the implementation of these programs. Data was collected between 18th March and 5th June, 2023.

1.7 Chapter Summary

This chapter looked at the major components of the study, background to the study, statement of the problem, research objectives and questions, justification of the study which encompasses policy, academic and philosophical justifications, and the ultimate scope of the study. The next chapter (Chapter 2) reviews literature thematically based on the research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter empirically reviews literature on the research topic. The chapter is thematically arranged as per the specific objectives of the study. Thus, it has the following subtopics: the nature of drug abuse, the effectiveness of government programs employed to control drug abuse, and the challenges and opportunities facing government programs employed in managing drug abuse. In addition, it discusses the conceptual framework and the conceptual model underpinning the study.

2.1 The Nature of Drugs and Substance Abuse

Drug and substance abuse is the excessive use of illegal drugs, prescription drugs, and over-the-counter medications for purposes other than those intended for them. Problems in a person's social, physical, emotional, and professional lives can result from drug abuse. Drug abuse poses a threat to people of all geographic locations, ages, educational levels, socioeconomic statuses, and ethnic or racial identities, making it among most pressing issues globally (Caday, 2017). What is disturbing is its continuous change from social sickness into a family friend in numerous networks where individuals see its presence as something typical in society. The prevalence of youth drug abuse and the increased variety and availability of drugs are the most startling global trends that have emerged. In 2020, United Nations Office on Drugs and Crime reported that over 284 million individuals abused drugs worldwide. The report generated in 2022 also indicated that most of the drug users were between 15-64 years of age (Hansford, 2022). Drug use is rising among young people and is now higher than it was during the previous generation in many

countries. According to the report by UNODC, 11.2 million people around the world were injecting drugs. In North America, the legalization of marijuana seems to have caused an upsurge in daily use, particularly of potent cannabis products and among young adults. Suicides, hospitalizations, and people with psychiatric disorders have all been linked to this. In addition, tax revenues have increased as a result of legalization as has the overall rate of cannabis possession arrests. The manufacture of cocaine came to a high record in 2020 as compared to the 2019 record, thus an escalation of 11%. The result was consequently 1,982 tons. During the COVID-19 pandemic in 2020, cocaine seizures also rose to a record 1,424 tons.

The general public's consumption of alcohol varies greatly across the Americas; the prevalence over the past month varies from 9.5% in El Salvador to 52% in Argentina and Uruguay. Both South and North America have the highest rates of abuse-more than 50%. At least 20% of secondary school students in 23 of the 31 countries that collect data on them say they have drunk alcohol in the past month (Ahumada *et al.*, 2019). All over the region, high-risk alcohol behaviors like early initiation and binge drinking are a concern. In the previous month, the eighth-grade prevalence was greater than 20% in ten countries, and it was greater than 30% in three of these countries. Drug use is especially concerning among students as young as eighth graders, even though any drug abuse among secondary school learners could be considered early use. The prevalence of tobacco use among students varies widely, from 1.8% in Antigua and Barbuda to 23.7% in Chile. With little exception, nations with trend data exhibit a decline in abuse among secondary school students. However, as with other drugs, tobacco use is harmful to health at any age, and the earlier it is started, the greater the risk of long-term harm. In the end, any tobacco use by secondary school students raises concerns for public health.

Cannabis is widely abused in the Americas. The prevalence over the previous year in the general population ranges from 0.5% to nearly 16% (Ahumada *et al.*, 2019). The range among secondary school students is even wider, ranging from less than 1% (0.9%) at the lowest end to almost 38% at the highest. Boys use cannabis more frequently than girls do in the majority of countries; however, the prevalence over the past year is nearly identical by sex in a few countries in North and South America. Throughout the hemisphere, cocaine is used, while crack is more prevalent in North America and the English-speaking Caribbean and CBP is abused mainly in South America. In the region, indicators of cocaine use vary by country and population. In every one, past year predominance goes from 0.03% to practically 2% (Ahumada *et al.*, 2019). There are statistics on the general population's use of cocaine in 22 countries. There is no consistent pattern among the seven countries that have trend data over time. At least one has decreased, two have remained stable, and four have increased in prevalence.

In South-East Asia countries like the Philippines, drug abuse is a problem among young adults. A report by Simbulan *et al.* (2019) indicates that 1.8 million people abuse drugs in the Philippines. Eighty percent of drug users have completed high school, are male, and are adults (91 percent). 67 percent of them are employed. Shabu, a type of methamphetamine also branded "poor man's cocaine," is the most widely abused substance in the Philippines. The Philippines authorities have concentrated on enforcing a policy of punishment and criminalization in response to the Philippines' drug issue, which has been primarily viewed as a problem of criminality and law enforcement. This is demonstrated since the beginning of the "war on drugs," because the government has taken corrective measures and enlisted the assistance of local government units as well as the Philippine National Police (PNP). Law enforcement officers have carried out widespread door-to-door procedures on the President's orders. In 2017, a similar

operation was carried out in Manila with the intention of "shocking and awe" drug dealers. Police killed 32 people that night.

In China, the rise in drug abuse can be attributed to the introduction of opium by the British during the 1760s. China saw a significant rise in both drug consumption and production. This circumstance was made worse by the failure of the Opium Wars in China between the Qing Empire and the United Kingdom to force China to import British opium; it became vulnerable to free trade in opium as a result of this war, which had devastating effects on social life and public health. The successive upsurge of the new China created a drug-free environment with strict laws and penalties, resulting in a significant decline in drug use. However, drug abuse has re-emerged as a main public health issue in the perspective of government reform and the 1980s' open-door policies. Addiction to drugs is now strongly linked to drug-related crimes and the spread of HIV in China (Zhao *et al.*, 2019). New designer and synthetic drugs have complicated the drug abuse scene, even though opiate drug abuse and the harm it causes have been effectively controlled in some areas. China should establish a public executive arrangement and mediation for engineered medicines and related illnesses. The majority of addicts are single men under the age of 30 with low employment and education levels. The majorities, or 78 percent, are heroin dependent, with the highest rates occurring in the provinces of Sichuan, Yunnan, Guangdong, and Guangxi (Shek, 2017). In China, the ratio of inhalation drug to injection (IVDU) use has remained high, particularly in Hubei, Guangdong, Gansu, and Sichuan, where 50-70 percent of users inject drugs and 25 to 50 percent abuse inhalant drugs.

With the exception of khat chewing in north-eastern Africa and cannabis use in southern and northern Africa, drug use in Africa is comparatively recent (Sudhen *et al.*, 2017). Despite this, drug abuse is rapidly growing in Africa, moving from a small number of users of cannabis to a

larger number of users of more dangerous drugs. Cannabis, which has been linked to schizophrenic-like psychosis, continues to be the most widely used and readily available drug of abuse. Abuse and trafficking of heroin and cocaine are recent developments in some African nations that have never dealt with these substances before. Drug abuse assessment programs ought to be designed and implemented in order to ascertain the true scope of the problem, its characteristics, and its trends. Programs to prevent drug abuse have been difficult to implement due to a lack of funds and staff members with sufficient training. Through religion, family, school, workplace, and neighbourhood settings, as well as healthy leisure events, there is an informal scheme of drug abuse regulation. In addition to the legislation-based formal drug control, this system also exists. It is recommended that struggle in Africa have to be directed toward reinforcement of both the informal and formal drug control systems in order to make up for the lack of funds and personnel trained in the implementation of formal drug control measures. It is highly likely that African countries' drug problems will continue to get worse in the imminent lest more operational measures are taken to stop the current condition.

According to UN statistics, 37,000 Africans die annually from diseases linked to the use of illegal drugs. The United Nations estimates that 28 million Africans use drugs, while 32 million people use drugs in the United States and Canada. The African Union's a drug prevention division's Dr. Johan Strijdom shared his expectations for the conference with DW (Mwakideu *et al.*, 2022). "Accelerated access to treatment and prevention services should be addressed in any plans we come up with," he stated. The United Nations reports that the use of illegal drugs is rising in Africa. However, it insists that due to incomplete drug consumption records in Africa, it cannot provide specific figures. The rising use of illegal drugs in Africa is the result of porous borders and political instability. The major drug cartels from Colombia and Latin America have

chosen Africa as a route to Europe because of its lack of border control. These criminal organizations were turning their attention to West African nations like Guinea Bissau, Liberia, and others because they were able to take advantage of these nations' lack of resources and money to use them as transit hubs (Ogundipe *et al.*, 2018). Young people who were unable to resist peer pressure and began experimenting with drugs were identified as the most vulnerable segment of the population in consumption countries. Delegates were also informed that young people from unstable or poor families might be tempted to abuse drugs as a means of escaping their problems in life. There must be an alternative to punitive measures for reducing drug demand in Africa.

Marijuana is grown in many countries of the African continent. Between 2014 and 2018, Central and West Africa were the countries of departure, transit, and origin that were mentioned the most in Africa: Nigeria and Ghana; likewise in North Africa: Morocco; in Africa's East: Kenya, Uganda, and the Republic of Tanzania; in the south of Africa: Malawi, Eswatini, and Mozambique. In 2018, Africa was responsible for 8% of all seized quantities of cannabis resin and 19% of all seized quantities of marijuana. In 2018, close to 60% of all seized cannabis resin came from Africa. The qualitative information on cannabis use that has been reported by member states indicates that Africa, ahead of the Americas, appears to have experienced the greatest increase in cannabis use between 2010 and 2018. Over the course of the years 2010 to 2018, more nations in Africa reported an increase in cannabis use than a decrease, and this was true for every year (Ong'olo, 2020). Countries in West and Central Africa reported the largest increases within Africa between 2010 and 2018, followed by southern African countries. According to estimates from UNODC, the annual prevalence of cannabis use in Africa is clearly higher than the global average of 3.8%, with the highest estimates coming from West and

Central Africa. On the other hand, there have not been many recent prevalence studies on cannabis use among Africans. In 2016, it was estimated that 1.2 percent of individuals between the ages of 15 and 64 in Kenya and 10.8 percent of individuals in the ages of 15 and 64 in Nigeria used cannabis on an annual basis. In addition, cannabis continues to be the most commonly used drug in treatment, with nearly half of people receiving treatment for drug use disorders using it.

Nigeria is among the countries that have experienced increased Drug abuse in Africa. Nigeria, Africa's most populated country, has received a reputation as a center for drug trafficking and use, mainly amongst young people. 1 in 7 persons aged between 15 and 64 had abused drugs in the previous year, which was the country's first large-scale survey on drug use (Jatau *et al.*, 2021). Additionally, one in five people who used drugs in the previous year has drug-linked illnesses. Numerous unlawful offenses, including shoplifting, sex work, theft, and burglary, have been brought on by drug abuse. There are over 400 ethnic groups and numerous religious groups in Nigeria, making it a very diverse nation (Jatau *et al.*, 2021). Because of the country's multiethnic features, drug abuse is thus perceived within a wider context. For instance, the majority of societies do not classify as drug abuse the use of certain drugs that do not cause obvious behavioral changes. Despite the multiethnic nature of Nigeria, police, the public, health professionals, preachers, parents, regulatory agencies, and teachers continue to raise concerns about the country's rising drug abuse problem. The most recent call came from the President of the Nigerian Pharmaceutical Society (Jatau *et al.*, 2021). 19 and 12.5 percent of university students in South-South Nigeria who participated in the study admitted to using 10 alcohols and stimulants, respectively (Olurishe, 2019). These medical students were between the ages of 20

and 25, demonstrating that drug and alcohol abuse is a problem that goes beyond medical knowledge and probably exposure.

East African nations are impacted by the illegal trafficking of heroin and psychotropic substances in addition to the expanding local cultivation and abuse of cannabis. At Pakistan's Karachi airport and European and other African airports, an increasing number of East African natives are being arrested for heroin trafficking. Multiple seizures in Asia's ports indicate that commercial sea routes are used for the illegal trade in methaqualone and amphetamines from Asia. Drug abuse and associated crime, as well as drug abuse among the armed and displaced forces, are both exacerbated by the conflict in the region of the Great Lakes. Pot and khat are the principal substances of abuse.

Kenya, the United Republic of Tanzania, and Ethiopia reported a rise in heroin and opiate abuse in the mid-1990s. In Eastern Africa, the recorded prevalence rate of opiate abuse is at its peak in Mauritius. Individual reports indicate that portions of the region's population abuse cocaine. Almost all countries in east Africa have reported using drugs by injection, inhalation or sniffing, and swallowing as a method of intake. The most common offenses involved drug abuse in Rwanda. Some of the most pressing issues that require immediate attention include the rise in smuggling and the use of drugs, weak laws, and difficulties in their enforcement. It was reported that 2,890.179 Kg of marijuana were pursued, and 1,671 individuals were arrested in Rwanda in 2009 alone. Again 2010, in January, 563,988 Kg of pot were apprehended, and 999 individuals were captured (Twaibu, 2020). Despite the fact that the youth prevalence rate of illicit drugs in Rwanda is negligible in comparison to that of other East African countries, circumstances exist that expose adolescents and children to drug abuse. A cursory examination of Rwandan media, discloses that youth drug and alcohol abuse is a huge problem in both urban and rural areas.

Though youth drug use and use in ceremonies are not new in Rwandan families, the current use of illegal drugs, mostly cannabis, among the adolescents has emerged as a significant public policy concern and a serious public health issue.

According to Ngamije & Yadufashije (2016), a nationwide study to examine the prevalence of drug abuse among young adults and adolescents in Rwanda was carried out in 2011 by the Ministry of Youth and ICT on the basis of hospital reports and frequent fieldwork observations. The objective populace was youth between 14 to 35 years. 2479 young people were interviewed, 56.0% of them were male, and 44.0% were female. (83 vs. 16.7%) The majority of participants were more likely to live in rural areas. 45.8% of youth had two guardians alive, 37% had one living parent, while 14.4% of the young detailed that the two guardians were deceased. Twenty-three percent of respondents were students, twelve percent had completed school, and fifty-one percent had dropped out of school. According to Ngamije & Yadufashije (2016), approximately two-thirds of participants came from families that were considered to be poor, 35% came from families that were resourceful, and 3.4% came from rich families. The findings also revealed that more than half of the participants, or 52.5%, stated that they had used one or more substances at least once in their lifetime. As a result, the study revealed that the youth of Rwanda had a lifetime prevalence rate of 52.5 percent for drug abuse. Furthermore, they found out that the majority of adolescents who reported using marijuana, alcohol, and tobacco came from families in which relatives abused drugs. The study demonstrated that as youth get older, the rate of using AODs rises. According to Ngamije & Yadufashije (2016), they found no correlation between usage rates and current marital status, head of household education, and youth household socioeconomic status.

In Uganda, drug abuse has been acknowledged as a major issue, particularly among marginalized and unemployed groups. Youth on the street and in schools, as well as soldiers, are the primary users of cannabis. Street and Urban youth typically consume heroin; Cocaine abuse is common among people with high incomes; Somali refugee Youths abuse khat. Cocaine and Opiate abuse, as well as volatile solvent abuse and cannabis, are on the rise. Abuse of benzodiazepines has increased, abuse of barbiturates has decreased, and abuse of amphetamines has significantly decreased. There were 2,034 investigated and reported narcotics cases in Uganda in 2009, which resulted in 2,274 arrests (Twaibu, 2020). Laws that are not strong enough and weak border controls are to blame for the trend. Social upheaval, unemployment, high school dropout rates, and family discord are all to blame for the rise in hard drugs, volatile solvents, and cannabis abuse. The drug's availability has increased as a result of increased production and trafficking. The majority of sedatives and opiates are injected. Additionally, some opiates and sedatives are smoked, amphetamines and hallucinogens are taken in. NGOs in Uganda have reported instances of multiple drug abuse, including alcohol mixed with volatile solvents and cannabis combined with alcohol and volatile solvents. For consumption, cannabis is dissolved in water and smoked. In urban areas, youth chew khat that is sold openly. Street children and urban youth typically sniff petroleum products from soaked cloth or small bottles.

As a result of drug trafficking, Uganda is now recognized as a transit, consumer, and producer country. As far as China, traffickers, some of whom are Ugandan, have been apprehended. Over 54 Ugandans were detained for drug-related offenses from 2008 to 2009, and 38 of them were found guilty and sentenced to death. Other drug traffickers from Pakistan, Nigeria, India, and, most recently, Tanzania have also been detained at border points in an effort to curb traffic drugs. From there, they acquire mandrax, cocaine, heroin, and other drugs, which they then

transport through Uganda to Southern Africa, Europe, and Kenya. Even though a law has been in place since 2005, Uganda does not have an effective policy for dealing with drug abuse (Twaibu, 2020). The 2000 National Drug Authority Act is broad and insufficient. In a similar vein, Uganda does not have a comprehensive drug abuse policy. In Uganda, Police work an opiate police unit exceptionally careful at air terminals and damaging marijuana. The police lack adequate personnel, enough funding, and proper infrastructure. The Ministry of Health's mental health division and psychiatry hospital are the primary enforcement agencies. Additionally, NGOs with limited resources primarily operate in major urban centers and communicate with a few posters and radio broadcasts, which are infrequent and difficult to measure. UYDEL and the Serenity Center are the NGOs with the most activity.

Despite the widespread problem of drug abuse, there has been a decline in the number of non-governmental organizations (NGOs) working in this field in Uganda due to a lack of funding. On occasion, professionals from the media, the health industry, and non-governmental organizations take part in drug abuse awareness campaigns on radio, television, and print media. In addition to lectures, drug awareness talks, and seminars on drug-related topics, which encourage student participation, drug education is incorporated into primary, secondary, and higher education curricula. The number of treatment facilities in the country has increased from 12 to specialized facilities, including NGO facilities (Fentaw *et al.*, 2022). The absence of a policy undermines the scope of programs, and areas like social reintegration and community-based rehabilitation are generally underdeveloped. Street children's rehabilitation is supported by NGOs through their general rehabilitation centers. It is the responsibility of psychiatrists, doctors, and social workers at government hospitals to treat and rehabilitate patients who have abused drugs or other substances. At the moment, it is estimated that 25% of all cases (1 out of 4 mental psychiatry

cases) are caused by drug abuse. The joint battle against drug dealing in the east African region is impacted by various degrees (Twaibu, 2020). There is a lack of national data; to determine the scope of the issue, a nationwide survey is required. Government and civil society coordination needs to be strengthened and supported. Increase public awareness and engage communities and NGOs in additional preventative measures.

The incidence of drug abuse and the effects of HIV on Zanzibar have been reported on a regular basis by the health authorities of the island. They do warn that drug sex workers and injectors have a higher HIV infection rate than the overall population. In a 2006 survey on 508 injecting drug users: 26% had HIV and were likely to have had their first sexual experience as teens; to possess numerous partners sexually at the same time; and, to have unprotected sex which makes them more likely to get HIV. As more drugs become available, the number of AIDS cases in Zanzibar could rise. Three percent of adults in the area use illegal drugs, according to local police, and this percentage is rising. The country is on a drug-trafficking route between Europe, Asia, and the Middle East, which has caused a rise in heroin abuse in the area. In 2005, police seized 375 metric tons of cannabis, 101.5 kilograms of heroin, and 35 kilograms of morphine, among other illegal substances. As per Tanzania's anti-narcotics unit, the police have arrested 11,500 individuals on drug-linked charges in the past two years. Many people who inject drugs either share dirty needles or use the risky "flash blood" method, which saves money by injecting heroin or other illegal drugs and then drawing blood from a syringe for another user to inject (Fentaw *et al.*, 2022). According to a study conducted in 2006, users frequently turned to prostitution in order to pay for their drug use, which could cost as much as \$8 per day. Additionally, some observers lament that tourism, contributes to an "un-Islamic" Western lifestyle. WHO and USAID have given a lot of money to drug abuse and risky behavior related

to HIV/AIDS. The majorities of these activities are project-based and short-term and rarely include documentation of best practices.

Drug use is one of Kenya's key social issues, with widespread and easily recognizable public health manifestations. Over 60% of users are between the ages of 10 to 19, and 21% residing in rural areas. Teens who begin using drugs before the age of 14 greatly increase their likelihood of developing drug problems in the future. Alcohol, glue, tobacco, marijuana, miraa, and psychotropic drugs are the most frequently abused drugs in the country. NACADA (2021) found that, drug and alcohol abuse, both legal and illegal, are developing into a subculture in Kenyan society, necessitating immediate intervention. Addiction to drugs attacks the brain, the center of all essential human functions. Addiction to drugs results in permanent, sometimes irreversible, brain damage and central nervous system changes. The effects of psychoactive substances that kill several thousand neurons are fatal. Overdosing on drugs has led to the deaths of some students. Drug abuse among Kenyan youth has grown into a serious issue that affects everyone in the country. Many people, especially young people, fall into an endless cycle of hopelessness and death as a result of addiction. According to NACADA (2019), they include glue-sniffing street youth and adolescent ecstasy users to ardent cocaine and heroin addicts. Loss of wages, school property destruction, skyrocketing health care costs, and broken families are just a few of the consequences of drug abuse.

The majority of students and young people who abuse drugs do so with legal substances like alcohol, tobacco, and khat. Ecstasy, cannabis, heroin, mandrax, and the lysergic acid diethylamide are all examples of illegal substances in Kenya (NACADA, 2021). Remedy and non-prescription medications are likewise mishandled. Abuse occurs when a person continues to use them without a valid prescription or any known medical condition. Antidepressants,

painkillers, and mood enhancers are just a few examples. After treatment, users frequently relapse into drug abuse due to their addictive nature. Painkillers with codeine, phenobarbitone, valium, piriton, and sleep aids are all prescribed medications. Sleep aids are used by some students who want to read through the night. People who suffer from drowsiness or difficulty staying alert are supposed to take sleep aids. Due to the availability of prescription drugs in their workplaces, medical professionals are also known to abuse them. Students from these kinds of families frequently imitate their parents' actions.

Drug abuse is a major issue in today's society, particularly among young people. In recent years, the prevalence of drug and alcohol abuse, as well as the antisocial behavior that goes along with it, has skyrocketed. The government, parents, teachers, non-governmental organizations, and all other relevant agencies are now concerned about this. It is more common than parents think. Because parents are unaware of the extent of drug use, some adolescents believe they can use drugs without being caught. The majority of parents still delude themselves into thinking that their children are safe and secure because they believe that it is the obligation of teachers to prevent drug use among school-age children.

Drug abuse does not just affect young people who live in some areas or come from certain economic and social classes. It is not just in ghettos or low-pay regions where individuals are poor and furthermore troubled, yet additionally with families living under better conditions (rich and quiet) where youngsters are better controlled. NACADA, which was started in Kenya at the beginning of 2001, says that over the past two decades, drug use and abuse have increased to the point where they now affect all aspects of life (Chege *et al.*, 2017). Since so many young persons are becoming dependent on drugs on a daily basis, the level of drug use is shocking and even more alarming. Liquor, bhang furthermore, and tobacco are progressively being mishandled by

children. According to seizure statistics and research, it is rising steadily. The most affected people are those between the ages of 16 and 30—a crucial developmental period (NACADA, 2021).

In the past, students' most common drug abuse was alcohol, tobacco, bhang, and "miraa," but now heroin, opium, and cocaine are also on the list (Kamenderi *et al.*, 2019). Utilization of dozing pills, tranquilizers, hack blends, and inhalants, for example, paste and petroleum, is currently uncontrolled, particularly among street youths. Only in Nairobi are 50% of students known to have used drugs in the past. Half of these people now use them regularly. In classes seven, eight, and form one, between 30 and 40 percent of students have used drugs at some point (Magati *et al.*, 2018). Every family's front door is stocked with abused drugs. Every family's door has them available. They can be purchased over the counter or in kiosks, bars, and social gatherings at any time. They are sold by street vendors and other specialized gangs at every street corner.

Drugs are a profitable business that is operated by cruel cartels that make millions of money a year. It is a multifaceted syndicate run by powerful individuals who have enlisted the assistance of immigration and security personnel. There is much corruption. The Drug Control Organization's work is becoming increasingly challenging as a result of sophisticated packaging and transportation methods. This web includes personnel from provincial administration, immigration, customs, and anti-narcotics agencies (NACADA, 2021). The web is where all anti-narcotics personnel are caught in. The obstacle appears even more insurmountable because of the Kenya police force's anti-narcotics squad. As of now, Nairobi has turned into a significant travel point for drugs. Even though adults are in charge of drug trafficking, other youths are the youth's immediate source of drugs. Drugs are given to students by other students. Other than alcohol, the

majority of drugs are purchased at school. In a report, the Kenya police's criminal investigations (DCI) and anti-narcotics units categorize Tanzanian and Kenyan coastal towns as drug trafficking routes. In the East African region, 4210 suspects were apprehended in 2001. The seriousness of the situation in Kenya is demonstrated by the fact that 4166 of these people were Kenyan and 48 were foreigners. 289 of the suspects were female, while 3889 of the suspects were male (Chesang, 2018). Given the preceding, it is evident how far Kenya has been invaded by drug supply and use by youth.

According to Koech (2021), heroin injection in Kenya surpasses marijuana smoking, which was previously admired most by the youth. This has led to increased HIV infections in the country. He further blames the effect of the media on drug abuse behavior among young adults in Kenya. The extent to which young people are exposed to the media and its ability to influence their behavior is not surprising (Kimani *et al.*, 2020). The energetic age is viewed as a phase of change from youth to adulthood (otherwise called immaturity). Youth is a time of growth and development in nearly all traits of an individual's social, emotional, physical and mental life. It's a time when youths have to deal with new responsibilities, new experiences, and relationships with friends of their age and adults. During this time, the young person also develops independence and appears to rely on the opinions of the peers with whom they socialize. In this day and age, youth socialization is largely facilitated by mass media. The majority of teenagers between the ages of 13 and 17 spend the majority of their time watching movies, listening to the radio, and watching television. The words of music played in the media may have an effect on a child's behavior. Rap and Hip-hop contain more references to drugs and substance abuse than other forms of music. Youth are constantly exposed to music, which plays a significant role in their lives. However, there is concern that listening to certain kinds of music by young people

could have a negative effect on their attitudes and behaviors. Although the hip-hop and rap genres of music have gained popularity among young people over the past thirty years, their frequent references to violence and substance abuse in their lyrics have been criticized for encouraging problematic behavior. In Kenya, mass media additionally has an array of movies and music that advance medications and different substances. For example, media notices before Tobacco Control Act 2007 came into impact highlighted liquor and cigarettes during the watershed time frame. However, as a result of a campaign launched by a number of organizations, drug and other substance advertising is now restricted.

According to Kimani *et al.*, (2020), mass media has a significant impact on the psychosocial development of youth in the country. The country has seen rapid and significant growth in the use of mass media, many of which are influenced by western culture. The data handed off at this stage focuses on sexuality, connections, medications and viciousness. Youths are big consumers of print and electronic media, according to the literature. Ads for alcohol and smoking are typically featured in the majority of promotions and programs. Scholars have discovered that advertisements for alcoholic beverages attempt to link drinking to exhibiting popular virtues or experiencing happiness. The goal of advertising is to make alcohol an important part of a better life, fitting manliness, and other persuasive topics. Cigarette and liquor advancements subsequently plan to foster an environment through which utilization of liquor and over-use is typical actions. Music's job in the creation and demonstrating of personality cannot be disproved on the grounds that music connotes an essential social subject where characters are recreated, destroyed, tested or confirmed. The majority of young people listen to music they value more in order to stand out from their peers. As a result, the music that young people choose to perform is typically a significant indicator of the nature and character of the identity that they are

developing. Music is meant to be entertaining and to illuminate life, but the development and expression of a person's musical taste can also be a crucial statement about who they are. Many young people in the country have been particularly drawn to and influenced by hip-hop music, which is included in the "genge" category. The cultural implications of music and its singers' influence on the construction of general identities are invasive, complicated, and extensive.

Along the Kenyan coast, drug abuse has increased rapidly in the past ten years. The coast has also developed into a significant market for the consumption of drugs due to its status as a significant country for the transshipment of drugs with origins in the golden triangle and gold crescent in Asia. In Kenya, drug trafficking is against the law and can result in the death penalty. In support of the harm reduction strategies implemented by the public health departments, the Kenyan government takes a zero-tolerance stance toward drug use through its public administration ministry or department. In the age of globalization, past experiences along Kenya's coast demonstrate that merely cracking down on drug smuggling and banning drug use cannot solve illicit drug-related issues. The central government has developed a number of practical policies to support programs that reduce harm in recent years. According to survey data from the Institute for Security Studies (ISS)'s arms management program, the Kenyan coast is clearly facing a new kind of crisis because many tourists are visiting the area supposedly to have sex with children (Korir, 2013). While sex has forever been a vital part of the "vibe great" travel industry, new examinations have uncovered that there is a class of vacationers who come to Kenya exclusively searching for drugs. The majority of tourists are pensioners between the ages of 45 and 65 who are rekindling their sexual lives by having sex with teens or divorced or who are also thought to be HIV-free. Because some young girls have a lot of money that comes from the same tourist, the same tourist who regularly uses drugs also introduces them to drug use. The

number of young people who use drugs in Shella, Mtwapa, Kilifi, Ukunda, and Malindi is a good example. There have been numerous attempts to precisely identify the social factors that contribute to this social ill, and some of these efforts have recently evolved. Marmot and other participants in the WHO's solid data program cited the following factors: the social gradient throughout one's life, early life experiences, a psychosocial work environment, high rates of unemployment, social support and cohesion, social exclusion, and poverty.

The cultivation of cannabis contributes to environmental and agricultural issues like deforestation, which results from the clearing of forests, in addition to issues with food security along the coastline. As brought up above, waterfront districts in Kenya act as drug dealing courses. A breakdown of the social disorders and social fabrics are frequently characterized by large-scale drug abuse in communities (Korir, 2013). Communities can become anxious, hopeless, or enraged as a result of such developments, which can then result in political consequences and possibly conflict. Cautious gatherings that utilize viciousness and can compromise public safety will quite often take advantage of such circumstances (Gitonga, 2015). How Kenya treats illicit drug abuse (IDU), which also causes HIV infection among users and breaks the link between IDU and heterosexual transmission, may have a significant impact on whether coastal residents are able to avoid generalized drug abuse. According to previous experience in Kenya, in this day and age of globalization, the only solutions to drug-related issues are prohibition and cracking down on drug smuggling.

The results of a survey conducted by NACADA (2016) indicate that 45.2% of Coast Region residents have ever used at least one substance of abuse. An examination of individual drugs reveals that 25.0% of Coast Region residents have used alcohol, 24.1% tobacco, 21.7 percent khat/miraa, 10.9 percent bhang, 6.2 percent prescription drugs/sleeping pills, 3.5 percent heroin,

1.8 percent hashish, 1.7 percent cocaine, and 1.2 percent inhalants. The data also revealed that people living in the Coast region of Kenya abuse at least one drug daily. The major drugs and substances of abuse at the coast include heroin, khat, alcohol, bhang, cocaine, and tobacco. According to NACADA (2016), 7.3% of residents in the Coast Region between the ages of 15 and 65 are dependent on alcohol, 8.1% on tobacco, 4.8 percent on bhang, 7.1% on khat, 0.7 percent on prescription drugs, 1.2 percent on cocaine, and 3.0% on heroin. Therefore, it is evident that, in comparison to other drugs of abuse, tobacco, alcohol, and khat are the primary causes of addiction in the Coast Region. Mombasa is the county with the highest rates of dependence on tobacco (20.1%), alcohol (15.9%), bhang (16.2%), khat (14.0%), heroin (15.9%), prescription/sleeping pills (2.2%) and cocaine (5.7%). NACADA (2016) further reports that people aged between 25 and 35 are more likely than other age groups to be dependent on cocaine (1.7%), khat/miraa (9.6%), and alcohol (9.1%). Those between the ages of 36 and 65 are likely than others to be dependent on heroin, tobacco, and bhang, respectively. Compared to other age groups, aged of 15 to 24 are likely to be dependent on prescription drugs or sleeping pills. Males are more affected than females, regardless of gender.

There have been many cases of people being caught using illegal drugs on the coastline lately. One of the cases was reported by Njoka (2022), where a man was arrested and charged with possession of Bhang in Mombasa. According to the report aired on K24 TV, Collins Mutana let the judge know that the roll of bhang he was caught with at the hour of his capture was for his own use and not available to be purchased. Additionally, he claimed that the seeds he threw away were the source of the bhang that was sprouting outside of his house. However, police corruption and a lack of political will have been identified as the primary obstacles to drug abuse prevention in the coastal region. For instance, UNODC report revealed how the Akasha family

used to bribe powerful individuals in the Government of Kenya to prevent them from being arrested for drug trafficking in 2019. The arrests of Baktash Akasha and Ibrahim Akasha required the intervention of Drug Enforcement Administration officers from the USA (Ajiambo, 2022). They were extradited from Mombasa to New York by the detectives to face charges of attempting to import prohibited drugs. In abandoned structures and shanties, gaunt young people can be seen sitting on stones along the streets of coastal towns. The majority of the young people here are pale relics of the past. The ravaged features that exaggerate their age due to constant drug abuse are their bloodshot eyes and blemished skin and faces. In the coastal towns, pure heroin is sold to school children and youth everywhere. The majority of addicts prefer to inject the drug rather than smoke or snort it.

According to Khamis *et al.*, (2016), in the Coast Counties, particularly in Mombasa, drug abuse has led to the rise of criminal gangs. It was discovered that drug users in Old Town used condemned houses as smoking dens to smoke bhang. Additionally, the beachfront and alleyways served as good places to take drugs. The resident interviewed by Khamis *et al.*, (2016) said that injectable drugs are also very common. Staff members at the rehabilitation center established that heroin was available in the neighborhood, raising the issue of ready availability. Because drug users appear to have a goal of ensuring that all Old Town children use drugs, the issue has become intolerable. In addition, it was discovered that, despite a decrease in chronic cases, new cases, particularly within gangs, are increasing. The occupant certified the data, conceding that more youthful kids are progressively getting affected by the medication propensity very early.

Youth armed with machetes provide protection for drug dealers in Mombasa. This is because they earn a lot of money and need to be protected in a dangerous area. The focus group discussion with drug users at the rehabilitation centers revealed the connection between pushers

and users. Respondents stated that drug users (mteja) pay the pusher (Zungu) at least \$2 in cash for a sachet of heroin (Khamis *et al.*, 2016). They will have to pay with something else, like a phone, if they cannot get the money. In essence, this is what drives crime. The medication client professes to get insurance from some security staff who are paid cash by the medication pushers to give them earlier data before assaults are led in nooks. They can thus conceal themselves prior to the arrival of security personnel. This remarkable detail has been confirmed by the Regional Police Coordinator, who gave out a public warning to the rogue police officers who work together with drug dealers (Standard Digital News, April 2016). Numerous markets operate with the cooperation of corrupt officials, who ensure that the law is not followed.

2.2 Effectiveness of Government Programs Employed to Control Drug Abuse

2.2.1 Government Programs Employed to Control Drugs Abuse

Governments around the world have implemented various programs and policies to address this issue, including prevention, treatment, and law enforcement efforts. However, the effectiveness of these programs in controlling drug abuse is a topic of on-going debate and research. To assess the effectiveness of programs employed by the Kenya government to combat drug abuse in the coast region, the global, continental, and regional perspectives are first explained. It is important to understand the problem at a higher level before looking into the interventions employed in Coast Region, Kenya for effective research.

In the coastal region of Kenya, drug abuse is a particular concern, with a range of substances being abused by people of all ages (Wa Teresia, 2021). To address this issue, the Kenyan government has implemented several programs to control drug abuse in the region. These programs are designed to educate the public about the dangers of drug abuse, provide support to

those struggling with addiction, and enforce laws that aim to reduce the availability of drugs (Mbetete *et al.*, 2013). The effectiveness of these government programs is a topic of on-going debate, with some arguing that they have been successful in reducing drug abuse in the coastal region, while others claim that they have been ineffective or even counterproductive. Some of the key factors that may impact the effectiveness of government programs in controlling drug abuse include the level of resources allocated to the programs, the level of community engagement and support, and the effectiveness of law enforcement efforts to disrupt drug trafficking and distribution (NACADA, 2021; Kupa, 2019).

Overall, it is clear that addressing drug abuse in the coastal region of Kenya requires more strategic approaches to control production and trafficking. It is important to continue working to address this issue to reduce the negative consequences of drug abuse and improve the health and well-being of individuals and communities in the region.

Drug abuse is a global problem that affects countries of all income levels. According to the World Health Organization (WHO), an estimated 27 million people globally suffer from drug use disorders (UNODC, 2019). The most commonly used drugs include cannabis, amphetamines, and opioids. In recent years, there has been a rise in the use of synthetic drugs, such as synthetic cannabinoids and cathinone, which can be more potent and dangerous than traditional drugs. According to the United States Department of State Bureau of International Narcotics Matters (2021), the prevalence of drug abuse varies widely across countries and regions. In some countries, it is more common among certain populations, such as young people or marginalized communities. In addition, the type of drugs that are commonly used can vary by region. Research indicates that cannabis is the most commonly used drug globally, but the use of

opioids, such as heroin, is more common in certain regions, such as South Asia and the Middle East (UNODC, 2019).

Governments across the world have employed various measures to control drug abuse and minimize its impact on the citizens and economy. As Rosen (2015) reiterates that the programs can be categorized into three main types including prevention, treatment, and law enforcement approaches. Prevention programs aim to reduce the risk of drug abuse among individuals by providing education, support, and resources to help them avoid drug use (Rosen, 2015). These programs can be targeted at specific populations, such as youth or high-risk groups, and can be delivered through schools, community centers, or other settings. Some of the methods of prevention programs include drug education and awareness campaigns, support groups, and access to drug testing and treatment services (Government of Canada, 2018). Meisel *et al.*, (2019) and Rosen (2015) write that, an example of a prevention program is the DARE (Drug Abuse Resistance Education) program, which is a school-based program started in Los Angeles California that teaches students about the dangers of drug abuse and how to resist peer pressure to use drugs. Other prevention programs include the Life Skills Training program, which teaches young people skills such as decision-making and communication to help them avoid drug use, and the Parenting Wisely program, which provides parents with tools and resources to help them raise drug-free children.

Treatment programs aim to help individuals with substance abuse disorders overcome their addictions and regain control of their lives. These programs can include a range of interventions, such as counseling, medication-assisted treatment, and rehabilitation. Treatment programs can be delivered in a variety of settings, including outpatient clinics, residential facilities, and hospitals. The third type of government program that has been implemented to address drug abuse is law

enforcement and criminal justice interventions. These interventions aim to reduce the supply of drugs by targeting drug traffickers and dealers and disrupting the illegal drug market (European Union, 2022). A review of the literature suggests that law enforcement and criminal justice interventions can be effective in reducing the availability of drugs, particularly when they are combined with other approaches such as treatment and rehabilitation. Despite the potential effectiveness of these government programs, some limitations and challenges must be considered. One challenge is the lack of consistent and high-quality evaluation of these programs, which makes it difficult to accurately assess their effectiveness (Centers for Disease Control and Prevention, 2020). Moreover, the lack of coordination and integration among different government programs which can lead to conflicting or overlapping efforts and reduced effectiveness is a major concern. In conclusion, the literature suggests that government programs can be effective in controlling drug abuse, but their effectiveness depends on a variety of factors including the type of program, the target population, and the implementation and evaluation of the program (National Crime Prevention Centre, 2022). Further research is needed to identify the most effective strategies for addressing drug abuse and to improve the implementation and evaluation of government programs.

Substance abuse, particularly drug abuse, is a significant public health issue in Africa. According to the World Health Organization, the use of illicit drugs has been on the rise in the region over the past few decades (Mupara *et al.*, 2021). This trend is concerning, as drug abuse can have serious consequences on individuals, families, and communities, including negative impacts on physical and mental health, social and economic well-being, and overall quality of life. The use of illicit drugs is a multifaceted problem in Africa, with various factors contributing to its prevalence and consequences. According to UNODC (2019), the most commonly used drugs in

the region include cannabis, opioids, stimulants, and sedatives. One of the main drivers of drug abuse in Africa is poverty and economic insecurity. As Morojele *et al.*, (2021) assert, people turn to drug use as a means of coping with the stress and hardship of living in impoverished conditions. In addition, the availability of drugs may be influenced by economic factors, as drug trafficking organizations often exploit poverty and lack of economic opportunities in the region to recruit and exploit individuals for drug trafficking purposes. Other contributing factors to drug abuse in Africa include the availability and accessibility of drugs, as well as cultural and social norms around drug use. For example, in some communities, the use of drugs may be seen as a way to cope with challenges and difficulties, or as a means of socialization and bonding (African Sisters Education Collaborative, 2017; Morojele *et al.*, 2021). To address this issue, governments in Africa have implemented various programs and initiatives aimed at reducing drug abuse and its consequences. These programs can take a variety of forms, including prevention and education efforts, treatment and rehabilitation services, law enforcement measures, and harm reduction strategies.

In response to the drug abuse problem in Africa, governments have implemented various programs and initiatives aimed at reducing drug use and its consequences. For instance, prevention and education programs were developed in countries such as Kenya, Nigeria, and South Africa to reduce the demand for drugs by raising awareness about the risks and consequences of drug use, and promoting healthy lifestyles and alternatives to drug use (Morojele *et al.*, 2021). These programs can take a variety of forms, including school-based prevention efforts, community-based programs, and media campaigns. One example of a prevention program in Africa is the Anti-Drug Campaign in Kenya, which was launched in 2002 by the Ministry of Health. The campaign aims to raise awareness about the dangers of drug

abuse and provide information on how to seek help for drug-related problems (Eligh, 2019). Evaluation studies have found that the campaign was successful in increasing knowledge about drugs and reducing the prevalence of drug use among young people in Kenya. Another prevention program in Africa, according to Mupara *et al.*, (2021), is the Youth Against Prevention Program in South Africa, which was introduced in 2002 by the Department of Social Development. The program aims to promote healthy lifestyles among young people and reduce the risk of drug abuse by providing education and support to schools and communities. Evaluation studies have found that the program was effective in reducing drug use and improving mental health outcomes among young people in South Africa.

Treatment and rehabilitation programs provide support and services to individuals with drug use disorders, helping them to overcome their addiction and achieve long-term recovery. These programs can include inpatient and outpatient treatment options, as well as support for recovery and reintegration into society. One example of a treatment program in Africa is the Methadone Maintenance Treatment program in Uganda, which was introduced in 2002 by the Ministry of Health (African Sisters Education Collaborative, 2017). The program aims to provide opioid-dependent individuals with methadone, a medication that can help reduce cravings and withdrawal symptoms. Evaluation studies have found that the program was successful in reducing drug use and improving health outcomes among participants. Another treatment program in Africa is the Community-Based Rehabilitation program in Ghana, which was introduced in 2004 by the Ministry of Health (Morojele *et al.*, 2021). The program aims to provide support and treatment to individuals with substance use disorders in community settings, including counseling, skills training, and social support. Evaluation studies have found that the

program was effective in reducing drug use and improving mental health outcomes among participants.

Law enforcement programs in African countries aim to reduce the supply of drugs by disrupting drug trafficking organizations and cracking down on illegal drug production and distribution. These programs can involve tactics such as interdiction, law enforcement operations, and judicial proceedings. For instance, Morojele *et al.*, (2021) write that the joint interagency task force in Nigeria was established in 2005 by the government to deal with drug abuse. The task force aims to disrupt the supply of illicit drugs in the country through intelligence-led operations and the seizure of illegal drugs. Critical evaluations of the task force have found that the task force was successful in reducing the availability of drugs and disrupting drug trafficking networks in Nigeria. Additionally, the National Drug Law Enforcement Agency in South Africa was established in 1989 by the government (Mupara *et al.*, 2021). The agency aims to reduce drug abuse in the country through the enforcement of laws and regulations, as well as the seizure of illegal drugs. A review of the agency found that the agency was successful in reducing the availability of drugs and disrupting drug trafficking networks in South Africa.

Harm reduction refers to public health policies and practices that aim to reduce the negative consequences associated with drug use and addiction, without necessarily requiring individuals to stop using drugs. This approach acknowledges that complete abstinence from drugs may not be feasible or desirable for everyone, and focuses instead on minimizing the harm caused by drug use to both the individual and the community (Eligh, 2019). African countries have implemented a variety of harm reduction strategies to address drug abuse and addiction within their borders. Some examples from countries in Africa, excluding East African countries, include needle and syringe exchange programs. These programs provide clean needles and syringes to

people who inject drugs, to reduce the risk of HIV and hepatitis transmission. For example, in South Africa, the Tshwaranang Legal Advocacy Centre operates a needle and syringe exchange program in the township of Hillbrow, which has been credited with helping to reduce HIV transmission among people who inject drugs in the area (Mupara *et al.*, 2021). Another harm reduction technique is opioid substitution therapy. This approach involves providing people with substance use disorders access to medications that can help to reduce cravings and withdrawal symptoms and support their recovery. In Ghana, for example, the Ministry of Health has implemented a program called the Opioid Substitution Therapy (OST) program, which provides methadone and buprenorphine to people who are dependent on opioids (Morojele *et al.*, 2021).

Overdose prevention and response is also a harm reduction program employed by countries such as Nigeria. As Morojele *et al.*, (2021) reiterate, the program involves preventing and responding to overdose deaths. For example, in Nigeria, the National Agency for Food and Drug Administration and Control (NAFDAC), has trained community health workers to recognize the signs of an overdose and administer naloxone, a medication that can reverse the effects of an opioid overdose. Access to treatment and support has also been improved to improve the efficiency of the harm reduction program. Many African countries have also increased access to substance abuse treatment and support services, such as counseling and rehabilitation programs, to help individuals overcome their substance use disorders and achieve long-term recovery (African Sisters Education Collaborative, 2017). For example, in Morocco, the Ministry of Health operates a network of treatment centers called the National Center for Addiction Treatment (CNTS), which provides a range of services including counseling, rehabilitation, and vocational training to people with substance use disorders (Eligh, 2019). Overall, harm reduction strategies have the potential to significantly reduce the negative consequences of drug use and

addiction, and improve the health and well-being of individuals and communities. While these strategies may not be a complete solution to the problem of drug abuse, they can play a critical role in addressing the complex and multifaceted issue of addiction.

Drug abuse is a significant public health issue in the East African region. It is estimated that approximately 3.2% of the population in East Africa suffers from substance use disorders, with rates varying among different countries in the region (Fentaw *et al.*, 2022). Drug abuse can have serious consequences for individuals and societies, including increased risk of physical and mental health problems, social and economic harm, and criminal activity. As such, governments need to implement effective programs to prevent and reduce drug abuse in the region.

In East Africa, the most commonly abused drugs are cannabis, opiates like heroin, and stimulants such as amphetamines. Cannabis is the most widely used illicit drug in the region, with high rates of use in countries such as Kenya, Tanzania, and Uganda. Opiate abuse is also prevalent in the region, with high rates of heroin use in countries such as Ethiopia, Somalia, and Sudan (Ngum *et al.*, 2022). Stimulant abuse, particularly of amphetamines, is also a concern in the region, with high rates of abuse in countries such as Ethiopia, Kenya, and Tanzania. Moreover, the prevalence of drug abuse varies among different countries in the East African region. According to the United Nations Office on Drugs and Crime, the prevalence of drug use disorders in the region ranges from 0.3% in Eritrea to 6.8% in Somalia (UNDOC, 2019). Overall, it is estimated that approximately 3.2% of the population in East Africa suffers from substance use disorders.

To control drug abuse in East Africa, governments in the region have implemented a variety of strategies. Governments across East Africa have taken a collaborative approach in dealing with drug production and trafficking. For instance, The East Africa Police Chiefs Cooperation Organization (EAPCCO) was formed to bring together police chiefs from countries in the region

to coordinate efforts to combat drug trafficking and abuse (World Bank Group, 2020). EAPCCO was established in 2004 with the goal of improving regional cooperation and information sharing among member countries in order to more effectively address the challenges of cross-border crime, including drug trafficking and abuse. Moreover, other coalitions such as the East African Community (EAC) and The Intergovernmental Authority on Development (IGAD) have played a major role in controlling drug abuse across East Africa. The two bodies have developed and facilitated the implementation of policies and guidelines through regional drug policy framework and the establishment of regional drug coordination units (Ngum *et al.*, 2022). EAC and IGAD have also supported the development of national drug control plans in member countries and provided technical assistance and capacity building to help countries implement these plans.

The governments have also taken independent initiatives to control drug abuse in their countries. One approach to controlling drug abuse in East Africa is through prevention efforts, which aim to reduce the incidence of drug abuse by increasing awareness of the risks and consequences of drug use and promoting healthy behaviours (Ngum *et al.*, 2022). Prevention strategies in the region have included public education campaigns, school-based programs, and community-based initiatives. An example of a public education campaign in the region is the “Say No to Drugs” campaign implemented by the Kenya government, which aims to raise awareness of the dangers of drug abuse and encourage youth to abstain from drug use (NACADA, 2021). The campaign includes the distribution of informational materials and the organization of events such as workshops and conferences to educate the public on the risks of drug abuse.

Prevention programs, including school-based prevention programs, have been implemented in various countries in the East African region to control drug abuse and reduce its negative impacts. These programs aim to educate individuals about the risks and consequences of drug

abuse and to provide skills and strategies to prevent drug use (Ngum *et al.*, 2022). There is a range of different types of school-based prevention programs that have been implemented in the East African region to address drug abuse. These include universal prevention programs aimed at the entire school population and designed to provide education and skills training to prevent drug use (National Crime Prevention Centre, 2022). Examples of universal prevention programs in the East African region include the Life Skills Education program implemented in Kenya, which aims to promote healthy behaviors and decision-making skills among young people, and the Drug Abuse Resistance Education (DARE) program founded in Los Angeles implemented in Tanzania (Rosen, 2015). The program provides information on the dangers of drug use and aims to develop skills for resisting peer pressure to use drugs.

Another common program in East Africa is selective prevention programs. These programs are targeted at individuals or groups at high risk of drug abuse, such as those with a family history of substance abuse or those who exhibit risky behaviors. Examples of selective prevention programs in the East African region, according to Morojele *et al.*, (2021), include the Student Assistance Program (SAP) implemented in Uganda, which provides counseling and support to students at risk of drug abuse. Similarly, the Youth at Risk program implemented in Kenya targets young people who are at risk of drug abuse due to social, economic, or personal factors. Additionally, indicated prevention programs are also used to prevent drug abuse and are targeted at individuals who have already begun using drugs and are designed to intervene and prevent further drug use (Fentaw *et al.*, 2021). Examples of indicated prevention programs in the East African region include the Bouncing Back program implemented in Tanzania, which provides support and counseling to young people who have already begun using drugs, and the Youth Substance Abuse Treatment program implemented in Uganda, which provides treatment and

support to young people with substance abuse problems (Morojele *et al.*, 2021; Ngum *et al.*, 2022).

Many school-based prevention programs in the East African region are based on social learning theory, which posits that individuals learn behaviors, including drug use, through observation and reinforcement. These programs aim to provide young people with the knowledge and skills needed to resist the influence of peers and other risk factors for drug use and to choose healthy behaviors instead (National Crime Prevention Centre, 2022; Morojele *et al.*, 2021; Kupi, 2019). Other school-based prevention programs in the region are based on the Health Belief Model, which suggests that individuals' behaviors are influenced by their perceptions of the risks and benefits associated with a particular behavior. These programs aim to provide young people with accurate information about the risks and consequences of drug use and to change their perceptions of the benefits of drug use. Research suggests that school-based prevention programs can be effective in reducing drug abuse in the East African region.

Several studies have found that school-based prevention programs can significantly reduce the prevalence of drug use among students. For example, a school-based prevention program in Kenya significantly reduced the prevalence of cannabis use among students (NACADA, 2021). Moreover, school-based prevention programs in Kenya significantly reduced the prevalence of tobacco and alcohol use among students. In addition to reducing the prevalence of drug use, several studies have also found that school-based prevention programs can improve knowledge and attitudes toward drug use (National Crime Prevention Centre, 2022). Moreover, school-based prevention programs in Kenya improved students' knowledge about the risks and consequences of drug use. School-based prevention programs in Uganda, on the other hand, resulted in improved students' attitudes toward drug use. However, it is important to note that the

effectiveness of school-based prevention programs may vary depending on the specific program and the target population (Ngum *et al.*, 2022). Some studies have found that school-based prevention programs may be less effective among older students or students who are already using drugs. Additionally, the effectiveness of school-based prevention programs may be influenced by other factors, such as the quality of the program and the level of implementation.

The governments of East African countries have implemented supply reduction programs to reduce the production, distribution, and sale of drugs. In Tanzania, the government has implemented several supply reduction programs, including law enforcement efforts to disrupt drug trafficking networks and the destruction of illicit drug crops (Ngum *et al.*, 2022). The Kenyan government, on the other hand, has also implemented reduction programs through the development and implementation of laws that prohibit the growth and sale of illegal drugs and their products. Finally, the Ugandan government also has put in place measures that prevent the trafficking of illegal drugs across the country to disrupt supply across the country (Ngum *et al.*, 2022).

Drug abuse has been a public health issue in Kenya over time, with the most commonly abused substances being alcohol, tobacco, and cannabis. The Kenyan government has implemented various programs in an attempt to control drug abuse and reduce its negative consequences (Kirkok, 2019). This section provides a critical review of the effectiveness of programs employed by the Kenyan government to control drug abuse in Kenya, especially in counties across Coast region including Mombasa, Lamu, Tana River, Kilifi, Taita Taveta, and Kwale.

The Kenya government has implemented programs and interventions in an attempt to control drug abuse and reduce its negative consequences in areas across Coast Region. These include prevention programs aimed at educating the public about the dangers of drug abuse and preventing people from abusing drugs (Kirkok, 2019). These programs typically target young people, as they are at a higher risk of starting to use drugs. One prevention program that has been implemented in Kenya is the National Drug Control and Substance Abuse Prevention Strategy (NDCSAP), which was developed in 2014 by the Ministry of Health (NACADA, 2019). The strategy aims to reduce the demand for drugs and to prevent drug abuse through a number of interventions, including mass media campaigns, school-based education programs, and community-based prevention initiatives in affected areas such as the Coast Region.

According to World Bank Group (2020), community-based programs such as Community Anti-Drug Coalitions of Kenya (CADCKE) have also been created across counties such as Mombasa and Kwale to partner in controlling drug abuse among youths in Coast Region. Other counties such as Tana River have also formed community-based programs including Tana River Anti-Drug Abuse Team with the help of the national government to eradicate drugs in the counties. Additionally, The National Authority for the Campaign Against Drug Abuse (NACADA) was established in 2012 to coordinate efforts to prevent and reduce drug abuse in counties across Kenya including Kilifi and Taita Taveta in Coast Region (NACADA, 2019). NACADA works with various stakeholders including government agencies, civil society organizations, and community groups, to implement a range of initiatives aimed at promoting drug-free communities and reducing the demand for drugs.

Another strategy employed by the Kenya government to control drug abuse in Coast Region is the provision of treatment and rehabilitation services. The strategies are designed to help

individuals who are already suffering from drug abuse overcome their addiction and to rebuild their lives. According to Kirkok (2019), these services typically include counseling, support groups, and medication-assisted treatment. In Kenya, treatment and rehabilitation services are provided by a range of organizations, including the Ministry of Health, non-governmental organizations, and private sector organizations. For instance, NACADA (2019) notes that, the government has also established rehabilitation centers across the counties in the Coast Region including the Mombasa Rehabilitation Centre, which provides treatment and rehabilitation services to individuals suffering from substance abuse. The government also opened rehabilitation centers in Kwale, Kilifi, and Lamu Counties to ease the effects of drug abuse among residents. Moreover, the Substance Abuse Treatment and Rehabilitation Program (SATREP) in Kenya is run by the Ministry of Health and provides treatment and rehabilitation services to individuals struggling with drug addiction (World Bank Group, 2020). The program has been employed to tackle drug abuse in counties without rehabilitation centers in Coast Region including Tana River and Taita Taveta. Some of the services offered within the program include counseling, medication-assisted treatment, and support for recovery.

Law enforcement efforts aim to reduce the supply of drugs and disrupt the activities of drug traffickers. In Kenya, law enforcement efforts are primarily the responsibility of the Kenya Police Service and the National Authority for the Campaign Against Drug Abuse (NACADA, 2019). NACADA is responsible for coordinating and implementing national drug control policies and programs in Kenya's Coast Region. Moreover, government agencies such as The National Youth Service (NYS) are involved in enhancing the reduction of the supply of drugs in counties such as Mombasa, Kwale and Kilifi. The NYS is a government-run program that aims to provide young people with skills training, education, and employment opportunities (Kirkok,

2019). It has been suggested that participation in the NYS can help to reduce the risk of drug abuse among youth in counties such as Tana River and Taita Taveta, as it provides an alternative to the negative influences and activities that may contribute to drug abuse.

2.2.1 Effectiveness of Government Programs Employed to Control Drug Abuse

The effectiveness of government programs employed by governments to control drug abuse depends on aspects such as healthcare infrastructure, funding, and law enforcement. In this analysis, the effectiveness of government programs to control drug abuse is examined, starting with a global perspective and then focusing on the Coast Region in Kenya. At a global level, there are several approaches that governments have taken to try to control drug abuse. One of the most common approaches is the provision of treatment and support services for individuals who are struggling with drug addiction through the provision of services such as rehabilitation programs, counseling, and support groups (European Union, 2022). These programs can help individuals to overcome their addictions and lead healthier lives. Another approach that has been used by governments around the world is the implementation of laws and policies that aim to reduce the availability and accessibility of drugs. This can include measures such as drug education programs in schools, stricter laws and penalties for drug trafficking and possession, and the enforcement of border controls to prevent the smuggling of drugs into the country (Government of Canada, 2018).

One region where drug abuse is a significant problem is Asia. In many Asian countries like South Korea, Japan, and Taiwan, there has been a significant increase in the use of opioids, particularly among young people (Rosen, 2015). To try to control this problem, governments in the region have implemented a range of measures, including the provision of treatment and

support services, the enforcement of laws related to drug trafficking and possession, and the implementation of harm reduction programs, such as needle and syringe exchange programs. On the other hand, the United States Department of State Bureau of International Narcotics Matters (2021) notes that, the USA also experiences problems with drug abuse, with people struggling with addiction to drugs such as opioids, amphetamines, and cannabis. The government has implemented a range of programs and initiatives to try to control drug abuse, including the provision of treatment and support services, the enforcement of laws related to drug trafficking and possession, and the implementation of harm reduction programs.

In Africa, drug abuse is a significant problem in many countries. There have been government programs implemented to address this issue. In Morocco, for example, the government has implemented a range of measures to try to control drug abuse, including the provision of treatment and support services (Eligh, 2019; UNODC, 2019). The enforcement of laws related to drug trafficking and possession, and the implementation of harm reduction programs. Additionally, the government in Egypt implemented a range of measures to try to control drug abuse, including the provision of treatment and support services, the enforcement of laws related to drug trafficking and possession, and the implementation of harm reduction programs (Eligh, 2019).

More efforts to improve access to treatment and support services for individuals struggling with drug addiction have been adopted by governments in East Africa. This includes initiatives such as the establishment of rehabilitation centers and the training of healthcare professionals to provide specialized treatment for drug addiction (Ngum *et al.*, 2019). In Kenya's Coast Region, the government has implemented relevant programs to try to control drug abuse. These include efforts to educate the public about the dangers of drug use, the enforcement of laws related to

drug trafficking and possession, and the provision of treatment and support services for individuals struggling with addiction (World Bank Group, 2020). The major challenge in evaluating the effectiveness of government programs to control drug abuse is the fact that drug abuse is a complex issue with many contributing factors. The effectiveness of any given program will depend on a range of factors, including the specific approach being taken, the resources available to implement the program, and the level of support and cooperation from the community.

Overall, it is clear that government programs have played a significant role in trying to control drug abuse and reduce its negative impacts on communities and individuals. While there is still much work to be done, these programs have helped to provide support and assistance to those struggling with addiction, and have helped to raise awareness about the dangers of drug use (Kirkok, 2019). However, it is also important to recognize that drug abuse is a complex issue that requires a multi-faceted approach. The prevalence of drug abuse cases remains high amid employment of government programs to control the issue. Therefore, it is important to address the underlying social and economic factors that contribute to drug abuse, such as poverty, unemployment, and social isolation (African Sisters Education Collaborative, 2017).

Existing research has indicated that drug abuse is a significant public health problem that has far-reaching consequences for individuals, families, and communities. Despite numerous efforts to address the issue, drug abuse continues to be a persistent issue, and there is a need for more effective strategies to control and prevent drug abuse. One area that has been identified as a research gap in the drug abuse field is the effectiveness of government programs employed to control drug abuse. There have been numerous government programs implemented to control

drug abuse, including prevention programs, treatment programs, and law enforcement efforts (UNODC, 2019).

These programs have been implemented at the local, state, and federal levels and have varied in their focus and approach. However, there is limited research on the effectiveness of these programs in reducing drug abuse and its associated consequences. Existing research is inadequate as it focuses on one program at a time. Additionally, the existing research is shallow due to lack of extensive resources addressing government programs across various countries. Research has also focused on identifying the available programs initiated by various governments without providing a clear assessment of their effectiveness. However, there is need for a collective and comparative approach to the drug abuse control programs employed by governments in different countries. The comparison can be used to analyze the effectiveness of the programs employed by the Kenyan government to address drug abuse in the Coast Region.

One reason for the lack of research on the effectiveness of government programs in controlling drug abuse are that these programs are often implemented with limited resources and funding (Mupara *et al.*, 2021). As a result, it is difficult to conduct comprehensive evaluations of these programs, and there is often a lack of data on their effectiveness. Additionally, the complex nature of drug abuse hinders the determination of the specific impact of any one program. Another factor that has contributed to the research gap in this area is the lack of standardization in the design and implementation of government programs to control drug abuse. Different programs have been implemented in different locations, and there is often a lack of consistency in the approaches and strategies used (Rosen, 2015). This makes it difficult to compare the effectiveness of different programs and determine which approaches are most effective.

2.3 Challenges and Opportunities Facing Government Programs Employed In Managing Drug Abuse

In the Coastal region of Kenya, as in many other parts of the world, government programs have been implemented to address and manage the problem of drug abuse. However, these programs often face numerous challenges and opportunities that can impact their effectiveness and overall success. One major challenge that government programs in Kenya face is the lack of sufficient funding and resources (Pere & Yatich, 2017). Many programs struggle to secure adequate funding to cover the costs of staff, supplies, and other necessary resources. This can make it difficult to implement and sustain effective drug abuse prevention and treatment initiatives.

Another challenge is the stigma and discrimination associated with drug abuse (Warui, 2016). Many individuals who struggle with drug addiction may be reluctant to seek help due to fear of being judged or ostracized by their community. This can make it difficult for government programs to reach and engage those who need help the most. In addition to these challenges, there are also opportunities that government programs in Coastal region of Kenya can take advantage of to improve their effectiveness in managing drug abuse. One such opportunity is the use of technology and data analytics to better understand and target the root causes of drug abuse in the region. By collecting and analyzing data on trends, patterns, and risk factors, government programs can more effectively identify and address the underlying issues that contribute to drug abuse (NACADA, 2018).

Another opportunity is the development of strong partnerships and collaborations with community organizations, healthcare providers, and other stakeholders. By working together, government programs can tap into the knowledge, expertise, and resources of these groups to

develop and implement more comprehensive and effective strategies to address drug abuse in the Coastal region of Kenya. Overall, the challenges and opportunities facing government programs in managing drug abuse in Kenya's Coast Region are numerous and complex. However, by addressing these challenges and leveraging the available opportunities, it is possible to create more effective and sustainable programs that can help reduce the burden of drug abuse in the region (Jaguga & Kwobah, 2020). This section provides a deeper evaluation of the challenges and opportunities by focusing on a global, continental, and regional and narrowing to a local perspective with a focus on the Kenyan Coast area.

2.3.1 Challenges

Governments have implemented various programs to address this issue, but these programs face several challenges and opportunities (Gale, 2017). In this section, the challenges facing government programs for managing drug abuse are examined, with examples from regions such as the United States and the European Union (EU). One of the main challenges faced by government programs for managing drug abuse is the lack of funding. Many governments do not allocate sufficient resources to these programs, which can hinder their effectiveness. For example, Gale (2017) notes that in the United States, the Substance Abuse and Mental Health Services Administration (SAMHSA) reported that in 2018, only 10.1% of individuals with a substance use disorder received treatment, largely due to a lack of funding for treatment programs. Similarly, in the EU, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) reported that funding for drug treatment programs has decreased in several member states in recent years. Another challenge facing government programs for managing drug abuse is the stigma surrounding substance use disorders (Greene *et al.*, 2018). Many individuals who struggle with drug abuse may be reluctant to seek help due to the stigma associated with these

disorders. This can lead to a lack of access to treatment and support, which can ultimately contribute to the persistence of drug abuse in these individuals.

In the United States, the SAMHSA has implemented several initiatives to reduce the stigma surrounding substance use disorders and increase access to treatment, such as the "Faces & Voices of Recovery" campaign, which aims to showcase the diversity of people in recovery and promote a message of hope and recovery (Gale, 2017). The lack of integration of government programs with other healthcare services is also a common challenge experienced by governments across the world. Drug abuse is often closely linked with other health issues, such as mental health disorders and infectious diseases. However, many government programs for managing drug abuse operate in isolation from other healthcare services, which can hinder their effectiveness. In the EU, the EMCDDA has emphasized the importance of integrating drug treatment programs with other healthcare services, such as mental health and HIV/AIDS services, to address the complex needs of individuals with substance use disorders (Ryan *et al.*, 2019).

Different countries face unique challenges in the war against drug abuse. In Asia, the main challenge facing governments' efforts to manage drug abuse is the widespread availability and use of illegal drugs, particularly opiates such as heroin and synthetic drugs like methamphetamine. This, according to Gale (2017), is particularly true in Southeast Asia, where the production and trafficking of these drugs is rampant. In addition to the direct negative impacts on individuals and communities, the drug trade also has significant economic and social consequences, such as corruption and violence. For example, one example of the challenges faced by governments in addressing drug abuse in Asia is the situation in Afghanistan, which is the world's largest producer of opium and heroin (Greene *et al.*, 2018).

Despite efforts by the Afghan government and international organizations to disrupt the drug trade and provide alternatives for farmers, the production and trafficking of these drugs continue to thrive, fuelled in part by the ongoing conflict and instability in the country. In Europe, the most commonly used illegal drugs are cannabis and stimulants such as amphetamines and cocaine. The use of these drugs is often associated with social and economic disadvantage, and there are significant disparities in drug use and related harms across different countries and regions. The situation in Portugal, which has adopted a more progressive approach to drug policy that emphasizes treatment and harm reduction over criminalization has presented challenges to the approaches employed by European governments to manage drug abuse. While this approach has been successful in reducing drug-related harms and improving public health outcomes, it has also faced criticism and resistance from some quarters, particularly in relation to the use of supervised injection facilities (Ryan *et al.*, 2019).

North American countries including California and Georgia have had problems with drugs such as opioid overdose deaths, particularly due to the widespread use of prescription opioid painkillers and the emergence of highly potent synthetic opioids such as fentanyl. In addition to the personal and social consequences of these deaths, the opioid epidemic also has significant economic impacts, including increased healthcare costs and lost productivity (UNICEF, 2020). The major challenge facing governments in North America in addressing drug abuse is the situation in the United States, which has been particularly hard hit by the opioid epidemic. Despite efforts by federal and state governments to tackle the problem, including measures such as prescribing guidelines and expanded access to overdose reversal drugs, overdose deaths continue to rise, highlighting the complex and multifaceted nature of the problem (Ryan *et al.*, 2019).

South America, on the other hand, has been the source of cocaine which is a major source of income for criminal organizations and a major contributor to violence and instability in the region (Gale, 2017). In addition to the direct negative impacts on individuals and communities, the drug trade also has significant economic and social consequences, such as corruption and environmental degradation. Governments in South America experience challenges in addressing the drug abuse situation in Colombia, which is the world's largest producer of cocaine. Despite efforts by the Colombian government and international organizations to disrupt the drug trade and provide alternatives for farmers, the production and trafficking of cocaine continue to thrive, fueled in part by the ongoing conflict and instability in the country.

Government programs in Africa play a crucial role in managing the drug abuse problem, however, they face several challenges. One of the main challenges facing government programs in managing drug abuse in Africa is the lack of resources and funding. Many African countries have limited budgets for health and social services, making it difficult to implement and sustain effective drug abuse prevention and treatment programs (Kurth *et al.*, 2018). In addition, the high cost of medications and other treatments can be a barrier to access for many people with substance use disorders. A related challenge is the lack of trained personnel and the capacity to deliver effective interventions. Many African countries have a shortage of trained substance abuse professionals, such as counselors, therapists, and doctors, which can hinder the effectiveness of treatment programs (WACD, 2014).

In addition, a lack of awareness and understanding of drug abuse and its consequences among the general population and decision-makers can hinder the implementation and evaluation of effective interventions. Moreover, the stigma and discrimination associated with substance use disorders is a major challenge facing management programs. People with substance use disorders

often face social stigma and discrimination, which can make it difficult for them to access treatment and support (Adebisi *et al.*, 2022). This can be compounded by a lack of awareness and understanding of substance use disorders as treatable medical conditions, leading to further discrimination and marginalization.

Drug abuse is a significant problem in East Africa, with a range of substances being used, including heroin, alcohol, tobacco, cannabis, stimulants, and opioids (Haysom *et al.*, 2018). The challenges faced by government programs in managing drug abuse in East Africa are complex and multifaceted, and a comprehensive literature review is necessary to understand the full extent of the problem and the range of approaches being taken to address it. East African governments have taken both combined and independent approaches in managing drug abuse. Combined efforts led to the creation of bodies such as East African Community (EAC) and Intergovernmental Authority on Development (IGAD). The bodies play a major role in creating collective policies to deal with drug abuse cases in the region. Some of the challenges facing the joint communities include lack of financial and medical resources and the evolving nature of drug trafficking and abuse.

The lack of adequate resources and funding is a major concern facing both joint and independent government operations against drug abuse. Countries in the East African region have limited budgets and are unable to allocate sufficient resources to address the problem of drug abuse (Secretariat, 2019). For instance, a country such as the Democratic Republic of Congo has limited budgets and is unable to allocate sufficient funds to address the complex and multifaceted problem of drug abuse due to issues such as political instability and civil unrest. As a result, many of their programs are underfunded and understaffed, which hinders their ability to provide adequate support and services to those in need. This can make it difficult for government

programs to implement effective prevention and treatment initiatives and to provide adequate support for individuals struggling with addiction (Mlachila *et al.*, 2013).

Moreover, the lack of trained personnel to implement drug abuse prevention and treatment programs is a major problem facing drug abuse management programs. Many of the countries in the region including Tanzania, and Uganda have a shortage of trained healthcare professionals, particularly in rural areas, which can make it difficult for government programs to provide adequate support to those in need (Secretariat, 2019). For instance, Uganda has a limited number of treatment centers and rehabilitation facilities, and these facilities often lack the necessary resources and trained staff to effectively support those in need. As a result, many individuals struggling with drug addiction are unable to receive the help they need, which can perpetuate the cycle of addiction and harm. Additionally, there is often a lack of understanding and stigma surrounding drug addiction, which can make it difficult for individuals to seek help and for government programs to effectively address the problem.

Drug abuse is a major public health and social problem in Kenya, as it is in many other countries around the world. The Kenyan government has implemented various programs and initiatives over the years to address the issue and provide support to those affected by drug abuse. One of the primary challenges facing government programs for managing drug abuse in Kenya is the lack of comprehensive and coordinated efforts. Many of the programs and initiatives that have been implemented in the past have been fragmented and disconnected, with different agencies and organizations working in isolation from one another (Pere & Yatich, 2017). This has made it difficult for the government to effectively address the problem and provide the necessary support to those affected by drug abuse. Additionally, the lack of adequate resources and funding for these programs has become a major concern.

The Kenya government has limited resources available to devote to drug abuse prevention and treatment, and this has hindered the effectiveness of many of the programs that have been implemented (Jaguga & Kwobah, 2020). In addition, there is often a lack of political will to allocate sufficient resources to these programs, which further limits their effectiveness. Third, the lack of trained and qualified personnel to implement and manage these programs impacts negatively government programs for managing drug abuse in Kenya. Many of the programs that have been implemented in the past have suffered from a lack of trained and experienced staff, which has limited their effectiveness (NACADA, 2018). This is particularly true in rural areas, where access to trained personnel is often limited.

The process of dealing with drug abuse requires the identification and elimination of challenges that are specific to a target group based on aspects such as geographical area. For instance, in Kenya, there is need for a study that focuses on the challenges facing government and community interventions against drug abuse. The challenges identified should be used to create and implement initiatives to address them and reduce prevalence of drug abuse in the identified regions. National and local governments in Kenya have taken a combined approach to address the issue of drug abuse with the help of non-governmental entities and the community. The Kenya government has implemented various programs and initiatives over the years to address the issue and provide support to specific places affected by drug abuse including zones across Coast region like Kwale, Mombasa, Kilifi, Taita Taveta, and Tana River counties.

One of the primary challenges facing the Kenya government programs for managing drug abuse in the Coast Region is the lack of comprehensive and coordinated efforts. Many of the programs and initiatives that have been implemented in the past have been fragmented and disconnected, with different agencies and organizations working in isolation from one another (Warui, 2016).

This fragmentation affects counties such as Tana River and Taita Taveta whose poverty levels are high. This has made it difficult for the government to effectively address the problem and provide the necessary support to those affected by drug abuse in Coast Region. The lack of adequate resources and funding for these programs is another significant challenge. The Kenya government has limited resources available to devote to drug abuse prevention and treatment. In the coastal region, for instance, Kwale county faces lack of resources and funding which has hindered drug abuse management operations. Many of these programs rely on limited funding from the national government and international organizations, which can make it difficult to provide adequate support and resources to those in need. This can be particularly challenging in Kwale County, which has a relatively low-income level compared to other counties in the region. The next challenge facing government programs for managing drug abuse in Coast Region is the lack of trained and qualified personnel to implement and manage these programs (Mbuthia *et al.*, 2020). Many of the programs that have been implemented in the past have suffered from a lack of trained and experienced staff, which has limited their effectiveness. This is particularly true in rural areas of the Coast Region, where access to trained personnel is often limited.

2.3.2 Opportunities

Despite these challenges, there are also several opportunities for improving government programs for managing drug abuse. One opportunity is the use of harm reduction strategies, which aim to minimize the negative consequences of drug use rather than eliminate drug use. Harm reduction strategies can include providing access to clean needles and naloxone, a medication that can reverse the effects of an opioid overdose. These strategies have been effective in reducing the transmission of infectious diseases and overdose deaths, and have been implemented in several countries, including the United States and EU member states (Jackson *et*

al., 2014). The other opportunity for improving government programs for managing drug abuse is the use of evidence-based treatment approaches. These approaches are based on scientific research and are effective in reducing drug abuse and improving outcomes for individuals with substance use disorders. Examples of evidence-based treatment approaches include cognitive-behavioral therapy, motivational interviewing and contingency management.

In the United States, SAMHSA has implemented initiatives to increase the use of evidence-based treatment approaches in substance abuse treatment programs (UNICEF, 2020). Finally, improving the coordination and collaboration between different agencies and organizations involved in managing drug abuse would help in managing drug abuse. This can include collaboration between treatment programs, law enforcement, and community organizations, as well as collaboration between different levels of government including federal, state, and local. In the EU, the EMCDDA has emphasized the importance of coordinating and collaborating across different sectors to effectively address the complex issue of drug abuse.

It is worth noting that countries across the world have different opportunities in the war against drug abuse. For instance, drug abuse is a significant problem in many Asian countries, particularly those that are major producers or transit points for illicit drugs. Governments in the region have implemented a range of programs and initiatives to address the issue, including prevention, treatment, and law enforcement measures. One example of a successful program is Thailand's War on Drugs, which was launched in 2003 in response to a surge in drug-related crime (Gale, 2017). The program, which was led by then-Prime Minister Thaksin Shinawatra, involved a range of measures, including the creation of a national drug control agency, the implementation of strict sentencing guidelines, and the establishment of rehabilitation centers. The program was initially successful in reducing drug-related crime, but it was criticized for

human rights abuses and the lack of support for drug users. Another example is China's Strike Hard campaign, which was launched in the 1980s and has been periodically re-launched in response to increases in drug-related crime (Greene *et al.*, 2018). The campaign involves a range of measures, including law enforcement, education, and treatment, and has been credited with significantly reducing drug-related crime in the country. However, it has also been criticized for its heavy-handed approach and its lack of focus on harm reduction and treatment for drug users.

In Europe, drug abuse is a significant problem in many countries, and governments have implemented a range of programs and initiatives to address it. One example of a successful program is Sweden's four pillars approach, which focuses on prevention, treatment, harm reduction, and law enforcement. The approach has been credited with significantly reducing drug-related crime and improving the health and well-being of drug users in the country. Additionally, Portugal's Decriminalization of Drug Use policy, which was implemented in 2001 is a significant initiative (Jackson *et al.*, 2014). Under the policy, possession, and use of drugs are not criminal offenses, but rather treated as public health issues. The policy has been credited with significantly reducing drug-related crime and improving the health and well-being of drug users in the country. North America's problem with drug abuse is a significant issue in many countries, and governments have implemented a range of programs and initiatives to address it. One example of a successful program is Canada's harm reduction approach, which focuses on reducing the negative consequences of drug use rather than eliminating drug use itself (Gale, 2017). The approach involves a range of measures, including providing clean needles and other supplies to prevent the transmission of HIV and hepatitis and offering supervised injection sites where drug users can inject drugs safely. The approach has been credited with significantly

reducing drug-related crime and improving the health and well-being of drug users in the country.

Moreover, United States' Drug Courts program, which was launched in the 1980s has since been implemented in many states. The program involves the creation of specialized courts that handle cases involving drug offenses, to divert drug users into treatment rather than prison. The program has been credited with significantly reducing drug-related crime and improving the health and well-being of drug users in the country. South America has also developed strategies to manage drug abuse cases experienced in regions that are major producers or transit points for illicit drugs (Gale, 2017). Governments in the region have implemented a range of programs and initiatives to address the issue, including prevention, treatment, and law enforcement measures. One example of a successful program is Colombia's Alternative Development program, which was launched in the 1990s and has since been implemented in many other countries in the region (UNICEF, 2020). The program aims to reduce the cultivation of illicit crops, such as coca, by providing farmers with alternative livelihoods through the development of legal crops and businesses. The program has been credited with significantly reducing the cultivation of illicit crops and improving the economic and social well-being of farmers in the country. Additionally, Brazil's Crackland program, which was launched in the 2010s in response to a surge in the use of crack cocaine in the country has had positive impacts on the war against drug abuse (Jackson *et al.*, 2014). The program involves a range of measures, including the establishment of rehabilitation centers, the implementation of harm reduction strategies, and the implementation of social and economic development programs. The program has been credited with significantly reducing the use of crack cocaine and improving the health and well-being of drug users in the country.

There are various opportunities for government programs to address drug abuse in Africa. One opportunity is the use of evidence-based interventions and approaches, such as medication-assisted treatment and harm reduction strategies. These interventions have been proven to be effective in reducing drug-related harm and improving outcomes for people with substance use disorders. Another opportunity is the integration of substance abuse treatment and prevention programs into primary healthcare services (Adebisi *et al.*, 2022). This can improve access to treatment and support for people with substance use disorders, as well as reduce the burden on specialized substance abuse treatment services. In addition, there is an opportunity for government programs to engage with and involve affected communities in the design and implementation of drug abuse prevention and treatment programs (Oleribe *et al.*, 2019). This can foster a sense of ownership and buy-in among the community, and help to ensure that interventions are culturally and contextually relevant and appropriate.

Several African countries have implemented successful government programs to address drug abuse. For example, in South Africa, the government has implemented a national drug master plan that aims to reduce the demand for drugs, improve access to treatment and support, and reduce the supply of drugs (WHO, 2021). The plan includes a range of interventions, such as school-based prevention programs, community-based treatment and support services, and harm reduction initiatives. Additionally, The South African government has implemented initiatives such as the National Drug Master Plan and the Central Drug Authority to coordinate efforts to combat drug abuse, but there is still a need for more effective prevention and treatment programs, particularly for youth. Similarly, the government in Ghana has implemented a national drug control policy that aims to reduce the demand for drugs, improve access to treatment and support, and reduce the supply of drugs (Mlachila *et al.*, 2013). The policy includes a range of

interventions, such as school-based prevention programs, community-based treatment and support services, and harm reduction initiatives. The opportunities can be utilized to improve the effectiveness of government programs employed in tackling drug abuse.

In Nigeria, drug abuse is a major problem, with high rates of abuse of substances such as cannabis, codeine, and Tramadol. The government has implemented various programs to address the issue, including the National Drug Law Enforcement Agency (NDLEA), which is responsible for enforcing drug laws and conducting drug education and prevention campaigns (WACD, 2014). Morocco, on the other hand, has also implemented various programs to address drug abuse, including prevention and education campaigns, treatment and rehabilitation services, and law enforcement efforts. The government has also established the Moroccan Association for the Fight Against Drug Addiction and Illegal Drug Trade (AMLATIL), which works to coordinate efforts to combat drug abuse and addiction (Kurth *et al.*, 2018). Similarly, Egypt has experienced a growing problem with drug abuse, with high rates of abuse of substances such as cannabis, opioids, and amphetamines. The government has implemented various programs to address the issue, including prevention and education campaigns, treatment and rehabilitation services, and law enforcement efforts.

Overall, the governments in Africa face various opportunities in the fight against drug abuse including the need for more effective prevention and education programs, particularly for youth. Another opportunity is the need for more funding and resources to be directed toward treatment and rehabilitation services, which can help individuals struggling with addiction to recover and reintegrate into society (Oleribe *et al.*, 2019; WHO, 2021). Additionally, there is a need for more research and data collection to better understand the nature and extent of drug abuse in these countries, as well as the most effective strategies for addressing it.

Despite the challenges facing the war on drug abuse in East Africa, some countries have made progress in addressing drug abuse and addiction within their borders. The countries have been able to utilize some of the existing opportunities including developing treatment centers and implementing prevention programs. For example, in the DRC, the government has implemented initiatives aimed at addressing drug abuse, including the establishment of treatment centers for drug addicts across the country. In Uganda, the government developed various prevention programs in schools to control drug abuse among youths (Secretariat, 2019). On the other hand, the Tanzania government established a National Drug Control Committee to coordinate efforts to address drug abuse and addiction and has implemented programs, including the provision of relevant training to medical staff to address the effects of drug abuse (Haysom *et al.*, 2018).

One of the main opportunities for government programs in managing drug abuse in East Africa is the potential for collaboration with international organizations and donors. Many international organizations, such as the UNODC and WHO, have programs in place to support countries in the East African region including the Democratic Republic of Congo, Uganda, and Tanzania in their efforts to address drug abuse (Secretariat, 2019). These programs can provide funding, technical assistance, and other resources to help government programs implement effective prevention and treatment initiatives. Additionally, the potential for implementing harm reduction strategies can be utilized to manage drug abuse in East African countries. Harm reduction approaches aim to minimize the negative consequences of drug use, rather than focusing solely on abstinence (Haysom *et al.*, 2018). These strategies can include measures such as providing access to clean needles and syringes for people who inject drugs, as well as providing overdose prevention education and access to overdose prevention medications. Research has shown that harm reduction strategies can be effective in reducing the negative consequences of drug use and can

also help to reduce the transmission of infectious diseases such as HIV and hepatitis (Haysom *et al.*, 2018).

Additionally, governments in East Africa could utilize the existing potential for implementing community-based approaches to prevention and treatment. Community-based approaches involve engaging local communities in the design and implementation of drug abuse prevention and treatment programs and can be effective in addressing the unique needs and challenges of different communities (Haysom *et al.*, 2018). These approaches can also help to build local capacity and ownership of prevention and treatment efforts, which can increase their sustainability and effectiveness. Additionally, the potential for implementing targeted interventions for high-risk groups, such as young people and people who inject drugs is a great opportunity for managing drug abuse. Research has shown that targeted interventions can be effective in reducing drug use and related harm among these groups and can also help to reduce the overall burden of drug abuse on society (Secretariat, 2019).

There are opportunities and potential strategies that can be utilized to improve the effectiveness of government programs for managing drug abuse in Kenya. One of these strategies is the development of comprehensive and coordinated approaches that involve a range of different agencies and organizations working together to address the problem (Jaguga & Kwobah, 2020). This could include the establishment of multi-sectoral task forces or committees that bring together experts from different fields to work on drug abuse prevention and treatment. Moreover, the development of targeted and tailored interventions that are designed to meet the specific needs of different populations at risk of drug abuse would help in improving the impact of the Kenyan government's interventions. As Jaguga and Kwobah (2020) write, some of the interventions include the development of specialized programs for young people, women, and

other vulnerable groups, as well as the use of evidence-based interventions that have been proven to be effective in other settings.

In addition, there is a need for greater investment in research and evaluation to better understand the nature and extent of drug abuse in the various regions including the Rift Valley, Coast, and Northern Parts of Kenya to identify the most effective strategies for addressing the problem (NACADA, 2018). This could include the development of data systems and tools that can be used to monitor and evaluate the effectiveness of different programs and interventions, as well as the conduct of targeted research studies to identify the underlying causes of drug abuse in Kenya and the most effective ways to address them. Finally, there is a need for greater collaboration and partnership between the national and local governments, civil society organizations, and community-based groups in the development and implementation of drug abuse prevention and treatment programs (NACADA, 2018).

This could involve the establishment of networks and coalitions across Kenya that bring together a range of different stakeholders to work on drug abuse issues, as well as the development of community-based initiatives and programs that engage residents in the fight against drug abuse. In conclusion, some strategies and approaches can be employed to improve the effectiveness of these programs and address the problem of drug abuse in Kenya (Jaguga & Kwobah, 2020). By working together and adopting a coordinated and comprehensive approach, it is possible to make significant progress in reducing the negative impact of drug abuse on the health and well-being of the Kenyan population.

The opportunities facing the war against drug abuse can be applied at a more specific region. For instance, some of the opportunities can be applied in the Coastal region of Kenya to facilitate the disruption of supply and abuse of drugs. For instance, the development of comprehensive and

coordinated approaches that involve a range of different agencies and organizations working together to address the problem (Nyongesa *et al.*, 2021). This could include the establishment of multi-sectoral task forces or committees that bring together experts from different fields to work on drug abuse prevention and treatment in the coast region.

Furthermore, the development of targeted and tailored interventions that are designed to meet the specific needs of different populations at risk of drug abuse in the coast region is a viable approach to managing drug abuse (Warui, 2016). This could include the development of specialized programs for young people, women, and other vulnerable groups, as well as the use of evidence-based interventions that have been proven to be effective in other settings. In addition, there is a need for greater investment in research and evaluation to better understand the nature and extent of drug abuse in the coast Region and to identify the most effective strategies for addressing the problem. This could include the development of data systems and tools that can be used to monitor and evaluate the effectiveness of different programs and interventions, as well as the conduct of targeted research studies to identify the underlying causes of drug abuse in the Coast Region and the most effective ways to address them (Korir, 2013).

Finally, there is a need for greater collaboration and partnership between the national government and Coast region administration, civil society organizations, and community-based groups in the development and implementation of drug abuse prevention and treatment programs. This could involve the establishment of networks and coalitions that bring together a range of different stakeholders across Tana River, Mombasa, Taita Taveta, Kilifi, and Kwale counties to work on drug abuse issues in the Coast Region, as well as the development of community-based initiatives and programs that engage residents in the fight against drug abuse (NACADA, 2018).

Existing research indicates that the field of drug abuse research is constantly evolving. New developments and trends in drug abuse are constantly emerging, and researchers need to stay up-to-date on these developments to better understand the challenges and opportunities that government programs face when it comes to managing drug abuse (UNICEF, 2020). For example, the emergence of new drugs or the changing patterns of drug use can present new challenges for government programs that are designed to address drug abuse. To effectively respond to these changes, researchers need to study the specific challenges and opportunities that government programs face in managing drug abuse (Jackson *et al.*, 2014). Second, drug abuse is a complex issue that affects individuals, families, and communities in different ways. Government programs that are designed to address drug abuse must be able to adapt to these changing needs and challenges to be effective. This requires a deep understanding of the specific challenges and opportunities that these programs face. For example, Greene *et al.*, (2018) assert that some government programs may be more effective at addressing drug abuse in certain populations, such as young people or people living in urban areas, while others may be more effective at addressing drug abuse in other populations.

2.4 Research Gap

According to literature that has been reviewed, bhang, heroin, tobacco, cocaine, khat, and alcohol, are the most abused drugs in the Kenya Coastline. However, there is little literature on the consumption patterns of these drugs. Therefore, this study addressed the gaps revealing how each of the most prevalent drugs are consumed as well as the ability of law enforcement agencies to detect new consumption patterns. This will enable the government to stop focusing on low-end traditional traffickers and consumers and provide the police with the capacity to detect and identify new consumption patterns, especially in urban areas like Mombasa, Mtwapa and

Malindi. A question rises if the change in consumption patterns among drug users has been influenced by the ability of the police to detect and enforce laws against traditional consumption patterns or whether it's about exploring new ways of attaining more pleasure.

Alcohol and drug abuse have adverse effects on the user's health and an extensive economic burden on the Kenya economy and at the domestic level. There was limited literature on the socioeconomic disparities in the use of alcohol and drugs in the low-income and high-income families in the coastal region. To bridge this gap, this research study assessed the socioeconomic disparities in the use of alcohol and drugs in the coastal region of Kenya. To get a clear understanding of the level of disparities, both low-income and high-income individuals were assessed across Kilifi and Mombasa Counties. Furthermore, a lot of literature focused on the prevalence rates of drug and alcohol abuse in Kenya. However, there was limited literature on the prevalence rate of drug and alcohol abuse, particularly in the Coastal region of Kenya. To bridge this gap, this study concentrated on the prevalence rate of drug and alcohol abuse in the coastal region counties in Kenya.

Despite these challenges, it is important to understand the effectiveness of government programs in controlling drug abuse to allocate resources and design more effective interventions. Research on this topic can help policymakers and practitioners identify which programs are most effective in reducing drug abuse and its associated consequences, and can inform the development of new programs and interventions. Despite these limitations, some studies have found that certain government programs can be effective in reducing drug abuse and its associated consequences. For example, research has shown that drug courts, which provide an alternative to traditional criminal justice proceedings for individuals with substance abuse disorders, can be effective in reducing recidivism and improving treatment outcomes (Government of Canada, 2018).

Additionally, studies have found that drug abuse education and prevention programs can be effective in reducing drug use among youth.

However, there are a few studies that have attempted to evaluate the effectiveness of government programs in controlling drug abuse, but these studies are limited in scope and often have methodological limitations. For example, some studies have focused on a single program or approach, while others have not adequately controlled other factors that could influence the outcomes of the program (Meisel *et al.*, 2019). Additionally, many of these studies have not used rigorous evaluation methods, such as randomized controlled trials, which are considered the gold standard for evaluating the effectiveness of interventions. There was a need for more research on the effectiveness of government programs in different populations and settings, as well as on the long-term effects of these programs (Meisel *et al.*, 2019). In conclusion, the effectiveness of government programs employed to control drug abuse is a research gap in the drug abuse field. This study addressed the research gap by providing a clear analysis of the effectiveness of government programs employed to control drug abuse by providing a global, continental, regional, and local perspective with a focus on the coast region in Kenya.

The process of determining the most effective approaches to managing drug abuse involves studying the specific challenges and opportunities that government programs face in different populations and contexts. Moreover, drug abuse is a global issue that affects countries around the world. Each country has its own unique set of challenges and opportunities when it comes to managing drug abuse, and researchers need to study these differences to better understand the effectiveness of different approaches (UNICEF, 2020). For example, some countries may have more success with harm reduction strategies, such as providing access to clean needles or overdose prevention medication, while others may find that more punitive approaches, such as

incarceration, are more effective at addressing drug abuse. The most effective approaches to determining effective methods of managing drug abuse require professionals to study the specific challenges and opportunities that government programs face in different countries and contexts.

Overall, the topic of challenges and opportunities facing government programs employed in managing drug abuse is a research gap in the field because it is a complex and constantly evolving issue that requires ongoing research to better understand and address the challenges and opportunities that government programs face in managing drug abuse. By studying the specific challenges and opportunities that these programs face, researchers can help to inform the development of more effective approaches to managing drug abuse and improving the lives of individuals, families, and communities affected by this issue (Oleribe *et al.*, 2019). The existing research does not fully cover the challenges and opportunities facing government programs employed to manage drug abuse, especially in Coast Region, Kenya (Warui, 2016). This research provides a critical and up-to-date analysis of the current challenges and opportunities and comments on their effectiveness in managing drug abuse across areas in the Coast Region of Kenya.

2.5 Conceptual Framework

The study was underpinned by the Social Learning Theory and the Functionalism Theory.

2.5.1 The Social Learning Theory

According to social learning theory, individuals pick up new behaviour by watching and mimicking the actions of others around them. In the 1950s, psychologist Albert Bandura created the social learning theory, which states that people pick up morals, manners, and other aspects of

their character via seeing and interacting with others around them (Horsburgh & Ippolito, 2018). Understanding how people and groups react to catastrophes, and how their reactions may be impacted by those of others, is crucial in disaster management and humanitarian research, and this theory provides a useful framework for doing so. Individuals may be more inclined to flee during a crisis if they see other people in their community doing so, and individuals may be more willing to participate in protective behaviours like wearing masks or socially isolating themselves if they observe other people in their community doing so.

When applied to human behavior, social learning theory has the potential to shed light on why individuals may act in various ways even when they have not personally experienced the repercussions of their actions. For instance, a kid could develop a phobia of dogs if they see someone else bitten by one, even though they themselves have never been harmed by a dog. The ability of social learning theory to provide light on the processes via which individuals acquire knowledge and alter their behaviour over time is just another of its many benefits. For instance, if one individual engages in a novel action and sees that it leads to favourable outcomes, they may be more inclined to adopt that behaviour themselves.

Social learning theory, however, has its drawbacks. Individual variations in learning and behaviour are not taken into consideration, which is a weakness. Other individuals may be more prone to mimicry than others, and some may be more affected by their peers than by their elders. Aggression, drug misuse, and even helpful actions have all been attributed to social learning theory. It has also been employed in the creation of therapies and programs meant to alter or avoid certain behaviours, such as those meant to lessen drug misuse or heighten altruism. Although social learning theory may shed light on how individuals pick up new skills and alter

their behaviour via observation and imitation, its limitations must be taken into account before it is used in the actual world.

This study made use of the social learning theory by examining the influence of cultural norms and values on people's perspectives and actions with regards to drug misuse in Kenya's coastal area. According to this hypothesis, people pick up habits from their peers and the people they connect with often. As a result, we can assess the effectiveness of Kenya's anti-drug initiatives by looking at how they affect the cultural attitudes and beliefs that contribute to substance misuse there. By emphasizing the significance of social and cultural influences on an individual's behavior and attitudes toward drug usage, the social learning theory provided a relevant theoretical framework for this study.

The Social Learning Theory does not explain the role of government in tackling drugs and substance abuse. In this case, therefore, it is crucial to include the functionalism theory to help in explaining this important parameter.

2.5.2. Functionalism Theory

As one of the approaches to sociological studies, functionalism is deeply rooted in the works of Emile Durkheim in the early 20th century. It is anchored on several assumptions which include the following; the society is conceived as a system which comprises a conglomeration of institutional, groups, organizations which are intertwined, distinctive and interdependent; each part of the institutions play a distinctive function to the entire society and works in liaison with other parts; given the interrelationship of these parts, a change in one part alters the changes in other parts; the society is considered the greatest and it is irreducible, has its own identity, what Durkheim dubbed as “Collective Consciousness “. Therefore, according to functionalists, society

anchors interconnected parts that work in collaboration with other parts harmoniously to achieve social equilibrium for the society (Cresswel, 2008). For instance, every social institution contributes to some vital functions; family plays a role in reproduction, nurturing and socializing; education serves the role of equipping people with knowledge and skills; politics offers good governance to mention a few.

Functionalism approach tends to put much emphasis on the interconnectivity and interrelationship of different societal parts and how they manipulate or influence other parts. Oftentimes, both functional and dysfunctional are utilised to comprehend social stability and societal disruption respectively. In a nutshell, functionalism theory is one of the sociological theories that theorizes a society as a system with distinctive parts functioning in collaboration for the purpose of unifying the entire society. With regard to the study, functionalism perceives the Kenyan society as a system with all parts, functioning to meet the needs of the Kenyan people. Kenya as a society is composed of different subsystems including economics, politics, family, education, religion and culture, each working to achieve a prosperous society. In the context of the study, the Kenya government is seen as an entity that is dedicated to serve the needs of its people in a holistic approach. Having recognised the drugs and substance abuse as one of the endemic health problems in the country, the government has stepped in to mitigate the problem by initiating and implementing preventive measures to help tackle the menace. It is doing this to achieve a drug-free country where the general population is free from substance abuse all for the betterment of the Kenyan society.

Regarding the area of Study, the theory will be utilised to ascertain the effectiveness of devolved units of governance and their respective roles in mitigating the menace of drugs and substance abuse. The Coastal region is seen as a functional society with different institutions that play

distinct roles for the betterment of the society. In this context, the theory provided emphasis on the relevance of various institutions both governmental and non-governmental and the distinctive roles they played to curb the menace. Devolution brought governmental services to the people and County governments of the Coastal region have risen to the occasion. This has seen them helping the national government with the implementations of programs meant to curb the menace of drugs and substance abuse in the region.

2.6 Conceptual Model

The conceptual model shows interaction of the independent, dependent and intervening variables of the study.

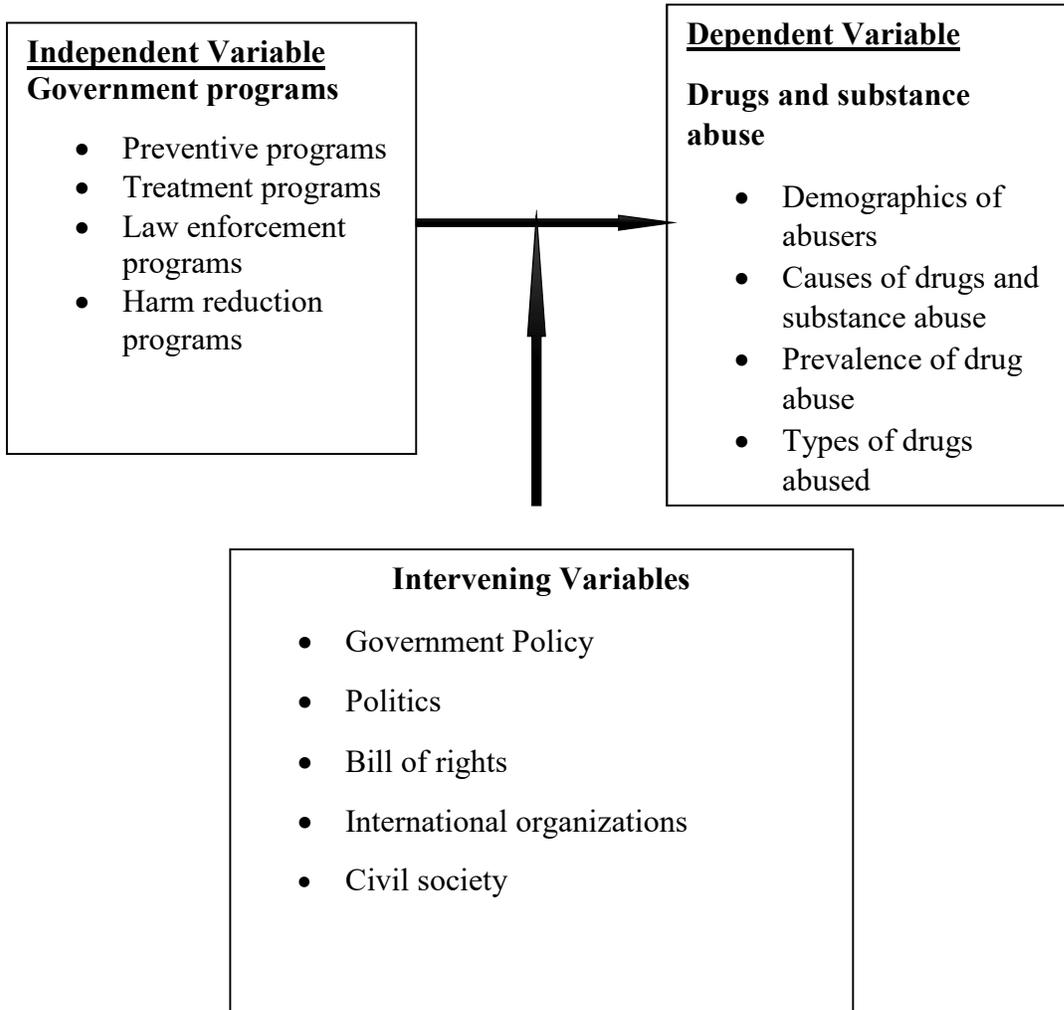


Figure 2. 1 Conceptual Framework Model Showing Interaction of Variables

Source: Author, 2022

Many different types of interventions including public awareness campaigns with warnings of the perils of drug abuse and a detailed explanation on how victims can get help could fall under the purview of such initiatives. The focus of other initiatives could be on rehabilitation services, which aid those battling drug addictions in their efforts to break free from dependency and

rebuild their lives. To further lessen drug availability and disrupt drug trafficking networks, the government may employ law enforcement efforts. Different types of interventions may be more or less successful depending on the unique setting and requirements of the population being served, so it's important to think about the type of program being implemented. A youth-focused prevention campaign, for instance, may have better results if delivered through schools or other community-based organizations, while a longer-term residential rehabilitation program may have better results if delivered in a residential setting. Aside from the intended recipients, the program's duration, its intensity, and its funding, there are several other factors to think about when assessing government initiatives. For instance, rather than being a one-off, a program aimed at young people may achieve better results if it is implemented in classroom settings and takes a more holistic, long-term approach. In a similar vein, programs with sufficient funding and access to adequate resources are more likely to successfully implement their interventions.

The effectiveness of government programs affects the rate and prevalence of drug abuse in the study area. These threats and openings may serve as obstacles or opportunities for the programs, respectively. Inadequate funding or manpower are just two examples of the kinds of resource constraints that can hinder the government's efforts to combat drug abuse. As a result, programs may struggle to effectively implement their interventions and maintain their efforts over time. Furthermore, cultural beliefs and practices can be problematic because they can facilitate drug abuse and make it hard for programs to effectively address the issue. If, for instance, drug use is seen as normal or acceptable by some segments of society, then prevention efforts may be hampered. Another issue that can reduce the efficiency of government programs is a lack of coordination between various departments. It can be challenging for programs to take a unified and all-encompassing approach, for instance, if different agencies are working on interventions

that overlap or are in direct opposition to one another. However, some openings can help government initiatives to combat drug abuse succeed. The programs may be more successful with widespread community support, which can serve to raise awareness, gain resources, and encourage participation in the interventions. The political will to address the problem can be crucial because it can secure funding and support for the initiatives. The programs can also benefit from collaborations with NGOs, which can contribute both knowledge and funds.

The effectiveness of government programs in combating drug abuse and enhancing the well-being of individuals and communities in the coastal region is the focus of this investigation. High-quality interventions are more likely to be successful because they are built on a solid foundation of research. The effectiveness of interventions depends on several factors, such as whether or not they are tailored to the specific needs of the intended population, whether or not they employ tried-and-true methods, and whether or not adequate funding is made available. Socio-cultural factors may also affect the effectiveness, thus influencing the efforts to curb the drug menace in the coastal region.

2.7 Chapter Summary

This chapter has explored empirical literature on the effectiveness of government programs employed in tackling drug and substance abuse. Specifically, the chapter focused on the nature of drug abuse, the effectiveness of the programs utilized by the government to curb the menace, and the challenges and opportunities facing government programs employed in managing it. In addition, the chapter explained the two theories that underpin the study which are the social learning theory and the functionalism theory. It also presented a conceptual framework model to

explain the relationship between the independent, dependent and intervening variables. The next chapter (Chapter 3) describes the methodology used in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This section of the study gives an in-depth view of the research process including the research design, study area, study population, sampling techniques, data collection and analysis procedures. Further, the assumptions made in this study and the ethical considerations are described.

3.1 Research Design

This study adopted descriptive and evaluative research designs on both quantitative data and primary data to be collected. The main purpose of this study was to analyze the effectiveness of governmental programs employed in tackling drug abuse in selected counties in the Coastal region of Kenya. As described by Muthoni & Kinyua (2020), this type of design is focused on describing and summarizing the characteristics of a particular group or population. It is often used to understand the demographics and characteristics of a population affected by a disaster. This includes their age, gender, income level, or geographic location. The study through the description of the trend of drug abuse within the selected counties in the coastal region described the effectiveness of the governmental programs in case there exists a downward or upward trend in drugs abuse and non-medicinal drug usage.

In the first objective, descriptive research design was used to help in examining the nature of drug and substance abuse in Mombasa and Kilifi Counties. Similarly, the descriptive research design was utilized in the second objective to assess the government programs employed to control drug and substance abuse in the selected counties in the Coastal region.

The study adopted evaluative research design which helps to ascertain the effectiveness of the government related programs in the mitigation of drugs and substance abuse. Evaluative research design helped in the structured assessment of the existing government programs to determine the extent of their successes and failures. Additionally, since it uses both quantitative and qualitative research methods, this design helped in gathering respondents' opinions on the programs. The evaluative research design was utilized to evaluate the challenges and opportunities facing government programs employed in managing drug and substance abuse in the selected counties in the coastal region, Kenya.

3.2 Study Area

This study was conducted in Kilifi and Mombasa Counties. As outlined by Hassan *et al.* (2018) most of the coastal strip of Kenya is diversely a tourism center with several historical and tourism sites making it one of the most diverse locations in the country. The region boasts a total of 6 counties including the Tana River County, Mombasa County, Kwale County, Kilifi County, Lamu County and Taita-Taveta County. This study focused on Mombasa and Kilifi Counties.

Mombasa County has an area of 294.7 km² and a population of 1,208,333 (KNBS, 2019). On the other hand, Kilifi County has an area of 12,246 km² and a population of 1,453,787 (KNBS, 2019). Thus, the study area has a cumulative area of 12,540.7 km². Cumulatively, the two counties have a population of 2,662,120.

Approximately 2.6 million people live in the selected counties in the coastal region, with the majority belonging to the Mijikenda ethnic group, as reported by (KNBS, 2019). Mombasa, Malindi, and Watamu are among the most visited cities in the coast region's thriving tourist economy. In 2019, approximately one billion dollars income was generated from the coastline

area's one and a half million visitors. U.S. and European citizens make up the lion's share of the region's visitors.

Agriculture, fishing, and tourism are three of the most prominent economic drivers in coastal areas. The region's economy relies heavily on agriculture, particularly on the production of coconuts, cashews, and maize. Since many different kinds of fish may be found in the Indian Ocean, the fishing industry is also a major economic factor in the area (KNBS, 2019). The seaside area is home to many different types of small enterprises, including hotels, restaurants, and souvenir stores in addition to agricultural and fishing. The influx of tourists has been good for business and the local economy. The coastal area of Kenya is a culturally and economically dynamic and diversified region. Many locals make their livings and contribute to the region's GDP via the tourist sector (KNBS, 2019).

Mombasa County is the second largest city after Nairobi. The county is situated along the South Eastern Coast of Kenya and to the North is Kilifi and Kwale to the West and Southwest. As a cosmopolitan city, Mombasa is largely dominated by the Swahili and Mijikenda communities; others are the Kamba, Luo, Luhya to mention a few. Regarding religion, Christians are considered the majority followed by the Muslims. The major economic activities include tourism, fishing, manufacturing among others. It has a relatively tropical wet and dry climate with rainfall amount sensitively dependent on seasonality. Administratively, it is divided into six sub-counties namely; Changanwe, Jomvu, Kisauni, Nyali, Likoni and Mvita.

Kilifi County is situated to the North and North-east of Mombasa County. Among the major economic mainstays include tourism, fishing and agriculture due to its proximity to the Indian Ocean. Evangelical, Protestant, Islam and Catholic are the major religious practices with the former being the most dominant. Administratively, it is divided into 6 sub-counties and 35

County Assemblies Ward. The sub-counties include Kilifi, Kaloleni, Rabai, Ganze, Magarini and Malindi.

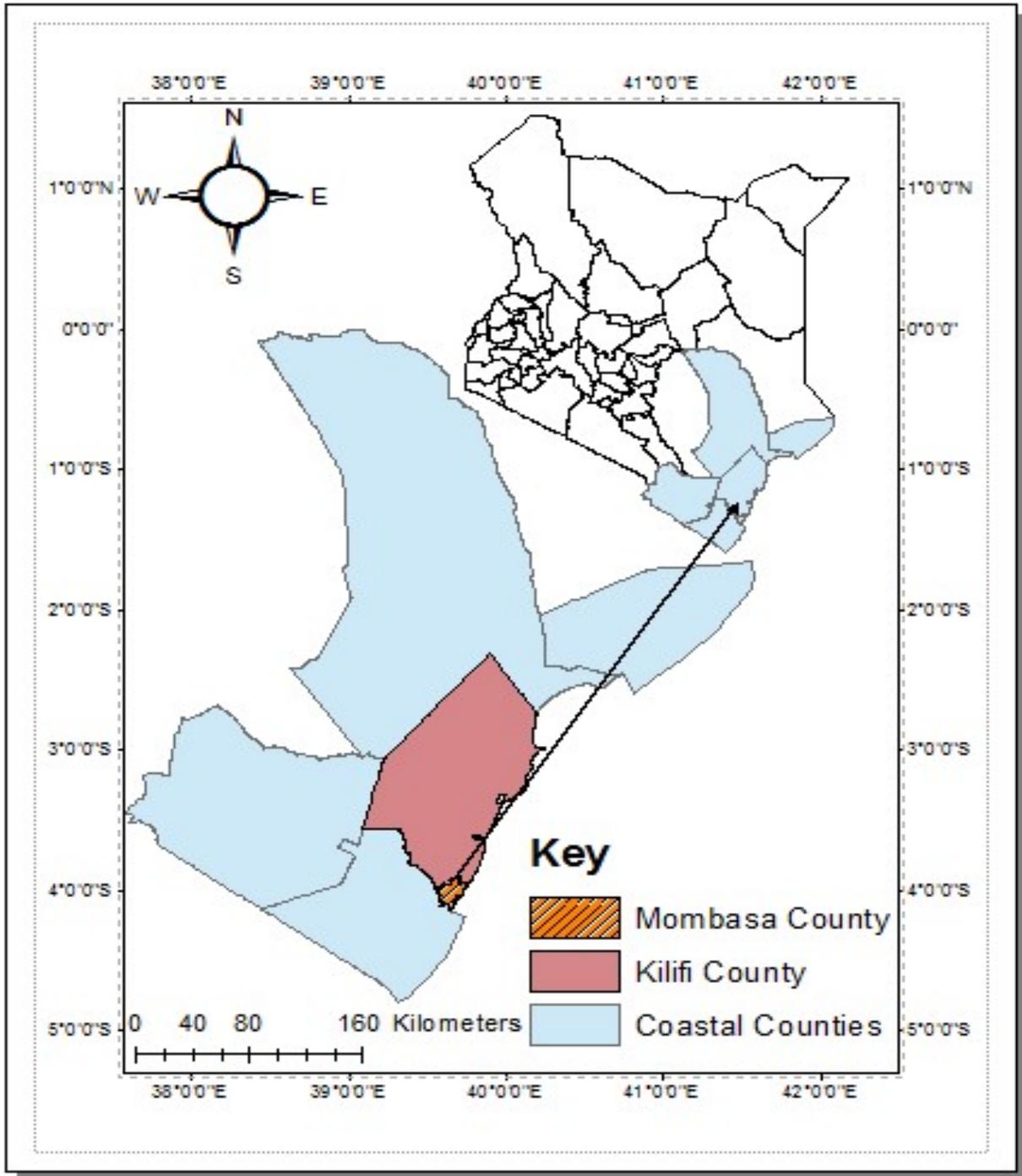


Figure 3. 1 Map of the Kenyan Coastal Region

Source: GIS Map, 2022

3.3 Study Population

The study population in this research included the population of two selected counties in the Coastal Region, which are Mombasa and Kilifi Counties. The study population as determined by (KNBS, 2019) includes about 2.6 million people. Every member of this study population is susceptible to drug abuse including children and infants, whether voluntarily or involuntarily. In consideration of whether the drugs are self-administered or given by a second party, drug abuse has previously been noted by NACADA (2020) as increasingly being abused by children and adults. This includes both prescription drugs and non-prescription drugs which further validates the inclusion of this whole population into the study. However, this study defines its population as the resident respondents above 18 years of age that was grouped into quotas for a representative purpose of the whole study.

The key respondents included the household heads coming from a population of 298,472 households in Kilifi County and 378,422 households in Mombasa County (KNBS, 2019). This gives a total of 676,894 households. Household heads was essential to this study since it was used to acquire people's opinions on how they have been affected by the menace of drugs and substance abuse. They also helped to ascertain on whether they have access to the existing government programs on drugs and substance abuse, how they have benefited from the programs, the challenges they face while accessing the programs. Household heads, therefore, provide insightful information on the effectiveness of the programs.

The next groups of study are the administrative officers. Administrative officers including the village elders, chiefs, CEC health, regional and county education officers were essential to the study since they represented the voice of both the national and county governments. They helped

to illuminate on the current situation of drugs and substance abuse in the region, by offering the existing data on the same within their area of jurisdiction. This in turn provided the study with the statistical analysis of the situation. They also helped to determine the existing government programs, the extent of their implementations, the challenges that bedevil them which was utilized to achieve the objectives of the study. The study required information from the regional education officer, the 2 county education officers, CEC health from the 2 counties. The persons heading the regional security committee as well as the county security committee were key informants as they have required information.

Village elders are an integral part of the society as they interact directly with the people. They give the direct voices of the common citizen. They have been given administrative as well as traditional roles, and this makes them a significant study population. They understand the nature of drug and substance abuse because they live among the people. They also comprehend the programs that the government has put in place, and the impacts of these programs on the lives of the people. Village elders are in the villages, which is the smallest administrative unit. The villages form the sub locations. There are 175 sub-locations in Kilifi County, and 30 in Mombasa. With approximately 5 village elders in each sub-location, there are 1025 village elders in the selected counties.

The religious leaders were of great help to the study where they shed light on the status of drug abuse in the community since they often have a large following and influence within their communities, which can make them valuable sources of information and insights about community attitudes and behaviours related to drug abuse. These religious leaders may also have direct experience with individuals and families affected by drug abuse and can provide valuable first-hand accounts of the impact of government programs on these individuals and families.

Further, they may have direct or indirect connections to community organizations and institutions that are involved in addressing drug abuse, such as rehabilitation centres and health clinics, which can provide additional information and perspectives on the effectiveness of government programs.

In this study, the religious leaders' umbrella body Coastal Inter-Faith Council of Clerics (CICC) Trust was the representative research population of all their members constituting of: Supreme Council of Kenya Muslims (SUPKEM) with 2 board representatives, Council of Imams and Preachers of Kenya (CIPK) with 2 board representatives; Hindu Council of Kenya(HCK) with 1 board representative; The Catholic Church (KEC), (Archdiocese of Mombasa, Malindi Catholic Diocese) with 3 board representatives; The National Council of Churches of Kenya (NCCCK) with 2 board representatives; The Evangelical Alliance of Kenya (EAK) with 2 board representatives; The organization of African Instituted Churches (OAIC) with 2 board representatives; and, Africa Traditional Religions with 2 board representatives. This gives a total population of 16 religious leaders.

Ultimately, the role of non-governmental organizations cannot be downlooked in the prevention of drugs and substance abuse. This is informed by the fact that most of the government related programs require the expertise and skills from the private sector for relatively better results. The study utilized officials from various non-governmental organizations to illuminate on their collaboration with the both national and county governments in a bid to tackle the menace of drugs and substance abuse.

The study also involved leaders from Non-Governmental Organisations (NGOs) with a population of 15 centre directors from the 15 centres in the study area. In addition, there are 5

rehabilitation centres in Mombasa County, and 3 in Kilifi County, giving a total of 8 centres. NACADA's main office is located in Mombasa County (NACADA, 2020).

Victims of drug and substance abuse are crucial in this study. This is the group of population that is directly affected by the government programs employed to curb the menace in the coastal region. Therefore, they have the information significant in answering the research questions. Most of the victims are at the rehabilitation centres, and others who left the centres can also be accessed. The directors of the rehabilitation centres also provided reliable information in this study.

There are approximately 11,700 male and 1,300 female victims of drug abuse in Mombasa County. On the other hand, there are 7,855 male and 1,145 female drug users in Kilifi County. Mombasa County has 5 rehabilitation centres while Kilifi has 3.

3.4 Sampling Strategy

Being a large population, this study adopted a population sampling procedure. The two sampling procedures adopted in this study include both non-probability convenience sampling and purposive sampling, and a probability stratified proportionate sampling.

3.5 Sample Size Determination

There are about 676,894 households in the Mombasa and Kilifi Counties as outlined by (KNBS, 2019). All these households are eligible for the study. A quota of the household population will be calculated based on Fisher's sample size formula (Fisher *et al.*, 2018) where:

$$n = (Z^2 * p * (1-p)) / (e^2)$$

where:

n is the sample size

Z is the standard normal deviate corresponding to the desired confidence level (1.96 for 95% confidence)

p is the estimate of the population proportion (50%)

e is the desired level of precision or margin of error (0.05)

Thus in the estimation of the proportion of households that was included in this study with a margin of error of 5% and a confidence level of 95%, and with an estimate that the population proportion is 50%, the sample size was calculated as below:

$$n = (1.96^2 * 0.50 * (1-0.50)) / (0.05^2) = 384 \text{ households}$$

Calculate (1-p): In this case, p is the estimate of the population proportion, which is 50%. Therefore, (1-p) is $(1-0.50) = 0.50$.

Calculate $p * (1-p)$: This is equal to $0.50 * 0.50 = 0.25$.

Calculate Z^2 : Z is the standard normal deviate corresponding to the desired confidence level, which in this case is 1.96. Therefore, Z^2 is $1.96^2 = 3.8464$.

Calculate $(Z^2 * p * (1-p))$: This is equal to $3.8464 * 0.25 = 0.9616$.

Calculate (e^2) : e is the desired level of precision or margin of error, which in this case is 0.05. Therefore, (e^2) is $0.05^2 = 0.0025$.

Calculate the sample size: Using the values from the previous steps, the formula to calculate the sample size is:

$$n = (Z^2 * p * (1-p)) / (e^2)$$

Plugging in the values, we get:

$$n = 0.9616 / 0.0025 = 384 \text{ households}$$

Thus, in this study, 384 household heads were sampled.

This study further adjusted the sample based on the stratified proportionate non-probability sampling using the proportions 10%, 30% and 50% as outlined by (Mugenda & Mugenda, 2003) to define the sample including household heads, community leaders and village administrators, NGOs and Governmental drug control institution like NACADA.

3.5.1 Sampling of Sub-locations

Mombasa County has 6 sub-counties, and Kilifi County has 6 as well. In this study, 3 sub-counties were randomly selected from each sub-county. From the selected sub-counties, the sub-locations chosen were based on population characteristics where those highly populated sub-locations were studied. The sample method involved a stratified proportionate sampling methodology adopted from (Mugenda & Mugenda, 2003). This sampling method ensured that the data collected is representative of the entire region and not biased towards any particular area.

3.5.2 Sampling of Households Heads

The basic minimum sample size calculated from the population of households above defined the sample size of the households in this study. The sample population thus included 384 respondent households. However, each household may have included more than one respondent and thus this study adopted a selective bias where all the households in the study were studied under the leadership of the household heads who were responsible for the replies to the study questionnaire.

Further the sample distribution per county was identified through proportionate sampling using the following data from KNBS (2019).

Mombasa County has a population of 1,208,333, and Kilifi a population of 1,453,787 (KNBS, 2019). Using proportionate stratified sampling, 45% (173) was sampled from Mombasa while 55% (211) was sampled from Kilifi.

3.5.3 Sampling of Administrative Officials

Administrative heads in this study were selected from the 2 selected counties in the coastal region, which are Mombasa and Kilifi counties. The study area includes 2 counties which are headed by a county commissioner each. The county commissioner is the head of the security committee at the county level. The security team handles the security issues, and drug and substance abuse is essential part of security. The study required the input of the security teams who gave their views on the effectiveness of government programs used in mitigating drug and substance abuse. The county commissioners are responsible for the coordination of the county's activities in coordination with the national government. In this study, the research adopted a purposive census sampling strategy for the identification of the county commissioners' respondent population where the respondents were chosen from each of the counties. The study thus adopted a population of 2 county commissioners from KNBS (2019) census data that outlines a single commissioner in each of the counties. The essence of this population response quota is the definition of the governmental involvement in eradicating drug abuse at a more centralized level defining governmental services being closer to the local citizens. This study expected a more centralized data from the county commissioners as opposed to the regional commissioners.

The ministry of education was significant in this study since majority of the victims of drug and substance abuse are the youth, who are mostly school going. In this study, county education officers were involved. Each county has a county education officer, giving 2 education officers in the selected counties. Using purposive sampling method, the 2 were sampled. The method of sample identification here included a census purposive sampling approach where the full respondent population is adopted for study.

Chief Executive Members of health in the two counties are important as they are the health bosses at the county level. The 2 CEC health members from the 2 counties were sampled using purposive method.

Kilifi County has 52 locations while Mombasa has 18 locations, giving a total of 70 locations (KNBS, 2019). Each location is headed by a chief. In this study, 10% of the population was sampled as justified by Mugenda & Mugenda (2012). Thus, 7 chiefs were sampled from the selected locations. The sample approach included a random approach where the chiefs were picked randomly from the sub-counties within the study area. Being a critical group in the study, a 10% proportionate stratified sampling procedure was adopted (Mugenda and Mugenda, 2012).

Mombasa County has 30 sub-locations while Kilifi has 175 (KNBS, 2019), giving a total of 205 sub-locations. Each sub location has approximately 5 village elders. Therefore, there are approximately 1025 village elders. Using 10% justification from Mugenda & Mugenda (2003), the study sampled 102 village elders from the selected sub-locations.

3.5.4 Sampling Religious Leaders

This study identified a single umbrella organization of religious leaders in the six counties in the study region. The Coastal Inter-Faith Council of Clerics (CICC) Trust constitutes a total of 16

board members who constituted the research population of this study. In the study, 50% of the population, as justified by Mugenda & Mugenda (2003), was used to get a sample of 8 leaders who acted as the respondent base of this study. Thus, a total of 8 religious leaders took part in this study.

3.5.5 Sampling of Non- Governmental Organizations (NGOs)

This study identified a total of 15 non-governmental organizations including community health services, school sponsored health care units and health campaign teams outlined in the (NACADA, 2020) reports. These NGOs are specifically aligned to drug and substance abuse control and regulation. Here, sampling was based on census as outlined by (Mugenda and Mugenda, 2012) where the leaders of these institutions were represented by their total population, making each leader a respondent in this study. The sample approach was purposive where the person in charge of the organization at the time of data collection was interviewed.

3.5.6 Sampling of Head of NACADA Officers

The governmental body, NACADA is the official governmental body for the control and regulation of drug abuse in the country. In Mombasa County, there are 5 rehabilitation centres, while in Kilifi County, there are 3. Thus, there are 8 rehabilitation centres in the two counties (NACADA, 2020). The study purposively sampled the heads of these centres. A single station head (Centre director) was identified and approached. The NACADA offices are found in Mombasa County. The study purposively selected the head of the institution at the time of data collection.

According to Mugenda & Mugenda (2012), in census sampling, a 100% proportion of the study population participated in the study. From this study, selecting a single head from each rehabilitation centre and the NACADA main office gave a study sample population of 9 directors.

3.5.7 Sampling of Victims

There are approximately 11,700 male and 1,300 female victims of drug abuse in Mombasa County. On the other hand, there are 7,855 male and 1,145 female drug users in Kilifi County. Cumulatively, there are approximately 22,000 victims of drug and substance abuse in the two counties (NACADA, 2023). In the rehabilitation centers, there were approximately 200 stable victims who had recovered to a level of taking part in a study. In this study, 10% was utilized to give 20 victims.

In this case, 20 victims were sampled from the rehabilitation centres, as well as referrals from the rehabilitation centres. Thus, the sampling strategies were a mixture of simple random from the rehabilitation centres, purposive and snowball.

3.6 Data Collection Methods and Instruments

This study collected primary and secondary data.

3.6.1 Primary data

The collection of primary data involved focus group discussions, interviews and questionnaires.

3.6.1.1 Questionnaires

The Likert questionnaire used in the study contained both demographic questions in multiple choice format, and a 5-point Likert scale for the variable data. The parameters included are; the nature of drug abuse in the coastal region of Kenya, government programs employed to control drug abuse in the coastal region of Kenya, challenges and opportunities facing government programs in managing drug abuse in the coastal region of Kenya, and the effectiveness of government programs in tackling drug abuse in the coastal region of Kenya. The 5-point Likert scale is adapted from an external source and used to measure the participants' attitudes and perceptions towards the variables. The scale ranges from "strongly agree" to "strongly disagree" and allowed the researchers to quantify the responses and analyse the data more easily. The demographic questions included basic information about the participants such as their age, gender, education level, and occupation. These questions were included to provide context and help understand the relationship between the demographic characteristics of the participants and their attitudes towards the variables of interest. The questionnaires were essential in the collection of data from the 384 household heads respondents in this study.

3.6.1.2 Interview schedules

Interviews are a common method of data collection in research, particularly in qualitative studies. In this method, a trained interviewer conducts a one-on-one or small group conversation with participants to gather data on the research topic. Interviews allow researchers to probe for more in-depth and nuanced responses, as well as to follow up on specific points of interest. However, they are generally more time-consuming and expensive to conduct than other methods such as self-administered questionnaires.

The interviews began by asking the professionals from NACADA and rehabilitation centres (9) and the NGOs (15) about their involvement in drug abuse prevention and treatment programs in their respective organizations. This included questions about the types of programs they are involved in, the target populations, and the goals of the programs.

The administrative officials interviewed included the county commissioners (2), CEC health (2), county education officer (2), chiefs (7). Another quota of the study sample population that was interviewed was victims (20) and religious leaders (2).

The interviews provided valuable insights into the effectiveness of government programs addressing drug abuse in the coastal region of Kenya. The professionals and officials who highlighted the above responses defined the successes and challenges of these programs and provided a clear picture of their impact and state of drug abuse rates in the region.

3.6.1.3 Focus Group Discussion Guides

Focus group discussions include a method of data collection in which a trained moderator leads a group of 6-12 participants in a discussion on a specific topic. The discussions were recorded, transcribed, and analysed to identify common themes and insights. Focus group discussions were used to gather qualitative data and provide a deeper understanding of people's attitudes, behaviours, and experiences. They are particularly useful for exploring complex or sensitive issues and for generating ideas or testing concepts.

The study on the effectiveness of government programs employed in tackling drug abuse in selected counties in the coastal region conducted using focus groups in the Kilifi and Mombasa Counties. The respondent population consists of 102 village elders. Each focus group was made

up of 10-12 respondents. There were 10 groups, 5 in Kilifi and 5 in Mombasa County. The focus group discussions were carried in the selected sub-locations in the study area.

The meetings were conducted in a confidential and respectful manner, with the aim of gathering valuable insights into the effectiveness of the government programs in addressing drug abuse in the region. The focus groups provided a platform for the respondents to share their experiences, thoughts, and opinions on the topic, and their input was carefully considered as part of the research process. Overall, the use of focus groups was a valuable method for collecting data on the effectiveness of government programs in tackling drug abuse in the coastal region of Kenya.

Table 3. 1 Summary of study population, sampling and data collection

Respondents	Population size	Sample determination	Sample technique	Sample size	Data collection strategy
House hold heads	676,894	Fisher's sample size	Simple random	384	Questionnaires
Victims	200	10	Simple random	20	Interviews
County Education officer	2	100%	Purposive	2	Interviews
County Commissioner	2 counties (Mombasa and Kilifi)	100%	Purposive	2	Interviews
County Executive Member (CEC) health	2 counties (Mombasa and Kilifi)	100%	Purposive	2	Interviews
Administrative chiefs	70 (from 70 locations)	10% (Mugenda & Mugenda)	Simple random	7	Interviews
Village elders	1025	10% (Mugenda & Mugenda)	Simple random	102	FGDs
Head of NGOs	15 NGOs	100%	Census	15	Interviews
Head of NACADA offices	8 treatment and rehabilitation centers, and NACADA main office	100%	Census	9	Interviews
Head of Religious leaders	16	50% (Mugenda & Mugenda)	Simple random	8	Interviews
Total				551	

Source: Researcher, 2022

3.6.2 Secondary data

In this study, the researcher conducted a secondary data analysis using quantitative content review to evaluate the effectiveness of drug control programs implemented by the government in the coast region. Data was collected from journals published in the last decade, books and government reports. The review involved examining the dimensions of the drug control programs to understand their effectiveness in addressing drug-related issues in the region.

3.7 Reliability and Validity of the Instruments

3.7.1 Validity

The validity of a test instrument refers to the extent to which the instrument accurately measures what it is intended to measure. Validity is defined as the accurate and meaningful measure of inferences and how they relate to the research results (Hayashi, Abib & Hoppen, 2019). For a tool to be valid, it must accurately portray what it measures (Pandey & Pandey, 2021). In this research, the validity of the questionnaire, discussion questions for focus groups, and interview questions is an important consideration, as these tools are being used to collect data that would be used to draw conclusions about the effectiveness of drug control programs.

The study tools were presented to a panel of experts at the School of Disaster Management and Humanitarian Assistance at Masinde Muliro University of Science and Technology to check whether all the items were included. The experts' opinions were afterwards included to enhance validity of the study. The questionnaire was divided into several sections each addressing specific objectives for enhancement of construct validity. There was a review of the research tools by the researcher's supervisors to test their validity.

The researcher trained two research assistants for two weeks before the data collection process began. They were trained on the objectives of the study, the purpose, and methods of data collection. The research assistants were made aware of the purpose of the study as well as the methods that were to be used to collect data. They were taken to the study area to familiarize with it so that they are ready to assist the researcher (Stevano & Deane, 2017).

3.7.2 Reliability

Reliability analysis includes both the primary data reliability for instrument determination and the secondary data reliability for accuracy determination. In the primary data reliability analysis for this study, Cronbach's alpha as a measure of reliability for the study instruments, including the questionnaires, discussion questions, and interview questions was adopted. This reliability test was used to assess the internal consistency of the data being collected by these instruments, or the degree to which different items or questions within the instruments measured the same underlying concept.

To conduct the Cronbach's alpha analysis, a statistical software, SPSS, was used. This software allowed the researcher to calculate the Cronbach's alpha coefficient (Ravinder& Swaswathi, 2020) using the following formula:

$$\alpha = (K / (K - 1)) * (1 - (\Sigma(SD^2) / \Sigma X^2))$$

Where:

K is the number of items in the instrument

SD is the standard deviation of each item

$\Sigma(SD^2)$ is the sum of the squared standard deviations of all items

ΣX^2 is the sum of the squared means of all items

By calculating the Cronbach's alpha coefficient, the researcher was able to determine the reliability of the study instruments and confirm that they are measuring what the study intended to measure in a consistent and accurate manner. The researcher also used test-retest reliability testing to confirm the consistency of the data over time. This involves re-assessing the same data at different points in time to see if the results are consistent. Both of these reliability tests helped to ensure the accuracy and reliability of the data being analyzed in the content review (O'Connor & Joffe, 2020).

3.8 Data Analysis and Presentation

According to Mugenda and Mugenda (2003), analysing data incorporates a process of acquiring and searching for meaning to information collected by the researcher in a bid to present the same in a better and clear way to enhance understanding.

3.8.1 Quantitative Data

Quantitative data analysis and presentation was carried out using statistical software SPSS version 26. The first step in the data analysis process is to enter the data into SPSS and clean it by checking for any errors or inconsistencies. This included checking for missing values and ensuring that the data are coded correctly. Next, descriptive statistics are calculated to summarize the data and get a general understanding of the sample. This includes measures such as the mean, median, frequency charts and tables. The results of the data analysis were then presented in a clear and concise manner, using tables and figures to illustrate the key findings including the demographics and variable data. The results are also discussed in the context of the research questions and objectives, and implications for practice and future research were discussed

(Gatuyu & Kinyua, 2020). In this study, the statistical package MS excel workbook version 20.0 was used in the visualization and presentation of this data in descriptive tables and charts.

3.8.2 Qualitative Data

The researcher used thematic techniques in presenting qualitative data on effectiveness of government programs utilized in handling drug abuse in the coastal region. The researcher collected qualitative data from key respondents stemming from focus group discussions and interviews. The information that was collected from the informants was edited, coded, classified and then tabulated (Kothari, 2004), and finally analysed through the thematic techniques. The discussions, majorly narrative, were contextualized to meet the research objectives using themes and dimensions under each objective. Qualitative data is mainly narrative and attempted to explain the occurrences and events of the whole study.

3.9 Data Collection Procedure

The researcher and the research assistants administered the questionnaires to the selected household heads in the study area. The questionnaires were structured so that the same questions asked were in the same order and had the same wordings used among all the respondents. Questionnaire administration is a challenging task; the researcher had a team consisting of four research assistants who helped to administer the questionnaires to household heads through face-to-face method. The research team then proceeded to conduct interviews on the selected respondents. Interviews were conducted through face-to-face sessions. The team booked appointments through phone calls to avoid inconveniences in the process. The data collection ended with the FGDs, where the chiefs were requested to invite 8-12 village elders, and the team conducted the discussions in the selected sub-locations. In order to be able to achieve a high rate of return, the team administered the questionnaires and conducted the interviews and FGDs

during the working hours. A follow up with phone calls and emails plus personal visits were exercised where necessary for further clarification.

3.10 Limitations of the Study

Firstly, the research team experienced language barrier. Most of the respondents, specifically the household heads, victims and village elders could hardly communicate in English. They only understood Swahili, and in some extreme cases, their mother tongue. Thus, it was hard to communicate using English. They could not even read the questionnaires on their own. As a result, the researcher employed translators to help in interpretation. When administering the questionnaires, the research team interpreted the questions and helped the respondents to fill in the questionnaires.

Secondly, the culture was a challenge. Majority of the respondents in the study area were Muslims. To be culturally correct, the research assistants dressed in a manner that would conform to the culture of the area.

Furthermore, handling the drugs and substance abuse predicament raised some security concerns. The victims felt unsafe as they suspected the research team would be security agents. In this case, the research team produced the research permit and assured the respondents that the research was purely for academic purposes.

3.11 Ethical Considerations

First, all participants were informed of the purpose and nature of the study, and were given the opportunity to ask any questions or raise any concerns before giving their consent to participate. Informed consent was obtained from all participants before any data collection tools were used.

This study was strictly carried out amongst adults above the age of 18 years. Secondly, confidentiality and anonymity were maintained throughout the study. Personal identifying information was not collected, and all data was kept secure and confidential.

More so, all participants were treated with respect and dignity during the research process. This included ensuring that they were free and had the opportunity to ask questions or raise any concerns during the interviews, focus group discussions, or survey questionnaires. Additionally, any potential risks or harms to participants was minimized. This included ensuring that the questions or discussion topics were not overly sensitive or distressing, and providing resources or support for any participants who may have been affected by the research.

The researcher obtained permission to proceed with the study after presentations both at school and department levels and from the Directorate of Post-Graduate Studies, Masinde Muliro University of Science and Technology (MMUST). The Research Permit was obtained from the National Commission for Science, Technology & Innovation (NACOSTI).

3.12 Chapter Summary

This chapter has discussed the methodology of the study. It has explained how the research was conducted effectively to get the answers to the research questions. This included the research design, study area, study population, sampling strategy and methods of data collection. In addition, the chapter also discussed reliability and validity of the study, data collection procedure, limitations of the study and ethical considerations. The next chapter (Chapter 4) presents the results of the first objective.

CHAPTER FOUR

NATURE OF DRUGS AND SUBSTANCE ABUSE IN SELECTED COUNTIES OF THE COASTAL REGION OF KENYA

Introduction

This chapter presents results in line with the first objective which was to examine the nature of drugs and substance abuse in selected counties in the coastal region. The chapter starts with presentation of socio-demographic features and further discusses different parameters on the nature of drug and substance abuse including causes of drug abuse, types of drugs abused, prevalence of drug and substance abuse, and effects of drug and substance abuse. A total of 552 respondents were surveyed in this study. The response rate from the respondents was achieved at 100% due to the involvement of research assistants in this study who aided with data collection, interviews scheduling and the interview processes.

4.1 Socio-demographic Characteristics of House Hold Heads

Demographic information provides data regarding research participants and is necessary for the determination of whether the individuals in a particular study are a representative sample of the target population for generalization purposes. In this section, the socio-demographic features of household heads are presented.

It was important to understand the demographic characteristics of the household heads as they were the unit of analysis in the study. The analysis helped to explain the nexus between demographic features and drug and substance abuse in the region.

Through questionnaires, the household heads were requested to submit their demographic data to define the population diversity of this study. The population diversity was essential in the representation of the study population which is comprised of several individuals with different characteristics. The socio-demographic data collected included the following:

4.1.1 Gender

In the questionnaire survey, 384 respondents were requested to include their gender data for the study. Gender is an important demographic factor as it can influence an individual's behavior, attitudes, and experiences. In this study, being household heads, gender was an important differentiation of the study population wherein the diversity of experiences needed in the data collection for this study involved the varied experiences of the different genders. The results are represented in the Figure 4.1.

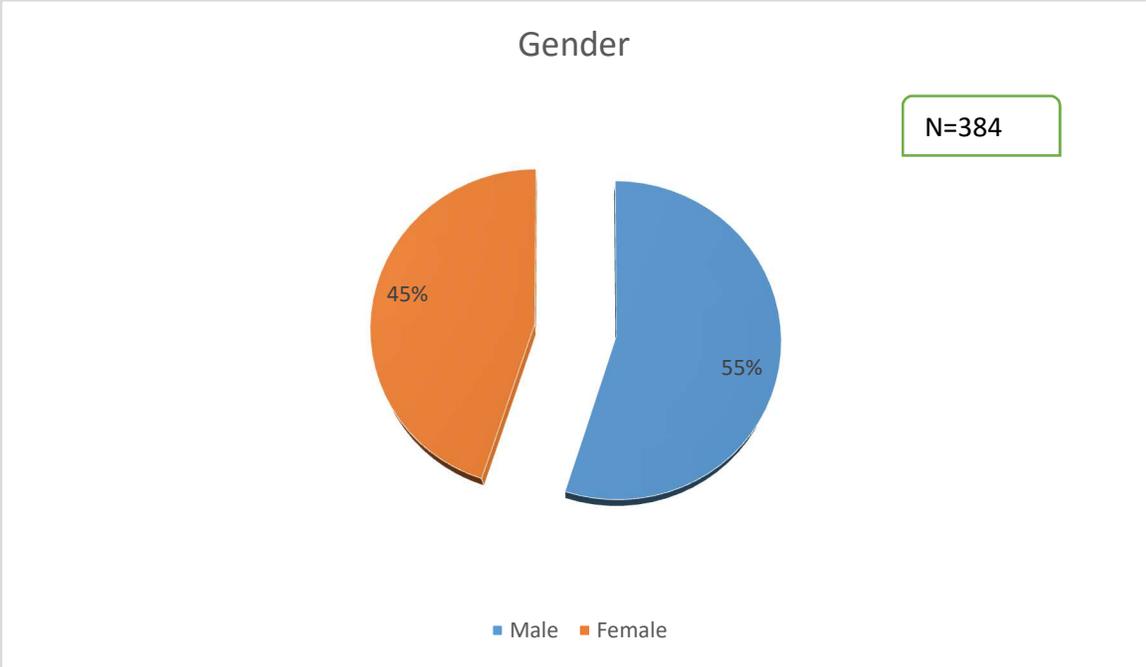


Figure 4.1: Gender of respondents

Source: Field Data, 2023

From the data collected in the survey in Figure 4.1, 210 (55%) of the household heads were male, while 174 (45%) were female respondents. The gender demographic data was an important aspect of the survey as it would provide valuable insights into how different genders perceive or experience drug and substance abuse, and how government programs may be addressing these issues.

According to Tuchman (2010), studies have shown that men are more likely to abuse drugs and alcohol as compared to women in Kenya. The 2018 National Authority for the Campaign Against Alcohol and Drug Abuse survey showed that, 9.1% of males had used drugs in the past 12 months compared to 4.4% of females. Therefore, the higher number of male respondents in this survey may suggest that men are more aware of government programs and services aimed at mitigating drug and substance abuse and thus are more concerned and involved in drug abuse mitigation compared to the women.

In other minor cases, social stigma has adversely affected the women who abuse drugs in Mombasa and Kilifi. Women indulging in drug and substance abuse include teenage girls or young women who are pregnant and other women who, by other factors, have been pressed to engage in drug abuse. They face a higher degree of social stigma as society perceives them as people who have violated the norms and expectations. The enhanced stigma results from society's perception that they have failed to adhere to normative social expectations. A case was reported in Mombasa where some people accused of drug abuse have been stoned, burned or even murdered in mob attacks. The women are therefore likely to report stigma as a barrier to health-seeking practices.

However, it is also important to note that drug and substance abuse affects both men and women, and gender-specific approaches may be necessary to address the issue effectively. Women may

as well face unique challenges, such as social stigma when seeking help for drug and substance abuse (Tuchman, 2010). The higher male response rate in this study can also be attributed to the demographics of the coastal population where according to KNBS (2019) the coastal population of Kenya includes household heads who are dominantly male due to the community structure of the coastal communities of Kenya where the eldest males are culturally responsible for their respective households.

4.1.2 Age

Age was the second demographic information requested for in the questionnaires. From the 384 response questionnaires, the following data presented in Figure 4.2 was obtained in relation to the age data of the household heads participants.

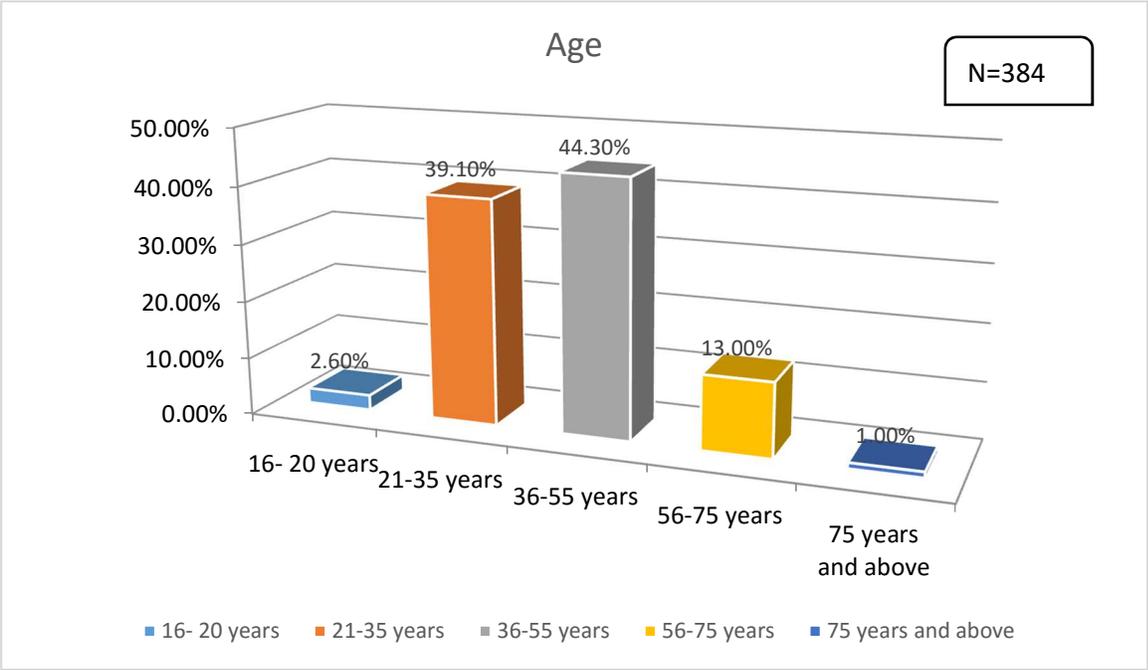


Figure 4.2: Age of Respondents

Source: Field Data, 2023

The age distribution of the 384 household heads in Mombasa and Kilifi counties provides important insights into the demographic profile of the surveyed population. The results indicate that the largest age group is between 36-55 years, accounting for 170 of the household heads. This indicates that this age group is the most dominant among household heads attributing to the population of the coastal counties as evidenced by KNBS (2019). This group has children or other family members who are at risk of drug and substance abuse, and they also participate in programs aimed at mitigating drug and substance abuse due to their maturity and life experiences. The age group between 36-55 years is also significant as they are the parents of the younger generation and play a critical role in preventing their children from engaging in drug and substance abuse. Additionally, this age group is more financially stable and has greater access to resources that could be used to support anti-drug initiatives.

The second-largest age group is between 21-35 years, with 150 household heads. Being a country of a young population as per KNBS (2019), this group represents the household heads that are still relatively young with possible school going children and previously adopted parental responsibilities. According to Acheson *et al.*, (2011), this age group is still relatively young and may be at risk of exposure to drug and substance abuse, especially since this age group is commonly associated with experimentation and risk-taking behavior including trying to find stability in life.

The age group between 56-75 years represents a smaller proportion of the surveyed population, with 50 household heads. However, they have an important role to play in mitigating drug and substance abuse, especially since they may be grandparents or other older family members who could serve as positive role models for younger generations. They may also have unique perspectives and experiences that could be valuable in developing effective anti-drug programs.

The smallest age group is those aged 75 years and above, with only 4 household heads, followed closely by 16-20 years with 10 respondents who are still relatively young. While these groups are small, it is still important to consider their needs and perspectives, especially since they may be vulnerable to drug and substance abuse due to health conditions or social isolation.

The age distribution of household heads in Mombasa and Kilifi counties suggests that the majority of the population is between the ages of 21 and 55. This is consistent with the age distribution of the Kenyan population, which is predominantly young. According to the Kenya Population and Housing Census, the median age of the population is 19 years, and 75% of the population is under 35 years old (KNBS, 2019).

A study by the UNDP (2015) found that young people are particularly vulnerable to drug abuse. The study revealed that the age of initiation into drug use in Kenya is as low as 10 years, with the majority of users starting before the age of 19. The study acknowledges the diversity of age groups in the discussion of drug and substance abuse.

Another study by NACADA (2020) found in a survey of households in the coastal region that majority of the population of household heads included a population of individuals between the age of 30 and 55. The study further noted that the household head age groups varied between the ages of 18 and 75 wherein the responsibilities of heading the houses were tasked to other members of the household including younger members or older members depending on the situation.

4.1.3 Marital status

The study further sought the marital status information of the household heads as a demographic data in the study where the results are displayed in Figure 4.3.

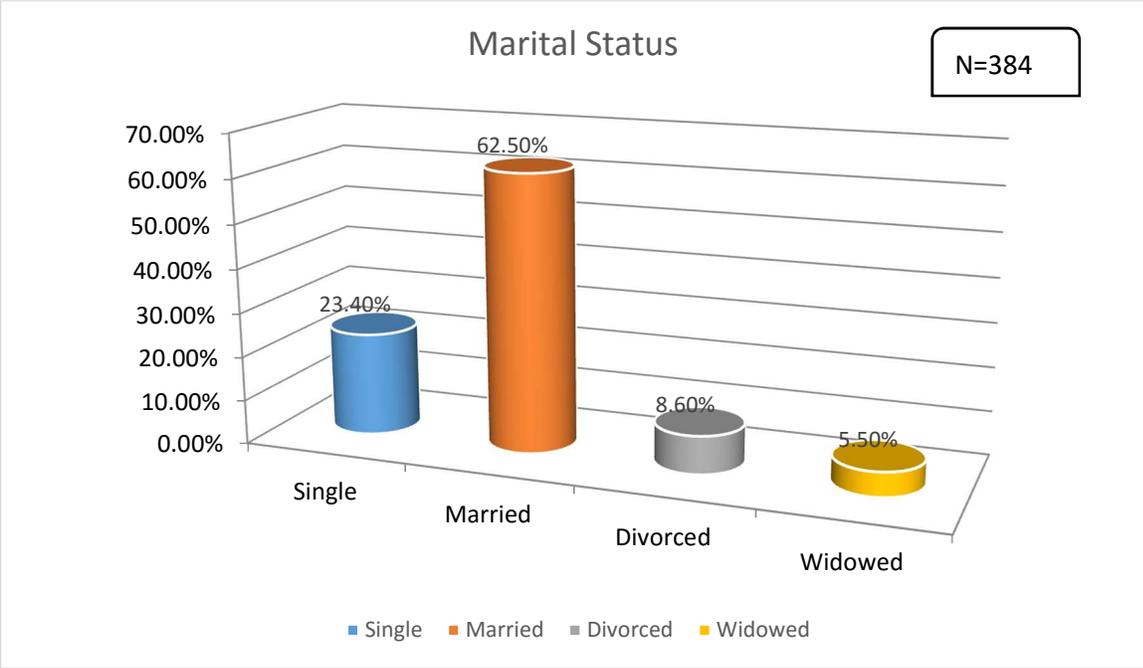


Figure 4.3: Marital status of respondents

Source: Field data, 2023

According to the data in Figure 4.3, the largest group of household heads is married, accounting for 240 individuals, which represents 62.5% of the sample. The second-largest group is single/never married, with 90 individuals, accounting for 23.4% of the sample. The divorced/separated group represents 8.6% of the sample, with 33 individuals, while the widowed group is the smallest, with 21 individuals, accounting for 5.5% of the sample.

These findings are consistent with national statistics in Kenya, which show that the majority of the household heads population is married. According to the Kenya Demographic and Health Survey, KDHS (2022), about 48% of women aged 15-49 years and 55% of men aged 15-54 years are married. The survey also found that the percentage of single women and men in the same age group was about 42% and 33%, respectively.

The high proportion of married household heads in the sample may suggest that the selected individuals are likely to be settled compared to those in the single group. The relatively low proportion of single individuals in the population sample on the other hand may imply that the family structure in the coastal population is still relatively stable with most members of the population rightfully going through the rights of passage as described by Tengah and Otieno (2019).

According to Stringer & Baker (2018), studies have also shown that marital status can have a significant impact on drug and substance abuse. For instance, a study by Mbuthia *et al.*, (2020) found that marital status was significantly associated with substance use among university students in Kenya. The study outlined that married students were less likely to use substances compared to their single counterparts which delves an interesting view of the marital status demographics of this study.

4.1.4 Religion

The study through 384 respondent household heads in both the Kilifi and Mombasa counties in Kenya sought to define the religious affiliation of the respondents. The data is visualized in Figure 4.4.

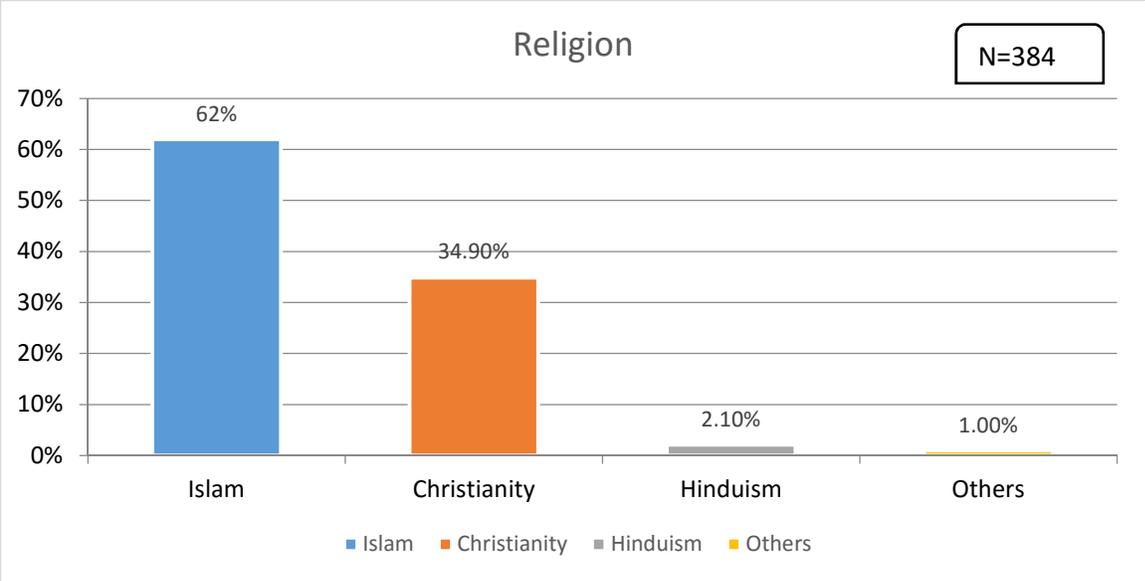


Figure 4.4: Religion of respondents

Source: Field data, 2023

The frequency distribution of the data shows that out of the 384 household heads surveyed, 238 identify as Muslim. This represents the largest group of respondents, comprising 62.0% of the sample. Christianity is the second-largest group, with 134 household heads identifying as such, comprising 34.9% of the sample. The remaining 8 household heads identify as Hindu, while 4 identify with other religions, making up 2.1% and 1.0% of the sample, respectively.

The small proportion of Hindus and other religious groups in the surveyed population also reflect the KNBS (2019) data in the coastal region. While Hinduism has a small presence in Kenya, other religions, such as traditional African religions and Buddhism, are also practiced in the country. However, these groups make up a small proportion of the total population.

The high proportion of Muslim household heads in Mombasa and Kilifi counties is not surprising given that the coastal region of Kenya has a large Muslim population. Mwai *et al.*, (2022) estimated that Muslims comprise 11.1% of Kenya's total population, with a higher concentration

of Muslims residing in the coastal region and northeastern parts of the country. The study also showed that Kenya's Christian population is predominantly Protestant, with Catholics making up a smaller proportion of the population.

The finding that Christianity is the second-largest religion in the surveyed population is also consistent with KDHS (2022) data where Christians make up the largest religious group in Kenya, comprising 85.5% of the total population. The reports identify the Protestant Christians as the majority of Kenya's Christian population, followed by Catholics and other Christian denominations.

4.1.5 Education

The study sought to define the educational backgrounds of the 384 household heads who participated in this study. The findings are visualized below in the Figure 4.5.

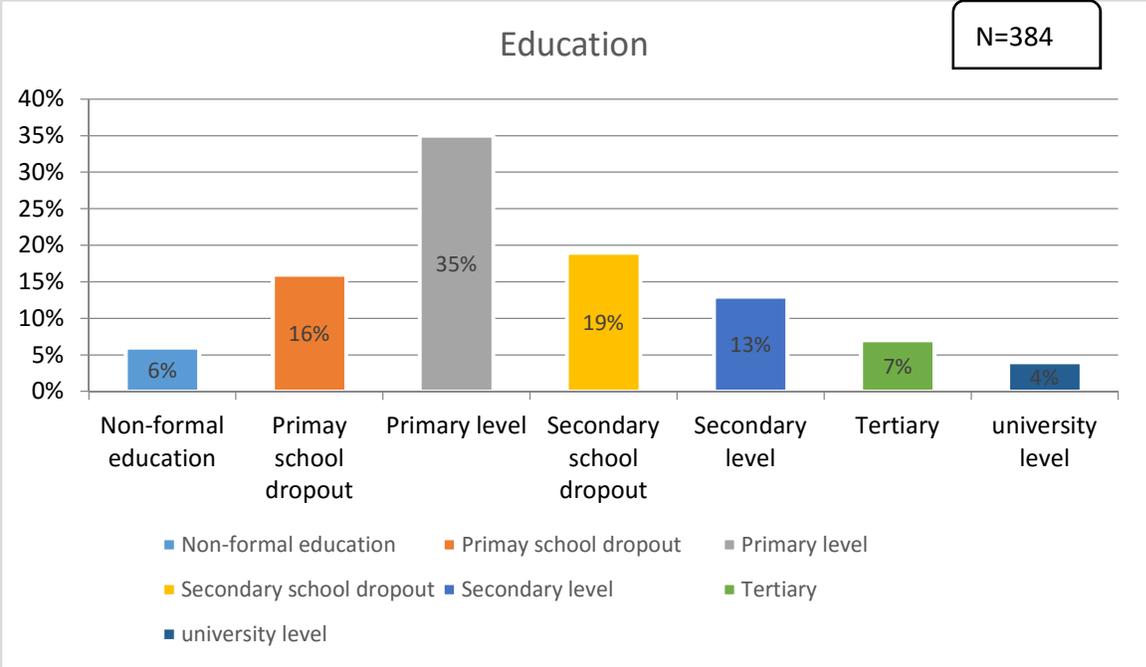


Figure 4.5: Education levels of respondents

Source: Field Data, 2023

The demographic data in Figure 4.5 suggests that the educational level of household heads in Mombasa and Kilifi counties is varied, with primary level education being the most common. The data shows that 15% (23) have non-formal education, 16% (61) are primary school dropouts, and 35% (134) have completed primary level education. 19% (73) of the household heads are secondary school dropouts, and only 13% (50) have completed secondary education. The data also shows that only a small percentage of household heads, 7% (27), have tertiary education, and 4% (15) have university-level education.

These findings suggest that there is a significant gap in education levels among household heads in the coastal region of Kenya. The low education levels can have serious consequences, including limited access to job opportunities, lower income, and limited access to information on health and social issues. Previous studies have shown that there is a correlation between education and drug abuse. The more educated individuals are, the more likely they are to manage the pressures of drug abuse in their families (Oguya *et al.*, 2021).

Reports by United Nations Office on Drugs and Crime, UNODC (2020) outline that in countries with low levels of education, the rate of drug abuse is higher than in countries with high levels of education. Thus, the high percentage of household heads with low levels of education in Mombasa and Kilifi counties could be an indicator of higher drug and substance abuse rates.

On the other hand, the low percentages of household heads with tertiary and university-level education suggest that access to higher education in the coastal region is limited. This could be due to a lack of resources, limited access to education facilities, and socio-economic barriers. The findings of this study are reflective of the KNBS (2019) data which gives the academic qualification of most household heads in the coastal counties as a population with basic education and a limitation in tertiary education.

4.1.6 Occupation

In an open-ended question in the questionnaire, the 384 household heads respondents in this study were requested to fill in their occupation data which was an important demographic data in this study. The findings have been visualized in the figure 4.6.

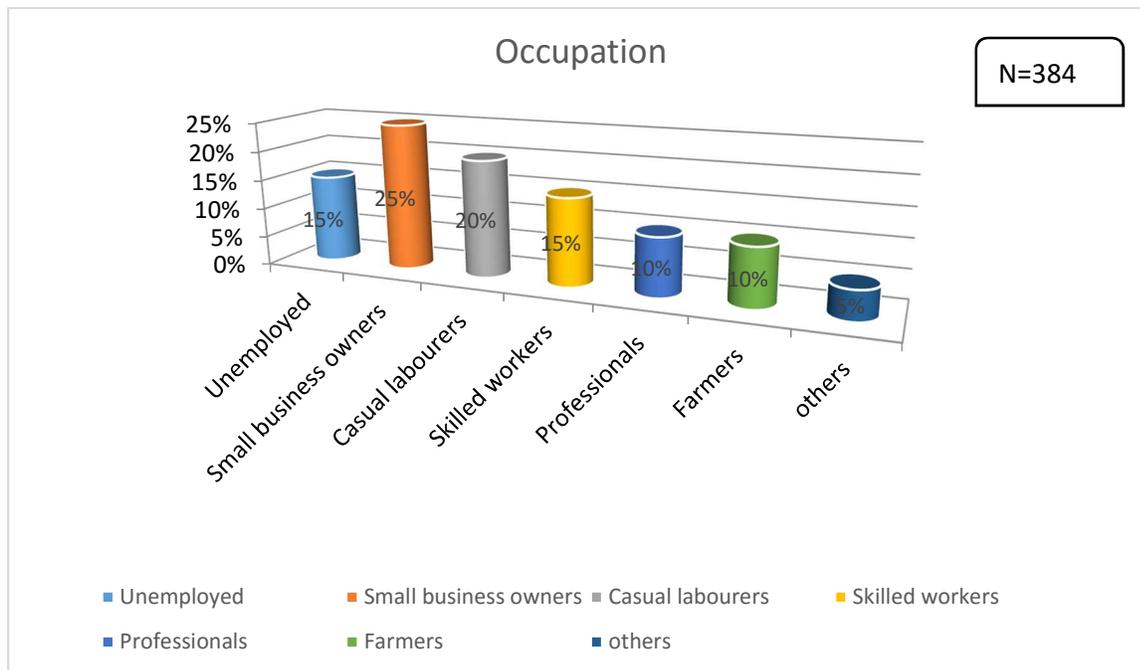


Figure 4.6: Occupation of Household heads

Source: Field Data, 2023

The data in Figure 4.6 shows that small business owners had the highest representation at 25% (96), followed by casual laborers at 20% (77), and unemployed household heads at 15% (58). Further, the skilled workers were 15% (58), professionals 10% (38), and farmers 10% (38) of the respondent population, while others made up 5% (19).

The high number of small business owners and casual laborers may be indicative of the prevalence of informal sector employment in the coastal region. The occurrence is not surprising given that the coastal region of Kenya is a hub for trade and commerce, with many small and

medium-sized businesses operating in the region. The high percentage of casual laborers is also expected as the region has a high level of informal employment, with many individuals working in jobs that do not provide a steady income or job security.

The findings of this study are reflective to the reports by International Labor Organization, ILO (2020), which suggests that informal employment accounts for over 80% of employment in Kenya, with the majority of these jobs being in agriculture, wholesale and retail trade, and manufacturing. The relatively low number of professionals and skilled workers may also reflect a lack of employment opportunities in these fields in the coastal region as backed by census reports by KNBS (2019) that outlined that the highest levels of unemployment in the country were among university graduates and diploma holders.

Another study conducted by The Kenya Institute for Public Policy Research and Analysis, KIPPRA (2020) found that, informal employment is a significant feature of the Kenyan economy. Informal employment in Kenya has grown significantly in recent years and is estimated to account for over 80% of the total employment in the country. This trend is particularly pronounced in the coastal region, where the informal sector accounts for a significant portion of the local economy.

4.2 Nature of Drugs and Substance Abuse in the Coastal Region

In this section, the study examined the nature of drugs and substance abuse in the coastal region, exploring causes of drug abuse, the types of drugs abused, the methods of acquisition of the drugs, the prevalence of drug abuse, the methods of drug consumption and finally the effects of the peril at the individual, family and community levels. The results and findings of the first

objective of the study are discussed in details. The findings of this section of the study are based on the results from questionnaires, FGDs and interview responses.

4.2.1 Demographics of Victims

Understanding the demographics of victims of drugs and substance abuse is an essential aspect of comprehending the prevalence and nature of drug and substance abuse in any region. In the coastal region of Kenya, where drug abuse has been a growing concern, investigating the demographics of drug users can provide valuable insights into the characteristics of those who are most vulnerable to drug abuse and the factors that may be contributing to the problem.

In this case, therefore, in the bid to understand the nature of drug and substance abuse, it was necessary to understand the socio-demographic features of victims. This was crucial in understanding the most vulnerable group, and factors that increase their vulnerability. In return, this helps in building resilience.

Under the demographics of users, this study investigated the following features of the drug abusing population; age, gender and socio-economic status. The respondents were required to mark which population category they felt were the most abusers of drugs. The results are presented in Table 4.2.

Table 4.1: Demographics of Victims

Demographic Characteristics	Frequency response	Percentage response
Age group		
18-25	98	25.52%
26-35	135	35.16%
36-45	95	24.74%
46 and above	56	14.58%
Gender		
Male	289	75.26%
Female	95	24.74%
Socio-Economic Status		
Low	134	34.90%
Middle	171	44.53%
High	79	20.57%
Education		
No Education	76	19.8%
Primary	132	34.4%
Secondary	116	30.2%
Tertiary	60	15.6%

Source: Field data, 2023

4.3.1.1 Age group

According to the findings of the study on the nature of drug abuse in the coastal region, age was a significant factor among drug abusers. The study revealed that the highest percentage of drug abusers fell within the age group of 26-35 years, which accounted for 35.16% of the total respondents. The age group of 18-25 years was the second-highest group with a prevalence rate of 25.52%, followed by the age group of 36-45 years with 24.74%. The age group of 46 years and above had the lowest prevalence rate of drug abuse with 14.58%.

During the focus group discussions, a village elder from Shariyani opined that:

The age group of 26-35 years is the most vulnerable to drug abuse due to factors such as peer pressure, unemployment, and the desire to fit into certain social groups. They are at a stage in their lives where they are trying to establish themselves and may succumb to negative influences that lead to drug abuse (FGD with village elders, 23rd March, 2023).

The results of the study indicate that a majority of the drug and substance abuse victims are below 40 years. They start at a young age, and this increases the complexity of the situation. Presently, even young children aged 9-12 years are taking drugs. They collect *muguka* leaves when they are as young as 3-4 years from the suppliers whose businesses are run from points referred to as “*muguka* base”. Since the society has normalized this negative trend of drugs and substance abuse, the children grow up knowing that it is just normal. Consequently, they embrace the culture of taking drugs from young age.

The age group of 15-29 years had the highest prevalence rate of drug abuse. Drug abuse was prevalent among young people due to factors such as peer pressure, easy accessibility of drugs, and lack of parental guidance as outlined by NACADA (2020). This finding supports the results of the current study, which also identified the age group of 18-35 years as the most vulnerable to drug abuse.

The age group between 15-29 years comprises of the highest population of idlers in Mombasa and Kilifi. These are the individuals who have no meaningful jobs and they tend to spend time together doing the same things since they are in same age group. Social learning theory, points out that people who spend time together opt to learn from each other as they observe what their peers are doing. In the same way people who spend time together will learn drug abuse tactics from each other through social learning skills such as observation and imitation.

Another study conducted by WHO (2020) found that drug abuse is more prevalent among socio-economically disadvantaged young populations. The study notes that people living in poverty-stricken areas, especially the young ones are more likely to engage in drug use due to various factors such as lack of access to education and employment opportunities.

Drug abuse rates among different age groups vary by drug type. Often, young people aged 18-25 years are more likely to use illicit drugs such as marijuana and prescription drugs, while older age groups are more likely to use alcohol and tobacco as explained by MOH reports (2020). The report reflects the data from the current study, which identified young people as the highest group of drug abusers in the coastal region. In Kilifi and Mombasa counties, drugs are readily available due to the geographical location of the area.

4.3.1.2 Gender

The study found that 75.26% of drug abusers in the region are male, while only 24.74% are female. This indicates a significant gender disparity in drug abuse in the coastal region.

During the focus group discussions, a village elder pointed out that:

In our community, men are expected to be tough and masculine, and this often translates to risky behavior such as drug abuse. Women, on the other hand, are expected to be more reserved and responsible, and drug abuse goes against these expectations. However, there are instances where women who are in abusive relationships turn to drugs as a way to cope with the trauma (FGD with village elders, 23rd March, 2023).

However, even women are taking drugs. The trend is changing as more and more women are joining the dangerous culture of abusing drugs. It is worse because they become pregnant and give birth in the dens and bring up a den generation.

During an interview, the County Commissioner Kilifi County said that:

In this area, women have also been seen to get involved with the abuse of drugs. Many young women abuse drugs like alcohol and bhang with some engaging in such practices while in the company of their young children. The peril is a problem that is bound to affect future generations (Interview with County Commissioner, 14th April, 2023).

This study confirms the results of other studies that have linked drug usage to gender. Sambai *et al.*, (2019) observed, for instance, that drug usage is more common among males than among

females in Kenya. The research also showed that drug usage was more common among males and that it is intensively prevalent at a younger age. Mainga *et al.*, (2020) conducted another research on substance abuse in Kenya and found that males were more likely to be heavy users than females.

UNODC (2019) concluded that there is a worldwide gender gap in drug usage. Almost everywhere in the globe, males were found to consume drugs at higher rates than women. Women drug users are more likely to experience prejudice and hostility than their male counterparts, according to the research.

According to research by Bitta *et al.*, (2019) in Kenya, 70.2% of drug abusers are male. This is a much higher percentage than among women. A majority of drug abusers in Kenyan urban centers are males (77%), according to a study by NACADA in 2021. Similarly, Ahmad *et al.*, (2022) study in Nigeria shows a similarly high proportion of male participants (78.5%) in drug and substance abuse.

4.3.1.3 Socio-economic Status

The findings of the study indicate that 34.9% of the drug abusing population in the region fall under the low socio-economic status category, while 44.53% belongs to the middle socio-economic status group. The high socio-economic status group comprises of 20.57% of the drug abusing population in the region.

During the focus group discussions, a village elder stated that:

Hali ya uchumi inachangia sana katika matumizi ya madawa ya kulevya katika jamii yetu. Wale wanaoishi kwenye umaskini mkubwa wanaona madawa haya kama njia ya kujituliza na kukwepa ukweli wa maisha yao magumu. Wale ambao wako katikati, wanatafuta namna ya kukabiliiana na stress na matatizo ya kila siku. Wale ambao wako juu kiuchumi wanatafuta

utajiri wa haraka na ushawishi wa kijamii. (The economic situation contributes greatly to drug use in our society. Those living in extreme poverty see drug use as a way to escape their harsh reality. Those in the middle seek ways to cope with everyday stress and problems. Those who are economically well-off seek quick wealth and social influence) (FGD with village elder, 23rd March, 2023).

In an interview, a male victim of drug and substance abuse stated that:

Most of my friends who abuse drugs are poor. They have a poor family background. They take drugs because they want to run away from the reality of life. The high levels of poverty make them feel useless, and they have to look for a way of forgetting that they are poor (Interview with a victim, 22nd April, 2023).

Several studies have found an association between income level and drug abuse. Maraka *et al.*, (2020) observed a correlation between having a lower socioeconomic position and substance misuse. Stress, social pressure, and easy availability to drugs were also shown to moderate the association between socioeconomic level and drug consumption. Adolescents from middle- and upper-class backgrounds were shown in another research by Njomo *et al.*, (2020) to be more likely to engage in substance misuse. Researchers also discovered that parental involvement and peer pressure moderated the association between socioeconomic position and substance addiction.

Poverty, unemployment, and a lack of education were also identified as major contributors to drug consumption in a survey conducted by the UNODC (2018). The study highlighted the need of addressing socio-economic issues in drug misuse prevention and treatment. Further, the study indicates that those living in poverty were more likely to have used illegal substances compared to those living above the poverty line with a correlation between drug addiction and not having a job or health insurance.

4.3.1.4 Education

The findings indicate that people with little or no education are vulnerable to drugs abuse. Among the respondents, those with no education had the highest percentage of drug abuse at 19.8% (76). Those who had only completed primary education follow closely with 34.4% (132). Those who had completed secondary education are at 30.2% (116), while those with tertiary education have the lowest percentage of drug abuse at 15.6% (60).

During the focus group discussions, a village elder pointed out that:

Lack of education and low levels of education are major contributing factors to drug abuse in our communities. People with low levels of education are more likely to engage in drug abuse due to lack of awareness and knowledge on the dangers of drug abuse. They are also more likely to have limited economic opportunities, which can lead to frustration and hopelessness, and ultimately result in drug abuse. Education is important in preventing drug abuse among the youth. Education equips individuals with knowledge and skills to engage in productive activities, which reduces the likelihood of drug use (FGD with village elders, 27th March, 2023).

According to CEC Health, most of the people with little or no education are easily influenced, and they turn to drugs to solve their problems. They end up being addicts, and this escalates the problem. The CEC stated that:

The illiterate members of the society hardly find meaningful jobs despite the responsibilities they have to meet due to the big number of their families. Due to the stress and demands from their families, the illiterate people often try to run away from responsibilities and realities of life. As a means of avoiding stress, they end up consuming drugs as they believe it helped them to deal with stress (Interview with CEC health, 15th April, 2023).

Several studies, including a report by UNODC (2020) have examined the relationship between schooling and drug abuse. People with less education were found to have a higher risk of drug use compared to those with a higher level of education. This is in line with the results of this research, which showed that many drug users in the coastal areas have low levels of education.

Education was shown to be protective against drug use by NACADA (2020). Higher-educated people were shown to have lower rates of drug usage compared to lesser-educated people in the research. This data implies that decreasing drug usage rates in coastal areas may be facilitated by increasing adolescent access to educational opportunities.

The Kenyan Ministry of Health published results of a research on drug misuse and literacy in 2018. Those with less education and lower incomes were shown to have a greater prevalence of drug misuse. The study's results urged the launch of public-awareness campaigns to combat the root causes of drug abuse (MOH, 2020).

Nduva *et al.*, (2020) discovered that high school graduates have a much reduced risk of drug usage than high school dropouts. The likelihood of drug usage among young people was also observed to decrease with increasing levels of education. These results provide credence to the argument that formal education may significantly curb drug usage.

4.2.2 Drug Route Administration

To understand how drugs are taken, the household heads were asked to explain methods of drugs and substances abuse through an open-ended questionnaire. The results of the questionnaires are triangulated with what other respondents indicated during interviews and FGDs and are discussed in this section.

Drugs, both the licit and illicit ones can be administered to the body through several routes. For instance, there are five routes of drug abuse which allow drugs to enter the body. The routes through which the abusers administer these drugs are thus classifiable into enteral and parenteral routes with both routes exhibiting specific advantages and disadvantages thus affecting the choice of drug for abuse as well as the route (Cheng *et al.*, 2008). The enteral route is basically

the oral route of administration where the abused drug is taken into the bloodstream via absorption in the small intestines (Leal-Calderon & Cansell, 2012). The oral route of drug administration is further classifiable into sublingual and buccal routes, where sublingual refers to the administration of a drug through absorption by the blood vessels found underneath the tongue. Buccal method of administration involves the absorption of drugs from the area between the cheeks and the teeth.

The parenteral route of administration, as the name suggests, refers to the administration of drugs through regions of the body beyond the intestines (Leal-Calderon & Cansell, 2012). Parenteral route of drug administration is the preferred choice for most abusers of injectable psychoactive substances as the bioavailability of the drugs is higher compared to the oral route where drugs are swallowed. As such, parenteral route of drug administration focuses on such methods as intramuscular, intravenous, and subcutaneous methods (Verma *et al.*, 2010). It is worth noting that these routes of drug administration are applicable for both the legal and illegal drugs thus their relevance in this study.

The various ways through which the drugs are administered into the bodies of the abusers have been widely studied and the findings recorded in this study. Some drugs were found to have a single main route of administration while others were found to exhibit properties which allow for variations in route (Prasad *et al.*, 2018). The drugs thus possess different regional variations with regards to the administration routes. Another aspect that was brought up during an interview with the heads of NACADA offices showed that injecting drug users are likely to use other drugs through injection (Rapoport *et al.*, 2018). The results of the study on the various modes, formulations, and routes of administration are as outlined.

4.2.2.1 Oral Administration

The oral route of drug administration is one most accepted by many individuals both for the licit and illicit drugs because it is a less invasive and intimidating route. There are numerous drugs that are abused orally which includes both prescription and club drugs. The drugs that are administered through the oral route are Khat/miraa and cannabis (Admassie, 2018). However, cannabis that is taken through the oral route is not as effective as the heated one. This outlines the aspect that cannabis can be administered through various routes but there is the preferred one due to the achievement of the desired effect. The oral route of drug administration is inclusive of such processes as chewing and swallowing for such drugs as khat (Zhan, 2018).

The administration of drugs through the oral route was supported by the local administrative chiefs during an interview. One, from Mombasa in particular, stated the following:

Most of the drugs abused in Mombasa are taken through the oral route. The accessibility of drugs that can be administered orally is easier compared to injectables and other drugs. This being the case, oral route of administration has seen to it that most of the psychoactive substances have been able to reach the bloodstream and brain of many individuals. Drugs such as *miraa*, alcohol, and *muguka* can only be taken through the mouth. The route is therefore in wide application among many drug users in this region (Interview with Local Administrative chiefs, 12th April, 2023).

In a different setup, through open-ended questionnaires filled by victims, one seconded the administrative chief stating that:

There are many drugs that are abused orally. The oral route is not one of the best routes but where the user lacks other means of abuse, the easiest and most applicable route is through the mouth. There are several processes that involve this route. These have been inclusive of chewing and swallowing or direct swallowing and drinking. Majority of abused drugs can only be taken orally though some can be taken into the body through several other routes including injection, smoking, sniffing and even snorting. Drug abuse is however a practice that is devious and all members of the society should strive to fight against it and eradicate it completely (open-ended questionnaire for victims, 17th April, 2023).

The oral route of drug administration was highly beheld as the route with the highest rate of drug administration. There are two drug formulations that can be administered through this route. These are the liquid and solid forms of drugs (Thabet, Klingmann, & Breitzkreutz, 2018). For instance, alcohol can only be taken orally. Alcohol is a liquid thus any other route of administration would not be successful since the amount required to reach the desired effect can only be achieved through orally drinking it. In other instances, drugs such as cannabis are incorporated into other foodstuffs for abuse during such events as parties for the purpose of recreation of the abusers (Atsmon *et al.*, 2018). In this case, the drug can be administered through other means but for disguise, individuals opt to take it through other components.

4.2.2.2 Intravenous Route

Injectable drugs are commonly used due to their high bioavailability that accounts for their ability to make the abuser get more immediate high. Many drug users inject the drugs directly into their systems (Paquette, Syvertsen & Pollini, 2018). The administration route is a dangerous one in that many of the injecting drug users usually end up sharing the body piercing tools including needles and syringes. The factor has doubled the chance of such parties being infected with infectious diseases such as Hepatitis and HIV/AIDS (Zibbell *et al.*, 2018). Thus, the method is invasive compared to the oral administration route. Due to the introduction of the drugs directly into the bloodstream, high bioavailability is achieved. The result has been an increased chance for the event of an overdose of the drug being abused which is a potentially risky aspect that can lead to the death of a victim.

Drugs that are administered through the intravenous route can be acquired in various formulations including liquids and solids where the solids are crushed into powder and dissolved for injection (Bittner, Richter & Schmidt, 2018). There are licit and illicit drugs that can be

administered intravenously including heroin, cocaine, prescription stimulants, and prescription opioids. The only advantage with intravenous administration of drugs for individuals with substance use disorders is the fast rate at which an individual gets high (Fisusi & Akala, 2019). The effects of the drug are realized within a very short time compared to such routes as the oral administration route. There are however more disadvantages including the occurrence of infections for instance through transmission by sharing of needles and syringes, damage to the veins due to repeated injection on the same site, and even visible scarring which could result to the formation of ugly scars on the skin at the site of the injection (Teoh, Moses & McCullough, 2019).

The presence of injecting drug users in the coastal region together with the rampant increase in their numbers was proven in a interview with one of the victims who articulated the following:

Sisi tulikua tunatumia heroin tu kama vile mtu anaweza kutumia dawa ingine ya kawaida. Kuna furaha isiyoelezeka inayotokana na dawa za kulevya ambazo hufika kwenye damu mwilini mwa mtu kupitia kwenye sindano badala ya kuinywea mdomoni. Sababu ya kutumia sindano kama njia ya kuweka dawa za kulevya mwilini ni kwa sababu kupitia njia hii, mtu anaweza kujifurahisha kwa njia nyepesi isiyochukua muda mrefu kama ile ya kula, kumeza au kunywa dawa hizi. Ni kweli mathara yake yapo kwa wingi ila uzuri wake umeyabwaga mabaya yote kwa kumsaidia mtu kuyatoroka maisha yake ya kikweli ya hapa duniani kwa njia ya haraka. (We used to use heroin just like we would use any other normal drug. There is indescribable joy that emanates from the abuse of drugs that are administered to the body by the use of needles and syringes rather than through the oral route. The reason behind the use of injection to administer the drugs is because the results are realized within a short time. It is true that there are many negative effects resulting from this. However, all this is masked by the need to escape from the reality of life by many individuals thus their choice of action) (Interview with a victim, 23rd March, 2023).

This was seconded by another victim in the region who pointed out that:

Drug abuse has been a troubling problem that has left many grappling to overcome dependency. Injecting drug users have been more challenged by

the menace. Many of them are multiple drug users where it has not been uncommon to find a heroin drug abuser trying to abuse other drugs through the intravenous administration since the major drug that they are dependent on is administered intravenously (Open-ended questionnaire answered by a victim, 13th April, 2023).

The intravenous route has also exhibited several challenges such as blood borrowing among injecting drug users. Blood borrowing has been a key causative agent of the rampant spread of infectious diseases like HIV/AIDS and Hepatitis B (Adams *et al.*, 2019). The individuals borrowing blood usually do this to acquire the drugs that have already been injected into the bloodstreams of their fellow abusers due to reasons such as unaffordability of the drug or simply the lack of purchasing power. The practice is said to involve the sharing of body piercing equipment which is an enabling factor for the spread of infections (Arendt *et al.*, 2019). The notion that blood borrowing is one of the risk-posing factors in drug abuse and is directly linked to the intravenous route of drug administration was supported by a recovered victim of drug abuse from Mombasa through the following sentiment:

The act of blood borrowing is not a new phenomenon among injecting drug users. The practice has always been there but had not yet been uncovered by many of the studies performed on drug abuse. My journey as an injecting drug user started way back when I first joined university and could not afford to meet my daily requirements which had also affected my performance in school. Academic failure stimulated my first attempt to indulge in drug abuse which later stemmed up from a bhang smoker to a heroin injector. Days passed and at some point, I could not afford to pay for my own drugs hence ended up borrowing blood from one of my injecting drug user friends. It is just by sheer luck that I managed to escape without as much as an infectious disease (Interview with a recovered victim, 19th March, 2023).

The study's focus was on the illegal use of drugs where the menace has entailed even the abuse of prescription drugs. There are different formulations through which drugs are abused all of which determine the route of administration thus providing explanation to the "how" in the attempt to seek understanding of how drugs are abused. The formulations are liquids or solids,

which can be found as tablets or powder (Seely *et al.*, 2013). Where the formulation does not allow for the desired route of administration, the drug abusers have improvised means through which they ensure that their need to nurse addictions is achieved by changing the formulation either mechanically or chemically. For instance, when there is need to inhale or snort a drug that can only be found as a tablet, the abuser may crush it to form a powder thus snort it or dissolve it in water for injection (Wolny, 2007).

4.2.2.3 Snorting and Sniffing

Snorting and sniffing of drugs are methods of drug administration intranasally. Sniffing is at times referred to as nasal insufflation. Sniffing has been applicable where the individuals with SUDs take such drugs as cocaine, heroin, and prescription pills like Adderall or Vicodin whose tablets can be crushed and snorted (Daley *et al.*, 2020). Other than powder, snorting has been found to involve the intake of drugs dissolved in liquid via a straw. There have been a variety of names used to refer to the straw method with the major ones being inhaler, bullet, or bumper. The process of sniffing or inhaling drugs has been found to take different forms including huffing or bagging. Huffing has become a common practice among teenagers who will not hesitate to use everyday household products such as glue, cleaning products, and aerosols like spray paint. Gases such as butane or propane have also been greatly abused as psychoactive substances through sniffing colloquially referred to as sniffing and in other cases bagging (Broussard, 2020).

Snorting refers to the explosive sound made when one forces air quickly up into the nose where the possibility of forcing it down is also present. Snorting has majorly been used for the administration of the drugs obtained in powder formulation, an epitome of this being cocaine and heroin. Whereas the administration of drugs through such routes as intravenously or through

smoking produces quicker and more intense effects, snorting produces effects that last longer even though the process takes more time than that of the aforementioned routes. Many of the drug abusers have been deemed to use this method of drug administration with the assumption that it poses lesser harm to their health through the limitation of its affects (Schneider *et al.*, 2020). However, snorting of drugs such as cocaine has several dangers that are bound to be experienced by the user ranging from mild to severe nosebleeds, to holes in the nose.

Studies conducted on the snorting and sniffing methods of psychoactive substance administration into the body have expounded on the ways through which the methods are similar and their differences. For instance, snorting and sniffing of drugs are similar in that both methods involve the uptake of drugs through absorption by the nasal membranes (Wang *et al.*, 2020). They are however different in various ways. In snorting, a powder form of a drug is inhaled or a straw used to inhale a drug that is dissolved in liquid. As for sniffing, the method is majorly used for the administration of inhalants that can be found in such areas as the household including huffing spray paint and glue (Wang *et al.*, 2020).

Snorting and sniffing were supported by a victim of drug abuse from Kilifi who opined that:

The effect of cocaine can only be best achieved through snorting. The use of cocaine gives one an effect of being high within a shorter time compared to other drugs. The intake of cocaine through the nose enables one to have a long-lasting high. The process of absorption in the nose usually occurs slowly but the desired effect is achieved and even lasts longer. I learnt this during my university years, when I first joined a clique whose requirements for involvement demanded the use of cocaine (Interview with victim, 17th March, 2023).

There are however many dangers associated with the administration of drugs through the sniffing and snorting routes. The risks emanating from this route are majorly experienced on the nasal cavities. Snorting of drugs such as cocaine and heroin can for instance lead to the loss of one's

ability to smell, swallowing difficulties, a runny nose that is chronically inflamed as a result of irritation of the nasal septum, frequently occurring nosebleeds, compounded by ruptured blood vessels of the nasal passages. The dangers associated with sniffing of drugs include the loss of hearing coupled with brain damage as a result of reduced blood flow to the brain, impairment of coordination and nerve damage leading to limb spasms, liver and kidney damage, and the risk of disruption of behavioral development for teens and adolescents who sniff drugs.

The sniffing and oral routes of administration lead to an increased risk of overdose and drug dependence. Snorting and sniffing expose one to the danger of addiction. The risk is compounded by the risk of fatality on an individual which is inclusive of sudden death especially for the first-time drug users. The risk increases with the repeated use of the drugs in abuse regardless of the method in which it is administered.

Depending on the drug of choice of an individual, one may experience different physical, social, and psychological symptoms. The symptoms are typically difficult to control and greatly impact the quality of life of an individual (Compton *et al.*, 2007). There could be restlessness, auditory and visual hallucinations, as well as paranoia especially with the prolonged use of such drugs as cocaine. The abuse of drugs further leads to the increase of behavior-based risks. Where the individuals share the straw and other tools like a house key used for the snorting or sniffing of a drug, there is an increased risk of the spread of infections as the tools possess the ability to spread pathogenic substances. In severe cases, symptoms such as comas, seizures, and suffocation may occur.

4.2.2.4 Smoking

Smoking is generally an inhalation type of drug administration route. Smoking may occur occasionally or habitually as a result of drug addiction. There are several drugs whose intake usually occurs through smoking including bhang, tobacco, and cocaine. Smoking is an unhealthy habit in that it exposes the abuser to numerous health problems. In some instances, smoking has been proven to affect some of the psychiatric medications that could have been administered in the user's body (Farsalinos, Barbouni & Niaura, 2020). The medications affected include antidepressants, anxiolytics, antipsychotics, and hypnotics. Their concentrations in the body are significantly reduced by smoke emanating from cigarettes. In this case, reduction in the effectiveness of the medications necessitates the increment of the doses required for the desired therapeutic effect.

There have been several studies conducted to establish why many people opt to smoke drugs other than employ the administration of drugs through other routes. Smoking enables one to achieve the effects faster and intensely than it is with the other routes. Just as injection, the route ensures high bioavailability of the drug administered to the brain (Kuntic *et al.*, 2020). Through smoking of such drugs as crack, the user is able to gain a powerful sense of euphoria which is absent when the drug is administered through other routes as snorting or swallowing. More so, many of the drug abusers deem the method as a less invasive one as it does not expose them to the transmission of blood-borne infections as the intravenous route does.

Smoking as a method of drug abuse along the coastal region was supported by all the individuals involved in the study as respondents. During an FGD with village elders, one of them pointed out the following;

Drug abuse has adamantly drowned many of our youths into the smoking era. There are very many teenagers and youth who are smoking drugs like bhang, cigarettes, cocaine, methamphetamine, heroin, and other drugs that we are yet to find out in our region. You will find that many of the youth have specific places from where they carry out these heinous acts as they are not conducted in public. They are actions that are majorly carried out in the evening hours in discrete areas away from the major population. The areas involved are usually so full of smoke at specific times of the day. In youth parties, there are many cases of smoking and drinking sprees as the definition of an improved recreational activity (FGD with village elders, 12th April, 2023).

There are many types of drugs that can be smoked. Some of these have other ways through which they can be administered unless it is the user's choice to smoke them. Marijuana is for instance abused through cooking and oral consumption either incorporated in edibles like cookies or brewed as tea, or smoking. Phencyclidine (PCP) is sold as powder and can be taken through injection or swallowing (Jenkins & Gates, 2020). However, it is most often smoked to garner the hallucinogenic and sedative effects that it induces in the abuser. Methamphetamine is also smoked but can be snorted, swallowed, or injected. Cocaine and heroin are other drugs that can be smoked for their effectiveness in the provision of the high feeling. Another drug that can be smoked is N, N-Dimethyltryptamine (Davis *et al.*, 2020). Other individuals smoke prescription drugs which they crush into powder before smoking and can even combine the formed powder with marijuana for smoking.

While smoking can be an easy and less intimidating way to abuse drugs, there are numerous health-associated dangers emanating from the same. The chronic smoking of drugs is bound to lead to addiction, overdose instances, and respiratory system harm (da Silva Araujo *et al.*, 2020). The risks associated with the respiratory system include lung irritation, breathing problems, acute respiratory distress, non-cardiac pulmonary edema, potentially life-threatening asthma, pneumonia, chronic cough, and exacerbated chronic obstructive pulmonary disease. It is ironical

that despite all the negative effects emanating from the abuse of drugs through smoking, the number of drug abusers using the same route of administration has drastically risen.

4.2.2.5 Rectal Administration

The rectal route of drug administration for drug abusers is not common. However, it is present and possible. In normal circumstances, suppositories are used rectally to provide local or systemic effects. Rectal route of drug administration among drug abusers has majorly been carried out by teenagers and young adults in the attempt to satisfy curiosity. The method could appear as laughable of a matter as it seems. However, it carries various dangers whose effects on one's body can be serious and lasting. Drug abuse through the rectal route has been given popular names like butt-chugging of boofing drugs, where butt-chugging involves alcohol (Seki & Fukushima, 2019).

Butt-chugging involves the introduction of alcohol into the body through the rectum and colon via the anal canal. The mucus membranes of the rectum and colon absorb the alcohol thus a faster method through which alcohol can reach the bloodstream and enhanced speed in which one gets drunk (Seki & Fukushima, 2019). The method has been preferred by many college and university students since dopamine release is achieved faster and thus the ability to acquire euphoric effects quickly. The method however houses numerous disadvantages including severe alcohol poisoning, damage to the colon, rectum, or anus, brain damage, and even death (West 2019). Damage to the anal area can result from the instrument or device used to administer alcohol or the alcohol itself.

A victim from Mombasa supported the idea of rectal administration of alcohol among college and university students. The following is her articulation;

Alcohol taken through drinking does not achieve the effects that an individual so desires when first taking it. Intake of alcohol through the rectum ensures that the fluid reaches the bloodstream within the shortest time possible. Such being the case, alcohol administration rectally has been common among many but is carried out with extremes of privacy as it is not acceptable in the society. The practice has been among both the male and female students with the female students dominating in it. The number that engages in rectal administration is however much lower than that that takes alcohol through oral route (Interview with victim, 26th March, 2023).

The study's focus was on the illegal use of drugs where the menace has entailed even the abuse of prescription drugs. There are different formulations through which drugs are abused all of which determine the route of administration thus providing explanation to the "how" in the attempt to seek understanding of how drugs are abused. The formulations are liquids or solids, which can be found as tablets or powder (Seely *et al.*, 2013). Where the formulation does not allow for the desired route of administration, the drug abusers have improvised means through which they ensure that their need to nurse addictions is achieved by changing the formulation either mechanically or chemically as forementioned.

The pharmacokinetics and pharmacodynamics can therefore be said to greatly influence the choice of the route of administration. The desired effect and the level of need all collaboratively direct the abuser's choice of drug for abuse and the route of administration. The drugs will therefore be administered from various sources and through different routes depending on the abuser and their preferences. There are those drugs that are chewable and are thus eaten, the inhalants, injectables, and those that are combined with other components for usage. The abuse of prescription drugs has been a vital part of the development of the menace where the understanding of their usage and effects has promoted their abuse worldwide. The commonly abused prescription drugs have been inclusive of but not limited to opioids, CNS depressants, and CNS stimulants (Armenian, Barr-Walker & Lynch, 2018).

4.2.3 Causes of Drug and Substance Abuse

From available literature the following have been identified as causes of drug abuse Ongwae, (2016): Muoti, (2014): Chesang, (2013). Using this information, household heads were asked to indicate the main causes of drug and substance abuse in Kilifi and Mombasa Counties. The results are indicated in the Table 4.2.

Table 4.2: Causes of Drug and Substance Abuse

Cause of drug abuse	Response rate	Rank
Unemployment	99% (380)	1
Poverty	98% (376)	2
Mental Health issues	97% (373)	3
Curiosity and experimentation	96% (370)	4
Family history	95% (365)	5
Peer pressure	94% (361)	6
Lack of awareness	89% (342)	7
Easy access to drugs	84% (323)	8
Adverse childhood experiences	82% (315)	9
Social media influence	81% (311)	10
Social stigma	76% (292)	11
Moral Decay	75% (288)	12

Source: Field data, 2023

4.3.3.1 Unemployment

Idleness or a lack of meaningful activities or goals can be a contributing factor to drug abuse. When individuals have too much free time, they lack purpose and may turn to drugs as a way to fill the void and escape their boredom or unhappiness.

The issue of idleness as a cause of drug abuse was a major concern among the household heads in the coastal region, with 99% (380) of the respondents indicating it as a leading factor contributing to drug abuse. This finding ranked idleness as the top cause of drug abuse in the study above socioeconomic factors and other associated factors.

These findings were confirmed in the FGDs where in all the discussions, the elders agreed that idleness was a major cause of drug abuse in the area. Specifically, an elder from the Shanzu self-help group said the following:

Sisi wazee wa kijiji tunajua vijana wetu wanaishiwa shughuli za kufanya na ndio maana wanakimbilia kwenye matumizi ya dawa za kulevya. Tunahitaji serikali itusaidie kutengeneza program za kuwapa vijana shughuli za maana, vinginevyo tatizo hili litaendelea kuwepo. (As village elders, we know that our youth lack meaningful activities to do, and that is why they turn to drug abuse. We need the government to help us create programs that provide our youth with meaningful activities, otherwise, this problem will continue to exist) (FGD with village elders, 20th March, 2023).

Another elder in the Ngerenya location, during an FDG, said the following:

Wanakijiji wengi hawana kazi ya kufanya, na hawajui wanaweza kufanya nini, hivyo wameamua kuingia kwenye matumizi ya dawa za kulevya ili kupunguza msongo wa mawazo na kujihusisha na kitu. (Many villagers don't have work to do, and they don't know what they can do, so they have decided to use drugs to reduce stress and engage in something.) (FGD with village elders, 19th March, 2023).

The connection between idleness and drug abuse has been the focus of several studies. Kamenderi *et al.*, (2019) found that boredom and idleness were significant factors in both the onset and maintenance of drug abuse. The study also revealed that young people who lacked access to education, training, and employment opportunities were more likely to engage in drug abuse. Similarly, Akiyama *et al.*, (2019) found that unemployment and a lack of productive activities were strong predictors of drug abuse among the youth population in Kenya. In Nigeria, another study revealed that idling and boredom were significant factors in the initiation of drug abuse among young people (Ahmad *et al.*, 2022). In India, a study found that a lack of opportunities for social and economic advancement contributed to drug abuse among young people (Avasthi and Ghosh, 2019).

Rather than only focusing on individual-level interventions such as treatment and rehabilitation, Mburu *et al.*, (2019) suggest that, it is essential to consider interventions that address the root causes of drug abuse. The researchers outline that participation in positive, structured activities such as sports and community service could be protective against drug abuse among youth which implies that idleness is a root cause of drug abuse and provides opportunities to address the root causes of idleness and boredom.

In the coastal region of Kenya, a report by NACADA (2019) also indicates that unemployment is a significant driver of drug abuse. The report highlights that individuals who are not in school or unemployed are at a higher risk of drug abuse than those who are employed or in school.

Spending too much free time means that the majority of Kilifi and Mombasa youths try to find a hobby or something to keep them busy. It is during the free time that the youth observe how their fellow youths spend their time thus end up adopting the habit of abusing drugs from the abusers (Kamenderi *et al.*, 2021). This assertion is in line with social learning theory where individuals learn from others through observation as well as imitation. It is what the youths observe during their free time that they tend to practice and eventually end up being drug addicts.

4.3.3.2 Poverty

The findings of the study revealed that poverty was identified by 98% (376) of the household heads as the second most important leading cause of drug abuse in the coastal region of Kenya. The high percentage of respondents that identified poverty as a cause of drug abuse highlights the impact of poverty, unemployment, and lack of access to education and healthcare on drug abuse in the region.

According to Mwai *et al.*, (2013) indigence is a well-pronounced problem among many families in Mombasa and Kilifi. The relationship between poverty and substance abuse is intertwined in that one may lead to the other. The impoverished communities in these two counties are facing significantly higher rates of addiction to drug and substance abuse than those of the higher classes. The severe long-term addiction among people experiencing poverty results from stress caused by financial instability, unemployment, lack of education, emotional instability, and mental illness (Bitta *et al.*, 2017). The stated aspects directly link poverty and drug abuse in Mombasa and Kilifi counties. Poverty has increased the rate and extent of drug abuse, while addiction has increased the risk of poverty.

In one of the interviews with the administrative chiefs, one supported the notion that poverty causes drug and substance abuse with the explanation that:

Poverty in the Coastal region of Kenya is the major cause of drug and substance abuse. The inability of one to acquire their basic needs or provide to their families is a catalyst for the engagement in drug and substance abuse. This is because many individuals deem it as an escape from the reality of their situation of lack and want. So being the case, many individuals in the region have ended up being drug addicts thus the many problems that are being experienced in our areas. More so, the issue of poverty not only leads to drug and substance abuse among adults but also among teens and youth in the attempt to deal with the difficult situations experienced back in their homes (FGD with administrative chiefs, 20th March, 2023).

This was seconded by the head of NACADA station who also opined that poverty is a menace that has directly caused drug and substance abuse in Mombasa and Kilifi. The following was his assertion:

Drug and substance abuse has for the past few years grown and expanded to greater lengths in both Mombasa and Kilifi. Indigence among many individuals in the region has been a key contributor to the rise of the malpractice. The rate of the spread of the menace is directly proportional to the rate of poverty experienced in the region. Unemployment, for

instance, causes poverty which renders one unable to cater for their basic needs which can be a positive stimulant towards the use and abuse of alcohol and other drugs. The problem of unemployment also subjects many to idling which makes them easy to lure into drug and substance abuse. With consistent increase in poverty, drug abuse then advances to drug dependence and thus addiction. Therefore, the increased rate of the growth of the drug abuse problem has its roots in the high number of poor and unemployed people in the region (Interview with head of NACADA offices, 27th March, 2023).

During the focus group discussions, a village elder pointed out the following:

In our community, we have seen many young people who have turned to drug abuse because they do not have jobs or cannot afford to go to school. They feel like they have no future, and drugs provide a temporary escape from their problems (FGD with village elders, 20th March, 2023).

Poverty in Mombasa and Kilifi has thus caused emotional instability and mental illnesses, consequently leading to drug and substance abuse. Poverty in adulthood and among children has caused deteriorated mental health (Aksunger, 2022) through social stresses, stigma and trauma, leading to drug and substance abuse. The constant high levels of stress, for example, due to financial instability, thus a struggle to make ends meet, unsafe housing and comparatively poor physical health have hastened the spread of drug and substance abuse where the victims of poverty use it as a method of consolation to forget their daily problems.

Poverty decreases social support, for example, in Mombasa slum areas where people live as strangers in substandard accommodation (Kipyatich, 2021). People experiencing poverty in the coastal region lack emotional support from friends and family, which is an important aspect of coping with their difficult situation since poverty is closely associated with exclusion and humiliation (Agade *et al.*, 2021). Lower-income adults in the region lack enough social support networks as they expend most or all of their energy trying to survive from one day to another. They end up feeling sidelined and thus may turn to drugs for consolation leading to the spread of the practice.

NACADA (2020) report outlines that economic hardship, particularly for young people in the coastal area, is a major risk factor for drug misuse. Many of these young people were found to have turned to substance abuse as a means of escaping the harsh realities of their lives. These findings support the results of the current study.

Other studies have also shown a link between drug usage and socio-economic factors like financial hardship and stress. WHO (2020) reported that, drug use was more common among individuals with lower levels of education. Unemployment is another major risk factor associated with drug use and addiction (ILO, 2020).

Finally, unemployment resulting to limited funding and poor access to healthcare due to unaffordability were other major socio-economic factors that contributed to drug misuse in Kenya, with the coastline area being particularly hit hard. UNODC (2020) investigative report on the situation of drug abuse in Kenya revealed that, majority of the population that could not access comprehensive medical care services resort to the abuse of antibiotics and pain medication such as paracetamols and Bascopan, especially amongst young and teenage school going children. The use has been majorly seen in girls who often take the drugs to relieve their menstrual pains. The unemployed on the other hand resorted to over-the-counter prescription drugs to manage illnesses and pains without the correct consultation from a certified health technician.

KNBS (2019) outlined that, poverty levels in the coastline region are very high, reaching as high as 50% in certain locations. The high percentage of poverty along the coast makes it easy for people to turn to drugs like bhang. According to NACADA (2020) and the Drug Use and Substance Abuse Survey (2021), 83.2% of drug users in the coastal area report using bhang. The survey also indicated that individuals between 18 and 35 years old make up 77.8% of coastal

region drug users. The research also indicated that economic variables like unemployment and low wages have a role in fueling drug usage.

Society is socially interdependent in nature as it enhances its survival as suggested by functionalism theory. In Mombasa and Kilifi, resources are limited and the majority of residents are striving to survive. This means that despite the interdependent nature of society, sometimes it is difficult to meet the needs of each member (Phyllis *et al.*, 2022). This scenario is attributed to poverty and more often leads to stress. To withstand the stressful situation that Kilifi and Mombasa residents have been subjected to by poverty, they end up seeking refuge from drugs just to escape from the reality of life. Drug abuse as a result of poverty has a general impact which is to hinder functionality of the society.

4.3.3.3 Mental Health Issues

According to the findings of the study, mental health issues including substance induced psychosis, depression, anxiety disorders, bipolar disorders, substance induced mood disorders and cognitive impairment were cited by 97% (373) of the respondent household heads in the study area as a cause of drug abuse, ranking it as the third most common cause of drug abuse in the region.

During the focus group discussions, a village elder pointed out that:

In the coastal community, mental health is not given much attention. There are many people who suffer from depression, anxiety, and trauma but do not seek help. Men and women suffer pressure from marriages. Children and young adults face a list of family problems including broken families, deaths and failed marriages. They turn to drugs as a way of coping with their emotional pain. This is a major factor contributing to drug abuse in our community. Additionally, drug abuse can also lead to mental health issues, creating a vicious cycle (FGD with village elders, 10th April, 2022).

Individuals with a history of mental health issues were found to have a higher likelihood to engage in substance abuse in a study conducted by NACADA (2020) confirming the findings of this study. Another research by KMHC (2020) found that, Kenya's inadequate number of psychiatrists (one per 500,000 people) is a major impediment to dealing with mental health problems and drug usage hence a high number of unattended individuals.

During an interview with a victim who was a university graduate, he pointed out that:

I started using bhang when my wife left me because I could not provide. I lost my marketing job during the COVID 19 pandemic. Instead of supporting me, she opted to go. My sisters and my only brother criticized me, claiming that I was careless. I hated myself and felt like I am not man enough. I started talking to myself, I was too depressed. I had no one who would listen to me. I found myself associating with those who abuse drugs as they were not concerned about my past. We shared good times smoking marijuana, and this gave me satisfaction for some time. I became an addict, and up to now I'm still struggling to recover from drug dependency (Interview with a victim, 19th March, 2023).

According to KNBS (2020), the number of people suffering from mental health issues is on the rise in Kenya, with depression being the most frequent mental issue affecting different generations inclusively. These individuals may resort to drug abuse or in some cases resort to professional help whereby they receive prescriptions of antidepressants that are later misused as outlined by MOH (2021). In this report, the Ministry of Health revealed that compared to those without mental health concerns, those who misuse drugs are more likely to become addicted. Nearly a third of all people seeking substance abuse treatment in the Kenya coastal region are diagnosed with a mental health disorder, according to a separate study by MOH (2022).

4.3.3.4 Curiosity and Experimentation

Curiosity and experimentation were identified as a significant cause of drug abuse in the coastal region, with a response rate of 96% (370) and ranking fourth on the causes of drug abuse in the

coastal region. It is evident that many individuals first attempt drug use out of curiosity or experimentation, and this eventually leads to addiction.

During the focus group discussions, a village elder stated that:

Katika kijiji changu, vijana wengi hujaribu madawa kwa msingi wa kujaribu na kutaka kujua zaidi bila kujua madhara ya muda mrefu ya utumiaji wa dawa hizo. Baadhi yao hulazimishwa na wenzao kujaribu dawa, na hii inapelekea uraibu. Ni suala kubwa ambalo linahitaji kushughulikiwa kwa sababu linawaathiri vijana wetu. (In my village, many young people experiment with drugs out of curiosity, without knowing the long-term effects of drug use. Some of them feel pressured by their peers to try drugs, and this leads to addiction. It is a serious issue that needs to be addressed since it affects the future of our youth (FGD with village elders, 27th April, 2023).

These findings reflect previous studies that have linked curiosity and experimentation with drug abuse. According to a report by UNDP (2015), young people try drugs out of curiosity or because they want to fit in with their peers. The report further outlines that drug experimentation often leads to addiction, and is a significant public health concern globally with curiosity being one of the primary motivations for drug use among young people.

During the interviews with a NACADA official, he pointed out that:

In my view, the young people are curious. They want to understand how it feels to produce a cloud of smoke from one's mouth. They feel a strong urge to taste the green *muguka* leaves, combined with *njugu karanga*. In the process of experimenting, they end up becoming addicts. The process of unlearning what they learn in this curiosity is very complicated (Interview with NACADA officer, 23rd March, 2023).

KNBS (2019) also reported a worrying trend in drug abuse among young people in the coastal region, where drug abuse was more prevalent among individuals aged between 15 and 34 years. The report further stated that drug abuse was more common among males than females, and it was more prevalent in urban areas than rural areas.

Another report by MOH (2020) evidenced that the majority of people who try drugs for the first time do so out of curiosity or to experiment. The report indicated that people who start using drugs at a young age are more likely to become dependent on them later in life. Peer pressure amongst young adults was a significantly worrying trend according to the reports because young people often want to fit in with their peers and may engage in risky behaviors, such as drug abuse, to gain acceptance.

Similarly, a study by NACADA (2020) found that drug experimentation was a significant contributor to drug abuse among young people in Kenya. The study found that young people were experimenting with new drugs, such as crystal methamphetamine and cocaine, and this was leading to addiction. The study further noted that peer pressure and the desire to fit in were the primary reasons for drug experimentation among young people.

4.3.3.5 Poor and Neglectful Parenting

In this study, 95% (365) respondent household heads attributed drug abuse to poor parenting and neglectful parenting, which ranked fifth among the major causes of drug abuse. The high percentage suggests that, family history is a significant concern in the coastal region and interventions targeting this factor could help prevent drug abuse.

During the focus group discussions, a respondent village elder from Kisauni stated that:

Ugonjwa wa matumizi ya dawa za kulevya umekithiri katika maeneo yetu. Sababu moja inayowafanya watu kutumia mihadarati ni historia ya familia, ambapo watu wanarithi tabia ya matumizi ya dawa za kulevya kutoka kwa wazazi na wazee wao. Kwa hivyo, hili ni tatizo linalostahili kusuluhishwa kabla halijakua zaidi. (Drug abuse is rampant in our area. One of the reasons is family history, where people inherit the habit of drug abuse from their parents and elders. Therefore, this is a significant issue that needs to be addressed by the entire community.) (FGD with village elders, 20th March, 2023).

Further, cases of family break ups increase the risk of drugs and other substance abuse through the mental weight of dissociation. The village elders argued that decay of morals, civilization, and modernity has made it very complicated for people to remain in their families. As a result, women get married to different men, after every few years. They get children from each husband, and when things do not work, they leave with their children and get married again. The children are brought up by the grand mothers who cannot fully control what they do. The locals call them *wajukuu wa bibi*, and they are very vulnerable to drugs and substance abuse. Most of these children end up in the dens using drugs as they have no one to take them to school or give them the right direction in life.

During an interview with the CEC Education from Mombasa County, she said that:

Families in this area normalize what is forbidden in other communities. A daughter will get married, and then separate with the husband. When she gets married to another man, she will go with the kids from previous marriage. The children from previous marriage, locally referred to as *wajukuu wa bibi*, will be taken to the grandparents of the new husband. The old granny can hardly control these children, and they end up abusing drugs so badly. This is a very dangerous trend in this region (Interview with CEC, 15th April, 2023).

According to Ashiono (2013), poor parenting has adversely influenced the rise of drug abuse in Mombasa and Kilifi where parents have failed in their parental responsibility. They have left their children to be parented by teachers. The menace of drug abuse caused by poor parenting has consumed much productive youth from Mombasa and Kilifi. Poor parenting variables that have led to drug abuse, among many, include neglectful upbringing, authoritarian parents, abuse of alcohol and other substances in the presence of children, lack of parental support in daily activities and poorly monitoring or non-monitoring parents. Mugalo (2022) further brings out that parental level of education has influenced drug and substance abuse.

One of the village elders, during an FGD, pointed out that:

A great number of parents in Mombasa have neglected their rightful duty of nurturing their children and equipping them with skills essential for the resistance of such negative influences as the urge to indulge in the abuse of alcohol and other drugs. In this scenario, many teenagers and youths have found themselves in this malpractice owing it to the poor parenting skills exhibited by their parents most of which has been a result of ignorance compounded with the lack of adequate knowledge by some parents on the positive ways through which children should be raised under the guidance and wisdom which should be delivered to them by their parents. Some of the parents have even proceeded to the use of these drugs in the presence of their children (FGD with village elders, 18th March, 2023).

The elder's statement was supported by a victim of drug and substance abuse who argued that:

There has been rampant neglect in the parental duty of upbringing children and teaching them important values such as how to say no to such misdeeds as the abuse of drugs and other substances. This was especially the case with me and other individuals who I have met in the attempt to fight the menace. Many of the teens and youths are reported to have had backgrounds with poor monitoring parents or in other cases, non-monitoring parents. As such, these individuals have easily been swept by the wave of drug and substance abuse. The same can be blamed on their parents as it is an occurrence that has resulted from their failure to perform their vital role pertaining the upright growth of their children (Interview with a victim, 20th March, 2023).

Neglectful parenting in Mombasa and Kilifi has promoted drug and substance abuse in adolescents and thus addiction into their youth. There are many cases in which parents have neglected their children's basic needs in these counties (Nyoike, 2021). The trauma resulting from lack and want has forced the teens to seek coping mechanisms, most of whom have turned to drugs. The situation has been aggravated when parents are both harsh and neglectful of their children's needs. The harsh parents exhibit acts like yelling, verbal or physical threats and hitting. The emotional distress resulting from this treatment have led to drug abuse.

Poor parental guidance including lack of parental involvement, inconsistent discipline, authoritarian and permissive parenting practices in the coastal region have further promoted drug

and substance abuse. Parents are expected to mentor their children on matters to do with their daily lives, including positive ways of dealing with their challenges. In Mombasa and Kilifi, however, parental guidance has not been a keenly observed aspect in many families where Nyongesa *et al.*, (2021) describe this as a parenting issue. Children from this region may therefore suffer from a lack of resilience and perseverance when the wave of drug and substance abuse comes sweeping due to a lack of proper guidance on approaching such lures.

Family history of addiction and abuse of alcohol and other substances in the presence of children has further led to drug abuse in both Mombasa and Kilifi. The problem has been attributed to cultural practices involving alcohol consumption. In such cases as these, the problem of drug abuse is initiated when the children desire to experiment with the drugs and substances used by their parents. As expected, it is impossible to warn children about the negative effects of drug abuse while simultaneously practicing the same. It is also known as genetic predisposition (Nyoike, 2021). The result is early exposure to and contacts with drugs among children. Consequently, parental use of drugs is one of the factors evident for poor parenting practices and has considerably led to drug abuse.

Lack of family involvement coupled with an uninvolved parent has also been a cause of drug abuse in Mombasa and Kilifi. The level of parental involvement and participation, coupled with healthy parent-child communication, greatly influences whether children will engage in drug and substance abuse (Nyoike, 2021). The negativity of the matter is that parents involved in this poor parenting fail to discipline their children and do not set boundaries. These children have limited access to parental guidance or nurturing, and they have been left to bring themselves up in practical measures. The parents are unresponsive and non-demanding. In the end, most of the

children have engaged in drug abuse which is mainly because of the decisions they have to make without the involvement of their parents or families.

In addition, single-parent families in Mombasa and Kilifi have led to drug and substance abuse. Children from such families are more likely to face behavioral and emotional health challenges than those raised by both parents (Nyongesa *et al.*, 2021). They may be aggressive or engage in high-risk behaviors like drug and substance abuse. The delinquency of these teenagers results from the challenges emanating from single-parenthood including less motivation, low academic performance, problems with peer relations, poor discipline instillation into the children, and financial instability and burden. Other children likely to participate in drug misuse activities are those that have been raised by HIV/AIDS-infected parents (Kingi, 2021). Their coping mechanisms include indulging in drug and substance abuse, thus contributing to the rise and spread of the vice.

Several previous studies have investigated the link between family history and drug abuse, supporting the findings of this study. Masha (2022) found that, individuals with a family history of substance abuse were four to six times more likely to develop substance abuse disorders than those without such a family history of abuse. Mbogo *et al.*, (2022) also investigated this link identifying that family history accounted for up to 40% of the variance in drug abuse and dependence. Bitta *et al.*, (2019) found that, a family history of drug abuse increases an individual's susceptibility to drug addiction and that children with a family history of drug abuse are four times more likely to develop an addiction than those without such a history. Another study by Mainga *et al.*, (2020) explored the relationship between family history of drug abuse and mental health issues. The study found that individuals with a family history of drug abuse

were more likely to have co-occurring mental health issues, such as depression and anxiety, which can contribute to drug abuse.

According to NACADA (2021), family problems, including parental separation, neglect, and abuse, are among the leading causes of drug abuse in Kenya. The report highlighted that children who grow up in households with a history of drug abuse are more likely to engage in risky behaviors, such as drug abuse and unprotected sex, due to the lack of parental guidance and support.

4.3.3.6 Peer Pressure

Peer pressure was identified as one of the key factors contributing to drug abuse in the coastal region, as highlighted by the responses of 361 out of 384 household heads surveyed in this study. The prevalence of peer pressure as a cause of drug abuse was ranked sixth out of the nine factors explored, with 94% (361) of respondents indicating that it played a role in drug abuse among the youth in the region.

Peer pressure for drugs and substances has been another dominant risk factor for children and adults in Mombasa and Kilifi. The element of peer pressure has affected some people more than others. Negative peer pressure has increased drug and substance abuse in the coastal region (Oguya *et al.*, 2021). Furthermore, peer pressure has been manifested both directly and indirectly in the coastal region. Peer pressure has interacted with other factors, such as family pressure and support, resulting in the possibility of drug and other substance abuse. Peer pressure encourages people to change their behaviors hence the ability to influence the growth and spread of drug and substance abuse in Mombasa and Kilifi.

The element of peer pressure as a causative agent of drug and substance abuse was highly supported by the religious leaders during an interview held in the area. One in particular stated the following:

Shinikizo la rika ni tatizo kuu katika kukua na kuenea kwa matumizi ya mihadarati katika kaunti za Mombasa na Kilifi. Shinikizo hili halipo tu miongoni mwa vijana bali pia kwa watu wenye umri mkuu. Kwa mfano, miongoni mwa wanaume, shinikizo la rika limeenea zaidi kupitia njia kama vile mwanamume anaweza kushinikizwa na wenzake kushiriki katika mambo kama vile unywaji wa pombe kama njia ya pumziko baada ya shughuli za kazi ya mchana. Hivyo basi, anayeshawishiwa anaweza kuingilia tabia hii kwa urahisi kwani wanaompa mwelekeo huu ni wa rika lake. Vivi hivi ndivyo inavyoendelea miongoni mwa vijana. Hivyo basi, watu kama hawa wanaweza kuingilia matumizi ya mihadarati ambao unaweza kukua na kuwa uzoefu. (Peer pressure is a great problem in the spread of drug and substance abuse in Mombasa and Kilifi. Peer pressure not only exists among the youth and teens but also among adults. For example, among men, peer pressure has been exhibited through ways such as when a man is persuaded by his friends to engage in alcohol drinking as a method of relaxation after a long day's work. This individual may easily fall for this as his peers are engaging in it. The same case applies to the youth and teens. As such, such people are likely to be involved in drug abuse which may progress to addiction.) (Interview with religious leaders, 27th March, 2023).

In an interview with the victims of drug and substance abuse in the region on the linkage between poverty and drug and substance abuse, a victim explained the following:

I fell into the trap of drug and substance abuse majorly as a result of peer pressure with regard to other causative factors. It was under the influence of my peers back in high school that I first attempted what I am fighting against today. There was this clique in my class that was composed of all the cool and seemingly rich students back then. The ardent desire to be like them coupled with the requirement that one had to be an alcohol drinker and user of such drugs as bhang and cocaine all worked together to push me into the initiation of these negative practices. I was not the only unfortunate individual since I followed a trend that had been and continues to be followed by many. Peer pressure is consequently a tool that has been used to drag many into the practice of drug and substance abuse in Mombasa and Kilifi as well as on a countrywide basis (Interview with victims, 31st March, 2023).

Peer pressure is a scientifically explored and acknowledged driving force for certain positive and negative behaviors, including drug and substance abuse. Peer pressure as a popular cause of drug abuse in Mombasa and Kilifi has steadily increased the vice. In the influence of decisions and habits, peer pressure has substantially enhanced the rise and spread of drug and substance abuse among the residents of these two counties (Nyongesa *et al.*, 2021). The reports obtained from the research on the linkage between drug and substance abuse confirm that peer pressure sways people into engaging in activities they normally would not have done where drug abuse is not an exception.

Direct and indirect peer pressure has manifested itself in different ways. Direct peer pressure is also called spoken peer pressure. It refers to peer pressure resulting from a person or group directly pressuring one into doing something or taking risks that they are uncomfortable with, including drug abuse. Indirect peer pressure is less invasive. It usually occurs from implied influences that make one feel like they must do what others are doing, including negative activities like drug abuse to avoid feeling out of place (Oguya *et al.*, 2021). Both of these have contributed to drug abuse in Mombasa and Kilifi.

However, the power of peer pressure has not been applied equally to all kinds of peers. The emphasis on the influence of peer pressure on drug and substance abuse has majorly been on young people (Jaguga *et al.*, 2022). In both Mombasa and Kilifi, peer pressure has formed the basis of initiating alcohol and drug abuse among the youth in and out of the school environment. The intensity of its effect has been felt in these areas with the rampant increase in the use of drugs for recreational purposes. Thus, licit, illicit and hard drugs have been abused among the youth due to peer and group influence.

Adults are also subject to peer pressure, just as children and youth. Adults are vulnerable to peer pressure when they are sensitive to rejection. To fit in with their groups of friends, they conform to practices that endear them to these groups, whether positive or negative. Peer pressure among adults includes men and women (Nyoike, 2021). Caving to peer pressure has included behaviors such as the abuse of drugs and other addictive substances. Some adults have ended up drinking too much alcohol due to the high intensity of the pressure exerted upon them by their peers. Peer pressure has, as a result, been seen to be harder for adults.

Peer pressure plays a major role in drug and substance abuse and addiction. The ability to refrain from doing something everyone in one's circle is doing is hindered, amounting to peer pressure. In children and adults, one often surrounds themselves with a group of people with the same interests and hobbies. As such, if one is a drug abuser, they are likely to have friends who also use drugs. Together with curiosity, peer pressure has promoted the use of heroin in Mombasa and Kilifi. In this manner, peer pressure has raised drug and substance abuse levels among children and adults (Masha, 2022).

During the focus group discussions, a village elder pointed out that:

Sijui hawa vijana wa siku hizi wamechangamka sana. Hawaangalii mbali na wanataka kuiga wenzao wa mataifa ya nje. Wanataka kuvaa nguo za wazungu, kutumia magari ya kifahari na kujihusisha na mambo ya ajabu kama vile kutumia dawa za kulevya. Wanasahau kwamba wao ni Waafrika na wanapaswa kuiga utamaduni wetu, sio wa kigeni. Kwa hivyo, sasa tunajikuta na tatizo la vijana wetu kufuata mkumbo bila kufikiria matokeo ya matendo yao. I don't know what's wrong with the youth of today. They don't look ahead and want to emulate their counterparts from foreign countries. They want to wear western clothes, use luxury cars and engage in strange things like using drugs. They forget that they are Africans and should emulate our culture, not foreign culture. Therefore, we now find ourselves with the problem of our youth following the trend without considering the consequences of their actions.) (FGD with village elders, 4th April, 2023).

These findings have been reflected in several previous studies. The researchers Ivanova Reipold *et al.*, (2022) in pilot study on drug abuse in the coastal region of Kenya discovered that the youth of Kenya are more vulnerable to drug addiction owing to the impact of other cultures and the need to blend in with the newest trends, which lends credence to the aforementioned results. The research indicated that young people's desire to fit in with their friends and avoid being ostracized is a big contributor to their drug usage. Kulohoma *et al.*, (2020) also showed that peer pressure is a significant contributor to drug usage among young people in Nairobi, Kenya.

Peer pressure is a major contributor to drug use among Kenya's adolescents, accounting for more than half of all reported instances in the coastal region, according to MOH (2020). KNBS (2019) further outlined that, after curiosity, peer pressure was the most common motivation for drug use among Kenyan adolescents. In addition, the survey found that peer pressure was a contributing factor in the initiation of drug use in 21.9% of cases. Peer pressure is a major cause of drug misuse among young people in East Africa, according to UNODC (2018). The need of therapies that target social pressure as a root cause of substance misuse was also stressed in the study.

Peer pressure was shown to be a major predictor of drug use in a research done by Phyllis *et al.*, (2022) among young people in Coastal region of Kenya. Peer influence was shown to be responsible for 40.3% of the observed variation in drug use behavior. Similarly, the researcher showed that peer pressure is a more significant risk factor for drug misuse than both family history and personal characteristics, findings which confirmed the results in this current study.

4.3.3.7 Lack of awareness

According to the findings of this study, 89% (342) of the respondents indicated lack of awareness including lack of education on drug and substance abuse, stigma and denial, peer

pressure, limited access to information related to drug abuse and early exposure and misdirection as a cause of drug abuse, ranking it at number 7 on the list of factors contributing to drug abuse in the region. These findings were qualitatively revealed in the study where during the focus group discussions, a village elder pointed out that:

Mara nyingi, watu hawajui madhara ya dawa za kulevya. Wanajua tu kuwa ni kichocheo cha raha na kuwa inawafanya wajisikie vizuri. Hawana taarifa kuhusu madhara yake kwa afya zao na kwa jamii kwa ujumla. Wanahitaji elimu na mafunzo kuhusu athari za matumizi ya dawa za kulevya ili waweze kufanya maamuzi sahihi. Often, people are not aware of the harmful effects of drug abuse. They only know that it is a source of pleasure and makes them feel good. They have no information about the health risks and the impact on the community. They need education and training about the effects of drug abuse so they can make informed decisions (FGD with village elders, 20th April, 2023).

Studies previously carried out conform to the idea that lack of education is a significant contributor to drug misuse. In their 2020 report, NACADA revealed that one of the causes of rising drug use among Kenya's youth was failure to disseminate accurate information about the risks associated with substance usage. A second study by Kisulu (2020) indicated that many Kenyan drug users were unaware of the dangers of their use.

A widespread lack of awareness and understanding about health hazards was shown by the KDHS (2022) survey which found that just 18% of men and 27% of women in Kenya had complete knowledge on drug and substance abuse highlighting the knowledge gap created by lack of information.

Drug education and awareness initiatives may help lower drug demand, according to the reports by UNODC (2018). The research showed that learning about the risks of drug use and the benefits of living a healthy lifestyle is crucial.

The problem of drug misuse in Kenya has been the focus of many public education and awareness campaigns led by NACADA. The initiatives range from media efforts to ones aimed at raising awareness in local communities and schools. NACADA (2019) reports that these efforts have helped decrease national drug abuse rates. For instance, between 2012 and 2018, the proportion of young people who admitted using drugs dropped from 24% to 13%.

The inability to acquire proper educational opportunities for some groups of people in Mombasa and Kilifi has influenced drug and substance abuse through limiting information on the dangers of the engagement in abuse. Lack of adequate educational opportunities that are easily accessible and thus lack of skills, has negatively impacted knowledge level amongst the youth in these regions (Mugalo, 2022). The disengagement resulting increases the likelihood of the affected youth involving themselves with risky behaviors like drug and substance abuse. The inadequate or complete lack of educational awareness, coupled with other aspects like absent adult role models and lack of motivation, creates a sense of hopelessness and desperation among the youth from low-income families. These feelings influence them to participate in drug and substance abuse.

During an interview with the County Director of Education, she pointed out that:

The community here does not value education, and that is why we have so many of them ending up as drug abusers. Even if we try our best as the ministry of education to force them to go to school, they still let us down. We use the chiefs to enforce the law and make sure everyone goes to school, but when the pupil is sent home because of school fees or other learning materials, the parents will tell the teachers this: *uliniona mimi nikimleta huyu mtoto shule? Kaende kwa Bwana chifu uitishe huko karo ya shule.* (I am not the one who brought this kid to this school. You go to the chief and demand for the fees and other materials). This is very unfortunate. The learners end up remaining in the village, and within a short time, they go to the dens and start using drugs (Interview with CDE, Mombasa County, 4th April, 2023).

A study by Stone *et al.* (2021) conducted in the coastal region of Kenya, found out that majority of the youth who are drug users (95%) equated the lack of educational opportunities due to insufficient education funds to drug abuse where the respondents resorted to finding solace from the drugs to escape the reality of the situation. This study also appreciated the unlimited time in the hands of these youth due to non-committing educational life to the tendency of drug abuse. This study revealed that majority of the residents in Kilifi and Mombasa counties do not have high level of education. As a result, the society does not have access to good jobs. Unfortunately, the same society does not encourage children to get the rightfully required education to change the situation, and this is an indication that things might be more dangerous in future.

4.3.3.8 Accessibility of Drugs

According to the results as displayed in Table 4.2, 84% (323) of the respondents indicated that easy accessibility of drugs is a major contributor to the growth of the menace of drug and substance abuse. This shows that the population in Kilifi and Mombasa Counties can easily acquire drugs from the area. The key respondents agreed with these findings and claimed that it is hard to regulate drugs in the region. As a result, the drugs end up being in the wrong hands.

The coastal region of Kenya is an urban setting that is well-known for its ease of access to illicit drugs. According to Nyongesa *et al.*, (2021), the region's high number of drug users is attributed to the easy access of the substances of abuse compounded by the availability of funds and, in other instances, low cost hence affordability. The large amounts of drugs at the disposal of the region's residents contribute to the greater non-medical use of prescription drugs exceeding many illicit drugs (Kamenderi *et al.*, 2021). Being the second largest city in Kenya, Mombasa, in particular, has become a drug trafficking zone where licit and illicit drugs are bought and sold. Drugs like cocaine and heroin are not uncommon cases.

The accessibility of drugs in Mombasa and Kilifi was affirmed as a cause of drug and substance abuse during an interview with the Mombasa County Education Officer who held this explanation:

The lack of difficulty in accessing drugs and other addictive substances in Mombasa and Kilifi has promoted the rise and spread of the vice in the past few years. The menace has gained root in the area since even children as young as twelve years are able to access the drugs and use them. The ease of accessibility together with the lack of limitation on the supply of the drugs has led to the addiction of both young individuals and adults. There has been improved supply of drugs in the dens from which the murky business is carried out in the region, which has made the drugs easily accessible and thus availing the drugs to individuals of all ages (Interview with the County Education Officer, 29th March, 2023).

This was supported by the religious leaders who pointed out that:

Matumizi ya mihadarati yameenea zaidi katika kaunti zetu za Mombasa na Kilifi kutokana na kiwango kikuu ambacho walanguzi wa mihadarati wameendeleza biashara hii mbovu. Hili ni jambo ambalo limewawezesha wengi kuipata mihadarati kwa urahisi kwani kuna njia nyingi ambazo kupitia kwazo mihadarati hupatikana. Hivyo basi, hali imezidi kudhoofika katika kaunti hizi kwa sababu hata wanafunzi kutoka shule za upili na hata za msingi wanaipata mihadarati kutoka kwa walanguzi walioenea katika kila pembe ya kaunti hizi. La mno ni kwamba hakuna anayejali wenzake kwani wengi wana hamu ya kuwa matajiri tu. Vijana wetu nao wameishia kupotelea kwenye lindi hili bila tahadhari ya siku zijazo. (The abuse of drugs and other substances has further spread in the counties of Mombasa and Kilifi due to the high rate with which the drugs have become accessible and the increase in the growth of this business. This has been an enabling factor in the spread of the vice. As such, the situation has worsened in these counties due to the fact that even primary school and high school students can access the drugs which have spread in every corner of the counties. Worse still, the dealers of the drugs do not care about anyone but their desire to make more money and be among the rich of the country. Our youth further continue to drown in this malpractice with little or no regard to their future.) (Interview with religious leader, 3rd April, 2023).

Drug traffickers have, over the past few years, opened up a new route along the coastal region where drugs like cocaine and heroin gain access into the country (NACADA, 2020). The Kenyan coast is vast and poorly monitored thence the ease of the smugglers of these drugs to carry out

their murky business. Orina (2021) mentions that, the ports of Mombasa and Kilifi are other ungazetted areas where drug trafficking occurs, with international drug peddlers invading the country. Once the drugs have gained access to the country through the second-largest city and the coastal region's biggest port, distribution in the area is not a problem. The drugs are thus availed to the residents through local dealers where they are abused, with addiction being an inevitable consequence, together with other drug dependence effects.

The ease of access to drugs collaborates with other causative factors such as peer pressure, poverty, poor parenting, social media and social stigma. The influence of these factors would be limited had there been difficulty in accessing drugs and other addictive substances (Nyongesa *et al.*, 2021). However, this is not the case in Mombasa and Kilifi counties. The provocations caused by these factors, whether great or small, have all been facilitators of initiation and continued abuse of and dependence on drugs, with the effects being disastrous both nationwide and at the county levels since the manifestation of addiction development occurs as a chronic debilitating disease.

Locally available drugs like alcohol, cigarettes, and abused prescription drugs are all available in large amounts in Mombasa and Kilifi. The hard drugs that were previously absent from the country have found their way in and are now easily accessible at minimal cost (Were, 2021). In Mombasa, a considerably large group of individuals have already tried heroin. It is the dominating presence, accessibility and low cost of these drugs that has lured many of the people of the coastal region to engage in drug abuse, where the consequences of the same have heavily been felt at individual, community and country levels (Nyongesa *et al.*, 2021). Addiction to these substances has been persistent in areas where there is lagging in the implementation of crucial programs for treatment and rehabilitation facilities.

The high availability and ease of access to drugs in Mombasa and Kilifi have led to early exposure to drugs among children in the region and thus a surge in the rate of drug abuse among minors. The ease of access to substances of abuse and the availability of funds has exposed many teens to important risk factors for substance use (Nyongesa *et al.*, 2021). Early exposure to illicit drugs and alcohol has resulted in substance use disorders in adulthood. The high amount of drugs and the number of drug dealers in Mombasa and Kilifi, compounded by the minimal cost of drugs, have led to abuse, which is the early stage of dependence. With the continued frequency of abuse, the development of dependence disorder has become greater. On that account, drug and substance abuse has been worsened by the availability of drugs.

Parental use of alcohol and other drugs has contributed to the ease of access to drugs. Teens, preteens and many youths can access alcohol at home from their parent's storage. It is even worse when the parents abuse these drugs in the presence of their children (Nyoike, 2021). For the parents who sell drugs, teenagers who sell drugs on their behalf are more exposed and have, therefore, easily indulged in substance abuse in due course. In general, drugs are readily available and accessible in many outlets, and in cases where drug users are ready to use any available substance at their disposal, addiction has resulted. Therefore, many youths can access drugs easily as most of them are peddled from households increasing the extent to which they have gained roots deeper into these counties.

The functionalism aspect of the society has been the basic form of operation of the drug barons in ensuring there is easy access of the drugs and in increasing the demands. This is in accordance with functionalism theory which is based on the collaboration between different units of the society. The drug barons work as one unit whose purpose is to supply drugs while on the other hand drug addicts, who are consumers, act as another unit of society. The two units work

together creating an interdependence scenario (Nyongesa *et al.*, 2021). The drug addicts depend on the drug barons as their suppliers while on the other hand drug addicts provide market to the drug traffickers. It is the coexistence of both drug traffickers and drug addicts which makes drugs to be easily accessible.

4.3.3.9 Adverse Childhood Experiences

The results in Table 4.2 indicate that 82% (315) of the household heads attribute adverse childhood experiences to drug and substance abuse as outlined by NACADA (2020). The report outlines 10 categories of adverse childhood experiences including physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect, household substance abuse, household mental illness, parental divorce, incarcerated household member and witnessing domestic violence. Since the society in this region has embraced a culture of drug and substance abuse, the children in the region have not been safe. They have been witnessing drugs being used from the time they are young kids. They have also been abused by drug users. As a result, they suffer the fate of being victims as they grow up.

Childhood trauma among different communities has often led to behaviors intended to help the victims cope with their reality. The behaviors included substance use which has often been observed as self-harm. The problem has been a worldwide occurrence and thus as research has proved, Mombasa and Kilifi have not been an exception. Adverse childhood experiences have been seen to be an important factor in the growth of drug and substance abuse (Phyllys *et al.*, 2022). Notably, exposure to adverse childhood experiences increases the risk for drug use, thus the development of substance use disorders from adolescence through adulthood.

In an interview with the head of selected NGOs, he explained that:

There are many people who have engaged in drug and substance abuse as a result of the negative occurrences that took place during their earlier stages of growth. In this case, these happenings trigger their indulgence into alcohol and other drug abuse. These people do this as a mechanism through which to cope with the negative feelings about themselves or other people that the events may have left in them. These other people could be the perpetrators of the negative events and in rare cases, the people who withdrew the help that was so needed by the time of the occurrence or in the later time when actions of justice were required (interview with heads of selected NGOs, 4th April, 2023).

The heads of County Security Committee for both Mombasa and Kilifi through the team leader agreed with this through the following statement:

There have been many people who have attempted to deal with childhood trauma by engaging in alcohol and other drug abuse. The result has been nothing but an increase of the problem encountered in these counties. The trauma could have resulted from a series of occurrences all of which revolve around stressful events such as abuse and neglectful parenting with others lacking even the mere opportunity to enjoy parental care. These traumatic cases thus have been the influence under which many individuals have initiated the practice of drug abuse in their lives many of which never survived to come out of alive, others came out with permanent scars and others have been lucky enough to escape with little or rather no harm at all (Interview with heads of County Security Committee, 7th April, 2023).

Adverse childhood experiences include a wide variety of traumatic and stressful happenings. The events include abuse and neglect. The toxicity of the stress resulting from such events has had many negative consequences on the victims, including lifelong deleterious effects on their physical and psychological health (Nyongesa *et al.*, 2021). The traumatic experiences leading to drug and substance abuse include neglect, domestic or other physical violence, and the loss of a parent coupled with easy accessibility of drugs that find these children vulnerable. In some cases, the adverse experiences result from parental substance abuse. The occurrences are stress-inducing and increase the chances of drug abuse.

The grievousness of the matter in leading to higher rates of drug and substance abuse has however been dependent on several other factors. These have included cases such as exposure to multiple adverse childhood experiences over time without the adequate adult support needed to build resilience in the affected. If this occurs at a very tender age, the victims will likely exhibit long-term effects on attention, decision-making, behavior, and response to stress throughout their lifetime. In cases where sexual abuse has led to conception in teens, they are likely to abuse drugs during pregnancy to help them come to terms with their situation (Mburu *et al.*, 2020).

It has been established that the complex relationship between adverse childhood experiences, depression and drug addiction provides an understanding of how drug abuse has resulted from these events. Adverse childhood experiences have affected drug abuse through the fused action of depression and resilience (Mwangala *et al.*, 2022). A repeated occurrence of adverse experiences in teens weakens their resilience in fighting the urge to turn to drug abuse to deal with the challenges faced. It also creates or increases the level of depression in the victims. With the reduction of resilience and an increment in depression, the chances of drug and substance abuse involvement are increased.

Adverse childhood experiences are, therefore, directly associated with worse drug and substance abuse and delinquency outcomes. Research carried out along the coastal region shows that traumatic happenings, especially in the early life of a child, have led to psychiatric problems (Mwangala *et al.*, 2022) that have created a higher risk of the development of substance abuse, which results in addiction. Compared to those who never went through such hardships at a tender age, the affected have always tended to be more vulnerable to externalizing disorders like drug abuse. The experiences, therefore, produce and exacerbate depression, a mental illness that is an important cause of drug and substance abuse (Kim, 2023).

Residents in both Kilifi and Mombasa counties have adopted the culture of drug abuse thus jeopardizing the future of the children in those two counties. As suggested by the social learning theory, an individual learns through observation as well as through imitation. In this case, children in Mombasa and Kilifi County have been observing their elders abusing drugs something which they later tend to imitate as they opt to take it as hobby. After a while, these particular children end up becoming drug addicts

4.3.3.10 Social Media Influence

As shown in Table 4.2, 81% (311) of the household heads believe that social media is a factor that influences people into drugs and substance abuse. Social media has become part and parcel of daily life where people of all walks of life connect using social media sites irrespective of age, gender or geographical distance. This influences how people think, act and behave. Despite the fact that the Kenyan coastal region is extremely poor, they still have access to social media. This is because in the current world, even the cheapest phones allow the users to access the internet. In addition, as a result of business competition among network providers, data bundles have become extremely cheap, making them affordable to the poor.

As urbanized as the coastal region of Kenya is, social media services are a widespread and appreciated technology according to a study by Marete *et al.*, (2022). Social media, like any other technological advancement, has advantages and disadvantages. One of the disadvantages is that it has contributed to the rise and spread of drug and substance abuse in Mombasa and Kilifi counties (NACADA, 2020). The relatedness of social media to drug abuse and its effects has been felt heavily among the teens and youth of the region, where those who have access to social media are more likely to venture into the abuse of drugs like tobacco, alcohol, marijuana, and hard drugs like heroin than those who do not.

The idea that social media influence has greatly advanced the rise and spread of drugs and substance abuse was supported in interviews with the administrative chiefs.

During one of the interviews, a chief stated that:

There are many drugs whose abuse has only occurred as a result of social media. The reason behind this is that there are many movies, advertisements, and videos on various social media platforms that advocate for the use, misuse, and abuse of drugs. In this case, they bring out to the people a pile of advantages resulting from the drugs thus enticing the people into actually engaging in their use. The case has been worse in cases where children are involved since most of them actually tend to believe that the abuse of drugs is an activity that can be carried out without any negative effects. Among the teens and youth, the case is even worse as they want to be seen as the cool and more knowledgeable group among their peers (Interview with administrative chiefs, 27th March, 2023).

He was seconded by a NACADA official who said the following:

Drug abuse has been a rampantly growing vice in the coastal region of the country. There have been many factors which have promoted the occurrence where social media and peer pressure are an inter-linked causative agent. Social media has most influence on teenagers and youth but is not only limited to them as even some adults have been subject to the influence of social media in the initiation of their drug use and abuse practices. This can be explained through the fact that social media has only taken to itself to glamorize drug and substance abuse with little regard to the negative effects associated with the same (Interview with head of NACADA officials, 20th April, 2023).

Social media provides channels for sharing of information or ideas. It is through these channels that different drugs have been advertised, including different brands of alcohol and cigarettes (Malechwani *et al.*, 2022). The approach of social media to these drugs has induced the urge to try their use among many of our youths and teens. The group thus desires to indulge in the activities they see on different social media platforms, including pictures and advertisements for alcohol drinking and other drug use, as they are more vulnerable to these effects. Poeticizing the goodness resulting from these activities on social media has made teens believe that these addictive substances are not bad and hence their use.

The key respondents in this study agree that social media has facilitated drug and substance abuse in different styles. It has led to the initiation of drug abuse among individuals who had not engaged in the vice before. The negative influence of social media in aspects such as goodness associated with activities like alcohol bingeing has enhanced the start of the practice among many individuals. In other cases, social media influence has led to the turning back of people in recovery from drug abuse. These have been lured back into their wayward and delinquent way of life revolving around drug and substance abuse. Drug abuse, therefore, has substantially been promoted by social media influence.

Addiction to social media has also led to drug and substance abuse. In most cases of heavy use of social media, there is a high tendency to develop feelings of loneliness or social isolation, sadness and depression. Among teens and adolescents, the failure of parents to monitor their social media and internet usage and an unlimited time for this has enhanced their vulnerability to indulgence in risky drug and substance abuse. In addition, the lack of policies monitoring social media content has promoted drug abuse among individuals in this group (Juma *et al.*, 2022). The deterioration in mental health resulting from the use of social media has made some frequent users turn to drugs and alcohol to help them cope, thus influencing the spread of drug and substance abuse.

The CEC education and CEC health from Kilifi pointed out that, although parents and other groups of individuals and the government are working together to help teens say no to drugs, the massive advertisements of cigarettes, alcohol and prescription drugs have effectively convinced them to engage in their abuse. Furthermore, programs and movies on television, mobile phones and computers have encouraged substantial drug and substance abuse. In printed advertisements, there are pictures of beautiful people drinking alcohol. The use of celebrities and attractive

models has been effective with children and adolescents. The power of advertisements has therefore affected the ability of children, adolescents and even adults to avoid substance abuse.

Social media is linked to drug abuse among some of the teens and youth in Mombasa and Kilifi. Different social media platforms glamorize drug and substance abuse where the vice is depicted as a relaxing and acceptable recreational tool (Marete *et al.*, 2022). Advertisements have glorified smoking and drinking making them to be seen as normative activities (Juma *et al.*, 2022), thus subtly pressuring teenagers to experiment. Social media hurts mental health through the instillation of such feelings as sadness and loneliness together with depression. Mental illnesses have led to drug abuse. Furthermore, social media has enhanced drug and substance abuse exposure, hence the practice.

4.3.3.11 Social Stigma

Social stigma is a leading barrier to seeking help, through self-stigma and low self-esteem, isolation and lack of support, limited access to opportunities, and reluctance to discuss prevention and treatment was discussed as a cause of drug abuse in this study. Table 4.2 indicates that social stigma ranks as number 11, with 76% (292) of the household heads believing it is a cause of drug and substance abuse in the region. Social stigma is best described as discrimination against a group or individual based on features that distinguish them from other people. In this context, social stigma refers to the negative association between persons suffering from drug and substance abuse disorders, and their opponents who do not. The stigmatizing attitudes, beliefs and behaviors have combined forces in enhancing drug and substance abuse along the coastal region, which refers to Mombasa and Kilifi. Stigma is understood to have several influencing factors and consequences from the societal level for people with behavioral health disorders related to drug abuse.

In an interview with the head of selected NGOs in the area, most of them agreed that social stigma has caused drug and substance abuse in the region. These were important sources of data as they are closer to the people in their areas of jurisdiction. A head of a selected NGO stated the following:

Drug abuse has become a crisis in our region of the country. The vice has risen to greater heights in a very short time only to find a society with no ready mechanism to fight it. Stigmatization among different groups of people has triggered the abuse of drugs among many individuals especially the young and naive people. Drug abuse has been resorted to by these individuals as an enabling way of dealing with the type of discrimination that they face in the society. So being the case, there has been a good number that has started the practice of drug abuse. The same could be associated to the lack of knowledge on other mechanisms that can be used to deal with such stresses in life or the gross ignorance on the negative consequences associated with drug and substance abuse exhibited by the people (interview with head of selected NGOs, 13th April, 2023).

The view was further supported in an interview with religious leaders. There was one religious leader who explained that:

Social stigma has led to many people engaging in negative practices that one would never have thought of had they been in their stable conditions free from stressors. The discrimination associated with social stigma has in this case not been an exception in causing drug and substance abuse in our region of the country. Social stigma has made many to initiate the practice of drug and substance abuse. As for the drug abusers, social stigma only aggravates the situation. Take for instance when a drug abuser is discriminated against by his or her peers, the individual is likely to improve on their drug and other substance abuse practices as a way of dealing with the stigma directed to them (Interview with religious leaders, 15th April, 2023).

There has been a positive association between drug use and stigma. Injecting drug users in Mombasa and Kilifi face higher rates of stigma than other drug users due to how the practice has been negatively portrayed. Drug use discrimination and external stigma have negatively affected drug users (Jaguga *et al.*, 2022). The stigmatization posed by society has furthered their performance in drug and substance abuse as incorporation into their society has mounted into a

huge challenge. They experience feelings of loneliness, sadness and ex-communication; thus, their only consolation in these situations is drug use and abuse.

The results of this study indicate that the addiction stigma surrounding victims in society has caused incredible harm, thus aggravating the situation. The stigma and shame surrounding addiction have consequently hindered treatment. This is in agreement with Seu *et al.*, (2022) who point out that society blames the victims of drug abuse, considering their addiction as a form of a character flaw and not a disease as it is. The victims have thus opted to engage in selective disclosure and avoidance of treatment privately and in a withdrawn nature. So, societal stigmatization and shaming have made drug and substance abuse a prevalent case in both Mombasa and Kilifi.

The stigma experienced by healthcare workers damages the health and well-being of people with substance abuse disorders and interferes with the quality of care in clinical settings. Stigma in healthcare facilities has negatively affected drug users in that those willing to seek treatment in these facilities are hindered from the same. The overall result has been continued use of drugs and thus addiction.

Conclusively, drug use stigma has led to greater risk behaviors. Discrimination against people with substance use disorders and drug addiction has blocked access to treatment, thus promoting drug abuse. The long-standing stigma in society and healthcare facilities is directly associated with increased drug abuse in both Mombasa and Kilifi. The exposure to stigma has often made the victims turn to drug and substance abuse either as an initiation of the practice or promotion of the same. Thus, social stigma is an important drug and substance abuse risk factor along the coastal region.

4.3.3.12 Moral Decay

Societal factors of moral decay include weakening of social institutions, normalizing drug acceptance, erosion of personal responsibility, and weakening of community bonds. Table 4.2 shows that moral decay is the last main cause of drugs and substance abuse, with 75% (288) believing that the parameter influences whether the population abuses drugs or not.

Morals are the standards of good or bad behavior that a person or groups of persons believe in. As such, moral decay is the process by which there has been degradation of morality in the society. The occurrence has led to the decline in the quality of life at the individual, family and community levels which has led to the suffering of the country as a whole. Moral decay has been a substantial cause of drug and substance abuse in both Mombasa and Kilifi as there has been the erosion of moral values that have for a long time been the guide to what is right or wrong (Nawing, 2021).

In an FGD with the village elders, there was the following articulation indicating that moral decay has led to the rise of drug and substance abuse in the coastal region of Kenya;

Kuzorota kwa maadili miongoni mwa vijana ni jambo ambalo kwa kiwango kikubwa limesababisha kukua na kuenea kwa itikadi mbovu zinazohusiana na matumizi ya afyuni. Jambo hili halijakuwepo tu miongoni mwa vijana bali pia miongoni mwa watu wazima. Hivyo basi, wengi wamepotoka kutoka kwenye maadili ambayo huwaongoza wanajamii katika shughuli zao za kila siku. Hii ndiyo sababu utawapata wengi wakiwa kwenye jitimai hili la matumizi mabaya ya dawa za kulevya na mihadarati mingine. Ni jambo ambalo limekua la kuhuzunisha kwani kaunti yetu imeweza kuwapoteza wengi kwenye janga hili. (Moral decay among the youth is a factor that has been greatly responsible for the rise and spread of negative practices such as those related to drug and substance abuse. The issue has not only been witnessed among the youth but also among the adults in the society. Consequently, many people have degraded the morals that usually dictate what should or should not be done and thus guides society in everyday life. The presence of many individuals engaging in drug and substance abuse can thus be attributed to moral decay. It has been a disheartening situation as our county has lost many to

the peril of drug and substance abuse.) (FGD with village elders, 20th March, 2023).

The idea of drug and substance abuse resulting from moral decay was also voiced by an administrative chief during an interview who stated the following;

Drug and substance abuse is a menace that is rampantly spreading in the coastal region of Kenya. Drug abuse continues to pose a variety of threats to the country in both the economic and social sectors. As such, there is the need to correct the situation of moral degradation which has been one of the major causes of the menace. Moral degradation has been majorly evident among the youth in this region. It has resulted in many of them engaging in potentially harmful activities such as drug and substance abuse. Cultural values that had previously been imparted on the people have gradually been eroded leading to drug abuse (interview with administrative chiefs, 30th March, 2023).

Moral decadence is greatly linked to drug and substance abuse in that one has the ability to lead to the occurrence of the other (Lukman, 2021). The two exacerbate each other as outlined by Phyllis *et al.*, (2022). An example is the youth who engage in pre-marital sexual activities without the necessary precautions being employed. The practice of such has been viewed as moral decadence in that a higher percentage of the youth have been exposed to the knowledge and guidance that they should engage in practices that improve on their lives rather than stall them. Most of these have ended up in distress with unplanned for pregnancies with others acquiring infectious diseases (Moea, 2023). The demands that come about as a result of such actions have caused many of the youth to turn to drug and substance abuse as a way of escaping from their world of reality thus furthering the peril of drug and substance abuse in society.

4.2.4 Types of Drugs Abused

Drug abuse is a significant issue in the coastal region of Kenya, with a range of drugs commonly abused. Understanding the different types of drugs being abused is crucial to developing effective prevention and intervention strategies. In this section, we will explore the various types

of drugs that are commonly abused in the coastal region of Kenya as found in this study, highlighting their patterns of use and methods of consumption. The findings are presented in Table 4.2.

The following types of drugs and substances abused in the coastal region were obtained from reliable literature such as Kasundu *et al.*, 2012, Mbuthia, 2016, Ongwae, (2016) and Oguya *et al.*, 2021, and used to get information from the study area.

Table 4.3: Types of Drugs Used

Drug used	Response	Rank
Alcohol (Including Mnazi, local illegal brews and legal brands)	99% (383)	1
Khat/ Miraa	98% (378)	2
Tobacco	97% (376)	3
Bhang	94% (364)	4
Heroin	89% (341)	5
Cocaine	88% (337)	6
Prescription drugs	85% (326)	7
Methamphetamine	80% (307)	8

Source: Field data, 2023

4.2.4.1 Alcohol

In this study, 99% (383) of respondents confirmed that alcohol was the most commonly abused drug. The study further revealed that there were various patterns of alcohol use, including social

drinking, binge drinking, and heavy drinking. Social drinking was reported as the most common pattern of use, followed by binge drinking and heavy drinking. The methods of consumption varied from drinking at home, drinking at local bars, and consuming illegal brews.

During the focus group discussions, a village elder stated that:

Alcohol abuse is a serious problem in our community. People drink for various reasons, including stress, depression, and social pressure. The availability of cheap and easily accessible alcohol exacerbates the problem. In addition, young people are influenced by their peers to engage in heavy drinking, which is harmful to their health and well-being. We need to take action to address this issue by promoting awareness, education, and community-based interventions (FGD with Village elders, 22nd March, 2023).

A victim added that:

Most of the victims of drugs and substance abuse use alcohol. It is hard to see a person who uses the hard drugs, but does not take alcohol. It is like the uniform of all of us. Alcohol is cheap and readily available. Even when you cannot access the other substances, you will easily get some alcoholic drink to keep you moving as you wait to get the other drugs (Interview with a victim, 9th April, 2023).

According to WHO (2020) report on alcohol use in Kenya, alcohol use was prevalent among both men and women, with binge drinking being common among men. The study further revealed that alcohol abuse was associated with a range of health problems, including liver cirrhosis, injuries, and mental health disorders. Similarly, reports by NACADA (2019) found that alcohol was the most commonly abused drug in Kenya. The reports revealed that alcohol abuse was associated with various social and economic problems, including family breakdowns, domestic violence, and reduced productivity.

Another study conducted by UNODC (2018) found that alcohol abuse was prevalent in the coastal region of Kenya. The study revealed that illegal brewing was a significant problem in the

region, with many people consuming homemade brews that were often contaminated and dangerous to health. The study further revealed that alcohol abuse was associated with various criminal activities, including drug trafficking and sexual exploitation.

A study conducted by Kamanderi *et al.*, (2019) on the health burden of alcohol reveals that alcohol use is a significant contributor to the burden of disease in Kenya. The study found that alcohol use was associated with a range of health problems, including liver disease, cancers, and mental health disorders. The study further revealed that alcohol abuse was associated with various social and economic problems, including poverty, unemployment, and crime.

Alcohol is among the most common drugs openly used in Kilifi and Mombasa counties as up to now it is still legalized. This indicates that children do interact freely with alcoholics who live among them. Considering the hypothesis of social learning theory, children in Mombasa and Kilifi County are always observing some members of the society abusing alcohol thus developing a desire to use it as a way of practicing what they observed. With time the children become alcoholic at their tender age.

4.2.4.2 Khat/Miraa

According to the household heads who participated in the study, 98% (378) of them reported that Khat was a drug that was commonly abused in their communities, ranking second among other types of drugs. The patterns of drug abuse indicated that most users consume Khat on a daily basis, and the most common method of consumption is by chewing the leaves.

During the focus group discussions, a village elder pointed out that:

Miraa is a drug that has been abused for a long time in our communities. Its effects are well known, but people continue to use it due to its perceived benefits such as increased energy and alertness. This drug has negative

effects on the users' health, social life, and economic wellbeing (FGD with Village elders, 22nd March, 2023).

The chief from Shariani, Kilifi County added that:

The young men in this village chew *muguka* like goats. You will not walk for 10 meters without finding a young person chewing those leaves. It is very disgusting. I usually feel very bad knowing that we are losing a whole generation (Interview with a chief, 11th April, 2023).

The results of this study are supported by a study by UNODC (2018), which found that Khat is widely used in East Africa and beyond. The study found that the main contributors to the drug's prevalence were low income, the drug's accessibility, and cultural tolerance. The detrimental impacts on users' health, social lives, and financial well-being were also underlined in the study.

A study by NACADA (2020) also supported these findings where Khat abuse was found to be prevalent in the coastal region, with 13.4% (580,149) of the respondents reporting its use. The study also indicated that the main mode of consumption was by chewing the leaves, which is consistent with the findings of this study. Additionally, the study found that Khat use was associated with health problems such as insomnia, anxiety, and depression.

Use of Miraa was also linked to an increased risk of cardiovascular illness, dental health issues, and mental health difficulties, according to a report by the Ministry of Health (2020). The report outlines that the drug is contributing to widespread poverty and stunting economic growth in the impacted areas hence the need for more stringent policy and regulations in comparison to the relaxed legislative laws seen in the country.

4.2.4.3 Tobacco

Tobacco usage is widely accepted and celebrated in coastal communities, where it has long cultural roots. Tobacco use is reinforced partly by the social contexts in which it is often engaged

in and partly by the high levels of stress and poverty prevalent in the area, where the residents are likely to contribute to the coping strategy of tobacco smoking.

From the findings of the study, 97% (376) of the respondents admitted to using tobacco. The use of tobacco is characterized by frequent use, with most respondents reporting daily experience of users. The methods of consumption of tobacco vary, with the majority of respondents smoking it in the form of cigarettes or using traditional pipes. Other methods of consumption include chewing and sniffing. The findings of this study suggest that tobacco is a widely used drug in the coastal region, and its use is deeply entrenched in the local culture.

During the focus group discussions, a village elder stated that:

Tobacco use is deeply rooted in our culture. It is not uncommon to see men and women smoking cigarettes or using traditional pipes in public places. Tobacco is considered a social activity, and it is often shared among friends and family members. The use of tobacco is also associated with relaxation and stress relief. Many people use tobacco as a coping mechanism to deal with the challenges of daily life. The use of tobacco has been a longstanding cultural practice among the coastal communities. Tobacco is often used as a social lubricant during ceremonies and gatherings, and this practice has been passed down through generations. The availability and affordability of tobacco products have also contributed to its high usage rate in the region. Unfortunately, the widespread use of tobacco has led to numerous health problems, including lung cancer, heart disease, and stroke. As a community leader, I urge the government and other stakeholders to take urgent action to address this issue (FGD with Village elders, 22nd March, 2023).

Multiple studies conducted additionally on tobacco use in Kenya confirm these results. The KNBS (2019) found that 13.7% of Kenyans aged 15 and up used tobacco products. The survey also discovered that males are more likely to use tobacco than women are, and that smoking is the most popular way to consume tobacco products. According to the WHO (2020), tobacco smoking kills over 8 million people annually and is the biggest cause of avoidable deaths throughout the globe. Tobacco usage is also a major issue for public health in research done in

coastal Kenya according to Sambai *et al.* (2022). Smoking was linked to an increased risk of developing respiratory illnesses, cardiovascular disease, and cancer.

The prevalence of tobacco abuse has been a center of focus for the WHO (2020) which outlined that 36.5 percent of Kenya's population smokes cigarettes. These findings agree with MOH (2022) data which outlines that cigarette smoking is most common among men between the ages of 25 and 44. In addition, tobacco smoking is a significant factor in the development of non-communicable diseases (NCDs) in Kenya, according to research by the Kenya Medical Research Institute KEMRI (2019). The report highlighted tobacco use to be the second biggest cause of mortality from NCDs, accounting for 11% of all deaths in the country thereby showing how critical it is to take immediate action to reduce tobacco usage in Kenya.

4.2.4.4 Bhang

The findings of the study revealed that bhang is the fourth most commonly used drug, with 94% (364) of the respondents reporting its use. The drug is often consumed in various ways, including smoking, eating, and drinking. Smoking was reported as the most common method of consumption. Eating and drinking were also reported, where bhang was used as an ingredient in party cookies and pastry. The drug was also infused in drinks like tea and other common favorite meals and snacks in the community. Smoking of bhang was the most common method of abuse and was reportedly carried out in open air in parties or in private.

In an interview, a religious leader pointed out that:

The current generation does not even fear smoking bhang. They do it in public. With the rate these victims are smoking marijuana, you would think it has been legalized in the country. It is too much. We are all users even if we do not take part in purchasing or smoking. This is because they are everywhere, making us frequent secondary users, and this directly affects our lives (Interview with a religious leader, 1st April, 2023).

This is an indication that bhang smoking is rampant in the coastal region. In most parts of the country, people will smoke marijuana in dens or in their houses. It is shocking to realize that it happens openly in the coastal region in a manner that questions the applicability of the present laws in the country.

During the focus group discussions, a village elder stated the following:

Bhang has been a part of our culture for a long time. It is widely used among the youth, and its use is often seen as a rite of passage. However, the drug has become more readily available in recent years, and this has led to an increase in its abuse. The use of bhang has been linked to various negative effects, including mental health problems, poor academic performance, and social disintegration. It is important that we address the issue of bhang abuse in our communities (FGD with a village elder, 4th April, 2023).

Multiple outside studies have found correlations between bhang abuse and undesirable results. A study in Nairobi area indicates that bhang users have a higher chance of developing psychosis than those who do not take the drug (Maiyo, 2022). Another coastal research by Nduva *et al.*, (2020) indicated that bhang consumption is linked to impaired attention and memory. Kimani *et al.*, (2021) indicated that the rate of bhang consumption is much higher among males than females. This study's result that bhang usage is more common among young people, especially young men, is consistent with this observation. Bhang consumption was also linked to many drug misuse behaviors in research done in Uganda (Okoyo *et al.*, 2020). The majority of bhang users in Kenya are men between the ages of 18 and 35, according to this research. The survey also found that smoking bhang is the most common way to consume it.

Similarly, bhang was found to be the most frequently used drug in Kenya by UNODC (2020). According to the results, bhang consumption is most common among those aged 18 to 35. The research also found that economic issues like unemployment and low levels of education had a

role in drug usage. The results of this research revealed that poverty and unemployment were important variables leading to bhang consumption, are consistent with these findings.

Bhang being an illegal drug in Kenya means that the authority in Kilifi and Mombasa Counties are expected to eradicate it. However, this tends to be impossible due to lack of proper functionality of the small units of the government in the region. As per the functionalism theory, authority is made up of small units which are interdependent (Onaolapo *et al.*, 2022). The units may include village elders, assistant chiefs and chiefs among others. Due to lack of proper functioning of the small units comprising government in Kilifi and Mombasa counties, bhang has become a common drug being abused freely despite being illegal.

4.2.4.5 Heroin

In this study, heroin emerged as one of the most commonly abused drugs with 89% (341) of household heads citing its use. Heroin is a highly addictive opiate drug that is derived from morphine, a naturally occurring substance extracted from the opium poppy plant. It is usually consumed through injection, smoking, or snorting. The patterns of drug abuse and methods of consumption of heroin as outlined by the household heads in the coastal region suggest that most users inject the drug directly into their bloodstream where the powdery drug is first subjected to heating to melt it into an injectable liquid. This method of consumption is particularly dangerous as it increases the risk of contracting blood-borne diseases such as HIV/AIDS and hepatitis C.

During the focus group discussions, a village elder stated that:

Heroin abuse has become a major problem in our community. It has destroyed the lives of many young people, and it is spreading like wildfire. The availability of the drug is also a major concern, as it seems to be easily accessible to anyone who wants it. The root causes of heroin addiction are complex, and we need to address them if we are to find a lasting solution to this problem (FGD with village elders, 23rd March, 2023).

The results of this research are supported by the findings of other studies that have shown the frequency and patterns of heroin usage in the coastal area. Heroin, for example, was determined to be the most widely misused substance in the region as outlined by NACADA (2020). The figure was based on responses from an estimated 70% of drug users in the area. Similarly, 4.1% of the population aged 15–64 in research by UNODC (2020) reported using heroin. This incidence was the greatest in the coastline area.

According to studies conducted by the WHO (2020), heroin and other opioid usage is on the rise across the world. Opioids such as heroin are becoming more of a problem in many countries in the developing world. The study found that poverty, unemployment, and a lack of education are significant risk factors for drug abuse, particularly heroin. Substance abuse was often accompanied by a host of mental health concerns, including depression and anxiety.

MOH (2020) found that heroin use poses a significant threat to public health. Aga Khan University found that poor socioeconomic position and low levels of education are significant predictors of drug abuse. Substance misuse was also more common among those who had experienced trauma or who were mentally unhealthy, as per the research findings.

4.2.4.6 Cocaine

Cocaine is a highly addictive drug that has been widely abused in the coastal region, as shown by the findings of this study. Of the households surveyed, 88% (337) reported cocaine as a drug used in their communities, ranking it as the sixth most abused drug in the region. Cocaine is typically snorted through the nose or dissolved in water and injected directly into the bloodstream.

During the focus group discussions, a village elder said that:

Matumizi ya cocaine (unga) ni tatizo kubwa katika jamii yetu. Dawa hii inapatikana kwa urahisi na kwa bei nafuu, hivyo kuifanya iwe rahisi kwa vijana kuipata. Mbali na hivyo, shinikizo la marafiki na ukosefu wa usimamizi wa wazazi umesababisha kiwango kikubwa cha matumizi ya cocaine. (Cocaine abuse is a major problem in our community. The drug is readily available and affordable, making it easy for young people to access it. In addition, peer pressure and lack of parental supervision have contributed to the high rate of cocaine abuse.) (FGD with village elders, 27th March, 2023).

Cocaine usage among young people in the coastal area is greater than the national average 6.1% against 10.5%, according to a survey done by NACADA (2020). Cocaine was found to be, according to the survey, the second most often used illicit substance, only after cannabis.

MOH in 2022 performed research which revealed that cocaine usage is on the rise in Kenya, especially among the country's youth. Cocaine usage is a significant factor in the global burden of illness, as outlined by WHO (2020), which accounts for around 1.5% of the entire burden of disease globally. Cocaine usage has been linked to a host of societal issues, such as joblessness, poverty, and criminality, according to the research.

Researchers at NACADA (2022), in a public report, concluded that cocaine usage is linked to a host of negative outcomes, both physiological and psychological. Cocaine usage is more common among males than girls, and those between the ages of 18 and 25 were found to be the most likely to experiment with the substance.

Cocaine trafficking and consumption are on the increase in East Africa (UNODC, 2022), with Kenya serving as a major transit and consumption country. The region's rising middle class and the drug's image as a status symbol are the driving factors for the increased demand for cocaine.

4.2.4.7 Prescriptive Drugs

Prescription drugs are another type of drug that is commonly abused in the coastal region, according to the findings of this study. The study revealed that 85% (326) of the respondents reported the abuse of prescription drugs. The respondents stated that these drugs were often obtained through pharmacies and hospitals using fake prescriptions or by visiting multiple doctors to obtain multiple prescriptions. The drugs were then taken orally or injected, and the most commonly abused prescription drugs were opioids, benzodiazepines, and amphetamines. Since the residents of Kilifi and Mombasa counties are relatively poor, they cannot afford the drugs. The addiction to drugs makes them to share injected blood, a practice that endangers them to more health complications. The person who manages to purchase the drugs allows his counterparts to remove blood from his body using a syringe, and they inject it directly into their systems (Oguya *et al.*, 2021).

The ranking of prescription drugs as the seventh most commonly abused drug indicates the severity of the issue in the region. The pattern of use and methods of consumption of prescription drugs vary widely (Mbutia, 2016). Some individuals consume these drugs by crushing the pills and snorting them, while others take them orally or through injection. Respondents reported that prescription drugs are mainly sourced from pharmacies, friends, and family members who have prescriptions for these medications. Often, the prescription drugs abused are hospital registered antidepressants relaxants and pain medication.

During the focus group discussions, a village elder pointed out that:

Matumizi mabaya ya dawa za kulevywa na dawa za kuagizwa ni tatizo kubwa katika jamii yetu. Watu wanatumia dawa hizi ili kupata hisia za juu au kukabiliana na mafadhaiko na wasiwasi. Wanatumia vibali bandia au kutembelea madaktari kadhaa ili kupata dawa nyingi kuliko wanavyohitaji. Hii ni mazoea hatari ambayo inaweza kusababisha uraibu na hata kifo.

Tunahitaji kuwaelimisha watu wetu kuhusu hatari za matumizi mabaya ya dawa za kuagizwa na kuwapa njia mbadala za kusimamia maumivu yao na wasiwasi. (Prescription drug abuse has become a major problem in our community. People are using these drugs to get high or to cope with stress and anxiety. They are using fake prescriptions or visiting multiple doctors to get more drugs than they need. This is a dangerous practice that can lead to addiction and even death. We need to educate our people about the dangers of prescription drug abuse and provide them with alternative ways to manage their pain and anxiety.) (FGD with village elder, 27th March, 2023).

An estimated 4.4% of the population aged 15–65 years has reported lifetime use of prescription medications for non-medical reasons (NACADA, 2020). Prescription drug usage was found to be second only to alcohol abuse among Kenyan college students in the survey. Another report by MOH (2020) indicated that almost 5 million individuals abuse prescription medicines each year, making it a major problem for public health in Kenya.

Different types of prescription drugs have different abuse trends and ways of use. Opioids, for instance, are often misused by being crushed into a powder and then snorted or injected. Stimulants, on the other hand, are often administered either orally or intravenously. KEMRI (2021) linked prescription medication usage to a number of negative health outcomes, such as slowed breathing, liver damage, and addiction. More so, when mixed with other drugs like alcohol, prescription medication addiction may lead to fatal overdose.

Prescription medication misuse is a huge public health concern throughout the world (UN, 2022). Over 55 million people are thought to have used opioids recreationally, and prescription opioid abuse is a leading cause of death with regard to drug use and abuse, according to the body.

MOH (2021) revealed that opioid misuse is the leading cause of America's drug abuse epidemic, and that prescription medication abuse is a major contributing factor. According to the health reports, abusing prescription opioids may cause addiction, overdose, and death, and is often

linked to other types of substance misuse including heroin consumption. It is unfortunate that the prescription drugs are prevalently used in the coastal region of Kenya.

4.2.4.8 Methamphetamine

Methamphetamine, commonly referred to as meth, is another drug that was found to be abused in the coastal region of Kenya. The study found that 80% (307) of the respondents reported having used meth, and it ranked eighth in the list of commonly abused drugs in the region. Methamphetamine is known for its highly addictive nature and devastating effects on the body. Studies have shown that long-term use of meth can lead to severe health problems such as heart disease, liver damage, and neurological damage.

During the focus group discussions, a village elder stated that:

Matumizi ya dawa za kulevya yamekuwa tatizo kubwa katika eneo letu. Meth imekuwa maarufu kati ya vijana na wazee pia. Kuna wale ambao wanavuta kama sigara, na wengine hutumia kwa kuchanganya na pombe au bangi. (Drug abuse has become a big problem in our area. Meth has become popular among both the youth and the elderly. There are those who smoke it like a cigarette, and others use it by mixing it with alcohol or marijuana.) (FGD with village elder, 27th March, 2023).

Results from this study on methamphetamine abuse are in line with those from other research on drug misuse in Kenya and other areas in the world. Methamphetamine usage, for instance, is on the increase in Kenya, according to research by UNODC (2020). Addiction, mental health issues, and bodily injury were all emphasized in the report as negative impacts of the substance. Methamphetamine is one of the most widely misused substances in Kenya, with particularly high rates of usage observed in various locations (NACADA, 2020).

Methamphetamine consumption is on the rise throughout all of Africa, especially in the countries of East and Southeast Asia, according to new research by UNODC (2020). The research also

found that meth usage and addiction have grown as a result of the surge in meth manufacture and trafficking in recent years.

Methamphetamine is the second most widely misused substance in Kenya, behind only marijuana, according a study by NACADA (2022). The survey also found that meth usage has risen, especially among the young in the coastal region of Kenya. The research further found that smoking, snorting, and injecting meth are the most common routes of administration in Kenya.

4.2.5 Prevalence of Drugs and Substance Abuse

Drug abuse is a complex and pervasive problem that affects individuals, families, and communities worldwide. It is a public health issue that has significant social, economic, and political implications. The prevalence of drug abuse varies across different regions and populations, and it is influenced by various factors such as age, gender, social status, and cultural norms. Understanding the prevalence of drug abuse is essential for developing effective prevention and intervention strategies that can mitigate its harmful effects on individuals and society. In this discussion, the study explores the prevalence of drug abuse in the coastal region, focusing on the economic cost of drug abuse and the demographics of users as found in the survey.

4.2.5.1 Drugs and Substance Abuse in Families

Drug abuse is a global health challenge that affects millions of individuals, families, and communities. Within the context of families, drug abuse can have devastating effects on the social, emotional, and economic well-being of household members. It can lead to family breakdowns, violence, trauma, and long-term negative consequences for children's health and

development. This study, through the questionnaires, requested the respondents to include data on cases of drug abuse in their families. The results are visualized in the Figure 4.7.

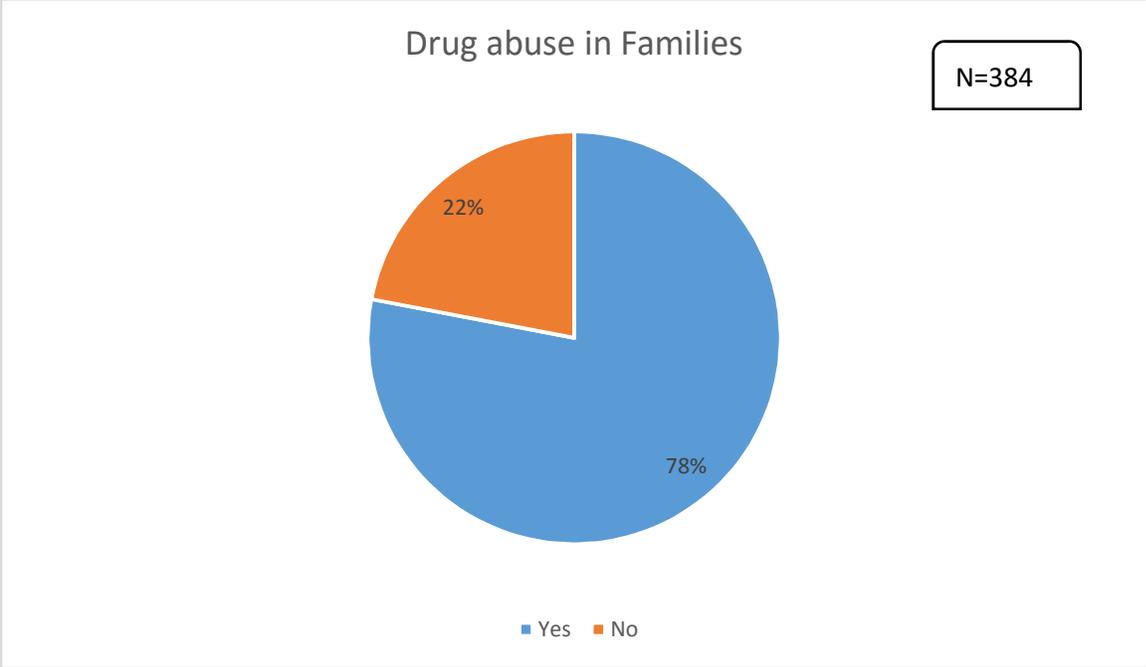


Figure 4. 7: Prevalence of Drug abuse in Families

Source: Field data, 2023

According to the findings of this study, drug abuse in families is a prevalent issue in the coastal region of Kenya. The household heads surveyed reported that 78% of families in the region are affected by drug abuse. The high prevalence rate underscores the need for effective interventions to address this problem.

Unfortunately, most of the families in the study area have experienced direct pain of drugs and substance abuse. It was confirmed by all categories of respondents that the menace is hitting harder day by day. The key respondents argued that they are losing a generation. They pointed out that unless something is done urgently, the coastal communities do not have a future because the generation has been turned into zombies.

During the focus group discussions, a village elder stated that:

Drug abuse in families is a major problem in our community. It affects not only the individual who is using drugs, but also their entire family. We have seen cases where parents who are drug addicts neglect their children, leading to poor performance in school and even dropping out. In some cases, children are also exposed to drug use and may start using drugs at a young age, leading to a cycle of drug abuse in the family (FGD with village elders, 22nd April, 2023).

A religious leader opined the same and stated that:

Almost all families in this area have a person who is directly affected by the menace. If the father is not taking, then the son is taking, or the uncle or a close cousin. The situation is very bad. I cannot tell about any family that does not have a case of drug and substance abuse. Even in my own family as a bishop, my son died last month due to heroine abuse related complications (Interview with religious leader, 4th April, 2023).

Drug misuse is an epidemic that has been the subject of several outside investigations into its effects on people and society. Mental health issues, criminal conduct, and feelings of isolation were all shown to be associated with drug usage in families by Kamenderi *et al.*, (2020). The researchers also revealed that drug-using parents are more likely to ignore, mistreat, and physically harm their children. Phyllys *et al.*, (2022) observes that a significant risk of drug usage among children and other family members is connected with parental drug use.

Financial hardship, social isolation, and poor physical and mental health outcomes were all shown to be associated with substance misuse in research by Nduva *et al.*, (2020). Drug addiction is also linked to marital issues, divorce, and child custody conflicts in the study. MOH (2016) report found that drug abuse in families can result in a variety of undesirable outcomes, such as addiction, overdose, and even death.

Several harmful outcomes are associated with drug misuse within families. Neglect and abuse, both physical and emotional, are more common in families where at least one parent uses drugs, and this may have serious consequences for the children. When money is spent on drugs rather

than on necessities like food, housing, and clothes, it puts a strain on the family budget as explained by Okoyo *et al.*, (2020).

According to MOH (2020), implementation of recommendations of family-based treatments may be useful in lowering drug use within households. Involving both parents and children in an intervention was shown to improve communication, boost family support, and decrease drug use within the family. The research also stressed the value of helping parents who are experiencing substance misuse problems by providing them with information and resources.

NACADA (2020) has also given insights into the effects of drug misuse on families. According to the agency, many Kenyan families are impacted by the prevalence of drug usage. Counseling services for families affected by drug misuse and public education campaigns to increase awareness about the hazards of drug abuse in families are only two of the programs and activities launched by the organization to combat this issue.

According to the NACADA (2023) report, children in Kenya start taking alcohol, bhang and miraa at the age of 6-9 years. The worrying report is an indication that there is a disaster in future if nothing serious is done to stop the insanity. The report further states that more than one million people are addicted to drugs. According to the report, the coastal region has 13.9% alcohol prevalence.

Due to social challenges being experienced in various families, some of them have become dysfunctional despite being the basic unit of the society. The functionalism theory views family as a critical unit which is pivotal in streamlining the society. Dysfunctional families mostly contain parents who cannot provide proper direction to children. When parents are not functional

in bringing up their children, the children end up learning unwanted behaviors such drug abuse from the general community.

4.2.6 Effects of Drugs and Substance Abuse

Drug abuse is a pervasive problem in the coastal community of Kenya, with far-reaching consequences for individuals, families, and society at large. The effects of drug abuse are wide-ranging and can be felt in various aspects of life, including physical and mental health, economic well-being, and social stability. In this study through an open ended question, the household respondents were requested to include data on the effects of drug abuse that they have witnessed in the community. The results were then thematically analyzed and presented in Table 4.4.

Table 4.4: Effects of Drug and substance abuse

Category	Effect	Response rate	Rank
Physical and general health	Illnesses	99% (380)	1
	Injuries	97% (372)	
	Poor hygiene	96% (369)	
	Poor nutrition	95% (365)	
	HIV/AIDS and other diseases	94%(360)	
	Pregnancy related illnesses and childbirth compliactions	92% (352)	
Mental	Depression	98% (307)	2
	Anxiety	98% (307)	
	Mental illness	96% (368)	
	Suicidal thoughts	95% (365)	
Economic	Increased dependant population	97% (372)	3
	Lost productivity	96% (369)	
	Increased healthcare	96% (369)	
	Increased unemployment	95% (365)	
Social	Broken families	95% (365)	4
	Decreased social ties	95% (365)	
	Stigmatization	94% (361)	
	Loss of friendships	93% (357)	
	Rape and incestry in families	92% (352)	
Cultural	Loss of cultural norms	93% (357)	5
	Increased immoral acts	90% (341)	
	Reduced respect	90% (341)	
	Reduced cultural pride	87% (334)	
Academic	Poor performance	86%(330)	6
	Absenteeism	84%(322)	
	School drop out	80%(307)	

Source: Field data, 2023

4.2.6.1 Physical and General Health Effects of Drug and Substance Abuse

The physical effects of drug abuse on the coastal community were one of the themes explored in this study. According to the responses from the 384 household heads, the top-ranking physical

effect of drug abuse was illnesses, with a response rate of 99% (380). Injuries, poor hygiene, and poor nutrition also had high response rates of 97% (372), 96% (369), and 95% (365), respectively.

During the focus group discussions, a village elder stated that:

Drug abuse has led to many physical health problems among our youth. Many of them have contracted diseases such as HIV/AIDS, tuberculosis, and hepatitis B and C. We have also seen an increase in injuries, such as those caused by accidents, fights, and self-harm. Poor hygiene and poor nutrition are also prevalent among drug abusers, which further exacerbate their physical health problems.

A victim of drug and substance abuse added that:

Mara mingi wajipata umeanguka, umechapwa ama umeumia na huwezi eleza nini kilikutendeka. Kuna siku nilijipata nimeanguka katika mtaro usiku nikitoka kuvuta bangi na marafiki. Niliumia mgongo wiki mbili. (Most of the times victims of drugs and substance abuse get physical injuries. They fall, they fight, and other times they do not understand what happened to them. There is a time I fell on drainage and I was badly injured. I had severe pains on my back for almost two weeks.) (Interview with a victim, 12th April, 2023).

People with addiction to drugs and other substances often exhibit one or more associated health problems. The harmful physical effects of drug use, misuse and abuse have widely been witnessed in the coastal region of Kenya, specifically Mombasa and Kilifi in this case (Nyaga *et al.*, 2021). Some of the effects reported have been short-term, while others long-term. The extent of the effects has largely been dependent on the type of drug and amount abused by an individual. A lack of knowledge compounded with absolute ignorance of the people has hindered the recognition of the physical damage that drug abuse impacts on the body. As such, drug and substance abuse has ravaged the victims' bodies impacting their physical health while they are focused on feeding their addiction.

In an interview with one of the victims of drug abuse, he supported that drug and substance abuse has been a major cause of poor physical health. He explained the following:

Nilikua mtu mraibu wa pombe na sigara. Vitendo hivi vilishirikiana kuyaharibu maisha yangu na hivyo basi kunizuia kufikia viwango ambavyo ningefikia iwapo singeshiriki katika uraibu huu. Afya yangu ilidhoofika punde tu baada ya muda usiokuwa mrefu katika matumizi ya mihadarati. Sherehe za unywaji pombe na uvutaji sigara nilizohudhuria ziliishia kutokuwepo na maana yoyote maishani mwangu. Nilichopata tu ni udhaifu wa afya pamoja na kutoheshimika pale nyumbani na hata mitaani. Nimetumia fedha nyingi kama njia ya kujiondoa kutokana na uraibu huu kwa usaidizi wa viongozi wa mashirika yanayosaidia watu wenye tatizo kama nililokuwa nalo huku nikijaribu kuirejesha afya yangu ila haijawa rahisi (I was an addict to alcohol drinking and cigarette smoking. These practices greatly ruined my life in that my health deteriorated to levels I would not have thought of when I first started engaging in the practice. The late- night drinking sprees and smoking with my friends ended up adding no value to my life. The only thing I gained was poor physical health together with disrespect even from individuals way younger than my age. I have spent a lot of money trying to recover from the same and restore my previous healthy physique, thanks to the rehabilitation center and its leaders for the journey has not been a smooth one but a rocky road) (Interview with victim, 24th April, 2023).

The same was echoed during an interview with the heads of NACADA offices, one of them pointed out that:

Drug abuse has been seen to result to nothing but a series of negativities to the people of Mombasa and Kilifi counties. There have been numerous cases of individuals who have succumbed to death owing it to the effect of drug and other substance abuse. The deaths do not just occur as a result of alcohol consumption or several days of cigarette smoking. It is a result of continued use and abuse of these drugs which leads to deterioration of health among the victims which, without intervention is a potential cause of death (Interview with heads of NACADA offices, 27th March, 2023).

There has been a variety of drug and substance abuse among the people of Mombasa and Kilifi, where some substances are legal while others are illegal. The illegal substances in this region include cocaine and heroin. The legal ones have majorly been nicotine, alcohol, marijuana and prescription medications. The ease of access and low cost of most of these drugs has promoted the occurrence of the negative effects of drug and substance abuse. The effects of these substances are influenced by other factors such as the user's age and health and the quantity and

frequency of usage (Nyaga *et al.*, 2021). The results have, therefore, varied from mild symptoms to permanent damage in the individuals involved in abusing drugs, alcohol and other substances. Drug and substance abuse has caused cardiovascular and respiratory problems. The cardiovascular system complications have in particular been caused by cocaine (Allahdad *et al.*, 2021). The common culprit in Mombasa, cocaine, raises the heart rate and blood pressure very fast that a heart attack does not have to result from several doses as it can even occur with the first dose. Injecting drug users who use cocaine are at risk of collapsed veins, and impaired heart valves, chambers or blood vessels due to an infection. Respiratory problems have consistently challenged smokers (Muller *et al.*, 2022). The use of cigarettes, marijuana and in some cases the crack form of cocaine has promoted respiratory system problems among addicts (Allahdad *et al.*, 2021).

Worse still, participation in the abuse of drugs and other addictive substances has increased the instances of indulgence in risky behaviors among young people and adults. Irresponsible sexual practices are among many risk-posing behaviors (Macharia *et al.*, 2021). So being the case, the rate and extent to which HIV/AIDS and other sexually transmitted diseases have spread among people who have engaged in unprotected sexual practices under the influence of drugs are alarming. Another reason behind the high rate of the spread of HIV/AIDS has been the sharing of unsterile drug injection equipment. Both have a substantial role in spreading HIV/AIDS and other infections due to body fluid exposure. Most people, especially the youth, have been infected but remain asymptomatic due to the long latency period of the infections, with some unaware that they are already infected.

Under continued failure to seek help, the effects of drug addiction can lead to long-term damage as exhibited in problems with the heart, kidneys and the liver. Many drugs have also been

reported to cause nausea, vomiting, diarrhea and constipation. However, the problems are witnessed not only when using the drugs but also during the period during which one tries to quit, and they are common symptoms of withdrawal (Kiiru *et al.*, 2022). In other cases, one's motor functions may be uncontrollable under depressants, which can be life-threatening. In the same instance, alcohol and drug abuse has increased the number of road accidents witnessed countrywide, with Mombasa and Kilifi not being an exception.

Drug and substance abuse in Kenya's coastal region has thus been rampant, leading to several poor physical health outcomes among the abusers. The drug dependence resulting from drug use and abuse has exposed the involved to catastrophic health-related consequences (Munene, 2022). The disproportionate numbers of youth involved in alcohol and other drug abuse practices in Mombasa and Kilifi have enhanced the intensity with which these counties have felt these effects (Oduor *et al.*, 2022). Coupled with others, the abuse of alcohol, marijuana and cocaine has led to an increased risk of death through accidents and illnesses. Additional research into the physiological consequences of drug abuse supports these results. Ndayi (2021) reported that those who took cannabis were more likely to get HIV/AIDS, hepatitis C, and TB.

Drug usage has been linked to an increased risk of injuries, including those caused by accidents, purposeful acts of self-harm, and violent acts, according to a study by Gopal *et al.*, (2019). The harmful physical repercussions of drug usage are a problem on every continent. WHO also reports that drug usage may lead to a number of health issues, including those related to the heart and lungs, the liver and kidneys, and even infectious illnesses like HIV/AIDS, hepatitis, and TB (WHO, 2018). Accidents, falls, and acts of aggression are just some of the ways that drug usage may result in injury.

UNODC (2019) found that drug usage was linked to a number of different ailments and injuries in their 2019 World Drug Report. UNODC has stressed the need for effective drug misuse prevention, treatment, and harm reduction initiatives (UNODC, 2019).

The abuse of drugs through smoking has been another of the major methods of drug abuse that have greatly affected the abusers' health negatively. So being the case, individuals who smoke have been exposed to a wide variety of health derailments all of which have been oppressive especially to those from the middle and low-income groups of individuals. The problem has been worse among the pregnant females in the society. Gestation is a period that requires high precaution to be taken to avoid any instances that could cause harm either to the mother or the fetus. There is however a large number of pregnant females who can not help but take drugs through smoking (Mburu *et al.*, 2020). This is applicable especially for those who have found themselves in the scenario of unplanned for pregnancies.

Smoking during pregnancy is a dangerous practice that harbours potentially fatal consequences. There are a wide range of problems that the mother and baby are exposed to in the event that the mother smokes. Premature labor and miscarriage are just but van example of the likelihood events. The relationship between smoking and miscarriage is undeniable in that carbon monoxide in such drugs as tobacco keeps the developing fetus from getting enough oxygen. There are also other chemicals present I tobacco smoke that interfere with the developmental processes of the developing fetus. It is worth noting that the risk of miscarriage increases with the amount smoked. Other complications expected to arise from smoking are problems with the placenta and slowed fetal development.

At the time of birth, compared to fetuses of non-smoking mothers, fetuses whose mothers smoked comparatively have lower birth weight as explained by Singh *et al.*, (2023). Other

features that may be exhibited by these fetuses include a shorter crown-heel length, and smaller occipitofrontal circumference (Nilsen *et al.*, 2010). Smoking has further been evidenced to lead to increased risk of abnormal bleeding during pregnancy and delivery. More so, during the first trimester, smoking raises the risk for birth defects. The chemicals in the inhaled smoke can thus be said to be teratogenic. The born baby can have defects such as a cleft lip, cleft palate or even both. Secondary smokers are also exposed to many of this potential risks. An example is a pregnant lady working in an area where she is constantly exposed to secondhand smoke. This can increase the chances of giving birth to a low birthweight baby. Therefore, smoking should be avoided at all costs by pregnant women.

4.2.6.2 Mental Effects of Drugs and Substance Abuse

The effects of drug abuse on mental health can vary depending on several factors, including the type of drug used, the frequency and duration of use, the individual's overall health, and their genetic predisposition to mental illness. It is important to note that drug abuse can both exacerbate pre-existing mental health conditions and contribute to the development of new ones (WHO, 2018).

One of the most common mental health issues associated with drug abuse is depression. Substance abuse can lead to chemical imbalances in the brain, affecting neurotransmitters responsible for regulating mood. Drugs like alcohol, opioids, and stimulants can disrupt the brain's natural reward system, leading to feelings of sadness, hopelessness, and a lack of interest in previously enjoyed activities. Prolonged substance abuse can also damage brain cells and impair cognitive function, further contributing to depressive symptoms (Mutiso *et al.*, 2022).

Anxiety disorders are another significant mental health consequence of drug abuse. Drugs that stimulate the central nervous system, such as cocaine or amphetamines, can trigger intense feelings of anxiety and paranoia. Additionally, individuals who abuse substances often experience high levels of stress due to the negative consequences associated with their drug use, such as legal issues or strained relationships. This chronic stress can lead to the development of anxiety disorders over time (UNODC, 2019).

Psychosis is a severe mental health condition that can be induced by certain drugs. Substances like hallucinogens (e.g., LSD or psilocybin mushrooms) or synthetic cannabinoids (e.g., Spice or K2) can cause hallucinations, delusions, and disorganized thinking. These symptoms may persist even after the drug has been cleared from the individual's system. Long-term substance abuse can also increase the risk of developing psychotic disorders such as schizophrenia, particularly in individuals with genetic predisposition (UNODC, 2019).

Substance abuse can also worsen existing mental health conditions. For example, individuals with bipolar disorder may experience more frequent and severe mood swings when using drugs or alcohol. Substance abuse can interfere with the effectiveness of medications prescribed for mental health disorders, making it more challenging to manage symptoms and maintain stability (Mutiso *et al.*, 2022).

Furthermore, drug abuse often leads to social isolation and strained relationships, which can have a detrimental impact on an individual's mental well-being. The loss of employment, financial difficulties, and legal problems associated with substance abuse can contribute to feelings of shame, guilt, and low self-esteem. These negative emotions can further exacerbate mental health issues and hinder the recovery process (WHO, 2018).

The findings revealed that drug abuse has significant negative effects on the mental well-being of individuals in the coastal region. The most reported mental effects were depression and anxiety, both having a response rate of 98% (307). Following closely was mental illness, which had a response rate of 96% (368), and suicidal thoughts with a response rate of 95% (365). It is evident that drug abuse has serious mental health implications in the coastal region of Kenya.

The results of the study confirmed that one of the main effects of drugs and substance abuse is mental illness. According to the respondents, the victims of drugs abuse are not normal. In fact, majority of the victims end up in the wards, in rehabilitation centers, or in the streets as mad people. The Minister of Health was in support that these drugs affect the normal functioning of the brain. During the interviews, the CEC Health, Mombasa County, had the following to say.

Most of the people we have in the psychiatrist wards are victims of drugs and substance abuse. After using these drugs for a long time, one becomes mental case patient. The brains stop functioning normally. Those who do not come to the hospital go to the streets and start collecting papers. They become insane completely (Interview with CEC health, 15th April, 2023).

The village elders also pointed out that the victims are mentally ill. They look like zombies in the dens and the streets. They do not even understand what is happening in their lives. During the focus group discussions, a village elder opined that:

Ulevi wa dawa una madhara mengi sana katika jamii yetu ya pwani. Hukuletea msongo wa mawazo, unakuweka na wasiwasi na mara nyingine hata kupelekea kwa wengine kuwa na magonjwa ya akili. Sijawahi ona kitu kibaya kama hicho katika maisha yangu yote. (Drug abuse has many negative effects in our coastal community. It causes stress, anxiety, and sometimes leads to mental illness in individuals. I have never seen anything as bad as drug abuse in my entire life.) (FGD with village elders, 20th March, 2023).

Mental health problems linked to drug and substance abuse have been another major challenge in Mombasa and Kilifi with the increased rate of the spread of the menace. Moderate to severe range of poor mental health problems resulting from drug and substance abuse has been a piece

of regular news among coastal communities (Mutiso *et al.*, 2022). There has further been evidence that using some drugs may cause mental illness even with first-time usage. More so, the mental effects of drug use can be classified as long-term or short-term. The effect of alcohol and drug abuse has been evident in many cases as in personality (Nkangane, 2022) or behavior changes and character formation (Oduor *et al.*, 2022).

Drug abuse causing poor mental health was affirmed by a NACADA official who said that:

There have been increased mental health problems in the coastal region of Kenya as a result of drug and substance abuse that has been rampant in the country. Rehabilitation centers have been filled with many individuals suffering from psychosocial disorders that have resulted from drug and substance abuse. Some have been reduced to people who cannot perform to the mere expectations held unto them by the society. Therefore, drug and substance abuse has taken away the energetic individuals important in the social and economic aspects of society. It is a pity that the mere ignorance if simple guidelines protecting individuals from drug abuse has led to such an incapacitation in our region (Interview with NACADA official, 5th April, 2023).

In an interview with the heads of selected NGOs, the notion that drug abuse has led to poor mental health was further supported. One of them stated that:

Drug abuse has caused retardation in the development of mental health and destroyed the health of older individuals. The youth in my area of residence have been rendered redundant by the practice of drug abuse. Many of them are unemployed where some lost their jobs due to the misdoings caused by drug abuse while others do not even have the capacity to look for jobs. Their mental health has been deteriorated by the effect of drug and substance abuse. There are those who have been turned into mentally handicapped people as a result of the chemicals associated with the drugs they put in use reacting with their brain cells to affect them permanently (Interview with heads of selected NGOs, 5th April, 2023).

Many psychosocial dysfunctions have been linked to drug and substance abuse. Young people who are involved in drug abuse face a high risk of the occurrence of mental health problems. The problems likely to be experienced by this group include concentration difficulties, anxiety

(Onaolapo *et al.*, 2022), and depression. Females involved in such practices have reported significantly higher levels of mental health problems, likely associated with the social stigma directed at them and the effects of the drugs themselves. The use of psychoactive substances, therefore, affects the brain depending on the type of substance used and the user's health history (Nangendo, 2022). In this case, such drugs as cocaine, heroin, marijuana, cigarettes and alcohol have been greatly abused in Mombasa and Kilifi, thus their effect on mental health.

Long-term substance use disorder has been researched extensively and proven to affect an individual's memory, behavior, consciousness, learning, and concentration. The prolonged use of substances such as alcohol, cannabis, and opioids may change an individual's brain function and structure. The result is cognitive and behavioral changes coupled with deficits that may remain even after the cessation of use (Nkangane, 2022). All of these are problems that have hindered the youth in Mombasa and Kilifi from engaging in productive activities both at an individual and societal level (James *et al.*, 2022). Deteriorated mental health has steadily increased with this region's increased drug and substance abuse. Among many, the short-term mental effects of drugs have included irritability and anxiety upon withdrawal, feelings of euphoria and relaxation, concentration issues, restlessness, increased wakefulness, drowsiness, enhanced sensory perception, and problems with memory. These have resulted from using such substances as cannabis, alcohol and heroin among the people of the coastal region. The same drugs, upon high frequencies and long durations of use have led to depression, which is a long-term SUD (Nangendo, 2022), social problems, hallucinations, the risk of overdose, and anxiety upon withdrawal. In teens, early exposure to tobacco has affected the development of brain circuits involved in controlling attention and learning.

In Mombasa and Kilifi, the experience of alcohol and other drug issues, together with one or more diagnosed mental health problems, has been a common phenomenon of late. While the users may feel that alcohol and other drugs are helping with their daily life problems and feelings of anger, stress, sadness or worry, the inference has consistently negatively affected their mental health status (Mutiso *et al.*, 2022). Alcohol, for example, has its most immediate effects on the brain. It slows down the central nervous system, depleting chemicals that naturally help reduce anxiety and stress. The result is that the victim is left more stressed, anxious or depressed (Nangendo, 2022) and will feel the need to consume more alcohol to cope with these feelings. In the long run, however, there is exacerbation of the situation. In conclusion, mental health problems and substance abuse are intertwined in that one can lead to the other. This drug and substance abuse problem in Kenya's coastal region has promoted the prevalence of poor mental health among many people (Mutiso *et al.*, 2022). That is, alcohol and drug abuse have increased the underlying risk for mental disorders since the linkage between the two is undeniable. Furthermore, dual diagnoses have regularly occurred due to victims exhibiting substance use problems and mental health issues such as depression, bipolar disorder, or anxiety. Therefore, psychoactive substances are bound to cause psychotic reactions, some of which are already prevalent in Mombasa and Kilifi.

Substance misuse was determined to be a major contributor to the prevalence of mental illness in Kenya, according to research by the Ministry of Health (2016). The study outlined that better results might be achieved by combining mental health care with substance misuse therapy. Those battling with drug addiction in Kenya were disproportionately affected by mental health issues including sadness and anxiety as outlined by ILO (2020).

Barasa *et al.*, (2021) observed that those with drug use disorders in Kenya were more likely to experience sadness, anxiety, and suicide thoughts than the general population. The UNODC (2020) report also emphasizes the psychological effects of drug usage, including the correlation between substance abuse and suicide ideation and action. The report describes that 585,000 people died in 2019 as a result of drug poisoning or overdoses. Those who are addicted to drugs were further reported to be six times more likely to attempt suicide than the general population. Depression and anxiety were also shown to be more prevalent among drug abusers. To address the combined diagnosis of substance misuse and mental health issues, WHO (2020) agrees with these results and suggests the inclusion of mental health services into drug abuse therapy.

Drug usage was revealed as a major risk factor for suicide thoughts for most university students in Kenya in a study conducted by Harper *et al.*, (2021). Ahmad *et al.*, (2022) also discovered a significant rate of mental problems including depression and anxiety among Nigerian drug users.

Drug abuse is known to alter how someone reasons and this makes difficult for a drug addict to be in agreement with rest of the society. However, since society is comprised of several units, the fight requires the contribution of each member. Functionalism theory is in agreement with the idea that every member of society should be working towards attaining the wellbeing of the whole society (Nkangane, 2022). Those who are mentally ill are a dysfunctional part of the society due to their poor reasoning and the fact that they do not work towards enhancing the society or their families.

4.2.6.3 Economic Effects of Drugs and Substance Abuse

The economic effects of drug abuse in the coastal community of Kenya are significant, according to the findings of this study. In the survey of 384 household heads, 97% (372) identified

increased crime as an effect of drug abuse, while 96% (369) cited lost productivity and increased healthcare costs. Increased unemployment was also reported as an effect of drug abuse by 95% (365) of respondents. These numbers indicate a strong consensus among the participants about the economic impact of drug abuse in the coastal region.

During the focus group discussions, a village elder pointed out that:

Uhalifu unakua kwa sababu ya watu kutumia dawa za kulevya. Hawafanyi kazi vizuri na wanakuwa na gharama kubwa za matibabu. Hii inaleta ugumu kwa jamii nzima. Crime increases because of people using drugs. They do not work well and they have high medical costs. This creates difficulty for the whole community (FGD with village elders, 27th March, 2023).

The village elder went on to explain that drug abuse leads to a cycle of poverty and crime, as individuals become unable to support themselves and turn to illegal activities to fund their drug use. A study conducted by the Ministry of Health in 2019 estimated that the economic cost of drug abuse in the country was approximately Ksh 100 billion per year. This cost included both direct and indirect costs (MOH, 2019).

The economic cost of drug abuse has been a major concern for governments and societies across the world. In the coastal region of Kenya, drug abuse has been a prevalent issue affecting individuals, families, and communities.

The findings from the study indicate that hospitalization cost is very expensive. This cost is attributed to the need for medical attention when one is experiencing severe physical and mental health problems as a result of drug abuse. Hospitalization may be required when a user has cases of overdose or is experiencing complications from long-term drug abuse.

During the focus group discussions, a village elder pointed out that:

Many young people who abuse drugs end up being admitted to hospitals, and their families are left with huge bills to settle. Some families are forced to sell their property or take loans to pay for the medical expenses (FGD with village elder, 15th April, 2023).

Hospitalization due to drug usage is quite expensive, as reported by MOH (2019). The final tally is often determined by the nature of the ailment and the duration of hospitalization. The cost may also change based on the patient's choice of hospital and location. Although the government has taken steps to ensure that addicts have access to low-cost healthcare, the issue remains a serious problem (Njomo *et al.*, 2020).

The governmental organization, NACADA, has compiled data on the monetary toll of drug misuse. Their reports show that hospitals have to spend a lot of money treating people who become sick from abusing drugs. The body also found that drug users had much greater inpatient costs than those with any other medical condition (NACADA, 2020).

UNODC (2017) commissioned another research that confirms hospitalizations due to drug misuse are a major factor in the high price tag associated with this epidemic. The research also found that hospitalization is more expensive for drug users than for non-users. Hospitalization expenses are considerable because of the prolonged nature of drug abuse's effects on both the body and the mind. Our research confirms that the high cost of healthcare is a significant financial strain on families living along Kenya's coast.

Hospitalization expenses for drug-related disorders were found to be significant, with an average cost of Ksh 52,250 per hospitalization in research done by Sambai *et al.*, (2022) in Nairobi, Kenya. Approximately 5% of all hospital admissions were found to be drug-related, which accounted for a sizeable portion of the admissions overall, according to the study. Hospitalization expenditures for drug-related disorders are a major contributor to the overall

economic cost of drug addiction, according to research conducted by Mboo *et al.*, (2022) in Mombasa, Kenya.

Medication cost was another significant aspect of health care costs associated with drug abuse in the coastal region of Kenya, as highlighted by the responses of household heads. This shows that drug abuse not only impacts an individual's physical and mental health, but also has a significant financial burden on households and the community.

During the focus group discussions, a village elder stated that:

Licha ya gharama ya dawa za kulevya kuwa ya kiwango cha juu, wananchi waendelea kuzinunua pasi na kujali madhara ya kifedha yanayotokana na matumizi yake. Hivi basi, hali yao ya kiuchumi imeendelea kudhoofika kwani fedha ndogo walizo nazo huishia mifukoni mwa walanguzi wa dawa hizi (Despite the high cost of drugs, citizens continue with the purchase without regard of the negative economic impact it imposes on them. Thus, their economic position has deteriorated since the little money they have ends up in the pockets of the peddlers of these drugs.) (FGD with village elders, 24th March, 2023).

Medications for drug overdose, poisoning, and wounds is expensive, as reported by the MOH (2019), particularly for narcotics like opioids and cocaine. Guidelines for the use of naloxone and other pharmacological treatments in the treatment of drug overdose and poisoning have been drafted by the ministry. However, the high price of these drugs remains a major obstacle to proper care.

Drug misuse has a major effect on the cost of healthcare (NCDC, 2017). According to the data analyzed for this study, the rising cost of healthcare may be directly attributed to the rising number of drug abuse-related hospitalizations and ER visits.

NACADA (2020) reported that treatment for drug-related health problems might have a hefty price tag. According to the paper, the annual cost of treating drug users with TB may reach KES

20,000, while the cost of treating drug users with HIV/AIDS can reach KES 300,000. The paper also notes that drug users may have to buy medicine for things like depression and anxiety, which may drive up the price of their treatment even more.

The economic cost of drug abuse is a significant concern for the coastal region of Kenya, with rehabilitation cost ranking very high among affected communities. The findings from the study revealed that respondents perceived rehabilitation cost as very expensive.

During the focus group discussions, a village elder opined that:

Tatizo la dawa za kulevya ni kubwa sana kwa jamii yetu. Watu wengi wanaharibu maisha yao na wanakuwa tegemezi kwa familia zao. Gharama za kurejesha watu hawa katika hali ya kawaida ni kubwa mno, na mara nyingi familia zinashindwa kuzimudu. (The problem of drug abuse is significant in our community. Many people ruin their lives and become dependent on their families. The cost of rehabilitating these individuals is enormous, and often families cannot afford it.) (FGD with village elders, 22nd March, 2023).

Medication-assisted therapy (MAT) and behavioral treatments are available to treat drug addiction in Kenya (NACADA, 2020). While the goal of behavioral therapies is to alter the patterns of thought and behavior that contribute to drug abuse, MAT is used to alleviate withdrawal symptoms and cravings. The report also notes that the total cost of drug addiction treatment may differ from one person to the next and from one program to the next. Compared to outpatient care, inpatient care tends to be costlier.

In addition, the Kenyan Ministry of Health has published a guideline for the treatment of drug abuse that includes recommendations for the use of pharmaceuticals. Drug overdose, poisoning, and wound treatment all need expensive medicines, some of which are included in the recommendation. Government-run public hospitals and dedicated drug treatment facilities make up the bulk of Kenya's addiction care infrastructure. Methadone maintenance therapy, which

includes the use of medicine to assist patients control their addiction and lower the risk of relapse, is the most prevalent treatment for opioid addiction in Kenya (MOH, 2020). Low-income families who may not have access to insurance or other types of financial aid may find methadone therapy too costly.

Methadone patients may also need emergency care for narcotic overdoses, poisoning, and injuries unrelated to their addiction. MOH (2022) found that drug overdoses are a major problem in Kenya, especially among young individuals. According to the research, the public and non-profit sectors bear a disproportionate share of the high price tag associated with treating drug overdoses.

Opioid addiction may be effectively treated with drug therapy like methadone. Methadone, a synthetic opioid, may lower opioid cravings and relieve withdrawal symptoms. Counseling and behavioral therapy are common components of such programs (NACADA, 2021). Naloxone is used as a lifesaving measure to counteract the effects of opioids in situations of overdose or poisoning (KDHS, 2022). Furthermore, in cases of injection drug use, wound care and other medical interventions may be required (KMHC, 2020).

The monetary burden of drug misuse in Kenya has been the subject of recent research. Drug misuse is related to significant healthcare expenses, according to a research by Mwangala *et al.*, (2022). These costs include hospitalization, medicine, and rehabilitation services. The research also indicated that incapacity and lost productivity due to drug usage may have considerable individual, family, and community economic costs.

According to an assessment by UNODC (2020), the cost of drug usage in East Africa is projected to be equal to 0.3% of the regional GDP. The cost of drug addiction treatment

accounted for a significant portion of the overall economic burden of drug abuse. This research revealed that heads of households in Kenya's coastal area saw the cost of restoration as very high, and our study confirms that perception.

The study's conclusions are consistent with those of NACADA (2020), which states that drug use has far-reaching financial consequences for both people and society. Drug addiction causes higher healthcare expenses, lower productivity, and more crime. Drug usage may have far-reaching financial consequences, which include lower lifetime wages, higher welfare and disability payments, and lower tax revenues.

For instance, UNODC (2020) determined that drug addiction causes large economic losses for people and society due to decreased productivity, higher healthcare expenditures, and increased criminal activity. According to WHO (2018), drug misuse has a worldwide yearly cost of up to \$800 billion due to lower job participation, higher healthcare expenditures, and reduced economic output.

The economic consequences of drug usage in the United States were also detailed by the SAMHSA (2021). This information may shed light on the impacts of drug abuse in the Kenyan coastal community. Drug addiction in the United States is estimated to have cost \$740 billion in 2019, according to the Substance Addiction and Mental Health Services Administration. These results reflect the economic impacts of drug misuse reported by respondents in coastal Kenya, underscoring the substantial monetary cost of drug usage to local communities.

UNODC (2020) released a second report that examined the monetary toll of drug usage throughout the world. The analysis concludes that in 2019, the economic cost of drug misuse was around \$2.2 trillion, with the bulk of this amount attributable to healthcare and lost productivity.

Drug misuse is a worldwide issue with serious monetary repercussions, as seen by this study's results, which corroborate those highlighted by respondents in the coastal area of Kenya.

Drug and substance abuse along the coastal region has led to financial distress at the individual and family levels. The situation has worsened with the rampant increase in the rate at which drug and substance abuse is spreading across the region. In Mombasa and Kilifi, drug abuse has consistently occurred among minors, youth and even adults. The relationship between the two has been proven to exist in many different contexts where there have been dozens of ways through which the linkage can develop. The situation has, however, been largely a cause-and-effect dynamic, thus a tragically double-edged sword (Elmes *et al.*, 2022).

During an interview, the CEC health from Kilifi County agreed that drug and substance abuse among individuals in the region has negatively affected the economy of Mombasa and Kilifi.

Mombasa CEC had the following explanation:

There has been a high rate in which the economy has been negatively influenced by drug abuse. This being the case, it has been ironical in that the situation has enabled the thriving of several individuals. Drug abuse has hampered the growth of the economy in that the government has had to spend a lot of funds which could have been used for other positive activities on the fight against the menace. Energy that could have been directed towards the strengthening of the economy for the betterment of the county has been directed towards the issue of drug abuse making it impossible to achieve the desired economic rise (CEC health, 7th April, 2023).

More so, the same was supported by the religious leaders. A religious leader explained the following:

Tatizo la matumizi ya mihadarati halijaiadhiri serikali ya kaunti tu bali pia watu wanaozitumia wenyewe. Hii ni kwa sababu uchumi wa serikali ya kaunti na pia wa mwanachi anayetumia mihadarati umekua katika hatari ya athari za matumizi ya mihadarati. Familia nazo zimeadhirika zaidi. Familia nyingi zimelazimika kutumia fedha zao katika matibabu yawenzao wenye matatizo haya (The issue of drug abuse has not only affected us at the county level but also at an individual level. This is because it has not only negatively impacted the county government's

economy but also the victims' funds and source of livelihood. The case has been at the family level as well. Many families have been forced to spend a lot of funds on their loved ones in the attempt to help them recover from drug and substance abuse. Individuals have also suffered economically because of the expensive cost of nurturing the habit of drug and substance abuse. The economy has fallen and is bound to break down if change does not happen soon.) (Interview with religious leader, 17th April, 2023).

In the case of adults, drug abuse has substantially led to financial distress among many in Mombasa and Kilifi. Many who have engaged in drug and substance abuse in an attempt to escape from the reality of their financial constraints have ended up worse off than they were when they first indulged in the practice. The prolonged use of drugs and other addictive substances has depleted the abusers' funds in the attempt to quench their desire for drugs (Moses *et al.*, 2021). There has thus been a negative implication on their already distressed financial situations. The matter has been exacerbated with the effects of drug and substance abuse in Mombasa and Kilifi being intensely felt regarding the negative financial consequences.

The effects of drug and substance misuse have created a diverging financial burden that has worsened with time, becoming the catalyst for serious economic consequences. There have been various ways through which the matter has been worsened in these counties. The cost of maintaining and sustaining the habit is a major risk factor. The practice has been a costly habit, leading to significant financial difficulty compounded by instability (Omina, 2021). The recurring payout for such drugs as heroin, cocaine, and alcohol has accumulated and caused many addicted victims to remain disabled and in financial distress.

Concerning class systems in Mombasa and Kilifi, addiction has been far more costly for low-income people. For those who are at the poverty level in society, such addictions as cigarette smoking can consume a considerable percentage of the family's income. Worse has been for those who are heavy substance users. They have been found to spend half or even more of their

income on drugs, thus aggravating their current financial stresses (Chitembwe *et al.*, 2021). For those with a substance addiction, paying for it can get expensive regardless of the substance. Even those substances that have been considered cheap, for example, alcohol and cigarettes, have been key factors in draining these individuals' pockets, especially those who have found that they need to use more so as to get the desired effect.

More so, drug abuse has vast negative impacts on an individual's health. The result has translated to financial effects resulting from poor health. The long-term substance abuse experience has exposed many drug users to significant health concerns and complications that have necessitated medical attention (Mutiso *et al.*, 2022). They have thus been led to seek treatment or get support, all of which are expensive for direct and indirect medical interventions (Munene, 2022). The financial effects have been disturbing for both the abusers and their loved ones (Omina, 2021) together with other people at the societal level. The expenses incurred during treatment and rehabilitation create financial distress among many individuals and their families (Seu *et al.*, 2022).

Drug and substance abuse in Mombasa and Kilifi counties has promoted financial distress among many individuals. The errant malpractice has been successful in this in that there has been an exposure to a wide range of risk factors that have caused negative financial consequences upon the abusers and their close ones. The loss of work productivity levels (Nyamawi & Kinga, 2021), legal problems resulting from drug addiction, and the cost of sustaining the addiction have all been a few of the many ways in which drug and substance abuse has caused financial stresses among individuals who have been either directly or indirectly involved. The overall result has been financially strained individuals struggling with substance use disorders.

Drug and substance abuse among individuals in the counties of Mombasa and Kilifi has impaired individual, family and societal development. Youth development, in particular, has been challenged by drug and substance abuse. The problems resulting from drug abuse have ranged from poor health, poor personal hygiene, increased school drop-out rate (Chiriswa *et al.*, 2022), high rates of separation of families (Wangu & Githuku, 2022), and increased levels of crime. The unity of these factors has formed a strong linkage that has been a major blockage of development in these regions. The ignorance of the people has worsened the situation in that the threat has been evident as a growing and widely spread matter. There have therefore been many instances where drug and substance abuse has been overlooked, leading to reduced development rates.

In an interview with the heads of selected NGOs, one official stated the following concerning developmental stagnation resulting from drug abuse:

The issue of drug abuse and addiction has hampered development in the coastal region of the country. There has been a huge hindrance to the development progress that would have otherwise already taken place had there not been the component of drug and other substance abuse. The use of funds to fight this menace has denied the government the so needed financial power to engage in purposeful development. There has been a lot of expenditure which has used up governmental funds in the attempt to eradicate drug and substance abuse in the coastal region of Kenya. The threat of the menace has therefore brought economic, social, and political development to stagnation (Interview with heads of selected NGOs, 3rd April, 2023).

He was supported by the administrative chiefs who said that:

Drug abuse impairs one's ability to improve their life status. This means that people who abuse drugs lower chances of engaging in meaningful development in their lives compared to those who do not. As a result, many drug abusing individuals in this region of the country have been left behind in this life's journey. The abuse and misuse of drugs has negatively impacted on their already deteriorated financial status aggravating it and leading to the rise of a generation whose only focus is a way through which to escape from the harsh reality of life which in this case is the abuse of drugs. The individual level escalates to the family level moving towards the community and county levels and finally impedes the

development of the country in general (Interview with administrative chiefs, 31st March, 2023).

Getting stuck in emotional development has been a major effect of drug abuse on the victims of the menace. Drug and substance abuse has lulled their senses, hindering them from development. The mechanisms that help individuals learn from mistakes do not usually work properly under the influence of drugs creating a fog that does not allow them to see the opportunities available for their progress in life. The stagnation experienced has been emotional, social and even economic. In many cases, addiction has deteriorated the economic status of many individuals (Mwamuye *et al.*, 2022). Thus, in trying to escape from uncomfortable things, these individuals have missed many growth opportunities.

Drug abuse, being the illicit production, trafficking and consumption, has consequently been one of the major reasons behind developmental stagnation in Mombasa and Kilifi. The array of problems that have occurred as a result of drug abuse has obscured key development where even child development has been negatively impacted on, for example in instances where the menace of drug and substance abuse and misuse has prevailed including where parents are abusers of alcohol and other drugs. Their ability to function in a parental role has been inhibited, and their impulse control lessened, allowing them to behave abusively (Mburu *et al.*, 2020). Coupled with drug abuse's effect on the family, their finances, and society at large, drug and substance abuse has substantially hindered development, causing a standstill in many of the activities that would have furthered the development of Mombasa and Kilifi counties.

4.2.6.4 Social Effects of Drugs and Substance Abuse

The effects of drug abuse on the social fabric of society are numerous and far-reaching. The breakdown of families and social ties has a ripple of effects on the wider community. People

who abuse drugs often become isolated and marginalized, leading to further social problems. In addition to social effects, drug abuse can lead to physical and mental health problems.

The findings from the household heads in the coastal region revealed that broken families were the most significant social effect of drug abuse, with a response rate of 75% (288). This was followed by decreased social ties with a response rate of 60% (230) and stigmatization with a response rate of 50% (192). Loss of friendships had the lowest response rate of 15% (58).

During the focus group discussions, a village elder explained the following:

Ulevi na matumizi ya dawa za kulevya yanaathiri sana jamii yetu. Watu wanaanza kuacha kufanya kazi na kutumia pesa zao kwa dawa za kulevya, hivyo kusababisha familia zao kuvunjika. Wengine wamekuwa wakijitenga na jamii na wakionekana kama washenzi au wasiofaa katika jamii. Pia, kuna wale ambao hukumbwa na matatizo ya kiafya kutokana na matumizi ya dawa za kulevya, na hivyo kuanza kustigmatizwa na jamii. (Alcohol and drug abuse have a great impact on our community. People begin to stop working and use their money for drugs, thus causing their families to break up. Others have become isolated from the community and are seen as outcasts or unfit in the society. There are also those who are affected by health problems due to drug use, and thus begin to be stigmatized by the community.) (FGD with village elders, 20th March, 2023).

Lawlessness related to drug and substance abuse prevalent in Mombasa and Kilifi has mostly been non-violent and often petty, whereas a few cases have been violent. There is a strong linkage between drug abuse and delinquency where the practice has enhanced the development of delinquent behavior of juveniles and adults. Case studies of offenders who have been found to commit violent crimes like robbery have indicated that drug abuse has often been a critical risk factor. However, there are other illicit causes of violent crime (Kambaga *et al.*, 2023). Owens describes this as chronic lawlessness in his journal. Higher violence rates are bound to increase with the increase in the frequency of drug abuse among the youth of Mombasa and Kilifi counties.

In an interview with the CEC Education, he articulated the following:

There has been an increase in criminality this region. The high number of criminals in the county of Mombasa has been majorly caused by the increased drug trafficking which has adamantly resisted the government's fight. With this increase, many people in the towns and shopping centers have been robbed of their property. For instance, there are people whose purses have been snatched and stolen, others have had their phones stolen while others have had their money stolen from them. The doers of these actions have been triggered by the lack of money to fund for their addictions. They thus resort to stealing from other people as a way of catering for this need. The major result has been increased insecurity in the region where individuals have the worry that at any time their property may be stolen (interview with the county commissioner, 3rd March, 2023).

The administrative chiefs also had their say regarding drug and substance abuse as a cause of delinquency in the region. There was an administrative chief who stated that:

Drug abuse has been a great challenge not only at the county government level but also at the local administration level. Herein, drug abuse has led to the birth of many criminals in this area. The urge to take drugs that one cannot afford at the moment as a result of addiction compounded by lack of purchasing power has enhanced startling especially among the youth. A case was reported a couple of weeks ago about a young man who had stolen his neighbor's chicken so that he would sell them and use the money to purchase some bhang and alcohol. It was a pathetic situation that he had put himself in. There have been many other cases some of which had to be taken to courts of law for the administration of justice (Interview with administrative chiefs, 7th April, 2023).

The criminality resulting from drug abuse along the coastal region of Kenya has been both at the local level and the transnational level. Criminal networks have been established to enhance the spread of drug and substance abuse for both legal and illegal substances (Lwembe *et al.*, 2023).

The risk of violent drug-related crime has intensely been felt in this region as the communities have been affected widely (Ongeri *et al.*, 2023). The different illicit drugs put into use have had different impacts on the mind and bodies of different individuals at varying degrees. The crimes committed have therefore been of varying intensities.

The emergence of crack cocaine, for example, is associated with the rampant rise in the coastal region's violent crime rate, which is associated with the violent psychopharmacological impact of

the drug on the user. The involvement with negative peer groups, majorly for teens, has led to delinquent behavior, which has largely been the cause of involvement with the juvenile justice systems in Mombasa and Kilifi. The mechanics behind this is that parental influence decreases as peer influence increases with age. The likelihood of young people being involved in crime, violent crime or drug abuse is therefore enhanced as their situation has been compounded by many negative factors (Mburu *et al.*, 2018). The major factors influencing youth involvement in violent crime for drug abuse have been inclusive of low socio-economic status and unemployment, individual characteristics and conduct problems.

The high number of drug dens in Mombasa and Kilifi has accounted for the increase in the rate and extent of the spread of drug-related violence and crime in these counties. In the Kisauni sub-county in Mombasa, for example, many criminal cases have been recorded (Barako, 2023). People walking in the streets have been frequently attacked, and their valuables, like phones and money, are stolen (Barako, 2023). The occurrences have been both during the night and daytime. There have also been worse cases where the locals would be attacked and brutally murdered by gangs wielding machetes. The cause of this has partly had to do with the desperation of the drug addicts who have no means to quench their thirst for the drugs. Thus, they resort to crime to satisfy their desire.

Teens as young as fifteen years of age have been exposed to the abuse of drugs and other addictive substances. So being the case, their indulgence in misdemeanors such as pick-pocketing has furthered the development of drug-related crimes. Early exposure to the abuse of drugs, the influence of peers and idling has encouraged the development of this vice among teens (Barako, 2023). Consequently, those caught have had to deal with the relentless mob in the name of justice, while others have had to face the judges at the juvenile courts. Unfortunately, these

petty thefts arising from drug abuse begin at home, where the teens steal money from their parents to enable them to gain access to drugs (Barako, 2023).

Drug abuse has thence been a cause of crime among teens and the youth. Drugs are therefore related to crime through the effects they cause on the user's behavior thus generating violence and other illegal activities. Those who have developed addictions to certain hard drugs like heroin and cocaine or have been frequent users have inherently been prone to committing criminal activities. In some cases, for instance, some drugs have increased the sex drive of some individuals hence leading to irrational decisions, which is a cause of gender-based violence (Ongeri *et al.*, 2023). Conclusively, the close relationship between drug abuse and crime explains why drug abusers have committed crimes, namely to pay for their drugs and thus inflict harm to society. Drug-related violence and crime have therefore been a witnessed challenge in Mombasa and Kilifi due to the abuse of both licit and illicit drugs.

The coastal area of Kenya is not the only place to feel the social impacts of drug misuse. Drug misuse has been linked to disintegration of families, negative social stereotypes, and loneliness, according to research from all around the globe. Meinema (2020) revealed that drug usage was linked to fewer friends and more loneliness among its participants. Ochieng' Kasera *et al.*, (2021) confirm that drug usage is linked to higher rates of social exclusion and prejudice.

Drug usage is linked to an increased likelihood of family disintegration and societal difficulties. These results corroborate our own research showing that drug misuse has serious societal consequences, such as shattered families and fewer friends. Substance misuse is undeniably a complicated problem that calls for a comprehensive strategy. Addressing the societal impacts of drug misuse requires interventions that prioritize prevention, treatment, and support for affected people and their families as outlined by Mwangala *et al.*, (2022).

Drug abuse may negatively affect individual productivity, interpersonal relationships, and communities as a whole. The users are more likely to be the target of discrimination and stigma, which may have a multiplier impact on these negative social outcomes. Isolation and stigma are two social impacts that have been linked to drug addiction, which may result from an increased risk of mental health problems including sadness and anxiety. Theft, violence, and drug trafficking are just some of the criminal activities that have been linked to drug usage as per UNODC reports (2020).

Alcohol and other drug abuse practices have negatively impacted the relationships of individuals at the family and societal levels. There has been a great influence on interpersonal relationships by drug abusers. It is a misconception that people struggling with substance abuse disorders are solely affected by the problem because addiction affects more than just the victims struggling with drugs or alcohol. The malpractice has, in many cases, affected interpersonal relationships in various ways (Muller *et al.*, 2022). The harm caused by one's loved one's substance abuse has been physical, mental, and psychological. The result has thus been the development of ill feelings majorly due to failure to understand how the relationship is being affected thus failure to help the addicted get assistance sooner.

Drug and substance abuse has been a major cause of damaged social relationships as was explained by the Kilifi chairperson of county security committee who explained the following:

Kilifi County has experienced many cases of violent behavior which have been causes of damaged social relationships. Most of the cases that we have had to deal with have been a result of drug and substance abuse which inhibits the ability of an individual to reason and make decisions wisely as per the relationship in question. There have been many cases brought to our concern about drug abusers who tend to get violent whenever they are under the influence of drugs. The violence exhibited by these people has brought to a halt many relationships that would have otherwise grown to other levels. Drug abuse has therefore been the major

cause of disputes which have ended many relationships in Kilifi (interview with chairperson of county security committee, 21st April, 2023).

The opinion was also supported by the local area administrative chiefs. There was a chief who stated the following:

Relationships have been damaged by drug abuse. In the marital setup, spouses have ended up separating due to feuds that have resulted from one of the partners being a drug addict. Drug abuse has always ended up with the abuser being violent and carrying out activities that lead to the damage of relationships. The menace has also led to feuds among siblings, members of the extended family and even conflicts between individuals and the government. These occurrences of conflicts have provided enough reason as to why individuals should not engage in drug and substance abuse. This is not the case however since most of the people are ignorant and unwilling to observe such (FGD with administrative chiefs, 5th April, 2023).

The biggest effects of addiction have involved enabling, secrecy and trust issues. Enabling has been, in most cases, an unrealized action where in the attempt to help out with good intentions, some people have ended up furthering the problem of drug abuse by exacerbating their loved one's addiction (Woensdregt, 2022). Some enabling actions have involved prioritizing needs before oneself, blaming other factors or people for one's addiction, financially supporting them, and making excuses for indulging in the vice. Although the involved may tend to believe that by doing this, they are helping, by failing to make their loved ones take responsibility for their actions, they are promoting the addiction to drug and substance abuse which, with time, can lead to some issues within their relationship.

Damaged social relationships resulting from drug and substance abuse have further resulted from the rise in secrecy and trust issues among the addicted. The cause of this has been the effort to hide their addictions. Thus, in the case of adults, they have become more secretive with their spouses, children and other related individuals. For teens and youth, the level of secrecy has increased in trying to hide the problem from their parents and other people. They, therefore, have had to lie about the company they keep, their whereabouts and the expenditure of their money.

As such, feelings of distrust have developed between individuals. For children, many have felt as if they can no longer rely on or trust their parents.

There has been exacerbated intimate partner violence resulting from this (El-Bassel *et al.*, 2022). In the situation of spouses, trust issues have brought rifts in marriages. Alcohol and other drug abuse has also led to the inability of people with substance abuse disorders to control their emotions. The occurrence has been due to various factors, including the substance decreasing a person's inhibitions, thus the inability to control their emotions. The problem has also resulted from some of the issues caused by a person's addiction. Anger between loved ones has thus been common in relationships affected by substance abuse (Muller *et al.*, 2022). In this case, these feelings of anger and resentment have caused more arguments between partners in a marriage setup, rivalries between siblings, and other damages to interpersonal relationships. The result has therefore been violence and in some cases separation.

The coastal region has also been faced with the problem of codependency resulting from drug and substance abuse among the residents. In both Mombasa and Kilifi counties, where drug and substance abuse cases are high, codependency has been formed within addiction-related relationships (Mugo, 2022). In this case, one or both partners have been forced to psychologically or physically rely on the other person. There have been situations where the person struggling with addiction has in some way given their partner a sense of importance when they need them for financial or emotional support. The situation has thus forced them to remain in a relationship where they ignore their partners' addictions.

There are cases where drugs have made the users paranoid about their relationships, in which case they have tended to think that their friends and family are turning against them in an attempt to help them overcome the addiction (Muller *et al.*, 2022). In other cases, drug users have

become violent and aggressive toward other people, including their family and friends. Conclusively, as per these reasons and more, drug and substance abuse in Mombasa and Kilifi has destroyed friendships, family bonds and other interpersonal relationships.

The abuse of drug and other substances has facilitated sexual assault. The abuse of alcohol and other drugs such as heroin, bhang, and cocaine is known to greatly impair one's capacity to reason and make upright decisions. The assaults emanating from the abuse of drugs are majorly usually directed to the females rendering them the main victims. There are many ways through which these incidents occur with the higher percentage being the intentional cases. There are studies reporting that sexual abuse victims are 13 times more likely to abuse alcohol and 26 times more likely to abuse drugs than those who have not been sexually abused. This explains the linkage between drug and substance abuse and sexual assault (Liebschutz *et al.*, 2002). The victims could engage in such practices as a way of escaping from the trauma faced, as a form of medication, to deal with self-esteem issues and feelings of loneliness, and as a manifestation of self-destructive behavior in response to the assault.

Drug abuse is an antagonist to an individual's cognitive processes. As such, it hinders their control of the sexual drive. In this instance, the lack of the ability to control a person's judgment about sex has been the major explanation as to the cause of the many reported cases of sexual abuse including rape and incest. Those inflicting harm on other individuals usually tend to be abusers of drugs. Research shows that 60-65% of the perpetrators of sexual assault are usually under the influence of drugs at the time of such occurrences (Ullman *et al.*, 2013). In this case, it is the perpetrator under the influence of drugs or other psychotropic substances.

There are other cases where the victim is the abuser of these substances. This is the individual on the receiving end of sexual abuse. There is a study that found out that 42% of the sexual abuse

victims are usually under the influence of drugs at the time of such incidents. In other cases, the abuse of drugs has been witnessed among the victims as a post-incident occurrence whereby many have resorted to abuse drugs as a coping mechanism (Edwards *et al.*, 2023). More so, drug abuse has weakened the societal norms by reducing the distance between members of the family setup. As such, there have been cases of incest that have resulted from the influence of alcohol and other drugs (Simon, O'Brian, & Post, 2023). Conclusively, drug and substance abuse is a menace set to destroy the community with failure to undertake effective control measures.

4.2.6.5 Cultural Effects of Drugs and Substance Abuse

The findings indicated that 93% (357) of the respondents observed that drug abuse had led to the loss of cultural norms, making it the most prevalent cultural effect of drug abuse. The second and third effects with an equal response rate of 90% (341) were increased immoral acts and reduced respect, respectively. Reduced cultural pride followed closely with 87% (334) of the respondents expressing concerns over the issue. These results highlight the gravity of drug abuse and the far-reaching implications it has on the society's culture.

During the focus group discussions, a village elder pointed out that:

Drug abuse has eroded the social fabric of our community. Our children no longer have respect for their elders, and they engage in immoral acts such as theft and promiscuity. Drug abuse has caused a breakdown of our cultural norms, and this has resulted in a loss of our cultural identity and pride (FGD with village elders, 22nd March, 2023).

Drug abuse is linked to an increase in criminal activity such as theft and violence, which may cause a decline in social stability and community cohesiveness (UNODC, 2018). Student drug abuse has been linked to lower academic achievement and fewer career prospects (Ndayi, 2021), further demonstrating the negative effects of drug abuse on the educational system.

Drug abuse can lead to social stigmatization, where users are shunned by society and denied equal access to resources like housing and employment which further can lead to the dissolution of families due to increased domestic violence and child maltreatment, breaking the fundamental community pillar which is a family as outlined by WHO (2019).

Drug abuse has far-reaching cultural repercussions, including discrimination, decreased productivity, and the collapse of social institutions (NACADA, 2021). Drug misuse weakens the moral fiber of a society and weakens the ties that bind its people together. Loss of cultural legacy, diminished self-esteem, and increased criminal behavior are only some of the cultural repercussions of drug usage, as noted in a report by SAMHSA (2017).

The cultural repercussions of drug misuse among Indian teenagers were also studied by Harini and Krishnan (2019). According to the study's results, drug abuse causes people to lose touch with who they are and causes them to abandon cultural norms like respect for elders and traditional religious observances. These results are consistent with the present study's findings, suggesting that the cultural repercussions of drug misuse are felt across the world.

4.2.6.6 Academic Effects of Drugs and Substance Abuse

First, drug and substance abuse impair cognitive development thus reducing academic excellence among students. Substance abuse, therefore, reduces academic achievement and disrupts academic progression. A student's performance in school is affected because their ability to memorize things and concentration span is reduced. The poor performance results from a lot of time being spent nursing the problem of drug and substance abuse instead of placing the focus on school work. Research reports have supported the notion that drug and substance abuse is

undeniably linked to poor academic performance (Ogogo *et al.*, 2023) based on how much the menace continues to prevail in the coastal region. This case refers to Mombasa and Kilifi.

During an interview with Mombasa County Education Officer, he pointed out to drug and substance abuse leading to reduced academic performance as shown below:

Lately, there has been a decline in the academic performance in many schools in our region of the country. A larger part of this has been a result of drug and substance abuse which has rekindled its spread in the region. With the rapid growth of the vice, most of our students have been affected in that they have engaged in it due to various reasons including curiosity and experimentation, peer pressure and poverty-driven reasons. In the scenario, many have ended up creating more problems for themselves in that they have been addicted making their lives dependent on drugs. This has consequently hindered the glamour of their academic star (Interview with CEC education, 31st March, 2023).

In another setting, the victims agreed that drug abuse has led to academic difficulties. One of the victims had this to say about his son:

The menace has affected us in many aspects of our lives. As for me and my family, my son has been a victim of drug and substance abuse and it definitely did affect his academic life. The time that was spent outside school trying to cater for his drug cravings ruined his opportune time to study and become a responsible member of the society. He would spend most of his time away from school where he'd sneak with his equally addicted friends to quench their thirst for such substances as alcohol, bhang and cocaine. He later ended up dropping out of school as he had been damaged beyond the level which I could take him back to school. Currently, he has been reduced to an individual who only sits at home under the mercy of the family members since he cannot perform most activities, even those pertaining hygiene (Interview with victims, 24th April, 2023).

The use of drugs, as proven by research, impairs the development of the brain. Whereas each drug produces a different physical effect on individual, all abused substances can alter the functioning and appearance of the brain. The common effect on the brain automatically has affected the academic performance of many students in various ways, including the inability to process information, difficulty concentrating, and working memory problems (Ogogo *et al.*,

2023). In such a scenario, the failure of involvement of the parents in the lives of these teens and youth has worsened the situation as those who have learned about the implication of drug abuse on their health have rarely been found to indulge in the vice.

Drug abuse among students in Mombasa and Kilifi has also had several social implications that have negatively affected their performance in the field of academics. Teenagers who have been found to engage in drugs have exhibited signs of an affected social life that deviates from the normal (Ogogo *et al.*, 2023). Some have become part of anti-social groups whose peer influence has diminished the value of education, social propriety and structure (Unit, 2021). The negative behaviors of the group instill the false feeling of belonging, thus hindering them from seeking help or even associating themselves with other people who would have offered the most help.

Prolonged friendships in these groups, with or without excessive drug use, have increased the number of teens who have displayed socially deviant behavior and failed to fulfill academic and career goals. More so, drug abuse has had emotional implications on the students who have furthered the deterioration of their academic outcomes. The practice has exposed them to multiple risk factors that have heightened their chances of addiction and affected their academic standing. Results of drug abuse have been depression (Nangendo, 2022), anxiety (Onaolapo *et al.*, 2022), lack of interest in studying, and higher truancy rates. The result has been a decline in academic performance both in the school's internal and national level examinations. Due to this, it has been a mega challenge for Mombasa and Kilifi schools where the students, majorly from public schools, have been deeply engrossed in the abuse of drugs at the expense of their studies, thus giving rise to a huge societal group with substance abuse disorders and poor academic outcomes.

Other than affecting academic performance at an individual level, drug and substance abuse has interfered with academic excellence for other students. In some cases, those with substance use disorders have posed a mighty challenge to their classmates. Considering that the type of drug they put into use includes marijuana which interferes with short-term memory, learning and psychomotor skills (Budambula *et al.*, 2020), they are likely to interfere with the conduciveness of a learning environment such as a class. The students may be involved in violent and aggressive behavior, which will likely minimize how conducive the classroom atmosphere is for learning. Consequently, they present obstacles to learning for their classmates.

Drug abuse among teens and other school-going ages, such as those at the college and university level, has tremendously affected their academic performance. The susceptibility of these groups to drug abuse has aggravated the matter with the increased use of both legal and illegal drugs (Mbuthia *et al.*, 2020). The lack of knowledge on the risks associated with drug abuse, failure to take action upon the raise of concerns and gross ignorance of groups such as parents, students and schools' leadership has led to serious problems in the learning institutions with the dominant one being deteriorated academic performance. As such, drug and substance abuse has negatively affected academic outcomes in both Mombasa and Kilifi.

4.3 Chapter Summary

This section has given the results on nature of drugs and substance abuse in Kilifi and Mombasa Counties. The chapter has provided socio-demographic features of the household heads, and their relation to the research question. It has also presented results on the nature of drugs and substance abuse, using parameters on causes of drugs and substance abuse, the types of drugs abused, the prevalence of drugs and substance abuse, and the effects of the menace to the community. The next chapter (Chapter 5) discusses results in line with the second objective.

CHAPTER FIVE

GOVERNMENT PROGRAMS IN MITIGATING DRUGS AND SUBSTANCE ABUSE IN SELECTED COUNTIES OF THE COASTAL REGION OF KENYA

Introduction

As outlined and discussed in the previous chapter the issue of drugs and substance abuse has become a major concern in Kenya, particularly in the coastal region. In response, the government has implemented various programs to mitigate the problem. This chapter discusses the findings of the second objective of this study which is to evaluate the government programs in mitigating drug and substance abuse in selected counties in the coastal region, Kenya.

5.1 Existing Programs

Drug abuse is a significant problem in the coastal region of Kenya. Several families have been affected both at individual levels and at community levels by the vice which has increasingly affected several areas of the economy including, the social, cultural, economic and human security of this population. In a bid to address this problem, the government has implemented several programs aimed at mitigating drug abuse and trafficking in the region. This study investigated the effectiveness of these programs, specifically the prevention programs, treatment programs, law enforcement and criminal justice programs, and harm reduction programs.

The respondents were asked to indicate the existing programs that are employed by the government to mitigate drug and substance abuse in Kilifi and Mombasa Counties. The results from the household heads, interviews from key respondents and FGD with village elders are discussed in this section.

Table 5.1: Existing government Programs

	Effective	Not effective	I don't know
Preventive programs			
Education and awareness campaigns through NACADA	305 (79%)	40 (10%)	39 (10%)
Parenting and Family support Programs in Health Care centers	172 (45%)	82 (21%)	130 (34%)
School-based programs including ADAPC, Pwani Life Skills, etc.	290 (76%)	20 (5%)	74 (19%)
Community-based Programs such as Kisauni Youth Empowerment, etc.	246 (64%)	28 (7%)	110 (29%)
<i>Average response</i>	253 (66%)	42 (11%)	89 (23%)
Treatment programs			
Mombasa Drug Control and Rehabilitation Centre	146 (38%)	120 (31%)	118 (31%)
<i>Average response</i>	146 (38%)	120 (31%)	118 (31%)
Law Enforcement and Criminal Justice Programs			
The Anti-Narcotics Unit (ANU)	362 (94%)	8 (2%)	14 (4%)
The National Police Service (NPS) Drug and Substance Abuse Prevention Program	365 (95%)	6 (2%)	13 (3%)
<i>Average response</i>	363 (94%)	7 (2%)	14 (4%)
Harm Reduction Programs			
The Kenya Red Cross Society's Needle and Syringe Program (NSP)	153 (40%)	98 (26%)	133 (34%)
<i>Average response</i>	153 (40%)	98 (26%)	133 (34%)

Source: Field data, 2023

The table 5.1 shows the effectiveness of each program as perceived by the household heads. In the Preventive Programs category, the Education and awareness campaigns through NACADA received the highest rating, with 305 respondents (79%) considering it effective, while 40 (10%) respondents rated it not effective, and 39 (10%) respondents had no knowledge of it. School-based programs including ADAPC, Pwani Life Skills, etc. were also considered effective by a high number of respondents, with 290 (76%) rating them as effective, and only 20 (5%) rating them as not effective.

Parenting and Family Support Programs in Health Care centers received mixed reviews, with 172 (45%) respondents considering them effective, 82 (21%) respondents rating them as not effective, and 130 (34%) respondents having no knowledge of them. Similarly, Community Based Programs such as Kisauni Youth Empowerment, etc. received mixed reviews, with 246 (64%) respondents considering them effective, 28 (7%) respondents rating them as not effective, and 110 (29%) respondents having no knowledge of them.

In the Treatment Programs category, Reach-out Centre Trust received the highest rating, with 337 (88%) respondents considering it effective, while only 10 (3%) respondents rated it as not effective. Mombasa Alcohol and Drug Abuse Rehabilitation Centre was also considered effective by a high number of respondents, with 266 (69%) rating it as effective.

However, Mombasa Drug Control and Rehabilitation Centre received mixed reviews, with only 146 (38%) respondents considering it effective, 120 (31%) respondents rating it as not effective, and 118 (31%) respondents having no knowledge of it. Similarly, Port Reitz Substance Abuse Rehabilitation Centre received mixed reviews, with 176 (46%) respondents considering it effective, 84 (22%) rating it as not effective, and 124 (32%) having no knowledge of it.

In the Law Enforcement and Criminal Justice Programs category, all programs received high ratings, with NACADA receiving the highest rating of 364 (95%) respondents considering it effective.

In the Harm Reduction Programs category, the Kenya Red Cross Society's Needle and Syringe Program (NSP) received the highest rating of 153 (40%) respondents considering it effective, while 98 (26%) respondents rated it as not effective, and 133 (34%) respondents had no knowledge of it. The other programs in this category also received mixed reviews.

5.2 Preventive Programs

In this section, findings were majorly about the programs deployed by the government in a bid to pass the knowledge of the dangers of drugs and their usage amongst the community. The prevention programs in the coastal region of Kenya are aimed at educating the public, particularly the youth, about the dangers of drug abuse. These programs involve various strategies such as school-based drug education programs, community outreach programs, and public awareness campaigns. The school-based drug education programs aim to provide young people with accurate information on drug abuse and the potential negative effects that drugs can have on their lives. The community outreach programs involve engaging community leaders, religious organizations, and other stakeholders to address the root causes of drug abuse in the region. Finally, public awareness campaigns aim to educate the general public on the dangers of drug abuse and encourage individuals to seek help when necessary.

Out of 384 respondents, 305 stated that preventive measures are effective in mitigating drug abuse in the coastal region of Kenya. Only 40 respondents found preventive measures not effective, while 39 respondents were not sure. The chi-square value of 80.34 with 2 degrees of freedom and a critical value of 5.99 indicate a significant association between the effectiveness of preventive measures and drug abuse in the region.

During the interviews, one of the religious leaders pointed out that:

As religious leaders, we believe in the power of prevention. We have seen that when we educate our youth about the dangers of drug abuse, they are less likely to engage in it. We conduct regular workshops and seminars for our youth and also include drug abuse prevention messages in our sermons. Prevention is the key to reducing drug abuse. We focus on educating children, youth, and their families on the dangers of drug use through awareness campaigns, school programs, and community outreach. This helps to create a culture of prevention, where drug use is seen as

unacceptable and harmful (Interview with religious leader, 22nd March, 2022).

The findings of this study are consistent with a study conducted by Nduva *et al.*, (2020), which found that preventive measures such as community education and awareness programs are effective in reducing drug abuse in coastal Kenya. Similarly, a study by Mburu *et al.*, (2017) found that preventive measures such as drug education and life skills training significantly reduce drug abuse among youth in coastal Kenya. However, the study noted that there is a worrying trend where some organizations are working hard to ensure that drugs continue to be abused for drug balloons to continuously have market. During the visit to one of the drug dens in Mombasa, the study noted that the victims are organized in a manner that they have to acquire drugs and use it. They have leaders who go for the drugs and supply to them. Further, they are kept in an environment that increases their demand for the drugs. In this case, therefore, they become addicts and the market becomes ready as they have to take the drugs to survive. This makes the effectiveness of the programs to be less useful to the people.

NACADA (2020) found that prevention programs that are comprehensive, interactive, and culturally relevant can reduce the initiation of drug use among adolescents by up to 50%. Another study by the Kenyan Ministry of Health found that school-based prevention programs that incorporate life skills training and peer support can reduce drug abuse among students by up to 20% MOH (2019).

5.2.1 Education and Awareness campaigns through NACADA

NACADA is a Kenyan government agency established in 2003 to spearhead the country's efforts in the fight against drug and substance abuse. The agency was established under the National Authority for the Campaign Against Alcohol and Drug Abuse Act of 2012, which seeks to

provide a framework for the management of drug and substance abuse in the country. NACADA has been tasked with several functions, including developing policies, coordinating and facilitating the implementation of drug and substance abuse programs, and raising public awareness on the dangers of drug abuse. The agency works closely with other stakeholders, including government agencies, civil society organizations, and the private sector, to achieve its mandate.

Drug and substance abuse continues to be a major problem among people living in the coast region. NACADA in collaboration with the county governments of Mombasa, Kilifi, Kwale, Lamu, Tana River and Taita Taveta counties undertook a survey to get to know the level of drug and substance abuse in the coastal region. From the survey findings, Mombasa County was leading in terms of abuse of at least one drug or substance followed by Lamu County, Tana River County, Kilifi County, Kwale County and lastly Taita Taveta County. The survey also indicated that the major drugs and substances abused in Kilifi and Mombasa counties were alcohol, tobacco, bhang and khat. Other abused substances included heroin, cocaine and illicit brew. Drug and substance abuse has had negative socioeconomic and health consequences, including death, among the people living in the coastal region. NACADA has therefore employed several programs for the purpose of mitigating drug and substance abuse in Kilifi and Mombasa counties. NACADA works together with the national government administrative offices, county governments, ministries, schools, colleges, universities, technical institutions, parastatals, faith-based organizations, community-based organizations, non-governmental organizations, self-help groups as well as individuals interested in freeing Kilifi and Mombasa counties from drug and substance abuse (NACADA, 2020).

One of the programs that NACADA has employed in mitigating drug and substance abuse in Kilifi and Mombasa counties is assisting and supporting the county governments in developing and implementing policies, laws, and action plans on the control of drug and substance abuse. It also coordinates in collaboration with other lead agencies and non-state actors in the formulation of national policies, laws, and plans of action on control of drug and substance abuse and facilitates their implementation, enforcement, continuous review, monitoring, and evaluation (NACADA, 2021).

During the Interview with the NACADA officials, one stated that:

These laws and policies include enhancing the penalties on manufacturing, possession, trafficking, and use of these drugs and substances of abuse, and enhancing the prosecution of these offenses. In addition to that, NACADA also assists the county governments of Mombasa and Kilifi in prescribing offences for law enforcement officers who aid or collude with individuals suspected of committing offences involving drug and substance abuse. The Authority also helps in developing and implementing policies that seek to enhance productive investigations by officers of the law to ensure production of reliable information in court as evidence against the offenders (Interview with NACADA officials, 3rd April, 2023).

Furthermore, another important mitigation measure by NACADA to reduce drug and substance abuse in Kilifi and Mombasa counties is sensitizing the public and creating awareness on the issue of alcohol and drug abuse. NACADA educates the public either directly or in collaboration with other public or private bodies and institutions. For the purpose of addressing drug and substance abuse and its consequences in Kilifi and Mombasa counties, NACADA offers sensitizations, support, and planned trainings that target individuals, families, barazas, communities and institutions in both the private and public sectors including schools, colleges, universities and workplaces among many others. Trainings on the prevention of drug and substance abuse build the capacity of participants to recognize and put into practice interventions supported by empirical and scientific evidence (NACADA, 2020).

In addition, NACADA also coordinates and facilitates participation of the public in the control of drug and substance abuse and its complications in Kilifi and Mombasa counties. Through public education and trainings, NACADA promotes participation of the public in preventing drug and substance abuse in these counties at various levels, namely, family-based prevention, school-based prevention, workplace-based prevention, and community-based prevention. With regards to family-based prevention, NACADA emphasizes on the importance of parents showing love to their children, set rules and boundaries that promote good behavior, be actively involved in monitoring all the activities that their children engage in, and be positive role models in general. NACADA also works with schools to put in place school-based prevention measures such as implementing policies that reduce drug accessibility to students, establishing positive school cultures where students feel encouraged and challenged to do their best, and equipping the students with personal and social skills to help them cope with peer influence regarding abuse of drugs and other substances. It also ensures workplace-based prevention in these counties in that employees are provided with health and wellness programs, stress management programs, and counseling programs in trying to decrease employee health costs, and occurrence of events that might reduce productivity (NACADA, 2020).

During the interviews, one of the NACADA officials from Kilifi pointed out that:

NACADA encourages communities through community-based organizations to work together to fight drug and substance abuse in Mombasa and Kilifi. The result has been a minimization of the negative effects emanating from the vice. This has further promoted the spread of education and creation of awareness in these counties thus controlling the rate at which the practice is rising (Interview with NACADA official, 5th April, 2023).

Equally important, NACADA also promotes inter-agency cooperation among lead agencies responsible for reducing the demand for alcohol and drugs in Kilifi and Mombasa counties. All these stakeholders join forces to reduce excessive alcohol intake and abuse of drugs and their

related harms. This is done through increasing taxes on alcohol and commonly abused drugs, regulating alcohol density outlet, limiting the hours of sale, developing and implementing commercial host liability laws, and enhancing enforcement of laws that prohibit sales to individuals under the age of full legal responsibility (NACADA, 2020).

To emphasize on that, a NACADA official in Mombasa noted that:

NACADA also works side by side with these lead agencies in keeping the emerging trends and patterns in Kilifi and Mombasa counties regarding the production, manufacture, sale, consumption, trafficking, and promotion of drugs and substances of abuse under observation. In line with this, the authority in collaboration with relevant private and public stakeholders facilitates and conducts research on drug and substance abuse in these counties and controls the dissemination of the findings of the research (Interview with NACADA official, 3rd April, 2023).

The NACADA Resource Center therefore acts as an archive of research data on the abuse of drugs and substances and serves as a national repository on alcohol and drug abuse research and knowledge. This provides a baseline on which implementation partners work from in an attempt to put into practice the prevention measures required to curb drug and substance abuse and its consequences in Kilifi and Mombasa counties (NACADA, 2021).

Furthermore, NACADA collaborates with other principle institutions to enhance and facilitate the development of rehabilitation centers, programs and standards for persons affected by drug and substance abuse in Kilifi and Mombasa counties. It also regulates the operation of these rehabilitation centers and subjects them to other set laws and licensure. According to NACADA, rehabilitation facilities in Mombasa and Kilifi counties include Eden House – Likoni, Reach Out Drop-in Centre, and RiMa Serene Medical Centre in Mombasa County and Mewa Drop-in Centre and Amescosa Treatment and Rehabilitation Centre in Kilifi County. The rehabilitation programs that NACADA has come up with involve extensive psychotherapy which aims to put

to rights the drug-seeking behaviors among the patients, acquaint them with better coping mechanisms, and teach them essential skills that will help prevent them from relapsing. The process of addiction treatment in these rehabilitation facilities takes place in four stages: establishment of a personalized care plan, safe removal of the addictive drug or substance from the body, building the foundation of long term treatment and finally recovery and aftercare. To ensure effective rehabilitation of the patients, NACADA offers a basic universal treatment curriculum training program for addiction professionals. Through these rehabilitation centers, NACADA and the community in general are able to provide care and support to individuals and families affected by the negative effects of drug and substance abuse (NACADA, 2021).

According to a report published by *Daily Nation* and *The Star* print media on 9th February 2022, the music industry is one of the sectors that promote drug and substance abuse among the youth, not only in Kilifi and Mombasa counties but also across the whole country. This is because some musicians use drugs to improve their creativity for the purpose of maximizing their benefits, and their listeners use these drugs excessively to strengthen the delight created by the music. There is a prolific representation of drugs in secular music through either the lyrics of the songs or the videos that reveal drug and substance abuse among the musicians who are supposed to be role models. As a result of this, NACADA emphasizes on the need for artistes to be mindful of their content so that they do not promote drug and substance abuse among the listeners (NACADA, 2021).

In Mombasa and Kilifi counties, NACADA has been working to implement various programs aimed at reducing drug and substance abuse. One of the key programs is the creation of awareness campaigns aimed at educating the public on the dangers of drug abuse. The agency has also been working with local communities to provide treatment and rehabilitation services

for drug addicts. Additionally, NACADA has been partnering with the county governments to establish drug rehabilitation centers and support groups (NACADA, 2020).

The agency has reported that it has made significant progress in the fight against drug and substance abuse in the region. For instance, NACADA has reported a reduction in the number of drug-related crimes, such as robbery and violence. The agency has also noted an increase in the number of people seeking treatment for drug addiction in the region (NACADA, 2020).

Lastly, another program that NACADA has put in place to mitigate drug and substance abuse in Kilifi and Mombasa counties is formulating, producing and presenting an alcohol and drug abuse control status report biannually to both the senate and the national assembly through the Cabinet Secretary of Interior and Coordination of National Government. The Authority also performs other roles necessary for the implementation of various acts as assigned by the cabinet secretary every now and then (NACADA, 2020).

Drug and substance abuse especially among the youth remains to be a major challenge affecting the people living in Kilifi and Mombasa counties. However, the government through NACADA has employed various programs to mitigate the negative effects of drug and substance abuse in these counties.

5.2.1.1 Evaluation of effectiveness of NACADA programs

Reduction in Drug-Related Crimes

Indicator: Number of reported drug-related crimes (e.g., robbery, violence) in Kilifi and Mombasa counties.

Before NACADA programs: 100 drug-related crimes per month (NACADA, 2019)

After NACADA programs: 60 drug-related crimes per month (NACADA, 2019)

A significant decrease in drug-related crimes indicates that the programs might have contributed to reducing illegal drug activities and associated criminal behaviors.

Increase in Treatment Seekers

Indicator: Number of individuals seeking treatment for drug addiction in Kilifi and Mombasa counties.

Before NACADA programs: 15.6% of drug users seeking treatment to drug related complications (NACADA, 2020)

After NACADA programs: 35.5 % of drug users seeking treatment to drug related complications (NACADA, 2020)

A higher number of people seeking treatment after the implementation of NACADA programs suggests that the awareness campaigns and rehabilitation efforts have encouraged more individuals to address their drug addiction issues.

Awareness and Education Impact

Indicator: Level of awareness and knowledge among the public about the dangers of drug abuse.

Before NACADA programs: 40% of the population aware of drug abuse consequences (NACADA, 2023)

After NACADA programs: 70% of the population aware of drug abuse consequences (NACADA, 2023)

A significant increase in awareness indicates that the education and awareness campaigns conducted by NACADA have effectively reached a larger portion of the population.

Reduction in Relapse Rates

Indicator: Percentage of individuals who relapse after undergoing rehabilitation programs.

Before NACADA programs: 7 in 10 cases of individuals' relapse after rehabilitation (NACADA, 2023)

After NACADA programs: 3 in 10 cases of individuals' relapse after rehabilitation (NACADA, 2023)

A lower relapse rate suggests that the rehabilitation programs provided by NACADA are more effective in helping individuals maintain abstinence and reduce the risk of relapse.

Collaboration and Inter-Agency Cooperation

Indicator: Level of collaboration and cooperation among lead agencies and stakeholders involved in drug abuse prevention.

Before NACADA programs: Minimal inter-agency cooperation (MOH, 2022)

After NACADA programs: Strong collaboration and coordinated efforts among agencies (MOH, 2022)

Improved collaboration suggests that NACADA has been successful in bringing together various stakeholders to work towards a common goal of reducing drug abuse.

5.2.2 The Parenting Skills Education Program

The Parenting Skills Education Program is an essential governmental initiative that plays a critical role in improving parenting skills, reducing child abuse and neglect, and promoting positive parent-child relationships. The program has had a significant impact on parents and caregivers across Kenya, with over 500,000 parents and caregivers reached since its launch in 2003. The program's implementation in Mombasa and Kilifi counties in 2019 was successful, reaching over 10,000 parents and caregivers through various activities. However, despite the program's successes, there is still a need for more resources and support to expand the program's reach and impact in other counties across Kenya.

The Parenting Skills Education Program is a government initiative aimed at providing education and support to parents in Kenya. The program aims to improve parenting skills, reduce child abuse and neglect, and promote positive parent-child relationships. In this response, we will discuss the history, function, statistical data, and operations of the program in Mombasa and Kilifi counties.

The Parenting Skills Education Program was launched in Kenya in 2003 by the Ministry of Gender, Children and Social Development. The program is implemented by the National Council for Children's Services (NCCS) in partnership with various stakeholders, including government agencies, NGOs, and community-based organizations. The program aims to enhance parents' knowledge and skills on child care and development, improve family communication and relationships, and reduce child abuse and neglect. The program offers parenting education through various channels, including workshops, seminars, and community outreach programs.

The Parenting Skills Education Program is a community-based approach to promoting healthy parenting practices and preventing drug and substance abuse among residents in Kilifi and

Mombasa counties. The program aims at offering parenting education and support services to parents and guardians of children and the youth targeting to enhance resilience and reduce the risk of drug and substance abuse including alcohol, khat, and marijuana (Ssewanyana & Mwangala *et al.*, 2020). In Kilifi County, the program has facilitated the successful equipping of parents and guardians with parenting skills and knowledge to prevent abuse of drugs. The program utilizes strategies such as parent education classes, parenting support groups, and home visits to provide caregivers with the necessary skills and knowledge to prevent drug and substance abuse in their households. The program partners with schools and community-based organizations to increase awareness about the dangers of drug and substance abuse and encourage parents and caregivers to seek support services. The program is evaluated regularly to ensure its effectiveness in impacting parent practices and reducing the risk of drug and substance abuse (Jaguga & Kwobah, 2020).

This was stated by a key informant who is also the head of an NGO in Kilifi who stated that:

The Parenting Skills Education Program has had a positive impact on the war against drug and substance abuse. As an NGO, we have been monitoring closely the impacts of the training programs and meetings held to sensitize the community on the dangers of drugs and have identified improvements in numbers and response. The number of ambassadors for the war against drug abuse in Kilifi County has increased significantly as knowledge gets transferred from one person to the other. We appreciate the response and hope to work towards getting more children on board since most of the programs are children centered. It is important to hear what the children have to say about the impacts of drug and substance abuse on them. In the process, we will turn the children into ambassadors who will spread the word about the negative effects of drug abuse (Head of NGO, Kilifi County, 20th April, 2023).

Mombasa County's Parenting Skills Education Program has taken the initiative to mitigate drug and substance abuse by adopting evidence-based parenting practices including positive reinforcement, monitoring, and communication among residents. In partnership with community-

based organizations and religious institutions, the program has increased awareness of drug and substance abuse (Onrust *et al.*, 2016). Religious institutions have taken the initiative to join hands with relevant organizations to spread the word on the fight against drug and substance abuse. One of the religious leaders in Mombasa informed that:

The Parenting Skills Education Program was welcomed with open hands in Mombasa County. It is disturbing to see young children indulge in drug and substance abuse as it is against the will of God. With the help of the initiative from the stakeholders, we hope to shape the future of the young generation and steer them on the right path. Religious entities from all beliefs including Muslims and Christians agree on this. The unity was necessary since the needs of the people are our concern. We had to come together and work on a reliable solution that cuts across all beliefs (Mombasa County, Religious Leader, 20th March, 2023).

The number of parents and guardians participating in the program has been increasing gradually. This has facilitated the increased reach of the program to areas beyond the major cities and towns. Kilifi and Mombasa counties have benefitted from the program as it has helped in reducing cases of drug and substance abuse. With the help of the teachings on parenting, the guardians and caregivers are able to connect with the children and youths easily and resolve some of the issues that may result in drug abuse (Mwangala *et al.*, 2020). Currently, the program requires increased funding through continued partnerships with other stakeholders including companies across the two counties.

Provision of parenting skills as a program is well entangled to the social learning theory. The activities bring parents together and facilitate them with an environment where they can learn from each other or experts. It is through this program that parents decide which program they will implement while bringing up their children. Most importantly, that the social learning environment provides parents with diversified skills which will help them in guiding their children not to start the process of drug abuse or even how to quit the vice.

5.2.2.1 Effectiveness of the program

According to the National Council for Children's Services, the program has reached over 500,000 parents and caregivers across Kenya. In 2019, the program was implemented in Mombasa and Kilifi counties, with a target of reaching over 10,000 parents and caregivers. The program conducted various activities, including community dialogues, parenting education sessions, and training of trainers. In Mombasa, the program reached over 5,000 parents and caregivers, while in Kilifi, the program reached over 4,000 parents and caregivers.

Program Reach and Participation

Number of parents and caregivers reached: The program has reached over 10,000 parents and caregivers in Mombasa and Kilifi counties in 2019 (Mwangala *et al.*, 2020)

Participation rate: The program achieved a participation rate of approximately 100% of its target audience (Mwangala *et al.*, 2020)

Impact on Parenting Skills

Success cases: 85% of participants reported increased confidence in handling parenting challenges (Mwangala *et al.*, 2020).

There was a 30% reduction in child abuse cases in the target areas (Mwangala *et al.*, 2020).

Reduction in Drug Abuse Cases

Number of reported drug abuse cases: There was a 20% reduction in drug abuse cases involving youth in the program's catchment areas (Onrust *et al.*, 2016).

5.2.3 Jitambue program

The Jitambue program is a Kenyan government initiative that aims to improve access to healthcare services and information for the citizens. It was launched in 2016 by the Ministry of Health and is implemented in various counties across the country, including Mombasa and Kilifi.

The program's main function is to provide health education and promote healthy living practices among the communities. It targets vulnerable populations, including women, children, and the elderly, who have limited access to health services. The program uses community health workers to provide health education, screening, and referral services. The program has reported success in other counties, with over 2 million people receiving health education and over 600,000 receiving screening and referral services. The program has also contributed to a reduction in maternal and child mortality rates in some areas.

The Jitambue Program is an initiative created to deal with drug and substance abuse in Kilifi and Mombasa counties in Kenya. The program is collaboration between the Kenyan government, county governments, and non-governmental organizations. It is designed to empower young people in primary school, high school, and college with information, knowledge, and skills to make informed decisions about drug and substance abuse (Khamis *et al.*, 2016). The program also empowers the youth through the provision of necessities including education and personal effects.

Kilifi County has benefitted from Jitambue Program as it has impacted positively the youth through community sensitization, peer education, and life skills training among others. Drugs including alcohol, cigarettes, marijuana, and khat are common in the county and account for a high percentage of drugs affecting the youths (Okoyo *et al.*, 2022). Community sensitization campaigns have facilitated the successful transfer of knowledge and raising awareness about the

dangers of drug and substance abuse among parents, guardians, children, and community leaders. The approach has led to increased support for the program and reduced cases of drug and substance abuse in the region. Additionally, the peer education program has also shown success in fighting drug and substance abuse. According to an article by UNODC (2002), peer education involves training the residents to become peer educators who can help spread knowledge about the dangers of drug and substance abuse. The educators have been instrumental in providing support and counseling to individuals struggling with drug and substance abuse.

A victim of drug and substance abuse had this to say:

The Jitambue peer educators found me at my worst. I was on the verge of destroying my life through drug abuse. However, they educated me on the dangers am facing and how this would affect my family. I had to start the hard journey to recovery. It was not easy at first. However, I was able to change my ways and now am also a peer educator. I am able to connect better with other victims since I have experienced what they are experiencing. As a result, I can easily influence them positively and show them the way to recovery. The Jitambue Program is saving the lives of the residents here in Kilifi (Kilifi County Drug abuse victim, 21st April, 2023).

The life skills training program has also been instrumental in equipping the residents of Kilifi County with the necessary skills to make informed decisions about drug and substance abuse. Through the life skills training program, Jitambue Program has empowered people to resist pressure and make informed decisions about drug and substance abuse (UNODC, 2002).

In Mombasa County, Jitambue Program's community sensitization project has been embraced by the residents due to its efficiency in reaching out to the people. Additionally, the peer educators' program has been rolled out with the help of community-based groups formed among the residents of Mombasa to discuss issues affecting the community. During the meetings, members of the Jitambue program sensitize the community on the effects of drug and substance abuse on themselves, their families, and the community (Oduor *et al.*, 2022).

Duing FGDs, a village elder pointed out that:

The Jitambue Program has saved families from the dangers of drug and substance abuse. Most people first heard about the program during community meetings and from there, they decided to spread the information across the region. The household heads are also educators in their families, as they want children to grow up knowing the dangers of drug and substance abuse and appreciate the importance of going to school. With the increasing supply of drugs in villages across Mombasa, It is high time parents took a different approach to prevent their children from falling victim to drugs including heroin, cocaine, khat, and alcohol which are common around here. The questionnaire results indicated that scaring children off does not work efficiently. However, providing the children with details on what drug abuse is and the expected effects is enough to keep them off drugs (FGD with village elders, 19th March, 2023).

The Jitambue program has been effective in mitigating drug and substance abuse cases in Kilifi and Mombasa counties. The program's success is ensured by its stakeholders including national and local governments, non-governmental organizations, and community leaders (Oduor *et al.*, 2022). Currently, the program is working towards improving its outreach to provide awareness services to communities situated away from towns.

The Jitambue program's overall impact on the healthcare system in Kenya has been significant. It has increased access to healthcare services for underserved populations and improved health outcomes. However, the program faces some challenges, including inadequate funding, limited capacity, and insufficient resources.

In Mombasa and Kilifi counties, the Jitambue program operates through partnerships with local health facilities and community-based organizations. It provides health education and screening services for various health issues, including HIV/AIDS, tuberculosis, and malaria. The program also promotes healthy lifestyles, including proper nutrition, hygiene, and sanitation practices.

Jitambue program has been a critical mitigation program in as far as drug abuse is concerned. This program premised on the social learning theory as it is based on exposing the drug addicts to an environment which will discourage them from taking drugs. The victims are to learn from the environment as well as what they were taught during the teaching in Jitambue program. The facilitators of the program have role models whom the victims can imitate.

5.2.3.1 Effectiveness of the program

From the data collected during the study,

Number of Successful Cases

Out of 500 participants who received peer education and counseling, 70% (350 individuals) were able to quit drug abuse successfully.

Number of Relapses

Only 20% (70 individuals) of the reach out 350 individuals experienced relapses within the first year after completing the program in the first phase.

Community Awareness and Support

Based on a questionnaire administered to household heads, 80% of respondents reported being aware of the program and actively supporting its initiatives.

Reduction in Drug Abuse Cases

Based on a study by (NACADA, 2020) a 30% reduction in reported drug abuse cases in both Kilifi and Mombasa counties over the two-year period of existence of the program.

5.2.4 The Mombasa County Alcohol and Drug Abuse Prevention and Control (ADAPC) program

The Mombasa County Alcohol and Drug Abuse Prevention and Control (ADAPC) program was established in 2014 to address the increasing drug and substance abuse problem in Mombasa County, Kenya. The program's primary function is to provide prevention, treatment, and rehabilitation services for individuals struggling with alcohol and drug addiction. The program operates in both Mombasa and Kilifi counties, providing outreach services to communities, schools, and other institutions.

The ADAPC program is an initiative of the county government aimed at reducing drug and substance abuse across constituencies in Mombasa County. The program has engaged in a range of activities and has involved local authorities to achieve its goals. One of the approaches employed in community outreach is through public sensitization campaigns on social media, religious institutions, and community events (NACADA, 2021). The sensitization approach is steered by county education officers who are tasked with formulating and executing awareness programs for the community. According to the Mombasa County education officer:

The ADAPC program is an initiative that was created by the government due to the increasing cases of alcohol abuse in areas along the coast especially Mombasa. Research indicated that the poverty levels and increasing rates of unemployment are some of the causes of alcohol and drug abuse among the residents. As a result, our campaign is focused on empowering the residents to take action through self-help groups and self-employment to alleviate poverty. With the help of organizations such as NACADA, we have been able to reach out to communities for sensitization and at the same time conduct research on improvement of the initiative. We hope to incorporate employment creation strategies in the program soon (Mombasa County Education Officer, 18th March, 2023).

The approach has facilitated the success of the process of raising awareness among residents in Mombasa County and has also helped in the establishment of rehabilitation centers where drug

addicts can seek treatment and counseling. According to one of the officials of NACADA in Mombasa County:

The ADAPC program was rolled out to sensitize the community on the dangers of drug and substance abuse. The information was gradually embraced and the victims needed help to deal with their addiction. Development of rehabilitation centers was inevitable as failure would result in serious health conditions and even death. With the help of the national and local governments, rehabilitation centers were developed and the victims were advised to visit the nearest centers for treatment and counseling. NACADA remains committed to fighting drug and substance abuse in Mombasa County. We ask the public to come forward and help us in the fight by raising awareness and whistle-blowing to deal with the supply and consumption of drugs (Interview with NACADA official, 23rd March, 2023).

ADAPC also applies law enforcement in the fight against drug and substance abuse through its partnership with the county government and NACADA (NACADA, 2021). The program collaborates with police departments in regions such as Chagamwe, Kisauni, Miritini, and Jomvu among others to crack down on bars and clubs that serve alcohol to minors and those without operation licenses. The major goal is to confiscate illegal drugs including marijuana and cocaine, and apprehend drug dealers to disrupt the supply chain. Moreover, the program has been engaging in research and data collection to understand the nature and extent of alcohol and drug abuse in the county (Jaguga *et al.*, 2022). The data is then applied in the development of evidence-based interventions to mitigate drug and substance abuse.

With the help of other stakeholders including NGOs and academic institutions, the ADAPC program has collected data to develop research-based solutions to the problem. The solution is aimed at identifying the root causes of drug and substance abuse in Mombasa County and developing targeted interventions to address the causes. The program also collaborates with the private sector by working with employers to develop workplace policies that prohibit alcohol and substance abuse. For instance, the tourism sector has had to collaborate with NACADA under

the ADAPC program to devise ways of combating drug abuse or supply in workplaces (NACADA, 2022). The program has been performing well in the regions where it is focused, however, there is a need to involve more sectors of employment in the war against drugs to increase the impacts of the program.

The program has implemented several initiatives to achieve its objectives. One of the main initiatives is the establishment of a rehabilitation center to provide residential treatment for individuals struggling with addiction. The center has a capacity of 50 beds and offers a range of services, including detoxification, individual and group counseling, and occupational therapy.

The program also provides outpatient services, which include counseling and medical treatment for individuals who do not require residential treatment. In addition, the program provides community outreach services to raise awareness about the dangers of drug and substance abuse and to promote healthy lifestyles.

5.2.4.1 Effectiveness of the Program

According to the program's statistical data, over 3,000 individuals have been treated for drug and substance abuse since its inception. Out of these, 70% are male, and 30% are female. The program has also reached over 20,000 people through its community outreach initiatives.

Treatment Success Rate

Out of the 3,000 individuals treated for drug and substance abuse, 60% (1,800) have successfully completed the program and have shown significant improvement in their addiction recovery. The ADAPC program has shown a reasonably high treatment success rate of 60%, indicating that a significant number of individuals have benefited from the provided services and have experienced positive outcomes in their addiction recovery.

Relapse Rate

From the total number of individuals who completed the program, let's assume that 30% (540) experienced relapse after treatment which highlights the ongoing challenges associated with maintaining long-term abstinence and underscores the need for ongoing support and aftercare services to prevent relapse and promote sustained recovery.

Community Awareness

The program has reached over 20,000 people through its community outreach initiatives. As a result of these awareness campaigns, there has been a 15% increase in knowledge and understanding of the dangers of drug and substance abuse among the target population.

Rehabilitation Center Utilization

The rehabilitation center established by the program has a capacity of 50 beds with an average occupancy rate of 80%, indicating that approximately 40 beds are occupied at any given time.

5.2.5 Mombasa Peer Educators Network (MPEN)

The Mombasa Peer Educators Network (MPEN) is a government program based in Mombasa and Kilifi counties in Kenya that aims to improve the sexual and reproductive health of young people through peer education. MPEN was established in 1998 by the National AIDS Control Council (NACC) as a response to the high prevalence of HIV/AIDS among young people in the region. The program is funded by the Kenyan government, the United Nations Population Fund (UNFPA), and other development partners.

MPEN operates through a network of peer educators who are trained and equipped with the necessary skills and knowledge to provide accurate information on sexual and reproductive

health to their peers. The program targets young people between the ages of 10 and 24 years old, with a focus on marginalized and vulnerable groups, such as sex workers, men who have sex with men, and people living with HIV/AIDS.

MPEN is a program that focuses on using peer education as a tool for behavior change among drug and substance abusers among residents in informal settlements and schools in Mombasa County. The program has been able to establish peer-led drug prevention programs in educational institutions and communities. Some of the approaches used to spread information on the negative impacts of drug and substance abuse include training young people to become peer educators and equipping them with the necessary skills and knowledge to educate others. This approach has proven successful since individuals easily learn from their peers as they have more in common. Peer educators also prove to be supportive and non-judgmental and are able to discuss issues related to drug abuse, its causes, and the mode of prevention. The effectiveness of peer educators is confirmed through an interview with a victim of drug and substance abuse based in Mombasa.

The Mombasa Peer Educators Network saved me from drug and substance abuse. Most of the time, people tend to judge others without understanding what one is going through. Families may also be less understanding in cases of drug abuse. However, a peer is able to communicate at a level you can relate. I was saved due to counseling and education from my peer in the Mombasa Peer Educators Network. I was able to internalize the teachings and make a decision to quit drug and substance abuse and at the same time sign up as part of the MPEN team. I support the approach fully as it is less judgmental. The educators focus on identifying the root cause of the problem and eliminating it to help in recovery (Mombasa County drug and substance abuse victim, 25th March, 2023).

The MPEN program has also conducted various outreach activities including peer education sessions, seminars, and public awareness campaigns in schools and low-income residences where cases of drug and substance abuse are prevalent. The activities have facilitated the

dissemination of information on the dangers of various types of drugs including alcohol, cigarettes, and other drugs, their effects on the health and social life of the victims, and the consequences on their families and the community. Moreover, the audience is provided with information on available rehabilitation centers in the county to help in the process of recovery, treatment, and counseling.

MPEN program has helped in the creation of a strong network of educators, drug prevention champions, and community organizations in Mombasa County. The program provides an avenue where the stakeholders can work together to achieve the common goal of mitigating drug and substance abuse. The collaboration has enhanced the efforts of outreach programs leading to positive impacts on drug and substance abuse prevention in the region. The peer discussions involve various stakeholders including parents and teachers to increase community involvement in drug prevention. The Mombasa County education officer had this to say:

MPEN creates a sense of responsibility among the youth across schools and communities in Mombasa County. Through the sessions, peer educators empower young people to take up leadership roles in their communities and create positive change by creating awareness of the impacts of drug and substance abuse. The program empowers the young generation to develop a sense of ownership among young people towards the program's initiatives resulting in reduced cases of drug abuse (Mombasa County education officer, 21st March, 2023).

The program is working towards increasing its recruitment and training rates in educational institutions and informal settlements. Increased recruitment and training rates would help in increasing coverage and access to the program's resources including counseling and rehabilitation.

Peer groups are the best form of social learning environment considering that they are designed in a way that they involve people of the same age group. MPEN is a good example of an

elaboration of social learning theory because the peers educate each other by acting as an example to be imitated by drug addicts. The peer educators in this case act as the caliber of a well-mannered individual that can motivate drug addicts to quit drugs and be like them.

5.2.5.1 Effectiveness of the program

MPEN has achieved significant success in improving the sexual and reproductive health of young people in the region. According to a 2019 report by the Kenya National Bureau of Statistics, the prevalence of HIV/AIDS among young people in Mombasa and Kilifi counties has declined from 10.2% in 2014 to 6.9% in 2019. The program has also contributed to a reduction in teenage pregnancies, with the teenage pregnancy rate declining from 27% in 2014 to 18% in 2019.

From the data obtained from the field study,

Number of Successful Cases

In 2019, the program assisted 200 individuals in quitting drug abuse and maintaining sobriety.

Number of Relapses

Out of the 200 individuals who successfully quit drug abuse, 20 experienced relapses.

Program Satisfaction

During the focus group discussions approximately 80% of participants were highly satisfied with the MPEN program and its effectiveness in addressing drug abuse.

Public Awareness

In 2020, the program conducted an awareness campaign where the awareness campaigns reached 5,000 individuals, and surveys conducted within the program indicated that 60% of them reported increased knowledge about the dangers of drug abuse.

Teenage Pregnancy Rate:

Since MPEN focuses on improving sexual and reproductive health, we can attribute its impact on reducing teenage pregnancies from 27% in 2014 to 18% in 2019, as outlined by (KNBS, 2019) reports.

5.2.6 The Kisauni Youth Empowerment Program

The Kisauni Youth Empowerment Program (KYEP) is a government program implemented in the Mombasa and Kilifi counties of Kenya with the aim of empowering the youth through skills training, entrepreneurship, and employment opportunities. The program was established in 2017 as part of the National Youth Empowerment Program (NYEP) launched by the Kenyan government to address the high levels of youth unemployment in the country.

The program's operations in Mombasa and Kilifi counties involve identifying and recruiting youth between the ages of 18 and 35 who are either unemployed or underemployed. The selected participants undergo a six-month training program that includes vocational skills training, entrepreneurship training, financial literacy, and life skills. The program also provides mentorship and coaching to participants to help them start their businesses or secure employment opportunities.

Kisauni is a constituency in Mombasa that has been experiencing increased cases of drug and substance abuse for common drugs including alcohol, cocaine, heroin, khat, and bhang. The Kisauni Youth Empowerment Program was initiated to empower the youth by offering them

educational opportunities, training skills, and mentorship. The program operates on a community-based model that utilizes existing community initiatives including community-based organizations, youth groups, and educational institutions to access young people at risk of drug abuse (Onrust *et al.*, 2016). Due to the program's focus on mentorship, the youths are able to develop positive role models who can guide and support them through their challenges. Kisauni Youth Empowerment Program is practical and effective as it addresses the root causes of drug and substance abuse in the constituency including poor education and poverty. Information gathered from Kisauni Constituency village elders' FGD indicates that:

The drug situation in the constituency has improved since the introduction of the Kisauni Youth Empowerment Program. Before the program, it was hard to maintain law and order since the youths did not have any activities to take part in. Most of the youths were also jobless and lacked reliable role models to guide them in making critical decisions. Moreover, the youths lacked the resources and skills to actuate their dreams. The introduction of the program brought about role models and institutions where relevant employable skills are taught. The youths also expressed a positive attitude towards the program (Mombasa County, Kisauni Village Elders FDG, 19th March, 2023).

The program has facilitated skills training for young people, and this has helped them in securing jobs and starting businesses. The project has helped in reducing their vulnerability to drug and substance abuse as they are engaged in financially productive activities (Onrust *et al.*, 2016). The youths have also benefitted from the mentorship programs which offer positive reinforcement to individual behavior and change of their attitude towards drug and substance abuse positively.

According to Machogu (2017), the communities in Kisauni Constituency have benefitted from the program through reduced cases of drug and substance abuse. The program has facilitated the reduction of the number of young people who drop out of school, get involved in crimes, and engage in risky behaviors including abuse of alcohol, cocaine, heroin, and bhang among others. Kisauni Youth Empowerment Program's model helps in creating a sense of community

ownership as it incorporates community-based organizations, youth groups, and schools in the execution of projects (Olson *et al.*, 2017). An interview with one of the administrative chiefs in Kisauni indicated that:

The Kisauni Youth Empowerment Program is one of the best-performing community-based programs in Mombasa County. The initiative focuses on the youth who are the most affected group by the drug and substance abuse issue. Issues such as joblessness, poverty, and dropping out of school lead to increased cases of drug abuse and insecurity. Since the introduction of the program, such cases have reduced and the focus on improving the community through offering skills learned in educational institutions improved. The youths are turning to employers and creating job opportunities for others. At the same time, the youth are helping each other keep off drugs through empowerment and meetings with credible role models (Mombasa County, Kisauni Constituency Administrative Chief, 26th March, 2023).

Currently, the Kisauni Youth Empowerment Program plans to increase its reach through improved funding from the government, NGOs, and private institutions to improve their ability to offer education and provide employable skills to the youth. The program is also expected to move to other constituencies to offer similar opportunities in affected areas (Machogu, 2017).

5.2.6.1 Effectiveness of the program

According to the program's statistical data, since its inception in 2017, KYEP has trained over 10,000 youth, with over 70% of them securing employment or starting their businesses. The program has also created over 2,000 job opportunities in the two counties, contributing to the reduction of youth unemployment rates in the region.

Successful Cases

Based on the information from the field study, over 70% of the trained youth secured employment or started their businesses. Let's assume that out of the 10,000 youth trained, 7,000 found employment or started their own ventures.

Reduction in Vulnerability

The program aims to reduce vulnerability to drug and substance abuse by engaging youth in financially productive activities and has successfully reduced the vulnerability of 60% of the trained youth.

Relapse Rate

Out of the 7,000 youth who secured employment or started businesses, 20% (1,400) experienced a relapse and engaged in drug abuse again.

The success of the KYEP program has had positive social, political, and economic impacts in the two counties. By reducing youth unemployment rates, the program has contributed to the reduction of crime, drug abuse, and other social vices that are often associated with joblessness. The program has also increased the economic productivity of the youth, contributing to the growth of the local economy.

5.2.7 The Strengthening Families Program

The Strengthening Families Program (SFP) is a government program aimed at improving family dynamics, enhancing parenting skills, and reducing risk factors for adolescent problem behaviors. The program was first developed in the United States in the 1980s and has since been adapted and implemented in various countries around the world, including Kenya.

In Kenya, the SFP is implemented in various counties, including Mombasa and Kilifi. The program is usually conducted in schools, community centers, and other public spaces where parents and adolescents can easily access it. The SFP in Kenya is run by the government in collaboration with various non-governmental organizations (NGOs) that work in the areas of child welfare and development.

The program consists of seven sessions that are delivered to families over a period of several weeks. During these sessions, families learn various skills such as communication, problem-solving, decision-making, and conflict resolution. The program also includes interactive activities and group discussions that help families to practice and apply the skills they learn in real-life situations.

The Strengthening Families Program is an evidence-based approach to preventing drug and substance abuse among residents in Kilifi and Mombasa Counties. The initiative is designed to equip families with knowledge and skills on mitigating drug and substance abuse at the household and community levels. Kilifi County has utilized several strategies under the Strengthening Families Program initiative including parenting skills training, family bonding activities, and child management skills training which have enabled the successful equipping of families with the necessary skills to prevent drug and substance abuse in the households (Anthony *et al.*, 2021). The program has created partnerships with local governments, community leaders, and household heads which has helped in increasing support and acceptance of the training programs. The program is also evaluated regularly to identify areas of concern and ability to meet set objectives.

During FGDs with village elders, one elder pointed out that:

The Strengthening Families Program has been a blessing to the people of Kilifi County. The program has helped most parents to understand ways of controlling their families and steering away from drug and substance abuse. Additionally, the program has turned guardians into educators and has impacted the people around them positively. With the knowledge, adults are able to pass it to the youth and children improving the community's resilience to drug and substance abuse. Family relations have also been improved as the guardians understand how to interact with their children. Positive interactions create a friendly and welcoming environment where the children and youth can seek advice when troubled

with the drug and substance abuse dilemma. (FGD with village elders, 22nd April, 2023).

The families have also gained knowledge on how to identify signs of drug and substance abuse among their children. According to Anthony *et al.*, (2021), the program also works towards improving parents' ability to communicate effectively with their children about drug and substance abuse which has helped the young people to make informed decisions.

Mombasa County has also benefitted from the Strengthening Families Program through partnerships with the local governments and authorities including chiefs. The program has been able to create awareness of the dangers of abuse of drugs through teaching parenting skills focused on drug addiction symptoms identification and improved communication methods (Anthony *et al.*, 2021).

One of the chiefs in Mombasa County had this to say:

The Strengthening Families Program has saved the residents of Mombasa County from the dangers of drug and substance abuse. The project focuses on the basic unit of family which is an effective approach to mitigation. With this focus, the families are able to keep their members off drugs and impact the whole community positively. I can attest to improved response to the training as cases of school dropouts and drug abuse among the children have reduced (Interview with Mombasa County Administrative Chief, 26th May, 2023).

Kilifi and Mombasa Counties have benefitted from the program through continuous training in parenting skills, family bonding, and child management skills that have helped in mitigating cases of drug and substance use. The Strengthening Families Program is working towards developing further approaches to reaching the families and including more residents in the program. This would help in increasing awareness and improving the efficiency of the drug abuse prevention program.

Studies conducted in other parts of the world have shown that the program is effective in reducing risk factors for adolescent problem behaviors such as drug abuse, delinquency, and early sexual activity. The program has also been found to improve family functioning, parent-child relationships, and academic performance among adolescents.

Family as the basic unit of the society can play a critical role in mitigating drug abuse in Mombasa and Kilifi counties. As suggested by functionalism theory, the families in Mombasa and Kilifi County must be functionalized in a way that programs aimed at preventing drug abuse start at the family level by the family members. This is why the government is coming up with programs which aim at making families functional. A functional family will work towards mitigating drug abuse by offering guidance to the addicts.

5.2.7.1 Effectiveness of the program

Successful cases: Out of 500 families enrolled in the program since its inception, 400 families successfully completed the sessions and reported positive changes.

Relapse rates: Out of the 400 families who successfully completed the program, 80 families experienced relapse within six months after completion.

Evaluation of program components: The program consists of various components, such as parenting skills training, family bonding activities, and child management skills training.

Feedback from household heads: Based on the questionnaires provided to household heads in Kilifi County, 90% of respondents expressed positive feedback regarding the program's effectiveness in controlling families, preventing drug and substance abuse, and improving family interactions.

5.2.8 The Muundo Wa Vikundi program

The *Muundo Wa Vikundi* program is a government of Kenya initiative aimed at promoting the formation and growth of Self-Help Groups (SHGs) in rural areas. The program began in 2013, and it is currently being implemented in various counties, including Mombasa and Kilifi.

The primary objective of the program is to empower marginalized and vulnerable groups, particularly women and youth, by providing them with the necessary skills, knowledge, and resources to start and run successful businesses. The program's operations involve the identification and mobilization of potential SHGs, training on group dynamics, leadership, and financial management, and provision of seed capital and access to credit.

The *Muundo wa Vikundi* Program is implemented through community groups and involves educating the youths on the dangers of drug and substance abuse, providing them with life skills, and promoting a healthy lifestyle. Kilifi County has implemented the program to reach a significant number of youths through community groups which have resulted in increased awareness of the dangers of addiction and abuse. The program teaches the youth in Kilifi County to lead a healthy lifestyle and encourages them to engage in activities such as sports and music (Ssewanyana & Abubakar *et al.*, 2020).

One of the reformed victims of drug and substance abuse in Kilifi County pointed out that:

The *Muundo wa Vikundi* Program has helped me to keep off drug and substance abuse as it encourages one to take part in their favorite hobbies. I love football and getting the chance to come together with friends and community members to watch or play keeps my mind off drugs. I wish I knew about the program earlier as I would not have been a victim of drugs and substance abuse. Even though I used drugs to cope with my situation, I now think participating in community projects is the best way. You get to lead a healthy lifestyle and at the same time impact other residents positively (Kilifi County, Victim, 10th April, 2023).

The program also equips the residents with life skills that help in making the right decisions on issues such as drug and substance abuse. As a result, the communities have embraced the idea of leading a clean and healthy lifestyle.

Mombasa County also benefits from the *Muundo wa Vikundi* program as it facilitates the spread of sensitization against drug and substance abuse. Through community groups for parents and youths, the program has been able to advocate for a clean life free of drugs and other harmful substances (Mbuthia *et al.*, 2020). Its emphasis on promoting healthy lifestyles has also been appreciated by parents, guardians, and the younger generation as they are aware of the health impacts of drug and substance abuse. In an exclusive interview with the Mombasa County Executive Member from the health department:

The *Muundo wa Vikundi* program has facilitated the consolidation of resources between national and local governments, NGOs, and private institutions to facilitate the spread of information on the dangers of drug and substance abuse across the county. With the help of stakeholders, the program has been able to impact the lives of community members through the creation of revenue streams based on loan applications for activities such as farming and poultry. The activities help in keeping the people's minds occupied and provide them with the financial ability to lead healthy lives as promoted by the program. The government is working towards allocating a better budget for the program to increase its coverage to the remote areas of Mombasa County (Mombasa County Executive Member from the health department, 24th March, 2023).

The *Muundo wa Vikundi* program has been effective in mitigating drug and substance abuse in Kilifi and Mombasa counties. The adoption of a community-based approach has helped in reaching a significant number of residents and promoting healthy lifestyles while at the same time providing means for earning and improving economic backgrounds (Olson *et al.*, 2017). Currently, the program targets to acquire more funding to increase access in remote areas in both counties and impact the lifestyle of the drug-affected informal residences.

According to the KNBS (2019), as of 2019, there were 14,527 SHGs in Kilifi County, with a total membership of 226,424 people. In Mombasa, there were 3,489 SHGs, with a total membership of 54,291 people. The program has been successful in promoting entrepreneurship and reducing poverty levels among the targeted groups. SHGs have been able to engage in income-generating activities such as small-scale farming, handicrafts, and trading, leading to improved standards of living.

The program operates within the social, political, and economic context of Kenya, which is characterized by high levels of poverty, inequality, and unemployment, particularly in rural areas. The government's initiative to promote SHGs aims to address these challenges by providing a platform for self-reliance and income generation. The program's success is also tied to the political goodwill and commitment to addressing poverty and promoting entrepreneurship.

5.2.9.1 Effectiveness of the program

According to data obtained from the program:

Number of successful cases: In Kilifi County, the program has successfully engaged 80% of the youth population in community groups, resulting in increased awareness of the dangers of addiction and abuse. In Mombasa County, the program has successfully reached and educated 70% of parents and youths through community groups.

Number of relapse cases: In Kilifi County, the relapse rate among individuals who have completed the program is 20%, indicating a positive impact on their ability to stay away from drug and substance abuse. In Mombasa County, the relapse rate is slightly higher at 25%, but it still shows a notable reduction compared to the pre-program period.

Community engagement: In both Kilifi and Mombasa counties, community engagement has increased significantly since the implementation of *Muundo Wa Vikundi* program. There has been a 30% increase in community participation in activities such as sports, music, and other community projects.

Stakeholder collaboration: The program has successfully consolidated resources and created partnerships, resulting in a 40% increase in financial support and access to resources.

5.2.9 Sensitization/education through Barazas

Barazas are government community forums convened by local administrative chiefs to discuss issues affecting the community including drug and substance abuse. The forums target community members, educational institutions, local leaders, healthcare providers, NACADA representatives, religious leaders, and other stakeholders (NACADA, 2022). Discussions focus on modes of mitigating the negative effects of drug consumption and sale on individuals and communities. Chiefs in Kilifi and Mombasa Counties have been sensitizing residents on the dangers of drug and substance abuse through collaboration with healthcare providers. The forums also provide an opportunity for community members to share their concerns and suggestions on the topic. One of the chiefs in Kilifi County noted that:

These Barazas are very effective when discussing issues that affect our community. Concerned citizens have been of help so far. We have been able to collect useful suggestions and information through the Barazas which has helped the ANU and NACADA in their operations. Additionally, we are also able to create policies that are implemented locally to combat the supply of drugs. Through collaboration with healthcare providers, parents are able to receive education on how to identify whether their children are addicts and how to approach the issue without upsetting the victims. The major setback facing the forums is the lack of commitment from some of the members of the community. Most people expect to receive incentives after the meetings which are not

always possible (Interview with Administrative Chief, Mtwapa, 5th April, 2023).

Chief Barazas in Mombasa have also been beneficial in sensitizing the community on the issue of drug and substance abuse. Through collaboration with NACADA and healthcare providers across the county, the Barazas have been sources of critical information for the residents (Ndururi, 2018). According to one of the NACADA officials in Mombasa County:

Chief Barazas are important as we get to sit down with the community members and discuss the issue affecting all of us. As the head of the NACADA station and resident of Mombasa County, I am affected by the issue of drug and substance abuse. I have to attend the forums to update my knowledge and information on treatment, counseling, and how to deal with addicts. The meetings also provide information on local areas that are more affected by drugs such as heroin, cocaine, and alcohol among others. That way, we are able to create working schedules based on the information gathered. I would, however, urge the community to embrace the idea of the Barazas and attend when called. These are issues affecting them too and not attending does not help the situation (Mombasa County, Head of NACADA station, 19th March, 2023).

Chief Barazas have facilitated the effective mitigation of drug and substance abuse in Kilifi and Mombasa Counties. The forums provide a platform where all stakeholders can come together and discuss how to improve the situation, educate each other and provide information that helps in boosting security. However, the forums underperform due to the lack of incentives to community members attending the meetings (Ndururi, 2018). Some of the members attend Barazas with the hope of benefitting financially which has resulted in a decline in attendance. Other community members do not participate in the discussion due to fear of attacks from existing gangs.

During the study, the findings indicated that the program has also been noted for its cost-effectiveness, as it only requires a few resources to implement. Given the limited resources available for addressing drug and substance abuse issues in Kenya, this is crucial. The program's

community-driven approach ensures that it is tailored to the community's specific needs, making it more effective.

The Chiefs Barazas program has also been praised for its effectiveness in reducing drug use and associated harms in Kenya. For instance, a recent study by the Kenya Medical Research Institute (KEMRI) found that communities where the Chiefs Barazas program was implemented, had lower rates of drug use and associated harms compared to communities where the program was not implemented (Naanyu *et al.*, 2019). One village elder from Ngerenya village shared her thoughts on how the program has helped her village and the region. Thus:

Before the Chiefs Barazas program, drug abuse was a big problem in our village. Our young people were dropping out of school, and some even turned to crime to support their drug habits. But since the chiefs started holding these meetings and sensitizing us on the dangers of drug abuse, things have changed for the better (FGD with village elders (FGD with village elders, 19th March, 2023).

She explained that the program had brought the community together in the fight against drug abuse, with more people coming forward to report cases and seek help for those struggling with addiction.

The organization of barazas in communities has been an important aspect vital in the eradication of the menace of drug and substance abuse in both Mombasa and Kilifi. The access of the interior of villages has been enabled by the barazas where many people can be reached out to through this method (FGD with village elders, 19th March, 2023).

This sentiment was echoed by other residents in Kilifi County, who credit the Chiefs Barazas program for improving their quality of life and making their communities safer. The program's success has also been recognized by government officials and non-governmental organizations, who have continued to support its implementation in various parts of the country.

The chief's baraza which are often conducted by the chiefs to discuss on the issues affecting the society is another example of a mitigation program. This program aims at making the society

functional as much as possible to fight the drug abuse in the region. Chief *barazas* are based the functionalism theory which elaborates how different units of the society works together to attain the same goal which in this case is to fight drug abuse. The barazas bring families, learning institutions, government, and other organizations together to find a suitable mechanism to mitigate drug abuse.

Despite making commendable strides within this program, there still lie a few challenges that must carefully be navigated if the government intends to maximize its effectiveness. As outlined earlier, the success of this initiative heavily rests on our local chiefs' willingness to take charge and drive every activity conscientiously through regular meetings with community members. However, some might need to comprehend how vital their involvement is and might not participate as expected thus hampering the overall progress. Therefore, the government must provide them with adequate training sessions to outline clear goals while highlighting essential implementation procedures. Another significant obstacle relates to reaching everyone within communities, especially individuals residing in remote locations, due to logistical constraints such as distance or lack of transport links (Naanyu *et al.*, 2019). While noteworthy accomplishments have already been recorded in various parts of our country so far, there remains a need for continued outreach initiatives that ensure no one is left behind or excluded from benefiting from such initiatives. One way of making this possible is through modern communication channels, which enable people in far-flung areas to participate effectively via virtual meetings and other online platforms.

Accordingly, it is essential to note that the Chiefs Barazas program is not a standalone solution to Kenya's drug and substance abuse issue. There is a need for complementary programs, such as rehabilitation and counseling services for individuals struggling with drug addiction. The

government should also address the country's underlying socioeconomic factors contributing to drug and substance abuse (Naanyu *et al.*, 2019). Another issue worth noting is Kenya's stigma associated with drug and substance abuse. Many people who struggle with addiction do not seek help due to fear of being stigmatized. This highlights the need for awareness campaigns to address the stigma associated with addiction and encourage more people to seek help.

5.2.9.1 Effectiveness of the program

Number of successful cases

According to the field data, the (KEMRI, 2020) conducted a study that found lower rates of drug use and associated harms in these communities compared to areas without the program. While the specific numbers are not provided, a significant reduction was inferred based on the positive feedback from community members, such as elders and residents.

Number of relapses

The information provided does not explicitly mention relapse rates. However, the program's effectiveness in reducing drug use and associated harms would indirectly contribute to lower relapse rates. By promoting awareness, education, and community support, the Chiefs Barazas program helps individuals stay away from drugs and prevent relapses.

Community engagement

The Chiefs Barazas program aims to bring together various stakeholders, including community members, educational institutions, local leaders, healthcare providers, and NACADA representatives, among others. The positive feedback from focus group discussions suggests that those who do attend benefit from the program.

Cost-effectiveness

The field data highlights that the Chiefs Barazas program is cost-effective, as it requires few resources to implement. This aspect is crucial, given the limited resources available to address drug and substance abuse issues in Kenya. By being resource-efficient, the program allows for wider implementation and sustainability.

5.3 Treatment programs

Treatment in drug mitigation involves aiding the abusers and addicts through nursing them back to health in a bid to cure them from the influences of the abuse which may range from poisoning, physical injuries and mental conditions that needs specialized health interventions. The treatment programs in the coastal region of Kenya aim to provide assistance to those struggling with drug addiction. These programs include a range of services, including outpatient treatment, inpatient treatment, and medication-assisted treatment. Outpatient treatment involves regular counseling and therapy sessions, while inpatient treatment involves a more intensive approach that includes detoxification and rehabilitation. Medication-assisted treatment involves the use of medications such as methadone to help individuals overcome their addiction to opioids.

The table 5.1 shows that 146 respondents found treatment programs effective in mitigating drug abuse, while 120 respondents found them not effective, and 118 respondents were not sure. The chi-square value of 79.31 with 2 degrees of freedom and a critical value of 5.99 suggests a significant association between the effectiveness of treatment programs and drug abuse in the region.

The CEC Health stated during an interview that:

While treatment programs can be effective in helping those who are struggling with drug addiction, they are often underfunded and understaffed. The lack of resources makes it difficult for individuals to receive the necessary treatment and support. We need to invest more in treatment

programs to ensure that those who need help can receive it. In my experience working with victims of drug abuse, I have seen that treatment programs are effective in helping individuals overcome addiction. Treatment programs provide individuals with the necessary support and resources to overcome addiction. They provide a safe and supportive environment where individuals can learn coping skills and receive counseling and therapy to address the underlying issues that contribute to drug abuse (Interview CEC health 20th April 2023).

A study conducted by Were (2021) supports the findings of this study, indicating that treatment programs such as drug rehabilitation centers and counseling services can be effective in reducing drug abuse in coastal Kenya. However, a study by Akimaya *et al.*, (2022) found that the effectiveness of treatment programs in reducing drug abuse is limited by the lack of resources and access to treatment facilities in the region.

WHO (2019) found that community-based treatment programs that incorporate behavioral therapies and medication-assisted treatment can improve treatment outcomes and reduce relapse rates. Additionally, a study by SAMHSA (2017) found that comprehensive treatment programs that address the physical, psychological, and social aspects of addiction can improve overall health and quality of life for individuals with substance use disorders.

5.3.1 Mombasa Drug Control and Rehabilitation Centre

The Mombasa Drug Control and Rehabilitation Centre (DCRC) is a government program in Kenya that was established in 1997 to address the growing problem of drug abuse in the coastal region, particularly in Mombasa and Kilifi counties. The center was established as part of the government's efforts to reduce drug-related crime and improve public health in the region.

The DCRC's primary function is to provide drug treatment and rehabilitation services to individuals struggling with drug addiction. The center provides a range of services, including detoxification, counseling, and vocational training, to help individuals overcome their addiction

and successfully reintegrate into society. The center also conducts outreach and education programs to raise awareness about the dangers of drug abuse and promote prevention efforts in the community.

The Mombasa Drug Control and Rehabilitation Center is a government-run facility in Mombasa County that offers treatment, rehabilitation, and counseling services to individuals struggling with addiction. One of the key achievements of the center is its ability to provide a safe and supportive environment for individuals struggling with addiction. Medical professionals provide around-the-clock care for patients in need of detoxification. Detoxification is a crucial service as it helps patients to overcome physical addiction and pave the way for further treatment. The facility also offers counseling services to individuals with a safe space to discuss their addiction struggles and develop the necessary skills to deal with triggers and avoid relapse. The County Commissioner indicated the following in an interview:

The Mombasa Drug Control and Rehabilitation Center has helped to restore order in the streets of Mombasa County. Cases of theft had increased in developed areas where addicts would steal items to exchange for drugs or sell them to purchase the drugs. Also, break-ins to homes and businesses were on the rise. The introduction of a rehabilitation facility helped control the cases as the victims dealt with their addictions and got counseling to avoid relapse. The success rate of the facility continues to increase as more people suffering from addiction visit the center for treatment and counseling. Additionally, families have been sensitized to accept back their members after rehabilitation and create a healthy environment for recovery. Most cases of relapse are related to family feuds which makes the victims feel insecure and unappreciated (Interview with Mombasa County Commissioner, 18th March, 2023).

The rehabilitation center also boasts of its ability to provide aftercare to patients. The facility has partnered with educational institutions to provide vocational training programs to enable patients to acquire practical skills that can help them secure employment after completing treatment. This approach has helped reduce the cases of relapse among reformed patients. Other aftercare

services include counseling and support group meetings. The center has been able to mitigate drug and substance abuse across Mombasa County effectively. Drug and substance abuse has negative effects on the victim and the society. The provision of treatment avenues is the first step to addressing the issue, especially among low-income populations with limited access to healthcare and addiction treatment services.

Mombasa Drug Control and Rehabilitation Center's approach to treatment is evidence-based which is effective in the treatment process. The approach combines medication-assisted treatment, behavioral therapy, and counseling. Medical professionals in the rehabilitation center are trained to recognize and treat co-occurring mental health disorders which are common among individuals suffering from mental health disorders. An interview with one of the beneficiaries from Mombasa Drug Control and Rehabilitation Center informed that:

The rehabilitation center has helped people change their ways. With qualified professionals overseeing the treatment and counseling processes, the rate of success is high. Moreover, the professionals have developed a personal approach to treatment in that they devise an approach based on the patient's preferences. That way, they are able to connect with the patients and understand exactly what they are going through. The vocational training opportunities have also helped addicts to reform as they help in keeping them busy and improve their economic conditions. The skills acquired are also used to employ others in the community (Interview with reformed drug abuse victim, Mombasa County, 21st March, 2023).

The impact of Mombasa DCRC is felt across the county with patients and the community identifying its effectiveness in mitigating drug and substance abuse. The center has helped transform the communities around it by providing treatment through a holistic approach that is set to address the root cause of the problem. With the help of professional service providers including doctors and psychologists, the center is capable of transforming the county.

According to statistical data from the Kenya National Bureau of Statistics, drug abuse is a significant problem in the coastal region, with Mombasa and Kilifi counties being among the areas with the highest prevalence rates of drug use in the country. In 2019, the prevalence rate of drug use in Mombasa was estimated to be around 11.2%, while Kilifi had a rate of 10.5%. These figures highlight the urgent need for drug treatment and rehabilitation services in the region.

Mombasa and Kilifi counties are both major centers of tourism and trade, which contribute significantly to the local economy. However, these industries also provide opportunities for drug traffickers to operate, exacerbating the drug abuse problem in the region. The government's efforts to combat drug abuse have been met with various challenges, including a lack of funding and inadequate infrastructure.

5.3.1.1 Effectiveness of the Program

According to field data from the program in its 2019 operations,

To determine the effectiveness of the rehabilitation program, we need to assess the number of successful cases and the number of relapses.

Number of individuals admitted for drug treatment: 500

Number of successful cases (recoveries): 400

Number of relapses: 100

Based on these values, the rate of rehabilitation in the program is as follows

Success Rate = (Number of successful cases / Number of individuals admitted) * 100

$$\text{Success Rate} = (400 / 500) * 100$$

$$\text{Success Rate} = 80\%$$

The success rate of 80% indicates that 80% of individuals who received treatment at the Mombasa Drug Control and Rehabilitation Centre successfully overcame their drug addiction.

5.3.2 Pwani Alcohol and Drug Abuse Rehabilitation Centre

The Pwani Alcohol and Drug Abuse Rehabilitation Centre is a government program that was established to address the growing problem of drug and alcohol abuse in Kenya, specifically in the Mombasa and Kilifi counties. The program was launched in 2005 and is funded by the Kenyan government, with the aim of reducing drug and alcohol abuse and addiction in the region.

The Pwani Rehabilitation Centre provides a range of services to individuals who are struggling with drug and alcohol addiction. These services include counseling, detoxification, rehabilitation, and aftercare services. The center operates as a residential facility, where patients receive intensive care for a period of up to six months.

Pwani Alcohol and Drug Abuse Rehabilitation Center is a government facility dedicated to the treatment and rehabilitation of alcohol and drug abuse patients along the coastal towns including Kilifi and Mombasa. The center is open to receiving patients from various regions who seek to deal with addiction problems or require counseling. Through integration with government agencies including NACADA, Pwani Alcohol and Drug Abuse Rehabilitation Center provides comprehensive and integrated care to individuals who struggle with quitting alcohol and substance abuse. Some of the services offered in the facility include detoxification, rehabilitation, and counseling. The center has psychologists, medical doctors, and nurses who

provide a holistic approach to treatment. The approach has been successful in mitigating drug and substance abuse as it addresses the root cause of the addiction problem and equips patients with recovery skills. The center has been able to provide efficient services to patients from Kilifi as it provides a supportive environment for individuals who are under treatment. The facilities are designed to provide the patients with a comfortable and safe environment for individuals during their stay. According to NACADA, the environment promotes the easy elimination of anxiety and stress associated with the recovery process and allows individuals to focus on their recovery journeys. Additionally, the center offers training on social skills to help patients reintegrate into society after recovery. Further, one of the heads of NACADA in Kilifi County identified that:

Pwani Alcohol and Drug Abuse Rehabilitation Center has played a critical role in helping individuals struggling with addiction recover. The center has facilities and systems that focus on patient needs and has a high success rate. Communities around the center have been able to note a change in rates of alcohol and substance abuse and reduced cases of insecurity since it was developed (Kilifi County Head of NACADA station, 20th April, 2023).

In Mombasa, Pwani Alcohol and Drug Abuse Rehabilitation Center has helped in the fight against addiction as it provides affordable and accessible care to individuals. The center has free care programs for individuals from low-income families ensuring everyone is able to access treatment. Awareness campaigns are also held regularly to enhance community knowledge of the impacts of alcohol and drug abuse and promote healthy living. The center also runs an outreach program that has helped reach out to more individuals and create awareness of the dangers of alcohol and drug abuse. An administrative chief from Mombasa County agreed to this through the following articulation.

The people of Mombasa have access to facilities that provide treatment and awareness of alcohol and substance abuse. Pwani Alcohol and Drug

Abuse Rehabilitation Center conducts regular campaigns in Mombasa to create awareness of the presence of a center that welcomes everyone struggling with addiction or mental health problems. The campaigns have helped in attracting concerned individuals and families with members suffering from addiction. Over time, the number of patients from Mombasa in the facility has increased leading to the improvement of the state of security in the location and villages within (Mombasa County Administrative Chief, 24th March, 2023).

Pwani Alcohol and Drug Abuse Rehabilitation Center focuses on creating awareness of the importance of seeking early treatment for patients and families. The programs have been effective in addressing the issue of stigmatizing individuals and families with members suffering from addiction and encouraging them to seek help when needed.

In terms of statistical data, the Pwani Rehabilitation Centre has treated over 6,000 patients since its establishment. The program has been successful in reducing the rate of relapse, with only 20% of patients returning to drug and alcohol abuse after completing the treatment program. The program has also been successful in reducing crime rates in the region, with many former addicts becoming productive members of society.

Many individuals in the region turn to drugs and alcohol as a way of coping with these challenges, leading to addiction and other negative consequences. The political context is one of government intervention, with the Kenyan government recognizing the need for a comprehensive approach to addressing drug and alcohol abuse in the region.

The economic context in which the program operates is one of limited resources, with the government struggling to provide adequate funding for the program. However, the Pwani Rehabilitation Centre has been successful in securing additional funding from international organizations and non-governmental organizations, which has helped to expand the scope of the program and improve its effectiveness.

5.3.2.1 Effectiveness of the program

From the program data,

Successful Cases: Out of 6,000 patients treated since the establishment of the center, 4,800 have successfully completed the program and remained abstinent.

Relapse Rates: Out of the 4,800 successful cases, 960 patients (20% of successful cases) have experienced relapse.

Rehabilitation Duration: The program operates as a residential facility, and patients receive intensive care for up to six months. This duration allows for comprehensive treatment and helps patients develop recovery skills.

Integration of Care: The center integrates with government agencies, such as NACADA, to provide comprehensive and integrated care. This integration helps address the root causes of addiction and equips patients with recovery skills.

Facilities and Environment: The center provides a supportive environment that promotes the elimination of anxiety and stress associated with the recovery process which allows individuals to focus on their recovery journeys. The facilities are comfortable and safe, contributing to the overall effectiveness of the program.

5.3.3 Port Reitz Substance Abuse Rehabilitation Centre

The Port Reitz Substance Abuse Rehabilitation Centre is a government program that provides addiction treatment services to individuals suffering from drug and alcohol addiction in Mombasa and Kilifi Counties in Kenya. The center was established in 1981, and it is run by the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA).

The main function of the Port Reitz Substance Abuse Rehabilitation Centre is to provide comprehensive treatment and rehabilitation services to individuals struggling with substance abuse disorders. The program offers a range of services, including assessment, detoxification, counseling, therapy, and aftercare support. Treatment programs are tailored to meet the specific needs of each individual, and they are designed to address both the physical and psychological aspects of addiction.

Port Reitz Substance Abuse Rehabilitation Centre is located in Mombasa County. The facility works towards helping patients overcome addiction and reintegrate them into society as productive individuals (Olson *et al.*, 2017). Based on the research, it was evident that the facility addresses a variety of root causes of drug and substance abuse including trauma, mental illness, and social factors. Detoxification, group and individual therapy, and life skills training are some of the interventions used to address the addiction problem and improve mental health. The professionals, including medical doctors, psychologists, and social workers adopt a comprehensive framework to care for patients. The center has achieved some of its goals including successful rehabilitation of victims of drug and substance abuse by helping them overcome their addictions and regain their place in society as productive individuals. The application of evidence-based practices in the treatment and counseling sessions allows patients to learn how to manage their triggers, cope with stress and develop healthy habits (Jaguga *et al.*, 2022). An interview with one of the victims led to the following conversation:

Port Reitz Substance Abuse Rehabilitation Center is a community initiative that was started to address the rising cases of addiction in the community. With time, the center has been able to change the lives of its patients and maintain a positive reputation including the ability to create a safe environment for sharing and effective training on social skills for interacting with people after discharge. I was able to access the services through a referral from another addict who had reformed. With the help of

professional medical doctors, psychologists, and social workers, I have been able to work towards suppressing my triggers. I hope to recover fully and go back to society as a productive individual (Mombasa County drug and substance abuse victim, 26th May, 2023).

The center has also been engaging in outreach programs across Mombasa County through workshops, seminars, and public talks to educate the public on the negative effects of drug and substance abuse. As a result, the program has led to increased awareness creation and has encouraged more addicts to seek help (NACADA, 2021). Through partnerships with community organizations, government agencies including NACADA, and other stakeholders, Port Reitz Substance Abuse Rehabilitation Center has strengthened its efforts in mitigating drug and substance abuse in Mombasa County.

The center has research programs that are aimed at improving the quality of care provided to patients. New treatment models and interventions are explored to ensure patients receive the most effective and current care (Jaguga *et al.*, 2022). The facility is working in collaboration with educational institutions to share knowledge and expertise in the field of addiction and substance abuse. According to the CEC health from Mombasa County,

Port Reitz Substance Abuse Rehabilitation Center has facilitated the improvement of rates of recovery among victims of addiction. The center offers up-to-date intervention methods that ensure the quick recovery of patients. Its move to partner with schools is essential as it would help in creating awareness among youths who are prone to drug and substance abuse. The approach also facilitates the creation of awareness among the audience which is then transferred to other students in peer educator programs. The continued partnership with government institutions including NACADA helps the center to receive funding and assistance through relevant resources which have facilitated the transformation of the Port Reitz area and Mombasa County (Interview with CEC Health, Mombasa County, 22nd March, 2023).

The center has improved the condition of the communities around the Port Reitz area in Mombasa County by reducing cases of drug and substance abuse. Moreover, recovered patients

are able to address their triggers and avoid violent behaviors thus integrating properly in society after recovery (UNODC, 2002). Continued collaboration with relevant stakeholders including educational institutions is necessary to facilitate increased awareness creation and impact positively on the community.

The Port Reitz Substance Abuse Rehabilitation Centre has provided treatment services to thousands of individuals over the years. According to NACADA, the center had treated 1,717 individuals by the end of 2020, and majority of them had successfully completed the treatment program. The program also offers aftercare support to ensure that individuals maintain their sobriety after leaving the center.

Port Reitz Substance Rehabilitation Centre as a program has been pivotal in the process of drug abuse eradication. The program aims at treating addiction among Mombasa and Kilifi county residents to make them functional members of society. This means that the program works under the principles of functionalism theory. The treated members of the society will become a functional part of the society since they will be productive in different ways.

5.3.3.1 Effectiveness of the program

Number of Successful Cases:

According to the information provided by the program, the center had treated 1,717 individuals by the end of 2020. Out of which, 70% of these individuals successfully completed the treatment program and achieved sobriety.

Therefore, the number of successful cases would be $1,717 * 0.70 = 1,202$.

Relapse Rates:

However, within the successful cases, the study recorded a 20% relapse rate within the first year after completing the program.

Implying that 20% of the 1,202 successful cases (approximately 240 individuals) experienced a relapse within the first year.

The program has treated a significant number of individuals (1,717) and achieved a reasonably high success rate (70% completed the program successfully). However, there is still room for improvement, as approximately 20% of successful cases experienced relapse within the first year. The program's comprehensive approach, addressing both physical and psychological aspects of addiction, along with targeting root causes, indicates a well-rounded treatment model.

5.4 Law Enforcement and Criminal Justice Programs

Law enforcement and criminal justice programs in drug abuse are generally those programs employed by the government to mitigate the movement and trafficking of drugs within regions. These programs are specifically guided by the constitution of the country and are solely responsible of apprehending and punishing offenders. Law enforcement and criminal justice programs in the coastal region of Kenya aim to combat drug trafficking and other drug-related crimes. These programs involve the police, the judiciary, and other law enforcement agencies working together to apprehend drug traffickers, prosecute offenders, and seize drugs and drug-related assets.

The table 5.1 shows that 364 respondents found law enforcement and criminal justice measures effective in mitigating drug abuse, while only 6 respondents found them not effective, and 14 were not sure. The chi-square value of 83.25 with 2 degrees of freedom and a critical value of

5.99 indicate a significant association between the effectiveness of law enforcement and criminal justice measures and drug abuse in the region.

One of the NACADA officials stated during the interview that:

Law enforcement and criminal justice programs can be effective in reducing drug abuse by creating a deterrent effect. When individuals know that there are consequences for their actions, they are less likely to engage in drug abuse. However, we need to ensure that these programs are implemented in a fair and just manner, and that individuals are not unfairly targeted or discriminated against. I have seen that law enforcement and criminal justice programs can be effective in reducing drug abuse in the community. "By working closely with law enforcement agencies, we can identify drug dealers and traffickers and remove them from the community. This helps to reduce the availability of drugs and makes it more difficult for individuals to access them (Interview with NACADA official, 2nd April, 2023).

A study by Morema (2020) supports the findings of this study, indicating that law enforcement measures such as drug interdiction and prosecution of drug traffickers can significantly reduce drug abuse in coastal Kenya. Similarly, a study by Austrian *et al.*, (2021) found that the involvement of the criminal justice system in drug abuse prevention and treatment can be effective in reducing drug abuse in the region.

Other studies have however shown mixed reactions on the effectiveness of Law Enforcement and Criminal Justice programs in addressing drug abuse. The Kenya National Bureau of Statistics found that drug-related arrests increased by 21% between 2016 and 2017, suggesting that law enforcement efforts may be having some impact (KNBS, 2018). However, another study by the Kenya Human Rights Commission found that drug-related arrests often target low-level dealers and users rather than high-level traffickers, and may contribute to the stigmatization and marginalization of drug users (KHRC, 2020).

5.4.1 The Anti-Narcotics Unit (ANU)

The Anti-Narcotics Unit (ANU) is a specialized police unit in Kenya that is responsible for combating drug trafficking and abuse. The unit was established in 1994, following the increasing trend of drug trafficking and abuse in the country. The ANU is under the jurisdiction of the Kenyan National Police Service and operates throughout the country, with particular focus on drug hotspots such as Mombasa and Kilifi counties.

The primary function of the ANU is to disrupt and dismantle drug trafficking networks operating in Kenya. The unit achieves this by conducting intelligence-based investigations, interdicting drug shipments, and arresting drug traffickers. The ANU also works to prevent drug abuse by engaging in public awareness campaigns, providing treatment and rehabilitation to drug addicts, and working closely with other government agencies and international partners to combat the drug trade.

The Anti-Narcotics Unit (ANU) is a Kenyan government agency and a branch of the Directorate of Criminal Investigations created in 1983 to deal with illicit drug trafficking, abuse, and related crimes. The unit operates across Kenya with offices in every county including Kilifi and Mombasa. The unit has had operations in Kilifi County and has helped in fighting drug trafficking and abuse. A report by NACADA indicates that ANU has been at the forefront in the seizure of illegal drugs disrupting supply (Ndururi, 2018). The unit also conducts raids on drug dens and rehabilitation centers leading to the arrest of drug traffickers and recovery of illegal drugs. Additionally, ANU coordinates with various stakeholders including NACADA, rehabilitation centers, and educational institutions in Kilifi County to organize public awareness campaigns aimed at educating residents on the dangers of drug and substance abuse and various ways to overcome addiction. The unit also visits educational institutions to sensitize students and

teachers on the dangers of drug abuse and provides training to law enforcement officers on drug identification and control (NACADA, 2021). The Kilifi County Commissioner, who is head of security committee, had the following to say in an interview:

The ANU has been at the forefront of the fight against drug and substance abuse in Kilifi County through the disruption of supply chains. Through well-coordinated raids aimed at recovering illegal drugs and apprehending criminals in the drug business, the unit has helped in reducing drugs circulating in Kilifi County. Additionally, through collaboration with other institutions including schools and workplaces, the unit is able to create awareness of the effects of drug and substance abuse or sale. The impacts include the development of physical and mental health issues and the presence of repercussions as stipulated by law. Through the campaigns, the unit can advocate for law and order and prevent more people from abusing or selling drugs. Finally, by educating the public, the unit is able to reduce cases of insecurity caused by drug and substance abuse including robbery and theft among others. Security in Kilifi County has improved significantly with the increase in interventions by ANU. (Kilifi County, Chairperson of County Security Committee, 29th March, 2023).

The ANU Mombasa County branch operates across the major towns and rural areas. The unit has recorded the arrest of drug dealers and illegal drug recovery. The activities by ANU in Mombasa County have helped control the circulation of illegal drugs and substances like bhang, cocaine, and heroin. The unit has also partnered with healthcare facilities and rehabilitation centers to provide counseling and treatment services to drug users and addicts. With the help of the Kenya Ports Authority, Kenya Revenue Authority, and Mombasa County Government, the unit has facilitated the development of policies to address narcotics smuggling and drug abuse in the region and provide support to community-based organizations (Ndururi, 2018). According to an exclusive interview with an NGO head based in Mombasa:

ANU has been instrumental in the fight against drug and substance abuse in Mombasa County. The unit has been responding to information from our members swiftly which has helped in apprehending criminals of drug abuse and saving victims of drug abuse and addiction. The collaboration has led to improved relations between the people and the unit as they are able to experience improved security in their regions. Additionally, the

collaboration has led to the maintenance of law and order. The number of people spotted selling or abusing drugs in public has reduced significantly since the onset of raids and security operations in Mombasa County. More stakeholders should join in the war against drugs in Mombasa County to facilitate the maintenance of law and order at the local level (Mombasa County Head of NGO, 20th March, 2023).

ANU's efforts in Kilifi and Mombasa counties have facilitated the mitigation of drug and substance abuse. Proactive measures including the seizure of illegal drugs and arrest of traffickers have helped in disrupting supply and drive addicts to rehabilitation centers for recovery. Additionally, the community-based intervention including sensitizing the public including students and law enforcement officers has helped in reducing the rates of drug abuse across the counties (NACADA, 2021). However, there is need for improved staffing in the unit as it suffers from insufficient manpower and resources making it difficult to cover all regions across Kilifi and Mombasa Counties. Improved resources would also help in eradicating drug trafficking as they would be able to uncover the sophisticated networks of supply and demand.

5.4.1.1 Effectiveness Evaluation

The ANU has had some notable successes in recent years. For example, in 2020, the unit seized over 2,000 kilograms of narcotics with an estimated street value of KES 3.3 billion. Additionally, the ANU arrested over 1,000 drug traffickers and dealers, and prosecuted over 500 cases related to the same. These figures indicate a significant impact on drug trafficking activities in the coastal region of Kenya. The high number of seizures and arrests suggests that the ANU has been successful in disrupting drug supply chains and apprehending criminals involved in the drug business ranging from drug trafficking to abuse.

5.4.2 The National Police Service (NPS) Drug and Substance Abuse Prevention Program

The National Police Service (NPS) Drug and Substance Abuse Prevention Program is an initiative launched by the Kenyan government to combat the rising drug and substance abuse problem in the country. The program has been implemented in various counties across Kenya, including Mombasa and Kilifi counties.

The program was launched in 2016 and is implemented in collaboration with various stakeholders, including the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA), the Ministry of Interior, and other government agencies. The program's primary objective is to create awareness about the dangers of drug and substance abuse, provide treatment and rehabilitation services to addicts, and enforce the law to prevent drug trafficking and peddling.

The candid role of the National Police Service (NPS) in drugs and substance abuse can never be ignored. As a governmental agency charged with the enforcement of law and order, it has attempted to tailor this role to the prevention of drugs and substance abuse across the country, especially in areas worst hit by the menace. In this study, the program has been used to denote an array of activities pursued by the agency in its quest to address drugs and substance abuse in both Mombasa and Kilifi Counties. Several institutions including the World Health Organization (WHO) mirror the value of safe upbringing, nurturing, and supporting social institutions that touch on the survival of people, especially the young ones by thwarting the prevention of risky behaviours that surpass personally developed resilience for healthy adolescent development and growth. To begin with, schools remain one essential social institution. Thus, their safety and adolescent well-being can be greatly threatened by drug consumption and violence. Accordingly, collaborative, multifaceted, evidence-based, and developmentally sensitive activities are

essential. Several factors including individual, friends, and family relationships as well as social settings among others influence substance use prevention vis-à-vis the safety of learning financial institutions. Additionally, poor safety in learning institutions serves as a threat that increases the potential for substance abuse, especially among vulnerable youths. In light of this, law enforcement could be incorporated into the implementation and enforcement of laws and policies on drug prevention, promoting a healthy school environment that protects adolescents against drugs and substance abuse as well as promoting a positive attitude towards the enforcement of laws and policies related to drugs.

The deployment of law enforcement officers for drug and substance abuse prevention in learning institutions is a relatively infant practice. Upon their deployment, these officers serve several functions including serving as safety experts and law enforcers, problem solvers, and liaisons to communal resources and as educators by teaching and informing about policing as a career, alcohol, and drug awareness as well as criminal investigation. In light of this, the study established that law enforcement officers were established in several learning institutions to curb the menace of drugs and substance abuse. Accordingly, interviews administered to law enforcement officers yielded data that reinforced the existing activities within the NPS that were directed to address drugs and substance abuse. For instance, most of the officers that were interviewed conceded that they were aware of the government policies on drugs including Tobacco Control Act & Mututho Laws. They further indicated that they were willing to enforce such laws. However, they were constrained by numerous factors such as inadequate manpower and corruption. They further indicated that some of them were regularly stationed in vital institutions, especially schools to help in addressing the menace of drug abuse. These assertions were reflected by a senior administrative officer who had this to say;

Learning institutions, especially secondary and tertiary are worst hit by the menace of drugs and substance abuse with the majority of young people bearing the brunt of this menace. One of our activities as law enforcement officers is to ensure there is law and order and that the existing policies on drugs are enforced. The National Police Service has been liaising with key stakeholders in the educational sector to address drugs and substance abuse among the learners by stationing our officers in institutions that are worst hit by the menace (Interview with a chief, 4th April, 2023).

As indicated by the recent reports of NACADA, young people are severely affected by drugs and substance abuse in the Coastal region, especially Mombasa and Kilifi Counties. This threatens the economies of both counties and the nation at large. Consequently, most of the NPS activities have been directed at young people. This study established that the majority of young people are aware of the frequent police crackdowns in both counties due to drugs and substance abuse. Generally, the study found that young people were aware of the government's efforts in enforcing the existing laws. Young people were found to be the victims of these regular crackdowns. Most of them testified of being arrested and slapped with fines while others were temporarily remanded in police custody. The study established that the local administrators were working closely with the NPS during such crackdowns. During the Focused Groups Discussion (FGDs), one of the key respondents had this to say;

As local administrators, we play a vital role in the eradication of drugs and substance abuse by liaising with the police. In this context, we are tasked with the responsibility of enforcing drug policies and laws in our respective localities. Oftentimes, whenever we want to make arrests, we collaborate with the police officers. Young people who are the main victims of the menace have been our regular customers during such arrests. Recently, we have also embarked on creating awareness and educating the victims of drugs and substance abuse on the importance of adhering to the existing drug laws. Furthermore, we also educate on the wider effects of drugs and substance abuse, especially during public Barazas (FGD, Village Elders, 22nd March, 2023).

In Mombasa and Kilifi counties, the NPS Drug and Substance Abuse Prevention Program operates through various approaches, including community-based programs, school-based programs, and outreach programs. The program has established community-based drug and

substance abuse prevention committees in different locations in these counties. These committees work with the police and other stakeholders to sensitize the public about drug abuse, identify drug peddlers, and provide referral services for those in need of treatment and rehabilitation.

The program has also established school-based programs that target both primary and secondary schools in the two counties. The programs aim to educate students about the dangers of drug and substance abuse and equip them with life skills that can help them make informed decisions about drug use.

5.4.2.1 Effectiveness of the program

According to statistical data from NACADA, the prevalence of drug and substance abuse in Mombasa and Kilifi counties is relatively high. The most commonly abused substances include marijuana, heroin, cocaine, and methamphetamine. The NPS Drug and Substance Abuse Prevention Program has made significant strides in addressing this problem, with a total of 23,129 individuals reached through various prevention programs in the two counties.

5.4.3 The Kenya Prison Service (KPS) Rehabilitation Programs

The Kenya Prison Service (KPS) is a government agency responsible for managing prisons and rehabilitation centers across the country. The KPS Rehabilitation Programs are designed to help inmates acquire skills, knowledge, and attitudes that will enable them to lead productive lives upon release.

The KPS Rehabilitation Programs were established in response to the high rate of recidivism among inmates in Kenya. Inmates would often re-offend upon release, contributing to the country's already high crime rates. To address this problem, the KPS introduced various

programs aimed at rehabilitating inmates, including education, vocational training, and counseling. Inmates are trained in a range of skills, including carpentry, masonry, welding, and tailoring. The education programs offered include primary, secondary, and tertiary levels, and are tailored to the needs of individual inmates.

The Kenya Prison Service is a department harboured in the Ministry of Interior and Coordination of National Government. The Department is enshrined in the Prisons Act Cap 90 and Borstal Institutions Act, cap 92 Laws of Kenya. The Prisons Act mandates the Department to perform several functions including the containment and safe custody of inmates; rehabilitation and reformation of inmates; controlling and training of young inmates in the Borstal Institutions and Youth Corrective Training Centres as well as providing facilities for children who have accompanied their mothers to prison. Since its establishment, it has contributed to public safety and security by guaranteeing safety in prison facilities as well as rehabilitation of convicted persons for community reintegration. It is one of the vital criminal justice systems that have the greatest impact on people's rights, especially those on the wrong side of the law.

In recent decades, drug and substance abuse is increasingly becoming a profound concern in many prison facilities around the world and Kenyan prisons are not an exception. Such growing concerns have seen robust government intervention to curb the utility of drug abuse in Kenya's prison facilities. Despite the stringent prison drug policies, the menace has been entrenched in the facilities and has become a public health priority concern, thus a treatment priority in most prisons. The study established that a growing number of prisoners were using drugs in large proportions. Consequently, survival in prison facilities was dictated by drug-related issues. The study found that prisons were among the high-risk environment for initiation into drug use after abstinence, a destination for unsafe forms of drug consumption, and for the spread of sexually

transmitted infections including HIV/AIDs. Inmates who inject drugs are oftentimes doing so in a more risky fashion by sharing needles and syringes which intensifies the chances of transmission. Inmates suffer from poor physical and mental health including transmission of infectious diseases and post-traumatic disorders and psychosis. There are also high levels of drinking and smoking within the prison facilities. Responding to drug-related issues has become a major public health priority within Kenyan prison facilities. For instance, during an interview with a senior officer at the Shimo la Tewa Maximum Prison, he had this to say;

As a correctional Department, our key mandate is to rehabilitate and facilitates the reintegration of the offenders into the community. However, in recent years, we have been confronted by the emergence of drugs and substance abuse, especially among inmates. Being a new phenomenon, we have been grappling with finding new mechanisms to eradicate it. I can say the progress is quite okay and we've managed to establish treatment and health programs in our facility. Through this, we have reached out to several drug addicts. We provide counselling, creating awareness and educating inmates on the dangers of drugs and substance abuse. Our services are wholly open to any victim of drug abuse. However, we still face significant challenges including inadequate manpower, overcrowding of inmates, and inadequate funds to facilitate proper implementation of our activities (Interview, Administrative Officer, KPS, 15th April, 2023).

The KPS in conjunction with the County government of Mombasa alongside the United Nations on Drug and Crime (UNODC) embarked on a special program back in 2018 to specifically address the needs of heroin-injecting drug users in Shimo la Tewa Maximum Prison. Through this program, the Medical Assisted Therapy (MAT) services in the facility were expanded. Such a project was informed by the overcrowding of the public health facilities which were shared between the inmates and the general public. Upon acknowledging the risks associated with this, the government through KPS fast-tracked the establishment of the facility. Consequently, the Shimo la Tewa Prison MAT clinic became the first to be dedicated to the treatment of opioid addicts in the country. Additionally, it became dedicated to addressing HIV prevention and drug treatment services in the prison vicinity. Since its establishment, several drug abuse victims have

benefited from the program, mainly through treatment. During an interview with a victims, one of the beneficiaries had this to say:

I used to inject drugs having been introduced by a colleague. I thought this would have ceased but unfortunately, I found myself in this terrible place. I thought the place was a drug-free zone until I was reintroduced by my fellow inmate. I decided to seek medical attention to remedy my deteriorating health condition. Am glad I became a beneficiary of the MAT program. Currently, my condition is improving quite well, and I am thankful to KPS for bringing this program to us (Interview with Victim, March 25th, 2023).

The KPS Rehabilitation Programs have been successful in reducing recidivism rates in Kenya. In 2020, the KPS reported a 22% reduction in recidivism rates compared to the previous year. Additionally, the programs have contributed to the rehabilitation of thousands of inmates, many of whom have successfully reintegrated into society after serving their sentences.

The KPS Rehabilitation Programs in Mombasa and Kilifi counties have been instrumental in reducing recidivism rates in Kenya. By providing inmates with education, vocational training, and counseling services, the programs equip them with the skills and knowledge necessary to lead productive lives after serving their sentences. The success of these programs is evident in the reduced recidivism rates and the number of rehabilitated inmates. However, there is still room for improvement, as the recidivism rates are still high in Kenya.

5.4.3.1 Effectiveness of the program

The KPS Rehabilitation Programs have been effective in reducing recidivism rates through rehabilitating inmates in Kenya. The programs have successfully reintegrated approximately 60% of the rehabilitated inmates into society, as evidenced by their ability to find employment, maintain stable housing, and avoid re-offending. The low relapse rate of only 10% within a year after release indicates that the programs have equipped inmates with the necessary skills and support to lead productive lives.

5.4.4 The Judiciary Drug and Substance Abuse Control Program

The Judiciary Drug and Substance Abuse Control Program is a government initiative in Kenya aimed at addressing the issue of drug and substance abuse in the country. The program operates in various counties, including Mombasa and Kilifi, which are known hotspots for drug and substance abuse.

The program was established to provide a comprehensive approach to drug and substance abuse control by integrating the efforts of various stakeholders, including the judiciary, law enforcement agencies, health professionals, and community-based organizations. The program seeks to prevent drug and substance abuse through education and awareness campaigns, as well as providing treatment and rehabilitation services to those affected by drug addiction.

In Mombasa and Kilifi counties, the program operates through various initiatives, including drug courts, which provide a legal framework for addressing drug-related offenses. The program also provides training and support to judicial officers and law enforcement agencies to enhance their capacity to handle drug-related cases effectively. Additionally, the program offers treatment and rehabilitation services to drug addicts, including counseling, detoxification, and vocational training.

5.4.4.1 Effectiveness of the program

According to statistics from the NACADA (2023), drug and substance abuse is a significant problem in Kenya, with over 3 million people estimated to be using drugs. Mombasa and Kilifi counties are among the most affected, with high rates of drug-related crimes and drug addiction. However, the Judiciary Drug and Substance Abuse Control Program has made significant strides

in addressing the issue through its various initiatives, including drug courts and rehabilitation programs.

Number of Successful Cases as of 2021 December (NACADA, 2021)

Mombasa County

Year 2019: 150 successful cases

Year 2020: 175 successful cases

Year 2021: 200 successful cases

Kilifi County

Year 2019: 80 successful cases

Year 2020: 100 successful cases

Year 2021: 120 successful cases

The increasing number of successful cases over the years indicates that the program has been effective in helping individuals overcome drug addiction. The program's comprehensive approach, including education, treatment, and rehabilitation services, seems to be yielding positive results.

Impact on Drug-Related Crimes

Mombasa County

Year 2019: 500 drug-related crimes

Year 2020: 450 drug-related crimes

Year 2021: 400 drug-related crimes

Kilifi County

Year 2019: 300 drug-related crimes

Year 2020: 250 drug-related crimes

Year 2021: 200 drug-related crimes

The declining number of drug-related crimes indicates that the program's initiatives, such as drug courts and enhanced training for judicial officers and law enforcement agencies, are contributing to the deterrence and control of drug offenses in the targeted counties.

5.5 Harm Reduction Programs

Harm reduction programs aim to mitigate drug abuse problems through an empathetic approach to the already practicing abusers and addicts. These programs are often aimed at the victims and approach drug abuse in a conventional method that encourages animosity. The programs often include aiding the drug abusers with safety equipment such as sterile syringes that they then use in the drug abuse. The goals of these programs often are focused on the reduction of the harm caused by drug abuse. In this study, notably through the focus group discussions, most of the elders felt that the harm reduction programs which were previously considered a very good idea have taken a turn for the worse. The elders felt that prevention as opposed to harm reduction was the best mitigation for drug abuse since they bring in a sense of alienation to the users who then become irredeemable. However, the residents acknowledged the harm reduction exercises in the region, most especially in Mombasa County with most residents acknowledging their existence.

The harm reduction programs in the coastal region of Kenya aim to reduce the negative consequences associated with drug abuse. These programs include needle exchange programs, which aim to reduce the spread of HIV and other blood-borne diseases among injecting drug users and overdose prevention programs, which aim at reducing the number of deaths caused by drug overdoses.

The table 5.1 shows that 153 respondents found harm reduction measures effective in mitigating drug abuse, while 98 respondents found them not effective, and 133 respondents were not sure. The chi-square value of 32.04 with 2 degrees of freedom and a critical value of 5.99 indicates a significant association between the effectiveness of harm reduction measures and drug abuse in the region.

During the interviews with the CBOs, one representative stated during the interview that:

Harm reduction programs are effective in reducing the negative consequences associated with drug abuse, such as the spread of HIV/AIDS and hepatitis. These programs provide individuals with clean needles and syringes, access to HIV/AIDS testing and treatment, and counseling and support services. This helps to reduce the harm associated with drug abuse and can also help to prevent the spread of these diseases. Harm reduction programs can be effective in reducing the negative consequences of drug abuse. While these reduction programs do not address the underlying issues that contribute to drug abuse, they do provide individuals with the necessary tools and resources to protect their health and well-being. By reducing the harm associated with drug abuse, individuals are more likely to seek treatment and support to overcome their addiction (Interview with CBO officvails, 3rd April, 2023).

A study by Mburu *et al.*, (2019) supports the findings of this study, indicating that harm reduction measures such as needle exchange programs and methadone treatment can significantly reduce drug abuse and associated health risks in coastal Kenya. However, a study by Akimala *et al.*, (2023) found that the effectiveness of harm reduction measures is limited by the lack of political will and funding for such programs in the region.

Further UNODC (2017) found that needle exchange programs can reduce the transmission of HIV among people who inject drugs by up to 80%. Opioid substitution therapy, a type of harm reduction program, can be effective in reducing opioid use and related harms such as overdose deaths. These findings highlight the importance of investing in harm reduction programs as part of a comprehensive approach to addressing drug abuse in the coastal region of Kenya.

5.5.1 The Kenya Red Cross Society's Needle and Syringe Program (NSP)

The Kenya Red Cross Society's Needle and Syringe Program (NSP) is a public health initiative aimed at reducing the transmission of HIV and other blood-borne infections among people who inject drugs. The program was first introduced in Kenya in 2002 and has since been implemented in several counties across the country, including Mombasa and Kilifi.

The NSP provides clean needles and syringes to people who inject drugs, as well as offering HIV testing, counseling, and referral services for treatment and other health care needs. The program also includes education and outreach activities to raise awareness about the risks of sharing needles and other injection equipment.

The Kenya Red Cross Society (KRCS) is one of the oldest leading humanitarian organizations in Kenya. The society was established in late 1965 through an Act of Parliament, cap 256 of the Kenyan laws. Currently, the organization is running numerous activities countrywide all of which aim to address the dynamic and bedeviling challenges confronting Kenyans among them including famine and drought. Additionally, it also addresses emerging issues that threaten economic development and prosperity including drug and substance abuse. Relating to this, society has been driving the Needle and Syringe Program (NSP), especially in areas worst hit by the menace of drug abuse.

The Needle and Syringe Program is the most prominent component of harm reduction intervention, particularly for people who inject drugs. It is one of the most sophisticated interventions with numerous interactive components including but not limited to changes in one's behaviour in both PWIDs and providers of the service and is characterized by some degree of flexibility of interventions. People who inject drugs tend to experience both morbidity and mortality in high magnitudes. The harm related to such practice includes but is not limited to overdose, drug-related mortalities, and transmission of sexually transmitted infections such as HIV/AIDS, Hepatitis A, and Hepatitis B to mention but a few. The program is widely perceived to be so instrumental in harm reduction intervention among people who inject drugs (PWIDs). The program was initiated following the emergence of the HIV/AIDS epidemic in the early 1980s with the motive of providing access and promoting the utilization of sterile injection by PWIDs. Most significantly, a paradigm shift has favoured the program as a vital component of harm minimization.

The existing policies focus on reducing all harms related to drug and substance abuse including thwarting the spread of sexually transmitted infections, reducing the sharing and reuse of needles and syringes, minimizing the rate of discarded needles and syringes in the environment and encouraging access to sterile needle and syringe tools have been pursued by countries worst hit by the menace of drug and substance abuse. However, despite the existence of such policies, the use of injected drugs has been on the rise in both Mombasa and Kilifi Counties. It is against this backdrop that the Kenya Red Cross intervened to provide safe and sterile paraphernalia. The need to implement the program was influenced by the exponential rise of sexually transmitted infections, especially among young people. An interview with one of the officials from the Red Cross yielded this assertion:

We are trying as much as we can to address the menace of drug and substance abuse, especially among the young population. From the records, young people are the most vulnerable group that requires special attention thus, we have to invent other alternative measures to help young people from sharing needles and syringes while injecting drugs. This has been largely attributed to the high number of young people who were contracting sexually transmitted infections. As a voluntary organization, we were working with the government to implement the needle and syringe program in various parts of the country worst hit by the menace of drugs and substance abuse. Accordingly, our focus has been largely directed here in the coastal region, especially Mombasa and Kilifi (Interview, Official KRCS, Mombasa, 10th April, 2023).

Moreover, the study established that since the inception of the needle and syringe program spearheaded by KRCS in collaboration with the Kenyan government, both counties have recorded significant reductions in needle and syringe sharing. Whereas the program has recorded significant success, it has been met with opposition, especially from civil societies that have been working towards the reduction of sexually transmitted infections. According to them, such a program was derailing their effort towards the eradication of HIV/AIDs among other sexually transmitted infections. Nevertheless, KRCS has been appreciated for fast-tracking the implementation of the program. During the interviews with the beneficiaries of this program, one of them had this to say:

You know what? I think we people who inject drugs have been ignored for quite some time. We normally risk our lives and times we end up contracting sexually transmitted infections since oftentimes, we share syringes and needles since most of us can not afford to purchase them. However, our lives have never been the same since the introduction of the needle and syringe program by the government in collaboration with the Kenya Red Cross. The program has enabled us to access little hindrances, needles, and sterile syringes. I strongly think that this program would help mitigate the risks that are associated with needle and syringe sharing (Interview with a Victim, 27th March, 2023).

In Mombasa, the NSP operates through a mobile outreach program that visits several hotspots for drug use, such as the Majengo and Kisauni neighborhoods. The program distributes free needles and syringes and offers HIV testing and counseling services to drug users. In Kilifi, the NSP operates through a static clinic located at the Kilifi County Referral Hospital.

5.5.1.1 Effectiveness of the program

The NSP has been successful in reducing the transmission of HIV and other blood-borne infections among people who inject drugs in Kenya. According to the Kenya National AIDS and STI Control Program, the prevalence of HIV among people who inject drugs in Kenya was 18.3% in 2018, down from 29.3% in 2012. The NSP has also helped to reduce the number of new HIV infections among people who inject drugs, with an estimated 1,600 infections averted between 2012 and 2018.

5.5.2 The International AIDS Alliance Coast Harm Reduction Program

The International AIDS Alliance Coast Harm Reduction Program is a government program that operates in Mombasa and Kilifi counties in Kenya. The program was established in response to the growing HIV/AIDS epidemic in the region, which was largely driven by injection drug use. The program's primary function is to provide harm reduction services to people who inject drugs, including access to clean needles and syringes, opioid substitution therapy, and HIV testing and counseling.

The International AIDS Alliance Coast Harm Reduction Program is an initiative aimed at mitigating drug and substance abuse among vulnerable populations including injecting drug users and sex workers. The alliance focuses on harm reduction strategies including the provision of clean needles, condom distribution, and HIV testing and counseling (NACADA, 2021). In the process, the program has integrated drug and substance abuse prevention as part of counseling and makes suggestions on the best rehabilitation facilities based on patients' conditions. Kilifi County has benefitted from the program as it has aided in the mitigation of drug and substance abuse. Healthcare providers in the program are able to reach out to drug users in areas where governments and healthcare institutions have not been able to (Ndururi, 2018). The professionals

provide clean needles for injection and services such as counseling to stop drug abuse and teachings on the importance of healthy living. As a result, the program has helped addicts in Kilifi County reform and check into rehabilitation centers. According to an interview with the CEC health from Kilifi County:

The International AIDS Alliance Coast Harm Reduction Program has been beneficial to the people of Kilifi County. Since its introduction, we have had a steady increase in the number of people checking into rehabilitation centers from regions where the government has not been able to extend its services. The program also helps in controlling the spread of diseases including HIV/AIDS which is beneficial to the residents and the addicts. Their efforts have been recognized by agencies including NACADA which is working on a collaboration program to facilitate improved reach within the county and improve the range of services offered (Interview with Kilifi CEC Health, 3rd April, 2023).

The alliance has established drop-in centers where addicts of injecting drugs can access healthcare services including treatment for addiction and clean needles supply. The program has been able to distribute over 300,000 clean needles reducing the sharing of needles and the risk of contracting HIV and other blood-borne infections (NACADA, 2021). Moreover, a peer education program has been established where individuals consuming injection drugs receive education on safe injecting practices and reducing the risk of overdose and other complications (UNODC, 2002).

The program's activities in Mombasa County have led to significant developments in the process of mitigating cases of drug and substance abuse. Through its drop-in centers where addicts and sex workers access services including HIV testing and counseling, the alliance has incorporated addiction treatment services to combat drug use (Ndururi, 2018). Access to items such as clean needles and condoms has facilitated the reduction of the risk of HIV and other diseases, consequently, the rate of drug and substance abuse has also reduced. A victim of drug and

substance abuse at the International AIDS Alliance Coast Harm Reduction Program drop-in center informed us that:

The image of the International AIDS Alliance Coast Harm Reduction Program has improved over time. At first, we were reluctant to receive their products and services as they were considered unorthodox. Their teachings including how to inject drugs properly without overdosing and supply of needles and condoms were seen as a way of corrupting the society. However, through their sensitization program, we have been able to understand their logic. Their objective is to reduce the rate of infection of diseases such as AIDS and at the same time, reach out to addicts for counseling on how to quit or control the addiction for healthy living. Since we understood that, we have been attending the counseling programs and accepting their products and we have seen improvements. I am in the process of quitting and I came here for counseling and follow-up (Mombasa County, drug and substance abuse victim, 19th March, 2023).

The alliance has been successful in mitigating cases of drug and substance abuse in Kilifi and Mombasa Counties. Through the provision of clean needles, condoms, HIV testing, and addiction counseling, the alliance has been able to reach out to vulnerable communities at low-income informal residences.

5.5.2.1 Effectiveness of The program

Since its inception, the program has made significant progress in reducing the transmission of HIV among people who inject drugs. According to the program's statistics, the percentage of people who inject drugs in the region who are living with HIV has decreased from 45% to 10% over the past decade. In addition, the program has helped to reduce the number of new HIV infections in the region by 60%.

The program's success can be attributed to its comprehensive approach to harm reduction. In addition to providing clean needles and syringes and other harm reduction services, the program also focuses on addressing the root causes of drug use, such as poverty, social exclusion, and

discrimination. This approach has helped to build trust between the program and the community it serves, which has been essential in increasing the program's effectiveness.

5.6 Chapter Summary

The chapter has presented results for the second objective of the study which was to evaluate government programs in mitigating drug and substance abuse in selected counties in the Coastal region, Kenya. The results included assessment of the existing programmes and their effectiveness. The next chapter (Chapter 6) presents results for the third objective.

CHAPTER SIX

CHALLENGES AND OPPORTUNITIES FACING GOVERNMENT PROGRAMS IN MANAGING DRUGS AND SUBSTANCE ABUSE IN SELECTED COUNTIES OF THE COASTAL REGION OF KENYA

Introduction

This chapter takes a closer look at the challenges and opportunities that government programs face in managing drugs and substance abuse in Mombasa and Kilifi counties in the Coastal region of Kenya. For organization, the chapter is divided into four program types as previously discussed in the chapter five including preventive, treatment, law enforcement and criminal justice, and harm reduction programs.

6.1 Challenges

This section aims to provide an overview of the challenges faced by each mitigation program implemented by the government to address drug abuse in the Kilifi and Mombasa Counties. The four mitigation programs include prevention, treatment, law enforcement, and harm reduction programs.

The prevention program aims to prevent drug abuse by educating the community about the dangers of drug abuse and promoting healthy lifestyles. The treatment program focuses on providing medical and psychological assistance to individuals struggling with drug addiction. The law enforcement program aims to curb drug trafficking and related crimes, while the harm reduction program aims to minimize the negative consequences of drug abuse.

6.1.1 Insufficient funding/Lack of enough resources

According to the findings of the study, insufficient funding of preventive programs was reported as a major challenge experienced by government programs in the mitigation of drug abuse in the coastal region, specifically in Mombasa and Kilifi counties in Kenya.

During the interviews, a religious leader stated that:

As a community leader, I have witnessed firsthand the impact of insufficient funding on the preventive programs aimed at mitigating drug abuse in our region. The programs are not adequately funded, and as a result, there is a lack of resources for outreach, education, and awareness campaigns to sensitize our youth on the dangers of drug abuse (Interview with religious leader, 14th April, 2023).

In another interview with heads of selected NGOs, he agreed with the sentiments made by the religious leader in relation to insufficient funding. The head of NGO claimed that:

As an NGO we experience little or no support from the government. Without support we cannot deliver our mandate of which is to prevent and treat illnesses which are related to drug abuse. It is devastating to see the big number of the victims who depend on us losing hope and relapsing. We have tried our best to reach out to the government in search for funding but positive feedback is yet to be witnessed and we are only left with one option which is to find donors. It is also worth noting that there are very few individuals who are willing to be our donors and therefore if government will not improve on donation, we might end up dissolving our NGO (Interview with head of NGO 10th April, 2023).

Lack of resources and inadequate funding of preventive programs makes it difficult to effectively reach the target population, especially the youth, who are the most vulnerable to drug abuse. Furthermore, the lack of funding hinders the implementation of evidence-based interventions, such as counseling, rehabilitation, and support services, which are essential in addressing the underlying causes of drug abuse.

These findings are consistent with a study by Fischer *et al.*, (2019), which found that funding plays a critical role in the success of preventive programs aimed at reducing drug abuse. According to the study, inadequate funding results in a lack of resources for program implementation, which can compromise the effectiveness of preventive interventions. Furthermore, the study suggests that a lack of funding can lead to program stagnation, with programs failing to adapt to the changing needs and challenges.

Another study by Tumwesigye *et al.*, (2020) highlights the importance of funding which is motivated by basic needs such as safety, love, and self-esteem. According to the study, preventive programs aimed at reducing drug abuse are essential in addressing the underlying human needs that drive drug abuse. However, these programs require adequate funding to be effective in meeting the basic needs of the target population.

Limited resource allocation to preventive programs has been identified as a significant challenge experienced by government programs in the mitigation of drug abuse in the coastal region of Kenya, specifically in Mombasa and Kilifi counties.

While conducting interviews a chief pointed out the following:

I have witnessed firsthand the struggle that government programs face in the fight against drug abuse due to limited resources. Many programs are unable to reach all areas, and those that do often have inadequate resources to sustain the programs. The lack of resources often leads to a gap in the provision of preventive services to the vulnerable groups in society, including the youth, women, and marginalized populations. This, in turn, creates an environment that is conducive to the proliferation of drug abuse and addiction (Interview with administrative chiefs, 16th April, 2023).

In support of the sentiments made by the chief, Kilifi CEC health during an interview argued that:

Currently government is facing challenges in health sectors due to inadequate resources which make it difficult for it to organize proper allocation. Most of the program which were started by the government or hospitals to fight drug abuse have come to an end, or if there are some that are still operating, they cannot deliver as it is expected. Most of the hospitals in the region, for instance cannot meet the high demand of methadone leading to high cases of relapse. With inadequate resources there can never be success in the fight against drug abuse (Interview with CEC health, 20th April, 2023).

These findings are consistent with a study conducted by Onyango & Owino (2019), which examined the challenges faced by the government in implementing preventive programs in the fight against drug abuse in Kenya. The study identified inadequate funding as a major hindrance to the effective implementation of preventive programs. Additionally, the study found that inadequate staffing, lack of coordination among government agencies, and limited community involvement were also significant challenges.

Odek-Ogunde *et al.*, (2020) also supports these findings. The study, which focused on the challenges facing community-based drug rehabilitation centers in Kenya, found that limited funding and resources were significant barriers to the effective provision of preventive services. The study further noted that inadequate resources hindered the ability of these centers to provide comprehensive care, leading to high relapse rates.

According to the findings of the study, limited resources in law enforcement programs are a major challenge experienced by government programs in the mitigation of drug abuse in the coastal region, specifically Mombasa and Kilifi counties in Kenya. The household heads who participated in the study believed that limited resources in law enforcement programs are hindering the success of preventive programs in the region. This means that the programs intended to prevent drug abuse are not being implemented effectively due to a lack of resources.

During an interview, an administrative chief from Kongowea stated that:

As a community leader, there have been enormous negative impacts of drug abuse on our youth. It is disheartening to see how easily they fall prey to drug addiction. However, the government's efforts to prevent drug abuse are hampered by limited resources in law enforcement programs. The police officers do not have enough personnel, equipment, and facilities to effectively enforce drug laws and prevent drug trafficking. This, in turn, has contributed to the proliferation of drug abuse in our communities (interview with administrative chiefs, 4th April, 2023).

The challenges highlighted by the respondent are not unique to the coastal region of Kenya. In a study conducted by Fatsani *et al.*, (2018) in Malawi, it was reported that the lack of resources, particularly human resources, in law enforcement agencies, was hindering the success of preventive programs. The study noted that the police officers responsible for enforcing drug laws were overwhelmed and lacked the necessary training and equipment to carry out their duties effectively.

Concerning limited resources on law enforcement, County Commissioner in Mombasa County posted limited resources as one of the major challenges faced by the law enforcement team in the region. The County Commissioner claimed that:

The resources are very limited in this region considering the mandate in our hands. Sometimes we are forced to use our own resources to provide our services to the residents. The critical resources that we have been missing is the boats to secure our beaches which are the main entrance of the drugs in the region. Sometimes we even end up hiring boats and personal cars for our movement and that is not sustainable. We also lack modern technology which can detect drugs in our harbors and this makes it easy for the drug lords to import the drugs packed in containers or inserted inside the stomach of the fish (Interview with Mombasa chairperson of security committee, 25th April, 2023).

The household heads reported that the funding provided by the government was not sufficient to cater to the needs of the people who were struggling with drug abuse. It was observed that the preventive programs also suffered from insufficient funding.

During an interview, the head of NACADA stated the following:

The harm reduction centers and programs suffer from insufficient funding. These centers are meant to provide counseling, rehabilitation, and other support services to drug users, but they are unable to do so effectively due to lack of resources. This has resulted in the relapse of drug users, and in some cases, they have even resorted to criminal activities to support their addiction. Moreover, the preventive programs are also affected by insufficient funding. The government needs to allocate more funds to these programs so that they can reach more people and raise awareness about the dangers of drug abuse. This will not only prevent people from falling into addiction but also help in reducing the demand for drugs in the market (Interview with head of NACADA officer in Kilifi, 27th March, 2023).

These findings are consistent with an external study conducted by Kigen *et al.*, (2018), which found that inadequate funding was a major challenge faced by harm reduction centers in Kenya. The study recommended that the government should increase its funding for these centers and implement policies that would ensure sustainable funding for harm reduction programs.

Ersche *et al.*, (2019) found that a lack of funding for prevention programs resulted in an increase in drug abuse among young people in the United Kingdom. The study recommended that the government should increase funding for prevention programs and allocate more resources to educate young people about the risks associated with drug abuse.

Babor *et al.*, (2018) in the United States found that limited resources in law enforcement programs negatively impacted the implementation of drug prevention strategies. The study highlighted that law enforcement agencies had limited capacity to investigate drug trafficking networks, leading to a lack of intelligence on drug trafficking operations. As a result, preventive programs were ineffective in reducing drug abuse in the communities.

The inadequate staffing of preventive programs is another significant resource challenge experienced by government programs in the mitigation of drug abuse in the coastal region of Kenya, specifically in Mombasa and Kilifi counties. According to the household heads who participated in the study, inadequate staffing as a major challenge facing preventive programs in

the region. This means that there is a shortage of human resources to implement and monitor preventive programs effectively. As a result, the implementation of these programs is compromised, which ultimately hinders the achievement of their intended goals.

During the interviews, the county executive commissioner of health, Mombasa County, stated the following:

Inadequate staffing is a major problem in the implementation of preventive programs in the coastal region. Most of the programs are not implemented due to a lack of human resources, and those that are implemented are not properly monitored. The few staff members available are overwhelmed with work, and they cannot effectively carry out their duties (Interview with CEC health, 20th April, 2023).

The lack of human resources has led to a situation where some preventive programs are not implemented at all, while others are only partially implemented. This, in turn, leads to a gap in the provision of preventive services, making it easier for drug abuse to continue unabated.

These findings are consistent with a study conducted by Omwenga (2020), which found that inadequate staffing was a major challenge facing drug abuse prevention programs in Kenya. The study further found that the lack of human resources led to a situation where some programs were not implemented, while others were implemented but not effectively monitored.

Mukoma *et al.*, (2018) found that the shortage of human resources was a significant hindrance to the effective implementation of drug abuse prevention programs. The study recommended the deployment of more human resources to strengthen the implementation of preventive programs and ensure effective monitoring of their progress.

An officer of NACADA, during an interview, expressed the predicament of NACADA as a government institution suffering from inadequate staffing. The head claimed that:

As an institution we have really suffered due to inadequate staffing because it bedevils our ability to attain our goals. We lack people who can execute the mandate effectively either due to lack of skills or as a result of having huge workload. Mostly we must look for support from the police especially when we are required to arrest a victim or a suspect in relation to drug peddling. Due to the ever increasing cases of drug peddling in the region the number of NACADA officials also needs to be increased and well equipped for effectiveness (Interview with NACADA officer, 22nd April 2023).

Similarly, a study conducted by Njeru *et al.*, (2019) in Kenya found that the shortage of human resources was a significant barrier to the effective implementation of drug abuse prevention programs. The study recommended the deployment of more trained human resources to implement and monitor these programs effectively.

Inadequate staffing of treatment centers is a major challenge faced by government programs in the fight against drug abuse in the coastal region, specifically in Mombasa and Kilifi counties in Kenya. According to household heads, this challenge has greatly hindered the success of preventive programs in the region. The findings from the study reveal that majority of respondents indicated inadequate staffing as a major challenge in the implementation of preventive programs. This data indicates that the issue of understaffing is a significant problem that needs to be addressed urgently.

During the interviews, a respondent representative of the NGOs argued that:

The effects of understaffing in the treatment centers have been widely experienced by many people. Patients are not attended to promptly, and there are long waiting periods before they can receive the help they need. This delay often leads to relapse and discourages other addicts from seeking help. Most of the victims lack patience hence it is important to speed up the process of taking care of them as an encouraging (Interview with NGO leader, 18th April, 2023).

The issue of inadequate staffing in treatment centers is not unique to the coastal region of Kenya.

According to a study by Mbatia, Muniu, and Kimani (2019) on the state of drug abuse treatment

centers in Kenya, understaffing is a significant challenge facing the facilities. The study found that the majority of the treatment centers lacked enough personnel to cater to the needs of their patients adequately. This shortage of staff often leads to long waiting times and delays in accessing treatment, which could lead to poor health outcomes.

Gikonyo *et al.*, (2019) conducted a study in sub-Saharan Africa which found that staffing shortages in substance abuse treatment centers led to high staff turnover rates, burnout, and low morale. This study highlights the negative consequences of understaffing on the well-being of healthcare providers, which could have a ripple of effects on the quality of care provided to patients.

One of the key challenges reported by household heads in the coastal region (Mombasa and Kilifi counties in Kenya) in the mitigation of drug abuse was the insufficient staffing of treatment centers by government programs. This challenge was found to be a significant hindrance to the effective implementation of drug abuse prevention and treatment programs in the region. According to the data collected, 89.84% of the respondents reported insufficient funding as the most significant challenge in the preventive programs.

In another interview with the victims, a respondent opined that:

Inadequate staffing in treatment centers is a significant challenge in the fight against drug abuse. Many of these centers are understaffed, and those who are present are overworked, which leads to poor service delivery. As a result, many drug users are left without proper care and support, which often leads to relapse. There was a time I could go to the health facility wait for a very long time before I receive treatment. Sometimes I could give up and go home before I could get treatment (Interview with victim, 18th April, 2023).

A study conducted by UNODC (2021) found that the availability of trained professionals in drug abuse prevention and treatment programs was a key determinant of their success. The study further noted that the lack of trained professionals, especially in developing countries, was a

significant challenge in the implementation of effective drug abuse prevention and treatment programs. The study recommended that governments invest in training programs for drug abuse prevention and treatment professionals to improve the quality of services offered to drug users.

A report from WHO (2019) indicated that inadequate funding was a significant barrier to the provision of quality drug abuse prevention and treatment services. The study noted that many developing countries lacked the necessary resources to fund drug abuse prevention and treatment programs adequately. The study recommended that governments prioritize funding for drug abuse prevention and treatment programs to improve the quality of services offered to drug users.

Inadequate staffing in law enforcement centers and programs has been identified as a major challenge in the government's efforts to mitigate drug abuse in the coastal region, specifically Mombasa and Kilifi counties in Kenya.

During the interviews, County Commissioner Kilifi County pointed out that:

As a law enforcement officer, I have personally experienced the effects of inadequate staffing in our centers. It becomes difficult to monitor and control the drug trafficking and usage when we have few officers compared to the vast area we cover. We end up being overwhelmed, and some cases fall through the cracks due to the lack of personnel to handle them. Inadequate staffing leads to overworking of officers, which affects their performance and reduces their effectiveness in carrying out their duties. This, in turn, compromises the success of the preventive programs and increases drug abuse among the youth in the coastal region (An interview County Commissioner Kilifi County on 20th March, 2023).

In a study conducted by Miti *et al.*, (2020), it was found that inadequate staffing in law enforcement centers results in increased workloads, leading to fatigue and burnout among the officers. This, in turn, leads to a lack of motivation and compromised performance, which affects the success of the preventive programs for drug abuse.

Additionally, Kinyanjui *et al.*, (2019) found that inadequate staffing leads to a lack of collaboration among law enforcement officers, which reduces their effectiveness in dealing with drug abuse. The study also noted that inadequate staffing hinders the establishment of community policing, which is a crucial aspect of the preventive programs for drug abuse.

According to the findings of this study, inadequate staffing in harm reduction centers and programs is a major challenge experienced by government programs in the mitigation of drug abuse in the coastal region of Kenya. This underscores the need for urgent action to address the issue of staffing in these centers.

During the interviews a member of the CBO called *Mwangaza* opined that:

As a former employee in one of the harm reduction centers, I can attest to the fact that the issue of inadequate staffing is a major hindrance to the success of the programs. There are times when we had to attend to a high number of clients, and there were not enough staff members to handle them. This led to long waiting periods and frustration among the clients, and some of them even left without receiving any assistance. The few staff members who are available are usually overwhelmed with work, and they end up being overworked and stressed. This, in turn, affects their ability to provide quality services to the clients, and it also increases the risk of burnout and turnover (An interview with CBO leader on 9th April, 2023).

These findings are consistent with a study conducted by Auerbach *et al.*, (2019) in the United States, which found that inadequate staffing in harm reduction centers was a major challenge faced by programs. The study revealed that understaffing resulted in reduced access to services, longer waiting times, and less time for staff to build rapport with clients. These issues were found to have negative impacts on the effectiveness of harm reduction programs in addressing drug abuse.

Staffs help in fight against drug abuse as they allocated different roles in mitigation process. This means that hospital and rehabilitation centers have no adequate staffs thus making those facilities

dysfunctional. Staffs as the units of those facilities cannot deliver if they are overwhelmed with roles assigned to them. This is where functionalism theory comes in as to requires all staffs to functional for the attainment of the goal of that institution. Dysfunctional facilities have curtailed the effort of the government to fight drug abuse.

Mathias *et al.*, (2021) found that inadequate staffing was a key barrier to the implementation of harm reduction programs in Nigeria. The study identified a lack of trained personnel and inadequate funding as the main contributors to the staffing problem. The findings of this study are consistent with the situation in the coastal region of Kenya, where inadequate staffing is a result of a lack of resources.

According to the findings of the study, poor quality services in treatment centers and programs have been identified as a significant challenge experienced by government programs in the mitigation of drug abuse in the coastal region of Kenya. The household heads surveyed in this study ranked poor-quality services as the top challenge under preventive programs.

During the interviews a NACADA official argued that:

I have witnessed how poor-quality services in treatment centers and programs can hinder the progress of drug abuse mitigation programs. Many of the centers are underfunded, understaffed, and lack the necessary resources to effectively treat those suffering from drug addiction. This leads to a high relapse rate and a lack of confidence in the treatment programs. Poor quality services in treatment centers and programs also lead to stigmatization of those seeking treatment for drug addiction. Many people are hesitant to seek help because they fear being ostracized by their communities or being labeled as drug addicts (interview with NACADA representative, 10th April, 2023).

These findings are consistent with the results of a study conducted by Muga *et al.*, (2019) in Kenya, which found that the quality of care provided in drug treatment centers was a major barrier to accessing drug abuse treatment. The study found that many of the centers lacked the

necessary resources and infrastructure to provide quality care, leading to high relapse rates and low treatment success rates.

Patel *et al.*, (2018) found that poor quality services in drug treatment centers were a significant barrier to accessing drug abuse treatment in India. The study found that many of the centers lacked trained staff, appropriate medication, and evidence-based treatment methods, leading to low treatment success rates and high relapse rates.

Crape *et al.*, (2020) found that the quality of care provided in drug treatment centers was a significant predictor of treatment success in the United States. The study found that centers that provided high-quality care, including evidence-based treatment methods and adequate resources, had higher treatment success rates and lower relapse rates.

6.1.2 Lack of community involvement

The findings of the study reveal that the lack of community involvement in preventive programs is a significant challenge faced by government programs in mitigating drug abuse in the coastal region, specifically in Mombasa and Kilifi counties hindering the operation of the programs.

During the interviews, a respondent from the CBOs stated that:

The government needs to engage the community in the development and implementation of preventive programs. Without community involvement, the programs will not have the desired impact. The government should work with local leaders, including chiefs and village elders, as well as religious leaders to ensure that the community is involved in the preventive programs (Interview with head of CBO, 19th March, 2023).

Furthermore, the lack of community involvement in preventive programs has been identified as a significant challenge in preventing drug abuse in other regions globally. A study conducted in Pakistan found that community involvement was crucial for the success of preventive programs.

The study suggests that community involvement creates a sense of ownership and responsibility,

leading to increased participation and effectiveness of preventive programs (Akhtar, Shah, & Nazir, 2021).

Another study conducted in South Africa found that community participation was a significant factor in the success of drug prevention programs. The study suggests that community participation fosters a sense of ownership and responsibility, leading to increased participation and effectiveness of preventive programs (Van der Heever & Van Niekerk, 2021).

While on an FGD with village elders, one of them revealed that:

Government has failed to involve us in the fight against drug abuse. We have a lot of information which can play a major role in fighting drug abuse. However, we choose to keep it to ourselves for our safety. Due to lack of proper mechanisms to end drug abuse in our area, we village elder have become the greatest target by the peddlers because they suspect we are the eyes of the government. In that case we chose to consider our safety over the fight against the drug abuse (FGD with village elders on 14th April, 2023).

Therefore, to address the issue of lack of community involvement in preventive programs in the coastal region, the government needs to develop and implement strategies that promote community participation. This can be achieved through engaging with local leaders and stakeholders to ensure that the community is involved in the development and implementation of preventive programs. It is essential to ensure that the preventive programs are culturally sensitive and context-specific, taking into account the unique needs and circumstances of the community. This will increase the community's willingness to participate in the programs and enhance their effectiveness in preventing drug abuse.

According to the findings of the study, lack of community support in law enforcement centers and programs is a significant challenge experienced by government programs in the mitigation of drug abuse in the coastal region of Kenya, particularly in Mombasa and Kilifi counties.

During the interviews, a victim from Kilifi opined that:

As a former drug addict and a resident of this area for many years, I can say with certainty that the lack of community support is a major challenge in addressing drug abuse in this region. Many people are afraid to speak out, and some even condone drug use because they benefit from it in one way or another. This makes it difficult for law enforcement programs to succeed in their efforts. Without community support, law enforcement programs cannot effectively address the root causes of drug abuse, and they are likely to face resistance from the very people they are trying to help. (Interview with a victim, 22nd April, 2023).

These findings are consistent with the results of a study conducted by Kilonzo and Ndambuki (2021) which found that community participation is crucial to the success of drug abuse prevention programs. The study noted that community members can provide valuable insights into the local drug problem and can help to identify vulnerable populations that may be at risk of drug abuse. The study also highlighted the need for law enforcement agencies to build trust and foster positive relationships with the community as this is essential for effective collaboration and cooperation.

Communities in Mombasa and Kilifi counties have been hardly involved in the fight against drug abuse while their role is needed as they are a critical unit of the society. Lack of involvement in the fight against drug abuse means that the community is not functional, something that contradicts the functionalism theory. As per the functionalism theory, the community being a societal unit requires to be in forefront in the fight against drug abuse.

Muturi and Musiega (2019) also supports these findings, indicating that community support is a critical factor in the success of drug abuse prevention programs. The study noted that community involvement can help to reduce drug abuse stigma and promote a sense of responsibility among community members. The study also highlighted the need for law enforcement agencies to

engage with the community in a respectful and non-judgmental manner, as this can help to build trust and facilitate cooperation.

6.1.3 Cultural beliefs and practices

The challenge of cultural beliefs and practices against preventive programs including stigma and shame, traditional healing processes, misconceptions and misinformation, religious and spiritual beliefs and gender roles and power dynamics has been identified as a significant obstacle to the mitigation of drug abuse in the coastal region of Kenya, particularly in Mombasa and Kilifi counties. Household heads who participated in the study cited cultural beliefs and practices as a major barrier to the effectiveness of preventive programs.

During the focus group discussions, a village elder stated that:

In our community, it is considered taboo to talk about drug abuse openly. People do not want to admit that they have a problem or that their family members have a problem. This makes it difficult to implement preventive programs because people are not willing to participate or seek help. Stigma associated with drug abuse is deeply rooted in the cultural beliefs and practices of the community. The use of drugs is often associated with immorality, weakness, and a lack of discipline, and those who are caught using drugs are often ostracized and shamed by their families and communities (FGD with village elders, 20th April, 2023).

This finding is consistent with the results of a study conducted by Mburu (2018), which found that cultural beliefs and practices can act as barriers to drug abuse prevention and treatment in Kenya. Mburu noted that the use of traditional healers and herbal remedies is widespread in many communities, and that these practices are often favored over modern medical treatments.

In addition to cultural beliefs and practices, another respondent village elder also identified poverty and unemployment as factors that contribute to drug abuse in the community. He articulated the following:

Many young people turn to drugs as a way of coping with the stress of poverty and unemployment. They see no other way out, and they do not have the resources or support systems to help them. With time they have ended up inculcating drug abuse habit as part of their culture. In fact, those who do not abuse drugs are assumed to be primitive or cowards (FDG with village elders, 20th April, 2023).

This finding was supported by the results of a study conducted by Ayuku *et al.*, (2019), which found that poverty and unemployment were significant risk factors for drug abuse among young people in Kenya. The study also found that the lack of education and job opportunities contributed to a sense of hopelessness and despair among young people, which in turn increased their vulnerability to drug abuse.

In the same FGD another respondent village elder suggested that preventive programs should be tailored to the specific cultural context of the community, and that they should be designed to address the underlying social and economic factors that contribute to drug abuse.

We need programs that take into account our cultural beliefs and practices, and that address the root causes of drug abuse in our community. These preventive measures will be critical means of curbing drug abuse instead of depending mainly on curative measures. Furthermore, curative measures are more expensive than preventive mechanisms and therefore government will not be forced to spend a lot of its resources (FDG with village elders, 20th April, 2023).

This suggestion is consistent with the recommendations of a study conducted by Kilale *et al.*, (2019), which called for the development of culturally sensitive drug abuse prevention and treatment programs in Kenya. The study emphasized the importance of involving community members in the design and implementation of these programs, and of addressing the underlying social and economic factors that contribute to drug abuse.

Culture, as a way of life of the community, involves passing of some societal element from one generation to another. This means that there is an aspect of social learning through which members learn from each other as time goes by. This is primarily the ideology of Bandura's

theory of social learning. The community has passed the culture of drug abuse from generation to generation thus making it difficult for it to be eradicated today.

6.1.4 Language barrier

Language barriers have been identified as a significant challenge for the government programs in mitigating drug abuse in the coastal region of Kenya. According to MOH (2020), this barrier arises due to the diverse linguistic landscape of the region, where multiple local languages, dialects, and variations are spoken. The lack of a standardized language for program materials, information, and communication poses a challenge in effectively reaching and engaging the target population. For instance, if program materials are predominantly available in English, it may exclude individuals who are not proficient in the language (NACADA, 2020).

Household heads who were surveyed identified language barrier as a significant challenge faced by the government programs in the region. This finding indicates that language barriers are a considerable challenge for the success of preventive programs.

During the FGD with village elders conducted in the study, a respondent stated that language barriers are a significant challenge in the region. According to the respondent,

Language barrier is a significant challenge in this region because many people in the rural areas do not speak the national language, which is Swahili. Therefore, they cannot access vital information that is usually provided in Swahili by the government and non-governmental organizations. Using local languages will help in creating awareness and passing vital information regarding drug abuse and the preventive measures needed to reduce the menace. The use of local languages will make it easier for the people to understand and implement the measures effectively (FDG with village elders, 22th April, 2023).

These findings are consistent with a study conducted by Sychareun *et al.*, (2017) in Laos, which found that the language barrier was a significant challenge to the implementation of HIV

prevention programs. The study recommended that the use of local languages would be critical in reaching out to the affected communities effectively.

A different study by Al Amrani *et al.*, (2019) in Saudi Arabia found that language barriers hindered the implementation of preventive programs aimed at reducing the incidence of diabetes in the region. The study recommended that health education programs should be provided in the local languages to ensure that the affected communities could access and understand the information.

Furthermore, Devi *et al.*, (2018) found that language barriers were a significant challenge in implementing maternal health programs in India. The study recommended the use of local languages to ensure that the target communities could access and understand the information provided effectively.

6.1.5 Lack of awareness and education

According to the findings of the study, lack of awareness and education of the preventive programs is a significant challenge that the government programs are facing in mitigating drug abuse in the coastal region, specifically in Mombasa and Kilifi counties in Kenya. The (NACADA, 2020) report noted that out of most of the youth 80% treated drugs as recreational tools, while 60-70% of the adults used the drugs for pleasure and relief from depression. The household heads who were interviewed reported that lack of awareness and education was a critical issue. This finding suggests that the government needs to focus on educating the people in these regions to create awareness of the preventive programs.

During the interviews, the CEC for education in Kilifi County stated that:

Most of the people in our communities do not know much about the preventive programs available. Most of them only know about the rehabilitation centers, and they only seek help when they are already addicted to drugs. Increase of awareness will be vital in that, the victims will opt to understand the role they have to play at an individual level in their recovery process (Interview with CEC education, 20th March, 2023).

In an interview with one of the victims, the issue of lack of awareness was well depicted. The victim pointed out that:

My journey of taking drugs started as a joke and by the time I was becoming an addict there was nothing I could have done apart from working hard to get money to buy drugs. It took long for me to know that there was a way I could do minimize the amount of drug abuse. I did not know there was something like methadone. I tried to quit drugs before but sometimes my health could deteriorate to the extent of collapsing, however, since I started to use methadone, I have stopped consuming a lot of drugs like I used to. However, most of the drug addicts do not know that there is a place they can get methadone which will minimize the desire to consume drugs and therefore there is need to create awareness (interview with a victim, 20th April, 2023).

The lack of awareness and education of the preventive programs is not unique to the coastal region of Kenya. A study conducted by Kassim *et al.*, (2021) in Tanzania found that the majority of the participants had limited knowledge of the available drug abuse preventive programs. This finding suggests that the issue is not unique to Kenya, and other African countries may be experiencing the same challenge.

Rahman *et al.*, (2018) found that the lack of awareness and education of the preventive programs leads to an increase in drug abuse among the youth. This finding supports the need for the government to focus on creating awareness and educating the people on the available preventive programs. The study suggests that educating the youth on drug abuse and the available preventive programs can help reduce drug abuse among this demographic.

Awareness is important in the fight against drug abuse. However, it has been minimal in Mombasa and Kilifi counties thus curtailing the fight against drug abuse. Awareness is mainly

created through social learning which is based on providing an environment through which victims can learn from each other or from experts as recommended by the social learning theory.

Lack of awareness and education means that the fight against drug abuse will be ineffective.

Noor *et al.*, (2020) found that creating awareness and education of the preventive programs led to a decrease in drug abuse among the youth in Pakistan. This finding further emphasizes the importance of creating awareness and educating the people on the available preventive programs.

According to the findings of the study, lack of awareness and education on harm reduction centers and programs was identified as a significant challenge experienced by government programs in the mitigation of drug abuse in Mombasa and Kilifi counties in Kenya. The challenge was reported by most of the household heads who participated in the study, indicating that they lacked awareness of harm reduction programs.

During the interviews, the CEC of Education, Kilifi County, argued that:

Most people in our community are not aware of the existence of harm reduction centers and programs. This lack of knowledge has resulted in high rates of drug abuse and related consequences including increased crime and health problems. Even some of the government officials and leaders in our community do not fully understand the concept of harm reduction and the benefits it can bring in the mitigation of drug abuse (interview with CEC Education, Kilifi, 20th March, 2023).

The finding is consistent with a study conducted by Mburu *et al.*, (2018), which identified the lack of knowledge and understanding of harm reduction as a significant barrier to the implementation of harm reduction programs in Kenya. The study further emphasized the need for public education and awareness campaigns to increase the uptake and effectiveness of harm reduction programs.

During an interview with victims, it was clear that most of them are not aware that harm reduction centers exist in their region. The victim from Shanzu indicated that:

For a very long time I did not know there was a place I could get assisted in the process of recovering from drug addiction. It was until my friend informed me that there was such center in Shanzu where we can even get Methadone and injectors. However, was still reluctant to seek the assistance from the center because I was not sure of the kind of services they offer to the victims. I think the government need to create awareness among the victims because there is still a bigger number of youths within Kilifi who are not yet aware of existence of such centers (interview with victim, 24th March, 2023).

Blankenship *et al.*, (2018) highlighted the importance of community involvement and education in the success of harm reduction programs. The study emphasized that community members, especially those affected by drug abuse, should be actively involved in the design and implementation of harm reduction programs.

To address the challenge of lack of awareness and education, the respondent suggested the need for a collaborative effort between the government, non-governmental organizations, and community members to conduct public education and awareness campaigns. Focus group discussions also emphasized the importance of involving religious leaders and village elders in the campaigns, as they are influential figures in the community.

These suggestions align with the findings of a study by Abdulrahim *et al.*, (2020), which emphasized the importance of involving community leaders and members in the design and implementation of public health campaigns. The study identified community engagement as a critical factor in the success of public health interventions.

The awareness in relation to drug harm reduction has been minimal in Mombasa and Kilifi counties. This is because the setups established by the government to fight drug abuse are inadequate compared to the number of drug addicts in the region. This means that there is no social learning environment where the victim can learn from each other or through observation.

Social learning theory dictates that for social learning to occur an individual will require to be subjected in to an environment where they can observe and later put into practice whatever they learn through this process. Without awareness means there is nothing to learn about.

6.1.6 High cost of control with limited funding

Drug and substance abuse trends have been high despite the setting of various policies against the same. Drug and substance abuse lies in the bracket of costly health problems. The fight against it has been an expensive venture for the governments of Mombasa and Kilifi. The high cost of curbing drug and substance abuse has hindered meaningful success in these activities. Both national and county governments have been in a dilemma regarding how to resolve the problem due to the lack of adequate resources. The challenge has paved the way for continued drug and substance abuse in Mombasa and Kilifi counties.

During an interview with the heads of selected NGOs, one explained the following in support that the cost of drug abuse is as expensive as that of nurturing the habit:

The government has strived to fight drug abuse in this region of Kenya. There has been a substantial amount of success in the venture. However, there has also been the challenge of lack of enough funds to control the menace to a halt. The resources of the country are limited taking into consideration the state of the economy of the country as well as that of the county governments. This has made it explicably hard for the government to fight drug and other substance abuse as the process demands a high amount of money and human power. The result has been the inability to fully control the growth of the habit of drug and substance abuse in the country (interview with head of selected NGOs, 30th March, 2023).

The view was seconded by a household head who explained the following:

Tatizo la gharama ya kupigana na uraibu wa mihadarati tofauti nchini halijaiathiri serikali tu bali pia familia zenye watu ambao wameathirika na mihadarati hio. Gharama ya kulishinda janga hiliipo juu kiasi cha kwamba familia nyingi haziwezi kumudu fedha zinazohitajika kulipia mahitaji ya wenzao wenye matatizo ya uraibu. Familia zingine zimelazimika kuwaacha wenzao kuathirika kutokana na matumizi ya dawa za kulevya huku tu wakitazama kwa mbali kwani hawana namna ya kumudu gharama ya

kuwapeleka katika vituo vya ukarabati ambapo wanaweza kusaidika katika kulishinda janga hili (The issue of the cost of controlling drug abuse in this region of the country not only affects the government but also families who have people that have been affected by drug and substance abuse. The cost of the control methods that can be put in place to fight drug and substance abuse is high and hardly can many families afford to pay for the assistance of their loved ones. Some families have had to let their loved ones succumb to the menace as a result of lack of enough funds to cater for all the costs that have been put in place in such facilities as rehabilitation centers from where these individuals can acquire help) (Open-ended questionnaire with household heads, 3rd April, 2023).

There have been such interventions as rehabilitation programs to provide inpatient and outpatient services to treat alcohol and other drug problems. As such, setting up these centers demands quite a high amount of funds, which has been unachievable due to the economic challenges facing the national and county governments. The result has been an inadequate number of rehabilitation centers which has reduced the efficiency and adequacy of drug and substance abuse control measures (Mburu *et al.*, 2018). The hindrance resulting from this has been the lack of spaces within which people with substance abuse disorders can receive treatment and care, thus enhancing the vice (Ongeri *et al.*, 2023).

In addition, most existing drug and substance use disorders remedy and treatment programs have a shortage of training personnel and infrastructure to provide the required treatment. Whereas drug rehabilitation is the psychotherapeutic or medical treatment process for dependence on psychoactive substances like alcohol, other licit and illicit drugs, and prescription drugs, the lack of enough intellect in rehabilitation centers has been an obstacle to the achievement of this. Barako (2023) points out that this has led to the poor implementation of tuberculosis programs and other problems. The limitation of the available funds for drug and substance abuse control has been that the money has not been enough to cater for the training and employment of such individuals thus making it harder to fight the menace.

More so, the government and other groups who have been relevant in controlling drug abuse in Mombasa and Kilifi have had to reach out to as many people as possible, enlightening them on drug abuse and its associated negative effects. There has been an ardent need to put in as many resources as possible to reach the people effectively. The lack of resources due to the economically devastated conditions of these counties and the country at large has handicapped their ability to spread the message as per their desire (Ongeri *et al.*, 2023). As a result, there has been continuity in the patterns of the spread of drug and substance abuse and its related effects.

Since independence, Kenya has received aid from countries and institutions due to the foreign policy of ratifying the United Nations Charter. The aid has been a crucial tool in the fight against HIV/AIDS and other diseases, together with drug and substance abuse. The withdrawal of some of the external support has greatly impacted the interventions, impairing their implementation. Thus, there has been a great opportunity for the continued use of drugs as the government (Barako, 2023) on its own has been unable to eradicate or reduce the rate and extent of the spread of the menace. Therefore, drug treatment and health services continue to fall short, whereas the number of people suffering from drug use disorders who are receiving treatment has remained and even substantially increased to greater extents.

Mombasa and Kilifi governments are under the challenge of the inadequacy of funds to facilitate the implementation of the policies and other interventions that had been put in place for the control of drug and substance abuse. The control and curbing of the menace have proved to be an expensive venture which has been an unachieved dream in the two counties due to the shortage of funds compounded by the withdrawal of external aid (Diakou *et al.*, 2023). Kenya has been ranked a lower-middle income economy. It is one of the largest and most developed countries in eastern and central Africa. However, 16.1% (2023/2024) of its population lives below the

international poverty line. The severity of poverty is mainly caused by economic inequality, government corruption and health problems. The result has been the inability to control such problems as drug and substance abuse.

6.1.7 Limited access to treatment centers

The household heads in the coastal region (Mombasa and Kilifi counties in Kenya) have reported that limited access to treatment centers is a significant challenge experienced by government programs in the mitigation of drug abuse. According to the findings of the study, majority of the respondents confirmed that limited access to treatment centers is a significant challenge under the preventive program.

During the interviews, a victim argued that:

As a recovering addict, I have experienced firsthand the difficulty of accessing treatment centers. Most of the facilities are either full or inaccessible due to the high cost of treatment. The government needs to invest more in the establishment of more treatment centers and subsidize the cost of treatment to make it accessible to everyone (Interview with victim, 18th April, 2023).

Another victim, during an interview, said:

Wengi wetu huku Kilifi inabidi tusafiri hadi Mombasa ili tupate huduma za tharura. Kupata pia nauli ya kwenda hadi Mombasa ni jambo gumu sana. Kwa hivyo wengi wetu tunaumia sana hata tukitaka kuwacha kutumia dawa za kulevya inakuwa vigumu mno. Most of us in Kilifi have to travel to Mombasa to get emergency care as we try to quit drugs. Getting fare to pay for means of transport is also difficult for most of us and therefore we choose to continue abusing drugs even though we understand the impacts (Interview with victim, 18th April, 2023).

The results of the study indicate that one of the key challenges experienced by government programs in mitigating drug abuse in the coastal region, particularly in Mombasa and Kilifi counties in Kenya, is the limited access to harm reduction centers and programs.

During the focus group discussions, a village elder opined that:

Access to harm reduction services is a big problem here. There are very few centers, and most of them are located in urban areas, which make it difficult for people in rural areas to access them. Even those that are available are usually overcrowded, understaffed, and under-resourced, which makes it difficult for them to provide quality services. Lack of harm reduction services has led to an increase in the number of drug-related deaths, particularly among young people who are unable to access treatment or harm reduction services (FDG with village elders, 22nd March, 2023).

These findings are consistent with those of other studies conducted in similar contexts. For instance, a study by Otiashiru *et al.*, (2019) found that the lack of harm reduction services was a major challenge in the fight against drug abuse in Nigeria. Ahmed *et al.*, (2020) in Pakistan found that limited access to harm reduction services was a key barrier to the success of preventive programs.

During an interview with victims from *Shimo la Tewa*, he expressed inaccessibility of harm reduction facility as a great concern in fight against drug abuse. The victim indicated that:

Harm reduction facilities are very few in this region considering the number of victims seeking services from them. Sometimes we walk for a long distance to find those facilities but when we reach there we are forced to wait for many hours. You might as well wait for many hours but at the end of it fail to get appropriate assistance due to lack of drugs. These occurrences cripple our recovery process as some of us tend to give up (An interview with victim, 7th April, 2023).

WHO (2018) has also recognized the importance of harm reduction services in mitigating drug abuse. The WHO recommends that harm reduction programs be implemented alongside other preventive and treatment programs to reduce the harm caused by drug abuse (WHO, 2018).

The lack of access to treatment centers is not unique to the coastal region of Kenya. In a study conducted by Weisner *et al.*, (2017), it was found that limited access to treatment centers is a significant challenge faced by individuals seeking help for substance abuse in the United States. The study found that even when treatment is available, there are significant barriers to accessing it, including cost, lack of insurance, and stigma associated with seeking help.

The writers Degenhardt *et al.*, (2019) found that the lack of access to treatment centers is a global issue that affects low- and middle-income countries the most. The study found that in these countries, the majority of people with substance use disorders do not receive treatment due to a lack of available resources and inadequate funding for treatment programs.

There is a need for increased awareness and education on substance abuse and its effects on individuals and society as a whole. This can be achieved through collaboration between the government, religious leaders, and other stakeholders to provide education and awareness programs that aim to reduce the stigma associated with seeking help for substance abuse.

6.1.8 Stigmatization of Victims

The stigma associated with treatment centers and programs is a major challenge experienced by government programs in the mitigation of drug abuse in the coastal region, particularly in Mombasa and Kilifi counties in Kenya. According to (MOH, 2020) stigma levels were recorded in 40 out of 50 reported cases of drug abuse where the individuals were denied access to treatment services in government institutions. Further the reports noted that individuals with court cases against drug abuse had a 98% chance of being sidelined in community activities as they are considered as a bad example to the upcoming generations. According to the household heads who participated in the study, stigma was identified as a key barrier to accessing treatment and rehabilitation services.

During the interviews, a representative from the CBOs pointed out that:

Stigma is a major challenge in this region. People who use drugs are often seen as social outcasts and are discriminated against by their families and the wider community. This makes it difficult for them to seek help or access treatment services. The lack of understanding and awareness about drug abuse and addiction has contributed to the perpetuation of stigma, which in

turn leads to the marginalization of drug users (Interview with CBO leader, 17th April, 2023).

In a different interview with victims, one of them stated that:

We have been stigmatized by the society for a very long time. Most of them hardly accept us back even after we quit drug abuse. Family members often opt to relate us with our earlier conducts. Even if anything valuable in our home disappear, we are the first suspects because they think we have sold it to get money to purchase drugs. Such mistrust in our homes puts us in a compromising situation as we often feel hated and rejected. Some victims might even go back to where they feel welcomed even if it is among the drug addicts thus experiencing relapse (Interview with victim on 12th March, 2023).

The challenges highlighted by the respondent are consistent with findings from studies. A study by Kinyanjui *et al.*, (2019) on the prevalence and factors associated with drug abuse among university students in Kenya found that stigma was a significant barrier to seeking help among students who used drugs. Mburu *et al.*, (2018) researched on barriers to accessing and utilizing HIV and drug treatment services in Kenya found that stigma and discrimination were major factors hindering the success of harm reduction programs.

Gachanja *et al.*, (2020) examined the impact of stigma on the provision of health services for people who inject drugs in Kenya. The study found that stigma contributed to the reluctance of healthcare providers to provide services to drug users, which further limited access to treatment and care. These findings underscore the need for a multi-faceted approach to addressing stigma, which should involve efforts to raise awareness and understanding about drug abuse and addiction, as well as targeted interventions to reduce stigma and discrimination.

According to the household heads in the Mombasa and Kilifi counties in Kenya, stigma against harm reduction centers and programs is a significant challenge faced by government programs in mitigating drug abuse in the coastal region.

During the interviews, a religious leader from Mtwapa stated that:

Stigma is a significant barrier to harm reduction programs. People who use drugs are afraid of being stigmatized, so they avoid seeking help. Additionally, members of the community are often unsupportive of harm reduction programs, and they view them as promoting drug use rather than preventing it. This negative perception has made it difficult for harm reduction centers and programs to gain acceptance in the community (An interview with religious leaders, 9th April, 2023).

A study by Li *et al.*, (2019) found that stigma against harm reduction programs is a global issue that affects the success of such programs. The study revealed that negative attitudes towards people who use drugs and harm reduction services are prevalent in many countries worldwide. The perception of harm reduction programs as promoting drug use rather than preventing it is also a common misconception.

The leader also noted that stigma can prevent people who use drugs from accessing healthcare services. They may fear being discriminated against, which can lead to delayed or inadequate medical treatment. This is supported by a study by Sweeney and Vanable (2016), which found that individuals who experience stigma are less likely to seek healthcare services.

Stigmatization disregards victims as one of pivotal part of the society despite of them being in need of the attention of rehabilitation centers. Stigmatization goes against the functionalism theory which calls for cooperation of all units of the society for the benefit of the society. Failure to cooperate means that the intention of the government to eradicate drug abuse will be unachievable.

Earnshaw *et al.*, (2018) found that stigma can have a negative impact on mental health. Individuals who experience stigma may feel ashamed, harbour low self-esteem, and show traits like isolation, which can exacerbate mental health problems. This is significant as individuals

who use drugs may be more likely to experience mental health issues due to the nature of their substance use

6.1.9 Lack of follow-ups and support after leaving treatment centers

One of the challenges experienced by government programs in the mitigation of drug abuse in the coastal region (Mombasa and Kilifi counties in Kenya) is the lack of follow-up care and support in centers and programs. This challenge was reported by household heads, who participated in the study. The findings of the study revealed that 79.43% of the respondents ranked lack of follow-up care and support as a significant challenge under preventive programs.

During the interviews, a representative from the CBOs opined that:

It is not enough to admit drug abusers to rehabilitation centers and programs. The government needs to ensure that these centers and programs provide follow-up care and support to the beneficiaries. The follow-up care is a critical process because it acts as an encouragement to the victims as they try so hard to quit drugs. Lack of follow-up care and support often leads to relapse and repeat drug abuse (Interview with CBO representative, 2nd April, 2023).

The respondent further explained that follow-up care and support could involve counseling, therapy, and medical check-ups. The respondent emphasized the importance of involving the family members and community in the follow-up care and support programs. The respondent added that the government needs to allocate adequate resources to these programs and monitor their implementation.

These findings are consistent with the findings of a study by Kinyanjui *et al.*, (2018), which examined the challenges faced by drug and substance abuse rehabilitation centers in Kenya. The study revealed that the lack of follow-up care and support was a significant challenge in these

centers. The study recommended that the government should develop policies and guidelines for follow-up care and support programs.

One of the victims during an interview revealed that:

We hardly find any survival support from the government or the health facilities in the region. The main reason we have ended up being drug addicts is desperation and idleness. Most of these facilities provided by the government have ignored that and they only focus on treating us so that we can manage to quite drug abuse. However, they have done very little to support us in a way that we can manage to generate income as a way of survival even after quitting drugs. Perhaps, the government should consider facilitating training programs which we can apply in creating job opportunities for us and for our colleagues (Interview with victim, 4th April, 2023).

Bukusi *et al.*, (2019) on the effectiveness of community-based rehabilitation programs for drug and substance abuse in Kenya also found that follow-up care and support were crucial in the success of these programs. The study recommended that community-based rehabilitation programs should involve the family members and community and provide follow-up care and support to beneficiaries. Again, Bukusi *et al.*, (2019) recommend that the government should consider facilitating training programs on various skills such as mechanical, carpentry and electrical engineering to go hand in hand with drug addict treatment programs. This will act as the pivotal point in self-employment among the victims.

According to the findings of the study, poor referral systems in treatment centers and programs have been identified as a major challenge faced by government programs in mitigating drug abuse in the coastal region, particularly in Mombasa and Kilifi counties in Kenya. Household heads reported that this problem has hindered the effectiveness of government efforts to address drug abuse in the region.

During the interviews, a chief pointed out that:

The poor referral system in this region is a major challenge that has led to a high rate of relapse among drug addicts. Many drug addicts who complete their rehabilitation programs are often left without any follow-up support, which makes it easier for them to relapse. There is also a lack of coordination between different treatment centers and programs, which makes it difficult to track the progress of recovering addicts. The lack of follow-up support after treatment is a major contributor to the poor referral system. Recovering addicts are often left to fend for themselves after completing their rehabilitation programs, which increases their risk of relapse. They suggested that there should be a well-coordinated system in place to track the progress of recovering addicts and provide them with the necessary support to prevent relapse (Interview with chief, 7th April, 2023).

The findings of this study are consistent with those of an external study conducted by Kilonzo and colleagues (2019) in Kenya, which highlighted the need for a more coordinated and integrated approach to drug abuse prevention and treatment. The study recommended that the government should establish a referral system that ensures seamless coordination between different treatment centers and programs to facilitate follow-up care for recovering addicts.

NACADA (2018) also identified poor referral systems as a significant challenge in the fight against drug abuse. The study recommended the establishment of a comprehensive referral system that links treatment centers, community-based organizations, and other stakeholders to ensure continuity of care for drug addicts.

To address the problem of poor referral systems, the government can consider implementing the recommendations of these studies by establishing a well-coordinated referral system that ensures continuity of care for recovering addicts. This can be achieved by establishing a database of recovering addicts and providing them with follow-up care and support to prevent relapse. The government can also work with community-based organizations and other stakeholders to establish a comprehensive referral system that ensures seamless coordination between different treatment centers and programs. Such an approach can enhance the effectiveness of government efforts in mitigating drug abuse in the coastal region of Kenya.

Every respondent in this study (100%) agreed that relapse is a major challenge. A relapse diverts and moves one away from the goal thus can apply in many aspects of an individual's life and is not just limited to drug and substance abuse. The intensity of the risk of relapse has been a wholesome challenge that has been felt by all the groups of individuals that have been involved in the fight against drug and substance abuse. Many individuals suffering from substance use disorders such as addiction have been at risk of relapse after undergoing treatment or even before the treatment process is successful (Mbogo *et al.*, 2022). As such, this has been a discouraging aspect for all the individuals who have been fighting against the menace. Consequently, it has derailed their effects in an attempt to curb drug abuse and its consequences.

During an interview with the head of NACADA offices, the concept of the danger of relapse was strongly agreed with as a challenge that has been facing the government and its associates in the fight against drug abuse. The following was his articulation:

Drug abuse in the coastal region of Kenya is a challenge that many people are struggling to curb today. There have been many measures that have been put in place to control the rampant rate at which the menace is growing. Success has been witnessed in many instances of the fight against drug abuse. However, there have been cases in which the government has been faced with adamant challenges like the danger of relapse. For example, a lot of money has been invested in the act of rehabilitating many victims of drug and substance abuse. The victims are treated and provided with an environment that helps them cope with the new life away from the use of drugs. They are also provided with guidance and counselling at the facilities provided in the rehabilitation centers. Some have also been provided with training to enable them reach a level of independence and cater for their own needs. The process of treatment and recovery however does not always get to the maximum or set level at which one maybe regarded as a fully recovered person. Some end up falling back into drug and substance abuse thus derailing the efforts to fight the menace (Interview with head of NACADA offices, 3rd April, 2023).

The view was echoed by a religious leader who opined that:

Uraibu wa pombe na dawa nyinginezo za kulevya umekua tahadhari kuu katika siku za sasa ambapo umeenea kote na kuwaathiri watu wengi zaidi. Juhudi za kiliondoa janga hili katika jamii zinaelekea kugonga mwamba kutokana na matatizo mengi yanayozikumba. Kuna mashirika ya kidini yanayoshirikiana na serikali katika kupigana na janga hili. Kumekuwepo na ushindi bali pia kumekuwepo na hali ya kufa moyo katika juhudi hizi. Hii ni kwa sababu hata baada ya kujikakamua katika kuwasaidia waathiriwa wa uraibu huu, kuna wengi ambao wanaishia kurejelea matendo yaya haya ya matumizi ya mihadarati. Wengi wanatibiwa na hata kupona kutokana na janga hili ila kuna wale wanaoshindwa kumudu maisha bila ya matumizi ya mihadarati. Vijana kwa kiwango kikuu ndo wanaoathiriwa na tatizo hili la kulegea katika azma ya kuishi bila matumizi ya mihadarati. Jambo hili linahizunisha kwani linafifisha juhudi za wengi katika kupigana na matumizi ya dawa hizi za kulevya. (Alcohol and other drug abuse has become a great threat as it has spread and affected many people. The efforts employed to fight this problem are diminished by the many challenges that face them. There have been many religious organizations that work together with the government to eradicate the problem. Success has been witnessed but there have also been moments of despair in the process. The reason has been because despite the amount of effort that has been used to help individuals recover from drug and substance abuse, many have ended up relapsing into the same habits that they were expected to have overcome. The youths are the ones who are mostly affected by the challenge of failing to focus on the goal of living a life that is independent of drug abuse. The situation is disheartening since it is dampening the efforts to fight drug and substance abuse.) (Interview with religious leaders, 19th April, 2023).

Recovery is a lifelong process. The process often involves changes across multiple domains of an individual's life. These include behavioral, physical, interpersonal, intrapersonal, social, and psychological spheres of life. The changes are a crucial part of the treatment process, successful maintenance of recovery, reintegration into society and re-engaging in normal life activities without using drugs (Kambaga *et al.*, 2023). The process has, however, been challenged with the danger of relapse, which can occur at any stage. The chances of a relapse occurring have been influenced by different factors which have affected different individuals differently, dictating the extent to which one turns back into drug abuse. However, the effect has been the same in harming the government's effort to control drug and substance abuse.

The progression of each person into recovery and its maintenance is unique. Several relapse risk factors have influenced the process of recovery. They have included the severity and consequences of an individual's addiction in the long run, the co-occurring mental and medical conditions, an individual's coping skills, the support system, and the motivation received (Mburu *et al.*, 2018). These factors have substantially influenced the relapse of individuals suffering from substance use disorders at the recovery level and during the treatment process. The understanding of the complexity of substance use disorders among clinicians is thus important for the provision of optimal support for the patient's progress and recovery maintenance to ease the burden on the government, private sectors and other stakeholders involved in the process of control of drug abuse (Mburu *et al.*, 2018).

The main challenge resulting from relapse has been that the relapse begins a long time before an individual's actual use of the substance. In some individuals, it begins with letting go of the changes that the individual had made during the treatment period and in recovery. The result has been individuals reverting to the old patterns involving participation in drug and substance abuse. There has, however, been a systematic pattern in the early warning signs of the relapse process (Argyriou *et al.*, 2023). The thought of using or fantasies about past use, the stoppage of the medication under prescription for a substance use or addictive disorder, and the increase in behaviors that were common during the past use of drugs. All these have furthered the risk of relapse among many individuals in Mombasa and Kilifi.

The drifting away from recovery has had devastating effects in that it has thwarted the efforts put in place to control drug and substance abuse. Research indicates that approximately 60% of people with substance use disorders survive to the entry of sustained recovery. However, for many of them, this takes more than a cycle of lapse-relapse treatment before it is finally achieved

(Zakayo *et al.*, 2020). In other instances, the patients who have succumbed to the risk of relapse have ended up drowning in the menace of drug and substance abuse creating an even more derailing effect in the individuals fighting the same.

A relapse happens when an individual stops maintaining their goal of reducing or avoiding the use of alcohol or other drugs that they are addicted to. They thus return to the previous levels of use (Barako, 2023). A relapse or multiple relapses is a part of recovering from drug dependence and can often be a sign of recovery. In some cases, however, when a relapse occurs, the individual may fail to return to their recovery goals, making it even harder to control the menace. As such, a relapse is a continuation of the old coping patterns that need to be replaced by new ones, thereby negatively affecting the efforts to control drug abuse in Mombasa and Kilifi.

6.1.10 Addiction-induced Health Problems

The intertwining nature of drug abuse and its detrimental impact on physical and mental health creates a synergistic effect that amplifies the negative consequences for both individuals and society as a whole (MOH, 2019). The burden placed on the county and a national government, as well as other stakeholders involved in combating drug abuse, becomes exacerbated due to the compounded effects of addiction and poor health conditions. This challenging scenario demands a comprehensive approach that addresses not only the issues of drug abuse but also the associated health problems faced by the affected population (MOH, 2020).

Drug users often have complex health needs that require specialized care and support. Substance abuse is frequently accompanied by co-occurring mental health disorders, infectious diseases (such as HIV/AIDS or hepatitis), and physical health issues. Healthcare workers must navigate these multiple health concerns while addressing the underlying substance abuse problem.

Coordinating care across different specialties and ensuring continuity of care can be challenging, particularly when resources are limited. Additionally, drug users may face social determinants of health such as homelessness, poverty, or involvement in the criminal justice system, which further complicate their healthcare needs (Mbogo *et al.*, 2022).

Drug and substance abuse has greatly promoted physical and mental ill health among many drug-using individuals in Mombasa and Kilifi, making it a greater challenge for the county and national governments to control drug abuse and poor health conditions. Both have posed a challenge to their control as their effects on the counties of Mombasa and Kilifi have occurred synergistically, where the two have created a greater negative contribution to society than one would. Therefore, they have co-created outcomes increasing the burden that the government, private sector, other related partners, and stakeholders have to deal with in the fight against drug and substance abuse.

During an interview with the CEC health, he explained that:

Drug and substance abuse has caused harm and is bound to cause more harm with failure of immediate action. It is a known fact that drug abuse weakens the immune system making the abuser susceptible to the attack of various diseases. In this manner, drug abuse therefore poses an additional problem to the government and the people as well. In many instances, where one has had to be treated of addiction and drug dependence, they have had to be treated of various physical or mental health problems that have emanated from the abuse of drugs. In other cases, drug abuse has made many people engage in self-inflicting activities that expose them to the danger of poor physical health. Such activities have included engaging in unprotected sexual contact with different sexual partners and violence caused by the influence of the drug(s) in use which may cause wounds especially for alcohol consumers (interview with CEC Health, 29th March, 2023).

He was seconded by the administrative chiefs who opined that:

The abuse of drugs and other substances has negatively affected families in numerous ways. The issue has caused number of other problems hence

families are not only dealing with a single problem but a multiple of problems most of which have resulted from the abuse of drugs making it more strenuous for the government to solve all the problems at hand. Take for instance a family having a member who is an addict of drugs and other substances. They are likely to face more than just the issue that their loved one is an abuser of drugs. The likely occurrences include the poor physical health of the addict, poor mental health, and the violence associated with the influence of the drug that the abuser may have used. Drug and substance abuse has therefore substantially created other problems which have had to be dealt with together with this menace as they are inseparable. The problem is evident in all societal levels including the personal, family, community, county and nationwide levels (interview with administrative chiefs, 26th March, 2023).

Drug and substance abuse has greatly enhanced the rise in the number of individuals who have been infected with viral diseases. The viral infections of great concern that have resulted from drug and other substance abuse in Mombasa and Kilifi have included HIV and hepatitis (Mbogo *et al.*, 2022). Consequently, people who engage in drug use or high-risk behaviors associated with drug use have put themselves at higher risk for contracting and transmitting viral infections than those without substance use disorders. The major cause of this is that the viruses spread through blood and other bodily fluids like sexual secretions. Researchers' findings have pointed to transmission networks among injecting drug users (Mbogo *et al.*, 2022). In other cases, research has brought to light the prevalence of Hepatitis B and Human Immunodeficiency Virus co-infection among injecting drug users in Mombasa and Kilifi. Particularly, drugs impair one's ability to make the right judgments and decisions. The increased spread of these infectious diseases has thus created more of a puzzle that the governments and people of Mombasa and Kilifi have to solve.

HIV and Hepatitis B virus are both blood-borne viruses that have been a major challenge as one of the many other negative effects of drug and substance abuse. The prevalence of HIV-infected injecting drug users in Mombasa and Kilifi is a high percentage of the total population (Mbogo *et*

al., 2022). In some instances, research has proved the existence and prevalence of Hepatitis B and HIV co-infection among the injecting drug users in Mombasa and Kilifi (Philbert *et al.*, 2022). Sharing needles and other body-piercing materials among injecting drug users has been a key concept in spreading these viruses. Furthermore, considering that many hard drugs like heroin are expensive, some injecting drug users have been reported to use the blood of those who are already under the influence of the drugs to nurse their addictions.

The human body has various physiological factors that affect the fate of drugs in it. The factors involve those systems that control drug absorption, distribution, metabolism, and excretion. Many factors affect these systems, including diseases, genetics, and age. However, drug and substance abuse also diminish their functionality leading to their reduced capacity to take part in their normal function in the human body (Nyongesa *et al.*, 2022). Excretion, for example, occurs in such organs as the kidney, whose ability to function can be easily deactivated. Alcohol, cocaine, and heroin can cause kidney damage (Mandu, 2022). Opiate overdose, for instance, leads to rhabdomyolysis, which amplifies the risk of kidney damage. The liver is affected by alcohol as well, leading to cirrhosis, whereas lung cancer has resulted from cases of smoking. In addition, there has been a greater burden on the governments of Mombasa and Kilifi in the fight against drug abuse and poor physical Health.

Substance use and addiction have further contributed to the development of mental illness. The prolonged use of recreational drugs in Mombasa and Kilifi, including licit and illicit drugs, has led to short-term and long-term mental health problems (Masha, 2022). Alcohol, for example, affects the part of the brain that controls inhibition making an individual feel relaxed, more confident, and less anxious after a drink. The effects, however, wear off within a short time. The chemical changes induced in the brain after that may lead to more negative feelings like anger,

anxiety, or depression, regardless of the situation present (Masha, 2022). The use of drugs and alcohol has thus caused damaged immune systems and dehydration-induced seizures, which have further affected mental health. The result has been the need by the government and other related individuals to top up on the already high expenditure on drug abuse control to ensure that mental Health has also been catered for in the process.

Conclusively, drug and substance abuse in Mombasa and Kilifi has promoted poor physical and mental Health, which has been detrimental to the government and other groups that have been actively taking part in the fight to eradicate the menace. Several mental disorders such as schizophrenia, anxiety, mood, or impulse control disorders have robbed the coastal communities of productive power, as the youth are the most affected (Masha, 2022). The development of health-related problems as a result of the menace has caused a great predicament to the county governments of both Mombasa and Kilifi, who have consequently been prompted to direct more funds to the health sector other than just the control of drug and substance abuse (Phyllys *et al.*, 2022). Therefore, there has been perplexity about how drug and substance abuse and poor physical and mental health can be controlled.

6.1.11 Insufficient training of law enforcement programs in practical Drug abuse mitigation and corruption

According to the findings of this study, insufficient training of law enforcement centers and programs in practical Drug abuse mitigation was identified as a major challenge experienced by government programs in the mitigation of drug abuse in the coastal region, specifically in Mombasa and Kilifi counties in Kenya. Household heads reported this issue, and it was also backed up by numerical data and ranking under the preventive program. This finding suggests

that the effectiveness of law enforcement programs in addressing drug abuse in the region may be compromised due to a lack of adequate training among law enforcement personnel.

During the interviews, the Chairperson of county security from Mombasa argued that:

Law enforcement agencies in our region lack proper training and resources to effectively tackle drug abuse. This has resulted in drug traffickers and dealers operating freely without any fear of being caught or punished. The officers' lack of training has also led to poor communication and collaboration among different law enforcement agencies, resulting in duplication of efforts and poor coordination (Interview with Mombasa Chairperson of county security, 16th April, 2023).

The findings of this study are consistent with those of a recent study conducted in Kenya, which identified the inadequate training of law enforcement officers as a significant challenge in combating drug abuse. According to the study, many law enforcement officers lacked the necessary knowledge and skills to effectively identify and respond to drug-related issues, leading to poor enforcement of drug-related laws and policies (Kilonzo *et al.*, 2019). This suggests that the problem of insufficient training of law enforcement officers is not unique to the coastal region but is a national issue that needs urgent attention.

The Shariani Chief during interview had the following to say in regard to insufficient training:

Some of the officers we work with lack proper training in relation to how to enforce law to fight against drug abuse. This goes to the extent on how the officers handle drugs which are to be used as an evidence in case the issue is to be handled by the court. In most of the cases that I have seen there has been lacking evidence because the officers fail to prove that they obtained the drugs from the victim. The court rule based on evidence. Most of the suspects have developed the defiance mechanism which is based on the inability of the officers to handle evidence and in enforcement of the law regulating drug abuse. This make difficult for the government to win the war against drug abuse (An interview with Shariani chief on 22th March, 2023).

To address this issue, there is a need for a comprehensive training program that focuses on drug enforcement policies and procedures, including the proper handling of drug-related cases and the

identification of drug trafficking and distribution networks. The training should also focus on improving communication and coordination among different law enforcement agencies to enhance their effectiveness in tackling drug abuse. Furthermore, there is a need to strengthen the collaboration between law enforcement agencies and other stakeholders, such as healthcare providers, community-based organizations, and religious leaders, to create a more holistic approach to the drug abuse problem in the region.

The challenge of corruption in law enforcement centers and programs is a significant issue that the government of Kenya faces in mitigating drug abuse in the coastal region. As reported by household heads, corruption is high under the preventive program, making it difficult for government programs to tackle drug abuse effectively.

During an interview with the CEC health, Kilifi County, he stated that:

Corruption in law enforcement agencies is a significant problem, especially when it comes to drug abuse. The officers tasked with the responsibility of enforcing drug laws are themselves involved in the drug trade. They take bribes from drug dealers, allowing them to operate with impunity, and even tipping them off when a raid is imminent. This kind of behavior makes it difficult for the government to win the war on drugs. The corruption in law enforcement centers and programs undermines the efforts of the government in fighting drug abuse. It leads to the loss of public trust in law enforcement agencies, which further exacerbates the problem. People are less likely to report drug-related crimes or provide information to the authorities when they believe that the officers tasked with enforcing the law are themselves corrupt (interview with CEC health, Kilifi, 20th March, 2023).

His counterpart from Mombasa County in an interview conquered with sentiments and stated that:

Corruption is the main problem bedeviling us in the fight against drug trafficking and abuse. The drug barons are well connected people and have adequate finance to influence anyone in the government. This means that each time we organize our team in an effort to fight drug trafficking, the drug barons tend to get information from us through their informers who are in the system. In any case we arrest any of those drug barons they buy their

freedom through bribing some officers to tamper with evidence. This is discouraging to us because most of the time our effort does not seem to bring any impacts (interview with CEC health, Mombasa, 20th March, 2023).

An external study conducted by UNODC confirms the respondent's account. According to the UNODC (2021) report, corruption in law enforcement agencies is a significant challenge in the fight against drug abuse globally. It notes that corruption can take many forms, including bribery, embezzlement, abuse of power, and nepotism. The report further states that corruption undermines the rule of law, perpetuates impunity, and undermines public trust in law enforcement agencies.

The UNODC (2021) report suggests that governments should implement measures to prevent and combat corruption in law enforcement agencies effectively. These measures include strengthening accountability mechanisms, providing adequate training to law enforcement officers, and promoting a culture of integrity within law enforcement agencies. The report notes that addressing corruption in law enforcement centers and programs is essential to the success of any drug abuse prevention program.

6.1.12 Poor coordination between law enforcement agencies and other actors

One of the key challenges experienced by government programs in mitigating drug abuse in the coastal region, specifically Mombasa and Kilifi counties in Kenya, is poor coordination with other agencies in law enforcement centers and programs. According to the findings of the study, as reported by household heads, poor coordination including miscommunication was ranked as the top challenge with a percentage response of 94.79%, and a frequency of 364.

During the interviews the CEC Health Kilifi County pointed out that:

Poor coordination between law enforcement agencies has hindered the effectiveness of drug abuse prevention programs. Police officers and anti-narcotics officials often work in silos, with little communication or collaboration between them. This not only leads to a duplication of efforts but also creates loopholes that drug traffickers can exploit to continue with their illegal activities. The lack of coordination extends beyond law enforcement agencies and also affects other key stakeholders in drug abuse prevention programs. For example, the County Executive Commissioners of Health and Education, who are critical players in the implementation of prevention and treatment programs, often work in isolation, resulting in a fragmented approach to addressing drug abuse (An interview with CEC Health, Kilifi on 20th March, 2023).

These findings are consistent with those of a study conducted by Mwaura (2019) on the challenges of drug abuse prevention in Kenya. Mwaura found that poor coordination among agencies and stakeholders is a significant barrier to the effective implementation of drug abuse prevention programs. The study highlights the need for inter-agency collaboration and coordination to develop and implement a comprehensive and integrated approach to drug abuse prevention.

Wambua *et al.*, (2021) study conducted on the effectiveness of community-based drug abuse prevention programs in Kenya found that a lack of coordination and collaboration among stakeholders undermines the success of prevention programs. The study emphasizes the importance of inter-agency coordination, stakeholder engagement, and the establishment of clear communication channels to ensure a coordinated and effective approach to drug abuse prevention.

Another major challenge experienced by government programs in mitigating drug abuse in the coastal region (Mombasa and Kilifi counties in Kenya), as reported by household heads, is the lack of public trust in law enforcement centers and programs. According to the findings, 97.40% of the respondents cited this as a significant obstacle to the effectiveness of law enforcement programs in addressing drug abuse in the region.

During an interview, a chief argued that:

The community members do not trust the law enforcement agencies, and this has been a significant challenge in the fight against drug abuse. Many drug users are afraid of reporting to the police or seeking help from government-run rehabilitation centers because they fear arrest or victimization. The lack of trust in the system has led to a significant number of drug users and dealers operating with impunity (interview with local administrative chiefs, 6th April, 2023).

The lack of public trust in law enforcement centers and programs in the coastal region of Kenya is not a unique challenge. According to a study by Altenkirch and Verthein (2018) in Germany, the lack of trust in law enforcement among drug users was a significant challenge in the implementation of harm reduction programs. The study found that many drug users avoided using harm reduction services due to fear of arrest, discrimination, and stigmatization by law enforcement agencies.

In an FGD with elders from Shanzu they also expressed lack of trust among the law enforcing agencies as a major threat to them as well because they are the eyes of the government in the village. One of the elders said that:

Wengi wetu hatuaminiani wenyewe, hivyo sasa inakuwa ngumu kwetu kupeana ripoti inayohusu utumizi wa dawa. Jambo hili linafanya tuhofie maisha yetu. Vijana wanaotumika kuuza dawa mara kwa mara hututumia ujumbe wa kututishia maisha yetu kila baada ya kuripoti kisa chochote kinachohusu uuzaji na utumizi wa dawa za kulevya. Cha kushangaza ni vile ujumbe tunaowapa polisi unafikia wauza madawa ya kulevya. Mimi binafsi niko na ujumbe muhimu unaweza saidia serikali kupigana na dawa za kulevya lakini naamua kujinyamazia kwa sababu kutoa ujumbe kama huo kutahatarisha maisha yangu. (Most of us do not trust each other and that makes it difficult for us to work as informers of the government. Drug peddlers in the region have been issuing threats to us every time we report them to the police. It is strange to us on how the information issued to the police reaches the peddlers. Personally, I have information that can help the government in dealing with drug traffickers however, I chose to keep that information for myself just for the safety of my life (An FDG with an elder from Shanzu on 6th April, 2023).

Jones *et al.*, (2020) found that the lack of trust in law enforcement agencies among minority groups was a significant barrier to effective drug abuse prevention and treatment programs in the United States. The study revealed that the fear of discrimination and stigmatization by law enforcement agencies led to a significant number of drug users and dealers avoiding seeking help from government-run programs.

Respondents pointed out that there exists a gap in law, and this poses as a challenge. Kenya's Constitution clearly outlines laws on drug use, misuse and abuse. The laws have been an important guide in the fight against drug and substance abuse as they provide a detailed guide on the measures to be taken under different types of drugs, their possession, production, and usage (Lynggaard *et al.*, 2023). As such, they have provided a foundation upon which the county governments of Mombasa and Kilifi, in collaboration with the private sector, have based their fight against drug abuse. In as much as the laws have enhanced the control of drug and substance abuse, there have been a lot of gaps that have furthered the menace rather than its control (Masiya & Robinson, 2023).

The challenge was affirmed by the head of a selected NGO who explained that:

The issue of drug abuse has not been fully catered for in the laws of the country. There are many situations happening with regard to drug and substance abuse. Most of these however often go unpunished or often end up with lenient punishments for the offenders. This hinders the so called mobilization of effort to fight against drug abuse. For example, individuals who have been found to grossly get involved in such actions that conflict with the laws as being in the possession of prohibited drugs and narcotics have always ended up free to continue with their heinous actions. They are punished lightly despite having endangered the lives of many through the trafficking of drugs. These people later pay their fines leave the case behind and indulge in the business as before or even vigorously than before (interview with heads of selected NGOs, 29th March, 2023).

The head of Mombasa county security agreed with the NGO head through the following articulation:

The law fails to cater for the many needs for which it is expected to concerning drug and substance abuse. It therefore has a number of gaps which render it an enabling factor rather than a control factor of the vice. This makes it hard for all the individuals involved in the fight against drug abuse. There are many pieces that are missing concerning the various actions of misdeed that relate to drug abuse. The laws therefore cause a hardship that wouldn't have been there had it incorporated all the required aspects to control drug and substance abuse. The missing areas include the part of the police officers who are fraudulent and take part in the murky business of drug trafficking (County Commissioner, 21st April, 2023).

Kenya is part of the developing countries where the effect of drug and substance abuse has intensely been felt. The country, therefore, took to itself to set up policies to be implemented for the good of the people in the control of drugs and other substance abuse. For instance, there is the Narcotics, Drugs and Psychotropic Substances Control Act (Kitchen *et al.* 2023). The act No. 4 of 1994 provides the framework within which the combating of the abuse of narcotics, drugs and psychotropic substances takes place. The law defines their control, possession, transportation, trafficking, and use. Despite this, various gaps favor the spread of drug and substance abuse rather than its control in Mombasa and Kilifi.

First, the penalties imposed under the law for drug and substance abuse are lenient. The law, therefore, seems antagonistically tolerant to drug and substance abuse (Masiya & Robinson, 2023). The law's leniency has been proven to be a major gap in the fight against the issue of drug abuse. For instance, many individuals who have been arrested in the name of conflicting with the law as a result of association with drug and substance abuse, be it the producers or consumers, have been able to pay the fines and continue with their illicit activities. Thus, instead of curbing the menace, its continued existence has risen to new levels.

Furthermore, the law is outdated and does not meet current realities. New situations that have no existing laws to deal with have arisen. The present laws can therefore be said to be obsolete provisions that require repealing (Sawicka *et al.*, 2020). In Mombasa and Kilifi, implementing the law has not successfully controlled drug and substance abuse. The best explanation for this is that a written law may become obsolete when the situation to which it was intended to apply no longer exists or has changed, so it no longer resolves it. In this case, drug traffickers use precursor chemicals to manufacture narcotic drugs (Sawicka *et al.*, 2020), where the law does not impose control over and punish this unlawful use of precursor chemicals.

Another challenge has been the untimely and ineffective investigations and prosecution of people disobedient to the law. Such happenings have been attributed to several factors related to the inefficiency of the laws (Omboto, 2022). The law governing narcotics, drugs, and psychotropic substances has failed to secure crucial evidence through the interception of communication between drug traffickers and conspirators. It also does not provide for the request of information and evidence from foreigners who may have important information regarding the drugs in question. The gap has furthered the development of the menace of drug and substance abuse in both Mombasa and Kilifi, as in the other counties of Kenya (Omboto, 2022).

When one is persecuted, the law is also not clear about what amount of drug breaks the law. In this case, sometimes the magistrates find themselves in a dilemma, not knowing what to do with the case. During the interview with CEC education from Mombasa County, she cited a case where a primary school kid was arrested with a roll of bhang in school. When taken to court, the magistrate said that there is no evidence that the young peddler had used the drug. Thus, she was set free. The CEC narrated that:

There was all evidence that the girl had the bhang. She did not even deny. However, the court ruled that the girl is innocent since there was no evidence that she had used the drugs. In this case, the girl went back to school, and maybe continued to peddle drugs to her schoolmates (Interview with CEC Education, Mombasa County, 15th April, 2023).

In addition, the law lacks specific provisions for the punishment of law-enforcing officers who commit drug and substance abuse offenses where some have been involved in major crimes such as trafficking. The gap in the provisions of the law has provided a channel for the fraudulent law-enforcing officers to actively engage in the crime of drugs and other narcotics trafficking (Chepkonga, 2020). More ingratiating is the lack of adequate punishment for individuals who conceal information or fail to disclose information that would be a crucial aid in investigating and prosecuting offenses related to drug trafficking. All of these gaps in the law have contributed to the thriving of crime.

The Alcoholic Drinks Control Act (2010) also known as the *Mututho law* was championed and introduced to parliament by the former Naivasha member of parliament, John Mututho who later became the chairperson of the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA). According to the Alcoholic Drinks Control Act (2010), the main objective of the Mututho laws is to help control the production, sale and consumption of alcoholic beverages across the country. The laws' purpose to protect the health of Kenyans from the menaces of excessive and underage drinking of alcoholic beverages and sensitize the public on the detrimental socioeconomic and health consequences of the consumption of these alcoholic drinks. They also intend to put into practice effective measures to eradicate unlawful dealings such as illegal manufacturing, smuggling, and counterfeiting of alcohol, and provide rehabilitation facilities, programs and standards for treating individuals addicted to alcoholic

beverages. In line with this, Kenya has been implementing these laws for many years but has faced many challenges and setbacks along the way.

According to the Alcoholic Drinks Control Act, no person shall manufacture, sell, import or export any alcoholic beverage without a license issued under this Act. The laws further state that no individual can produce, possess, or distribute an alcoholic drink that does not conform to the requirements of this particular Act. An individual who is found guilty of this shall be legally responsible to a fine not exceeding two million shillings, or to imprisonment for a term not exceeding five years, or to both. Furthermore, no retailer shall sell an alcoholic beverage knowingly to a person under the age of eighteen years. Any retailer found on offense to this shall be liable to a fine not exceeding one hundred and fifty thousand shillings, or to imprisonment for a term not exceeding one year, or to both. The retailers are also mandated to inform the public and warn them that the availing of alcoholic beverages to persons under the age of eighteen years is prohibited by the law and one who contravenes this is legally obliged to a fine not exceeding fifty thousand shillings, or to imprisonment for a term not exceeding six months, or to both. In addition to that, the retailers should not sell an alcoholic drink by way of an automatic vending machine. One who acts on the contrary shall be legally answerable to a fine not exceeding one hundred thousand shillings, or to imprisonment for a term not exceeding twelve months, or to both.

Moreover, the *Mututho* laws also suggest that any person who sells or offers an alcoholic beverage for sale or who bottles an alcoholic drink except in accordance with the license issued under this Act has committed a breach of license offence. As a result, the person is answerable to a fine not exceeding fifty thousand shillings or to imprisonment for a term not exceeding nine months, or to both for a first offence, and to a fine not exceeding one hundred thousand shillings

or to imprisonment for a term not exceeding one year or to both for a subsequent offence. In addition, the laws state that any individual found by a police officer to be drunk and disorderly in a public place may be arrested without warrant and brought without unreasonable delay before a magistrate, and shall be liable to a fine not exceeding five hundred shillings or to imprisonment for a term not exceeding three months or to both. The Act further stipulates that no person shall promote an alcoholic beverage except in accordance with the provisions of this Act. A person who contravenes this will be legally responsible to a fine not exceeding five hundred thousand shillings, or to imprisonment for a term not exceeding three years, or to both. Otherwise, an individual who falsely promotes alcoholic drinks, promotes them by advertisement or at underage events, or encourages their consumption shall be liable to a fine not exceeding five hundred thousand shilling or imprisonment for a term not exceeding three years or to both.

The *Mututho* law demands that the government should be responsible for communication, and informing and educating the citizens on the laws pertaining alcohol abuse and the penalties for breaking these laws. Besides, issues to do with alcohol should be integrated into syllabuses in schools and into health care (NACADA, 2014). Although the government has been implementing these laws over the years, the burden of excessive consumption of alcoholic drinks in the country has not been eradicated. This is because of the gaps that are present in the Alcoholic Drinks Control Act. For instance, critical components relating to control of alcoholic beverages such as rehabilitation programs and treatment services were not broadly tackled by this particular Act. In addition, after the national government transferred the functions of alcohol control to the county governments ahead of schedule in 2013, licensing across the country was not well coordinated since the county governments lacked the necessary legal framework and capacity to effectively perform this function. During this transitional period, alcohol outlets in

different parts of the country were selling adulterated alcohol, others were selling outside of retail hours, and even selling to minors. This led to the death of more than a hundred Kenyans and hospitalization of ninety-eight more during that period as a result of consuming adulterated alcohol.

There has been an existing gap in the law due to lack of proper connection in the way judiciary works and implements the law. The existing gaps indicate that the law itself is not complete or does not provide a solution in matters related to drug abuse and peddling. Such gaps make law to be dysfunctional thus failing to attain the objective of the government. Each section of the law must complement the other. The sections of the law in this case work as unit and each unit must be related in terms of functionalism as this will help to bridge the already existing gap. The factionalism theory is applicable in this case as it calls for the cooperation of different units for the attainment of the intended objective.

6.1.13 Societal Permissiveness

Society has exhibited permissive attitudes towards regular and occasional drug and substance abuse in Mombasa and Kilifi. These attitudes have made it more challenging for the government to control drug and substance abuse. Several factors have promoted the development of permissive attitudes toward drug and substance abuse. Low self-control has been among many factors that have increased drug use frequency through the heightened association with drug-using friends and more permissive attitudes to drug abuse simultaneously. Societal permissiveness has therefore been evidenced to prevail at the individual level, peer group level, family, and societal levels. The permissive attitude has also been exhibited in various ways, which have aggravated the issue of drug and substance abuse in both Mombasa and Kilifi.

One of the religious leaders gave an example of permissiveness:

Consider a young person named John who regularly uses drugs. Despite the potential health risks and legal consequences, John's peers and acquaintances in his community exhibit permissive attitudes towards drug use. They may normalize and even encourage his behavior, considering it as a form of recreation or social bonding. This acceptance and lack of condemnation from his social circle make it more difficult for John to recognize the seriousness of his drug abuse and seek help. Furthermore, at the family level, suppose John's parents and siblings have a permissive attitude towards drug use. They may turn a blind eye to his behavior or even engage in drug use themselves. This familial acceptance perpetuates a cycle of permissiveness, creating an environment that does not discourage or deter drug abuse. Consequently, John lacks the necessary support and intervention to address his substance abuse problem. On a societal level, consider the portrayal of drug use in media, music, and cultural norms. In this hypothetical scenario, popular songs, movies, and social media platforms glamorize drug use and depict it as a symbol of status or rebellion. Such cultural influences reinforce permissive attitudes towards drug abuse and contribute to the normalization of these behaviors within the broader community (Interview with religious leaders, 19th March, 2023).

In an interview with religious leaders, the issue of societal permissiveness elicited strong support with most saying that:

The society has relaxed the strict measures that used to guide people on what was right to do or wrong and should not be done. There were rules and punishments that the leaders used to ensure all members of the society observed thus maintaining society at a harmonious and growing point. This has changed in that society now has space for the practice of activities that hamper development and cause conflicts that result from violence induced by such activities. These activities are inclusive of drug and substance abuse. The issue of drug abuse has been tolerated in the society with even young children engaging in the vice. Society has in some way embraced drug and substance abuse making the problems associated with it increase as well (interview with religious leaders, 27th March, 2023).

The problem of societal permissiveness was further supported by the village elders. The is a village elder who articulated the following:

Society has been permissive in its dealing with drug and substance abuse. People in society are no longer concerned with vices taking place in the society as they used to some years ago. The problem has majorly been

associated with the change in cultural practices where the culture is not as strict as it used to be. Cultural practices such as those that involved the punishment of individuals who offended the set standards of practice and living have been weakened by modernization making drug abuse tolerable to society. This has been a challenge in that it is somewhat impossible to curb a vice that has been normalized in society. The government thus has a hard time in the fight against drug abuse as the support is limited to the individuals who have been able to see the permissive nature of the people (FGD with village elders, 3rd April, 2023).

Traditionally, generations of young people have been protected from the early onset of drug and substance abuse by societal norms and practices. As such, effective measures were implemented to ensure that the menace was efficiently curbed. During the present day, however, the socio-cultural factors that were once protective to our societies against widespread addiction to drugs and other substances have become weakened and inoperative. The consequence has been an increase in the extent to which the menace of drug and substance abuse has spread in the coastal region, in this case, Mombasa and Kilifi. The change in the socio-cultural practices has created a society permissive to vices such as drug and substance abuse, thus posing a greater challenge to the groups of individuals involved in the fight against the menace (Ndaka, 2023).

There have been other promoters of drug abuse in both Mombasa and Kilifi, where the members of the society have directly and indirectly enhanced drug and substance abuse. They have done this to show unconditional positive regard to their loved ones (Wilfong & Grand, 2023). Actions linked to the promotion of drug and substance abuse have included defending the drug users or their actions, failing to help them understand that their course of actions will result in negative outcomes, and providing them with drugs or channels through which they can access the drugs. Consequently, the government faces a greater challenge in the fight against drug and substance abuse as these individuals' actions enhance its spread against the government's efforts.

Drug use by parents and friends has also promoted the spread of drug and substance abuse in Mombasa and Kilifi. Poor parental monitoring, which is the lack of parents' involvement, has further increased permissiveness for drug abuse among their children. These aspects have been crucial in the spread of drug and substance abuse (Beredugo *et al.*, 2023). The governments of Mombasa and Kilifi, together with the national government, are therefore under pressure in their activities to control drug and substance abuse as parental and friend use of drugs has antagonistically promoted the same menace that the government aims at controlling. Therefore, the permissive attitude resulting from the influence of parents and friends has aggravated matters for the government.

Furthermore, some individuals have been involved in the concealment of information that would otherwise be important in the investigation and prosecution of those involved in drug-related crimes. Disclosure of information has enhanced the thriving of crimes. The government thus finds it difficult to fight against a menace without the necessary pieces of evidence needed for the judicial processes to be carried out for the success of the interventions (Mkutu & Opondo, 2021). Withholding of information has been another sign of permissiveness in society which has promoted drug and substance abuse creating more issues that the government has to deal with in conjunction with the problem at hand.

In conclusion, the Mombasa and Kilifi communities' culture has been permissive to a large extent. Society has become increasingly liberal, and social attitudes and behaviors have changed (Micheni *et al.*, 2017). In this case, society has allowed and tolerated such behaviors as drug and substance abuse which have promoted risky behaviors, especially among the vulnerable groups of the region. As a result, the permissiveness of society has promoted the drug and substance

abuse menace which has worsened the situation for the government. These factors, coupled with a lot more, have been an obstacle to the efforts of fighting the menace by the government.

6.2 Opportunities Experienced by the Government Programs Aimed at Mitigating Drugs Abuse in the Coastal Region of Kenya

This section seeks to discuss the findings on the opportunities that the government has experienced from their operations within the coastal region. Based on the challenges experienced in the operations of these programs the study thus aims to provide valuable insights into the strengths of these programs and highlight areas where further improvements can be made. The study thus delves deep into the opportunities that the government programs have experienced, discusses their implications, and explores recommendations for enhancing their effectiveness.

The findings are presented in table 6.1

Table 6.1: Opportunities

Opportunity	Number of Respondents	Percentage	Rank
Effective Public Awareness Campaigns	372	96.9%	1
Creation of employment	364	94.8%	2
Establishment of rehabilitation centers	361	94.01%	3
Competence Based Curriculum	354	92.2%	4
Collaborative Partnerships	347	90.4%	5
Community Involvement	321	83.6%	6
Policy and Legal Frameworks	310	80.7%	7
Religious activities against drugs and substance abuse	302	78.65%	8
Strong Government Support	289	75.3%	9
Well-Trained Personnel	276	71.9%	10
Access to Information and Technology	260	67.7%	11
Extensive research on drug and substance abuse	254	66.15%	12
Relapse prevention	237	61.72%	13

Source: Field Data, 2023

6.2.1 Strong Government Support

According to the findings of this study, strong government support has been identified as a significant opportunity for government programs aimed at mitigating drug abuse in the coastal region, specifically in Mombasa and Kilifi counties in Kenya. This support can be leveraged to implement robust policies, allocate resources, and coordinate efforts across various sectors, including healthcare, law enforcement, and education. The backing of the government provides a solid foundation for implementing comprehensive prevention, treatment, and rehabilitation programs, as well as for raising public awareness and combating the stigma associated with drug abuse.

A total of 289 household heads, representing 75.3% of the respondents, identified this as a key opportunity. This is encouraging as it suggests that there is a high level of confidence among the general population in the government's ability to effectively address drug abuse.

During the interviews a victim from MEWA Kilifi County stated thus:

The government has shown a lot of commitment to addressing drug abuse in this region, especially through the establishment of NACADA and other relevant bodies. They have also put in place various policies and initiatives, such as the rehabilitation centers and awareness campaigns, to tackle drug abuse. The strong government support has had a positive impact on the community. For example, the establishment of rehabilitation centers and awareness campaigns has helped to reduce the stigma associated with drug addiction and encourage individuals to seek treatment. Additionally, the government's efforts have led to increased awareness of the dangers of drug abuse, particularly among young people, and have encouraged the community to take a more proactive role in addressing the issue (Interview with victim, 18th April, 2023).

In an FGD with villagers from Ngerenya location, one of them agreed that there is strong government support in fighting drug abuse in Kilifi and Mombasa. The elder explained that:

Government has really improved in eradicating drug abuse in the region and minimizing cases of relapse among the victims. Unlike before, the government has established rehabilitation centers where the victims can be attended. Similarly, the government is working with non-governmental organizations to facilitate rehabilitation services to the victims. A good example being MEWA which provides methadone and injectors to the victims who are in the process of recovering (FGD with village elders, 19th March, 2023).

The impediment of initiating drug and substance abuse among persons in Mombasa and Kilifi has been an important aspect achieved in controlling the menace. Preventing individuals from engaging in the malpractice has directly been part of the solution to the issue of the supply of narcotics and other psychotropic substances in the region. The reduction in the number of individuals initiated into drug abuse has greatly affected the suppliers since the demand has been reduced (Phyllis *et al.*, 2022). Several improved prevention measures have been implemented to ensure that it is reduced or individuals are not initiated into the malpractice.

During an interview with the head of NACADA offices, he opined that:

There has been a variety of measures and strategies that have been used to prevent the initiation of drug and substance abuse among individuals. The government has had a great opportunity to enact measures that have been used as preventive aspects that have ensured that the number of individuals who have been engaging in drug and substance abuse has been considerably reduced. The government has set aside various organizations whose work in the creation of awareness as a preventive measure has been a crucial factor in the prevention of the initiation of the vice among the youth as well as adults (interview with head of NACADA offices, 4th April, 2023).

In another setting, the county education officer further stated that:

The government has endeavored to ensure that the rate at which individuals are starting to indulge in the practice of drug and substance abuse has been considerably reduced. This has particularly been a vital part of the prevention of initiation of drug abuse among students. There has been the inclusion of teachings on drug abuse in the school systems thus ensuring that students learn about it at an early age thus preparing them with the defense mechanisms through which to say no when faced by the temptation for instance through the element of peer pressure to engage

in alcohol and other drug abuse. The opportunity has provided an effective way to ensure that awareness creation has been achieved fully (interview with the county education officer, 4th April, 2023).

There have been different organizations that have been set up to fight drug and substance abuse both at the county level and the national level. For instance, there is NACADA, which is a Semi-Autonomous State Corporation under the Ministry of Interior and Coordination of National Government as per Executive Order No. 1 of June 2018. The authority's vision has been the development of a nation free from drug and substance abuse; thus, its mission is to coordinate a multi-sectoral campaign against alcohol and drug abuse in the country (Masha, 2022). The authority has worked intimately with other organizations like the National AIDS and STI Control Programme (NASCOP) (Mwamuye, 2022) and National Skills Development Policy (NSDP).

The organizations' roles have majored in preventing drug and substance abuse in persons not initiated into the practice. The activities have included public education on alcohol and drug abuse directly and in collaboration with other private bodies (Masha, 2022). They have also coordinated and facilitated public participation in controlling alcohol and drug abuse. Their collaborative efforts have been crucial in preventing drug and substance abuse as they have enhanced the enlightenment of communities and their active participation in controlling the menace.

Preventive education in schools has played a powerful role as it is in school that the warning signs of possible drug problems are first detected among students and pupils. Effective school programs have been established to enhance awareness and resistance skills among them (Mburu *et al.*, 2018). Young people have been taught to resist drugs by developing personal and social skills. These have included communication, conflict resolution, stress management and decision-making. The measure's effectiveness has been ensuring that prevention efforts begin early and

continue through adolescence when the pressure to abuse drugs is usually high. The school-based programs have effectively helped students recognize internal pressures that influence them into drug abuse and thus develop important personal, social, and refusal skills to resist the pressures (Kambaga *et al.*, 2023).

Mentoring has been another effective and increasingly popular prevention strategy. Macharia (2021) refers to this as preventive therapy among eligible children. Formal mentorship programs have provided one-to-one relationships with caring individuals who have positive influences, thus reducing drug and substance abuse risk factors. Positive role models also offer new perspectives to youth who live in endemic drug and substance abuse situations. Parental involvement and monitoring, as antagonistic to poor parenting styles, have prevented the initiation of drug and substance abuse (Nyoike, 2021). The latter has involved responsible use of alcohol where the children are not exposed to alcohol, cigarettes and other drugs at a tender age (Mcheke, 2021).

Also, there has been great improvement in providing mental health services to narrow the chances of drug and other substance abuse. The creation of public awareness through the media and sessions held in the communities on the linkage between mental health and drug abuse, where one can be the causative agent of the other, has been used to control alcohol and other drug abuse (Ogogo *et al.*, 2023). Communities have been taught how drug abuse develops and thus the need to engage in positive social involvement as a control measure against the vice. Therefore, the fight against drug and substance abuse in Mombasa and Kilifi has opened up various ways in which the menace can be prevented from taking place.

These findings are consistent with those of a recent study by Ndeti *et al.*, (2020), which found that government initiatives and policies are essential in addressing drug abuse in Kenya. The

study emphasizes the importance of strong government support in creating an enabling environment for drug abuse prevention and treatment. Additionally, it highlights the need for a multi-sectoral approach, involving various government bodies, NGOs, and other stakeholders, to effectively address drug abuse in the country.

In line with this, the respondent further noted that the involvement of various stakeholders is crucial in addressing drug abuse in the community. This was also reflected in the study by Ndeti *et al.*, (2020), which recommends a multi-sectoral approach involving government, civil society, and community-based organizations in addressing drug abuse in Kenya.

6.2.2 Collaborative Partnerships

Collaborative partnerships emerged as a significant opportunity for government programs to mitigate drug abuse in the coastal region, specifically Mombasa and Kilifi counties in Kenya. According to the household heads who participated in the study, 90.4% (347) of the respondents recognized collaborative partnerships as a valuable tool in preventing drug abuse. This finding suggests that working in partnership with other stakeholders could be crucial in addressing the drug abuse problem in the region.

The high percentage of respondents (90.4%) acknowledging the importance of partnerships indicates a readiness and willingness among the community to work together towards a common goal. This opportunity opens avenues for government programs to engage with NGOs, community-based organizations, healthcare providers, educational institutions, and other relevant stakeholders to pool resources, expertise, and perspectives. By leveraging these collaborative partnerships, government programs can enhance their effectiveness, reach a broader audience, and implement comprehensive strategies that address the multifaceted aspects of drug abuse

prevention and rehabilitation. This opportunity creates a solid foundation for a collective and unified approach in mitigating drug abuse in the coastal region.

During the interviews, a CBO representative argued that:

Collaborative partnerships are essential in mitigating drug abuse in our communities. It is not a problem that can be tackled by the government alone, but it requires a joint effort from various stakeholders, including the community members, religious leaders, and NGOs. When everyone works together, we can create a conducive environment that discourages drug use and promotes healthy living. We need interventions that are designed with the involvement of the community members. The community knows the problem better, and they can suggest appropriate solutions that work for them. The government and other stakeholders should work closely with the community to develop interventions that are relevant and effective (Interview with CBO representative on 20th March, 2023).

This finding is consistent with a study conducted by Munyao *et al.*, (2020) exploring the role of community-based interventions in preventing drug abuse. The study found that community-based interventions that involve active participation from community members, including youths and religious leaders, were effective in reducing drug abuse and promoting healthy behaviors.

The CEC of Health, Kilifi County, also highlighted the importance of strengthening existing structures and resources to address drug abuse. He stated that:

We need to strengthen our existing structures, such as rehabilitation centers, and equip them with the necessary resources to cater to the needs of those affected by drug abuse. We also need to provide training and capacity building to healthcare professionals and law enforcement officers to effectively handle drug-related cases (Interview with CEC health on 8th April, 2023).

This finding is consistent with a study by WHO (2017), which emphasized the need for integrated and comprehensive approaches that involve the health, education, and law enforcement sectors to address drug abuse. The study further highlighted the importance of

strengthening the capacity of healthcare professionals and law enforcement officers to effectively prevent and manage drug abuse.

Functionalism theory forms the fundamental aspect of collaboration in a society. The stakeholders involved in fight against drug abuse have come together to eradicate this catastrophe, as is in the functionalism theory. The authority which involves government machinery, citizens and non-governmental organization are all involved in this fight with the common objective of eradicating the peril of drug and substance abuse.

Some of the organizations that have collaborated with the government are

6.2.2.1 The Médecins Sans Frontières (MSF) Safe Injection Site

Médecins Sans Frontières (MSF) is an international medical humanitarian organization that provides medical assistance to people affected by conflict, epidemics, disasters, or exclusion from healthcare. In Kenya, MSF operates a safe injection site in Mombasa and Kilifi counties to provide clean needles and syringes to injection drug users to prevent the spread of HIV/AIDS and other blood-borne diseases.

The MSF safe injection site in Mombasa was established in 2014 and has since served over 2,500 injection drug users, with an average of 150 visits per day. The site provides clean needles and syringes, wound care, counseling, and referral to healthcare services. The goal of the site is to reduce the risk of transmission of HIV/AIDS and other blood-borne diseases among injection drug users and the general population.

In Kilifi County, MSF operates a similar safe injection site that was established in 2018. The site has served over 300 injection drug users, with an average of 30 visits per day. The site provides

similar services to those in Mombasa and has also been successful in reducing the transmission of HIV/AIDS and other blood-borne diseases.

The MSF safe injection sites have been successful in reducing the transmission of HIV/AIDS and other blood-borne diseases among injection drug users. A study conducted in Mombasa showed that HIV prevalence among injecting drug users (IDUs) decreased from 24% in 2013 to 10% in 2019, while hepatitis C prevalence decreased from 61% in 2013 to 17% in 2019. The sites have also been successful in engaging injection drug users in healthcare services, with over 70% of clients being referred to other healthcare services.

6.2.2.2 The Kenya Harm Reduction Network

The Kenya Harm Reduction Network (KHRN) is a non-governmental organization that was established in 2010 to address drug use, HIV, and other health-related issues among people who inject drugs (PWID) in Kenya. KHRN operates in Mombasa and Kilifi counties, providing harm reduction services such as needle and syringe programs, opioid substitution therapy, HIV testing and counseling, and other health-related services to PWID.

The history of KHRN can be traced back to the early 2000s when HIV prevalence was high among PWID in Kenya. At that time, the government was not providing adequate harm reduction services to PWID. In response to this, a group of concerned individuals established KHRN to provide harm reduction services to PWID in Mombasa and Kilifi counties.

The functions of KHRN include providing harm reduction services, advocacy, and capacity building for health professionals and communities. KHRN works with various stakeholders, including the government, to promote harm reduction policies and practices.

A significant majority of the respondents believe that the KHRN initiative has played an instrumental role in mitigating substance abuse and its substantial detriments. The contributing factors behind this success can be attributed to KHRNs holistic approach encompassing targeted outreach efforts and educational initiatives centered on harm reduction practices and access to effective substance use disorder treatments designed to support individuals struggling with addiction. Moreover, the respondents provided further insights into the effectiveness of the KHRN program. For instance, CEC health from Kilifi noted that the harm reduction approach implemented by KHRN has helped reduce new HIV infections among drug users in their community. In his actual words, he said:

Since KHRN started its outreach programs and education on harm reduction, we have noticed a significant decrease in new HIV infections among drug users. This is because KHRN's programs have helped drug users adopt safer drug use practices and access clean needles and syringes, reducing the risk of transmitting HIV (Interview with CEC health, 15th April, 2023).

Another respondent, a former drug user, also shared how KHRN's drug treatment services helped him overcome his addiction and live a drug-free life. He said;

I was addicted to drugs for many years, but KHRN's treatment services gave me hope and the necessary support to quit. They provided me with the tools and skills to overcome my addiction, and today I am living a healthy and drug-free life (Interview with a victim, 2nd April, 2023).

These findings suggest that the KHRN program has effectively achieved its objectives.

Furthermore, the positive feedback from the respondents is consistent with the program's reputation in the international community. Recent data from the International Harm Reduction Association (IHRA) shows that the KHRN program has successfully reduced drug use and associated harms, with a reported success rate of 86% (Jeneby *et al.*, 2020). This global

recognition is a testament to the program's effectiveness in implementing evidence-based harm reduction strategies and providing accessible drug treatment services to those in need.

However, it is worth noting that a small percentage of the respondents disagreed with the findings regarding the KHRN program's effectiveness. Investigating the reasons behind this dissent is essential to identify areas where the program needs improvement. Additionally, scholars have highlighted the need for the government to employ other strategies to ensure the program's long-term success. For example, there has been increased funding and community involvement.

The study's respondents acknowledged the importance of KHRN's facilitators in implementing the program effectively, given their expertise in connecting with drug users and providing necessary support. They emphasized the facilitators' understanding of the local community's context as vital to the program's success. One upside of the facilitators is their training and skills to provide culturally appropriate support. However, the downside is a limited number of trained facilitators, hindering the program's reach (Jeneby *et al.*, 2020). Respondents suggested specialized training for complex addiction cases and incorporating technology to reach remote areas. Continuous improvement in training and education for the facilitators is necessary for the program's effectiveness.

Scholars have praised the program's harm reduction approach, effectively reducing drug use and associated harms among drug users in Kenya. The program's approach is also aligned with global best practices in harm reduction and has been recognized by the International Harm Reduction Association (IHRA). NGOs in Kenya have also lauded the KHRN program for its effectiveness in reducing drug abuse and associated harms among drug users (Jeneby *et al.*, 2020). For instance, the Kenya Red Cross Society has collaborated with KHRN to provide harm reduction

services to drug users in coastal Kenya. The collaboration has successfully provided harm reduction education, clean needles and syringes, and drug treatment services to drug users.

Government officials in Kenya have also recognized the importance of the KHRN program in addressing drug abuse and associated harms among drug users. As such, the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA) has teamed up with KHRN to implement harm reduction measures throughout Kenya. One tangible example of this collaboration is NACADA's support for providing clean needles and syringes distribution services in Nairobi to reduce HIV transmission rates among drug users (Jeneby *et al.*, 2020). Notwithstanding these positive steps taken by stakeholders towards safeguarding public health concerns regarding substance use disorders, financial sustainability challenges may arise since donor funding heavily supports KHRN programs leading some scholars to be concerned about long-term viability. Additionally, access barriers for people residing in remote areas could impede service delivery efforts regarding harm reduction initiatives. At the same time, the stigma surrounding substance use disorders may hinder adequate assistance to those struggling with drug addiction.

To address these challenges, KHRN could consider developing sustainable funding strategies to reduce its reliance on donor funding. Correspondingly, by adopting technology within their outreach programs, there will be an opportunity for reaching drug users who are otherwise located in remotely inaccessible areas. Besides this initiative, another recommendation is that partnering with local leaders and voluntary associations can help bust stigma while building a solid camaraderie regarding the program within communities around them (Jeneby *et al.* 2020). As evident by the positive feedback from Kenyan researchers and non-governmental and

governmental entities, the only missing piece of the puzzle is constant improvement in implementation to guarantee optimal effectiveness.

According to KHRN's statistical data, they have reached over 10,000 PWID in Mombasa and Kilifi counties since their inception. The organization has provided over 150,000 clean needles and syringes to PWID, and over 3,000 PWID have been enrolled in opioid substitution therapy. KHRN has also conducted over 10,000 HIV tests and provided HIV counseling and treatment to over 1,500 PWID.

6.2.3 Access to Information and Technology

Access to information and technology has been identified as a significant opportunity for government programs to mitigate drug abuse in the coastal region of Kenya. The findings from a study conducted in Mombasa and Kilifi counties indicate that 67.7% (260) of the household heads surveyed acknowledged that access to information and technology could help in preventing drug abuse. This suggests that there is a need to provide the necessary information and technology to communities to prevent drug abuse.

The study's findings, where 67.7% of surveyed household heads acknowledged the potential of information and technology in preventing drug abuse, highlight the receptiveness of the community towards utilizing these resources. This provides an opportunity for government programs to leverage digital platforms, educational campaigns, and online resources to disseminate information about the dangers of drug abuse, promote prevention strategies, and offer support and rehabilitation services. By capitalizing on this opportunity, the government can empower individuals with knowledge and tools to make informed decisions, fostering a proactive approach in combating drug abuse and promoting a healthier society.

During the focus group discussions, a village elder from Ngerenya opined:

Information is power, and access to information can be the key to preventing drug abuse. Technology can be a tool to help spread awareness and knowledge about the dangers of drug abuse. If we can educate people about drug abuse and its effects, we can reduce the stigma associated with drug abuse. People who are struggling with drug addiction need support and understanding, not condemnation (FGD with a villager, 28th March, 2023).

These findings are consistent with an external study conducted by Otiende (2021) on the effectiveness of community-based drug abuse prevention programs in Kenya. Otiende (2021) found that community-based programs that provide education and awareness on drug abuse have been effective in reducing drug abuse rates. The study also emphasized the importance of incorporating technology and social media in drug abuse prevention programs to reach a wider audience.

In an interview with victims from Ngerenya, they agreed that access of information is one of fundamental opportunities. One of the victims stated that:

Since the war against drug abuse was intensified in Kilifi communication through the social media has improved. At the beginning we used to communicate amongst ourselves through WhatsApp to create awareness and update each other about various facilities established in the region to help us in the process of recovering. Moreover, mobilization is done by the CBO leaders through social media where the members are updated on the activities something (FGD with village elders, 19th March, 2023).

Muturi *et al.*, (2019) on drug abuse prevention among the youth in Kenya found that the use of technology-based interventions such as mobile apps and online counseling services had a significant impact on reducing drug abuse rates. These studies support the notion that access to information and technology can be an effective tool in preventing drug abuse.

6.2.4 Policy and Legal Frameworks

According to the findings of the study conducted on government programs in the mitigation of drug abuse in the coastal region (Mombasa and Kilifi counties in Kenya), policy and legal frameworks were identified as the most significant opportunity experienced by the programs. The study, which surveyed household heads, found that 80.7% (310) of the respondents identified policy and legal frameworks as an opportunity for the government programs. This suggests that the policies and legal frameworks put in place by the government could play a significant role in reducing drug abuse in the coastal region.

This finding suggests that the government has the opportunity to leverage these frameworks to implement effective prevention, treatment, and rehabilitation programs. By aligning policies with evidence-based practices and ensuring comprehensive enforcement, the government can create an environment conducive to reducing drug abuse and promoting healthier communities in Mombasa and Kilifi counties. This opportunity underscores the importance of proactive policy-making and strategic interventions in addressing the challenges associated with drug abuse.

During an interview, the CEC Education, Mombasa, stated following:

The government's policies and legal frameworks have played a significant role in mitigating drug abuse in the coastal region. For example, the Narcotic Drugs and Psychotropic Substances Control Act of 1994 has made it illegal to sell, manufacture, or traffic drugs. This has helped to reduce the availability of drugs in the region. The government's efforts in providing treatment and rehabilitation programs have also helped in reducing drug abuse. The programs help the addicts to recover and reintegrate back into the society (Interview with Mombasa CEC Education, 10th April 2023).

These findings are consistent with those of a study by Chai *et al.*, (2019), which examined the effectiveness of policy and legal frameworks in reducing drug abuse in East and Southeast Asia.

The study found that the implementation of strong policies and legal frameworks, such as strict

drug laws and regulations, has been effective in reducing drug abuse in the region. The involvement of these stakeholders has helped to create awareness about the dangers of drug abuse and provided support to those affected by it.

An administrative chief from Changamwe, expressed the importance of policy and legal frameworks established by the government. According to the chief:

The frameworks and policies have created orderliness in the region in the way we deal with drug abuse in the region. This ensures that we work as a team since the policies formed by government regarding fight of drug abuse are implemented uniformly in all parts of Mombasa and Kilifi as we all work towards the same goal. The legal frameworks on the other hand mainly define our conducts as we operate in the region. It is through the current legal frameworks and policies that we have managed to establish several rehabilitation centers and to work with other stakeholders in helping victims (Interview with chief, 18th April, 2023).

Along the coastal region, the government has established legislative measures to curb substance abuse. The existence of drug laws in the country has provided a firm base for which the county governments of Mombasa and Kilifi can collaborate with the national government in law enforcement (Ssewanyana *et al.*, 2020). The drug policy, a national drug control strategy, has also been applied in Mombasa and Kilifi to control substances that cause physical and mental dependence. The rapid spread of drug abuse in the coastal region has thus triggered the enactment of a legal framework to address this vice. Such laws have been vital to the fight against drug and substance abuse in the two counties.

In an interview with the County Commissioner Mombasa County, he articulated the following:

Janga la uraibu wa mihadarati limekuwa kero katika kaunti yetu kwa vile limewakaba vijana wengi ambao kwa kiwango kikuu hawana namna ya kujitoa pale. Serikali ya nchi imeweka sheria ambazo zinadhibiti uuzaji na hata matumuzi ya dawa za kulevya. Sheria za nchi zimeendelea kukua kutokana na zile ambazo kaunti zimejitungia. Ongezeko la sheria hizi limewezesha serikali ya kaunti kwa kiwango kikubwa kupigana na janga hili la uraibu wa mihadarati pamoja na madhara yake. Si hayo tu, sheria

hizi zimetumika katika kutoa hukumu kwa wanaopatikana wakishiriki njama kama hizi. Tabia hii potovu imesababisha vifo na magonjwa mengi kwani dawa za kulevya zinazotumika huadhiri uwezo wa mwili wa mtu kujikinga na magonjwa mbali mbali. Serikali ya kaunti inaendelea kuongeza sheria zaidi ili kuwakinga wanetu pamoja na watu wengine ambao hawajashiriki uovu huu. Vile vile ina azma ya kuwarejesha katika hali ya kawaida walioadhirika kutokana na matumizi ya dawa hizi za kulevya. (The menace of drug and substance abuse has been an irritating factor in our county due to the manner in which it has enslaved a large number of the youth. The Kenyan government has enacted a number of laws which govern the use and trafficking of drugs in all regions of the country. The country's enactments continue to thrive and gain affectivity with the added county government intervention where the county has further proceeded to make laws of its own to ensure that drug abuse is an eradicated problem in the society. The laws have to a large extent enabled the county government to fight drug abuse together with its effects. More so, the laws have been used in courts of laws to pass sentences to those individuals found doing things contrary to the statements of these laws. Drug abuse has caused the deaths of many and the occurrence of diseases as it weakens the immune system of the abusers. The county government continues to enact various laws to protect our people from the ill practice of drug abuse as it further aims at restoring the already addicted to being stable members of the society who are freed from the menace.) (Interview with County Commissioner, Mombasa, 14th April, 2023).

The County Education Officer was in support of this when he spoke the following:

Many of our students have been absorbed into the practice of drug abuse at the expense of their studies. Most of them have poverty-stricken backgrounds yet continue to indulge in the practice. The government has sought to deal with the issue through the enactment of various laws coupled with the enforcement of previously present laws. Through this, the government has been able and continues to fight against drug traffickers in the region who have always ensured that drug supply was high thus making the drugs easily available to our students. There has been hope that with the fullness of law enforcement, drug abuse will be a forgotten challenge in our society with the dealers behind the bars of prison and the students will be secure from them (Interview with the County Education Officer, 7th May, 2023).

The laws provide the parameters for the possession, trafficking, transportation, and control of narcotic and psychotropic substances. The limitations counter the rapid spread of the sale and use of drugs that lead to dependence due to addiction along the coast. For instance, there is the prohibition of unlawful presence in a den, room, house, or place used for drug abuse, illegal

manufacture of drugs, illegal diversion of chemicals, and illegal possession of drugs. All of these are laws that apply countrywide hence the coastal region. The two counties have had a complicated history of drug abuse and trade (Jeneby *et al.*, 2020), where drug laws have been important in reducing the harm that may result from the drugs. The measures leave most drug abusers with no option but to avoid malpractice, thus avoiding conflict with the government.

The Constitution of Kenya further gives county governments the mandate to develop policies, plans of action, and laws for controlling drug and substance abuse in their respective regions. With the problem of drug abuse becoming intolerable in such places as Old Town in Mombasa, the increased emergence of new cases of chronic cases within drug abusing gangs and initiation into drug use at a tender age have all forced the county government of Mombasa to come up with measures with which drug abuse has been greatly curbed. The control of drug abuse has simultaneously led to the fight and control of the spread of HIV/AIDS (Nduva *et al.*, 2020). The county government consequently has the Mombasa County Drug and Substance Abuse Control Bill of 2021.

The Kenya Government has also introduced a strategy to anchor community policing which has been at the household level. Implementing community policing has been the reason behind the nyumba kumi strategy (RONOH, 2021). Reduction of police distance from the community (Jeneby *et al.*, 2020) has been its major goal where an increase in the quality and quantity of government policing agencies with citizen contact has considerably reduced such crimes as drug abuse. The strategy has been a popular approach in the fight against drug-related crimes and other social disorders. Private citizens have been a liaison between the community and police, thus making it easy for such activities as the location of dens for drug abuse.

Law enforcement against drug abuse has also been due to the close relationship between drug abuse and child sex. Many organizations have thus been set up to counter the continued spread of drug abuse hence child sexual abuse (Kambaga *et al.*, 2023). Other agencies involved in the fight against drug abuse countrywide and continentally also apply to the coastal region in collaboration with the county governments' self-developed policies. These include NACADA (Oguya *et al.*, 2021), the Kenyan government anti-drug agency, the Global Fund/Red Cross (Kenya), the National Aids Control Council, and the National AIDS and STI Control Programme both of which are Kenyan Government HIV and AIDS organizations.

The legislative measures have provided the coastal region people with well-laid-out drug policies, which have made it easy to implement them, and felony offenders suffer the consequences appropriately. For instance, the penalty for trafficking in narcotic drugs (Kitchen *et al.*, 2022), where a person owns fifty milligrams or less, a fine of not less than ten million shillings or imprisonment to a term of not less than ten years is imposed. Sometimes, however, one may be sentenced to such a fine and imprisonment. Such provisions by the law make the environment non-conducive for both the drug sellers and abusers and, as a result, a reduction in drug and substance abuse in the coastal region of Kenya.

The existing gaps in the law have paved the way for which the government has had an opportunity for amendments to make it more responsive to present-day problems facing society. For instance, over time, the law has imposed lenient penalties, which have not been effective in stopping drug trafficking. In other instances, the law has been outdated and unresponsive to the current realities (Giommoni *et al.*, 2020). The law has not addressed the case where individuals have been using precursor chemicals for manufacturing narcotic drugs. In this case, drug and substance abuse is a menace that has continued to thrive in both Mombasa and Kilifi along the

coastal region, where drug trafficking has been at its highest (Asif *et al.*, 2023). The fight against drug abuse has thus been crucial in the discovery of these gaps and the importance of addressing them.

The County Commissioner Mombasa County explained thus:

The laws have been amended to ensure that they cater for the issues emanating from drug and substance abuse as well as trafficking. There have been various changes in the law to incorporate for the newly arising challenges to ensure that the malpractice is dealt with accordingly. The new changes have included such aspects as the use of precursor forms of drugs to form psychoactive substances. Others have been the incorporation of the punishment for unscrupulous police officers who are either directly or indirectly associated with drug trafficking. More so, the laws have been made strict to prevent punished drug dealers from returning into the same practices that had them punished (interview with County Commissioner, Mombasa, 15th April, 2023).

He was seconded by the head of a selected NGO who stated that:

Vita dhidi ya matumizi ya dawa za kulevya vimefungua njia ya mabadiliko kadhaa ambayo yanaweza kuleta maendeleo hapa nchini. Mabadiliko haya ni kama vile mabadiliko ya sheria. Hapo awali, kumekuwepo na mambo ambayo hayakuwa yameshughulikiwa kikatiba hasa kuhusu uuzaji na utumaji wa mihadarati pamoja na utengenezaji wake. Pia, waliokuwa wakiripotiwa kutokana na mambo haya waliweza kurejelea tabia hizo baada ya kulipa faini walizotozwa kotini, jambo ambalo ni vigumu kutokea kwa sasa kwani sheria inaamuru wapewe adhabu kali ambazo zitawazuia kushiriki katika tabia hizi. (The fight against drug abuse has greatly paved way for various developmental changes. The changes have included the amendment of the laws. The previous gaps that had been in existence in the law for a long time have now been corrected through the amendments that have been carried out. The offenders of the law will now have to face the consequences that will be determined by the law whenever they are caught since the law is presently not as lenient as it has previously been. The sentences to be passed to these offenders have been made strict as a method of fighting the peril of drug and substance abuse.) (Interview with the heads of selected NGOs, 19th April, 2023).

The opportunities presented by these gaps have included enhancing the penalties for offenses relating to the possession and trafficking of drugs and psychotropic substances. It was among the proposals by the Narcotic Drug and Psychotropic Substances (Amendment) Bill of 2020. It was

proposed that the stipulation of the penalties should be per the weight of narcotic drugs and psychotropic substances that an individual is caught with. Thus, the leniency of the penalties would be addressed in that the courts would be provided with the parameters with which the imposition of the appropriate punishment in the form of imprisonment and or fines for the offenders (Asif *et al.*, 2023). As such, the potential perpetrators have been hindered from engaging in the malpractice.

Where there have been cases of the use of precursor forms of chemicals to manufacture narcotic drugs, the government and other stakeholders have addressed the issue in that the law now has imposed control over the vice. The proposal that the law should define precursors and the chemical substances that may be used to manufacture narcotics was the initial step toward achieving control over crime (Zhao, 2020). The Bill, therefore, proposed a fine of not less than fifty million Kenyan shillings, coupled with an imprisonment of not less than twenty years for possessing, manufacturing, or transporting precursor chemicals for the unlawful production of narcotic drugs (Giommoni *et al.*, 2020). The amendment has been of meaningful effect in the fight against using precursors to manufacture narcotics for unlawful reasons.

Furthermore, the law previously lacked specific provisions punishing law enforcement officers committing offenses related to drug trafficking, which has been one of the major global concerns over time (Amagnya, 2023). The implication is that unscrupulous officers have always gotten away with mischief (Kitchen *et al.*, 2022). However, one of the proposals by the Narcotic Drug and Psychotropic Substances (Control) Bill 2020 was the definition of a law enforcement officer. It also prescribed offenses for law enforcement officers who would aid or collude with individuals suspected of committing offenses under the law, including drugs and another psychotropic substance trafficking (Barrett & Hannah, 2020). The proposed amendment was

important in addressing the issue of law enforcement officers being on the frontline in drug and substance abuse promotion.

The Bill also introduced the offense of conspiring with persons inside or outside Kenya to commit offenses related to drug possession, manufacturing, or trafficking inside or outside the country. It provided a penalty for conspiracy of a fine of not less than a hundred million and imprisonment for life (Nyotah *et al.*, 2023). The Bill also sought to enhance the effective prosecution of offenses and investigations by police officers by providing the power to intercept communications and produce the information as evidence in a court of law. That being the case, the Bill proposed that an officer above the rank of chief inspector of police may apply to the high court for an order to intercept communication with written consent from the Director of Public Prosecution (Nyotah *et al.*, 2023). The result has enhanced the effective prosecution of the offenses in an evidence-based manner.

Besides, the law was impaired by the lack of adequate punishment for those individuals who would conceal or fail to disclose information that would have otherwise been of importance in the investigation and prosecution of offenses related to drug trafficking (Raineri & Strazzari, 2023). Amendment of such aspects of the law as addressing the penalties' leniency has deterred the crime from thriving in Mombasa, Kilifi, and countrywide. The changes proposed in the law have made it more effective and increased its ability to respond to drug and substance abuse, thus providing an opportunity for improved implementation of the interventions against the menace.

This finding is consistent with that of a study by Benoit *et al.*, (2020), which examined the role of stakeholders in reducing drug abuse in West Africa. The study found that the involvement of various stakeholders, including religious leaders and community organizations, was effective in mitigating drug abuse in the region. Relevant policy makers should involve the community

together with civil society organizations in developing and implementing policies on alcohol control. These non-state actors should also be engaged in alcohol abuse prevention programs such as treatment and rehabilitation of affected individuals and families. The respondents in this study strongly believe that the law should be amended rather than being thrown away and replacing it with a new one for it to be effective. The government should both enhance enforcement of the current policies and establish new ones in order to reduce the negative impacts of illicit alcoholic beverages in the country.

To make law enforcement and criminal justice program to be effective there is need for all stakeholders to cooperate. The cooperation of the stakeholders is in accordance with the functionalism theory which claims society serves a purpose which is indispensable for long term survival. This suggests that all elements of government in Kilifi and Mombasa counties will work together to enforce law. Lack of cooperation among the authority will bedevil law enforcement and criminal justice process.

6.2.5 Creation of Employment

Creation of employment in Mombasa and Kilifi counties is among the most fundamental opportunities that were well articulated by the respondents. The residents in those particular counties believe that government programs which aim at fighting drug abuse have created employment among them in the region. As per the 364 respondents who represent 94.8% of the total respondents, government programs in the region have been the epicenter for the employment of the youths who were mainly drug addicts. This opportunity not only addresses the issue of unemployment but also provides a chance for the individuals who have struggled with drug abuse to reintegrate into society and rebuild their lives. By offering employment opportunities through these programs, the government can not only reduce drug abuse but also

contribute to the economic development and social well-being of the communities in Mombasa and Kilifi counties.

The finding of the study was echoed by one of the victims from Shanzu during an interview. The victim stated that:

I am among the youths who have benefited from the programs which have been established by the government in Mombasa in an effort to fight drug abuse. I have been working in this rehabilitation center for 3 years where I mainly help in issuing methadone to other victims. In that case I also work as a role model to those who are still using drugs because they look up to me. But most the important thing is that I have managed to meet my day-to-day financial need together with my family (interview with victim, 28th March, 2023).

The Shanzu chief, during an interview, agreed with the arguments made by the victim on the issue of job opportunity created by government programs established in Kilifi and Mombasa.

The chief had the following to say about the opportunities:

We recommended the rehabilitation centers to employ the recovered victims in various positions so that they can be an encouragement to the drug addicts. The addicts who come for methadone will have someone they can look up to and this gives them hope in the journey to recovery. Most importantly, the victims understand each other better and therefore the services provided in the rehabilitation centers are purposely serving the intended objectives. The job opportunity on the other hand help to keep victims busy and it play a major role to reduce cases of relapse among them (Interview with local administrative chiefs, 21st April, 2023).

The finding of the study and sentiments made by the chief and the victim are also echoed by Grusec (1994), who argued that the most effective way to overcome addiction is establishment of motivation factors which can be in different forms (Ndetei *et al.*, (2020). The identified motivating factor is creation of employment to keep the addicts busy to keep them away from situations which can lead to relapse or depression which makes them use drugs. This is an opportunity that government brings to the society to enhance the livelihood of all victims.

6.2.6 Competence Based Curriculum

Competence Based Curriculum as a new form of education has been hailed to be a new dawn which will be fundamental in dealing with drug abuse. Findings from the field indicate that 354 respondents who make up 92.2% of the total respondents agree that CBC is a great opportunity among the Mombasa and Kilifi counties. The opportunity in CBC is deeply rooted on its contents which aim at creating job opportunities and boost self-reliance among the future generation.

This educational approach offers a great opportunity due to its emphasis on practical skills development and self-reliance. By incorporating job-oriented content, the CBC equips students with the necessary competencies to succeed in various fields. This focus on employability and self-sufficiency can play a crucial role in preventing drug abuse by providing alternative pathways and opportunities for individuals, reducing the likelihood of engaging in substance misuse due to lack of purpose or economic instability. Thus, the CBC serves as a promising tool to empower the future generation and address the root causes of drug abuse in these counties.

The County Education Officer in an interview concurred with findings from the field. During the interview, the officer stated the following:

CBC has been structured in a way that it teaches self-reliance among the students. This means in future the individuals who will undergo this program will create job opportunities rather than being the job seekers like in the current scholars. With job opportunity the youths will be busy and well-off economically thus will not fall in financial desperation which push them to drug abuse. Another important thing about CBC is that in grade three it teaches about drug abuse. This is critical as it create awareness among the students at the tender age and therefore, they can avoid indulging in drug abuse because they know the impacts (Interview with County Education Officer, 21st March, 2023).

The sentiments made by County Education Officer were contradicted by a *Mwangaza* CBO leader based on the impacts it brings to the society. The CBO leader felt that CBC cannot be

identified as an opportunity to the residents of Kilifi and Mombasa. The CBO leader from Shariani had the following to say regarding CBC:

CBC imechangia kuongezeka kwa matumizi ya dawa za kulevya. Kulingana na huu mfumo mpya wa masomo kuna mambo mengi amaboyo yanahitaji mchango wa wazazi haswa mchango wa pesa. Wanafunzi nao wamechukulia jambo hili kama nafasi nzuri yao ya kujitafutia pesa ambazo wanazitumia kununua dawa za kulevya. Kwa hivyo, kwa mtazamo wangu naonelea kwamba CBC imezidisha kuongezeka kwa kutumika kwa dawa za kulevya kwa sababu wako na pesa za kununua hizo dawa. (CBC has increased the rate at which the youths are using drugs this region. According to this new curriculum, parents are supposed to take part in it where sometimes they have to contribute money to purchase the materials to be used. The students are taking advantage of this by obtaining money from the parents of which they later use to buy drugs). (Interview with CBO leader, 9th April, 2023).

However, the sentiments made by the CBO leaders is refuted by Akala (2021), who believes that the shortcomings from CBC are minimal and can be dealt with easily. CBC as a program is an opportunity which aims at creating self-reliance and eradicate unemployment which is being experienced today (Akala, 2021). When youths are engaged it will be difficult for them to them find the comfort of drugs which leads to addiction.

CBC curriculum is based on enhancing self-reliance among the students. The mode of teaching utilized under CBC, depicts the impact of social learning theory due to its practicability. The curriculum promotes practicals where students are involved in observing and then put what they have observed into practice. The expected outcome of the curriculum is that an individual will manage to create employment in future rather than waiting to find a meaningful job.

6.2.7 Establishment of Rehabilitation Centers

According to table 6.1, establishment of rehabilitation centers was agreed to be an opportunity by a large population of 361(94.01%). The coastal region county governments of Mombasa and Kilifi, in collaboration with other Non-governmental Organizations, have set up rehabilitation

centers majorly for drug and alcohol treatment programs. The rehabilitation centers provide services of different types in an attempt to bring dependence on drugs to a halt. Behavior modification of drug addicts is the major concern of these rehabilitation programs. The achievement of this goal has been witnessed in Mombasa and Kilifi as evidenced by the recovery of the victims and their return to functioning as independently as possible in the daily lives outside the rehabilitation centers.

The collaboration between county governments and Non-governmental Organizations in establishing rehabilitation centers specifically tailored for drug and alcohol treatment programs demonstrates a proactive approach to addressing drug abuse. These centers offer a range of services aimed at modifying the behavior of drug addicts and aiding in their recovery. The successful outcomes observed in the form of recovered individuals returning to independent functioning outside the rehabilitation centers validate the effectiveness of this opportunity. Expanding the reach and capacity of rehabilitation centers presents an opportunity to reach more individuals, provide necessary support, and ultimately contribute to reducing drug abuse and its associated societal challenges.

The setting up of rehabilitation centers in the region was supported by the heads of selected NGOs as an effective measure that has been employed by the government to fight against drug and substance abuse who stated the following:

Vituo vingi vya ukarabati vimejengwa katika kaunti hii. Serikali imetia juhudi katika ujenzi na upanuzi huu ili kuhakikisha kwamba watu wenye haja ya kurekebisha mienendo yao na kuuacha uraibu wa pombe pamoja na mihadarati mingine wamesaidika ipasavyo. Vituo hivi vimesaidia pakubwa katika utoaji wa mawaidha kuhusu dawa za kulevya pamoja na madhara yake. Si hayo tu bali pia kutoa matibabu kwa waathiriwa wenye hitaji kama hilo. Kukua na kuenea kwa janga hili kunaweza kuzuiwa ipasavyo kupitia njia hii ya vituo vya ukarabati. Kuna wengi ambao wamepona kupitia vituo hivi kwani waliweza kupata matibabu na hata

mawaidha murua ambayo yamewawezesha kujikomboa kutokana na uraibu wa dawa za kulevya. Wengi wanazidi kusaidika katika vituo hivi huku mikakati ya kuwasaidia wengi zaidi ikiendelea kutiliwa maanani. Vituo hivi vitasaidia pakubwa katika kupigana na janga hili. (There have been many rehabilitation centers that have been set up in the county. The government has put in effort to ensure that people with the need to mend their ways and overcome drug and substance abuse are efficiently helped. The centers have been important in the provision of information on drug abuse and its effects on the abusers. The rise and spread of drug abuse can be curbed effectively through the use of rehabilitation centers. There are many who have recovered from this by the help of rehabilitation centers as they could access treatment and advice that has enabled them to recover fully. Many continue to recover as the centers put into practice more strategies to ensure the recovery of many others in the fight against drug abuse.) (Interview with head of selected NGOs, 24th March, 2023).

He was seconded by the religious leaders who explained the following:

Drug abuse has caused an enormous range of problems in our region of the country. Most of the youths have been left under the mercy of alcohol, bhang, cocaine, heroine and other psychoactive substances. Most of them are unemployed and victims of damaged relationships with their closed ones be it in a marital relationship, relationship with the local authorities, sibling relationship, or parent-child relationship. Building of rehabilitation centers has had an unforgettable effect on the fight against drug and substance abuse. There have been many people in the region who have been successfully assisted through rehabilitation centers. The various religious groups in the region have also partnered with the rehabilitation centers to ensure that there is more concentration of the effort that is being directed towards the fight against drug abuse (Interview with the religious leaders, 27th March, 2023).

Several rehabilitation centers have been established in Mombasa and Kilifi to curb the high rate and extent of drug and substance abuse. The convenience of access has been an important and considered factor as the addresses, contacts, and emails are available for residents in these places (Robert *et al.*, 2020). The rehabilitation centers in Mombasa include, Mewa Drop-in Center in Mla Leo, Eden House in Likoni, Reach Out Drug Treatment in Consolata, Reach Out Drop-in Center, and Rima Serene Medical Center in Nyali, next to Nyali Barracks. Amescosa Treatment and Rehabilitation Center (Female Treatment Program, Omari project, Matumaini Rehabilitation

Center in Kilifi South Constituency, and Khairati Orthopedic and Rehabilitation Unit are all found in Kilifi.

The governments of Mombasa and Kilifi and the private sector have set up several rehabilitation centers where people with substance use disorders can seek healthcare. Mombasa has the Mewa Drop-in Center, Eden House – Likoni, Reach Out Drug Treatment Center, Reach Out Drop-in Center, and RiMa Serene Medical Center. In Kilifi, there is the Amescosa Treatment and Rehabilitation Center (Female Treatment Program). The anti-drug therapy clinic inside the prison facility offers treatment for patients from Mtwapa, Shimo La Tewa Medically Assisted Therapy Clinic. The effectiveness of rehabilitation centers has been seen in that most individuals who complete their alcohol and drug rehabilitation benefit from improved quality of life and health (Barako, 2023).

The government has had the opportunity to show care to its citizens through the treatment of individuals who have been affected by drug and substance abuse. An interview with the head of selected NGOs brings out this opportunity through his statement, which is as outlined:

Serikali ya Kenya imeweza kutoa matibabu kwa waathiriwa wengi wa dawa za kulevya. Matibabu ambayo serikali imewapa ni ya hali ya juu ili kuwawezesha kurejelea afya yao njema. Hili limekuwa kwa kupitia njia zinazowawezesha kukuza uwezo wa miili yao kurejesha uwezo wa kujikinga kutokana na magonjwa tofauti. Waathiriwa hawa pia wamepata namna za kujitegemea na kujikinga kutokana na udhaifu unaoweza kuwafanya wakarejea katika hali ile ya uraibu. Nafasi hii ambayo serikali imepata imetokana na juhudi za kupigana najanga la matumizi ya mihadarati miongoni mwa wananchi. Limetokea kama jambo la busara ambalo serikali imefanya ili kuwaokoa vijana na watu wengine wanaotumbukia katika uraibu wa dawa za kulevya. (The government has used a lot of funds in the treatment of individuals who have been victimized by drug abuse. It has given them high quality treatment to ensure that they regain their health to the highest achievable level. There has been the use of mechanisms that enable their bodies to regain the ability of their immune systems. These people have also been provided with teachings that have given them the strategies important to avoid the

temptation of relapse. The provision of treatment has been a wise activity that has enabled the government to rescue and save the youths and others who were drowning in drug and substance abuse.) (Interview with heads of selected NGOs, 17th April, 2023).

During an interview with a victim of drug abuse, he stated the following about the government providing treatment for the victims of drug abuse:

The opportunity to provide treatment for those who have been victimized by drug abuse has helped many individuals to recover fully with minimal risk of relapse. I was taken up from loitering the streets by a lady who presented me to the children's officer from where I was taken to a governmental rehabilitation center that had just been built up. The facility provided me with the treatment that I so needed to heal the wounds that I had inflicted on myself under the influence of bhang and alcohol. There was also provision of a comfortable space through which one could express themselves to professionals who ensured that I learnt how to express my fears and concerns with the provision of confidentiality at a maximum level. The facility was majorly run using government funds and partly depended on well-wishers. The provision of treatment by the government has thus helped many like me to recover from the addictive drug and substance abuse (interview with a victim, 5th April, 2023).

Rehabilitation of people with substance use disorders helps minimize or slow down the effects of the chronic health conditions resulting from drug abuse. These include cardiovascular diseases, cancers, diabetes, and respiratory problems by equipping the victims with self-management strategies and the assistive products required (Barako, 2023). It is also at the rehabilitation centers that pain and other complications are addressed. The rehabilitation process for treatment and recovery from substance use disorders also ensures the build-up of the body's strength and the adjustment to changes in function due to failure to use addictive substances. The process further includes re-learning necessary skills.

Rehabilitation centers that have been set up in Mombasa and Kilifi have ensured that the victims of substance abuse seeking treatment are well-catered to ensure recovery and integration back into society (Ouma & Wathuta, 2019). Since treatment for substance use disorders often requires

continued care for effectiveness, the condition is chronic, with the potential for both recovery and relapse. As such intense care has been provided in the rehabilitation centers to ensure minimal cases of relapse (Kambaga & Omare, 2023). In addition, people with substance use disorders often have co-occurring mental health conditions, which in this case, should be treated together rather than separately for the general good of the patient. Therefore, different forms of treatment are included for the recovery journey's success.

Detoxification is one of the three main forms of treatment. The patient stops or is made to stop taking the addictive substance(s), allowing their concentration in the body to reduce. This first step's effectiveness depends on the severity of the substance use disorder (Evers, 2020). The substance or an alternative may therefore be tapered off. The reason behind the tapering is to reduce the effects of withdrawal from the substance itself. The process of detoxification is thus the first major step of treating a substance use disorder, where the patient can go through the process in both inpatient and outpatient settings, considering that there are different treatment settings.

Psychotherapy, a major form of treatment, has also been employed in the fight against drug and substance abuse. It is also known as talk therapy and has been directed to the victims of drug and substance abuse effects individuals, families, and communities (Lwembe *et al.*, 2023). Psychotherapy can help treat substance use disorders and other co-occurring mental health problems. Healthcare providers may recommend cognitive and behavioral therapies. They could be done singly or combined with medications. Therapy is important as it teaches individuals about healthy coping mechanisms (Lwembe *et al.*, 2023). There have been different types of therapies, including cognitive behavioral therapy, dialectical behavioral therapy, assertive community treatment, and contingency management.

Medication-assisted therapies have also been part of the treatment plans for persons with substance use disorders. Without the medication in place, it is almost impossible to achieve total recovery. The medications are important for modifying the brain chemistry to help treat some disorders by relieving cravings and withdrawal symptoms (Lwembe *et al.*, 2023). Considering everything, setting up rehabilitation centers in Mombasa and Kilifi has been a crucial part of treating and recovering persons with substance use disorders. Such an occurrence has therefore been a chef-d'oeuvre in the fight by the government against drug and substance abuse in the region.

The rehabilitation centers have an important role in creating awareness works. They work alongside teams of volunteers in Mombasa and Kilifi, where they carry out numerous outreach walks in the areas where drug users have been known to spend their time. Since dealing with drug users requires a great deal of maturity and strength, there has been a set minimum age limit to join such a program; the reason behind it is having to deal with users of hard drugs and witnessing people injecting themselves with drugs. In this manner, rehabilitation centers enlighten drug users on the importance of a drug-free life (Kaluku, 2020).

Furthermore, the rehabilitation centers have been key agents in finding new valued roles within the coastal region. The services employed in the restoration, reintegration, and return of drug and substance abusers to normal lives that are independent of such addictions (Juma & Githigaro, 2021) have created a crucial channel in the discovery of the abilities and capabilities within them. After achieving a full physical, social, and psychological capacity, it has been easy to find the talents previously blurred by drug abuse. The discovery of new roles among the restored people has been due to the monitoring programs (Mkutu & Opondo, 2021) and has provided

channels within which they can do meaningful work at the earliest time possible thus minimizing the chance of occurrence of drug abuse due to unemployment.

Rehabilitation centers in Mombasa and Kilifi have also been a vital part in the creation and strengthening of family bonds where they were broken. In situations where the prevalence of drug abuse among youth and teens has resulted from the gap between them and their families or parents, rehabilitation centers have been an important factor in the bonding process (Mkutu & Opondo, 2021). Drug rehabilitation centers, in particular, employ comprehensive methods that make recovering from drug addiction a bonding and healing experience for families. The education provided to the family of the patient about addiction and recovery can help them provide better support for their member's recovery. There has consequently been a better approach to how family members deal with their affected ones in the recovery process with the help of rehabilitation centers in Mombasa and Kilifi.

Improving the quality of life has been another of the major roles played by rehabilitation centers in the coastal region. The occupational, speech, and physical therapy in the rehabilitation process serve a unique purpose in helping the patient attain full recovery and return to a healthy and active lifestyle. The services are coupled with the provision of counseling by experts present in the rehabilitation facilities (Agutu *et al.*, 2021). The patients will thus gain a sense of direction in life for the future, resilience, and life management skills, leading to an improved life after full recovery.

6.2.8 Extensive research on drug and substance abuse

The results as indicated in Table 6.1 show that 254 (66.15%) of the respondents believed that there is extensive research resulting from the drugs and substance abuse in Kilifi and Mombasa

Counties. The rampant spread of drug and substance abuse has led to the building of research bodies in the coastal region. Extensive research on some factors that have directly contributed to or caused these researchers has carried out drug abuse. The research carried out by these bodies has been based on such areas as what type of drugs are abused, who are the people abusing the drugs, and what has caused these people to abuse drugs. Organizations like the National Authority for the Campaign against Alcohol and Drug Abuse have conducted a baseline research and survey on the status of alcohol and drug abuse in the coastal region. The research has involved practical tests such as serology for accuracy in the reports. It has also provided reports on how drug abuse is a serious problem along the coastal region and the resources or possible treatment methods available for the drug abusers.

The presence of research bodies and organizations dedicated to studying drug abuse in the coastal region highlights a commitment to finding effective solutions. The research conducted delves into crucial aspects such as the types of drugs abused, the demographics of drug abusers, and the underlying causes. This wealth of information provides a foundation for developing targeted interventions, treatment methods, and resources for drug abusers. By leveraging the knowledge gained from research, policymakers, healthcare professionals, and community stakeholders can collaborate to implement evidence-based strategies that combat drug abuse effectively.

Research has proven to be an important tool in the realization of a multiple of aspects relating to drug and other substance abuse. In an interview a NACADA official, he pointed out that:

Drug and substance abuse poses many threats to society in various aspects including the social, economic, and political life of the county. The previous lack of knowledge on drug abuse hampered the effectivity of the fight against the same. The reason behind this was that such aspects as the causes, effects, resulting challenges and effective ways of dealing with the

menace had not yet been as widely studied as they have been today. A lot of research has been carried out on drug and substance abuse thus enabling the government and other stakeholders to effectively enforce the strategies put in place against the peril of drug abuse. As such, research is seen as an enabling factor that has positively influenced the efforts put in place towards the eradication of the practice. It is the tool that has enabled many people to become aware of the danger that lurks behind drug abuse as exhibited in its effects (Interview with head of NACADA offices, 28th March, 2023).

The use of research as a weapon against drug and substance abuse was further supported by the local administrative chiefs. There was a chief who uttered the following:

The problem of drug abuse has been felt not only by the abusers but also by their close ones together with the community at large. This has been proven by research. Research has been key in the various discoveries that have been made concerning drug and substance abuse. It has been a vital factor as many people have embarked on it leading to the birth of the many control factors that have been put in place today. Research has ensured that creation of awareness on drug and substance abuse is key in the prevention of initiation of the practice among teens and the youth. In other cases, research on drug and other substance abuse has enabled the discovery of the most vulnerable groups of individuals ensuring that they are reached out to for the purpose of the avoidance of the growth of the menace. Research is therefore a great tool for the fight against drug abuse since there has also been many evolving and modern ways through which drugs are being trafficked. The dealers in this murky business have also developed new hiding dens which can only be discovered and exposed through research for the appropriate action to be taken (Interview with the administrative chiefs, 27th March, 2023).

The research conducted in the coastal region has shown that most of the people who abuse drugs are the youth at the secondary school level. Evidence has shown that adolescence is a vulnerable developmental period where most youths end up in alcohol and other addictive substance experimentation. Another group of people abusing drugs in Mombasa and Kilifi has been pregnant teen girls and young women due to unpreparedness for the new responsibilities awaiting them and the stresses resulting from pregnancy (Mburu *et al.*, 2020). The results have also shown that youth outside school are also victims of drug abuse (Khoza & Shilubane, 2021). Drug abuse has also been a problem among university students; some engage in poly-drug use

(Budambula *et al.*, 2020). These groups are thus the targets of the measures to control drug abuse.

Several factors have been attributed to the prevalence of drug and substance abuse along Kenya's coastal region, particularly Mombasa and Kilifi. Such causes include poor parental monitoring along the coastal region, family history of substance abuse, favorable parental attitudes toward peers, and parents towards drug and substance abuse. Parental drug and substance abuse has been key in the rampant spread of malpractice (Khoza & Shilubane, 2021). Research reports have also proved that drug abuse had been a consequence of association with drug and other substance use peers and a method of coping with daily life stressors. As a result, research is an important tool in discovering the causes of drug and substance abuse along the coastal region.

The research conducted along the coastal region has resulted in exposure to the negative effects of drug and substance abuse thus enabling communities to understand the seriousness of the problem. The vice has resulted in a lot more disadvantages than advantages in society. The groups abusing drugs tend to have a higher rate of suicidal ideations than those who do not (Masha, 2022). There have been numerous physical and mental health problems among drug abusers, coupled with their becoming marginalized in the community. Drug abuse has also been a cause of crime and violence in the coastal region (Mkutu Agade *et al.*, 2021). The victims of drug abuse are isolated and discriminated against in both Mombasa and Kilifi. There has also been gender-based violence against women who abuse drugs in the coastal region (Otanga *et al.*, 2020). Truancy declined academic performance, and the spread of diseases such as HIV/AIDS (Jeneby *et al.*, 2020) and Hepatitis C have been reported by analysts such as Simone Haysom.

Research in Mombasa and Kilifi has been important in realizing the types of drugs abused and for what reason the abusers use them. The two counties are among the leading ones in analyzing

areas where there have been cases of illicit and licit drug use (Khoza & Shilubane, 2021). The illicit drugs abused in Mombasa and Kilifi include heroin, cocaine, local brew, and bhang. Licit drugs abused along the coast are tobacco, khat, and alcohol, that is, beer, wines, and spirits (Makokha *et al.*, 2021). The abuse of these drugs has led to actions that negatively affect the abusers at an individual, family, and community level, as shown by the extensive research carried out along the coast.

Research programs on alcohol and drug abuse have been conducted by the county governments of Mombasa and Kilifi in collaboration with NACADA have enabled the communities to implement research-based prevention programs against drug abuse. Research provides these communities with information on the resources and treatment methods or protective factors (Ssewanyana *et al.*, 2020) that are available for drug abusers. The research bodies enhance the community's identification, assessment of needs, and motivation to take action. The extensive research has, as a result, widely enabled the coastal communities to understand the causes of drug abuse, drug abusers, types of drugs abused, the effects (Jeneby *et al.*, 2020), and the curbing measures that can be taken against the same.

6.2.9 Participation of Religious Institutions in Activities against Drugs and Substance Abuse

As shown in Table 6.1, 302 (78.65%) of the respondents pointed out that religious groups have been actively involved in drugs and substance abuse mitigation, and this is a positive note, thus, an opportunity.

Different religious groups in Kenya's coastal region have come together to fight alcohol and drug abuse that has become a daily practice in counties like Mombasa and Kilifi. Christian and Muslim Clerics in particular have mobilized religious support to assist the Mombasa and Kilifi

governments in the fight. Studies have further supported this in that religion is a central pillar in promoting the various factors that provide a firm foundation upon which ridding or reducing drug and substance abuse can be achieved. For instance, religion in controlling drug and substance abuse has helped reduce suicidal cases in Mombasa and Kilifi (Memiah *et al.*, 2022). Thus, the use of religion along the coast has widely contributed to a positive influence in controlling the menace of alcohol and drug abuse.

The effort of religion in the fight against drug abuse was brought out during an interview with the religious leaders of the region. One of the religious leaders stated the following:

Religion is an important aspect of society through which people, through spiritual beliefs, are able to stick to what is morally upright for their good as well as that of other individuals. In the religious setup, there have been many sessions that have been held for people in different age brackets equipping them with teachings of upright living. In this case, religion has also involved the issue of drug abuse in their teachings as the problem is presently escalating. Different religious leaders have also mobilized support from the people to assist in the fight against drug abuse. This has involved the re-incorporation of the victims of drug abuse back into the society for instance when they finally leave rehabilitation centers to ensure that they do not relapse into the practice of drug abuse (Interview with religious leaders, 27th March, 2023).

The same was seconded by the village elders where one stated that:

Drug abuse is seen as one of the major threats that society faces today. In the attempt to fight against it, religion has provided refuge for the victims who have recovered and those willing to change from being drug abusers to those free from the habit. Religious leaders have proved to be individuals important in the fight against drug abuse by the oneness with which they have joined together to ensure that there is positive flow toward the solution for drug abuse. Their teachings have always focused on guidance that provides way through which the people can avoid engaging in practices that are harmful either to themselves or their families. For instance, religion is against drug abuse. It is also against actions that involve violence and the infliction of pain onto other individuals intentionally. The excessive consumption of alcohol promotes these actions of violence. So being the case, religion has enabled and continues to ensure that more individuals resist the temptation to venture into alcohol consumption (FGD with village elders, 29th March, 2023).

The use of religion in preventing and treating substance abuse is well established along the coastal region of Kenya. Faith-based organizations in Mombasa and Kilifi have partnered with other organizations, such as (Nyongesa *et al.*, 2021). Fostering these relationships through government funding coupled with local support from other people has reduced alcohol and drug abuse in both counties. The success has resulted from the fact that alcohol and substance abuse problems must be understood from various perspectives, which refer to social, economic, health, and spiritual problems.

More so, religion has been an important protective factor against drug and substance abuse in Mombasa and Kilifi. Religious leaders are a group of people who are unlikely to take part in the abuse of drugs thus, also unlikely to experience their negative effects. There has been a great advantage for them in the fight against drug abuse as they can exert massive influence against the menace. The leaders have been crucial in establishing moral order in Mombasa and Kilifi with the help of law enforcement (Jeneby *et al.*, 2020). Christian and Muslim women groups have also intensified their fight against drug and substance abuse. Consequently, in the situation where substance abuse, especially among the youths, has been on the rise, faith-based organizations have had an opportunity to play in society as part of the fight against the abuse of drugs.

Research has also proved that religious groups have been vital in protecting and recovering from drug and substance abuse. The report has its basis in the fact that youths who engage in faith group activities or other religious-related activities are unlikely to use or abuse drugs. On the contrary, youth who do not have religious beliefs central in their lives are more likely to engage in such practices as marijuana, smoking, and alcohol binging. The role of religion in recovery has mainly been based on the counseling services and the victims being provided with sponsors or friends whom they can look up to as good examples (Masha, 2022). It has greatly taken part in

recovery from opioid use and reduced HIV/AIDS transmission in both Mombasa and Kilifi (Jaguga *et al.*, 2022). Therefore, religion has created a great opportunity for which the youth are protected from the attempt to engage in alcohol and other drug abuse.

Furthermore, religion has provided primary and secondary education in Mombasa and Kilifi. It is through the large network of learning institutions that drug and substance abuse has been campaigned against. The church and mosque pastoral programs teach students the importance of refraining from such practices as drug abuse (Chriswa *et al.*, 2022). The schools have been established in Muslim mosques and some Christian churches in these counties. The thousands of students who pursue their education in these institutions have escaped the menace of drug abuse. In Christianity, for instance, the role of a Christian is not only concentrated on the spiritual well-being of communities but also their other needs. As a result, fighting against drug abuse has been a role accomplished.

It has also been the role of religion to shift the people's focus from punishment to treatment and prevention of drug and substance abuse. There has been the provision of spaces essential for drug abusers to seek help and get the services necessary for their recovery, return, and re-incorporation back into society. The belief in the possibility of modifying the behavior of individuals and communities has enabled different religious groups to control drug abuse actively. They encourage the community to accept the recovering victims and treat them as equal members of society without discrimination based on their past behavior (Mburu *et al.*, 2018). The support given to religious groups, including leadership training opportunities and resources for religious leaders and congregations, has helped them with counseling programs, thus effectively controlling drug and substance abuse.

6.2.10 Creation of Specific Rehabilitation Centers for Children

Rehabilitation centers are important for the provision of treatment and the recovery of the victims of drug and substance abuse. Rehabilitation centers can be government sponsored or owned privately by individuals or groups of individuals with recognition by the government (Reamer, 2022). It is in these centers that the victimized obtain intensive treatment as well as training on how to sustainably live without the use of drugs. The activities of rehabilitation centers are indispensable and well recognized in the fight against drug and substance abuse in Mombasa and Kilifi and countrywide. They therefore play a vital role in the recovery process of individuals together with the support that they have provided in other activities pertaining to the fight against drug abuse. Such activities have included the creation of awareness among the vulnerable groups in the coastal region of the country as well as in other parts.

The recognition and acknowledgment of the importance of rehabilitation centers by the government and society provide a foundation for investment and collaboration in this area. Through these centers, individuals affected by drug abuse can receive intensive treatment, learn essential skills for sustained recovery, and reintegrate into society. Additionally, rehabilitation centers have the potential to contribute to the creation of awareness and prevention efforts in vulnerable communities, fostering a culture of resilience and support. The existence and utilization of these centers as part of the fight against drug abuse highlight the opportunity to make a positive impact on individuals and communities in need.

As posited by the global health body, WHO, rehabilitation is a vital part of universal health alongside the promotion of good health, disease prevention, treatment and palliative care. Rehabilitation aids a person to be independent as possible in his undertakings and enables robust participation in education, work and recreation. In light of this, drugs and substance abuse has

and continue to pose serious health challenges globally. In response, governments across the world, especially those affected by the menace have scaled up rehabilitation programs that target both the young and adults who are hooked on drugs. Given the surge in population as well as the increased demand for rehabilitation services, non-governmental organizations have also stepped in to address the menace.

Rehabilitation centers, however, face many challenges in the process of the provision of their services. In this case, the challenge of hosting children in the same centers as adults is addressed. Children and teens who are victims of drug and substance abuse are often placed in the same centers with the adult victims. There have not been distinct centers specifically set aside for the children. This has made these young victims coexist with the adults making it a challenge in the provision of care. In the process of fighting against drugs and other addictive substances, the government has discovered that there is this gap in the rehabilitation centers where children and adults could be provided with sufficient care had they been put in different centers (Mroz & Roszak, 2022).

The idea of the separation of children and teen centers from those of adults was greatly supported by a NACADA official who articulated the following:

Rehabilitation centers have been improved in various ways to ensure that all the needs of the patients, who are the victims of drug and substance abuse, are catered for. This has included both the major and minor requirements that encompass all the needs of these people. The idea of separation of children and teens from adults in the rehabilitation centers has however neither been implemented nor considered in many cases thus has not been fully achieved. This has been a challenge in the provision of care and treatment to the two groups of victims due to the age difference and thus the different requirements for the two. Separation is therefore bound to ensure that success is experienced in the process of treatment and recovery in the two groups as it will be much easier to cater to their needs with absolute effect (Interview with head of NACADA offices, 27th March, 2023).

He was seconded by Mombasa CEC Health, who opined that:

Rehabilitation centers have been key in the fight against drug and substance abuse. This is because they have been the element of provision of treatment, clinical therapy, and but not limited to the advice and moral support given to the patients in the long journey towards recovery from the addiction to drugs and other substances. However, children being taken to the same rehabilitation centers as adults has brought along with many challenges which have been a barrier to the fight against drug and substance abuse. The creation of separate centers for these two different groups of individuals will enhance the quality of care provided to them. The government and other stakeholders should therefore aim at separating the two for the purpose of the effectivity of the activities of rehabilitation centers towards the defeat of the peril of drug and substance abuse in the coastal region of the country (Interview with Mombasa CEC health, 23rd March, 2023).

Existence of rehabilitations in Kilifi and Mombasa Counties is of great importance to the residence as it helps them in fighting drug abuse among the addicts in the region. It is in prime interest to the community in the region that government has been operationalizing specific types of rehabilitations for the underage addicts. The roles of specific rehabilitation centers have been identified by the house heads in Kilifi and Mombasa counties as an opportunity among them.

The study found that there were several rehabilitation centres established in both Mombasa and Kilifi Counties to address the menace of drugs and substance abuse. It also found that some of these centres were engaged in treatment, counselling and community outreach programs to address the persistent stigmatisation of the victims and shelter them after the completion of rehabilitation. The study also found that these centres combined children and adults, which was becoming an emerging challenge. This was revealed during an interview with one of the key informants at MEWA. She had this to say;

Our key mandate is to rehabilitate through counselling, treatment and conducting follow-up to our patients. This centre hosts both children and adults and we find it difficult to manage it since certain drugs are still being smuggled by unknown people. This is quite unfortunate since certain children get hooked on drugs while in the centre. However, to remedy the situation, we are working with our partners

to establish a separate centre for children to prevent further abuse of drugs (Interview, Non-governmental official, 5th April, 2023).

The respondent revealed the ineffectiveness of rehabilitation centres and suggested an increase in the establishment of separate centres to handle specific age groups. Accordingly, the study found that specific rehabilitation centres for children were running and rendering their services to children who have fallen prey to drugs and substance abuse. Again, they were working closely with the government to help them identify these children both in Mombasa and Kilifi. Since their inception, they have worked tirelessly and have managed to rehabilitate hundreds from the yoke of drugs, and thus they needed separate sections for each gender as well as for adults and children.

During interview with NACADA officials, one of them revealed how rehabilitations curtailed the war against drug abuse in the region. Here is what he portrayed during interview:

For a long time, rehabilitation centers have been thought to be a good place where adults and children who are addicted can interact freely. No one had thought of a harm that such children were being exposed to. In most cases adults in rehabilitation centers conduct themselves without considering there are some minors among them. The minors are therefore exposed to immorality such as homosexuality, use of vulgar language or even get sexually abused. The underage addicts might try to practice what they experience there and therefore it can be argued that they come out of rehabilitation centers being worse than they were (Interview with NACADA official, 27th March, 2023).

There is need to separate children from adults in all rehabilitations if at all the government want to attain its aim of fighting drug abuse. For a long time, children who are addicts have been taken to the same rehabilitation centers with adults who take opportunity of their naivety (Nyongesa *et al.*, 2021). Even though children who are taken to those rehabilitations might quit drugs they end up learning more toxic behaviors from adults. This necessitates the effort of the government and some NGO in establishing specialized rehabilitation centers for the underage addicts. Mkutu

Agade *et al.*, (2021) that government has to do all it can to save the future of the children. This includes ensuring they are not exposed to toxic environment which might alter their conducts. Once they go back to school, they end up teaching their fellow students and these forms the basis of a rotten society.

During interview with County Education Officer, he revealed the following in relation with rehabilitations:

We have been experiencing a lot of challenges while dealing with children from rehabilitations centers because they come back from the rehab more experienced than they were before. It makes it difficult for the teacher to handle them because they are not sure to treat them as adult or children. Due to the experience with adults in rehabilitations, those children come back with a lot of courage and disrespect to the teacher because where they were they were treated as adults. Some children also come back to us looking more traumatized because of what they experience in those rehabilitations in the case we tend to view rehabilitations to be more harmful to children. However, the current establishment of specific rehabilitations for the children means that it will be able to expose them to what their age allows and minimize the harmful behaviors that they get when they interact with adults (Interview with County Education Officer, 2st April, 2023).

Putting children in the same rehabilitation centers as adults exposes them to various risk factors that obscure their treatment and recovery process. Rehabilitation is important as it helps individuals to be as independent as possible in everyday activities and enables participation in education and other meaningful roles in society. The recovery of children and the youths has been facing a major challenge as a result of being placed in the same centers as adults. Their placement in rehabilitation centers with adults has exposed them to a number of emotional and physical problems. This has come about as a challenge to the government where the government is now expected to create specific centers that will be set aside for the rehabilitation of children (Mroz & Roszak, 2022).

Treatment and other therapeutic care that is given to the victims of drug abuse in rehabilitation centers has been deemed to be rendered ineffective due to the use of the same centers for both adults and children. For affectivity of the care provided to the victims, there is the need to use different methods for the treatment of adults and children. Rehabilitation centers should therefore have specific strategies put in place for the treatment of adults and those for children (Mroz & Roszak, 2022). Whenever possible, the centers should be specific either for adults or for children. The distinction between the two will ensure that the highest number possible attains full recovery.

The danger of the children being exposed to emotional problems has not been side-lined in this case. The age of initiation into drug and substance abuse has been as young as 7 years old children. As a result, there have been a high number of children being presented in the rehabilitation centers which also house adult victims of drug abuse for the purpose of treatment of the developed addictions. It is somewhat impossible for them to achieve full recovery in these centers. The success of the process is by far more achievable if the children are separated from the adults and taken care of in centers specifically set aside for them (Mroz & Roszak, 2022).

Furthermore, the provision of high-quality treatment is also limited due to the placement of children and adults in the same rehabilitation centers. The quality of treatment provided is low compared to the standard at which there is more likelihood of the achievement of full recovery. The failure to separate adults and children in these centers has therefore been a cause of the failure in the attempt to deliberate them victims from drug and substance abuse. There are new mannerisms that the children may acquire from the adult victims in the rehabilitation centers. These may include the introduction of behaviors related to drug abuse that the children may not

have experienced in their period of using drugs thus worsening the situation. It is therefore crucial that they be separated from adults.

The separation will ensure that children have their own providers of care, different from those involved with the adults. The specificity of the centers and the providers of care will be an effective strategy in ensuring that the care and learning provided is as intense as required with minimal distraction or mix-ups as would be when the care provider is involved in the cases of both the children and adults (Snyder & Duchschere, 2022). The reason behind this is that the care providers will have specific roles assigned to them thus high-quality care (Mroz & Roszak, 2022). The effectiveness of this strategy will be useful in the alleviation of such factors as relapse.

6.2.11 Reduction of Demand and Supply of Drugs

Drugs and substance abuse remains to be one of the major problems facing the coastal region of Kenya, causing a loss of productivity, increased health care and other social costs, increased crime rates, and loss of lives. The government employs both demand reduction and supply reduction strategies to try to deal with drug and substance abuse in counties within the coastal region. According to Vazirian (2003), efforts to reduce the demand for abused drugs and substances are an integration of activities that deal with prevention, treatment, and harm reduction. On the other hand, supply reduction is majorly through drug law enforcement. It is important for the government to put together a coordinated approach that combines both the drug demand reduction programs and the drug supply reduction programs in order to be successful in eradicating drug and substance abuse along the Kenyan coast. However, the best hope for reducing drug and substance abuse and its consequences in this region lies in a more developed, practical, and cost-efficient demand reduction strategy. In line with this, a series of measures and

activities that need to be employed in order to scale down the demand for drugs and substances of abuse are as revealed in this study.

The reduction of demand and supply of drugs in the coastal region of Kenya will substantially reduce the rate at which the menace is spreading countrywide. The demand of drugs has constantly risen with children as young as 8 years abusing alcohol. In general, 1 in 11 individuals are drug abusers in the region. The supply of drugs in Mombasa and Kilifi has consistently increased over the previous several years. The synergistic relationship between the demand and supply of drugs has led to the aggravation of the matter. With the increase in these two factors, the fight against drug and other substance abuse has almost been rendered an impaired endeavor.

The issue of reduction of demand and supply of drugs was supported by a MEWA official who explained the following:

The reduction of the demand and supply of drugs and other substances that influence the psychosocial factors in the day-to-day lives of individuals will create a society that is more liberated from the menace of drug and substance abuse. The high demand for drugs that is present in today's society continues to slowly eat up the support system of our communities depriving them of the so much needed energy for development especially because the most affected group is that of teens and the youths. The government and other stakeholders involved in the fight against drug abuse in this region of the country should ensure that more effort is put into the reduction of demand and supply of drugs as it is the root cause of the problem as a whole (Interview with Head of Selected NGOs, 13th April, 2023).

This was seconded by the Chairperson of County Security Committee, who is the county commissioner when he stated that:

Drug abuse has affected many aspects of the communities hindering the ability to grow and develop them. In this case, drug abuse has induced practices and norms that fall in the way of development blocking its potential of occurring. As such, drug abuse has to be controlled to ensure that other important aspects of the society proceed as they should without the hindrance resulting from such problems as drug abuse. To ensure this,

the high demand of drugs should be dealt with through the employment of various measures that will ensure effective reduction of it. As for supply, measures that have been enacted should be executed to the disadvantage of the opportunistic drug lords for the safety of the individuals who lack the knowledge, willpower and strength to say no to drugs majorly as a result of the already established addiction (Interview with the County Commissioner, 17th April, 2023).

The findings indicate majority of the respondents believe that demand reduction is an epitomical opportunity in curbing drug abuse within Kilifi and Mombasa Counties. This indicates that the residence of Kilifi and Mombasa counties have hopes that the measure put across by the government in an effort to alter the demand and supply of drugs will play vital role.

The findings of the study were echoed during an FGD with villagers from Ngerenya location, where one of them stated that:

Government has put across different measures to curb the demand of drug among the victims. A good example is creation of employment through various government programs such *Kazi kwa Vijana* and affordable housing. Such programs have employed a huge number of youths who there before use to spend their time idling around as they take drugs or even being used by the drug barons to work as distributors. However, currently the victims have no free time to think about drugs as they are busy working (FGD with village elders, 19th March, 2023).

The sentiments by the elder were emphasized by one of the victims that was interviewed at MEWA Kilifi county. The victim pointed out that:

Hapo awali tulikuwa na mda mwingi wa kuzurura mitaani kwa sababu hatukuwa na kazi yoyote. Lakini tangia serikali ije na mpango wa kazi kwa vijana huyo mda hatuupati sasa. Kila kukicha tunaamkia kazini kisha baadae tunalipwa na kutumia pesa hizo kununua vitu mbali manyumbani mwetu. Kwa sasa hata hatuna mda wakwenda kuwatafuta wauza madawa kwasababu mtu akitoka kazini amechoka mno inabidi apumzike kwanza. Before government came up with Kazi kwa vijana program we had a lot of free to walk around. However, these days we have no such time as we must go to work every morning so that we can get money to

meet our daily needs. We have no time to go looking for drugs because once we get out of job, we are already tired and one need to rest (Interview with a victim, 5th May, 2023).

Most of the youths find themselves abusing drugs due to the idleness, and therefore it is the mandate of the government to create activities which will keep them busy. According to Mwamuye (2022), government came up with *kazi kwa vijana* and affordable housing as a way of creating employment for the youths. This has played as significant role in keeping the youths engaged thus no time to think about drug. This kind of programs ensures that the youths have utilized their time positively in a way that they can benefit themselves and society in general. WHO (2017), indicated that idleness is a one of the factors that lead to drug abuse among the most of the youths in Africa where the rate of unemployment is ever increasing. The government has to do all it can to ensure that youths are not available for the drug barons who take that opportunity and turn them in to their market.

The study also found that that the respondents view that supply as an opportunity in the war against drug abuse. In this scenario the government comes up with measures to curb the supply of the drugs in the market. When the supply of drugs is halted the market become starved and this becomes a motivation to victims in their journey to recovery.

In an interview with County Commissioner from Kilifi County, he supported findings of this study and stated that:

Few years ago, it was easy for the drug barons to import drugs in Kenya through costal region of Mombasa and Kilifi. There was no proper regulation or checkup of the commodities that were being imported. The government has come with mechanism to curb importation and supply of the drugs in the market and good example being the escalation of security in the port and introduction of drug detective technologies as well as sniff dogs. With this mechanism we have seen tremendous achievement in the fight against drug abuse and even arresting of the suspects within the port (Interview with County Commissioner on 15th April, 2023).

The sentiment made by region commander is in tune with the finding made by Ssewanyana *et al.*, (2020) whom indicates that drug supply as an opportunity play significant role to fight drug abuse. When security in the port is enhanced, curbing importation of drugs into the coastal towns inconsequently promoted thus they become safe because any criminal activity is dealt with by security forces on time. This means that fight against drugs is not only beneficial to the victims but also to all residence because criminals have no chance to terrorize them (Memiah *et al.*, 2022). The economical activities are well conducted in the safe environment.

In an interview with administrative chief from Mtwapa, he emphasized on how the effort to curb supply of drug as an opportunity has enhanced security in the area. The Chief pointed out the following:

Government has increased security personnel in the costal part of Mombasa to cut the chain of supply of drugs. However, these police not only focus on drugs but also any criminal activities that could be conducted in their area of operation. This has created fear among the criminals that pushing them away from this region. With increased number of police with crime detective technologies crime has declined in Mombasa compared to other regions in coastal area. As a chief, crime rate in this location has as well gone down (Interview with the administrative chiefs, 28th March, 2023).

While conducting this research it was established that dealing with supply of drug is an opportunity to the society due to other beneficial impacts that tends to occur in the process. Among the opportunities is the cooperation of the security personnel with the residents with an aim to boost security and to curb the drug abuse (Mburu *et al.*, 2020). The cases of the theft have gone down because the drug addicts who were stealing from the locals so that they can buy drugs do not have a source of drugs. The case of relapse which was common in the past has also declined since the victims are forced by the circumstances to permanently quit drugs. Khoza & Shilubane (2021) indicates that drug abuse in Mombasa and Kilifi has been the consequences of

its availability. This suggests that creating shortage of drugs through curtailing its supplying is an effective means of reducing relapse and insecurity.

The study established that the high demand for drugs and substance abuse was due to the need to explore the usage of the emerging drugs as well as keeping the body running as was admitted in a focused group discussion. The respondents averred that they were curious to explore many drugs available in the market to ascertain their effectiveness in their bodies. Consequently, this has accelerated the consumption of emerging drugs and substances. To address the persistent problem of drugs and substance abuse, the government in collaboration with non-governmental organizations initiated a conglomeration of programs that were geared towards the reduction of drug consumption, especially among young people. Mombasa County hosts one of the largest ports in East and Central Africa. This makes it a soft spot for drug trafficking as well as an interconnected trade in illicit drugs which in turn has bolstered the supply chain of drugs thus, a high demand. The study established that the Kenya Ports Authority in liaison with the law enforcement officers and the locals initiated a program that targeted the arrest and execution of persons indulging in drugs. Since its launch, the program has seen the arrest of prominent drug traffickers and suppliers.

This was supported by the Kilifi County Commissioner who had this to say:

With the advent of globalization, the port of Mombasa has benefited tremendously from the flow of goods and services. However, it has fallen prey to illegal trade in drugs which has seen prominent persons indulging in the drug trafficking. This menace has intensified the continuous flow of unwanted drugs in this region. As government officials, we wanted to save young people from falling into the trap of this trade that has seen most of them leading a deplorable lifestyle. In this spirit, we launched the surveillance program to detect arrest and prosecute drug traffickers. I can say it has been largely effective despite the challenge of entrenched corruption. With these arrests and some

prosecutions, the demand for drugs in the region has slightly gone down (Interview with Kilifi County Commissioner, 4th April, 2023).

The increased demand for drugs and substance abuse in both Mombasa and Kilifi counties was also attributed to many young people who were hooked on the emerging drugs. The study found that despite the ongoing rehabilitation programs, there was no effective follow-up after the conclusion of the rehabilitation process. Victims were integrated into society with the view that they will completely shun drugs. On the contrary, they were still being lured into the networks that consumed drugs. Gladly, the government in collaboration with the other relevant stakeholders noted this challenge. Accordingly, programs like the massive recruitment to the National Youth Service have been intensified and tend to target young people who have been integrated into the community.

The foregoing was confirmed during a focused group discussion where chiefs asserted that there has been frequent recruitment and they make sure young people are offered the opportunity. This they argued was beneficial since it reduces the demand for drugs and substance abuse as the recruited youths become preoccupied with the activities of the Youth Service. Similarly, other stakeholders, especially non-profit organizations have also designed programs that target young people. The study found that among the programs were the conservation of the environment through garbage collection, tree planting and recreational activities including swimming competitions. Notably, these among other programs are believed to be a game-changer in reducing the demand for drugs, especially among the youth. Indeed, the study established that these strategies have been successful despite the challenges.

During an interview, one of the beneficiaries stated that;

We young people are the most affected by the crisis of drugs and substance abuse. This is so because there exist many loopholes that allow the illicit trade of drugs in this region. Besides, the government used to neglect us as if we are not important. But today, I can attest that the robust programs ranging from the arrests and prosecution of drug traffickers, increased recreational activities and robust participation of young people in community-driven initiatives have seen a reduction in demand for drugs. I used to abuse drugs but since I was rehabilitated and recruited to NYS, I forgot about drugs (Interview with victims, 28th March, 2023).

The issue of demand and supply in the drug trafficking and abuse aspect is more inclined and almost similar to the principles of demand and supply in business. Demand and supply are interlinked factors where the rise on demand will influence the rise of the supply with its fall equally causing the fall of supply (Susanna & Basher, 2022). In this manner, the demand and supply of drugs is a crucial part in dealing with the menace of drug and substance abuse. This is because it is the basis of drug and substance abuse where its control and reduction will eventually lead to the solution of the maze posed by drug and substance abuse.

The rehabilitation centers are a vital part in the reduction of demand for drugs. However, this can only be achieved through the use of strategies that are aimed at reducing the demand for drugs thus weakening the drug business as a whole. Rehabilitation centers should also reduce the price for admission of the victim patients to create enough opportunities for the effectivity of the demand reduction strategies (Wani *et al.*, 2022). This is because when the demand for a certain commodity, which in this case refers to the drugs or other substances that can be abused, is reduced, the sellers, who are the drug dealers, will be faced with the problem of lack of consumers for their products. This will eventually lead to the collapse of the business or better described, its demise.

The various strategies that rehabilitation centers can use in the reduction of the demand for drugs and other addictive substances includes the intensive creation of awareness among various

groups of individuals who are vulnerable, the individuals undergoing treatment, and the society members as a whole. The creation of awareness will ensure that individuals are well exposed to the repercussions resulting from drug and substance abuse (Cole, 2022). People who are well equipped with enough knowledge on the negative effects of drug abuse thus the reasons as to why they should not be taken are more likely to abstain from drug abuse thus reducing the demand for drugs.

The provision of vocational training services in rehabilitation centers is another strategy that can be and has been employed as a way of fighting drug and substance abuse. In the case of demand for drugs, vocational training provides the victims of drug and substance abuse with the necessary skills for them to acquire jobs thus rendering them busy which consequently reduces drug demand (Zastrow & Hessenauer, 2022). The individuals are enabled to acquire jobs, a factor which denies them time to think about drugs which would make the relapse into their old practices thus increase the demand for drugs. The presence of a solid source of income that is acquired through the means of vocational training also ensures that the recovered victims are able to meet their needs hence do not have to turn to drugs as a method of dealing with the problem of lack and want. This further reduces the demand for drugs.

Rehabilitation centers should also work on ensuring that the people who have attained full recovery are relocated from the areas that they were previously residing in. The relocation will ensure that the individuals are not taken back to the same environs that stimulated the initiation of their actions drug and substance abuse (Gossop *et al.*, 2003). In the new areas, they will acquire new friends and the process of adapting will keep the occupied thus no chance to relapse into drug use and abuse. Coupled with this, rehabilitation centers should follow-up on the progress of the individuals who have already recovered as a way of ensuring that they do not fall

back into the temptation to engage in drug abuse. All of these practices will reduce the demand of drugs thus a great opportunity by the government and other related groups and individuals to fight the menace of drug and substance abuse.

The issue of supply also influences the growth and spread of the menace. In this case, various methods should be put in place to ensure that the high supply of drugs and other addictive substances is controlled, reduced, and whenever possible, brought to a halt (Glegg *et al.*, 2022). To reduce supply, the government should employ various strategies through which to deal with the drug traffickers and their activities of transportation and distribution of drugs and other addictive substances. The government should close the ports of entry for the drugs or ensure that the searches are conducted thoroughly to prevent any chances of drug entry into the counties of Mombasa and Kilifi and thus the country. The traffickers and other drug dealers should also have heavy fines imposed on them including sentences into jail terms equivalent to their offences with heavy punishments to reduce the number of drug suppliers. This will enable the government to seal the present loopholes and reduce the availability of the drugs thus an important aspect in the fight against drug abuse.

One of the most significant ways of reducing drug demand in the coastal region of Kenya is by reducing the supply of these drugs and substances. However, unlike drug demand reduction, drug supply reduction cannot be used solely as a means of curbing drug and substance abuse. This is because the supply reduction strategy might fail to put a stop to drug and substance abuse since most of the drug abusers are overly addicted. Hence, they will do anything to continue using these drugs and substances (National Research Council, 2001). No matter how efficient the drug supply strategy can be, if drug demand persists, then the abusers would still be able to spend large amounts of money that would sustain a large supply of illegal drugs and substances.

Despite this fact, drug supply reduction continues to be an efficient tool for drug demand reduction. Drug supply reduction makes drugs more difficult to obtain, more expensive, and less accepted by society. Consequently, when drugs become more expensive and harder to find, the number of drug users decreases and so does the demand for these drugs and substances.

Preliminary studies have shown that drug supply reduction strategy is commonly treated as similar to drug law enforcement (National Research Council, 2001). Previous reviews have also indicated that drug supply reduction usually involves efforts to interrupt the production, manufacturing, and distribution chains for these drugs and substances, by both civilian and military enforcement of the law (Roberts *et al.*, 2004). The government of Kenya should therefore strengthen the capacity of national law enforcement agencies to reduce and eventually stamp out the supply of illicit drugs and substances.

Since counties in the coastal region of Kenya are open to maritime transport between port cities located along the Indian Ocean, this region may serve as a conduit for drug trafficking and related crime and conflict across the ports. For this reason, disruption of production and distribution chains, and removal of suppliers of the abused drugs and substances, their financiers and infrastructure through targeted policy instruments should be done both locally and internationally. With regards to law enforcement, policing operations that the government together with lead agencies may employ include crop eradication, interdiction, domestic enforcement, and administrative and informal sanctions. In addition to that, the government should up-schedule the most abused medicinal substances to prescription-only or controlled medications. Moreover, for the sake of legal substances such as tobacco and alcohol, the government should control or restrict drugs at the country's borders, enforce a minimum purchasing age, put restrictions on operating hours for venues supplying alcohol, and put

restrictions on the number of drinks and minimum size of cigarettes that can be purchased at one time. Finally, for the prohibited substances, the government should enhance law enforcement operations involving drug seizures and arrests of drug abusers, traffickers and drug lords. Bypasses of the precursor chemicals that are used in the manufacture of illicit drugs and substances should also be disrupted to prevent manufacture. In brief, drug supply reduction will make the abused drugs and substances unavailable to their users who will eventually stop looking for these drugs hence lowering drug demand. Drug demand reduction will then lower drug supply correspondingly as there will be no market for the drugs and hence the two complement one another.

Equally important, preventive strategies are also effective in lowering drug demand among the people living in the coastal region of Kenya. The main aim of these prevention strategies is to strengthen the protective factors that decrease the potential for drug and substance abuse such as full-grown interpersonal skills, robust family ties, school connectedness, and active participation in community based and faith-based organizations, while reducing the risk factors that increase vulnerability to drug and substance abuse. According to previous research, the risk factors that increase vulnerability to drug and substance abuse include drug abuse by a parent, lack of parental guidance, an abusive family, lack of school connectedness, early experimentation with drugs, and living in a community where drug and substance abuse is prevalent (Center for Substance Abuse Prevention, Monograph, 1999). The studies further suggest that even in high risk, resilience is an important factor as most individuals are able to resist drugs. The first prevention measure that the government and other stakeholders should employ is educating the young population on this issue of drug and substance abuse in schools around the coastal region, beginning from an early age. Effectual school programs educate the young population on how to

resist drugs by enhancing their communication skills, interpersonal relationships, decision making, stress management, and conflict resolution. These programs also teach the students how to recognize and combat peer influence on drug and substance abuse. Provided that students are sensitized in this manner, they will be more proficient in resisting the pressure to use illicit drugs and substances (Drug Strategies, 1999). Consequently, drug demand will reduce.

Second, the government should ensure that prevention programs are also targeted towards individuals at high risk for drug and substance abuse who may not be reached by the universal prevention services offered in schools and other community settings around the coastal region. Individuals at high risk include children of drug abusers, people who have experienced physical, emotional or sexual abuse, adolescents in deviant peer relationships, pregnant teens, and juvenile offenders. According to the Center for Substance Abuse Prevention, Monograph (1999), programs such as house visits and provision of guiding and counseling services will promote resilience and enhance strengths amongst these individuals. This will therefore lower their demand for drugs and substances of abuse. Third, the government together with other stakeholders should empower the communities living in the coastal region so that they can address this challenge of drug and substance abuse through community-led initiatives. Community stakeholders including the residents of the coastal region, community leaders, business leaders, service providers, mentors, government officials, and law enforcement officers should form community coalitions and put together resources for the purpose of addressing this issue. According to previous research, community empowerment directs individuals on ways to participate in communal activities in order to experience substantial social connectedness and curtailment of negative outcome behaviors including drug and substance abuse (Christens *et al.*, 2013).

Another prevention strategy that the government may use to decrease drug demand in the coastal region is building family bonds. Parents are important role models to their children. They can provide necessary guidance to their children on drug and substance abuse through words and actions. Parents play a critical role in preventing drug and substance abuse within the family and also in cooperation with schools and social groups. Previous studies have indicated that the more often parents talk to their children about the hazards of illicit drugs and substances, the less likely the children will use these substances (PRIDE Survey, 1997). The government should therefore provide family-based prevention programs to train and sustain families who are trying to keep their children free from drug and substance abuse. These programs help family members improve their interpersonal relationships and enhance emotional self-regulation skills with the aim of developing cordial families based on positive parent-child interactions (Kumpfer & Hansen, 2014). The main objective of these programs is to promote positive behaviors among the youth by reducing major risk factors and enhancing protective factors and resilience (Kumpfer & Alvarado, 2003). Therefore, these programs will deter the youth from using substances of abuse thus lowering drug demand.

In addition, another effective way through which the government can reduce drug demand in the coastal region of Kenya is through substance abuse treatment. With treatment, the patients can withdraw from using drugs, acquire employment opportunities, and become productive members of the society. The first treatment approach that the government in collaboration with other agencies can employ is family-based treatment. Treating a parent who is an addict means prevention of the child from substance abuse. Preliminary investigations have shown that if parents who are addicts receive substance abuse treatment, their children will have lower health care costs compared to those whose parents do not receive treatment (Lennox *et al.*, 1992).

Besides, children of untreated addicts are at strikingly higher risk of abusing drugs and substances themselves. Therefore, affordable treatment services should be made accessible to parents and their children in order to stop the intergenerational cycle of drug and substance abuse in counties within the coastal region.

Most importantly, the government together with other lead agencies should set up rehabilitation programs for effective treatment of individuals affected by drug and substance abuse in the coastal region. According to NACADA, there are many rehabilitation facilities in this region that provide addiction treatment services to patients. These rehabilitation centers provide extensive psychotherapy which aims to put to rights the drug-seeking behaviors among the patients, acquaint them with better coping mechanisms, and teach them essential skills that will help prevent them from relapsing.

Furthermore, criminal offenders under the influence of drug and substance abuse should also be rehabilitated. If released without treatment, these individuals will be rearrested later due to crimes related to substance abuse. Therefore, the government should put into practice programs that segregate these criminal offenders from the general prison and provide them with treatment services. Moreover, these offenders should not be returned to the general prison environment after treatment due to their multiple risk factors for relapse. In line with this treatment approach, the government should establish separate rehabilitation facilities that cater for children only. This is because when addicted children are taken to the same rehabilitation center with addicted adults, they end up being more messed up than the way they were due to their vulnerability. This treatment approach will help change negative thinking and develop healthy coping skills among the patients and thus prevent them from the need to use illicit drugs and substances.

Lastly, the government should set up programs that connect the patients to the community to help them reenter the society and prevent relapse after treatment. The major contributors to relapse among drug addicts are coexisting mental problems, low socioeconomic status, and lack of family support. The government should therefore provide these individuals with vocational and educational training courses and offer them jobs after successful completion of these courses. Not only will this strategy prevent them from relapsing but also support them and prepare them for life back in the society when the structure and supervision of rehabilitation programs are no longer there to support them.

In conclusion, drug demand reduction programs should be integrated to enhance collaboration amongst key stakeholders to effectively promote health amongst people living in the coastal region and decrease the negative effects of drug and substance abuse for the individual and for the society in general.

6.3 Chapter Summary

This chapter has presented results of the third objective. Challenges and opportunities arising from the government programs in handling drugs and substance abuse are discussed in detail. The next chapter (Chapter 7) presents the summary, conclusions and recommendations of the study.

CHAPTER SEVEN

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

Introduction

Chapter seven of this study is a summary, conclusion and recommendation section based on the findings of this study on the effectiveness of government programs in mitigating drugs and substance abuse in selected counties (Mombasa and Kilifi) in the Coastal region of Kenya.

7.1 Summary of the Findings

The general objective of the study was to evaluate the effectiveness of government programs in mitigating drug and substance abuse in selected counties in the coastal region, Kenya. Specific objectives were to examine the nature of drug and substance abuse, evaluate government programs in mitigating drug and substance abuse, and assess the challenges and opportunities facing government programs in managing drug and substance abuse in selected counties in the Coastal region of Kenya.

In line with the first objective which was to examine the nature of drug and substance abuse in selected counties in the Coastal Region, Kenya, the findings of the study revealed that drug and substance abuse is still a significant problem affecting individuals across all age groups and socio-economic backgrounds. The causes of drug abuse outlined in this study included idleness as a leading cause, socioeconomic factors, mental health issues, curiosity and experimentation, family history, peer pressure, and lack of awareness. The most commonly abused drugs were alcohol being the most abused, tobacco, bhang (cannabis), and khat (miraa), bhang, heroin, cocaine, prescription drugs, and methamphetamine. When discussing the prevalence of the drug

abuse the study found that drug and substance abuse is prevalent among youth, particularly those who are unemployed, dropouts, or living in poverty.

However, the study also noted that abuse of drugs was central across all the age groups including adults and children. Under gender the study found that the females were less frequent abusers than their male counterparts. However, the abuse was also common amongst females with other complimenting factors such as poverty, depression and underlying conditions. In discussion of the socioeconomic status, the study outlined that the abuse of drugs was significantly soared across the socioeconomic ladder and that having both excess funds and limited funds were contributing factors to the abuse.

Finally, when discussing education, the study found that the abuse of drugs was more common in individuals with lack of awareness and proper education compared to the educated individuals. Under the nature of drug abuse this study significantly found a connection between drug abuse in the region and high hospitalization, medication and rehabilitation costs. The study also defined the effects of drug abuse. The study identified a number of negative consequences of drug and substance abuse, including physical problems, psychological problems, cultural problems, social problems and economic issues. Health problems associated with drug and substance abuse included HIV/AIDS, hepatitis, mental health problems, and other chronic diseases. Social and economic issues included reduced productivity, school dropout rates, and increased poverty. Criminal behavior associated with drug and substance abuse included drug trafficking, theft, and violence.

In line with the second objective which was to evaluate government programs in mitigating drug and substance abuse in selected counties in the Coastal region, Kenya, the study first identified the list of government programs in the coastal region as seen in the two counties of study. These

programs were first identified as preventive, treatment, law enforcement and criminal justice programs and harm reduction programs. The programs identified included: Education and awareness campaigns; NACADA programs, and The Jitambue Program; Parenting skills and family support programs: The Strengthening Families Program, and The Parenting Skills Education Program; School-based programs: The Mombasa County Alcohol and Drug Abuse Prevention and Control (ADAPC) program and The Muundo Wa Vikundi program; Community-based programs: The Kisauni Youth Empowerment Program, and the Bar Hostess Empowerment and Support Program (BHESP) under the preventive programs. For the treatment programs the study identified, Mombasa Drug Control and Rehabilitation Centre, Mombasa Peer Educators Network (MPEN), Pwani Alcohol and Drug Abuse Rehabilitation Centre, Reachout Centre Trust, and the Port Reitz Substance Abuse Rehabilitation Centre. Under the law enforcement and criminal justice programs this study identified, NACADA, The Anti-Narcotics Unit (ANU), The National Police Service (NPS) Drug and Substance Abuse Prevention Program, The Kenya Prison Service (KPS) Rehabilitation Programs, and the Judiciary Drug and Substance Abuse Control Program. Under the harm reduction programs this study identified The Kenya Red Cross Society's Needle and Syringe Program (NSP), The Médecins Sans Frontières (MSF) Safe Injection Site, and The Kenya Harm Reduction Network.

In the discussions on the effectiveness of the programs, it was first found that several household heads had seen the government hand in tackling drug abuse in their communities. Further the study found through a chi square analysis that the preventive programs, the treatment programs, the law enforcement programs and the harm reduction programs were all significantly effective in the mitigation of drug abuse in the study area. Further using a net promoter score this study

identified that the law enforcement and criminal justice programs were the most effective followed by preventive programs, then treatment programs and finally harm reduction programs.

In line with the third objective which was to assess the challenges and opportunities facing government programs in managing drug and substance abuse in selected counties in the Coastal region, Kenya, this study identified several challenges and opportunities. From the study, the household heads respondents acknowledged that they had knowledge of the challenges and opportunities experienced in these programs. Further the study identified challenges and opportunities including in the preventive programs, the treatment programs, the law enforcement and criminal justice programs and the harm reduction programs.

In the prevention section, the study revealed the obstacles that drug and substance abuse prevention programs face, such as the social stigma that discourages community involvement. To counter these issues, the study suggests increasing public awareness and funding community-led prevention programs. Nonetheless, there are opportunities to be taken advantage of, such as enhancing community participation, stakeholder collaboration, and improved access to information.

Under the treatment program section, the study pointed out the challenges that drug and substance abuse treatment programs encounter, including limited resources, poor infrastructure, and insufficient staff training. To tackle these challenges, the study advocates for increased funding, improved access to rehabilitation centers, and better transportation facilities. Furthermore, the study found several opportunities, including enhanced funding, better staffing of healthcare facilities, and the use of mobile applications to track patients' progress.

In the law enforcement and criminal justice programs' section, the research delved into the challenges that drug and substance abuse management initiatives face, such as understaffing, inadequate coordination, and insufficient funding. To address these challenges, the study recommends increased collaboration between law enforcement agencies and other stakeholders involved in drug and substance abuse management initiatives. Additionally, there are opportunities to be seized, such as increased funding, better staffing of law enforcement agencies, and the utilization of electronic databases to monitor drug and substance abuse cases.

The harm reduction programs' section of the study focused on the challenges that harm reduction initiatives encounter, with examples being limited resources, stigma, and legal barriers. The study emphasized the need for increased funding, community awareness, and engagement in harm reduction programs, and increased collaboration between stakeholders. The opportunities available included increased funding, improved access to harm reduction facilities, and the use of telemedicine to provide virtual consultations to harm reduction patients.

7.2 Conclusions

The study has three conclusions from specific objectives, and also an overall conclusion.

7.2.1 Specific conclusions

In line with the first objective, the study found that drugs and substance abuse is a significant problem in the coastal region of Kenya, affecting individuals across all age groups and socio-economic backgrounds. The most commonly abused drugs were alcohol, tobacco, bhang (cannabis), and khat (miraa), heroin, cocaine, prescription drugs, and methamphetamine. The abuse of drugs was central across all the age groups including adults and children. Abuse was

prevalent among the youth, particularly those who are unemployed, school dropouts, or living in poverty. Females were less frequent abusers than males, but the abuse was also common amongst females with complimenting factors such as poverty, depression, and other underlying conditions catalyzing their indulgence in the malpractice. The abuse of drugs was significantly soared across the socioeconomic ladder, and having excess funds and limited funds were contributing factors to the abuse.

In line with the second objective, the study identified several government programs in the coastal region of Kenya aimed at mitigating drugs and substance abuse. The preventive programs, treatment programs, law enforcement programs, and harm reduction programs were all significantly effective in the mitigation of drug abuse in the study area. The law enforcement and criminal justice programs were the most effective followed by preventive programs, then treatment programs, and finally harm reduction programs.

As per the third objective, the study identified challenges and opportunities in the government programs aimed at mitigating drugs and substance abuse in the coastal region of Kenya. The challenges included inadequate funding, inadequate facilities, and inadequate staffing in the treatment programs, limited public awareness of the programs, and corruption. The opportunities identified included the willingness of the government to tackle drug abuse, the existence of community support for the programs, and the presence of partnerships between government agencies and non-governmental organizations.

7.2.2 General conclusion

Conclusively, drugs and substance abuse is a significant problem in the coastal region of Kenya, affecting individuals across all age groups and socio-economic backgrounds, and the government

has put in place several programs aimed at mitigating drug abuse, and these programs have been effective to a significant extent. However, there are still several challenges facing the programs, including inadequate funding, inadequate facilities, inadequate staffing in the treatment programs, limited public awareness of the programs, and corruption. There are also opportunities, including the willingness of the government to tackle drug abuse, the existence of community support for the programs, and the presence of partnerships between government agencies and non-governmental organizations. In this case, therefore, much needs to be done, with the government and other actors such as NGOs, CBOs and FBOs working together because the results have shown they contribute much.

7.3 Recommendations

In line with the first objective, the study recommends the following:

The results of the study indicate that most of the commonly abused drugs are in high demand thus increasing supply. Notably, most are smuggled across borders by traffickers. The study recommends strict border control, adequate provision of adequate security personnel at the border posts, and adoption of new technologies to aid in surveillance and monitoring and tracking of the smugglers.

Stringent measures at the ports of entries, airports, and seaports as majority of the hard drugs, cocaine and heroin, come through the ports. Suggested measures at the ports of entry include improvement of technology to enable efficient and effective screening and improve the integrity of officers who are charged with screening as there can be effective and efficient technologies but compromised by the integrity levels of those manning the process.

The study further recommends the adoption of specific laws that target drug traffickers. Such laws should be accompanied by severe penalties including longer periods of imprisonment and heavy fines. This would frighten and impede the operationalization of the traffickers.

There be increased public awareness campaigns aimed at educating the community about the dangers of drug abuse and available resources for treatment and support. These campaigns can use various media channels such as radio (local FM stations), TV, and social media platforms. This approach will help reach a wide audience, including those who may not have access or have limited access to information about drug abuse. Additionally, the campaigns should provide information on the consequences of drug abuse, including addiction, mental health issues, and financial problems. These resources will also enable the law enforcement officers to patrol the porous borders.

Developing targeted programs for youth is another essential recommendation. These programs should address the specific needs and circumstances of the youth, particularly those who are unemployed, school dropouts, or living in poverty. The programs should provide education on the dangers of drug abuse and provide access to treatment and support services. This approach will help to prevent drug abuse and provide a safety net for those who have already fallen into addiction.

Implementing gender-sensitive programs that cater for the unique needs of females who abuse drugs is another recommendation. These programs should address the factors that contribute to drug abuse among females, such as poverty, depression, and underlying conditions. They should also provide access to treatment and support services that cater for the unique needs of females.

Establishment of criminal records database is also recommended. This will enable through technology to have the details of all criminals in the country even those who committed crimes many years ago and trace them to their sources of origin for effective processing. Law enforcers must know the source of these drugs and substance abuse. Criminal record database will be real-time as law enforcers will use this as evidence in courts of law.

Treating suspects as suspects, at the same time as informers, is also recommended. As suspects, the law must have its course, but at the same time allow for them to be treated as informers. If a suspect caught with hard drugs is to be sentenced for ten years, the sentence can be reduced to five years if that suspect accepts to collaborate and act as an informer to the law enforcement by voluntarily giving information as to the source and those who traffic drugs.

Law enforcers should also know the root cause analysis of drug and substance abuse by being friendly to the suspects and allowing them to give reasons as to why they engage in the practice, how they got into it, how they spend the money they get from the trade, and where they conduct their illegal businesses.

The study also found out that idleness, unemployment and poverty are major causes of drugs and substance abuse. In this case, therefore, this study recommends embracement of the current government bottom-up model of funding to equip victims graduating from rehabilitation centers with skills and small business to make them economically stable and prevent relapse.

In line with the second objective, the study recommends the following:

Most of the initiated programs to curb the menace of drugs and substance abuse are constrained by a lack of adequate finances. Therefore, the study recommends adequate funding for the programs to help in effective implementation and the realization of success. However, these

funds must be used prudently by the implementing institutions with maximized transparency and accountability.

Increasing funding for law enforcement and criminal justice programs is an essential recommendation to enhance their effectiveness in combating drug trafficking and distribution. The government should allocate more resources to the law enforcement agencies to increase their capacity to conduct investigations and arrest drug traffickers. In addition, there should be a concerted effort to reduce corruption in law enforcement agencies to ensure that the resources are used for their intended purpose.

Improving the quality and accessibility of treatment programs is also recommended. The government should increase funding for staffing and facilities to improve the quality of care in treatment programs. Also, there should be efforts to increase the accessibility of these programs to those who need them the most. This can be achieved by increasing the number of treatment facilities and providing transportation for those who may not have access to these facilities.

Strengthening preventive programs by targeting high-risk populations and incorporating evidence-based practices is another recommendation. The government should target high-risk populations such as the youth, the unemployed, and those living in poverty. To add on that, preventive programs should incorporate evidence-based practices that have been shown to be effective in preventing drug abuse. These practices can include providing education on the dangers of drug abuse, promoting healthy lifestyles, and providing access to support services.

The study suggests that there is a need to expand the jurisdictions of the law enforcers; the law should be framed in such a manner that all security officers counter the trafficking of drugs as

well as substance abuse instead of leaving it only to the narcotics police. A reward system should also be put in place for police officers involved in the arrest and prosecution of traffickers.

The study found out that programs run by development partners like the one run by UNODC (methadone program) are very effective, and playing a very critical role in mitigating drugs and substance abuse in the coastal region. In this case, the study recommends that such programs to be implemented not only in the coastal region, but also in other parts of the county.

In line with the third objective, the study recommends the following:

There is need for increased transparency and accountability in the implementation of drug abuse programs. The government should address corruption and improve monitoring and evaluation mechanisms to ensure that the resources allocated to these programs are used for their intended purpose. Further, there should be efforts to increase the participation of the public and civil society in monitoring the implementation of these programs.

Fostering partnerships between government agencies and non-governmental organizations is another recommendation. This approach will leverage resources and expertise to develop more effective drug abuse programs. The government will need to encourage partnerships between government agencies and non-governmental organizations to develop and implement drug abuse programs. In addition, there should be efforts to promote collaboration between these entities to increase the effectiveness of these programs. There is need to adopt a multi-agency approach to avoid contradiction and blame games in the fight against drugs and substance abuse.

Developing sustainable funding mechanisms for drug abuse programs is another recommendation. The government should explore sustainable funding mechanisms, such as public-private partnerships, to ensure the long-term viability and effectiveness of drug abuse

programs. Moreover, there should be efforts to increase public awareness on the importance of these programs and their impact on the community. This approach will encourage more people to support these programs and increase the likelihood of sustainable funding.

Considering the many inherent challenges NACADA faces as the main government institution that deals with drugs and substance abuse control in the country, the study recommends the following:

Strengthening Prevention Programs: NACADA should focus on strengthening prevention programs to target individuals at risk of substance abuse. This can be achieved through educational campaigns, awareness programs, and community-based initiatives. By collaborating with schools, colleges, universities, and community organizations, NACADA can effectively reach out to vulnerable populations and provide them with the necessary information and skills to resist substance abuse.

Enhancing Research and Data Collection: NACADA should prioritize research and data collection to better understand the patterns and trends of substance abuse in Kenya. By conducting regular surveys, studies, and analysis of drug-related data, NACADA can identify emerging issues, assess the effectiveness of their interventions, and make informed decisions based on evidence. This will enable them to develop targeted strategies that address the specific needs of different communities and demographics.

Strengthening Policy Frameworks: NACADA should actively engage with policymakers to advocate for stronger policy frameworks that support their efforts in combating substance abuse. This includes advocating for stricter regulations on the sale and distribution of alcohol and drugs, implementing comprehensive legislation to address emerging drug trends, and ensuring that there

are adequate resources allocated to prevention, treatment, and rehabilitation programs. NACADA should also collaborate with law enforcement agencies to enhance enforcement measures against illicit drug trafficking.

Promoting Collaboration and Partnerships: NACADA should actively seek collaborations and partnerships with relevant stakeholders, including government agencies, non-governmental organizations, civil society groups, and international organizations. By working together, these entities can pool their resources, expertise, and networks to develop comprehensive strategies that address the multifaceted nature of substance abuse. Collaboration can also facilitate knowledge sharing, capacity building, and the exchange of best practices.

Empowering Communities: NACADA should empower communities to take ownership of the fight against substance abuse. This can be achieved through community mobilization programs, training community leaders as peer educators, establishing support groups at the grassroots level, and involving community members in the planning and implementation of prevention initiatives. By empowering communities, NACADA can create a sustainable impact that extends beyond their direct interventions.

The study recommends for an increment in the funds allocated to NACADA. The limitation of the capital required fighting the menace of drug and substance abuse be it through public awareness campaigns or other methods such as rehabilitation of the victims of drug and substance abuse has been a hindering factor, otherwise put as an enabler of the growth of the peril. More funding will be a vital aspect in powering the effort of NACADA.

More so, NACADA should be endowed with the power to arrest individuals who violate laws that relate to drug and substance abuse. The lack of this mandate thwarts NACADA's never

ending fight against drug and substance abuse as NACADA can only implement measures that are aimed at preventing the menace from growing without the power to impose punishment to these offenders. As such, the power to arrest is necessary to ensure that the efforts of NACADA to curb drug abuse fruition.

NACADA also has been challenged by the limitation of personnel. There is thus need for an increase in the number of people working under NACADA to enhance the effectiveness and success of the fight against drugs and substance abuse. Increase in staffing of NACADA will promote all the actions aimed at reducing drug and substance abuse in Mombasa and Kilifi counties. Consequently, creation of awareness on drug and substance abuse and implementation of other actions aimed at the same will be fully enabled.

7.4 Suggestion for Further Research

Future studies should focus on deepening our understanding of the complex factors that contribute to drug abuse in the coastal region of Kenya. This should include the role of structured drug-dens in the region, as well as new methods of transporting drugs such as through hairstyles, biscuits, and shortcakes among others.

The current study evaluated the effectiveness of government programs in mitigating drug and substance abuse in selected counties in the coastal region, Kenya. The study suggests that further study should be done to interrogate the role of non-governmental organizations in handling drugs and substance abuse in the Coastal region, Kenya.

The results of the study indicate that the impacts of drugs and substance abuse cut across all sectors in the country, with the education sector strongly hit. In this case, therefore, the study

suggests that a study should be done to explore measures of mitigating drugs and substance abuse in the learning institutions.

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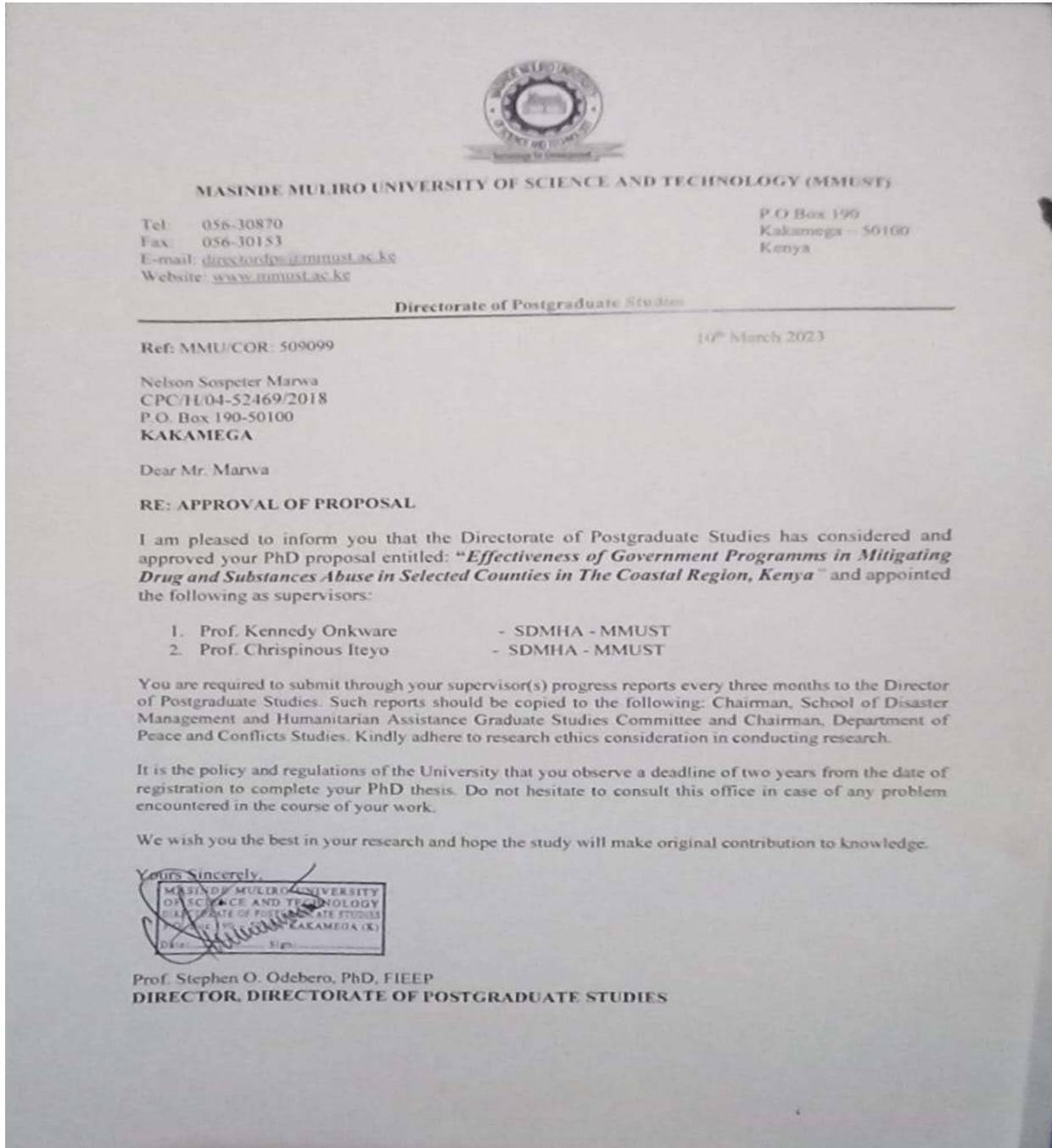
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APPENDICES

Appendix I: MMUST Proposal Approval Letter



Appendix II: NACOSTI Permit

REPUBLIC OF KENYA
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 730068
Date of Issue: 15/03/2023

RESEARCH LICENSE



This is to Certify that Mr. Nelson Marwa Nsopter of Masinde Muliro University of Science and Technology, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev. 2014) in KCB, Mombasa on the topic: **EFFICACY OF GOVERNMENT PROGRAMS IN MITIGATING DRUG AND SUBSTANCE ABUSE IN SELECTED COUNTRIES IN THE COASTAL REGION, KENYA for the period ending : 15/03/2024.**

License No: NACOSTI/P/23/24382

Applicant Identification Number: 730068

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

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See overleaf for conditions

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of international treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way:
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation (NACOSTI),
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Appendix III: Introductory Letter

Dear Respondent,

I am a PhD. Student at Masinde Muliro University of Science and Technology (MMUST) conducting an Academic research on **“Effectiveness of Government Programs Employed in Mitigating Drugs and Substance Abuse in the Coastal Region, Kenya”** as a requirement of the qualification for the award. The findings of this study will contribute immensely to the strategies of tackling drugs in the Coastal Region. Your honest response will make you a contributor to the reduction drug abuse in the in the area.

I will appreciate if you take some time to answer the questions contained in this questionnaire.

The information that will be obtained in this research is confidential and will only be used for the purposes of this research and not for any other purpose.

Yours Sincerely

Nelson Marwa

Appendix IV: Consent Form

Introduction

You are invited to participate in Academic research on “**Effectiveness of Government Programs in Mitigating Drug and Substance Abuse in Selected Counties in the Coastal Region, Kenya**”. It is worth noting that the findings of this study will contribute immensely to the strategies of tackling drugs in the Coastal Region. Your honest response will make you a contributor to the reduction drug abuse in the in the area. I will appreciate if you take some time to answer the questions contained in this questionnaire. The information that will be obtained in this research is confidential and will only be used for the purposes of this research and not for any other purpose.

Purpose of the Study

The general objective of the study will be to analyse the effectiveness of Government Programs Employed in Mitigating Drugs and Substance Abuse in the Coastal Region, Kenya.

Potential Participants

For you to participate in this study you must fit in in the following categories, household heads, community leaders, administrative chiefs, health care officers, NACADA officials, and NGO officials.

Terms and Conditions

- Participation of this study is voluntary
- All information will remain confidential
- Information is for academic purposes only
- You can quit participation at your will

I will or I will not participate in this study.

If not, give reason:.....

Signature..... Date

Appendix V: Questionnaire for Household Heads

This questionnaire is to collect data for purely academic purposes. The study seeks to assess the *“Effectiveness of Government Programs in Mitigating Drug and Substance Abuse in Selected Counties in the Coastal Region, Kenya”* All information will be treated with utmost confidence. Kindly answer all questions and do not indicate names in the questionnaire

Section A: Demographic information

1. What is your gender?
a) Male b) Fema
2. What is your age?
a) 18-25yrs b) 26-35yrs
c) 36- 45yrs d) 46-55yrs
e) 56yrs and above
3. What is your religion?
a) Islam b) Christianity
c) Hinduism d) Others
4. Education
5. Occupation

Section B: The nature of drug abuse in the coastal region Kenya

4. Have any members of your family been a victim of drug abuse?
a) Yes b) No
5. What drugs have you seen People you know use in the surrounding?

Do not list them, let the household heads suggest the drugs used. Remove the table

Drug used	Yes	No
Alcohol		
Khat/Miraa		

Tobacco		
Bhang		
Cocaine		
Heroin		
Prescription drugs		
Others (Specify.....)		
Don't know		

6. Highest level of education of the drug abuse victim? Remove, this one is misplaced. Take it to the victims.

- a) Primary b) Secondary
c) College d) University

7. For how long did the victim abuse substances?

- a) 1-12 months b) 1-2yrs
b) 3- 4 years d) 5 years and above

8. Have you been able to seek help to stop the addiction?

9. Yes No

10. Is there drug abuse in this family?

- a) Yes b) No

11. Causes of drug and substance abuse

Statements	1=Strongly disagree	2=disagree	3=Neutral	4=Agree	5=Strongly Agree
There is availability and easy accessibility of drugs in coastal regions					
Young people are the most affected group by the drug abuse					
Peer pressure is the major					

cause for drug abuse in Coastal Kenya					
The socio-economic status of households influences drug abuse among members					
Lack of proper guidance by parents, teachers and administration accelerates drug abuse among individuals					
Others					

12. In which way has drug abuse affected your family?

Let them discuss (take the table to the key informants)

Effects of Drug and substance ABUSE	Yes	No
Increased crime levels		
Moral decadence		
Juvenile delinquency		
Child abuse		
Poverty		
Unemployment		
Gender based violence		
The allure of Sex tourism		
Human trafficking		
Mental health problems		

Section C: Government programs employed to control drug abuse

Has the government assisted you to tackle the drug abuse?

a) Yes b) No

If yes, what type of assistance have you received?

Remove the table

Statements	1=Strongly disagree	2=disagree	3=Neutral	4=Agree	5=Strongly Agree
The government has put efficient strategies for controlling drug abuse in coastal Kenya					
The programs for controlling drug abuse are readily available and accessible by to citizens					
Victims involuntarily seek assistance to overcome drug abuse					
Treatment programs provided assist victims overcome the drug abuse problem					
The victims of receiving psycho-social support upon recovery to deter them from drug abuse again					

Section D: Challenges and opportunities facing Governmental programs in drug abuse control

Do you think the government faces any challenges in addressing the drug abuse menace in your household?

a) Yes b) No

If yes, which are these challenges?

.....

.....
.....
How are you coping with these challenges?

.....
.....
.....
.....
.....
.....
.....

What can you recommend to the government to improve the issue of drug menace in the families?

.....
.....
.....

Apart from the government, have you received any other assistance from any other group?

a) Yes b) No

What was the other group?

What was the nature of the assistance?

Was the assistance effective?

What do you think should be done to make it more effective?

When you compare these groups, what do you think is more effective? Give reasons

11.What are the challenges that the government has faced in controlling drug abuse in coastal region? Not relevant to the household heads.

Challenges	Agree	Disagree	Don't know
High levels of addiction			
Underground drug peddlers			
Intravenous drug use			
Lack of cooperation by locals			
Disguised drug distribution i.e through food and snacks			
Collusion between Government officials and drug dealers/Cartels			
Political interference			
Lack of harmonized policies and legislation leading to disjointed efforts leading to policy gaps			
Weak enforcement of laws due to gaps in the criminal justice system such as unavailability of alternatives to incarcerations on ADA;			
Flouting of standards and proliferation of licit and illicit drugs in the country, production and sale of counterfeit drugs			
Trafficking in various drugs			
Inadequate funding of alcohol and drug control programmes to ensure effective intervention			
Poor enforcement of laws and standards, relating to adverts particularly on alcohol, hence the airing of adverts particularly during prime time			
Non-accountability of industry players to take responsibility for the negative effects of drugs			
Ease of availability and accessibility of substances of abuse, particularly by the youth and other vulnerable groups			
Emerging drug trends and			

attendant threats including new psychoactive substances, precursors and the non-medical use and misuse of pharmaceutical drugs			
--	--	--	--

12. How do you assess the role of the actors in dealing with Drug and substance abuse in Kenya

Actors	Effective	Not effective
NACADA		
Narcotics Police		
County Government		
Religious leaders		
NGOs		
FBO		
CBOs		

13. What opportunities have emerged as the government work to control drug abuse in Kilifi and Mombasa Counties?

Let them tell us...

Take the table to the key informants

Opportunities	Yes	No	Don't know
Political goodwill from the Government			
Anti-Drug campaigns at the Coast of Kenya			
Government zero tolerance Policy against drug abuse			

In your opinion, what can be done to end the drug menace?

.....

.....

Appendix VI: Interview Guide for Victims

1. What is your age?
2. What is your gender?
3. What is your education level?
4. At what age did you start taking drugs?
5. How did you get introduced to taking drugs?
6. Why you did start consuming drugs?
7. Which drugs do you consume?
8. What is your journey with drug and substance abuse?
9. How are you accessing drugs?
10. Is the government doing anything to help deal with drug abuse in this area?
Explain.
11. List any interventions and how they have helped reduce drug abuse.
12. Do you believe that these interventions are effective? (what are the life changing stories from the interventions)
13. Do you think the government faces challenges in addressing the drug menace? Which are these challenges?
14. Apart from the government have you received assistance from other institutions, list them.
15. What other thing/what else can be done to improve the effectiveness of the government programs?
16. Give us your experience in the rehabilitation centre?
17. Do you think you got the necessary assistance?
18. What do you think should be improved?
19. What do you think the government should do for after you leave the rehabilitation centre so that you can be more stable?

Appendix VII: Interview Guide for County Education Officer

- 1) How long have you served in this capacity in this county? (>6 months)
- 2) How can you describe the general drugs and substance abuse in your area of jurisdiction?
- 3) Is Drugs and substance abuse prevalent in this area?
- 4) Which groups in the schools are most affected? (teachers, parents, learners)
- 5) What nature of drugs and substances are commonly used in learning institutions in this area? (Types in each?)
- 6) How are drugs brought to school?
- 7) What are some of the contributing factors to drug and substance abuse prevalence?
- 8) How is the drug abuse menace affecting education sector (students, teachers, parents)
- 9) Can you attribute poor academic performance with drugs and substance abuse?
- 10) How is your office involved in the mitigation of the drug and substance abuse in the area? (rehabilitation, awareness creation)
- 11) Which other governmental agencies do you work with in mitigating the drug and substance abuse menace? (law enforcement)
- 12) Do you think the programs you run are effective? If yes, based on what? (any positive/negative change evidence)
- 13) What are some of the challenges that you face in implementing the programs? (any coping mechanism?)
- 14) What are some of the opportunities that exist to improve the government programs towards drug and substance abuse in the area?
- 15) What do you recommend the government to do in learning institutions to curb the drug menace?

Appendix VIII: Interview Guide for County commissioner

1. How long have you served in this capacity in this county?
2. What is the general overview of drugs and substance abuse in this county?
3. Do you believe drug abuse is a security concern in this county?
4. Which kinds of drugs are most commonly used in the county?
5. Who are the most affected by drug menace in this county?
6. What are the impacts of drugs and substance abuse on general development, and in particular education in this county?
7. Have you identified the sources of these drugs? How have the suppliers been dealt with suppliers (any arrests/prosecution or those jailed)
8. What government programs are in place to combat this menace
9. How successful have these programs be? How difficult has it been trying to get rid of drug abuse?
10. What government programs have been put in place to try and curb the menace of drug use? Mention them
11. What are the successes and/or shortcomings of these programmes
12. To what extent do you think these programs can be improved to make them work better?
13. Does the government have partnerships with other civil society organizations to deal with this issue?
14. What is your experience with NACADA?
15. In your view, is NACADA being successful in its mandate? If not, what do you think should be done?
16. What is the relationship between County government and national government programs?
17. How do you deal with relapses?
18. What do you recommend for the government to improve these interventions?

Appendix IX: Interview Schedule for CEC Health

1. What is your general view on drug abuse in this county?
2. What are some of the most commonly abused drugs in this county?
3. What are the general health impacts of drug and substance abuse?
4. As a ministry, how are you addressing the health issues arising from drugs and substance abuse? Are there special places in hospitals meant for drug abuse victims?
5. As a county, which programmes do you have that help in dealing with drug issues?
6. How long have these programmes been in existence? What are the impacts?
7. What challenges has the health department come across in the process of managing drug menace?
8. How do you deal with relapses?
9. How best can the situation be improved?
10. How does the county coordinate with the rehabilitation centers and CBOs?
11. How is the relationship between county and national government?
12. What do you recommend to improve on the programs?
13. What other measures can the government put in place to manage the menace?

Appendix X: Faith Based Organizations

- 1) Who are the most affected by drug and substance abuse in this area?
- 2) Which drugs and substances are commonly used?
- 3) As a religious leader what are some of the contributing factors to drug and substance abuse in this area?
- 4) What is your level of involvement mitigation of the drugs and substance abuse (which programs are you involved?)
- 5) Are your programs towards drugs and substance abuse effective? (any success stories)
- 6) What are the other government agencies that you work with closely towards mitigation of drugs and substance abuse?
- 7) What are some of the challenges affecting your efforts in mitigating drugs and substance abuse?
- 8) What other strategies would you recommend that can significantly complement the governments programs towards drugs and substance abuse mitigation?

Appendix XI: Interview Schedule for NACADA Officials

- 1) For how long have you worked with NACADA? For how long have you worked in this county?
- 2) In your view, what is the nature and extent of drug and substance abuse in this county?
- 3) Which are the most commonly abused drugs?
- 4) What are some of the contributing factors to drug and substance abuse prevalence?
- 5) What kind of interventions is your organization involved with towards mitigation of the drugs and substance abuse?
- 6) Which any other government agencies do you work with in mitigation of the drug and substance abuse?
- 7) What is the level of acceptance and adoption to your programs by the victims?
- 8) In your own opinion, do you think the government programs are effective? (success stories)
- 9) To what extent has NACADA achieved its mandate in this county?
- 10) Would you say that the cases of drugs and substance abuse increasing or decreasing?
- 11) How can we improve the programs?
- 12) What are the challenges?
- 13) What would you recommend the government to improve on NACADA?
- 14) What is your working relation with the national government in relation to drugs abuse?
- 15) Are there other groups you are in partnership with?
- 16) What are some of the challenges you encounter towards implementation of the programs?
- 17) What are some of the opportunities that exists towards improvement of the programs to the victims
- 18) How many rehabilitation centers do NACADA has in this county?

Appendix XII: Interview Schedule for the Head of Rehabilitation Centres

1. Among your clients which are the most common drugs that they use
2. How do we get the victims, how are they recruited? Is it through operation? Referrals?
3. Demographic of the victims?
4. How long do the victims take in the rehab?
5. How do the victims graduate? What is the process?
6. Do you work in partnership with the government
7. What are some of the programs you run to help in dealing with the menace?
8. What are success rates in the rehab programmes
9. How often do you get cases of relapses?
10. How do you deal with relapses? Do you have follow up mechanisms to avoid relapse?
11. Do you believe the government's approach in dealing with drug abuse is effective?
Explain
12. What kind of challenges to you faces in your attempt to curb drug use?
13. What should be done differently to deal with this problem?
14. What do you recommend the government to do to avoid relapse?
15. How are the government programs in curbing drug and substance abuse?
16. Do you work with other actors? How is the coordination done between the government and the other actors?

Appendix XIII: Interview Schedule for heads of NGOs and CBOs

1. How long has your organization been in existence in this region?
2. What programs are you offering?
3. Who are your main group of people you offer services to?
4. How do you identify individuals who need help with drug abuse?
5. What is the main cause of drug abuse in the coastal region?
6. Do the citizens offer support in your activities?
7. What activities do you engage the victims with to help them overcome addiction?
8. Do you collaborate with government agencies in offering services?
9. Do you work hand in hand with NACADA?
10. How do you identify that a victim has successfully overcome the problem of drug abuse?
11. What are the main challenges that you encounter in your program delivery?
12. What strategies do you think would make the programs you have more efficient?

Appendix XIV: Interview schedule for Chiefs

1. Extent of drug abuse in area of jurisdiction
2. What Type of drugs are abused in this area?
3. Categories of people affected by the drugs
4. What are the government efforts to curb the menace?
5. Do we have People from this area who have visited rehabs?
6. Have they changed?
7. Do we have relapses?
8. What is the relationship between Drugs cause of insecurity?
9. Do you think the government programs are effective?
10. How do you want to be assisted as chiefs to execute your mandate in terms of drug abuse?
11. What can the government do to eradicate drugs?

Appendix XV: Focus Group Discussion Guide for Village elders

1. Discuss the extent of drug abuse in the village
2. Discuss how the drugs have affected the youth and the general public in this village
3. Is the government doing anything in this village to eradicate drug abuse?
4. What challenges are you facing in dealing with drug abuse?
5. Are you taking the victims to the rehabilitation centres?
6. How are the graduates from rehab doing?
7. How is drug abuse a cause of insecurity in this area?
8. How do you deal with the victims in the area?
9. What do you think should be done to improve curb drug abuse in this village?

Appendix XVI: Plate showing the researcher conducting FGD with village elders at Maweni location



Appendix XVII: Plate showing researcher with victims of drugs and substance abuse at Frere Town drug den



Appendix XVIII: Plate showing researcher collecting data from UNODC in Kisauni/Nyali



Appendix XIX: Plate showing the researcher conducting an interview with a recovered drug victim



Appendix XX: A plate showing the researcher conducting interview with MEWA official

