# FACULTY OF SCIENCE AND ENGINEERING



# DEPARTMENT OF SUSTAINABLE DEVELOPMENT

# DRUG ABUSE AND HIV/AIDS PREVALENCE IN HOPELY HIGH DENSITY SUBURB, HARARE: A CORRELATION STUDY.

 $\mathbf{BY}$ 

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SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE BACHELOR OF SCIENCE HONOURS DEGREE IN DEVELOPMENT STUDIES

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The undersigned strongly certify that they have read and made recommendations to Bindura University of Science Educations for acceptance for a research project entitled: Drug abuse and HIV/AIDS prevalence in Hopely high density suburb, Harare: a correlation study. The project was submitted in partial fulfilment of the requirements of Bachelor of Science Honors Degree in Development Studies

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# **DECLARATION**

I **Takunda Chinwada B212006B** do hereby declare that this research represents my work and has not been written or published by others for any degree program. All the materials that have been used in this research are fully acknowledged and sited accordingly in the study as will be shown in the references and appendices at the end of the research study.

# **Dedication**

This work is dedicated to my beloved family, whose unwavering support, encouragement, and love have been my greatest source of strength throughout this academic journey. To my parents, thank you for believing in me and for the sacrifices you made to make this possible. To my friends and mentors, your words of wisdom and kindness inspired me every step of the way. And finally, to all those affected by HIV and substance abuse in our communities may this research contribute, even in a small way, to building a healthier and more informed society.

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# **ABSTRACT**

Drug and substance abuse is increasingly linked to the spread of HIV/AIDS, especially in highdensity suburbs like Hopely, Harare. However, there remains a research gap in understanding this relationship within such communities. This study investigates the correlation between drug abuse and HIV/AIDS prevalence in Hopely, aiming to inform targeted public health responses. A quantitative research design was adopted, using stratified random sampling and structured questionnaires to gather data from 72 respondents. The study focused on understanding causes of drug use, how drug-related behaviors contribute to HIV transmission, and the extent of public health service utilization. Key findings show that 78% of respondents had used drugs, with peer pressure (51%) and unemployment (46%) being major drivers. Risky sexual behavior (40%) and poor judgment (26%) were identified as the main ways drugs contribute to HIV infection. Despite the risk, only 38% had accessed HIV testing services, and 32% had used any support services. Respondents highlighted the need for more awareness programs, employment opportunities, and better healthcare access. The study's findings have implications for public health officials, community leaders, and policymakers. By addressing both drug abuse and HIV prevention simultaneously through tailored education, economic support, and rehabilitation services interventions can be more effective in reducing infection rates and improving community health. This study highlights a strong link between drug abuse and HIV/AIDS prevalence in Hopely. Addressing both issues together is essential for effective intervention and improved public health outcomes.

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# Acronyms

**AIDS** 

Acquired Immuno-deficiency syndrome ART Anti-Retroviral Treatment United Nations Office on Drugs and Crime UNODC World Health Organization WHO United Nations Programme on HIV and AIDS **UNAIDS** United States Agency International Development **USAID** National AIDS Council of Zimbabwe NACZ **ZRP** Zimbabwe Republic Police

MOPSE Ministry Of Primary and Secondary Education

HIV Human Immuno-deficiency Virus

HTS HIV Testing Services

KPs Key Populations

G&C Guidance and Counselling

HBM Health Belief Model

ZIMSTAT Zimbabwe National Statistic Agency

NATF National AIDS Trust Fund

NGO Non-Governmental Organisation

PLWHIV People Living with HIV

WDR World Drug Report

OVC Orphans and Vulnerable Children

PrEP Pre-Exposure Prophylaxis

PSS Psychosocial support

SGBV Sexual and Gender Based Violence

STIs Sexually Transmitted Infections

UNICEF United Nations International Children's Emergency Fund

YFC Youth Friendly Corners

MOHCC Ministry of Health and Child Care

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#### **Chapter 1: Introduction**

The chapter outlines the context of drug abuse and HIV/AIDS prevalence, the assertion of the problem, main objective, specific objectives, the main question, and specific questions are outlined in this section. Additionally, the section presents the significance of the research investigation, definition of key terminology's study delimitation, limitations, assumptions, study organizational structure, and conclusions.

# 1.1 Background of study

The abuse of drugs, together with the spread of HIV/AIDS, pose significant public health challenges both in developing and developed countries (Ghys, 2007). These issues are a serious threat to individuals, communities, and national development. The lentivirus known as the Human Immunodeficiency Virus (HIV) causes Acquired Immunodeficiency Syndrome (AIDS), a disorder in which a person's immune system is significantly compromised, making them susceptible to potentially fatal infections that are usually treatable in healthy people (Camoni, 2013). Regardless of its legal status or medical permission, any psychoactive chemical that has the ability to change how the mind or body functions is considered a drug (Bean, 2010). When someone misuses drugs, whether through illicit use or excessive use of alcohol, prescription pharmaceuticals, or other legal substances, it is considered substance abuse (UNODC, 2023). The projected number of people living with HIV, including both diagnosed and undiagnosed cases, at any one moment is known as HIV prevalence (UNODC, 2023).

Globally, drug abuse has been on the rise. The United Nations Office on Drugs and Crime's World Drug Report 2023 indicates that over 296 million individuals globally utilized drugs in the preceding year, marking a 23% increase over the past decade (UNODC, 2023). The COVID-19 pandemic has significantly exacerbated this trend, contributing to an increase in the number of drug users globally (UNODC, 2023). The global prevalence of HIV and AIDS persists at a significant level, with approximately 39.9 million individuals living with HIV, comprising 38.6 million adults (aged 15 years and older) and 1.4 million children (World Health Organization, 2023).

Among countries that rank drugs leading to drug use disorders, cannabis is the most commonly reported drug, with 46% of countries ranking it in first place (Compton 2005). Opioids, primarily heroin, are reported as the leading drug in 31% of countries, while amphetamine-type stimulants,

particularly methamphetamine, top the list in 13% of countries (Alpolinario, 2023). The frequency of usage and the likelihood of dependence are the two main criteria used to rank drugs in each nation.

For those who inject drugs, the chance of contracting HIV is much higher. Compared to people who do not inject drugs, injecting drug users have a 35-fold increased risk of contracting HIV (UNODC, 2023). According to a joint global estimate by the UNODC, WHO, UNAIDS, and the World Bank, 1 in 8 injecting drug users are HIV-positive, or around 1.6 million injecting drug users, or roughly 12% of injecting drug users are HIV-positive. South-West Asia has the greatest HIV prevalence among injecting drug users (29.3%), followed by Eastern Europe (25.4%).

More than half of all people living with HIV/AIDS worldwide reside in Eastern and Southern Africa, where there are over 20.8 million HIV/AIDS-positive individuals (UNAIDS, 2023). Women make up 53% of this population (Martinez, 2024). The main medications that people entering drug treatment programs report using clearly vary by region. While cocaine is the most usually reported drug in Latin America, opioids are the most commonly reported substance in most of Europe and several sub-regions of Asia. Methamphetamine usage is most common in East and South-East Asia, while cannabis is the most commonly used drug in portions of Africa (UNODC, 2023).

With 11.9% of persons aged 15–49 living with HIV as of 2023, Zimbabwe has one of the highest rates of HIV prevalence in the world (UNAIDS, 2023). Despite significant progress made through public health campaigns, increased access to Antiretroviral Therapy (ART), and behavioral change initiatives, new infections continue to emerge (National AIDS Council of Zimbabwe, 2021). The high-density suburbs of Harare, including Hopely, are particularly vulnerable to both HIV transmission and substance abuse. Overpopulation, poverty, and limited access to healthcare in these areas create an environment that facilitates the spread of these public health issues (Bakilana, 2005). Although intravenous drug use is not as widespread in Zimbabwe compared to other regions, the abuse of substances such as cannabis, heroin, and methamphetamines has been on the rise, especially among young people (ZRP Drug Report, 2023). These substances are often linked to risky sexual behavior, which increases the likelihood of HIV transmission. The social and economic challenges faced by communities like Hopely exacerbate the problem, as high

unemployment rates, poverty, and a lack of education leave individuals particularly vulnerable to both drug abuse and HIV infection (SAMHSA, 2021).

While substantial research has taken place globally on the nexus between drug abuse and HIV prevalence, there is limited understanding of how these issues specifically intersect in high-density, economically marginalized areas in Zimbabwe, particularly Harare's Hopely suburb. Research has highlighted that drug abuse is prevalent in Zimbabwe, but there is insufficient data on the specific link between substance abuse and HIV transmission in urban areas like Hopely. There is a significant knowledge gap regarding the direct impact of drug abuse—particularly cannabis, heroin, and methamphetamine use—on HIV transmission rates in Zimbabwe's high-density areas. The role of socio-economic factors such as unemployment, poverty, and lack of access to healthcare in exacerbating this problem is also under-researched. This study aims to close this gap by examining the correlation between substance abuse and HIV/AIDS prevalence specifically in Hopely, Harare, and by identifying the social, economic, and healthcare-related factors that contribute to the problem

#### 1.2 Statement of the problem

The correlation between drug abuse and the prevalence of HIV/AIDS presents a critical public health challenge worldwide. Individuals engaging in drug use, particularly through intravenous methods, are at an increased risk of contracting HIV due to practices like needle-sharing, impaired judgment leading to risky sexual behaviors, and weakened immune systems (Gfroerer, 2000). The ideal situation expected is one where communities are able to effectively address the intersection of drug abuse and HIV/AIDS prevalence, resulting in a reduction in both drug abuse and HIV transmission. In such a scenario, effective prevention measures, education, and treatment programs would be in place, and public health efforts would ensure that individuals engaging in drug use are not at an increased risk of HIV infection. The gap or problem lies in the insufficient targeted research and intervention in high-density areas such as Hopely, Harare, where the correlation between drug abuse (particularly through substances like cannabis, heroin, and methamphetamines) and HIV/AIDS transmission has not been sufficiently explored. Although global statistics highlight the increased risk of HIV among individuals who inject drugs, there is a

lack of detailed, localized research that focuses on how drug abuse in urban, high-density areas influences HIV prevalence. The specific socio-economic factors contributing to this correlation, such as poverty, unemployment, and lack of healthcare access, remain under-explored in the Zimbabwean context. If this problem continues unresolved, the public health challenges associated with both drug abuse and HIV/AIDS are likely to worsen. This could lead to a continued rise in HIV infections, particularly in high-density, economically marginalized areas. Additionally, the failure to Interventions that are tailored to the unique requirements of these communities may increase the suffering of disadvantaged groups and make it more difficult to stop the spread of HIV and drug abuse. This study intends to solve this problem by examining the relationship between drug misuse and the prevalence of HIV/AIDS in Hopely, Harare, with an emphasis on comprehending the socioeconomic elements that contribute to this problem. The study aims to offer practical insights that can guide public health and policy solutions specific to the particular difficulties faced by Zimbabwe's densely populated urban areas by thoroughly examining this correlation. By providing data in favor of more successful prevention, treatment, and harm reduction tactics, this study will also add to the expanding corpus of knowledge on the relationship between drug addiction and HIV/AIDS.

# 1.3 Research Objectives

#### 1.3.1 Main Objective

i. To examine the correlation between drug abuse and HIV/AIDS prevalence in the high-density suburb of Hopely, Harare.

# 1.3.2 Specific Objectives

- i. To identify the causes of drug and substance abuse and it links to the spread of HIV/AIDS in Hopely, Harare.
- To assess the social impact of drug and substance abuse on the spread of HIV/AIDS in Hopely, Harare.

iii. To explore mitigation measures and public health strategies to reduce the spread of HIV/AIDS related to drug and substance abuse in Hopely, Harare.

# 1.3.3 Main Research Question

i. How does drug and substance abuse contribute to the spread of HIV/AIDS in Hopely, Harare?

# 1.3.4 Specific Research Questions

- i. What are the primary causes of the rise in drug and substance abuse in Hopely, Harare?
- ii. What effect does drug and substance abuse have on the prevalence HIV/AIDS in Hopely, Harare?
- iii. What mitigation measures have been implemented to combat the spread of HIV/AIDS through drug and substance abuse in Hopely, Harare?

# 1.4 Study significance

The research investigation is important to Hopely high density suburban settlement since it will under seek the relationship between drug and substance abuse and HIV/AIDS prevalence as well as the effects one has on the other in the area. The fact that this study tackles a vital public health concern in Zimbabwe makes it noteworthy. The study will offer important insights into the mechanisms causing the epidemic in this particular environment by examining the relationship between substance usage and HIV prevalence in the high-density suburb of Hopely. Additionally, this study adds to the body of knowledge already available on the relationship between HIV, drug and substance addiction, and socioeconomic characteristics. This information is crucial for policy makers, healthcare professionals to develop targeted intervention studies to address this issue ultimately contributing to the achievement of the UNAIDS 95-95-95.

# 1.5 Assumptions

This study makes the assumption that there is as relation of causation and effect between drug and substance abuse with HIV/AIDS prevalence in high density suburbs such as Hopley, Harare. This presumption may not be true because some individuals with HIV and AIDS may not abuse drugs or other substances. Additionally, the study is predicated on participants giving truthful and accurate information on their HIV status and drug and substance use. Additionally, the study assumes that individuals will give their informed consent and be willing to participate.

#### 1.6 Definition of Terms

- Human Immunodeficiency Virus (HIV): Krentz characterizes HIV as a lentivirus that causes AIDS, a condition in which the immune system is unable to control life-threatening infections that would otherwise be dealt with in non-infected individuals (Camoni, 2013).
   "AIDS is a lentivirus that causes acquired immunodeficiency syndrome (AIDS)," Krentz says.
- Drug: Any psychoactive substance that modifies the way the mind or body operates, regardless of its legal status or medicinal permission (Bean, 2010).
- HIV Prevalence: Refers to the estimated number of people living with HIV, including those
  with both diagnosed and undiagnosed infections, at a specific point in time (UNODC,
  2023).
- Substance Abuse: The use of illegal drugs or the misuse of legal substances such as alcohol, prescription medicine, and other legal substances, taken excessively or inappropriately (Heath, 2001).

#### 1.7 Chapter summary

The research problem, its manifestation and cause, and its significance were outlined in this chapter, which also included the study's background, which laid the groundwork for the problem statement; the research questions, the study's validity, and the research objectives; a preliminary literature review that offered a range of scholarly perspectives on the subject of the study; and an acknowledgement of the limitations encountered during the study's execution. The research methodology will be covered in detail in the next chapter, which will outline the approach, design,

data collection techniques, and analytical procedures used to investigate the relationship between drug abuse and HIV/AIDS prevalence in Hopely, Harare.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1 Introduction

Examining the body of research on the relationship between drug and substance abuse and HIV/AIDS prevalence, especially in densely populated suburbs, is the aim of this chapter. Despite being a major global public health concern, substance misuse exacerbates HIV/AIDS's incidence and transmission by encouraging risky behaviors including sharing needles and engaging in unsafe sexual activities. Drug misuse is a significant problem in Zimbabwe, where HIV/AIDS prevalence is extremely high, especially in densely populated places like Hopely, Harare. These populations are more vulnerable to HIV transmission and increasing drug use because they face socioeconomic obstacles like poverty and restricted access to healthcare. Reviewing the existing research on the connection between HIV/AIDS and substance usage, with an emphasis on Zimbabwe specifically, is the goal of this chapter. The results of this literature analysis will show the important gaps that this study aims to fill and offer a contextual understanding of the correlation.

#### 2.2 Theoretical Framework

Several theoretical frameworks have been proposed to explain the correlation between HIV prevalence and drug/substance abuse. These will provide the basis for understanding for understanding the various dimensions of HIV/AIDS and the effectiveness of different interventions in the context of Hopely high density suburb. In this study, The Health Belief Model (Rosenstock, 1974) will serve as the primary theoretical lens through which the correlation between drug abuse and HIV/AIDS prevalence in Hopely, Harare, is explored. The other theories will also be explored in brief to see how they link with HIV prevalence in hopely.

#### 2.2.1 The Risk Environmental Framework

The Risk Environment Framework, proposed by Rhodes (2002), highlights how HIV risk is not determined solely by individual behaviors but is influenced by environmental factors. These include socio-economic conditions, drug availability, law enforcement policies, and healthcare access. This framework is highly relevant for Hopely, where poverty, unemployment, weak law enforcement, and limited healthcare access contribute to the high prevalence of drug abuse and

HIV infection. In this environment, individuals may have limited access to prevention programs, and their engagement in high-risk behaviors may be exacerbated by their socio-economic status.

# 2.2.2 The Social Cognitive Theory

According to Bandura's (1986) Social Cognitive Theory (SCT), behavioral, environmental, and personal factors all have an impact on behavior. According to SCT, people who are exposed to risky behaviors (such sharing needles or having unprotected sex) in their social surroundings are more likely to partake in those activities themselves when it comes to HIV and drug usage. Due to the high prevalence of drug usage and social difficulties, Hopely creates an environment where teenagers are more susceptible to peer pressure, which might cause them to engage in activities that raise their risk of HIV infection. This argument explains why young people in Hopely, in particular, would take drugs and have unsafe sexual encounters, which would further the HIV transmission cycle.

#### 2.2.3 The Syndemic Theory

The Syndemic Theory, proposed by Singer (2009), argues that interconnected health issues—such as substance abuse, HIV, poverty, and mental health disorders—exacerbate one another in marginalized communities. In Hopely, the intersection of poverty, drug use, HIV infection, and social problems such as violence and mental health disorders creates a "syndemic" that worsens the health outcomes in this community. This theory highlights the need for a holistic approach to tackling HIV and drug abuse, emphasizing that addressing only one issue in isolation will not be sufficient. The Syndemic Theory is relevant for understanding why the combination of drug abuse and HIV prevalence in Hopely cannot be tackled by single-factor interventions, but requires comprehensive programs that address both health issues and the social determinants that contribute to them.

#### 2.2.4 The Theory of Planned Behaviour

The Theory of Planned Behavior suggests that personal actions are shaped by attitudes, social norms, and perceived control over behavior (Ajzen, 1991). In the realm of HIV and substance abuse, TPB indicates that those with favorable views on condom use and needle exchange, and who believe their peers participate in these actions, are more inclined to practice protective behaviors (Albarracin et al., 2001). This theory aids in comprehending the rationale for why many youth in Hopely are inclined to participate in drug and substance misuse along with hazardous sexual activities

# 2.2.5 The Health Belief Model (HBM)

When it comes to HIV and drug/substance abuse, the Health Belief Model (HBM), which was created by Rosenstock in 1974, suggests that people's behavior is influenced by their perceptions of their vulnerability to a health threat, the seriousness of that threat, the advantages of taking preventive measures, and the obstacles to doing so. According to the HBM, people who believe they are at high risk of contracting HIV are more likely to use condoms or take part in needle exchange programs (Janis & Mann, 1977).

Because it explains why people, especially teenagers in high-density suburbs like Hopely, might not adopt protective behaviors in spite of the significant risk of HIV transmission linked to drug misuse and unsafe sexual practices, the Health Belief Model is especially pertinent to this study. The concept emphasizes that perception is crucial for behavior modification; yet, when people use drugs, their judgment may be compromised and their capacity to evaluate their risk of HIV may be skewed. The prevalence of drug usage and its association with risky sexual conduct in Hopely raises the possibility that many young people may not consider themselves to be at risk for HIV or may undervalue the seriousness of the consequences.

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Despite the established risks of HIV, the HBM can help explain why teenagers in Hopely would be more prone to drug misuse and hazardous sexual conduct. Social pressures and the poor judgment frequently linked to drug use can cause people to disregard preventive measures. The Health Belief Model provides important information about the behavioral and psychological aspects of HIV prevention measures, especially those aimed at drug-using communities in high-risk places like Hopely.

# 2.3 Conceptual Framework

Visualizing and comprehending the connections between various elements that affect an issue can be accomplished through the use of a conceptual framework (DeMaro 2020). HIV/AIDS and drug/substance misuse are correlated for a number of contextual reasons. Social isolation and a higher risk of drug and substance abuse can result from stigma and prejudice against people living with HIV/AIDS (Parker, 2007). Because people may use illegal substances as a coping method, poverty and unemployment can also raise the likelihood of drug and substance usage (Manhica, 2021). The relationship between HIV/AIDS and drug/substance misuse has gotten worse in Zimbabwe as a result of the country's economic crises and political unrest, which have also led to higher rates of unemployment and poverty (Moyo, 2023). Providing individuals with emotional, educational, and practical assistance can aid them in coping with stress and trauma (Kraus, 2004). Another important perspective is social capital, which highlights the importance of social networks and connections in achieving collective objectives (Putnam, 2000). Social capital can significantly influence the organization of support efforts for those who may be prone to substance abuse and engaging in risky sexual behaviors.

# 2.4 Global Perspective on Drug Abuse and HIV/AIDS

HIV/AIDS remains a significant global public health issue, with approximately 38 million individuals living with HIV/AIDS around the world (UNAIDS, 2020). Substance abuse poses another critical public health challenge globally, with around 270 million individuals reported to be using illicit drugs worldwide (UNODC, 2020). Research conducted in Eastern and Southern countries, including Russia, Indonesia, and the United States, indicates that injecting drug users (IDUs) face a heightened risk of HIV infection due to the sharing of needles (Degenhardt, 2010). According to UNAIDS (2021), 10% of all new global HIV infections are attributed to injecting drug use. The United Nations Office on Drugs and Crime reported that 270 million people engaged in the use of illicit substances and drugs in 2020. The sharp rise in drug users is largely linked to the COVID-19 pandemic, as many individuals experienced prolonged periods of inactivity during lockdowns. Studies from South America and Asia reveal that drug usage is associated with increased engagement in risky sexual behaviors, such as having multiple sexual partners and

inconsistent condom use. Among the 46 nations that regularly provide data to UNODC regarding individuals in drug treatment, approximately 40 percent reported a decrease in the number of people undergoing treatment during the COVID health crisis compared to prior years. Data from 2021 indicates that this decline has continued. Women who use drugs often develop drug use disorders more swiftly than men, yet they remain underrepresented in treatment programs. The disparity is notably pronounced among women who use amphetamine-type stimulants, where nearly half of users are women, but only a quarter of those receiving treatment are female. In addition to societal expectations and obligations, women may encounter additional obstacles to accessing treatment, such as heightened fears of legal repercussions, increased social stigma, lack of childcare options, and concerns about losing custody of their children during treatment. Women who use drugs and belong to specific population groups—such as trauma and violence survivors, individuals with co-occurring conditions, sex workers, prisoners, or ethnic minorities—confront even greater vulnerabilities, including elevated levels of stigma and discrimination. This group is crucial, as they are at a higher risk of contracting HIV compared to those who do not use drugs.

#### 2.5 Sub- Saharan Africa Perspective

Sub-Saharan Africa continues to be the region most affected, with estimates indicating that up to 22.5 million individuals are living with the virus. In Africa, the rise in substance abuse is increasingly contributing to the spread of HIV. A significant factor facilitating HIV transmission in this area is the abuse of drugs. Studies have indicated a strong link between drug abuse and the transmission of HIV in Sub-Saharan Africa. This essay will explore the main factors driving this relationship, regional differences, and the responses to the issue.

A major contributor to the connection between drug abuse and HIV transmission is the use of injecting drugs. Sharing needles and other equipment for injection poses a substantial risk for HIV spread (UNAIDS, 2020). In several Sub-Saharan African nations, injecting drug use is prevalent, especially among youth. For instance, in Kenya, it is estimated that more than 50% of individuals who use injecting drugs are HIV positive (NASCOP, 2020). Research conducted in South Africa revealed that the use of drugs, specifically methamphetamine (tic), was linked to increased risky sexual behaviors in young adults (Parry et al., 2018). A study in Kenya indicated that commercial sex workers who used drugs had elevated HIV prevalence compared to those who did not (Okal et

al., 2011). In Nigeria, the consumption of alcohol and marijuana among adolescents was associated with early sexual initiation and inconsistent condom use (Olley, 2006).

Non-injecting drug use also significantly contributes to the link between drug abuse and HIV transmission. The use of non-injecting drugs, like cocaine and methamphetamine, can elevate the risk of HIV transmission by lowering inhibitions and increasing participation in high-risk activities. In South Africa, it is estimated that over 20% of non-injecting drug users are HIV positive (SANAC, 2020). Socioeconomic factors also significantly influence the link between drug abuse and HIV transmission. Issues such as poverty, unemployment, and limited access to education and healthcare are all factors that contribute to this relationship. Many countries in Sub-Saharan Africa experience these socioeconomic challenges, particularly among the youth.

There are also differences across regions regarding the link between drug abuse and HIV transmission. In East Africa, nations like Kenya and Tanzania have witnessed a notable rise in HIV transmission rates among injecting drug users. In Southern Africa, countries such as South Africa and Namibia report high rates of HIV transmission among non-injecting drug users.

To tackle the connection between drug abuse and HIV transmission, several nations in Sub-Saharan Africa have adopted harm reduction strategies. These initiatives include needle exchange programs and opioid substitution therapy, aimed at mitigating the risk of HIV transmission among injecting drug users. Antiretroviral therapy (ART) has also been widely embraced as a treatment for HIV/AIDS and has been demonstrated to significantly decrease the risk of HIV transmission.

#### 2.6 Zimbabwean context

The relationship between drug and substance abuse and the HIV/AIDS epidemic has been extensively examined in various socio-economic environments. Substance misuse, especially through injection drug use, engaging in unprotected sexual encounters while under the influence, and engaging in transactional sex due to drug addiction, has been recognized as a significant factor in the spread of HIV (UNAIDS, 2022). This issue is worsened in densely populated

neighborhoods, where social and economic challenges, restricted healthcare access, and peer influences contribute to both elevated substance use and higher rates of HIV prevalence (WHO, 2021).

The HIV outbreak in Zimbabwe is widespread and primarily fueled by unprotected heterosexual intercourse. Individuals in stable heterosexual relationships represent about 55% of all new HIV infections (Erin, 2006). Women, especially adolescent girls and young females, are the most affected. Nonetheless, there are emerging epidemics within key populations, including sex workers and men who engage in sexual activity with men, who face a higher risk of HIV (NACZ, 2018). Data concerning these populations is scarce, as only a limited amount of information is gathered and documented in national records.

In September 2013, Zimbabwe implemented the antiretroviral therapy guidelines established by the World Health Organization in 2013. The 2010 WHO guidelines had been in place prior to this change. At the time of the study, the 2013 guidelines were still active and formed the basis for enrolling individuals into care. The estimated HIV prevalence in Zimbabwe stands at approximately 12.9% (ZIMSTAT, 2020). The primary modes of HIV transmission include unprotected sexual activity, needle sharing, and mother-to-child transmission (CDC, 2020). The prevalence of drug and substance abuse in Zimbabwe is estimated to be about 10.4% (ZIMSTAT, 2020). Substance abuse can result in various adverse health effects, such as overdose, addiction, and a heightened risk of contracting HIV/AIDS (WHO, 2018). A study in Harare revealed that individuals who engaged in illicit drug use were at a greater risk of contracting HIV/AIDS (Gonese, 2015). Another study in Bulawayo found that individuals who injected drugs were more likely to partake in high-risk sexual behaviors, further increasing their chances of acquiring HIV/AIDS (Sibanda, 2017).

The sentinel surveillance system established by the National AIDS Council of Zimbabwe for tracking HIV prevalence in generalized HIV epidemics was first advised by the World Health

Organization in 1989. The NAC surveillance system in Zimbabwe was initiated in 1990, with antenatal care services being commonly utilized as a healthcare source in the country.

#### 2.7 Substance Abuse and HIV in Hopely High-Density Suburb

Hopely, a high-density informal settlement, faces high unemployment, poverty, and inadequate health services, making it a hotspot for both substance abuse and HIV transmission. Hopely has a large population of unemployed youth, who often engage in drug abuse (Mupambirei, 2025). The suburb lacks adequate healthcare facilities, making HIV prevention and treatment difficult (Zimbabwe Ministry of Health, 2023). Reports indicate that drugs such as crystal meth and marijuana are widely available, exacerbating risky sexual behavior (Cimi, 2029).

Drug abuse in Hopely is a growing social and health concern. Commonly abused substances include crystal meth (commonly known as "mutoriro"), marijuana, broncleer cough syrup, and other illicit drugs. The lack of employment opportunities has driven many youths into substance abuse as a coping mechanism. Drug abuse in Zimbabwe is prevalent in marginalized urban areas where poverty, unemployment, and social disintegration are common (Muzuva et al 2023).

Hopely has high rates of HIV infections, primarily due to poor healthcare infrastructure, risky sexual behaviors, and low awareness of HIV prevention methods. The Zimbabwe National AIDS Council (NAC) reports that urban informal settlements like Hopely are hotspots for HIV transmission due to economic hardships that lead to risky behaviors such as transactional sex. High-density suburbs in Zimbabwe have higher HIV prevalence due to a lack of access to health services and the prevalence of multiple sexual partnerships (Bhat, 2017).

#### 2.8 The link between Drug abuse and HIV Prevalence

Various research efforts have shown a link between HIV/AIDS and drug or substance abuse. One study carried out in South Africa revealed that those who injected drugs had a higher likelihood of contracting HIV/AIDS (Durvasula, 2014). Additionally, research in Kenya indicated that individuals who used illegal drugs were more prone to engage in high-risk sexual activities, thereby raising their chances of getting HIV/AIDS (Mwangi et al., 2018).

# 2.8.1 Increased Risky Sexual Behavior

One significant way drug abuse facilitates HIV transmission is by impairing decision-making and raising the chances of engaging in unsafe sexual activities. The use of substances often results in

decreased inhibitions, leading individuals to partake in unprotected intercourse, have several sexual partners, or engage in transactional sex. Those under the influence of drugs are less inclined to take protective measures such as using condoms or discussing safe sex practices (Mesfin, 2024). This significantly contributes to the proliferation of HIV in areas where drug use is common. In Hopely, this situation is especially urgent, as a considerable number of residents, particularly the youth, participate in risky sexual behaviors while under the influence of substances such as crystal meth, marijuana, and alcohol. These actions not only heighten the risk of HIV infection but also worsen the already elevated rates of HIV prevalence in the region. The widespread occurrence of transactional sex, where individuals trade sex for money, drugs, or other material goods, further amplifies the HIV epidemic.

#### 2.8.2 Sharing of Needles and Other Drug Paraphernalia

Although injecting drug use is not as prevalent in Zimbabwe compared to other areas, it still poses a significant risk for HIV transmission among certain groups. Sharing needles is a known method of spreading HIV. In Hopely, while injection drug use may not be as common as elsewhere, drugs like methamphetamines and heroin are still used, and sharing needles may happen among those who inject these substances. Even in areas where drug use doesn't involve injection, research such as Mathers et al. (2008) shows that the risk of HIV transmission is heightened due to related behaviors like unprotected sex and violence. These indirect factors contribute to the virus's spread, even in contexts where drug use does not involve injections. Thus, despite the relatively low rates of injecting drug use in Zimbabwe, the overall use of illegal drugs can still significantly elevate the risk of HIV.

# 2.8.3 Sexual Exploitation and Transactional Sex

Another crucial element connecting drug use with HIV transmission in Hopely is the participation in transactional sex, especially among young men and women. Transactional sex involves exchanging sexual acts for drugs, money, or other material possessions, often occurring under duress or in vulnerable circumstances. In Hopely, a significant number of youth, particularly young women, partake in this behavior to fund their drug habits, rendering them particularly susceptible to HIV infection (Wamoyi, 2016). The vulnerability of young individuals in these environments is exacerbated by financial difficulties, which frequently diminish their ability to advocate for safe sex practices. Many of these individuals, especially those who are urgently seeking money for drugs, may feel disempowered to discuss condom use during sexual activities, dramatically

heightening the risk of HIV transmission. Additionally, certain people may be taken advantage of by older drug dealers or men in exchange for drugs, continuing the cycle of HIV spread.

#### 2.8.4 Weakening of the Immune System

Chronic drug abuse can have profound effects on the immune system, weakening the body's natural defenses and making individuals more vulnerable to infections, including HIV. Substance abuse not only increases the likelihood of contracting HIV, but also accelerates the progression of the disease in HIV-positive individuals, leading to poorer health outcomes (Parikh, 2012). For individuals who are already HIV-positive, the effects of drug abuse can be particularly detrimental. Drugs like methamphetamines and alcohol can compromise the body's ability to fight off infections, making it harder for the immune system to control HIV progression. This often results in faster deterioration of health, increased susceptibility to opportunistic infections, and ultimately, a worsening prognosis for the individual.

# 2.9 Current Interventions on HIV and Drug/Substance Abuse

On a global scale, efforts to combat both HIV/AIDS and substance abuse have increasingly adopted a holistic approach that recognizes the intricate and interrelated nature of these issues. Such strategies often integrate prevention, treatment, and harm reduction initiatives, highlighting the importance of addressing substance abuse in the battle against HIV/AIDS. Worldwide initiatives, including the Sustainable Development Goals (SDGs)—specifically SDG 3: Good Health and Well-being, SDG 1: No Poverty, and SDG 4: Quality Education—have significantly influenced the development of interventions and policies focused on addressing HIV/AIDS and drug abuse globally.

#### 2.9.1 Awareness and Education Campaigns

Raising awareness regarding the dangers of drug misuse and its connection to HIV/AIDS is a vital element of intervention strategies. Community education initiatives conducted by healthcare professionals, NGOs, and local organizations are crucial in informing at-risk populations, especially young people, about safe practices and the significance of harm reduction methods. Avert (2019) indicates that educational programs led by the community have been effective in considerably decreasing high-risk behaviors within vulnerable groups. In Hopely, organizations like the National AIDS Council of Zimbabwe (NAC), in partnership with other entities such as the Ministry of Health and Child Care, Population Services International, and the Ministry of Primary

and Secondary Education, are proactively working to raise awareness through schools and community initiatives about the relationship between HIV/AIDS and drug misuse. These initiatives are designed to inform individuals about the risks associated with drug use, advocate for safe sex practices, and emphasize the necessity of HIV testing and treatment.

#### 2.9.2 Harm Reduction Strategies

Harm reduction methods are a debated yet effective way to address the relationship between HIV/AIDS and substance abuse. These methods focus on minimizing the negative effects of drug use, particularly within at-risk groups. Common harm reduction measures include needle exchange initiatives, supervised drug rehabilitation, and the provision of opioid replacement therapy. These efforts help curb HIV transmission by providing individuals who inject drugs with access to sterile needles, thereby avoiding the sharing of contaminated paraphernalia. Studies indicate that harm reduction measures can greatly decrease HIV transmission rates in communities with high levels of injecting drug use. For instance, nations like Russia and Indonesia have put needle exchange programs into place and have observed a reduction in HIV rates among injecting drug users (IDUs). Although some may find these strategies controversial, evidence suggests they can play an essential role in alleviating the adverse effects linked to drug abuse and the spread of HIV.

#### 2.9.3 Strengthening Healthcare Services

Enhancing access to healthcare services is a crucial strategy for tackling the intertwined issues of drug addiction and HIV/AIDS in Hopely. Increasing access to Antiretroviral Therapy (ART) for individuals living with HIV, along with substance abuse treatment programs, is vital for achieving improved health outcomes. Integrated healthcare services that offer both HIV care and drug treatment have demonstrated more effective health management for those facing co-occurring HIV and substance use. As reported by UNAIDS (2021), when HIV treatment is offered in conjunction with drug therapy, individuals are more likely to stick to their treatment regimens, leading to a decrease in HIV viral load and an enhancement in immune function. In Hopely, bolstering healthcare infrastructure—particularly in areas of HIV testing and counseling, ART availability, and rehabilitation programs for substance abuse—could significantly lessen the impact of both HIV/AIDS and drug addiction. Furthermore, enhancing community-based healthcare services and minimizing stigma surrounding both HIV and drug use can encourage health-seeking behaviors among residents in densely populated areas.

# 2.9.4 Economic Empowerment Programs

Addressing the root causes of drug abuse, such as unemployment and poverty, is crucial in reducing both substance dependence and HIV prevalence. Economic empowerment initiatives, such as vocational training and income-generating projects, can offer alternative livelihoods to vulnerable populations, particularly the youth, who are at a higher risk of engaging in drug abuse as a coping mechanism for economic hardship. According to Chirisa & Machine (2011), economic interventions targeting youth in urban informal settlements —like Hopely —are vital in curbing social problems such as drug abuse and HIV. By providing individuals with the skills, resources, and opportunities to become economically independent, these programs can reduce the allure of drug abuse as a means of coping with poverty, unemployment, and social isolation. Economic empowerment initiatives also offer positive social alternatives, which can break the cycle of substance abuse and reduce the risk of engagement in risky sexual behaviors that contribute to HIV transmission. In Hopely, such programs could include job training in areas like agriculture , technology, trade skills, or entrepreneurship, alongside support for microenterprises and community-based income-generating activities . These efforts could offer young people alternatives to illicit activities and reduce the likelihood of drug abuse becoming a long-term coping strategy. Furthermore, through enhanced economic stability, individuals may experience a reduction in the financial pressures that often lead to transactional sex and other risky behaviors that increase the risk of HIV infection.

#### 2.10 Gaps in current research

Despite the significant body of research on the correlation between HIV/AIDS and drug/substance abuse, several notable gaps remain in the existing literature. A substantial amount of research focuses on broader populations or more generalized settings, but there is limited focus on high-density suburbs like Hopely in Zimbabwe. Hopely, as an informal settlement characterized by poverty, unemployment, and limited access to healthcare services, presents a unique social environment that may influence both substance abuse and HIV/AIDS prevalence in ways not fully explored in existing studies. Additionally, although there is recognition of the intersection between drug use and HIV/AIDS globally, few studies have specifically examined the contextual factors that uniquely contribute to the correlation in Zimbabwe. Factors such as the country's economic challenges, political instability, and socio-cultural influences may play a critical role in shaping the drug abuse and HIV/AIDS dynamics, but these have been under-researched. Moreover, while

studies globally have highlighted the role of gender, sexual behavior, and drug-related practices, local knowledge on Hopely's socio-economic environment and its specific challenges remains sparse. There is a lack of in-depth research into how local practices—such as substance abuse associated with peer pressure, transactional sex, or the availability of specific drugs like methamphetamine or marijuana—may compound the challenges associated with HIV transmission in this specific context. Thus, the absence of research tailored to the high-density suburb of Hopely leaves critical questions unanswered, particularly regarding how local social, economic, and cultural dynamics shape the interaction between substance abuse and HIV/AIDS. Addressing these gaps will be essential in developing targeted and effective public health interventions for high-risk communities.

# **2.11 Summary**

This chapter has explored the complex relationship between HIV/AIDS and drug/substance abuse, particularly in high-density suburbs like Hopely, Harare. It highlighted key theoretical frameworks, including the Health Belief Model (HBM), which serves as the most relevant framework for understanding the behaviors driving HIV transmission in this context. The literature reviewed underscores the significant impact of drug abuse on HIV prevalence, both globally and within Zimbabwe, with socio-economic factors like poverty, unemployment, and poor healthcare access exacerbating the issue in Hopely. Despite substantial research on this topic, there remains a notable gap in studies specifically examining the HIV-drug abuse correlation in high-density urban settings like Hopely, which limits the effectiveness of targeted interventions. This chapter therefore sets the stage for the next section, which will outline the research methodology used to address these gaps and investigate the factors contributing to HIV and drug abuse in Hopely, Harare.

#### **Chapter 3: Research Methodology**

#### 3.1 Introduction

The research approach utilized to examine the relationship between drug misuse and HIV/AIDS prevalence in Zimbabwe's Hopely high-density suburb of Harare is described in this chapter. The research design, the study population, and the sampling techniques used to choose participants are all thoroughly covered in this chapter. The chapter also covers data gathering methods, including

the tools used to acquire data, followed by data analysis procedures. There will also be a presentation of the ethical factors that were taken into account during the research process, such as confidentiality and informed permission. The chapter will also discuss the study's possible limitations that could influence how the results are interpreted. By ensuring scientific rigor and systematic research practices, this methodology aims to produce valid, reliable, and actionable findings that contribute to understanding the link between drug abuse and HIV/AIDS prevalence in high-density urban areas like Hopely.

# 3.2 Research philosophy

The study utilizes the positivist research framework, which focuses on objectivity, the collection of empirical data, and the application of statistical analysis. Positivism is based on the premise that knowledge is acquired through observable and quantifiable facts, and it is generally linked to quantitative research approaches. Within this framework, reality is perceived as external and independent of the observer, with the assumption that the social environment functions according to laws that can be objectively identified and comprehended through empirical evidence. Positivism is particularly effective in research aimed at establishing causal connections between variables, such as the relationship between drug abuse and HIV/AIDS within the setting of Hopely. Numerous studies have aligned their investigations within the positivist framework, particularly those examining the connection between substance abuse and HIV transmission. For instance, the research conducted by Marmor et al. (2006) adopted a positivist perspective to evaluate the incidence of HIV among injecting drug users, depending on statistical information to determine correlations. Similarly, the work of Kalichman et al. (1996) regarding high-risk sexual behavior and HIV transmission applied a positivist model, utilizing quantitative surveys to gather data from participants.

The advantages of the positivist paradigm include its emphasis on objectivity and its capability to produce replicable, reliable, and generalizable findings. By utilizing structured methods and statistical analyses, this approach guarantees that the results are rooted in empirical evidence rather than personal interpretation. Additionally, it permits the measurement of variables such as drug abuse and HIV prevalence, which are integral to this research.

However, the positivist methodology also has its drawbacks. It often neglects the subjective experiences and interpretations that individuals associate with their actions. In relation to HIV/AIDS and drug abuse, this can lead to a lack of understanding of the personal and societal factors that influence these behaviors. While positivism is effective at identifying correlations and causal links, it may fail to encompass the complexities of human conduct and social occurrences, which are frequently shaped by context, culture, and individual experiences.

Despite these shortcomings, the study remains grounded in the positivist framework due to its capacity to offer clear, quantifiable data on the association between drug abuse and HIV/AIDS prevalence. The objective of this research is to measure the degree of the relationship between these two factors in the densely populated suburb of Hopely, where information on this topic is limited. By relying on statistical methods, the study aims to establish empirical evidence that could inform public health strategies and interventions focused on decreasing HIV transmission in high-risk groups. To address the limitations of positivism, aspects of the interpretivist approach will also be integrated, facilitating a more comprehensive understanding of the personal and social influences that lead to drug abuse and HIV transmission.

#### 3.3 Research design

The cross-sectional research design implemented in this study effectively captures the logical relationship between drug and substance abuse and the prevalence of HIV/AIDS within the specified context at a single point in time. A research design pertains to the approach used for collecting and analyzing data in order to answer the identified research questions (McCombies, 2021). In this instance, there is no requirement to manipulate the study participants to investigate the relationships among the variables of interest, including the rates of drug abuse and the count of individuals with HIV/AIDS in the Hopely community, along with the community's sociocultural dynamics.

Cross-sectional research is widely utilized in public health research because it provides a precise assessment of health behaviors and outcomes within a specific demographic. For example, the

research by Degenhardt et al. (2019) and Kalichman et al. (2011) employed cross-sectional design methods to explore the relationship between drug use and HIV risk behaviors. These investigations reinforced the notion that a cross-sectional design is suited for identifying relationships among various variables in particular contexts and populations.

This study exclusively utilized a quantitative approach, employing structured questionnaires to collect numerical data. Through this methodology, patterns, consistencies, and possible associations between drug abuse and the prevalence of HIV/AIDS can be identified. Questionnaires facilitate the collection of data from a significant number of participants swiftly, thereby enhancing the study's reliability and generalizability within the Hopely community.

Nonetheless, it is important to note that a cross-sectional design can establish associations but not causations. This does not imply that the findings cannot highlight underlying associations or indicate that drug abuse directly leads to HIV/AIDS.

Despite this limitation, the cross-sectional quantitative design is pertinent for this study as it seeks to assess the current levels of drug use and the prevalence of HIV/AIDS in Hopely. It provides a pragmatic and effective method for data collection and analysis to assist in the formulation of public health interventions and policies.

# 3.4 Study Area and population

#### 3.4.1 Study area

Hopely is a densely populated suburb situated in the southern region of Harare, which is the capital city of Zimbabwe. It is located around 15 kilometers southwest of the Harare Central Business District (CBD) and is adjacent to neighborhoods such as Mbare to the northeast and Waterfalls to the southeast. Initially developed as an informal settlement, Hopely has experienced considerable growth over the decades, driven by rapid urban migration. According to the latest estimates, the suburb houses over 150,000 residents, rendering it one of the most populated areas in Harare

(ZIMSTATS, 2022). This elevated population density exerts considerable strain on the already scarce infrastructure and social services.

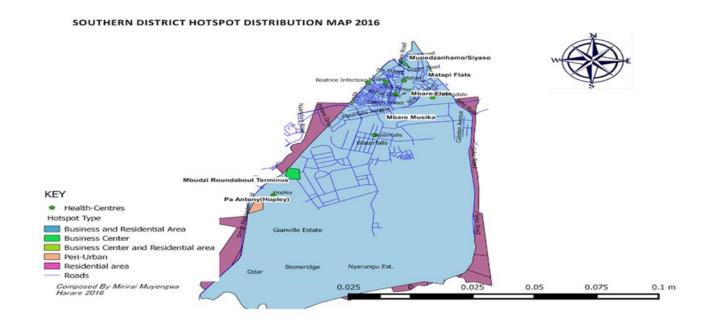
Geographically, Hopely consists of informal housing, subpar road systems, inadequate drainage facilities, and restricted access to clean water and sanitation. These environmental and infrastructural challenges contribute to various public health issues, increasing susceptibility to communicable diseases such as HIV/AIDS. Economically, most residents rely on informal jobs, which include street vending, informal transport operations, small-scale manufacturing, and artisanal crafts. With soaring unemployment rates, particularly among the youth, and scarce prospects for advancement, many individuals in the suburb endure socioeconomic difficulties.

The suburb's closeness to significant economic areas like Mbare, known for its vibrant market and transportation hub, also establishes it as a center of both economic activity and social concerns, including the trafficking of illegal substances. These collective elements render Hopely a vital area for examining the relationship between drug and substance abuse and the high incidence of HIV/AIDS. This location was selected for the study due to its reputation as a hub for both drug abuse and elevated HIV/AIDS rates, marking it as a crucial target for public health initiatives. Approximately 65,000 individuals within this population are aged between 10 and 24 (ZIMSTATS 2022). The socioeconomic conditions prevalent in Hopely, characterized by high unemployment, poverty, and limited healthcare access, intensify these public health challenges, and the outcomes of this research can help inform focused interventions designed to mitigate drug abuse and curb the spread of HIV/AIDS in the neighborhood. Hopely is part of the broader Southern District of Harare and features active hotspots for drug abuse and sex work, such as PaAnthony (Beerhall) and Pama Steps bus terminus, where illicit drug activities and sex work are prevalent. These hotspots further contribute to the widespread occurrence of drug abuse and HIV transmission in the region, making it a prime site for this investigation.

Below is a map of Harare Southern District Highlighting Hopely as one of the major hotspots

# Figure 4.1 Educational levels of respondents (n=72)

Figure 3.1: Educational levels of respondents (n=72)



# 3.4.2 Target population

The research centers on people living in Hopely, especially those at the highest risk for the dual challenges of HIV/AIDS and substance misuse. The group being studied consists of:

# Youth (aged 15–35 years)

This group is particularly vulnerable to drug abuse and risky sexual behaviors, which are major contributors to HIV transmission. They are often exposed to peer pressure, limited access to education, and socio-economic challenges, increasing their susceptibility to engaging in high-risk behaviors.

# People Living with HIV/AIDS (PLHIV)

This group will help the research explore whether drug abuse is a common factor among individuals diagnosed with HIV/AIDS in Hopely and if substance abuse contributes to higher vulnerability to HIV transmission.

#### **Healthcare Professionals**

This includes nurses, physicians, and social workers who care for people living with HIV and address health issues related to drug use. Their knowledge will provide important perspectives on the connection between substance abuse and the prevalence of HIV/AIDS in the region.

# **Community Leaders and Law Enforcement Officers**

These stakeholders will provide expert opinions on drug use patterns, the impact of substance abuse on public health and safety, and potential intervention strategies.

## 3.5 Sampling procedures

A probability sampling method was utilized to guarantee that each individual in the target population had a known and equal likelihood of selection, which is crucial for the correlational research framework. In particular, a multi-stage sampling approach was implemented, integrating both stratified sampling and random sampling techniques to improve the representativeness and dependability of the sample.

## 3.5.1 Stratified Sampling

The residents of Hopely were categorized into separate strata according to important factors like age (young people vs. adults), health condition (people living with HIV vs. those not living with HIV), and professional categories (healthcare workers, law enforcement agents, etc.). This approach guaranteed that various subgroups within the community were adequately represented in the sample.

## 3.5.2 Random Sampling

In each stratum, individual participants were chosen using simple random sampling. This approach guarantees that all members of each category had an equal opportunity to participate in the study, minimizing selection bias. Random sampling was utilized for both the youth and PLHIV groups to ensure equal representation.

## 3.5.3 Purposive Sampling for Experts

Given that healthcare professionals and law enforcement personnel possess specialized knowledge and skills essential for the study, purposive sampling was utilized to select these individuals. These experts were specifically identified based on their responsibilities in addressing HIV/AIDS and drug abuse within the community.

# 3.6 Determining the sample size

The sample size was calculated using Cochran's sample size formula applicable to a finite population. This formula is frequently employed in social science research to determine the minimum sample size needed for a specific level of precision and confidence:

$$n = Z^2 \cdot p \cdot \frac{1-p}{e^2}$$

Where:

- n is the sample size,
- Z is the z-value (1.96 for a 95% confidence level),
- p is the estimated proportion of the population (0.5 is used when the true proportion is unknown, as this maximizes the sample size),
- e is the margin of error (0.05 for a 5% margin).

$$n0 = 0.0521.962 \cdot 0.5 \cdot (1 - 0.5) = 0.00253.8416 \cdot 0.25 = 384.16$$

Substituting the values into the formula:

$$n^{0} = \frac{\left(1.96^{2} * 0.5 * (1 - 0.5)\right)}{1}(0.05^{2})$$

$$= \frac{(158 * 0.25)}{1}0.0025$$

$$= 0.9604 \frac{1}{1}0.0025$$

$$= 72$$

Thus, the initial required sample size was approximately 385 respondents.

Since the target population of Hopely is finite, estimated at 200,000 residents, the finite population correction (FPC) was applied using the formula:

$$n = \frac{n^0}{1} \left( 1 + \left( \frac{(n^0 - 1)}{1} N \right) \right)$$

$$n = 158 \frac{1}{1} \left( 1 + \left( 384 \frac{1}{1} 200,000 \right) \right)$$

$$= 158 \frac{1}{1} (0.25 * 1.00192)$$

$$= 72$$

The adjusted sample size remains approximately 72 respondents. Therefore, a sample size of 158 was considered ideal to achieve a 95% confidence level with a 5% margin of error. However, due to limitations such as access, and resource constraints, only 72 respondents were successfully reached. While this is below the ideal threshold, the sample still provides indicative insights into the relationship between drug and substance abuse and HIV prevalence in Hopely. The reduced sample size increases the margin of error to approximately  $\pm 11\%$ , which has been taken into account in the analysis and interpretation of results.

# 3.7 Data Collection Instruments

In this research, a structured questionnaire served as the main tool for collecting data to investigate the relationship between drug abuse and the prevalence of HIV/AIDS in the Hopely high-density suburb. A questionnaire consists of a series of thoughtfully designed questions aimed at gathering information about participants' views, behaviors, experiences, and perceptions. Questionnaires are effective instruments for gathering data from large and varied populations, allowing the researcher to obtain a wide array of responses from the community (Bhandari, 2021). This instrument includes both closed-ended and open-ended questions, ensuring that it collects both quantitative

and qualitative information. The closed-ended questions yield measurable data suitable for statistical evaluation, whereas the open-ended questions enable participants to share their experiences and opinions in their own words. By employing this dual approach, the study captures both the range and depth of participants' viewpoints.

## 3.7.1 Structure of the Questionnaire

The questionnaire was structured into several sections to address the research objectives and gather comprehensive data related to drug abuse and HIV/AIDS. The structure of the questionnaire is as follows:

## **Section A: Demographic Information**

This section gathers basic demographic details about the participants to better understand their background and contextualize the data. Information collected includes:

- Age
- Gender
- Educational level
- Employment status
- Marital status
- HIV status (if applicable)
- Geographic location (to confirm their residence in Hopely)

This section helps to assess the demographic characteristics of the study population, which are critical for understanding how factors like age, gender, and socioeconomic status may influence drug use and HIV prevalence.

# Section B: Knowledge and Awareness of HIV/AIDS

- This section contains questions related to the participants' understanding of HIV/AIDS, its transmission methods, prevention strategies, and available treatments.
  - i. What are the primary ways HIV is transmitted?

- ii. Are you aware of available HIV prevention methods (e.g., condom use, PrEP)?
- iii. Do you know where HIV testing is available in Hopely?

This section helps evaluate the level of knowledge about HIV/AIDS within the community, which may influence individuals' behaviors, including their likelihood of using protection during sex or engaging in high-risk behaviors.

## **Section C: Drug/Substance Abuse Patterns**

Questions in this section assess the extent of drug use in Hopely and its correlation with risky sexual behaviors.

- i. Which substances do you use most frequently?
- ii. How often do you use drugs (daily, weekly, monthly)?
- iii. Have you ever used drugs before engaging in sexual activities?
- iv. Do you share needles or other drug paraphernalia?

This section addresses the research objective of understanding the relationship between drug use and HIV transmission. It provides insight into both the frequency of drug abuse and the contexts in which individuals are most likely to engage in high-risk behaviors.

# **Section D: HIV Testing and Treatment**

This section explores whether participants have ever been tested for HIV, their experiences with HIV treatment, and their participation in harm reduction programs. Examples include:

- i. Have you ever been tested for HIV? If yes, how many times?
- ii. Are you currently on antiretroviral therapy (ART)?
- iii. Have you participated in any needle exchange programs or rehabilitation services?

This section allows for an assessment of the accessibility of HIV testing and treatment in the community and the effectiveness of ongoing interventions such as harm reduction programs.

## Section E: Attitudes toward HIV/AIDS and Drug/Substance Abuse Interventions

This section captures participants' perceptions of existing HIV/AIDS and drug abuse interventions in the community.

- i. How effective do you think the current HIV prevention programs are in Hopely?
- ii. Have you ever participated in any HIV or drug abuse education sessions? If yes, were they helpful?
- iii. Do you think that the government is doing enough to address drug abuse and HIV/AIDS in Hopely?

This section evaluates community attitudes toward existing interventions and provides insights into the potential gaps and improvements that may be needed in local HIV/AIDS and drug abuse programs.

# Stratified sampling procedure

A stratified random sampling method was utilized to guarantee that various subgroups within the Hopely community were sufficiently represented in the research. The population was categorized into distinct strata based on essential characteristics like gender, age, and neighborhood. Participants were then randomly chosen from each stratum to maintain a balanced and representative sample across the identified groups. This method was selected to enhance the precision and dependability of the results by capturing the diverse viewpoints and experiences related to drug and substance abuse and HIV/AIDS in the community. Stratified sampling also aids in minimizing sampling error and ensures that significant subpopulations, such as youth, adults, and both genders, are proportionately included in the study.

# 3.7.2 Rationale for Using Questionnaires

The use of questionnaires is well-suited for this research, as they offer a systematic and effective method for gathering both quantitative and qualitative information from a significant number of respondents in a relatively brief timeframe. Given that this research follows a correlational design, utilizing surveys enables the collection of data on multiple variables (such as drug use, HIV rates, and risky sexual behavior) that can be analyzed statistically to uncover possible correlations. Moreover, incorporating both closed-ended and open-ended questions ensures that the research captures quantitative data while also reflecting participants' personal perspectives, thereby enriching the understanding of individuals' lived experiences in Hopely.

## 3.7.3 Limitations of the Questionnaire

While questionnaires offer numerous advantages, such as standardization and efficiency, there are limitations:

## 3.7.3.1 Response bias

Some participants may provide socially desirable responses, especially on sensitive issues like drug use and HIV/AIDS.

## 3.7.3.2 Limited depth

While open-ended questions provide opportunities for participants to expand on their thoughts, surveys might not adequately represent the intricate and detailed realities of individual experiences with drug addiction and HIV/AIDS.

# 3.8 Data analysis

The method of data analysis adheres to a structured framework that converts unprocessed data into valuable insights and actionable results (Crabtree, 2000). The gathered data was subjected to an extensive cleaning and preparation process prior to analysis. In instances of missing or incomplete data, suitable imputation methods were utilized to fill in the gaps and maintain the integrity of the analysis.

#### 3.8.1 Quantitative Data Analysis

The quantitative data gathered through surveys was examined with the help of statistical software, primarily SPSS (Statistical Package for the Social Sciences), and Microsoft Excel. These tools facilitated the use of descriptive statistics to highlight the demographic traits of participants (including age, gender, and employment status) along with their answers concerning drug abuse and the prevalence of HIV/AIDS. Descriptive statistics, such as frequency distributions, percentages, means, and standard deviations, were computed to give an overview of the data and to identify trends in participants' behaviors and understanding.

Moreover, the connection between drug abuse and the prevalence of HIV/AIDS was investigated using correlation coefficients. This analysis provided insights into whether there existed a statistically significant correlation between the two variables. In particular, Pearson's correlation was employed to assess both the strength and direction of the linear association between drug abuse behaviors (like the frequency of drug use or the sharing of needles) and HIV/AIDS prevalence. Additionally, regression analysis might be conducted to identify possible predictors of HIV/AIDS in relation to drug abuse patterns.

## 3.8.3 Limitations of Data Analysis

Although the methods utilized for gathering and analyzing data shed light on the relationship between drug abuse and HIV/AIDS, there are several limitations to take into account. The reliance on self-reported information in the surveys may lead to social desirability bias, causing participants to potentially downplay their drug use or risky activities due to the societal stigma associated with these topics. Additionally, the results of this research may not be entirely applicable to other settings outside of Hopely, since the study is focused specifically on this densely populated urban suburb. However, by following strict sampling methods and using a multi-faceted approach, the research provides significant insights into the effectiveness of existing HIV/AIDS and drug abuse interventions within the Hopely community.

## 3.9 Ethical considerations

Ethical considerations played a crucial role in the investigation of the relationship between drug abuse and the prevalence of HIV/AIDS in the Hopely high-density suburb, given the delicate nature of the topic and the susceptibility of the population involved. Prior to participation, informed consent was secured from all individuals after thoroughly outlining the study's aims, methods, potential risks, and their right to withdraw at any time without any consequences. Confidentiality and anonymity were rigorously maintained by omitting personal identifiers, securely storing the data, and utilizing participant codes to safeguard identities. The study was especially attentive to the needs of at-risk groups, including those living with HIV/AIDS, drug users, and survivors of gender-based violence, ensuring that they faced no harm or exploitation. Participants in need of additional support were directed to relevant counseling and healthcare services. Cultural sensitivity was prioritized throughout the study, with interview guides modified to honor local customs and values, and researchers trained to eschew biased assumptions. Efforts were made to reduce any psychological or emotional discomfort during data collection by conducting interviews in private settings and employing trauma-informed techniques. Researcher bias was tackled through reflective practices and consistent team discussions aimed at enhancing objectivity. Finally, ethical approval was granted by the pertinent ethics review board, affirming the study's adherence to both national and international ethical standards for research involving human subjects.

#### Conclusion

This section outlined the methodological framework utilized to examine the relationship between drug and substance abuse and the prevalence of HIV/AIDS in the Hopely high-density suburb. The chapter provided an overview of the research design, target population, sampling methods, data collection tools, and data analysis techniques. There was a focus on the ethical considerations that guided the research, including informed consent, confidentiality, cultural sensitivity, the protection of vulnerable groups, and the attainment of ethical approval. The mixed-methods approach used enabled an in-depth investigation of both quantitative data trends and qualitative experiences. Through this thorough methodology, the study maintained the reliability, validity, and ethical standards of the data gathered. The subsequent chapter will present the research findings. Chapter Four will offer a comprehensive analysis and interpretation of the data collected through questionnaires, interviews, and focus group discussions. It will examine the patterns, relationships, and emerging themes that demonstrate how drug and substance abuse affects the prevalence of HIV/AIDS in the Hopely high-density suburb.

## **Chapter 4 Data Presentation and interpretation**

## 4.1 Introduction

This chapter details the data gathered from the field and provides an analysis of the results in connection with the study's objectives. It aims to investigate the relationship between HIV prevalence and drug and substance abuse in the Hopely high-density suburb. A combination of quantitative and qualitative data is employed to offer a thorough understanding of the topic. The results are organized thematically, aligned with the research questions and objectives. Quantitative findings are represented through tables and figures, while qualitative insights from interviews and focus group discussions contribute additional depth and context to the data. This mixed-methods strategy improves both the reliability and richness of the analysis. The chapter also contrasts the findings with existing literature to spot patterns, consistencies, or discrepancies. It examines the broader implications of the results and identifies knowledge gaps that could guide future research and policy actions. The organization of the chapter includes details about participant demographics, thematic findings, a discussion in relation to literature, implications of the findings, and a summary of the chapter.

## 4.2 Response rate

The table below shows the response rate for the data collected on the relationship between drug and substance abuse and HIV/AIDS in Hopely High-Density Suburb. Out of 80 questionnaires sent to participants, 72 were filled out and returned, resulting in a response rate of 90%. This substantial return rate strengthens the credibility and representativeness of the data collected for the research.

Table 1: Response rate of respondents (n = 72)

Method	Actual Target	Responses	Response Rate
Questionnaires	80	72	92%

# 4.3 Demographic characteristics of respondents

#### 4.3.1 Gender distribution

The sample consisted of both male and female respondents. Out of the 72 participants, 42 (58%) were male and 32 (42%) were female. The higher proportion of male respondents reflects the reported gender imbalance in drug and substance abuse prevalence, where males are more often involved in drug-related activities. The table below shows the gender distribution of the participants.

**Table 2: Gender distribution of respondents (n = 72)** 

Gender	Frequency	Percentage
Male	42	58%
Female	30	42%
Total	72	100%

# 4.3.2 Age distribution

The table below illustrates the age distribution of e participants. A significant portion of the respondents, 67%, belonged to the 15–34 age group, aligning with the youth demographic typically linked to drug use and a heightened risk of HIV/AIDS. Conversely, individuals over the age of 50 represented the smallest segment, accounting for only around 6% of the respondents.

**Table 3. Age distribution of participants (n=72)** 

Age group	Frequency	Percentage
Under 15	7	10%
15-24	36	50%
25-34	12	17%
35-49	13	18%
50 and above	4	6%
Total	72	100%

# 4.3.3. Educational levels of respondents

The illustration below presents various educational levels among the respondents. The prevalence of participants with secondary education suggests a need to evaluate how educational attainment might affect awareness and behavior related to drug use and HIV prevention.

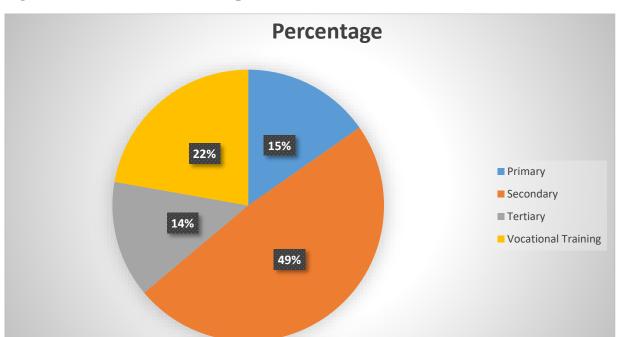
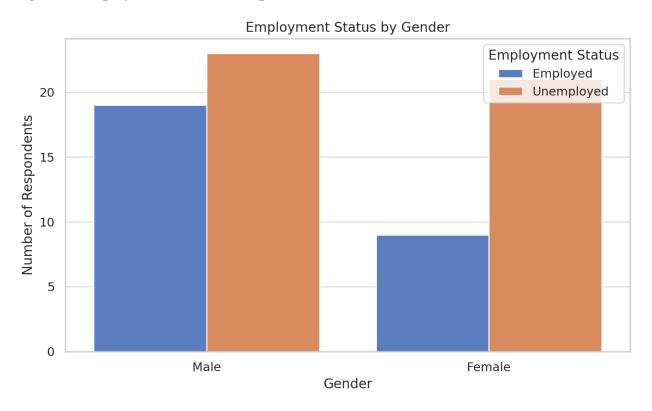


Figure 2. Educational levels of respondents (n=72)

# **4.3.4** Employment status

The figure below shows the employment status of the respondents across different genders. A significant proportion of respondents were unemployed, highlighting economic hardship as a possible driver of substance abuse and risky behavior linked to HIV transmission.

Figure 3. Employments status of respondents (n=72)



## 4.3.5 Marital status

The table below shows the marital status of the respondents. The dominance of single participants may suggest increased exposure to peer pressure and casual sexual behavior, both of which are relevant factors in the context of this study.

Table 4. Marital status of respondents (n=72)

Marital Status	frequency	percentage
single	53	74%
married	19	26%
total	72	100%

The demographic profile of the 72 respondents provides a contextual foundation for understanding the dynamics of drug and substance abuse and its linkage to HIV/AIDS prevalence in Hopely high-density suburb. The sample was predominantly male (58%), reflecting the general trend that males are more likely to engage in substance abuse within urban high-density settings. The majority of

respondents (67%) fell within the youthful age range of 15 to 34 years, a group widely regarded as being at higher risk for both substance abuse and HIV infection due to factors such as peer influence, unemployment, and risky behavior. In terms of education, almost half (49%) of the respondents had attained secondary-level education, while a smaller portion had achieved tertiary education (14%) or had no formal education at all. This suggests that while most participants had basic literacy and awareness, gaps in formal education may still limit their access to comprehensive information about drug use and HIV prevention.

Unemployment was notably high among the participants, with 61% reporting that they were not formally employed, while only 39% were either formally or self-employed. This economic vulnerability is a potential driver of drug use and risky sexual practices, which can in turn elevate the risk of HIV transmission. Regarding marital status, 74% of the participants were single, a demographic known to be more susceptible to peer influence and unprotected sexual behavior. The remaining respondents were either married (26%) or divorced/widowed. These demographic insights are critical in analyzing the behavioral trends discussed in the subsequent sections and serve to highlight the socioeconomic and cultural context in which drug use and HIV risk occur.

# 4.4 Reasons people engage in drug and substance abuse

#### 4.4.1 Ever used drugs before

The table below indicates that a total of **78%** of respondents reported having used drugs before, with **males (49%)** more likely to have done so than **females (29%)**. Only **22%** of respondents reported never using drugs, with a slightly higher proportion of females (13%) than males (10%) abstaining.

Table 5. Respondents engaging in drug abuse by gender

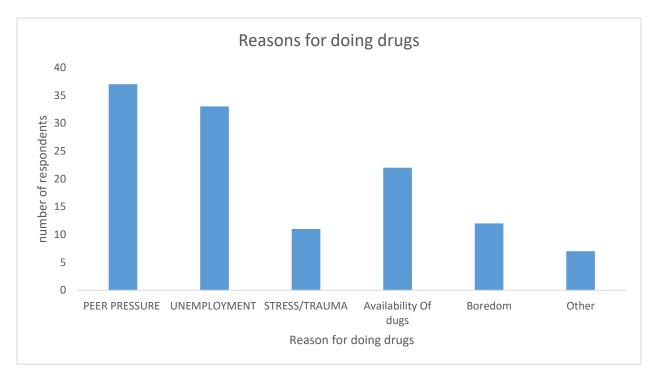
Frequency	y		
Yes	Percentage	No	Percentage
35	49%	7	10%
21	29%	9	13%
56	78%	16	22%
	Yes 35 21	35 49% 21 29%	Yes         Percentage         No           35         49%         7           21         29%         9

According to the data, drug use was more common among male respondents in Hopely, which is consistent with larger patterns seen in Zimbabwe's high-density and urban areas. Peer pressure, societal pressures, and a lack of job opportunities make male youth more prone to risky behaviors like drug use (Tozivepi, 2021). This directly affects the prevalence of HIV/AIDS because drug and substance abuse greatly raises the risk of HIV transmission, particularly when injectable drugs or unprotected sex while intoxicated are involved. Substance abuse is strongly associated with poor sexual health decision-making, especially among young men (Duri, 2017). The need for gender-specific interventions is further highlighted by the gender gap. Even though men use drugs more frequently than women, the 29% female usage rate is still noteworthy and shows that women in Hopely are not exempt from the circumstances or pressures that lead to drug use. This bolsters the claim made by Manjengwa (2017) that women in high-density suburbs experience particular stressors, such as trauma and unstable domestic relationships, which can result in substance abuse.

## 4.4.2 Causes of drug abuse according to respondents

Below is a figure visually presenting the reasons for engaging in drug use among respondents in Hopely.





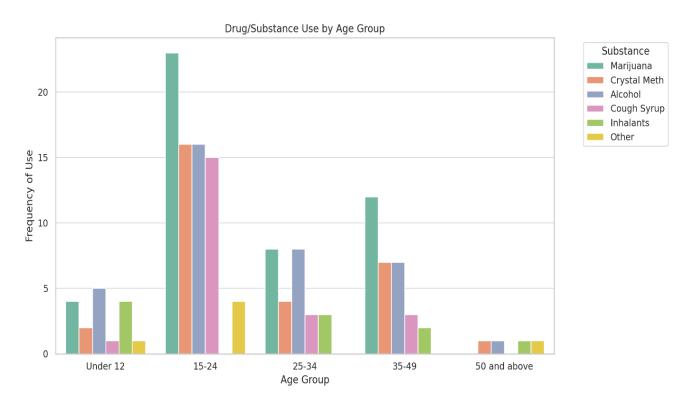
Peer pressure was cited by the majority of respondents (51%) as the main cause of drug use, closely followed by unemployment (46%). Drug availability was also a significant factor (31%), indicating that the issue is exacerbated by easy access to substances. Boredom (17%), stress or trauma (15%), and other reasons classified as "other" (10%) were other noteworthy explanations. The results show that the biggest causes of drug and substance abuse in Hopely are unemployment and peer pressure. These findings are in line with research by Mujuru and Chikowero (2020), who discovered that peer pressure is a major factor in drug use among young people in high-density areas of Zimbabwe. In a similar vein, Dzawanda (2018) highlighted how socioeconomic challenges—in particular, unemployment—are a structural cause of drug abuse in urban areas. The data also indicates that a major enabler is the easy availability of drugs (31%). This bolsters the findings of Ndlela and Mupedziswa (2019), who pointed out that the spread of drugs in underprivileged suburbs is facilitated by unregulated markets and lax law enforcement. Curiously, boredom (17%) and stress/trauma (15%) were less prevalent but still significant. In line with WHO's recommendations from 2021 regarding addressing the root causes of substance abuse, these psychosocial factors point to the need for mental health support services.

The results highlight a complex issue that is systemic (drug availability), social (peer influence), and economic (unemployment), highlighting the need for integrated intervention strategies.

# 4.4.3 Type of drug by age group

The figure below shows the type of drugs taken and its frequency by age group

Figure 5. Types of drugs by age group



The data revealed that the age group most frequently associated with drug and substance use was 15–24 years, across nearly all drug categories. Marijuana was the most commonly used substance, with a peak usage among individuals aged 15–24 (23 respondents), and followed by Alcohol and Crystal Meth (Mutoriro) in the same age group (16 respondents each).

Use of substances among children under 12 was notable, particularly for Inhalants (4 respondents) and Alcohol (5 respondents), indicating early exposure to harmful substances. The age group 50 and above reported minimal usage across all substances. These findings suggest that drug

prevention programs should prioritize youth aged 15–24, while also addressing early onset in minors.

# 4.5 Impact of drug on HIV prevalence

# 4.5.1 How drugs contribute to HIV transmission

The figure below represents how drug abuse contributes to HIV transmission in Hopely.

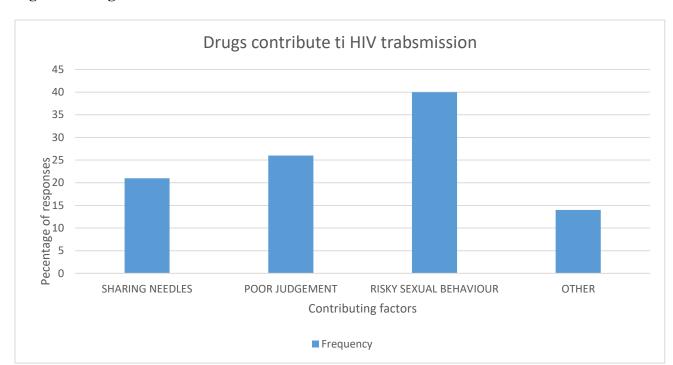


Figure 6. Drugs contribution to HIV transmission

The results indicate a strong relationship between drug and substance abuse and the transmission of HIV in Hopely. As illustrated in Figure 5 above, the most cited contributing factor was *risky sexual behaviour* (40%), followed by *poor judgment* under the influence of substances (26%). *Sharing needles* was also a significant factor (21%), consistent with findings by (Ball, 2019). who noted that intravenous drug use contributes to HIV transmission through needle sharing. These findings reinforce the theoretical link between substance-induced impaired decision-making and increased engagement in high-risk sexual activity. This is particularly critical in resource-constrained settings like Hopely, where access to safe injecting practices and comprehensive sexual education may be limited.

## 4.5.2 Drug use and HIV awareness

Figure below shows the distribution of responses related to drug use and HIV awareness indicators among residents of Hopely. A significant majority (78%) reported having used drugs, while only 38% had accessed HIV Testing Services (HTS). Interestingly, 49% of respondents stated they know someone who is HIV positive.

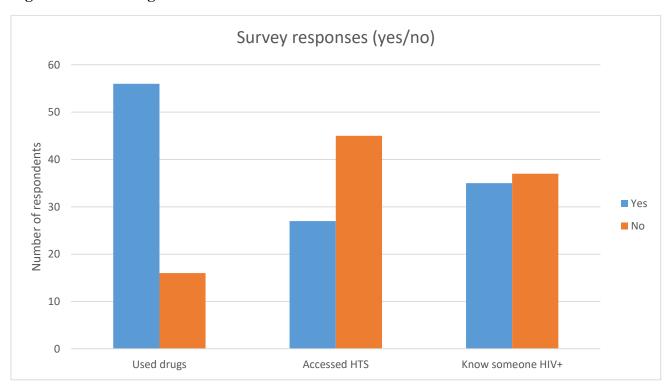


Figure 7. Use of drugs access to HTS

This data underscores a concerning trend while drug usage is high, access to critical health services like HTS remains low. This aligns with previous literature highlighting how drug abuse is both a direct and indirect driver of HIV transmission due to associated risky behaviours and lack of health-seeking actions (Alterovitz, 2018])

# 4.6 Mitigation measures and public health intervention

## 4.6.1 Community engagement

Below is a bar graph showing respondents' awareness and use of HIV support and prevention programs in Hopely, Harare. Figure 6 illustrates respondents' awareness of HIV prevention programs and their usage of available support services in Hopely, Harare.

Community awareness

60

50

50

10

Yes

No

AWARENESS OF HIV PREVENTION PROGRAMS

EVER USED SUPPORT SERVICES

Figure 8. Community awareness

According to the data, only 44% of the participants reported being aware of HIV prevention programs, while a larger 56% indicated no awareness. Furthermore, only **32%** had ever used HIV-related support services, with a significant 68% reporting they had never accessed such services.

These findings suggest a gap in public health outreach and the effectiveness of current mitigation strategies in the community. Limited awareness and low utilization of support services could be contributing to the continued spread of HIV/AIDS, particularly in contexts where drug and substance abuse is prevalent. This aligns with literature by UNAIDS (2022) and Mutambara and

Mugwagwa (2020), which emphasize the importance of accessible and well-promoted support systems in curbing HIV transmission among vulnerable groups.

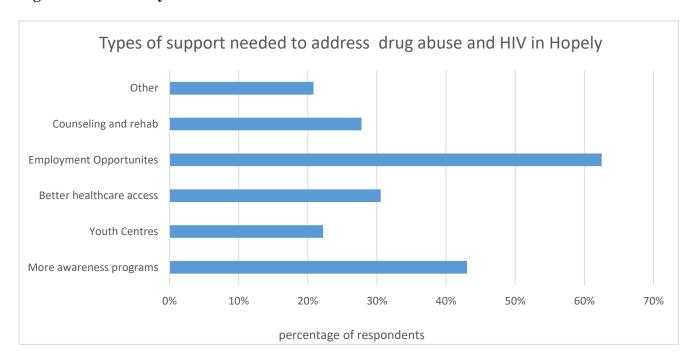
The low engagement with prevention and support services highlights the need for targeted interventions especially peer-led campaigns, mobile outreach clinics, and integration of HIV services with substance abuse rehabilitation programs. These could increase awareness and uptake of services, particularly among the youth and people who use drugs.

# 4.6.2 Support Methods Needed to Address Drug Abuse and HIV

The graph presents what respondents in the study identified as the most needed support interventions to address drug and substance abuse and its link to HIV in Hopely.

Figure 4.8 Community awareness

Figure 9. Community awareness



As illustrated in Figure 8 above, the most frequently cited support need was employment opportunities, mentioned by 63% of respondents. This suggests that many participants see unemployment as a root cause of drug abuse and, indirectly, the rise in HIV infections. The second most cited need was more awareness programs (43%), indicating a perceived gap in education and information dissemination related to both drug risks and HIV prevention. Better healthcare access

(31%), counseling and rehabilitation services (28%), and youth centres (22%) were also seen as important interventions. This aligns with literature by (Sharma 2017), which emphasizes that economic hardship and lack of access to health and social services are key drivers of both drug use and HIV vulnerability in marginalized urban communities.

# **4.7 Discussion of findings**

The results of this research reveal a significant correlation between the rising incidence of HIV/AIDS in the densely populated suburb of Hopely, Harare, and the misuse of drugs and substances. Respondents indicated that the leading route through which drugs contribute to the spread of HIV is risky sexual behavior (40%), followed by needle sharing (21%) and impaired judgment (26%). Substance misuse severely compromises judgment and increases vulnerability to high-risk sexual behavior, particularly among youth and those from economically disadvantaged backgrounds (Kassaye, 2020). These results align with previous research. Moreover, corroborating the findings from Hopely, UNAIDS (2021) has stated that drug-related risky sexual behaviors are a major factor in the rise of new HIV infections in Sub-Saharan Africa.

The same study also identified that peer pressure (51%) and unemployment (46%) were the predominant causes of drug and substance use in the area. These findings resonate with Chikowore's (2019) identification of poverty-related factors in Epworth, another densely populated suburb in Harare, particularly when contrasted with wealthier areas, indicating that economic hardship, lack of job opportunities, and idleness among youths are significant motivators for drug use. The availability of drugs (31%) and usage patterns were influenced by stress, trauma, boredom, and insufficient recreational outlets, as supported by other research (Dzinamarira, 2022), which reflects a qualitative aspect of power and influence within the socio-technical environment of Hopely, where socio-economic difficulties and the absence of psychosocial support systems vary significantly from those in Western contexts, where drug use is often oversimplified as being predominantly related to mental health issues, trauma, or opioid misuse. In contrast, studies from developed countries primarily attribute drug use to mental health disorders associated with such behaviors, trauma susceptibility, or prescription drug misuse, as in Hopely where the dynamics of

drug availability and peer influence hold greater importance (Silveria, 2020). These discrepancies illustrate that while the connection between drugs and HIV is globally recognized, the specific factors and mechanisms are unique to the local context, influenced by the existing infrastructure and the integration of public health initiatives.

Regarding gender, this research found that 49% of males and 29% of females reported drug use. This gender disparity reinforces the findings of Nyoni and Bonga (2020), which suggest that cultural norms in this segment of Zimbabwe foster toxic masculinity and discourage men from expressing emotions, resulting in a considerable number of young men turning to substance use as a coping mechanism. For women, the lower rates of drug use do not come without their own dangers, as they often face greater stigmatization and are less likely to openly disclose their usage status. This difference further underscores the importance of gender-sensitive interventions and awareness initiatives that can target both the prevalence of and stigma associated with substance misuse.

In terms of health-seeking behavior for HIV, only 38% of participants reported ever having sought HIV Testing Services (HTS), and a mere 32% accessed support services like counseling or rehabilitation. This is significantly lower than the figures noted in the most recent Zimbabwe Population-based HIV Impact Assessment (ZIMPHIA, 2020), which stated that over 80% of people living with HIV had been tested at least once. This disparity likely suggests that access is not the only challenge faced in Hopely; other barriers such as distrust in the healthcare system, misinformation about available services, fears of discrimination, and a lack of youth-oriented services may also contribute to these issues. This aligns with the findings of Ndlovu (2024), who highlighted service availability and stigma as key barriers that hinder the uptake of HIV-related services among the young urban population in peri-urban regions.

Participants in the study identified the need for increased awareness programs regarding HIV transmission and drug abuse (43%) as well as the importance of employment opportunities (63%). Additional recommendations included better access to healthcare (31%), the establishment of

youth centers (22%), and improved counseling and rehabilitation services (28%). This suggests that public perception favors addressing immediate issues rather than implementing long-term solutions. Agole (2021) proposed that vocational training can help mitigate youth vulnerability, emphasizing job creation and social safety nets to address the chronic underemployment seen in urban areas of Zimbabwe. The emphasis by respondents in Hopely on employment highlights a belief that economic empowerment could create stability, reducing reliance on drugs and addressing social disorder and violence.

Although the findings of this study closely align with local literature, discrepancies with international studies—particularly regarding the factors contributing to drug abuse and HIV transmission—suggest a need for further contextual understanding. In wealthier countries, intravenous drug use and synthetic opioids are prevalent, while in Hopely, commonly used substances include inexpensive crystal meth (mutoriro), marijuana, and alcohol. Additionally, local cultural influences, religious views, and inadequate governance regarding service delivery uniquely shape the community's health behaviors, differing from those in more developed nations. Therefore, while international concepts on drug use and HIV prevention provide some valuable insights, their applicability to Hopely is limited without acknowledging these local dynamics.

The findings of the study somewhat support existing Zimbabwean literature that connects drug abuse to increased vulnerability to HIV, driven by economic challenges and social disintegration that hinder access to public health services. Although international research presents varying results, these contrasts highlight the necessity for interventions tailored specifically to the community's needs. Collectively, these outcomes reinforce that a comprehensive approach to addressing drug abuse in relation to HIV prevention in Hopely can be achieved through empowerment, focused sex education, and the creation of engagement platforms that respond to this densely populated community's requirements.

# 4.8 Summary

Chapter 4 detailed and examined the results regarding the relationship between drug and substance abuse and the prevalence of HIV/AIDS in Hopely, Harare. The findings indicated that drug use is prevalent, primarily influenced by peer pressure, unemployment, and stress, and is closely associated with behaviors that elevate the risk of HIV transmission, such as engaging in risky sexual practices and impaired judgment. Access to preventive programs and support services appeared limited, and participants stressed the necessity for more focused interventions, such as awareness initiatives, youth centers, and job opportunities. These results are consistent with existing research and underscore the significance of tackling both social and health-related issues in the fight against HIV. The following chapter will summarize the study, outline key conclusions, and present recommendations derived from the research findings.

# Chapter 5 Summary, conclusion and recommendation

#### **5.1 Introduction**

This chapter concludes the research by summarizing the key findings, drawing final conclusions, and providing recommendations based on the data gathered. It reflects on the aims of the study, offering insights into the relationship between drug and substance abuse and the incidence of HIV/AIDS in Hopely. The key points discussed in earlier chapters are consolidated and interpreted concerning public health implications. The findings inform practical strategies intended to tackle the issues identified in the research. Furthermore, this chapter identifies areas that may need additional investigation to expand on the current findings.

# **5.2 Summary of findings**

The research aimed to investigate the relationship between substance abuse and the incidence of HIV/AIDS in Hopely, a densely populated area in Harare. The results demonstrated a strong link between these two factors. A notable number of participants cited peer pressure and unemployment as the primary causes of drug abuse, with 51% and 46% respectively identifying them as major contributors. Additionally, 78% of those surveyed reported having used drugs, with a higher proportion of males among the users. When asked about the ways drug abuse facilitates HIV/AIDS transmission, 40% of respondents pointed to risky sexual behavior as the main connection, followed by poor decision-making at 26% and needle sharing at 21%. This reinforces the notion

that impairment from drugs contributes to unsafe sexual behaviors, thus heightening the risk of HIV infection. Despite the prevalence of drug use, only 38% of participants had utilized HIV Testing Services (HTS), indicating a lack of preventive healthcare engagement among drug users. Regarding support and intervention needs, 63% of respondents requested more employment opportunities, 43% highlighted the importance of increased awareness programs, and 31% called for improved access to healthcare to help combat the issue. Importantly, only 44% of participants were aware of HIV prevention initiatives, and merely 32% had sought support services like counseling or rehabilitation. These results indicate a troubling intersection of socio-economic difficulties, inadequate access to healthcare, and behaviors that heighten HIV risks among drug users in Hopely. The study underscores the critical necessity for comprehensive public health strategies that address both drug abuse and HIV/AIDS prevention.

#### **5.3 Conclusion**

This research aimed to explore the relationship between substance and drug abuse and the occurrence of HIV/AIDS in Hopely, Harare. The results clearly demonstrate that drug abuse significantly contributes to the spread of HIV/AIDS in the community. Elevated levels of drug consumption, especially among young men, were associated with risky sexual activities, poor decision-making, and sharing of infected needles—key factors in HIV transmission. The study also highlighted that socio-economic issues like unemployment, peer pressure, and a lack of awareness initiatives are crucial drivers of drug abuse. Despite the clear health risks, access to HIV testing and support services is limited, with many respondents either unaware of or unwilling to utilize existing prevention and assistance resources. Employing a quantitative method provided measurable insights into the behaviors and perceptions of locals, allowing for the identification of statistically significant patterns linking drug use to HIV rates. The research indicates that without focused intervention strategies—such as job creation, youth engagement centers, and enhanced public health education—the combined issues of drug abuse and HIV/AIDS are likely to continue. Overall, the study emphasizes the pressing need for integrated, community-driven solutions to tackle these overlapping public health issues. The conclusions offer a basis for more focused policymaking and health interventions that can benefit the residents of Hopely, especially the youth and vulnerable groups.

## **5.4 Recommendations**

Drawing from the results of this research, a number of actionable suggestions can be made to tackle the dual issues of drug and substance abuse as well as the incidence of HIV/AIDS in Hopely.

- Implement Comprehensive Awareness Campaigns
   Government agencies and NGOs should intensify community-based education
   programs focusing on the dangers of drug abuse and its link to HIV transmission.
   These campaigns should use youth-friendly platforms such as social media, local
   events, schools, and churches.
- Establish Youth Centres and Rehabilitation Services
  the government, in collaboration with stakeholders, should set up well-equipped
  youth centres offering counseling, recreational activities, life skills training, and
  access to drug rehabilitation services. These centres should also provide HIV
  education and testing services.

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# **APPENDICES 1 QUESTIONAIRE**

Bindura University of Science Education

Faculty of Social Sciences and Humanities

Department of Development Studies

**Questionnaire for Community Members** 

Research Topic: The Correlation between HIV Prevalence and Drug/Substance Abuse in Hopely High-Density Suburb, Zimbabwe

Dear Participant,

I am a Development Studies student at Bindura University conducting a study on the relationship between HIV prevalence and drug/substance abuse in Hopely. This questionnaire is intended to gather your honest views and experiences. The information you provide will remain confidential and used solely for academic purposes.

Please do not write your name. Participation is voluntary.

# **Questionnaire for Community Members**

# **Section A: Demographic Information**

1.	Gender:				
	□ Male	□ Female □	Prefer not to sa	ny	
2.	Age:				
	□ Under 15	-24 🗆 25–3	34 □ 35–49	$\square$ 50 and above	
3.	Marital Sta	tus:			
	☐ Single	☐ Married	☐ Divorced	☐ Widowed	☐ Cohabiting

□ No formal education □ Primary level □ Secondary level   □ Tertiary level □ Vocational training □ Other (please specify):   5. Employment Status: □ Employed □ Self-employed □ Student □ Other:   □ Employed □ Unemployed □ Self-employed □ Student □ Other:   □ How long have you lived in Hopely? □ Less than 1 year □ 1-5 years □ 6-10 years □ Over 10 years    Section B: Drug and Substance Use  7. Have you ever used drugs or abused substances?  □ Yes □ No □ Prefer not to say
5. Employment Status:    Employed   Unemployed   Self-employed   Student   Other:
□ Employed □ Unemployed □ Self-employed □ Student □ Other: □
6. How long have you lived in Hopely?  □ Less than 1 year □ 1–5 years □ 6–10 years □ Over 10 years  Section B: Drug and Substance Use  7. Have you ever used drugs or abused substances?
□ Less than 1 year □ 1–5 years □ 6–10 years □ Over 10 years  Section B: Drug and Substance Use  7. Have you ever used drugs or abused substances?
Section B: Drug and Substance Use 7. Have you ever used drugs or abused substances?
7. Have you ever used drugs or abused substances?
☐ Yes ☐ No ☐ Prefer not to say
8. If yes, at what age did you start using drugs?
$\Box$ Under 12 $\Box$ 12–14 $\Box$ 15–21 $\Box$ 21-26 $\Box$ over 26 $\Box$ prefer not to
say
9. What type(s) of drugs have you used? (Select all that apply)
☐ Marijuana ☐ Crystal Meth ("Mutoriro") ☐ Alcohol ☐ Cough Syrup
☐ Inhalants (glue, gas) ☐ Other (please specify):
10. Do you currently use any drugs or substances?
□ Yes □ No
11. Why do you think people in Hopely engage in drug use? (Tick all that apply)
$\square$ Peer pressure $\square$ Unemployment $\square$ Stress or trauma
☐ Availability of drugs ☐ Boredom ☐ Other:

**Section C: HIV Awareness and Risk** 

		ed for HIV?
□ Yes	□ No	
13. <b>Do you k</b>	anow some	one who is HIV positive in your community?
□ Yes	□ No	☐ Prefer not to say
14. <b>In your</b> o	pinion, ho	w does drug use contribute to HIV transmission in Hopely?
☐ Sharin	g needles	☐ Risky sexual behavior under influence
□ Poor ju	udgment	☐ Other:
Section D: Com	munity Int	terventions
16. Are you	aware of a	ny HIV or drug prevention programs in Hopely?
☐ Yes	□ No	
		ne you know ever used support services (counseling, rehab, HIV
	ı or someo	ne you know ever used support services (counseling, rehab, HIV
17. Have you	ı or someo	ne you know ever used support services (counseling, rehab, HIV
17. <b>Have you</b> services) □ Yes	or someo? □ No	ne you know ever used support services (counseling, rehab, HIV ou think is most needed in Hopely to reduce drug abuse and
17. <b>Have you</b> services) □ Yes	or someo? □ No	
17. Have you services)  ☐ Yes  18. What sup HIV?	or someo? □ No pport do ye	
17. Have you services)  □ Yes 18. What sup HIV?  □ More a	or someo? □ No pport do ye	ou think is most needed in Hopely to reduce drug abuse and programs   Youth centers or activities