

**EFFECTS OF DRUG ABUSE ON HIV/AIDS PATIENTS IN CENTRAL DIVISION,  
JINJA MUNICIPALITY**

**BY**

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**A RESEARCH DISSERTATION SUBMITTED TO THE COLLEGE OF HUMANITIES  
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## DECLARATION

I Nanyombi Elizabeth, declare to the best of my knowledge that this research work entitled “*The Effect Of Drug Abuse On HIV/AIDS Patients in Central Division, Jinja Municipality*”, is original and has neither been presented to any University before for any degree award. Where I am indebted to the efforts of other scholars and professionals, due acknowledgement has been made.

Sign.....

Date.....*30<sup>th</sup> sept. 2019*.....

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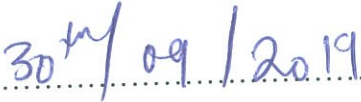
## APPROVAL

This is to certify that this research report entitled “*The Effect of Drug Abuse On HIV/AIDS Patients in Central Division, Jinja Municipality*” has been submitted to the University’s Academic Board of Examiners with our approval as University Supervisors.

## SUPERVISOR

NAME: MR KAMYA EMMANUEL LUYIMA

Signature.....

Date.....

## **DEDICATION**

I affectionately dedicate this report to my beloved Dad, Kidiba Tonny my mum Nansumba Hasifah, my brothers Arthur, Arnold and Calvin without forgetting my sisters Angel and Hanirah for all the moral support they rendered me by standing beside me in the stiff period of my studies and giving all the kind of moral support they gave me.

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## ABSTRACT

The major aim of the study was to establish the effects of drug abuse on HIV/AIDS patients in Jinja Central Division. The study also examined the effects of stimulant abuse to HIV/AIDS patients in Jinja Central Division, the effects of drug injection to HIV /AIDS patients in Jinja Central Division and the effects of inhalants to HIV /AIDS patients in Jinja Central Division. The related literature was based on other researchers and in reference to the stated specific objectives of the study. The study was guided by the theory of Cognitive Affective-Pharmacogenic (CAP) that was cited to analyze the effects of drug abuse on HIV/AIDS patients. The stud followed a cross section design where both qualitative and quantitative methods were used.

The mixed method research provided strengths that offset the weaknesses of both quantitative and qualitative research. Thus, by using both types of research, the strengths of each approach made up for the weaknesses of the other. Mixed method research design determined strategies, tools and methods that was related to data collection and analysis. The findings showed that responses had a mean difference of 3.84 and the Standard Deviation was 0.867. In this case the results meant that, unpleasant side effects to human nature especially on the side of Fatigue, Anxiety among others.

In conclusion, it was noted that, each time drug users rely on a drug to relieve tension and feel good about themselves, they become a little less capable of coping on their own. By using drugs to cope, the individual is cut off from learning other more adaptive coping mechanisms and becomes less tolerant of the pain of anxiety. The researcher recommended that, prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs. The researcher also suggested that, thorough research should be carried out on Prevention programs that can be designed to intervene as early as infancy to address risk factors for drug abuse, such as aggressive behavior, poor social skills, and academic difficulties. This will enable the future generation to examine the intense way to prevent drug abuse in the society.

## CHAPTER ONE

### INTRODUCTION

#### 1.0 Introduction

The study investigated the relationship between drug abuse and HIV/AIDS patients in Jinja town, Uganda. In this study, drug abuse constructed the independent variable whereas HIV/AIDS will construct the dependent variable.

It is worth noting that drug use involves various forms among which include illegal injection and non-injection of drugs; (heroin, cocaine, tobacco, marijuana, opioid and excessive pain killers), use of stimulants (Legal and illicit stimulants, Natural and synthetic), and inhalants (Solvent gases such as (butane, spray-can propellants) for which have severe negative consequences to HIV/AIDS patients when used for a long time (Li X, et al., 2009). Such drugs pose psychological changes in other chemical systems and circuits as well to an individual's judgment, decision making, memory loss and compromising the ability to think. Majority of the addicts and users claim that drug misuse is used to distinguish improper or unhealthy use from use of a medication as prescribed or alcohol in moderation (Edward et al., 2007). It has been observed by some scholars that people abuse drugs basically to have a temporally different feeling, to ease stress, or avoid reality. All these drug abuse forms have significant effects to HIV/AIDS patients as the study unfolds.

According to Birkhead et al., (2007) Human Immunodeficiency Virus (HIV) is considered as that virus contracted through body fluids, often by sharing a used needle or having sexual intercourse with an infected individuals. On the other hand, scholars assert that Acquired Immunodeficiency Syndrome (AIDS) is scientifically proved to be acquired after being infected

with the HIV virus (Birkhead et al., 2007). Sharing, or use, of contaminated needles is a very effective way of spreading HIV. Since injecting drug users often have close links and commonly share injecting equipment, HIV can spread very rapidly among them. The human immunodeficiency virus (HIV) is efficiently transmitted by the sharing of contaminated injecting equipment. Addressing this issue is, however, not a simple matter. The social nature of drug-injecting, the complex dynamics of sharing and the interaction of drug use with high-risk sexual behavior present a considerable challenge for the design of effective responses.

This chapter therefore presents the background to the study, the problem statement, the objectives of the study, the research questions and the hypotheses, conceptual framework, significance and justification of the study plus the scope of the study.

## **1.1 Background to the study**

This section looked at the background of the study that was categorized as Historical, theoretical conceptual as well as contextual.

### **1.1.1 Historical background**

According to Thornhill, A. (2007), as drugs have been abused for hundreds of years all over the world, their effects have been felt for just as long. Since drugs have been used, there were always those who abused them, which led to full-blown addiction and the bevy of side effects that come with it. As the physical and mental health implications of addiction became clearer, rehabilitation efforts began to appear. As a result, the history of rehabilitation in the United States dates back hundreds of years.

In 1864, the New York State Inebriate Asylum, the first hospital intended to solely treat alcoholism as a mental health condition, was founded. As the public began to view alcoholism and related drug abuse more seriously, more community groups and sober houses began appearing (Biederman J, et al, 2016).

In the history of drug addiction, it has been a problem from the beginning foundation of the country. Before the 19th century, the drugs that were commonly used and abused were related to plants that helped reduce the feelings of pain. In modern times, we have harmful synthetic drugs, but even the primitive forms of drugs abused in the past were dangerous. Even when natural substances are being abused, the body can experience addiction. Drug abuse history also spreads out to early uses of opium and alcohol. The United States began to take action and offer treatment solutions and regulations for the public (Katusic SK, et al., 2015).

Opium and alcohol were both used to dull the pain during certain surgical and medical procedures, the history of drug addiction tells us. Before the Civil War, the effects of drugs and alcohol and their addictive qualities were not entirely understood. This was an issue since many soldiers of the Civil War were given drugs for pain and became addicted after surgery. In the 1800s, morphine, codeine, and cocaine were developed and unregulated. The wide availability of these newer developed drugs made it easy for many people to try, and become addicted.

The US began to develop laws and regulations when it became clear that drugs were a serious problem among the public. To help the drug problem, regulations like the ones made in 1906 were passed to make it more difficult to obtain certain drugs. The 1906 Federal Food and Drugs Act were meant for regulating drugs, foods, medicines and their traffic.

Although drugs were no longer easily accessible for the public to obtain, addiction was still

prominent throughout the United States. Trafficking drugs still gave the access people needed to try and abuse substances, resulting in an addictive state. At this time in the history of drug addiction, since substance abuse was still being recognized as a significant issue for public health and safety, the US had to take further actions. These actions resulted in The Federal Bureau of Narcotics prosecuting medical doctors that gave prescriptions that violated laws. Treatment options were expanding, but still limited as the knowledge of addiction was still lacking.

Substance abuse research began funding when the NIMH was established. The NIMH, or the National Institute of Mental Health, began after World War II. Efforts made to diminish drug abuse for generations to come started with research by this group. Research on addiction, prevention, and public awareness was initiated and progressed during this time.

Drug addiction today is viewed as a disease and can be treated through modern, scientifically researched methods. This disease is characterized by long-lasting changes that occur in the brain. Modern society is generally on the same page about addiction, but it hasn't always been that way. In the history of drug addiction, society viewed drug addiction as a moral choice that had created a flaw of the individual. Also, in the history of drug addiction, treatments included imprisonment, church-guided prayer, and sending individuals to asylums. These "treatments" were not surprisingly an ineffective way to recovery.

Following Prohibition and the Twenty-first Amendment, which overturned Prohibition, a major step for the rehabilitation movement came in 1935, when Dr. Bob Smith and Bill Wilson commonly known as Dr. Bob and Bill W. founded Alcoholics Anonymous (AA). Using a spiritually based approach to rehabilitation, AA presented a welcoming environment where recovering alcoholics could find solace and support. From the AA format, various other branches

formed, such as: Narcotics Anonymous (NA), Cocaine Anonymous (CA), and Marijuana Anonymous (MA).

Today, thousands of drug abuse rehabilitation programs offer addicts a variety of treatment approaches, ranging from traditional, evidenced-based care to more experimental or holistic services. Since care should be customized according to the individual patient, oftentimes one's treatment regime will consist of a range of therapies that have been chosen specifically for the individual.

### **1.1.2 Contextual background**

Although these studies provided early empirical evidence for the role that contextual factors play in shaping illicit drug use, there have been few systematic efforts to consider the different contextual factors that may be important determinants of drug use risk behavior and to study the relative contribution of these factors empirically.

Drug use has been a consistent feature of the urban environment for the past century, despite sustained and costly efforts at prevention. The economic, health, and social costs associated with drug use are enormous. In the past two decades, injection drug use has been one of the two most common routes for the spread of HIV infection worldwide. Although extensive research has been devoted to identifying individual factors associated with drug use, our ability to explain drug use risk behavior remains limited. It is increasingly clear that research focusing on individual patterns of drug use is insufficient to fully explain inter-individual drug use behaviors or how these behaviors facilitate the spread of disease. The field of public health developed from practical concerns with social and environmental issues that have an impact on the health of

human populations.

Early public health practitioners identified environmental and social forces associated with well-being and implemented efforts to ameliorate them. However, for most of the 20th century, research emphasis, driven by improved methodological techniques and a growing interest in chronic disease etiology, shifted to individual level risk factors, and less attention was given to environmental and social conditions associated with health and well-being. More recently, research efforts have aimed at accounting for multiple levels of analysis, including individual as well as group-level factors. New epidemiologic techniques have also enabled researchers to weigh the relative importance of risk factors at the individual and group levels. While most research on contextual factors has been in the form of ecological analyses, recent work has introduced a better understanding of how larger contextual forces interact with and shape individual-level behaviors.

These studies have usually linked information on small-area characteristics available from archival data to survey-based measures of individual-level covariates from epidemiologic studies. For example, neighborhood, socioeconomic status, and aggregate measures of income and poverty have been associated with well-being. In addition, features of the social environment have been associated with risk behavior, including smoking and alcohol use, cardiovascular risk factors, physical activity, and violence. In the realm of substance use, a number of individual-level factors have been identified that may affect drug users' risk behaviors, including social networks and social support, psychological factors, and individual experiences. Newer work has begun to discuss the impact of social and economic contextual factors on substance use behavior. Among the early research that has shown an association between contextual factors and drug use



are analyses of the relations between alcohol outlets and alcohol, income distribution and smoking, and ethnographic research that has suggested a role for contextual social and economic factors in determining illicit drug use.

### **1.1.3 Theoretical background**

Theories describe, explain, and predict phenomena. Most frequently, theories are used to describe a phenomenon, and this first effort at description can then be used to explain why the phenomenon occurs, allowing for possible inferential predictions. Good theories also provide guidance about under which circumstances and conditions a given set of propositions apply. In terms of the field of sociology, macro-level theories focus on society- or group-level causes and processes, and this in contrast to micro-level theories which address individual-level processes. There is a need to incorporate more of these macro-level approaches in the study of heroin addiction. As such, this article aims to assess the usefulness of three established theories in order to build upon and add to theoretical contextual conceptualizations of behaviors of heroin users.

Among the most widely quoted theories of anomie and strain in reference to theories of criminality involves the work of Robert Merton. In addition, Messner and Rosenfeld's theory of institutional anomie added to Merton's conception of anomie and showed how institutions can influence criminality. Further building on these ideas, Cloward and Ohlin's theory of differential opportunity focused on the fact that those using criminal and illegal means of opportunity require a set of learned skills, just like those that are involved in legitimate means. They suggest that people's access to both legitimate and illegitimate means are socially structured. This means that there is a "differential opportunity" to reach economic goals by legitimate means, but that there is also a "differential opportunity" to use illegitimate means to reach those goals. This theory

focuses on the discrepancy between what marginalized groups want, and what is available to them.

One way to better understand differential opportunities is by examining the microeconomics of substance use through behavioral economics, social cognitive, and psychosocial lenses. These all have implications for differential opportunity theory. Established routes to the marginalization and disenfranchisement of substance users are unemployment, a lack of marketable skills, and barriers to economic opportunities and mobility. For example, unemployment is related to drug use and relapse. Data from 405,000 people, in the 2002 to 2010 U.S. National Survey on Drug Use and Health, compared substance outcomes among unemployed and employed persons. Strong associations were found between unemployment and drug and alcohol use, and this relationship was not diminished by race or gender.

Other studies have consistently found employment to be a moderator of the relationship between treatment and length of sobriety, a mediator of treatment setting effect and sustained abstinence, a predictor of sustained abstinence in a longitudinal study of alcohol and drug users, and an outcome of longer length of stay in recovery housing. Employment aids in preventing relapse by providing reinforcement to people in order to discourage use of drugs.

Though employment is central to sustained recovery, people with a history of heroin use encounter challenges with obtaining employment due to social and personal deficiencies. Again, the notion of differential opportunity appears to be critical. Given the rising number of heroin users and related deaths each year, it is important to focus on the socioeconomic characteristics of these users and their environments. This aids in developing strategies to both prevent heroin use and reintegrate current users back into mainstream society. As an example, a life-course

model has been used to explore the embedding of heroin users into a drug lifestyle. They found this lifestyle lead to even more marginalization. Many social routines such as criminal behavior to generate income and substance use further reinforce social marginality. They view addiction along a continuum of the use of the drug itself, and the lifestyle that accompanies and sustains the drug use. Roddy, Steinmiller, and Greenwald found that participants indicated they would significantly decrease heroin due to strong environmental changes involving a loss of income such as family/friends no longer paid their living expenses. These studies are directly related to different opportunity theory and indicate the importance of treatment services and economic support for these at-risk individuals.

#### **1.1.4 Conceptual background**

Drug abuse and addiction have been inextricably linked with HIV/AIDS scourge since the beginning of the epidemic. While intravenous drug use is well known in this regard, less recognized is the role that drug abuse plays more generally in the spread of HIV thus by increasing the likelihood of high-risk sex with infected partners. The intoxicating effects of many drugs can alter judgment and inhibition and lead people to engage in impulsive and unsafe behaviors. Also, people who are abusing or addicted to drugs may engage in sexually risky behaviors to obtain drugs or money for drugs. Nearly one-quarter of AIDS cases stem from intravenous drug use, and one in four people living with HIV/AIDS in the period of 2010 – 2018 reported use of alcohol or drugs to an extent that required treatment.

Additionally, substance drug abuse which takes shape in different forms like stimulants, injection drug use, inhalants and many more have left severe health challenges to HIV/AIDS drug users. Due to health and social problems associated with drug abuse among HIV/AIDS patients, it remains the biggest cause of morbidity and mortality rates.

Injecting drug use is the main, or a major mode for the transmission of HIV in many countries of Asia, Europe, Latin America and North America. While precise figures can be difficult to obtain, research has shown that HIV can spread through drug using populations with remarkable speed and can stabilize at very high rates. In the early 1980s, a number of young men died of infections that were usually only seen in immune-compromised patients. Over the next several years, the HIV virus was identified, characterized, and found to be an RNA virus that was only transmitted by intimate contact, most commonly sex and shared needles. The public health response to the epidemic seemed obvious at the time, and a campaign to educate people at risk about the use of condoms and clean needles was launched. It was surprising to many public health officials that the epidemic continued but less surprising to those who worked in mental health areas and already knew how difficult it is to change behaviors.

Most estimates suggest that there are just over a million persons living with HIV/AIDS in the United States. According to CDC data, between 2001 and 2005, an average of 37,127 new cases of HIV infection, HIV infection and later AIDS, and concurrent HIV infection and AIDS were diagnosed each year. Injection drug use, male-to-male sexual contact in men and adolescent boys, and high-risk heterosexual contact in women and adolescent girls are the 3 most common routes of transmission (Kirk et al., 2011). Among individuals with psychiatric illness, injection drug use and other high-risk behaviors contribute significantly to high rates of HIV infection.

While in parts of both Europe and the United States of America, higher levels of heroin abuse have recently been accompanied by an increase in non-injecting modes of transmission while the number of countries throughout the world reporting the existence of injecting drug users and HIV infection among them continues to grow (Cohen et al., 2011). Numerous studies have found

drug users to be disproportionately likely to be involved in the sex industry or to engage in high-risk sexual activity. Drug-injecting also contributes to an increased incidence of HIV infection through the transmission of the virus to the children of drug-injecting mothers, and through sexual contact between drug injectors and non-injectors.

Illicit drugs are not the only stimulants out there, as prescription amphetamines have become popular drugs of abuse in recent years. These drugs include Ritalin, Adderall, and Concerta (Armstrong et al., 2006). They are often prescribed to treat attention deficit hyperactivity disorder (ADHD), a condition that affects an individual's ability to focus and control impulses. According to the Center for Disease Control and Prevention (CDC), 11 percent of people 4-17 years old had been diagnosed with ADHD as of 2011

## **1.2 Statement of the Problem**

Drug abuse in its commonly known forms is increasingly a concern among HIV/AIDS patients yet claiming several lives Jinja municipality. Majority of the HIV/AIDS patients resort to drug abuse in various ways for varying reasons for which point to temporary false comfort, denial of their leaving health status, and while others consume these drugs as alternatives to pain and psychological satisfaction.

On record, the famous drugs commonly abused in Jinja municipality and Uganda at large are consumed in form of stimulants, injection drug use, and solvent gases through inhalants. Others include alcohol, marijuana, cocaine, heroin, drug club and "*mairungi*". While these are locally produced, the report also indicates an increase in the use of hard drugs such as cocaine, heroin and methamphetamines. Other drugs commonly abused are prescription medicines including pethidine (a pain killer) and Ephedrine. Additionally, the Ministry of Health has revealed that the

country recorded more than 85,000 cases of drug abuse and alcohol abuse between 2010 and 2014. According to the Director Health Services health management information system surveillance report on alcohol and drug use indicates the highest consumption to be in the central region at 39%, northern region at 24.2%, eastern at 20%, western at 17%.

Despite several government interventions in form of strict laws and regulations, joint operations to crack down the drug dealers and heavy punishments, the vice among HIV/AIDS patients seems to be on the increase thus the reason as to why the researcher seeks to investigate the existing relationship between drug abuse and HIV/AIDS patients particularly in Jinja municipality.

### **1.3 General Objective**

The major aim of the study was to establish the effects of drug abuse on HIV/AIDS patients in Jinja Central Division.

### **1.4 Specific Objectives**

- i. To examine the effects of stimulant abuse to HIV/AIDS patients in Jinja Central Division.
- ii. To assess the effects of drug injection to HIV /AIDS patients in Jinja Central Division.
- iii. To determine the effects of inhalants to HIV /AIDS patients in Jinja Central Division.

### **1.5 Research Questions**

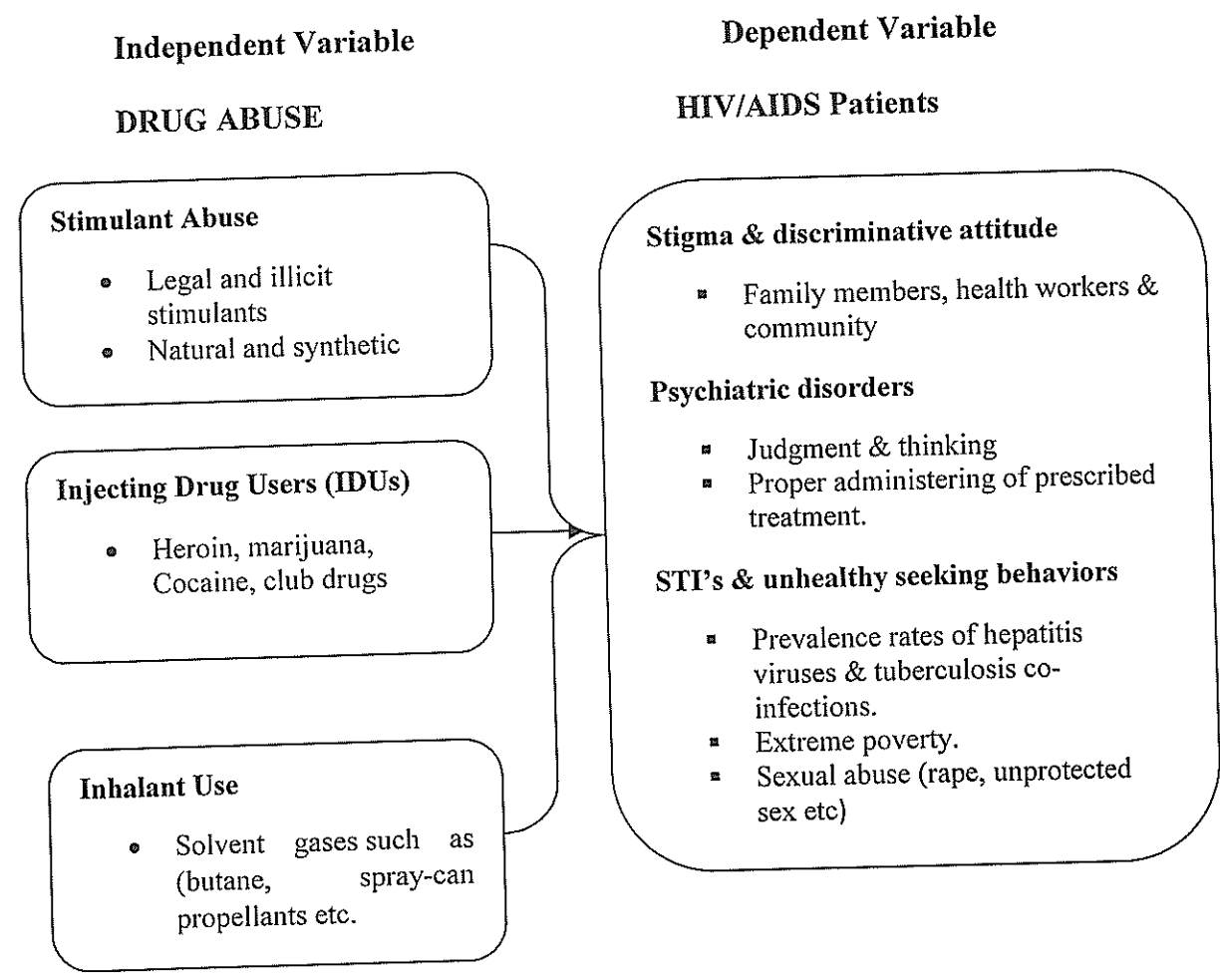
- i. What is the effect of stimulant abuse to HIV/AIDS patients in Jinja Central Division?
- ii. What is the effect of drug injection to HIV /AIDS patients in Jinja Central Division?
- iii. What is the effect of inhalants to HIV /AIDS patients in Jinja Central Division?

## **1.6 Research Hypothesis**

- i. Stimulant abuse has a significant effect to HIV/AIDS patients in Jinja Central Division.
- ii. Drug injection has a significant effect to HIV /AIDS patients in Jinja Central Division.
- iii. Drug inhalants have a significant effect to HIV /AIDS patients in Jinja Central Division?

1.7 Conceptual Framework

According to McGaghie et al. (2001), a conceptual framework “sets the stage” for the presentation of the particular research question that drives the investigation being reported based on the problem statement. In other words, the conceptual framework is the researcher’s understanding of how the research variables connect with each other. Thus, it identifies the variables required in the research investigation and draws a clear relationship between them.



**Source:** Adapted from Jinja Municipal council drug abuse reports 2017 and modified by the researcher.



**Figure 1:** A conceptual framework showing the relationship between drug abuse and its effects to HIV/AIDS patients in Jinja Municipality. The framework clearly illustrates forms of drug abuse used by HIV/AIDS patients and ways in which those drugs affect these patients' lives. In this case, drug abuse is construed in relation to; (Stimulants, Injection drug users and Inhalants) while HIV/AIDS patients perceived in relation to (Stigma & discriminative attitude, Psychiatric disorders, and high spread of STI's & unhealthy behaviors).

### **1.8 Significance of Study**

It is anticipated that the proposed study might be significant in the following areas; One the study might be used by other academicians as a reference for further research especially in the area of drug abuse and HIV/AIDS patients; secondary the study might be used by various field practitioners like NGO's in advocacy and decision making during their HIV/AIDS campaign programs; further still the study can be used by Jinja municipality health agencies to find better strategies on how to minimize this phenomenon which has seemed to be eating up the town, by informing the management on how to handle special cases of HIV/AIDS patients falling victims of drug abuse; lastly, the study might be used by both the College of Humanities and Social Sciences at KIU University including the library as a point of reference to other students during their research studies and various stakeholders.

### **1.9 Justification of the Study**

Jinja town is one stop center for adventure and fun place for many socialites including tourists in eastern Uganda. This is because of its geographical location and natural endowment with the White Nile River, and the famous Owen falls dam which was constructed by Queen Elizabeth in 1956. Therefore being a one stop center and a harboring

site for many tourists, with many hotels and lodges, the city has experienced an increasing number of drug users of which majority are HIV/AIDS patients and little attention has been given to this vice neither researched about academically nor published. If this vice remains as it is today without documentation and research, it might later escalate and scare off tourists and thus affect the social economic benefits of the economy.

## **1.10 Scope of the study**

### **1.10.1 Geographical scope**

The study carried out in Jinja municipality in the eastern part of Uganda. The place was believed to be having a huge number of HIV/AIDS patients who were drug addicts, for which majority are admitted at Jinja referral hospital where they were being treated. The reason for choosing this location was based on familiarity to the researcher due to her background thus believing that access to information and respondents was easier; secondly being a home town concerns of accommodation and feeding while collecting data from the field was solved.

Jinja town sits in Jinja District which is bordered by Kamuli District to the north, Luuka District to the east, Mayuge District to the south-east, Buvuma District to the south, Buikwe District to the west, and Kayunga District to the north-west. The district is located 96 kilometers by road, east of Kampala, Uganda's capital. Jinja municipality sits along the northern shores of Lake Victoria, near the source of the White Nile in the eastern region of Uganda. It is located 0.44 latitude and 33.20 longitude and it is situated at elevation 1187 meters above sea level. According to the 2014 Uganda National Bureau of statistics population census, Jinja has a population of 471,242 making it the biggest city in Eastern Region.

### **1.10.2 Time scope**

The study covered a period of 2014-2018 since it was the time Jinja municipality has witnessed a high increase of drug abuse among HIV/AIDS patients. The researcher used a period of two months to carry out the study as allocated by the university.

### **1.10.3 Content scope**

The study investigated the effects of drug abuse on HIV/AIDS patients in Jinja municipality. In this study, drug abuse was considered as the independent variable to include; (Injection of drugs by users; Use of inhalants and cocaine); whereas HIV/AIDS was perceived to be the dependent variable to include variables such as; (Proper treatment; Quick death and Mental illness).

## **1.11 Operational Definitions**

**Drug abuse:** Drug abuse is defined as the sporadic or persistence excessive use of any chemical or substance for any reason other than its acceptable medical purposes which may lead to independence on drugs has been defined by interaction between a living organism and a drug characterized by behavioral and other responses that always include a compulsion to take the drug on continuous or periodic and sometimes to avoid the discomfort of its absence, (Kilonzo, 1996).

**HIV/AIDS:** Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). It is a virus that is transmitted in the body fluids, often by sharing a used needle or having sexual intercourse with

an infected individual. Acquired Immunodeficiency Syndrome (AIDS) is scientifically proved to be acquired after being infected with the HIV virus.

**Drug injection:** Is a method of introducing a drug into the blood stream via a hollow hypodermic needle and a syringe, which is pierced through the skin into the body. As of 2004, there were 13.2 million People worldwide who used injection drugs of which 22% are from developing countries. Sharing needles, syringes or other injection equipment to inject drugs puts people at risk for getting HIV/AIDS. For almost all injecting drug users (IDUs), the first injection is done to the arm. Years after in their injection career they shift to using other methods.

**Substance abuse** is the excessive use of a substance such as drugs or alcohol which results into clinical and functional impairments. With regards to HIV/AIDS substance abuse plays a significant role in infection and disease progression. Although HIV/AIDS can affect anyone, the risk of infection is significantly higher in patients suffering from substance abuse whether the risk is of direct exposure through needles or increased likelihood of high risk behavior due to loss of clear sense judgment. Substance abuse is of primary concern to HIV/AIDS by promoting actions which increase the initial risk of infection. Furthermore some abused substances can also influence disease progression and interfere with the effectiveness of treatment.

**Stimulants** are a group of drugs that result in increased activity in the body. Sometimes referred to as “uppers,” these drugs are frequently abused due to their performance-enhancing and euphoric effects. Generally, those who abuse stimulants experience heightened energy levels and enhanced focus. Stimulants speed up mental and physical processes, which can produce desirable effects in the short-term by increasing levels of dopamine in the brain. While users may feel

great due to the short-term effects of stimulants, long-term abuse of these drugs can have significant consequences, which is why it is so important for those who abuse the drugs to get help as quickly as possible.

**Methamphetamine:** Methamphetamine is a highly addictive stimulant, more commonly known simply as “meth.” It is usually found in either powder or crystal form, and it can be used in a multitude of fashions, from smoking the drug to injecting it intravenously. Its popularity as a recreational drug is due to the initial rush of euphoria that accompanies it. However, once that initial rush has passed, emotions generally get more negative, with feelings of anger and fear being common during the “crash.”

**Cocaine:** Cocaine is one of the most well-known stimulants in the world. A highly addictive drug, it is made from and named for the South American coca plant. Cocaine usually comes in the form of a fine white powder, though the popular “crack” form comes as crystallized rocks. Cocaine and crack cocaine can be used via a multitude of methods; the most common form of ingestion for powdered cocaine is snorting the drug, and the most common method for crack cocaine is to smoke it.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

In this chapter the researcher looked at related literature basing on other researchers and in reference to the stated specific objectives of the study. In this chapter again, the researcher looks at the theory of Cognitive Affective-Pharmacogenic (CAP) that have been cited to analyses the effects of drug abuse on HIV/AIDS patients.

#### **2.1 Theoretical review**

Under this section the researcher reviewed The CAP Control Theory of Drug Abuse to thoroughly determin the significant relationship between the study variables.

##### **2.1.1 The CAP Control Theory of Drug Abuse**

The CAP control theory emphasizes the interaction of the individual's style and the affective experience of drug use with the drug's pharmacogenic effect. These are the basic ingredients of the Cognitive Affective-Pharmacogenic (CAP) control theory of addiction (Coghlan et al. 1973; Gold and Coghlan 1976). The cognitive style of the drug abuser is viewed as the pivotal factor in an individual's moving from drug experimentation to drug abuse. The cognitive dimension will therefore be discussed first.

There is a current trend in behavior therapy emphasizing cognitive approaches (Lazarus 1976; Mahoney 1977; Meichenbaum 1977). The major tenets of cognitive behavior therapy are that human behavior is mediated by unobservable that intervene between a stimulus and the response to that stimulus. Beliefs, sets, strategies, attributions, and expectancies are examples of the types

of mediating constructs currently considered crucial to an understanding of emotion and behavior. Second, the way an individual labels or evaluates a situation determines his or her emotional and behavioral response to it. A third basic assumption is that thoughts, feelings, and behaviors are causally interactive (Mahoney 1977).

To tie the cognitive approach to drug abusers, the CAP control theory posits that the abuse process begins with conflict as a predisposing factor. People who are having difficulty in meeting demands or expectations placed upon them by society or by themselves are in conflict, and a consequence of the stress of conflict is anxiety. Anxiety is a universal feeling, something most of us experience to some degree each day. It is not the experience of anxiety but the individual's interpretation of the anxiety that is crucial to the theory. Underlying the anxiety of drug abusers is a belief that they cannot alter or control the situation; that they are powerless to affect their environment and decrease or eliminate the sources of stress. The belief that they are powerless to cope with stress is the major cognitive distortion of drug abusers. One consequence of this is the intense feeling of low self-esteem that is a well-known clinical entity among drug abusers (Krystal and Raskin 1970). Feelings of self-depreciation, which form the belief that one is powerless, represent the affective component of the CAP theory.

The experience of anxiety is, of course, uncomfortable, and a means of anxiety reduction is necessary. A primary pharmacogenic effect of heroin is anxiety reduction. Not only does the drug provide relief from anxiety, but the individual obtains a temporary ecstatic feeling—a "high." Under the influence of the drug the individual temporarily experiences an increased sense of power, control, and wellbeing. The sense of powerlessness is replaced by an exaggerated sense of being all powerful--no task is too great and no feat impossible while

“high.” Thus, drugs can do for abusers what they believe they cannot do for themselves: get rid of anxiety, lead to good feeling about themselves, and make them believe they are competent, in control, and able to master their environment.

Unfortunately for the drug abuser, the drug effects are short lived and any temporary gains turn into long-term losses. Inevitably, after the high wears off some internal or external source of stress will rekindle the conflict and anxiety. Not only do the old feelings of lack of control return but they are likely to be even stronger than before. It is this increasing sense of powerlessness with increased drug use that leads the individual from drug use to abuse. Each time drug users rely on a drug to relieve tension and feel good about themselves, they become a little less capable of coping on their own. By using drugs to cope, the individual is cut off from learning other more adaptive coping mechanisms and becomes less tolerant of the pain of anxiety. The drug user now knows that anxiety does not have to be tolerated, as drug taking has been successful in the past in removing tension and producing good feelings. It is therefore expected that drug use will increase both in frequency and in the number of different situations in which it is employed. For example, arguments with parents may be a primary source of conflict and anxiety for the adolescent drug abuser. Drug taking will frequently follow such an argument. An adolescent experiencing school-related stress, having learned that drug taking is an effective means of anxiety reduction, may turn to additional drug taking to compensate for academic failures. The reliance on drugs to cope with stress therefore creates a vicious cycle; the more drugs are used, the more the individual believes they are necessary. Each drug experience serves to confirm for users the belief that they are powerless to function on their own.



## 2.2 Stimulant abuse and HIV/AIDS patients

Attention-Deficit/Hyperactivity Disorder (ADHD) is a prevalent neurobehavioral disorder occurring in 6–8% of children and 4–5% of adults worldwide (Polanczyk G, et al, 2017). Although more prevalent in boys than in girls and the overwhelming majority of the extant literature on ADHD is based on boys, it is very clear that ADHD afflicts a sizeable number of girls and it is as much a source of morbidity and disability for girls as has been documented for boys.

ADHD is now considered to be more chronic with from 40–60% of children continuing to manifest prominent ADHD symptoms and impairment through adolescence into adulthood. Across the lifespan, ADHD has been shown to be associated with high risk for comorbid disruptive, mood, and anxiety disorders. Likewise, a high risk for cigarette smoking and Substance Use Disorders (SUD; including drug and alcohol abuse and dependence) has also been shown in ADHD individuals growing up (Kessler RC, et al, 2016).

Among treatments for ADHD, stimulants remain among first line treatments for the disorder (Faraone SV, et al, 2013). Because ADHD is a well-known risk for SUD and because the stimulants are potential drugs of abuse Katusic SK, et al. (2015), concerns remain as to the possibility for stimulants to increase the subsequent risk for cigarette smoking and SUD in individuals treated for their ADHD. Along those lines, while one group found that cigarette smoking and cocaine abuse was associated with previous stimulant treatment, others have reported that stimulant treatment in youth with ADHD does not increase subsequent cigarette or SUD and yet other studies including a meta-analysis have shown that it may exert a protective effect against the subsequent cigarette smoking and/or SUD.

According to, Barkley RA, et al (2003), despite the implications of the effects of early stimulant treatment on later SUD, important limitations in the literature exist. For example, previous studies have not generally examined the length of stimulant exposure and later SUD, severity of Substance Use Disorders (SUD) outcomes, or comorbidity with Conduct Disorder (CD).

In addition, there is a limited literature that specifically examines the association between stimulant treatment and Substance Use Disorders (SUD) attending to sex. Yet data suggest that girls with ADHD compared to boys with ADHD may have a substantially higher age matched risk for cigarette and substance use and SUD in early adolescence (Katusic SK, et al., 2015). Moreover, data suggest differences may exist between boys and girls with ADHD in terms of Substance Use Disorders (SUD) risk associated with prior stimulant treatment. For instance, (Katusic et al, 2016) reported a difference in the Substance Use Disorders (SUD) risk reduction associated with stimulant treatment in boys but not girls with ADHD.

Psycho-stimulants are the most used psychotropic substances over the world. A “psycho-stimulant” can be defined as a psychotropic substance with the capacity to stimulate the central nervous system. It causes excitation and elevated mood, as well as increased alertness and arousal. Its global effect is to speed up signals into the brain. A psycho-stimulant can also be negatively defined as a substance other than a depressant or a hallucinogenic substance.

Beyond the worldwide use of caffeine and nicotine, illicit psycho-stimulants are more used in specific subgroups or cultures. Cocaine may be used in private parties as a mood and energy enhancer, methamphetamines (speed, ice) in raves or techno culture for the same reasons, and 3-4-methylene-dioxymethamphetamine (ecstasy), also known as the “love pill” in a wish to enter an empathic state. Recently, in the context of an always more individual and competitive society,

the use of cocaine or methamphetamine in the professional context has been observed. A certain plant, khat, is used in specific societies in east-Africa for its psycho-stimulant properties.

Psycho-stimulants (e.g. sibutramine) can be prescribed to lower appetite in obesity. This can be considered the pharmacologic part of the treatment of a huge epidemic of obesity (BMI > 30) which increased from 23% of the population in the period of 1988-1994 to 31% in the period 1999-2000 in the USA (Faraone SV, et al, 2013). The other indication for prescribed psycho-stimulants (e.g. methylphenidate) is attention-hyperactivity disorder in children (US prevalence 8.3% in children aged 8-15 year old or adults (4.4% of adults aged 18-44 year old. According to Polanczyk G, et al (2017), the very rare disorder narcolepsy (25-50 per 100,000 persons can warrant psycho-stimulant prescription (e.g. methylphenidate, modafinil or amphetamines) for the treatment of daytime sleepiness. Finally, the group of selective serotonin reuptake inhibitors and other amine reuptake inhibitors (noradrenalin) are widely used as anti-depressants but act more as correctors of an abnormal slow function of the central nervous system activity as stimulants in a direct sense of the term.

McGough JJ, et al (2015) asserts that, Caffeine is the most consumed socially acceptable stimulant, with approximately 90% of the population who consume it daily in the industrialized countries. Nicotine can be considered the most used legal stimulant with 25% of the population who use it daily in Western Europe, and 17.5% in the United States of Americas. For nicotine, the percentages are even higher in Eastern Europe and South America, and with a clear male predominance. When we consider the illicit substances, the prevalence of consumption in the last year for the adult (15-64 year old) population is also quite impressive: in Europe it is estimated to be 1.3% of adults for cocaine, 0.8% for ecstasy, and 0.6% for amphetamines. The total

prevalence for illicit psychostimulant use over the last 12 months will then be about 2.7% of the population last year. The situation in the United States of Americas shows that cocaine (including crack) has been consumed in the last year by 7.5% of the young adults (18-25 year old), 2.2% for the younger (12-17 year old) and 2.5% for the older (26 year old and older). These percentages are respectively 3.7%, 1.3% and 0.3% for ecstasy, and 1.6%, 0.7% and 0.4% for methamphetamines (McGough JJ, et al, 2015) Comparing to Europe the amount of people consuming illicit psycho-stimulants altogether in USA is more important, with about 4.5% of people using cocaine in the last year.

According to the WHO World Mental Health Survey (2010) Initiative followed over 85,000 people in 17 countries around the world. They found that life-time prevalence of cocaine use varied between 0 and 16%, the lowest being in China, Japan and Nigeria, and the highest being in the USA. Of interest is that the distribution is not even and cannot simply be explained by drug control policies, since country with the most severe illegal drug policies do not have lower levels of consumption than the ones with more liberal ones.

In a report of the National Department of Health(Who, 2010), the prescribed stimulants used in the United States of Americas are found to be at the level of 3.5% of the young adults (18-25 year old), 2.3% for the younger (12-17 year old) and 0.6% for the older (26 year old and older).

### **2.3 Drug injection and HIV /AIDS patients**

According to Board on Global Health, Institute of Medicine of the National (2007), Drug injection is a method of introducing a drug into the bloodstream via a hollow hypodermic needle and a syringe, which is pierced through the skin into the body (usually intravenously, but also at

an intramuscular or subcutaneous location). As of 2004, there were 13.2 million people worldwide who used injection drugs, of which 22% are from developed countries.

A wide variety of drugs are injected, often opioids: these may include legally prescribed medicines and medication such as morphine, as well as stronger compounds often favored in recreational drug use, which are often illegal. Although there are various methods of taking drugs, injection is favoured by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds. It also bypasses first-pass metabolism in the liver, resulting in higher bioavailability and efficiency for many drugs (such as morphine or diacetylmorphine/ heroin; roughly two-thirds of which is destroyed in the liver when consumed orally) than oral ingestion would. The effect is that the person gets a stronger (yet shorter-acting) effect from the same amount of the drug. Drug injection is therefore often related to substance dependence.

Risks from drug injection are caused by a variety of factors, including unclean or unsafe injection practices and repeated injections at the same site. Injection drug users that fail to adequately sanitize the skin or use clean injection products are at increased risk for cellulitis, abscesses, and thrombophlebitis; these infections can subsequently result in sepsis and bacteremia, which can be fatal if untreated. Repetitive injections, especially those with unsafe practices, can result in additional medical concerns that include thrombosis formation and infectious endocarditis. In rare cases Osteomyelitis of the chest can be caused by IV drug use.

Additional risks from unsafe injection practices result primarily from sharing materials (needles, cookers, syringes) used in injection. Blood-borne pathogens, such as HIV, Hepatitis B,

and Hepatitis C are of particular concern among injection drug users who share supplies, and increase the likelihood of infection. An added challenge, is that not only infected individuals know their positive status and continue to share supplies, placing other users at risk for infection as well. 30-50% of adults will not experience acute Hepatitis B symptoms, and those that do experience lethargy, nausea, upper abdominal pain, muscle aches, or a darkening of urine will need to connect these symptoms to a possible infection to seek care and limit spreading of the virus.

Of all the ways to ingest drugs, injection carries the most risks by far as it bypasses the body's natural filtering mechanisms against viruses, bacteria, and foreign objects. There will always be much less risk of overdose, disease, infections, and health problems with alternatives to injecting, such as smoking, insufflation (snorting or nasal ingestion), or swallowing.

Drug injection is also commonly a component in HIV-related syndemics. Fragments from injection of pills are known to clog the small blood vessels of the lungs, brain, and elsewhere, potentially causing pulmonary embolism (PE), stroke, or venous embolism. A small proportion of PE is due to the embolization of air, fat, and talc in the drugs of intravenous drug abusers. More commonly, the inflammatory response to these foreign objects causes granulation tissue to form in the capillary beds, resulting in vasculitis, and, when it occurs in the pulmonary capillary bed, potentially pulmonary talcosis. Hitting arteries and nerves is dangerous, painful, and presents its own similar spectrum of problems. The injection of talc from crushed pills has been associated with pulmonary talcosis in intravenous drug users.

A wide variety of drugs are injected. Among the most popular in many countries are morphine, heroin, cocaine, amphetamine, and methamphetamine. Prescription drugs including tablets,

capsules, and even liquids and suppositories are also occasionally injected. This applies particularly to prescription opioids, since some opioid addicts already inject heroin. Injecting preparations which were not intended for this purpose is particularly dangerous because of the presence of excipients (fillers), which can cause blood clots. Injecting codeine into the bloodstream directly is dangerous because it causes a rapid histamine release, which can lead to potentially fatal anaphylaxis and pulmonary edema. Dihydrocodeine, hydrocodone, nicocodeine, and other codeine-based products carry similar risks. Codeine may instead be injected by the intramuscular or subcutaneous route. The effect will not be instant, but the dangerous and unpleasant massive histamine release from the intravenous injection of codeine is avoided. To minimize the amount of undissolved material in fluids prepared for injection, a filter of cotton or synthetic fiber is typically used, such as a cotton-swab tip or a small piece of cigarette filter.

Some manufacturers add the narcotic antagonist naloxone or the anticholinergics atropine and homatropine (in lower than therapeutic doses) to their pills to prevent injection. Unlike naloxone, atropine does indeed help morphine and other narcotics combat neuralgia. The atropine may very well not present a problem, and there is the possibility of atropine content reduction of soluble tablets by placing them on an ink blotter with a drop of water on top, then preparing a shot from the remainder of the pill. However, as a narcotic agonist antagonist, pentazocine and its relatives can cause withdrawal in those physically dependent upon narcotics.

## **2.4 Inhalants and HIV /AIDS patients**

Although the chemical substances found in inhalants may produce various pharmacological effects, most inhalants produce a rapid high that resembles alcohol intoxication, with initial excitation followed by drowsiness, disinhibition, lightheadedness, and agitation. If sufficient

amounts are inhaled, nearly all solvents and gases produce anesthesia a loss of sensation and can lead to unconsciousness (McGough JJ, et al, 2015).

The chemicals found in solvents, aerosol sprays, and gases can produce a variety of additional effects during or shortly after use. These effects are related to inhalant intoxication and may include belligerence, apathy, impaired judgment, and impaired functioning in work or social situations; nausea and vomiting are other common side effects. Exposure to high doses can cause confusion and delirium. In addition, inhalant abusers may experience dizziness, drowsiness, slurred speech, lethargy, depressed reflexes, general muscle weakness, and stupor. For example, research shows that toluene can produce headache, euphoria, giddy feelings, and the inability to coordinate movements.

Inhaled nitrites dilate blood vessels, increase heart rate, and produce a sensation of heat and excitement that can last for several minutes. Other effects can include flush, dizziness, and headache.

A strong need to continue using inhalants has been reported by many individuals, particularly those who have abused inhalants for prolonged periods over many days. Compulsive use and a mild withdrawal syndrome can occur with long-term inhalant abuse. A recent survey of 43,000 American adults suggests that inhalant users, on average, initiate use of cigarettes, alcohol, and almost all other drugs at younger ages and display a higher lifetime prevalence of substance use disorders, including abuse of prescription drugs, when compared with substance abusers without a history of inhalant use.

Since 2007 sexual transmission has surpassed IDU and become the dominant mode of HIV transmission in China. The proportion of cumulative reported cases through homosexual



transmission route has increased more than five times, from 2.5% to 13.7%, between 2006 and 2011 (UNAIDS, 2012). The national sentinel surveillance suggested that the HIV prevalence among men who have sex with men (MSM) increased from 0.9% in 2003 to 6.3% in 2011 (Wang, et al, 2012). It is estimated that homosexual transmission actually accounted for 29.4% of all newly infected HIV cases in 2011. Despite the implementation of numerous HIV prevention strategies targeting the promotion of safer sex and expanding needle exchange programs and methadone maintenance therapy, the HIV epidemic continues to expand among MSM (UNAIDS, 2012).

Recent study from USA and Britain indicated that synthetic drug has increasingly become an important risk factor fueling the HIV epidemic. However, limited data is available about synthetic drug use among MSM in China. According to Wang, et al, (2012), Synthetic drugs such as amphetamine-type stimulants (ATS) and ketamine have become popular in entertainment industries and are confirmed to increase risk of HIV seroconversion. Studies also show that amyl nitrites appear to have the strongest association with HIV seroconversion among synthetic drugs.

Since the 1960s, amyl nitrites have been popularly used as an inhalant among homosexual and bisexual men in order to relax the anal sphincter and diastolic capillaries and achieve enhanced sexual intercourse and euphoria. Unfortunately, amyl nitrites also appear to pose multiple health risks that disproportionately impact MSM. Amyl nitrites use has been independently associated with unprotected anal intercourse incident sexually transmitted infections, unprotected intercourse with serodiscordant partners, and HIV seroconversion among MSM (Wang, et al, 2012). Commonly known as “poppers,” “rush,” or “rush poppers”, nitrite inhalants in China include isopropyl phenylenes nitrate (2-propyl nitrate) and isobutyl nitrite (2-methylimino-

nitrate) and have become increasingly popular in MSM community. Epidemiological research of nitrite inhalants and HIV risk is well documented in Western countries (Wang, et al, 2012); however, there is limited information from China. This is the first study in China to investigate the prevalence and correlates of the use of nitrite inhalants among MSM.

## **2.5 Conclusion**

In conclusion, the problem with insight and resolve is that the drive for the drug of choice remains, much energy is expended in mere coping, and the opportunity for relapse is high. The problem with treating the personality disorder which gives rise to drug abusing behavior is that very few therapists are trained in dealing with problems of dysphoria and existential ennui, prime “illnesses of the spirit” which contribute to drug dependence.

## CHAPTER THREE

### METHODOLOGY

#### 3.1: Introduction

This chapter focused on the methodology of this study and underline deeply eight section of the study methodology as presented; - Research Design, second talked about research Population, third section focused on sample size, fourth section concentrated on sample procedure, fifth section talked about data research instrument, the sixth section focus on reliability and validity others look at ethical consideration and limitations.

#### 3.2: Research Design

Research design refers to the choice of specific methods of data collection and analysis. The design is a general plan about what was done to answer the research question (Sekaran, 2005).. The research design in this study was both qualitative and quantitative (mixed method research design). The mixed method research provided *strengths* that offset the weaknesses of both quantitative and qualitative research. Thus, by using both types of research, the strengths of each approach made up for the weaknesses of the other. The mixed method research design determined strategies, tools and methods that was related to data collection and analysis.

#### 3.3: Research Population

A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics (Amin, 2005). All individuals or objects within a certain population usually have a common, binding characteristic or trait. In this research it included district commissioners, youth group Leaders and other community Leaders in Jinja

District. It was from this population that this research got the sample and primary data which was make the target population of 52 respondents.

### 3.4: Sample Size

The sample size of this study was 52 respondents. To obtain this the researcher applied Sloven's theory.

$$n = \frac{N}{1 + Ne^2}$$

Where

N= target population

n=Sample population

e<sup>2</sup>= desire margin of error is 0.05<sup>2</sup>

$$n = \frac{60}{1 + 60(0.05)^2} = 52.$$

Therefore, the sample size of this study was 52 respondents.

### 3.5: Sample Procedure

According to Sekaran (2003), sampling is the process of choosing the research units of the target population, which were included in the study. The samples used in the study were selected using purposive sampling which was a function of non- probability sampling. Under purposive sampling technique, the researchers purposely chose who, in their opinion are thought was relevant to the research topic. In this case, the judgment of the researcher was more important

than obtaining a probability sample. The process of sampling in this case involved purposive identification of the respondents.

### **3.6: Sources of Data**

#### **3.6.1 Primary Data Sources**

Primary data refers to data collected by a researcher to address the specific needs of his/her study. It involves using either quantitative and qualitative methods or a combination of both to gather first-hand information on a subject of study (Dawson, 2002, Ahiadeke, 2008). In this study, primary data was collected from District commissioners, youth group Leaders and other community Leaders in Jinja District. Here, data was gathered using a semi-structured questionnaire consisted of both open-ended and closed ended questions. An interview guide was used to collect data from the key Informants.

#### **3.6.2 Secondary Data Sources**

Apart from gathering first hand data, this study also reviewed a lot of secondary data in order to have a broader understanding of the topic. Secondary data, according to Ahiadeke (2008), refers to data which was collected by other people for a different purpose but which have significance for the present study. It involved using information from studies others have conducted on the subject of study (Dawson, 2002). Secondary data was collected from the following sources; governmental statistical sources (census data, and other national data), book, previous research studies Private sector, journals, internet search, records District Commissioners, Youth Group Leaders and other community Leaders in Jinja District

### **3.7 Data collection techniques**

### **3.7.1 Questionnaire**

Questionnaire is a technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order (sounders et al., 2013). Questionnaire techniques was adapted in collecting primary data since it could provide an efficient way of collecting responses from a large sample size. The questions were then slightly modified by using expert opinions to adapt to the local context. Researcher selected questionnaire as it had the following advantages: first, it provided efficient way for collecting responses from a large sample size. Second, it required less skills and sensitively than semi-structures and in-depth interviews (Sounders *et al.*, 2016). The questionnaires was responded to by District Commissioners, Youth Group Leaders and other Community Leaders in Jinja District and others who were selected at random.

### **3.7.2 Interview guide**

With interview guided the researcher gathered information through verbal interaction with the Key informants. Carrying out verbal interaction with the respondents enhanced and created conversation between the researcher and the respondent. This method further created an explanatory atmosphere to obtain information.

### **3.8 Reliability**

Reliability is defined as the extent to which a questionnaire, test, observation or any measurement procedure produces the same results on repeated trials (Miller, 2002). Reliability of measure is an indication of stability and consistency with which the instruments measures the concept and help to assess the “goodness” of a measure (Sekaran, 2005). Furthermore, the

reliability of measures indicated the extent to which it was without bias (error free) and hence ensures consistent measurement across time and across various items in the instrument.

**3.9 Validity**

Validity refers to the extent to which data collection method accurately measures what it was intended to measure or to the extent to which research findings are about what were claimed to be about (Saunders et al., 2009). The development of a Content Valid Instrument (CVI) was typically achieved by a rational analysis of the instrument. Specifically, the researcher reviewed all of the items for readability, clarity and comprehensiveness and come to some level of agreement as to which items were included in the final instrument.

**3.10 Measurement of Variable**

For the researcher to measure the independent and dependent variables, a 5 scale Likert Scale was used as demonstrated in the table below;-

No.	Mean range	Interpretation
1	1.0 - 1.8	Strongly agree
2	1.8 - 2.6	Agree
3	2.6 - 3.4	Neural
4	3.4 - 4.2	Disagree
5	4.2 – 5.0	Strongly disagree

### **3.11 Data Analysis**

Data was edited, coded and entered into a computer. Data analysis was done through using Statistical Package for Social Scientists (SPSS) version. Descriptive statistics such as frequencies and percentages were used to analyze data. Tables, figures and pie-charts was generated for easy interpretation of the data in order to come up with conclusions and recommendations. In addition, descriptions were used by looking and reviewing documents to understand attitude opinions, beliefs, social behavior, what people think, what they have done to solve their problems and their views towards success.

### **3.12 Limitations from the study**

Limitations were faced by the researcher included;

Unwillingness to fill the questionnaires; some respondents were no unwilling to share

Information about their leaders, supervisors, benefactors, workmates and the service system.

The researcher however explained to the respondents that the research was purely academic research and confidentiality of the information was upheld.

Interpretation of the questions may affect the meaning because some respondents may get difficulty in interpreting the questions correctly especially with the respondents that do not know English. However the researcher hired research assistants who translated the research questionnaires to the respondents and here, the respondents were able to understand the meaning of the questions.



### **3.13 Ethical Consideration**

The researcher conducted this study in accordance with the ethics and in this research the collected data was used for academic purpose and the researcher made sure that the research opinion did not include other interested but only research and must give fair consideration.

## CHAPTER FOUR

### DATA PRESENTATION AND INTERPRETATION OF FINDINGS

#### 4.0 Introduction

In this chapter the researcher presented the findings of the study, which were analyzed from the data obtained from the field in regards to the effectiveness and accuracy of the questionnaires returned. From the findings it is indicated that 40 questionnaires were returned filled out of the total number of 52 target population and the total number of questionnaires distributed; carrying a total percentage 76.9%. This return rate is what the researcher used to analyze the data needed to drive to the conclusion.

#### 4.1 The demographic characteristic of the respondents

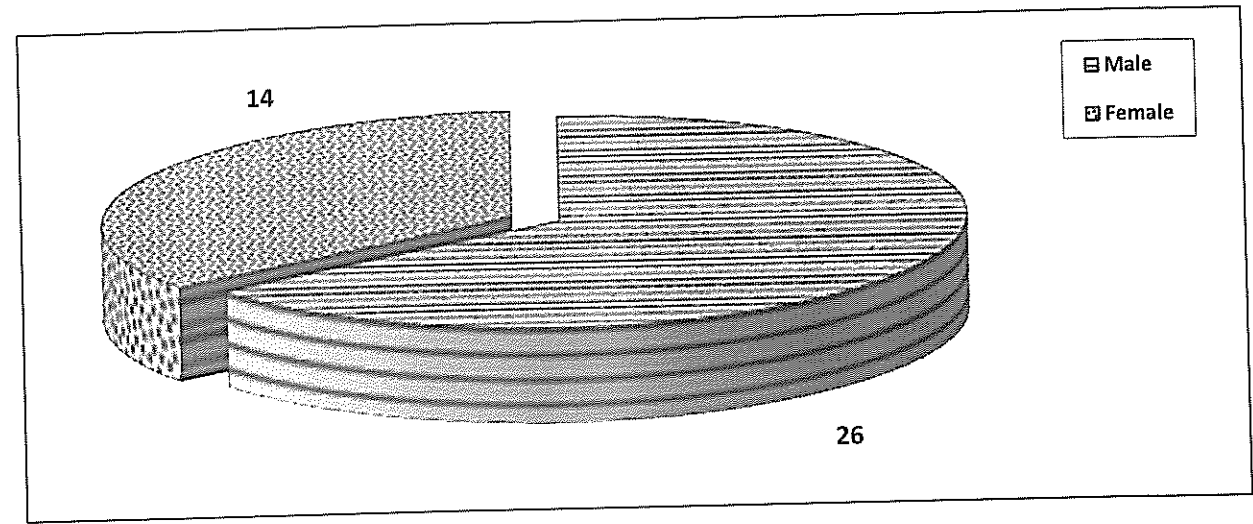
This was characterized by the sex of the respondents, Age, Marital Status, education level; the period spent in service. The information obtained was as indicated in tables below;-

**Table 4.1: Sex of the respondent**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	26	65.0	65.0	65.0
Valid Female	14	35.0	35.0	100.0
Total	40	100.0	100.0	

*Source: Primary Data, 2019*

Figure 4.1: Sex of the respondent



Source: Primary data, 2019

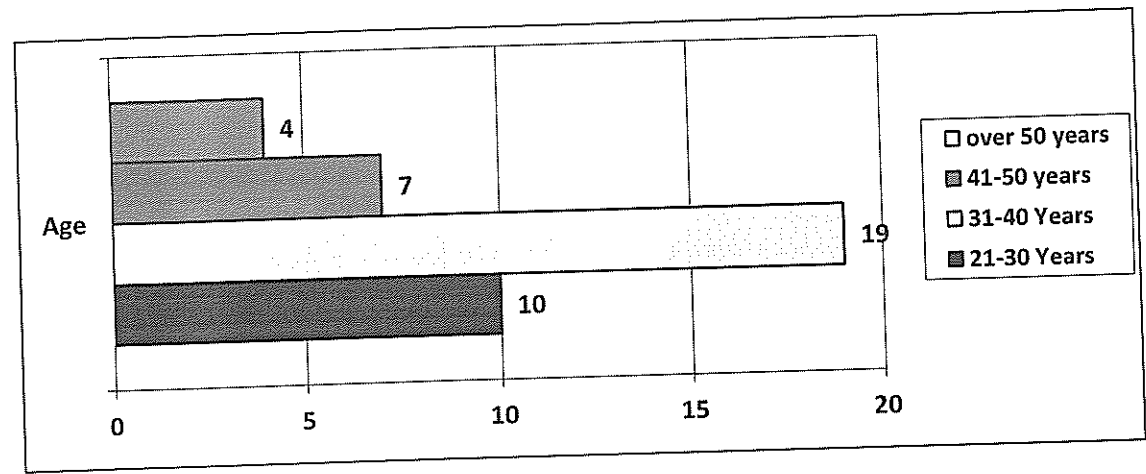
As indicated in the table 4.1 and figure 4.1 above, results about sex of the respondents showed that out of four respondents who participated in the research, 26(65%) were Male and 14(35%) were female. This indicated that the research was dominated by male respondents.

Table 4. 2 Age Group

Age Group		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30 Years	10	25.0	25.0	25.0
	31-40 Years	19	47.5	47.5	72.5
	41-50 Years	7	17.5	17.5	90.0
	over 50 Years	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

Source: Primary data, 2019

Figure 4.2: Age Group



Source: Primary data, 2019

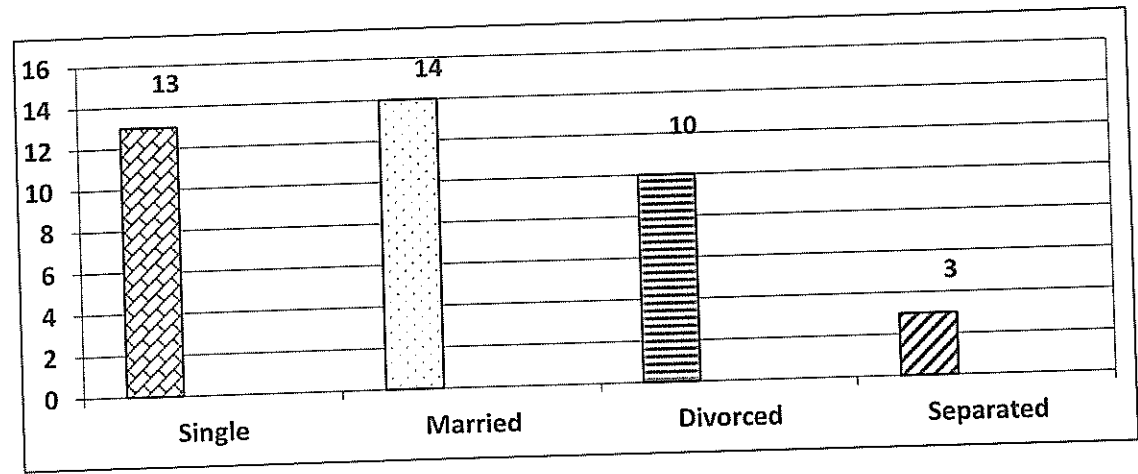
From the findings in table 4.2 and figure 4.2 above on age of the respondents, 10(25%) were 21-30 years, 19(47.5%) were between 31-40 years, 7(17.5%) were between 41-50 Years, 4(10%) were above 50 years. This indicated that the dominant respondents were between 31-40 years of age, followed by those between 21-30 years, the 41-50 years and as well minority were 50 years and above.

Table 4. 3: Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Single	13	32.5	32.5	32.5
Married	14	35.0	35.0	67.5
Valid Divorced	10	25.0	25.0	92.5
Separated	3	7.5	7.5	100.0
Total	40	100.0	100.0	

Source: Primary Data, 2019

**Figure 4.3: Marital Status**



**Source: Primary Data, 2019**

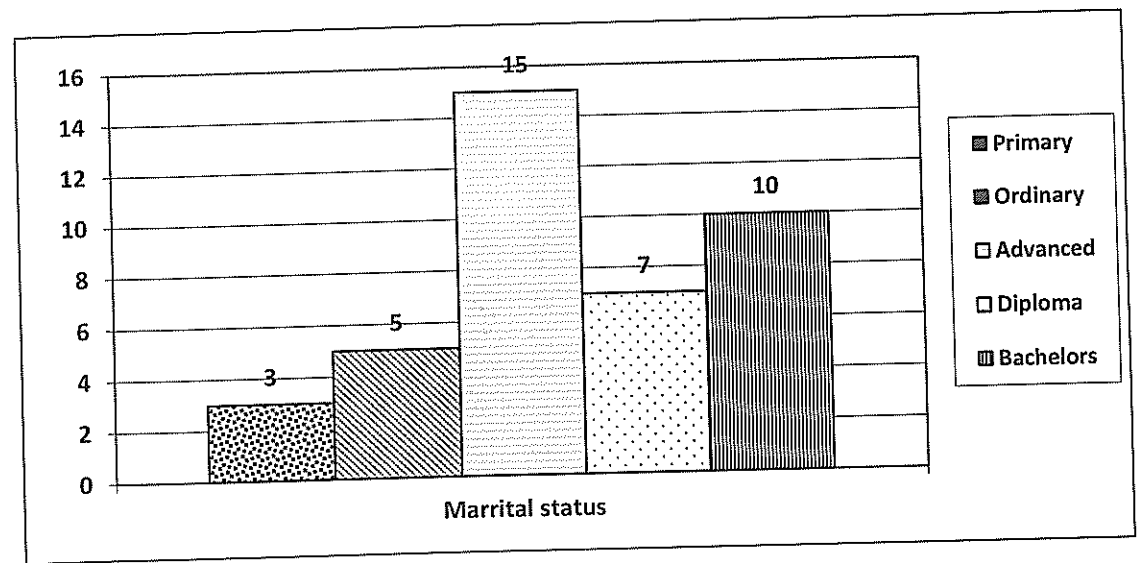
Findings in table 4.3 and figure 4.3 above about marital status of the respondents, 13(32.5%) were single, 14 (35%) were married, 10(25%) were divorced while 3(7.5%) were separated. This showed that majority of the respondents who participated in this research were married followed by those who were single, then divorced and lastly few were separated.

**Table 4.4 Level of Education attained**

Level of Education attained		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary level	3	7.5	7.5	7.5
	Ordinary level	5	12.5	12.5	20.0
	Advanced	15	37.5	37.5	57.5
	Diploma	7	17.5	17.5	75.0
	Bachelors	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

**Source: Primary Data, 2019**

Figure 4.4 Level of Education attained



Source: Primary data, 2019

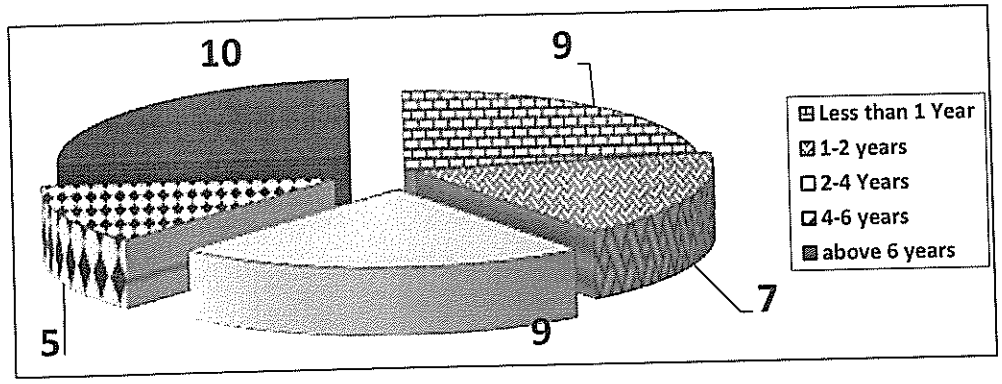
Results in table 4.4 and figure 4.4 on the level of education of the respondents above indicated that 3(7.5%) were primary leavers, 5(12.5%) were of Ordinary level, 15(37.5%) had acquired advanced level of education, 7(17.5%) had diploma while 10(25%) had bachelor's degree. From the findings therefore, majority of the respondents had advanced level education qualification.

Table 4. 5: Number of Years Spent in Jinja

Number of Years Spent in Jinja		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 Year	9	22.5	22.5	22.0
	1-2 Years	7	17.5	17.5	40
	2-4 years	9	22.5	22.5	62.5
	4-6 Years	5	12.5	12.5	79.5
	Over 6 Years	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

Source: Primary data, 2019

Figure 4.5 Number of Years Spent in Jinja



Findings in table above on the number of years spent in Jinja, 9(22.5%) had spent less than 1 year, 7(17.5%) had spent between 1-2 years, 9(22.5%) had spent 2-4 years, 5(12.5%) had spent between 4-6 years while 10(25.5%) had spent over 6 years in Jinja. The findings in this case indicated that the research was dominated by respondents who had spent 6 and above years.

#### 4.2 Stimulant Abuse and HIV/AIDS Patients

The study investigated the Effects of Stimulant Abuse to HIV/AIDS patients using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing.

**Table 4. 6 Descriptive Statistics on the Effects of Stimulant Abuse to HIV/AIDS Patients**

Responses	N	Mean	Std. Deviation
Stimulant abuse has some unpleasant side effects like fatigue, anxiety, depression, and raising a person's blood pressure, rate of breathing, and heart rate	40	3.84	0.867
Misusing prescription stimulants can also lead to stimulant use disorders but people with Attention deficit hyperactivity disorder who use them as are not at the same risk	40	3.62	0.777
Stimulants abuse can increase the amount of a chemical needed to help a person stay focused	40	3.77	0.758
Stimulants abuse can produce an overabundance of dopamine, the pleasure-inducing chemical in the brain	40	3.76	0.670
Many people abuse prescription stimulants to enhance performance rather than to get high.	40	3.89	0.704
Valid N (listwise)			

*Source Primary Data, 2019*



The first alternative was to assess whether Stimulant abuse has some unpleasant side effects like fatigue, anxiety, depression, and raising a person's blood pressure, rate of breathing, and heart rate. The findings showed that responses had a mean difference of 3.84 and the Standard Deviation was 0.867. In this case the results meant that, unpleasant side effects to human nature especially on the side of Fatigue, Anxiety among others.

The second statement was to find out whether, Misusing prescription stimulants can also lead to stimulant use disorders but people with Attention deficit hyperactivity disorder who use them as are not at the same risk. The mean difference here was 3.62 and the Standard deviation was 0.777. The third statement was to identify whether, Stimulants abuse can increase the amount of a chemical needed to help a person stay focused. The mean difference here was 3.77 and a standard deviation of 0.757.

Participants were also asked to examine the extent to which they agree with the statement that Stimulants abuse can produce an overabundance of dopamine, the pleasure-inducing chemical in the brain. Here the mean difference was 3.76 and standard deviation was 0.670.

The last statement was to find out whether many people abuse prescription stimulants to enhance performance rather than to get high. The Mean difference was 3.89 and standard deviation of 0.704.

In this case mean and standard deviation obtained per each construct tested, the Standard deviation showed how measurements for a group were spread out from the average (mean), or expected value. As a result, the findings indicated that most of the participants agreed that stimulants remain among first line treatments for the disorder. Along those lines, while one

group found that cigarette smoking and cocaine abuse was associated with previous stimulant treatment, others have reported that stimulant treatment in youth does not increase subsequent cigarette and yet other studies including a meta-analysis have shown that it may exert a protective effect against the subsequent cigarette smoking.

#### 4.3 Drug injection and HIV /AIDS patients

The study aimed at examining the effects of drug injection to HIV /AIDS patients, using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing.

**Table 4. 7: The effects of drug injection to HIV /AIDS patients**

Responses	N	Mean	Std. Deviation
Skin popping is a dangerous route of administration because it can result in permanent tissue damage.	40	3.83	0.521
A person who inject drugs (PWID) can experience collapsed veins when they repeatedly inject in the same site.	40	3.73	0.821
PWIDs can get HIV by sharing needles, syringes, and other drug equipment	40	3.97	0.556
The heightened effect of injecting drugs intravenously can make the chances of addiction more likely	40	3.96	0.582
In many societies, there is a social stigma attached to injecting drugs.	40	3.90	0.410
Injection of drug is favored by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds	40	3.93	0.488
Valid N (listwise)			

**Source: Primary Data, 2019**

Responses in table 4.7 above indicated that drug injection has a significant effect on the patients with HIV/AIDs. From the statements; Skin popping is a dangerous route of administration because it can result in permanent tissue damage, out of the total number of respondents, the Mean=3.83 and STD=0.521.

For the statement whether a person who inject drugs (PWID) can experience collapsed veins when they repeatedly inject in the same site, out of the total number of respondents, the Mean was 3.73 and the STD was 0.821. Statement about PWIDs can get HIV by sharing needles, syringes, and other drug equipment indicated that the mean difference was 3.97 and standard Deviation 0.556

The heightened effect of injecting drugs intravenously can make the chances of addiction more likely the mean difference was 3.96 and 0.582. Whether in many societies, there is a social stigma attached to injecting drugs, the Mean was 3.90 and STD was 0.410 while statement to whether Injection of drug is favored by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds the Mean difference was 3.93 and STD was 0.488.

From the findings it should be recalled that, a wide variety of drugs are injected, often opioids: these may include legally prescribed medicines and medication such as morphine, as well as stronger compounds often favored in recreational drug use, which are often illegal. Although there are various methods of taking drugs, injection is favoured by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds. It also bypasses first-pass metabolism in the liver, resulting in higher bioavailability and efficiency for many drugs (such as morphine or diacetylmorphine/ heroin; roughly two-thirds of which is destroyed in the

liver when consumed orally) than oral ingestion would. The effect is that the person gets a stronger (yet shorter-acting) effect from the same amount of the drug.

Drug injection is therefore often related to substance dependence. Risks from drug injection are caused by a variety of factors, including unclean or unsafe injection practices and repeated injections at the same site. Injection drug users that fail to adequately sanitize the skin or use clean injection products are at increased risk for cellulitis, abscesses, and thrombophlebitis; these infections can subsequently result in sepsis and bacteremia, which can be fatal if untreated. Repetitive injections, especially those with unsafe practices, can result in additional medical concerns that include thrombosis formation and infectious endocarditis.

#### **4.4 Inhalants and HIV /AIDS Patients**

The study aimed at investigating the effects of Inhalants to HIV /AIDS Patients , using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing.

**Table 4.8: The effects of Inhalants to HIV /AIDS Patients**

Responses	N	Mean	Std. Deviation
Inhalants starve the body of oxygen and force the heart to beat irregularly and more rapidly.	40	3.91	0.459
Users can experience nausea and nosebleeds and lose their sense of hearing or smell	40	3.81	0.715
Chronic use can lead to muscle wasting and reduced muscle tone, and the poisonous chemicals gradually damage the lungs and the immune system.	40	3.70	0.905
An inhalant user risks Sudden Sniffing Death Syndrome. Death can occur the first time or the hundredth time an inhalant is used.	40	3.75	0.938
People who use inhalants long-term may experience forgetfulness and memory impairment	40	3.77	0.968
People who use inhalants long-term may experience irritability, hostility, feeling depressed or feeling persecuted	40	3.70	0.905
Valid N (listwise)			

Source: Primary data, 2019

Findings in table 4.8 above was to find out the effect of Inhalants to HIV /AIDS Patients. Statements were constructed to identify whether, the respondents agreed. From the findings it was observed that statement about, Inhalants starve the body of oxygen and force the heart to beat irregularly and more rapidly the Mean difference was 3.91 and STD was 0.459. For Users can experience nausea and nosebleeds and lose their sense of hearing or smell the Mean was 3.81 and STD was 0.715

On the other hand, respondents were asked whether, chronic use can lead to muscle wasting and reduced muscle tone, and the poisonous chemicals gradually damage the lungs and the immune

system. Here the Mean difference was 3.70 and Standard Deviation was 0.905 out of the total number of responses obtained. For the statement whether, an inhalant user risks Sudden Sniffing Death Syndrome. Death can occur the first time or the hundredth time an inhalant is used. The Mean difference was 3.75 and Standard Deviation was 0.938.

The statement about People who use inhalants long-term may experience forgetfulness and memory impairment the Mean difference was 3.77 and Standard deviation was 0.968. The last statement tested to find out whether people who use inhalants long-term may experience irritability, hostility, feeling depressed or feeling persecuted the Mean was 3.70 and standard deviation was 0.905.

The implication of this was that, the chemicals found in solvents, aerosol sprays, and gases can produce a variety of additional effects during or shortly after use. These effects are related to inhalant intoxication and may include belligerence, apathy, impaired judgment, and impaired functioning in work or social situations; nausea and vomiting are other common side effects. Exposure to high doses can cause confusion and delirium. In addition, inhalant abusers may experience dizziness, drowsiness, slurred speech, lethargy, depressed reflexes, general muscle weakness, and stupor.

## **CHAPTER FIVE**

### **DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

In this chapter the researcher summarizes the findings of the study as they are presented in chapter four, she further recommends and conclude in relation to the specific objectives. The researcher discussed the findings in relation to literature and the research objectives as discussed below; -

#### **5.2 Summary and Discussion of the findings**

##### **5.2.1 Stimulant abuse and HIV/AIDS patients**

Under this section, the study investigated Stimulant Abuse to HIV/AIDS patients using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing. The first alternative was to assess whether Stimulant abuse has some unpleasant side effects like fatigue, anxiety, depression, and raising a person's blood pressure, rate of breathing, and heart rate. The findings showed that responses had a mean difference of 3.84 and the Standard Deviation was 0.867. In this case the results meant that, unpleasant side effects to human nature especially on the side of Fatigue, Anxiety among others.

The second statement was to find out whether, Misusing prescription stimulants can also lead to stimulant use disorders but people with Attention deficit hyperactivity disorder who use them as are not at the same risk. The mean difference here was 3.62 and the Standard deviation was 0.777. The third statement was to identify whether, Stimulants abuse can increase the amount of

a chemical needed to help a person stay focused. The mean difference here was 3.77 and a standard deviation of 0.757.

Participant were also asked to examine the extent to which they agree with the statement that Stimulants abuse can produce an overabundance of dopamine, the pleasure-inducing chemical in the brain. Here the mean difference was 3.76 and standard deviation was 0.670.

The last statement was to find out whether many people abuse prescription stimulants to enhance performance rather than to get high. The Mean difference was 3.89 and standard deviation of 0.704.

In reference to the findings it was indicated that most of the participants agreed that stimulants remain among first line treatments for the disorder. Along those lines, while one group found that cigarette smoking and cocaine abuse was associated with previous stimulant treatment, others have reported that stimulant treatment in youth does not increase subsequent cigarette and yet other studies including a meta-analysis have shown that it may exert a protective effect against the subsequent cigarette smoking.

### **5.2.2 Drug injection and HIV /AIDS patients**

Under this section, the researcher aimed at examining the effects of drug injection to HIV /AIDS patients, using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing. Responses in table 4.7 indicated that drug injection has a significant effect on the patients with HIV/AIDs. From the statements; Skin popping is a dangerous route of administration because it can result in permanent tissue damage, out of the total number of respondents, the Mean=3.83 and



STD=0.521. For the statement whether a Person Who Inject Drugs (PWID) can experience collapsed veins when they repeatedly inject in the same site, out of the total number of respondents, the Mean was 3.73 and the STD was 0.821.

Statement about Person Who Inject Drugs (PWID) can get HIV by sharing needles, syringes, and other drug equipment indicated that the mean difference was 3.97 and standard Deviation 0.556. The heightened effect of injecting drugs intravenously can make the chances of addiction more likely the mean difference was 3.96 and 0.582. Whether in many societies, there is a social stigma attached to injecting drugs, the Mean was 3.90 and STD was 0.410 while statement to whether Injection of drug is favored by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds the Mean difference was 3.93 and STD was 0.488.

From the findings it should be recalled that, a wide variety of drugs are injected, often opioids: these may include legally prescribed medicines and medication such as morphine, as well as stronger compounds often favored in recreational drug use, which are often illegal. Although there are various methods of taking drugs, injection is favoured by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds. It also bypasses first-pass metabolism in the liver, resulting in higher bioavailability and efficiency for many drugs (such as morphine or diacetylmorphine/ heroin; roughly two-thirds of which is destroyed in the liver when consumed orally) than oral ingestion would. The effect is that the person gets a stronger (yet shorter-acting) effect from the same amount of the drug.

Drug injection is therefore often related to substance dependence. Risks from drug injection are caused by a variety of factors, including unclean or unsafe injection practices and repeated

injections at the same site. Injection drug users that fail to adequately sanitize the skin or use clean injection products are at increased risk for cellulitis, abscesses, and thrombophlebitis; these infections can subsequently result in sepsis and bacteremia, which can be fatal if untreated. Repetitive injections, especially those with unsafe practices, can result in additional medical concerns that include thrombosis formation and infectious endocarditis.

### 5.2.3 Inhalants and HIV /AIDS Patients

Under this section, the researcher investigated the effects of Inhalants to HIV /AIDS Patients, using an ordinal Likert scale questionnaire for the respondents to answer the statements with options ranging from strongly disagreeing to strongly agreeing.

Findings in table 4.8 above was to find out the effect of Inhalants to HIV /AIDS Patients. Statements were constructed to identify whether, the respondents agreed. From the findings it was observed that statement about, Inhalants starve the body of oxygen and force the heart to beat irregularly and more rapidly the Mean difference was 3.91 and STD was 0.459. For Users can experience nausea and nosebleeds and lose their sense of hearing or smell the Mean was 3.81 and STD was 0.715. On the other hand, respondents were asked whether, chronic use can lead to muscle wasting and reduced muscle tone, and the poisonous chemicals gradually damage the lungs and the immune system. Here the Mean difference was 3.70 and Standard Deviation was 0.905 out of the total number of responses obtained. For the statement whether, an inhalant user risks Sudden Sniffing Death Syndrome. Death can occur the first time or the hundredth time an inhalant is used. The Mean difference was 3.75 and Standard Deviation was 0.938.

The statement about People who use inhalants long-term may experience forgetfulness and memory impairment the Mean difference was 3.77 and Standard deviation was 0.968. The last

statement tested to find out whether people who use inhalants long-term may experience irritability, hostility, feeling depressed or feeling persecuted the Mean was 3.70 and standard deviation was 0.905.

The implication of this was that, the chemicals found in solvents, aerosol sprays, and gases can produce a variety of additional effects during or shortly after use. These effects are related to inhalant intoxication and may include belligerence, apathy, impaired judgment, and impaired functioning in work or social situations; nausea and vomiting are other common side effects. Exposure to high doses can cause confusion and delirium. In addition, inhalant abusers may experience dizziness, drowsiness, slurred speech, lethargy, depressed reflexes, general muscle weakness, and stupor.

### **5.3 Conclusions**

In conclusion, it should be noted that, each time drug users rely on a drug to relieve tension and feel good about themselves, they become a little less capable of coping on their own. By using drugs to cope, the individual is cut off from learning other more adaptive coping mechanisms and becomes less tolerant of the pain of anxiety. The drug user now knows that anxiety does not have to be tolerated, as drug taking has been successful in the past in removing tension and producing good feelings. It is therefore expected that drug use will increase both in frequency and in the number of different situations in which it is employed. For example, arguments with parents may be a primary source of conflict and anxiety for the adolescent drug abuser. Drug taking will frequently follow such an argument. An adolescent experiencing school-related stress, having learned that drug taking is an effective means of anxiety reduction, may turn to additional drug taking to compensate for academic failures. The reliance on drugs to cope with

stress therefore creates a vicious cycle; the more drugs are used, the more the individual believes they are necessary. Each drug experience serves to confirm for users the belief that they are powerless to function on their own.

A wide variety of drugs are injected. From the findings, among the most popular in many countries are morphine, heroin, cocaine, amphetamine, and methamphetamine. Prescription drugs including tablets, capsules, and even liquids and suppositories are also occasionally injected. This applies particularly to prescription opioids, since some opioid addicts already inject heroin. Injecting preparations which were not intended for this purpose is particularly dangerous because of the presence of excipients (fillers), which can cause blood clots. Injecting codeine into the bloodstream directly is dangerous because it causes a rapid histamine release, which can lead to potentially fatal anaphylaxis and pulmonary edema. Dihydrocodeine, hydrocodone, nicocodeine, and other codeine-based products carry similar risks. Codeine may instead be injected by the intramuscular or subcutaneous route. The effect will not be instant, but the dangerous and unpleasant massive histamine release from the intravenous injection of codeine is avoided.

To minimize the amount of undissolved material in fluids prepared for injection, a filter of cotton or synthetic fiber is typically used, such as a cotton-swab tip or a small piece of cigarette filter. Some manufacturers add the narcotic antagonist naloxone or the anti-cholinergics atropine and homatropine (in lower than therapeutic doses) to their pills to prevent injection. Unlike naloxone, atropine does indeed help morphine and other narcotics combat neuralgia. The atropine may very well not present a problem, and there is the possibility of atropine content reduction of soluble tablets by placing them on an ink blotter with a drop of water on top, then preparing a shot from

the remainder of the pill. However, as a narcotic agonist antagonist, pentazocine and its relatives can cause withdrawal in those physically dependent upon narcotics.

#### **5.4 Recommendations**

Prevention programs should enhance protective factors and reverse or reduce risk factors. The risk of becoming a drug abuser involves the relationship among the number and type of risk factors (e.g., deviant attitudes and behaviors) and protective factors (e.g., parental support).

Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs.

Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors

Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness

Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information.

Parental monitoring and supervision are critical for drug abuse prevention. These skills can be enhanced with training on rule-setting; techniques for monitoring activities; praise for appropriate behavior; and moderate, consistent discipline that enforces defined family rules.

Drug education and information for parents or caregivers reinforces what children are learning about the harmful effects of drugs and opens opportunities for family discussions about the abuse of legal and illegal substances

### **5.5 Future area of research**

The researcher recommended that family-focused interventions for the general population should be critically assessed because it can positively change specific parenting behavior that can reduce later risks of drug abuse. The researcher also suggested that, thorough research should be carried out on Prevention programs that can be designed to intervene as early as infancy to address risk factors for drug abuse, such as aggressive behavior, poor social skills, and academic difficulties. This will enable the future generation to examine the intense way to prevent drug abuse in the society.

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## APPENDICES

### APPENDIX I: THE EFFECT OF DRUG ABUSE ON HIV/AIDS PATIENTS IN CENTRAL DIVISION, JINJA MUNICIPALITY

Dear respondent,

My name is NANYOMBI ELIZABETH, I am a student of Kampala International University pursuing a bachelor's degree in Public administration. I am carrying out the study on "The Effect of Drug Abuse on HIV/AIDS Patients in Central Division, Jinja Municipality". This research is mainly for academic purposes and will not be used elsewhere but for partial fulfillment of the award of a degree in human resource management. Your contribution towards this research will be highly appreciated.

#### SECTION A DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Tick in the appropriate box

(1) Gender of the respondent

(a) Male ☐

(b) Female ☐

2. Age Group

21 – 30 yrs ☐

31 – 40 yrs ☐

41 – 50 yrs ☐

Over 50 yrs ☐

3. Marital status

Single ☐

Married ☐

Divorced ☐

Separated ☐

Others specify .....

4. Level of education attained

Primary level ☐

Ordinary level ☐

Advanced level ☐

Diploma ☐

Bachelors' Degree ☐

Others specify.....

### 5. Number of years spent in Somalia

Less than 1 year ☐

1-2 years ☐

2-4 years ☐

4 -6 years ☐

Over 6 years ☐

### SECTION B: THE EFFECTS OF STIMULANT ABUSE TO HIV/AIDS PATIENTS IN JINJA CENTRAL DIVISION.

In the this section select whether you agree, disagree, whether you are not sure of strongly disagree. The 5 Likert scaling represents a follows. 1=Strongly Agree(SA), 2= Agree(A), 3= Not Sure(NS), 4= Disagree(DA) and 5=Strongly Disagree(SD)

<i>Please indicate the degree to which you agree with the following statements. Tick the scale</i>	SA	A	NS	DA	SD
	1	2	3	4	5
<b>Stimulant abuse has some unpleasant side effects</b> like fatigue, anxiety, depression, and raising a person's blood pressure, rate of breathing, and heart rate					
Misusing prescription stimulants can also lead to stimulant use disorders but people with Attention deficit hyperactivity disorder who use them as are not at the same risk					
Stimulants abuse can increase the amount of a chemical needed to help a person stay focused					
Stimulants abuse can produce an overabundance of dopamine, the pleasure-inducing chemical in the brain					
Many people abuse prescription stimulants to enhance performance rather than to get high.					

**SECTION C: ASSESS THE EFFECTS OF DRUG INJECTION TO HIV /AIDS PATIENTS IN JINJA CENTRAL DIVISION.**

In the this section select whether you agree, disagree, whether you are not sure of strongly disagree. The 5 Likert scaling represents a follows. 1=Strongly Agree(SA), 2= Agree(A), 3= Not Sure(NS), 4= Disagree(DA) and 5=Strongly Disagree(SD)

	SA	A	NS	DA	SD
	1	2	3	4	5
Skin popping is a dangerous route of administration because it can result in permanent tissue damage.					
A person who inject drugs (PWID) can experience collapsed veins when they repeatedly inject in the same site.					
PWIDs can get HIV by sharing needles, syringes, and other drug equipment					
The heightened effect of injecting drugs intravenously can make the chances of addiction more likely					
In many societies, there is a social stigma attached to injecting drugs.					
Injection of drug is favored by some people as the full effects of the drug are experienced very quickly, typically in five to ten seconds					

**SECTION D: THE EFFECTS OF INHALANTS TO HIV /AIDS PATIENTS IN JINJA CENTRAL DIVISION.**

In the section select whether you agree, disagree, whether you are not sure of strongly disagree. The 5 Likert scaling represents a follows. 1=Strongly Agree(SA), 2= Agree(A), 3= Not Sure(NS), 4= Disagree(DA) and 5=Strongly Disagree(SD)

<i>Please indicate the degree to which you agree with the following statements. Tick the scale</i>	SA	A	NS	DA	SD
	1	2	3	4	5
Inhalants starve the body of oxygen and force the heart to beat irregularly and more rapidly.					
Users can experience nausea and nosebleeds and lose their sense of hearing or smell					
Chronic use can lead to muscle wasting and reduced muscle					

tone, and the poisonous chemicals gradually damage the lungs and the immune system.					
An inhalant user risks Sudden Sniffing Death Syndrome. Death can occur the first time or the hundredth time an inhalant is used.					
People who use inhalants long-term may experience					
People who use inhalants long-term may experience forgetfulness and memory impairment					
People who use inhalants long-term may experience irritability, hostility, feeling depressed or feeling persecuted					

*Thank you for your time*



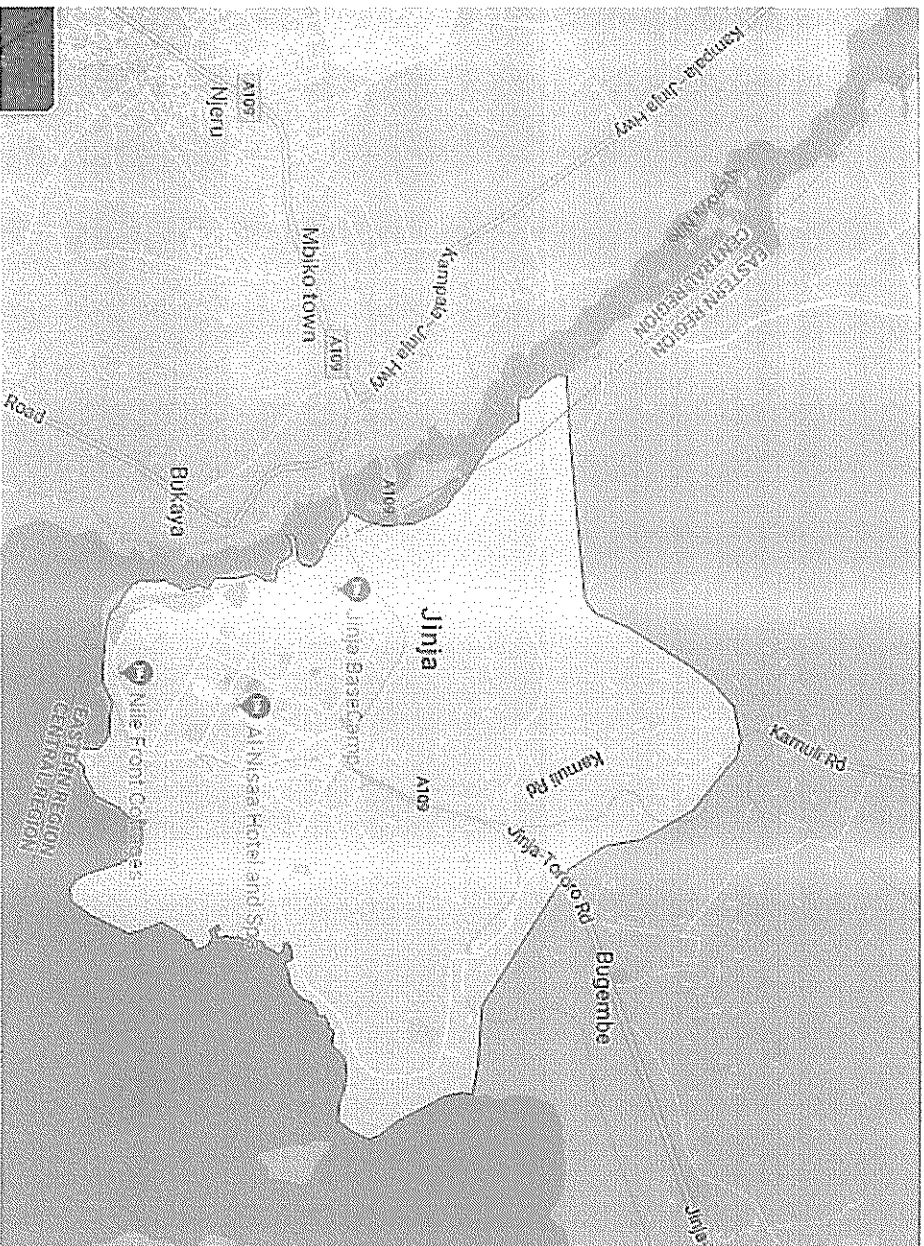
## APPENDIX II: WORK PLAN (GANTT CHART)

Task name	W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10
ending of topic title and objectives										
reparation of chapter one										
addressing of the supervisor's comments from the chapter one										
reparation chapter two										
addressing of the supervisor's comments from the chapter two										
reparation of chapter three										
responding of the supervisor's omments from the chapter two										
ubmission of the proposal(three hapters)										
orrecting and solving of the comments om the proposal										

### APPENDIX III: THESIS BUDGET

No.	Items	Amount \$
01	Equipment	74,000
02	Stationary	74,000
03	Printing facilities	444,000
04	Internet facilities	222,000
05	Research fee	370,000
06	Photocopy cost	37,000
07	Telephone Expenses	148,000
08	Transportation	185,000
09	Other cost	296,000
	Total Budget cost	1,776,000

## APPENDIX IV: MAP OF THE STUDY AREA



## APPENDIX V: A TABLE TO DETERMINE THE SAMPLE SIZE

Table 3.1

*Table for Determining Sample Size of a Known Population*

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

*Note: N is Population Size; S is Sample Size*

*Source: Krejcie & Morgan, 1970*