

**A SURVEY OF FACTORS IN RELAPSE AMONG ALCOHOLICS IN  
SELECTED REHABILITATION CENTERS IN NAIROBI, KENYA.**

**BY**

**BIRGEN JULIA**

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**DECLARATION**

This thesis is my own work and has not been presented for the award of degree or diploma in any other university.

Birgen Julia

EDU/PGGC/28/08

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**DECLARATION BY SUPERVISORS**

This thesis has been submitted for examination with my approval by University supervisors.

Dr. Shadrack Ogoma

Senior Lecturer

Dept. of Educational Psychology

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Prof. Jackson Too

Associate Professor

Curriculum Instruction and Educational Media

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **DEDICATION**

This work is dedicated to my loved ones: Mercy, Douglas, Maureen and Lee and not forgetting my husband Vincent.

### **ACKNOWLEDGEMENTS**

I would like to express my gratitude to God for seeing me through this research work. Also, I am grateful to all those who gave their time and assistance towards the completion of this work. Special thanks are given to my supervisors Prof. Too and Dr. Ogoma for sparing their special time to go through my work. Thank you so much for your critical professional guidance, active support and encouragement.

## ABSTRACT

The increase of alcoholism with associated adverse consequences among adolescents and young adults has been an issue of great concern in many parts of world and Kenya in particular. In response, there has been an increase in the establishment of treatment and rehabilitation services and demand for the same to assist alcohol abusers in recovery and prevention of relapse. However, despite the availability and demand of these services, there has been also a simultaneous increase in alcohol abuse and relapse cases. This scenario cast doubts on the effectiveness of the existing treatment and rehabilitation services in meeting the ever-increasing number of admitted cases. The purpose of study was to establish factors contributing to relapse in selected rehabilitation centers in Nairobi, Kenya. This study adopted cross sectional research design and focused on eight rehabilitations centers with admission of 226 clients. Purposive, Probability Proportionate to Size (PPS) and simple random sampling methods were used to select participating centers and respondents. The sample sizes were 144 alcoholics and 8 professional helpers. However, 82 alcoholics and 5 professional helpers were included in data analysis as some were lost due to inconsistent responses and non-responses. Data was collected the through administration of two sets of self-administered questionnaires to the selected respondents. Data was analyzed and presented using frequencies, percentages, cross tabulations, Chi-square, pie-charts and tables. Data analysis was performed by the use of Statistical Package for Social Sciences (SPSS). The study found out that more than half (62%) of the alcoholics in rehabilitation centers were relapsees and they had slipped to drinking more than once. The study established that relapse did not just occur but there were factors within the individual and environment that were associated with it. The study recommends that alcoholics need to be assisted to assume an active role in changing drinking behaviors by enhancing their abilities to overcome or cope with risk situations.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

NIH	- National Institutes of Health
NIAA	- National Institute of Alcohol Abuse and Alcoholism
SPSS	- Statistical Package for Social Sciences
WHO	- World Health Organization
NACADA	- National Agency Campaign Against Drug Abuse
UNODC	- United Nations Office of Drug Abuse and Crime
PPS	- Probability Proportionate to size
SOS	- Safe our souls

## CHAPTER ONE

### INTRODUCTION TO THE STUDY

#### 1.0. Overview

This chapter gives background on which study is based; statement of problem; objectives; research questions; justification; significance of study; theoretical and conceptual framework. The words used have been operationally defined.

#### 1.1 Background to the Study

The increase in alcohol use among adolescents and young adults is of great concern. The use of alcohol in African traditional society for social relations evolved over time into a problem of dependence and abuse. The World Health Organization (WHO) indicates that the most widely used drugs are alcohol, tobacco, *marijuana*, opium and its derivatives, cocaine and hallucinogens. UNODC (2005) add that an estimated 30% of the general adult population worldwide uses alcohol, out of which 20% are men and 10% are women. In Africa, the problem of alcohol has been a constant presence for years. Except where it is banned for religious reasons, large quantities of alcohol are still being brewed (Obot, 2000). However, regardless of improvement in technology, large amounts of unprocessed and unhygienic alcohol are still being consumed, especially by the poor (WHO, 2004).

In Kenya, alcohol is escalating and has permeated the whole society strata. However, high at risk are the youths and those in the early adulthood, who forms more than a half of the population (National Agency for the Campaign Against Drug and Substance Abuse – NACADA, 2007; Gacicio, 2003; Otieno, 1991). The youth seems to be dangerously

exposed to this menace (Ngeno, 2002). Alcohol has the highest national abuse rate of 36.3%, followed by nicotine (17.5%), *Bhangi* (9.9%), heroin (8.0%), *Miraa* (2.7%) and cocaine (2.2%) (NACADA, 2007).

According to WHO (2002), alcohol abuse is a great risk factor for morbidity and mortality globally. Alcohol is the leading risk factor in developing countries where it accounts for 6.2% of the health burden. It contributes to chronic and acute health problems because of its direct toxic effects on organs, its intoxicating properties (as in accidents and injuries), and it is a dependence producing substance.

Over the years, the Government of Kenya, has been concerned about drug abuse and has instituted various legislations and policies to curb drug abuse. It created the National Campaign Against Drug Abuse (NACADA) in 2001 to coordinate the prevention, reduction and control of drug and substance abuse through public education, empowerment, and enforcement liaison for a healthy and productive country (NACADA, 2007). NACADA (2007) in its survey of alcohol and drug addiction treatment and rehabilitation facilities indicates that there has been a steady increase in demand for admission owing

to the increasing population of drug addicts in the country. The report shows that there has been an exponential growth in the number of rehabilitation centers in Kenya in the recent past. Whereas there were only 13 centers which were operational by 1999 in the country, the figure rose to more than 48 centers registered by NACADA in 2007. Despite this progress as indicated by number of rehabilitation centers, there has been evidence in the past studies in other countries that approximately 90 percent of alcoholics are likely to experience at least one relapse over the 4-year period following treatment (Polish et al.

1981). Thus, relapse as a central issue of alcoholism treatment warrants further study. Thus leaves information gap on why majority of the clients are relapsing after receiving treatment and rehabilitation services. It also casts doubts on the effectiveness of the existing of rehabilitation and treatment services in meeting the ever-increasing demand of alcoholism treatment and relapse prevention.

## **1.2 Statement of the Problem**

Alcoholism and subsequent relapse are problems of great concerns in many countries in the world and Kenya in particular because of their adverse consequences to the alcoholics, their families and the larger society. It has emerged alcohol abuse is responsible for a wide variety of harmful effects that Kenyans are exposed to ranging from failing health to diminished productivity, social disharmony, exposure to HIV/AIDS infection and traffic accidents among others. Between April and August 2010, more than 45 people lost their lives while others were blinded after consumption of adulterated alcohol in several parts of the country(Kenya daily's).

These included 12 people who died in Nairobi's Shauri Moyo estate in April 2010, the 5 victims who died in Thindigwa village of Kiambu District in July 2010, more than 23 people in Kibera estate in July 2010 and 5 confirmed in Laikipia in August 2010. Whereas there is exponential increase in number rehabilitation centres from 13 in 1999 to 48 in 2007(NACADA 2007), past studies in other countries indicate that 90% of alcoholics are likely to experience at least one relapse over the 4 year period following treatment(Polish et al.1981)With these alarming prevalence statistics and adverse effects of alcoholism, it is imperative to put in place effective treatment and relapse prevention strategies to curb or mitigate the effects of this problem. There is need to find out why

majority of alcoholics slip to drinking after receiving treatment and rehabilitation services. Studies have shown that alcoholics who participate fully in effective treatment and relapse prevention programs were less likely to slip to drinking after treatment. However, studies based on Kenya to establish factors influencing relapse after treatment of alcohol dependence are sparse. The current study aimed to unravel some of these factors in personal, family, institutional and community domains and their associations with alcohol relapse. The findings of study may be useful to stakeholders in prioritizing areas of alcohol treatment and relapse prevention.

### **1.3 Purpose of the Study**

The study was to investigate the prevalence of relapse and factors that influence this relapse among alcoholics in rehabilitation centers in Nairobi, Kenya. The independent variables in this study included :personal, family, institutional and community domains. The dependent variable was alcoholic relapse.

### **1.4 Objectives of the Study**

The specific objectives of the study were:

- i) To find out prevalence of relapse among alcoholics in rehabilitation centers in Nairobi.
- ii) To establish personal factors which contribute to relapse among alcoholics in rehabilitation centers in Nairobi.
- iii) To identify family factors which contribute to relapse among alcoholics in rehabilitation centers in Nairobi.

- iv) To identify social factors which contribute to relapse among alcoholics in rehabilitation centers in Nairobi.
- v) To establish institutional factors which contribute to relapse among alcoholics in rehabilitation centers in Nairobi.
- vi) To find out demographic factors which contribute to relapse among alcoholics in rehabilitation centers in Nairobi.

### **1.5 Research Questions of the Study**

The study sought to answer these research questions:

- i) What is the prevalence of relapse among alcoholics in selected rehabilitation centre in Nairobi?
- ii) Which personal factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi?
- iii) Which family factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi?
- iv) Which social factors contribute to relapse among alcoholics in rehabilitation centers in, Nairobi?
- v) Which institutional factors influence relapse among alcoholics in rehabilitation centers in, Nairobi?
- vi) Which demographic factors contribute to relapse among alcoholics in rehabilitation centers in, Nairobi?



## **1.6. Justification of the Study**

Alcohol abuse has profound physical, academic, social and legal consequences on drinkers, family, abstainers and community at large. A study by NACADA 2007 revealed that 13% of the population consumes alcohol and adulterated alcohol are consumed by more than 15 % of those aged 15-64 years. With alarming prevalence statistics and far reaching consequences especially on users in not using or utilizing their full potential, it imperative to put in place a strategy that prevent or intervene to ensure effective treatment, rehabilitation and prevention of relapse. Past studies have shown alcoholism and relapse are

influenced by multiple factors in individual, family, institution and community domains. However, studies to show the extent of influence of factors on alcoholic relapse in Kenya are sparse. Therefore, this study may provide empirically validated evidence to any effective intervention and prevention programs to set priorities.

## **1.7. Significance of the Study**

Relapse prevention is central issue in alcohol treatment. The current study aimed to unravel the extent to which factors in individual, family, community and institution domains influence relapse among alcoholics in drug rehabilitation centers in Nairobi, Kenya. The findings may provide empirically validated evidences needed to prioritize areas of prevention and intervention of alcoholism and subsequent relapse. It is envisaged that such a study may benefit NACADA, Ministry of Public Health, Mental Health Agencies, psychologists, counselors, Non-Governmental Organizations, policy makers, researchers, drug abusers and families of alcoholics in the study area and the country at

large. The study findings may shed light on existing literature on alcohol treatment and relapse prevention.

### **1.8 Assumptions of the Study**

The study was based on the following assumptions:

- (i) Cases of alcohol relapse is a phenomena experienced across rehabilitation centers in Nairobi, Kenya.
- (ii) Demand for treatment and rehabilitation services in the country would continue as a result of growing drug related challenges in the country.
- (iii) The relapse cases and service providers were honest in responding to the data collection tools.

### **1.9 Scope and limitation of the Study**

The study focused on eight selected rehabilitation centers in Nairobi, Kenya. There were public (one), mission sponsored (one) and private centers (six). The rehabilitation centers in Kenya are disproportionately distributed and most of them are based in Nairobi and Coast province. The Nairobi was purposively selected because had the highest number of private centers and constituted the only public rehabilitation center (Mathare). The study encountered a number of limitations which could impede answering the research questions and achieving the objectives. These limitations include:

- (i) There were many registered and unregistered treatment and rehabilitation facilities in the country. Only a sample of them in Nairobi was selected and

was involved in the study. The generalization of the findings of this study would therefore be confined to the sampled and selected facilities.

- (ii) Alcoholics and center administrators were suspicious of ultimate goal of the study. However, the researcher sought assistance of the caretakers and service providers from the rehabilitation facilities to explain the intention of the study and developed amicable rapport with the respondents.

## **1.10 Theoretical Framework**

There are several theories that have been developed to explain why people use and abuse alcohol and other drugs, and especially why they continue or relapse despite being aware of the negative consequences. However, behavioral and social learning theories guided this study.

### **1.10.1 Classical and Operant Conditioning**

This is based on the fact that alcohol abuse like any other behavior is learned and maintained by various antecedent (preceding) and consequent (outcome) events in the society. Alcohol a depressant drug, temporarily reduces tension and makes the person feel more relaxed. In learning terms, the more often drinking is reinforced by tension reduction and relaxation, more likely a person is to respond by drinking in the future (Rivers, 1994). Therefore, drinking alcohol is reinforced by pleasant outcomes that it offers the user.

Excessive drinking of alcohol is maintained by the positive reinforcement obtained from the depressant and anesthetic properties of alcohol. Furthermore, the individual subjected to environmental stress are prone to consume to relax and reduce tension. After the person

has used alcohol for prolonged and heavy basis, alteration in the metabolism process occurs. This alteration provides another reinforcing factor for excessive drinking. After the individual become physically dependent on alcohol, a reduction in alcohol brings extremely aversive physiological reactions. Therefore, they must drink large quantities of liquor to alleviate distressing physical reactions and to prevent reoccurrence. Since drinking of alcohol promptly alleviates these adverse physical reactions, drinking behavior is automatically and continuously reinforced.

### **1.10.2 Social Learning**

Alcohol use can be learnt through modeling by adopting the behavior of others who also drink (Rivers, 1994). Drinking offers way to identify with and share in behavior of the valued person. Being like the person is reinforcing; it meets a need (making the drinker feel good about himself or herself) and may lead to drinking as a behavior that helps meet that need in the future. Bandura, proponent of the theory argues that individuals persistently engage in behaviors that are immediately reinforcing but that may be potentially destructive.

Bandura argues, individual are not passive recipients of environmental influences but there exists reciprocal relationship between individual, behavior and the environment. Bandura postulated the role of self efficacy in behavior control. The self-efficacy states that an individual's expectations about his or her ability to cope in a situation will affect the outcome. Bandura differentiated between the acquisition of behaviour change (i.e., quitting smoking) and the maintenance of behaviour change (i.e., staying quit). According to Marlatt (1978); Cummings, Gordon and Marlatt (1980); Marlatt and Gordon (1985), the

transition from the initial drink following abstinence (lapse) to excessive drinking (relapse) is influenced by an individual's perception of and reaction to the first drink. Bandura (1977) hold that the most powerful procedures for inducing behavior change may not be the most effective techniques for producing generalization and maintenance of treatment effects. That is, a treatment strategy may be highly effective in initiating a change in a client's drinking behavior but ineffective at maintaining that change over time and avoiding relapse. In accordance with social learning theory of drinking and alcoholism, self-efficacy has been shown to predict relapse following treatment for alcohol dependence.

This distinction between initiation and maintenance of behaviour change is of central importance in the choice of Bandura's theory of self-efficacy as a framework to guide development of relapse prevention procedures for treatment of alcohol problems. The relapse prevention model, based on self-efficacy theory, proposes that when a client enters a high-risk situation for drinking, a process of cognitive appraisal of past experiences is set in motion which culminates in a judgment, or efficacy expectation, on the part of the client of his or her ability to cope with the situation. That judgment of personal efficacy determines whether or not drinking takes place. Therapy begins with an analysis of the client's high-risk situations for drinking and the establishment of an individual hierarchy of drinking risk situations, from lowest risk to highest risk. The purpose of treatment is to affect an increase in the client's self-efficacy or confidence across all drinking situations in the hierarchy. Because behavioral performance has been shown to have the greatest impact on efficacy judgments; treatment focuses on having clients perform homework assignments involving entry into progressively more risky drinking situations in their

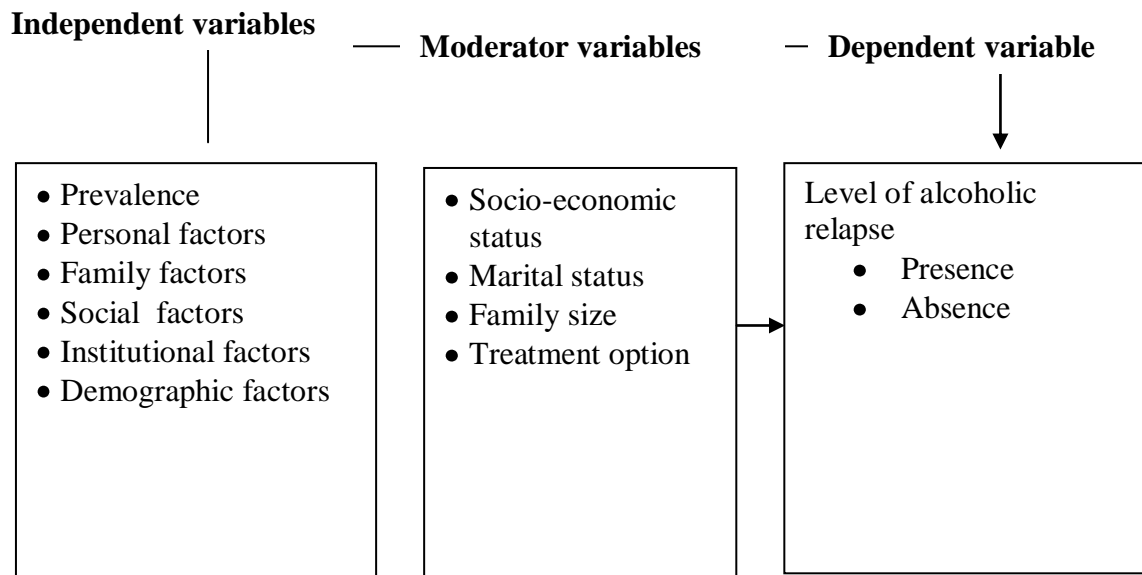
natural environment and attempting alternative coping responses. Homework assignments are designed in such a way as to promote maintenance effects that will be reflected in strong gains in the client's confidence or self-efficacy.

Because exposure to real-life drinking situations is central to these relapse prevention procedures, treatment must take place while the client is at risk in the community (Bandura, 1977 ; Marlatt, 1978; Cummings, Gordon & Marlatt, 1980; Marlatt & Gordon, 1985).

A relapse prevention model for alcoholics, based on the self-efficacy theory, emphasizes a strategy that helps each individual develop a profile of past drinking behavior and current expectations about high-risk situations. The therapy promotes use of coping strategies and behavioral change by engaging the patient in performance-based homework assignments related to high-risk situations.

### **1.11 Conceptual Framework**

The above theoretical framework based on the behavioural and social learning guide in developing a conceptual framework of this study that links selected factors and how they explain factors contributing to relapse among alcoholics in rehabilitation centres in Nairobi, Kenya. It shows the relationship between independent, moderator and dependent variables.



**Figure 1.1: Factors Influencing Relapse**

This study conceptualized that there were factors within individual, family, institution and social domains that contribute to alcoholic relapse. The interaction between the independent and dependent variables were affected by a number of moderator variables that were either facilitated or reduced the expected relationship. These other variables included Socio-economic status, marital status, family size and treatment option. The moderating variables were controlled by building them into the study. Then the data on these variables was analyzed and their possible confounding effects on relationship on independent and dependent variables were statistically gotten rid off using partial correlation.

### 1.12 Operational Definitions of Terms

The following operational definitions are presented as used in the context of this study.

**Alcoholic:** this is a person whose alcohol intake patterns are characterized by the repetitive and compulsive ingestion of alcohol in search away as to result in interference with some aspect of the interpersonal relationships or other required societal adaptations. In the study, the client admitted in rehabilitation center and who has alcoholic problem.

**Factors:** This refers to influences in person, family, institution and society domains that make relapse to alcohol use more likely after treatment and a period of sobriety.

**Prevalence:** Number of alcoholics who will indicate that they had used alcohol again after treatment and a period of sobriety prior to the study.

**Rehabilitation:** Refers to treatment, healing, remedy or cure. In this study, rehabilitation refers to the treatment, healing, remedy or cure of drug abuse cases by designated institutions.

**Rehabilitation centre:** An authorized institution for the reception, maintenance, treatment and rehabilitation of drug abuse cases.

**Relapse:** In the medical and healthcare field, relapse is a regression in a person's medical or psychiatric condition after they have been in recovery from a particular illness for a period of time.

In the study refers to use of alcohol after undergoing treatment and staying sober for some time prior to the study.

**Treatment:** Refers to the provision of one or more structured interventions designed to manage health and other problems resulting from drug or alcohol abuse, to improve or maximize personal functioning and social integration, and to achieve



and maintain long-term remission of disease. In study it refers to services offered to alcoholic in rehabilitation centers to cease use of alcohol and maintain sobriety.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 overview

This chapter presents a review of related literature on alcoholism and relapse prevention. The chapter begins with an overview of the concept of drug and substance abuse including the signs and symptoms of drug abuse and addiction, and the effect of drug abuse and addiction. Also discussed in details are alcohol and drug rehabilitation services, and management of alcoholism and addiction.

#### 2.1 Prevalence of Alcohol: Global and Regional

The World Health Organization (WHO) indicates that the most widely used drugs are alcohol, tobacco, *marijuana*, opium and its derivatives, cocaine and hallucinogens. UNODC (2005) add that an estimated 30% of the general adult population worldwide uses alcohol, out of which 20% are men and 10% are women. In Africa, the problem of alcohol has been a constant presence for years. There is evidence of alcohol and cigarettes not only with college students but also with secondary school students in Nigeria and Senegal (Fatoye & Morakinyo, 2002; Abasiubong *et al.*, 2008). A study conducted among high school students in Cape Town, South Africa revealed that the prevalence rates for use of alcohol 31% (Flisher *et al.*, 2003).

In Kenya, drug abuse is escalating and has permeated the whole society strata. However, high at risk are the youths and those in the early adulthood, who forms more than a half of the population (National Agency for the Campaign Against Drug and Substance Abuse – NACADA, 2007; Gacicio, 2003; Otieno, 1999). The youth seems to be dangerously

exposed to this menace (Ngeno, 2002). Alcohol has the highest national abuse rate of 36.3%, followed by nicotine (17.5%), *Bhangi* (9.9%), heroin (8.0%), *Miraa* (2.7%) and cocaine (2.2%)(NACADA, 2007).

## **2.2 Consequences of Alcohol and Addiction**

Alcohol abuse affects the person's life in many ways, including health, finances and stability. But it also affects the entire family, friends, colleagues and even the community. The strong denial and rationalization of the person using alcohol makes it extremely difficult to get help, and can make concerned family members feel like they are the problem (Pham-Kanter, 2001; NACADA, 2007).

### **2.2.1 Health, Employment and Crime**

Those who abuse alcohol have a greater risk for health problems. Heavy alcohol use directly affects health as well as may lead to diseases such liver cirrhosis, arthritis, heart problems, brain damage and even death from overdose. Productivity at work often suffers, and eventually trouble keeping a job or even homelessness can occur (NACADA, 2007).

### **2.2.2. Alcohol and the Family**

Alcohol abuse does not only affect the person abusing it but also affects friends, family and the entire society. Child abuse and neglect is much more common when there is drug abuse in the family. The abuser may neglect a child's basic needs in the quest for more drugs, or lack of impulse control can lead to increased physical and emotional abuse.. Alcohol abuse by a pregnant woman affects the developing baby's health. Domestic

violence also happens more frequently. Abusing alcohol leads to higher risk of injuries and death to self and others in car accidents (Pham-Kanter, 2001).

If you have someone you love abusing alcohol, it is an enormous emotional strain. You might feel obligated to cover for the abuser, cutting back from work to deal with the abuser's problems or working more to make financial ends meet. You might not be able to see friends and engage in hobbies, as coping with the abuse takes more and more time.

The shame of alcohol abuse in the family stops many family members from asking for help, instead pretending nothing is wrong. The emotional toll can be overwhelming (Pham-Kanter, 2001; NACADA, 2007)).

### **2.2.3. Mental and Emotional Consequence**

Abuse and addiction also affect mood, as alcohol is abused for the temporary good feelings they provide (Pham-Kanter, 2001).

Some mental and emotional signs include: cycles of being unusually talkative, "up" and cheerful, with seemingly boundless energy; increased irritability, agitation and anger; unusual calmness, unresponsiveness or looking "spaced out"; apathy and depression; paranoia, delusions; temporary psychosis, hallucinations; and lowered threshold for violence

## **2.3 Methods of Treatment of Alcohol Abuse**

The literature on goals of treatment, treatment services and programs were reviewed.

### **2.3.1 Goals of Alcohol Abuse Treatment**

Alcohol rehabilitation and treatment services are designed to help alcoholics, chronic relapse victims, and their families find effective treatment and intervention for alcoholism and addiction of the highest quality. They are meant for placement and intervention of drug and alcohol afflicted individuals. Treatment can be defined in two ways. As the provision of one or more structured interventions designed to manage health and other problems resulting from alcohol abuse and to improve or maximize personal functioning and social integration. Secondly as the process that begins when psychoactive substance abusers come into contact with a health provider or any other community service and may continue through a succession of specific interventions until the highest attainable level of health and well-being is reached (UNODC, 2005).

According to UNODC (2002), the primary goal of alcoholism treatment, as in other areas of medicine, is to help the patient to achieve and maintain long-term remission of disease. For alcohol dependent persons, remission means the continuous maintenance of sobriety. There is continuing and growing concern among clinicians about the high rate of relapse among their patients, and the increasingly adverse consequences of continuing disease. For this reason, preventing relapse is, perhaps, the fundamental issue in alcoholism treatment today. To achieve the above primary goal and regardless of the specific setting, modality, philosophy or methods of rehabilitation, treatment of addiction has the following four

goals. These includes: to maintain physiological and emotional improvements initiated during the detoxification-stabilization; to enhance and sustain and sustain reductions in alcohol and drug use; to reach, model and support behaviors that lead to improved personal health, improved social function and reduced threats to public health and public safety; and to reach and motivate behavioral and lifestyle changes that are incompatible with substance abuse.

### **2.3.2 Alcohol Abuse Treatment Services**

The general intent of treatment and rehabilitation is to enable the patient to cease alcohol abuse, in order to avoid the psychological, legal, financial, social, and physical consequences that can be caused, especially by extreme abuse (Bandura, 1999; Wood, 2006).

Drug rehabilitation addresses physical and psychological dependency. Physical dependency involves a detoxification process to cope with withdrawal symptoms from regular use of a drug. (Moos, Finney, Ouimette & Suchinsky, 1999; Bandura, 1999; Wood, 2006). Psychological dependency is addressed in many drug rehabilitation programs by attempting to teach the patient new methods of interacting in a drug-free environment. In particular, patients are generally encouraged or required not to associate with friends who still use the addictive substance. Twelve-step program encourages addicts not only to stop using alcohol or other drugs, but to examine and change habits related to their addictions. Many programs emphasize recovery is a permanent process without culmination. (Moos, Finney, Ouimette & Suchinsky, 1999; Bandura, 1999; Wood, 2006).

### **2.3.3 Alcohol Abuse Treatment Programs**

There are various methods of alcohol addiction treatment including drug-free treatment, drug substitution, and dual diagnosis treatment. NACADA (2007) observed that in Kenya, the commonest method of treatment in rehabilitation centres is drug-free treatment. However, NACADA also notes that no single method is appropriate for all people; some centres use more than one method.

In order to offer the above methods of treatment, the following treatment programmes are applied: brief intervention (least intensive treatment), inpatient treatment programmes, outpatient treatment programmes and self-

help approaches (peer support). As with any other area of medicine, the least intensive treatment is the starting point. Brief interventions may be utilized when alcohol consumption is abusive or dangerous to the drinker - or those around him or her. The goals of this kind of treatment typically include: moderating drinking activity, establishing specific behavioral goal, and building necessary skills to change drinking behavior. Interventions usually consist of one to four counseling sessions by a trained interventionist who may be a doctor, psychologist, or social worker. Strategies such as motivational interviewing are used to persuade resistant individuals who do not believe their drinking is harmful and hazardous. It is not clear whether brief interventions are effective with patients who are already alcoholics.

Residential or inpatient treatment programmes provide medical detoxification, in-depth therapy, and education to help rehabilitate alcohol-dependent individuals. Programme duration varies from one week to months, according to the needs of the individual. The

environment is highly structured and medical professionals are available around the clock. Inpatient treatment most often benefits alcoholics who have not succeeded in outpatient programmes, lack healthy social networks and or suffer from serious physical or mental health conditions from consumption.

Comprehensive residential inpatient treatment programmes monitor and address potential withdrawal symptoms and behaviours. These programmes incorporate behaviour modification techniques, and they are designed to get the user to recognize his behaviour (Bartels & Drake, 1996).

Outpatient alcoholism treatment programmes enable individuals to receive treatment without staying overnight in rehabilitation centre. An outpatient approach may be recommended in place of residential options or designed to serve as maintenance therapy after inpatient treatment is completed. For this reason, the duration, intensity and type of outpatient programmes vary significantly. Some feature daily 8-hour treatment sessions; while, others may have individuals attend for few hours three or more days or evenings a week. Treatment typically includes a combination of drug and behavioural education, individual and group counselling, and educational support for caregivers.

Peer support groups such as Alcoholic Anonymous, Smart Recovery, SOS, Women for Sobriety and others help alcoholics discuss and address their addiction in a non-threatening community that provides encouragement, support and a social outlet. In addition, there are online support groups for alcoholism addiction treatment that are available 24 hours a day, seven days a week.



Each self-help organization offers a slightly different philosophy and approach – yet all focus on abstinence – based recovery and a well – defined set of principles for peer support. Involvement is voluntary and meetings take place on a regular basis. Participation in addiction support groups may follow residential or out-patient treatment and is often in conjunction with different types of therapy and/or medication.

## **2.4 Alcohol Relapse and Prevention**

There was review of literature on nature of relapse process, prevalence, factors contributing to relapse and strategies in relapse prevention.

### **2.4.1 Nature of Relapse Prevention Process**

There is evidence that approximately 90% of alcoholics are likely to experience at least one relapse over the 4-year period following treatment (Rollins, et al., 2005). With this statistics, Alcohol relapse is a very real threat to any person who has suffered from alcoholism in their lifetime. Recovery from alcoholism is a life-long process. This is attributed to the changes that it produces in the brain of the client. The brains have been reprogrammed such that pleasure has become associated primarily with alcohol (Brownell, Marlatt & Lichtenstein, 1986; Marlatt, 1985). Therefore, contrary to many beliefs, once a person goes through alcohol detoxification and rehabilitation, the fight doesn't end there.

The individual who has suffered from alcoholism will face a life-long battle to remain sober. Fortunately, with the right education and a quality alcohol relapse treatment and prevention program, life-long sobriety is attainable. It can be very easy for someone to experience an episode of alcohol relapse. After rehabilitation, the individual will often

return home to familiar settings, hang out with the same friends and associate in behaviors that may have been part of the problem in the first place. Alcohol relapse treatment can provide the individual with the education they need to recognize the triggers that threaten all of the hard work put in while in rehabilitation. Alcohol relapse prevention will give the individual the tools and the techniques they can use to combat the cravings and help avoid peer pressure (Brink, 2001; Marlatt, 1985).

Alcohol relapse is not necessarily a sign that one has failed in their treatment experience. It is estimated that almost two-thirds of those recovering from alcoholism will relapse. But, it has also been shown that one-half of those experiencing alcohol relapse will eventually manage to enjoy long term recovery from alcoholism. Remember, when dealing with a disease, relapse is commonplace. It is how the relapse is dealt with that makes the difference. If the relapse is effectively managed in alcoholism treatment, the patient has a better chance of enjoying sobriety for a long time to come (Brink, 2001).

For sustain recovery from alcoholism, the treatment program chosen should provide a comprehensive alcohol relapse prevention program. Alcohol relapse prevention is a method of assisting the person in keeping this from occurring. The primary goal of an alcohol relapse prevention program is to educate people so they can easier identify the triggers for relapse. A quality program will also offer ways to manage life's challenges, as well as, the myriad of feelings one experiences after completing rehabilitation (Hunt, Barnett & Branch, 1971; Marlatt & Gordon, 1980). This will happen when the client enters an alcohol addiction treatment center. There, he or she will go through alcohol detoxification, rehabilitation and then move on to the aftercare portion of the program. The aftercare program includes alcohol relapse prevention, where one begin to identify triggers

for relapse, establish healthy boundaries, begin to change your thought process and learn how to avoid negative people and places (Polich, Armor & Braiker, 1981).

Drug addiction and alcoholism are diseases of the brain that, when not treated effectively, are followed by chronic relapse. Relapse prevention is an integral part of any effective addiction treatment program. Unfortunately, far too many drug and alcohol rehabilitations teach relapse prevention by just telling their clients to go to self help groups once discharged from their centre. The increase of relapses cases as indicated by statistics would not just work.

An individual's success outside any treatment centre depends on their ability to recognize when they are in a "slippery" situation, how to deal with it appropriately, who to talk to for help and where to go for support. If an individual is without these basic fundamentals, their chances of staying sober drastically decrease (Rollins, O'Neill & Davis, 2005).

#### **2.4.2 Factors for Alcoholic Relapse**

Research has shown that a relapse (or slip) does not just happen by itself. There are many outside influences and contributing factors. There are warning signs that may result in the individual returning to the self-destructive patterns of substance abuse, alcoholism or other disorders and addictions. Relapse is a process that takes place gradually and over time. It begins with a thought process which then is followed by behaviors to support that thought and then result in the discontinuation of recovery related activities. Afterwards, it ends up in another bout of drug or alcohol abuse (Rollins, et al., 2005; Hodgson, 1980; Mello, 1975).

As mentioned earlier, drug addiction and alcoholism are a chronic disease of the brain. As with any chronic disease, the possibility of relapse exists. Alcoholism and drug addiction are influenced by social, environmental, psychological and medical factors. There is no exact method for preventing relapse, but there are certain guidelines, that when followed, greatly increase the odds of achieving and maintaining long term recovery (Rollins, et al., 2005; Hodgson, 1980).

### **2.4.3 Relapse Prevention and Intervention Strategies**

Relapse prevention aims at providing strategies and techniques for the newly sobered individual to live by after leaving out a centre. These strategies and techniques allow the drug addict or alcoholic to deal with the addictions, disorders, behaviors and thoughts that in the past have created feelings of shame, depression, hopelessness and helplessness. These feelings and emotions (which are common in everyone but may be extreme in nature in the alcoholic or drug addict) have usually, in the past, resulted in a return to drug addiction, substance abuse or alcoholism. Brownell, Marlatt and Lichtenstein (1986) add that a relapse prevention program can best be described as a program used to teach the newly sobered alcoholic or addict how to effectively deal with the stressors or triggers. These stressors and triggers can appear without notice and if unprepared, may be the cause for serious alarm if the newly sobered individual isn't ready for them.

The success of relapse prevention will depend on the involvement of the client in working out their own programme. This is so as to increase their awareness of the choices that they have in dealing with their problem. There is also a focus on developing individualized

coping skills and self-control abilities (Marlatt & Gordon, 1985). All of these factors contribute to a sense of mastery and self-efficacy syndrome.

The teaching of these skills is done gradually at a pace that allows mastery without the clients being overwhelmed by too much too soon. Thus, the sense of mastery also helps build self-efficacy. There are two types of relapse prevention intervention strategies: specific intervention strategies and global self-control strategies. Specific intervention strategies are procedures directed at immediate precipitants or relapse. Global self-control strategies are designed to help modify clients, lifestyles and to deal with covert threat to relapse. The procedures used in both strategies can be subsumed under the categories of skill training, cognitive reframing and lifestyle intervention (Marlatt, 1985; Gorski, 1989).

Skill training involves learning both cognitive and behavioral responses to deal with high-risk situations. Cognitive reframing techniques help clients to see the habit change process as a learning experience; introducing coping imagery to deal with urges and cravings; restructuring how clients sees the initial relapses; and coping with the senses of failures and guilt or the feeling that everything gained in recovery is lost as a result of drinking slip (Annis, & Davis, 1989; Brownell, Marlatt & Lichtenstein, 1986).

Specific intervention strategies involve teaching the clients to recognize the high-risk situations that may trigger a relapse. These must be individualized because the risks are different for each person. It is important for the clients to recognize as early as possible in a chain of behaviors which ones are high risks.

The earlier the clients are aware of these risks, the sooner they can intervene by using coping skills and by using these cues as both warning signals and as reminders to engage

in alternative or remedial actions. Clients should be taught to monitor their reactions, check their sense of competency and use relapse and descriptions of previous relapses to alert themselves to modify their behaviors. They should be taught relaxation, stress management and efficacy-enhancing imagery as coping responses (Annis, & Davis, 1989; Annis, 1986; Gorski, 1989).

Education about the immediate positive and the long-term negative delayed effects of alcohol use may be beneficial. Two other procedures that help clients limit the impact of a relapse are contracting with them that should they drink, they will limit alcohol's use and using a reminder card that tells them what procedures to follow if they slip (Annis & Davis, 1989). Another training device sometimes used to anticipate relapse is "programmed relapse", that is, letting clients drink in the presence of the counsellor so that they discover that they can go back on the wagon after this programmed slip (Annis, 1986).

According to Annis and Davis (1989) and Annis (1986), global self-control strategies help clients establish a broader framework for resisting relapse. To deal with lifestyle imbalance, clients are trained to develop a balanced daily lifestyle and to utilize "positive" addictions such as jogging or meditation.

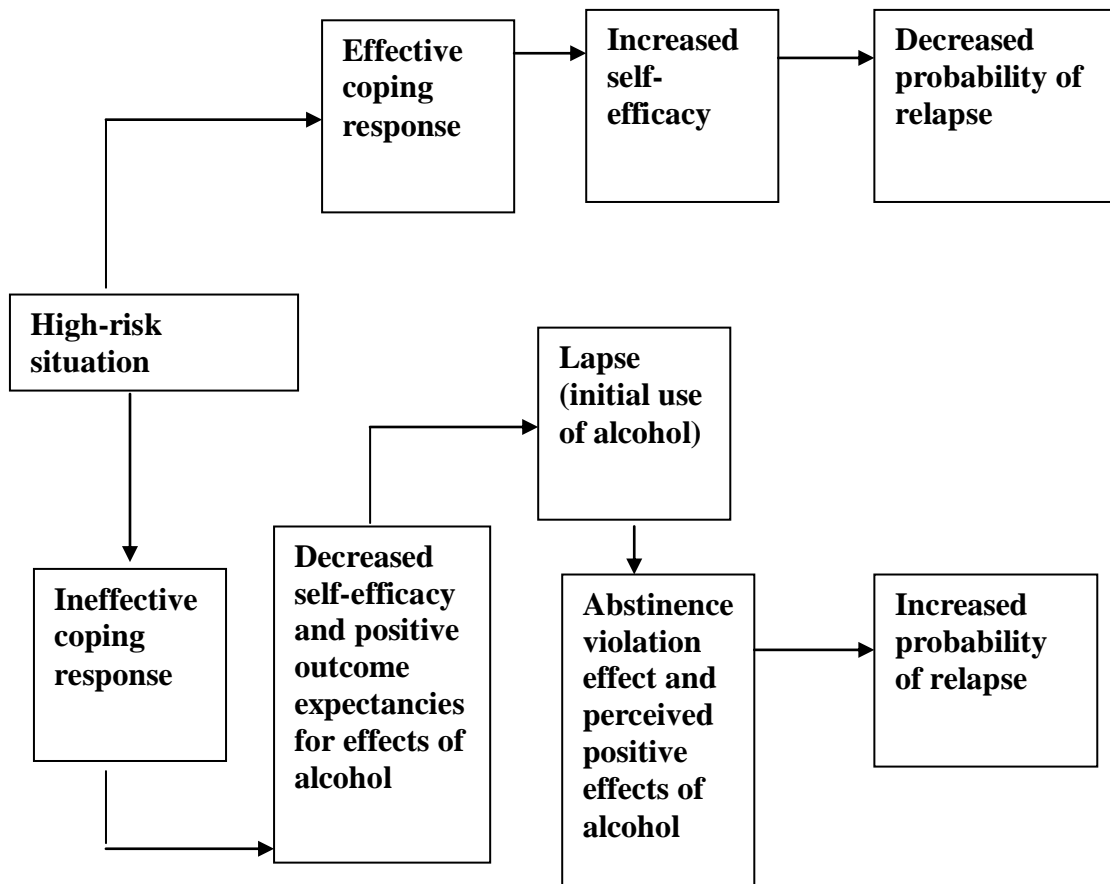
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To deal with the clients' desires for indulgences, substitute indulgences such as recreational activities or massages may be utilized. Global self-control strategies used to deal with urges and craving for alcohol include coping imagery, stimulus control techniques, labeling and detaching oneself from the feeling state (that is recognising that the urge to drink will occur and that it will eventually pass).

Individuals must deal with rationalization and denial by becoming aware of these defenses and treating them as aids to alert themselves about drinking risks. To deal with high-risk situations, alcoholics should make up relapse “road maps” that show where the risks are likely to occur and how to avoid those situations. Avoidance strategies can be used (Annis, & Davis, 1989; Annis, 1986; Cummings, Gordon & Marlatt, 1980).

Marlatt and Gordon ( 1985) devised relapse prevention model. Treatment based on this relapse prevention begins with the assessment of the environmental and emotional characteristics of situations that are potentially associated with relapse. After identifying those characteristics, the therapist works forward by analyzing the individual drinker’s response to those situations as well as the life style that increase drinker’s exposure to high risk situations. Based on this careful examination of relapse process, the therapist then devises strategies to target weaknesses in the client’s cognitive and behavioral repertoire and thereby reduce the risk of relapse.

The figure 2 shows the relapse process and interaction of high risk situations and individual coping mechanism.



**Figure 2.2: Cognitive-behavioral model**

Marlatt and Gordon (1985) relapse prevention model as illustrated in Figure 2 is based on socio-cognitive model and incorporates both a conceptual model of relapse and set of cognitive and behavioral strategies to prevent or limit relapse episodes. The cognitive-behavioral model of relapse process posits a central role for high risk situations and for drinker's response to those situations. People with effective coping responses have confidence that they can cope with the situation (increased self-efficacy), thereby reducing the probability of a relapse. Conversely, people with ineffective coping response will experience decreased self-efficacy, which together with the expectation that alcohol use will have a positive effect can result in initial lapse. This relapse in turn can result in feelings of guilty and failure hence increasing probability of a relapse.



## **2.5. Kenyan Government Efforts in Alcoholism Treatment and Relapse Prevention**

According to NACADA (2007), there has been an exponential growth in the number of rehabilitation centres in the country in the recent past. Whereas only thirteen centres were operational by 1999, the figure rose to 48 centres registered by NACADA in 2007. In fact, majority of all the centres in the country began operating in the last seven years. However, these centres differ in the reach of treatment and rehabilitation services that they offer. Kamau (2006) observes that the rehabilitation centres offer various methods of drug addiction treatment including drug-free treatment, drug substitution, and dual diagnosis treatment. Other methods of treatment include faith healing and traditional healing. Drug-free treatment is the common method of treatment in rehabilitation centers in the country, with half of the centers using it. Dual diagnosis is practiced by 47% of the centre but only 18% of the centers using drug substitution. About 44% use other methods of treatment.

According to UNODC (2005b) and NACADA (2007), 48 centers in the country carry out physical stabilization/detoxification in alcohol management. More than 50% carry out substance abuse treatment while another 80% and 73% give aftercare and social reintegration services, respectively, to their clients with alcohol addiction. Generally, there are more centers involved in aftercare and social reintegration than are involved in detoxification and substance abuse treatment. This may be due to the huge cost of the first two levels of treatment. The centers use inpatient, residential, outpatient and or community-based settings. Overall, 60% of the centers in the country have residential services. Nairobi and Rift Valley provinces have the highest proportion of rehabilitations with residential services and Eastern has the least at 25%.

All centers in Coast province have outpatient services followed by Central province (82%). Nyanza has the least proportion of centers with outpatient services (33%). Overall 80% of the centers in the country have outreach services. NACADA (2007) add that there has been an increasing trend in the demand for treatment and actual admissions in rehabilitations in Kenya for alcohol treatment. For social reintegration, the family is the main support group to which clients are referred at discharge (55%) followed by self-help groups and the general community.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 Overview**

This chapter presents the research design, the location and population of the study, as well as the sampling procedures and sample that will be adopted in the study. The chapter describes and explains the instrumentation, data collection and analysis procedures.

#### **3.1 Location of the Study**

This study was conducted in selected drug and alcohol rehabilitation centres in Nairobi, Kenya. Nairobi has the highest number of drug and alcohol rehabilitation centers in the country and only 14 had registered by NACADA. The 14 rehabilitation centers in Nairobi account for 29% of all centers (48) in the country.

#### **3.2 Research Design**

The study adopted cross sectional survey design that collects information at same point in time from a sample drawn from predetermined population (Fraenkel & Wallen, 2006). The design not only describes what exists but also why it exists. The design was appropriate for the study as it suitable for collecting data on views, opinions and perceptions that were the case for this study.

Perceptions, views and opinions of alcoholics and professional helpers on factors contributing to relapse were studied.

### **3.3 Research Population.**

The research population for this study comprised the alcoholics and their service providers in 8 of the selected drugs and alcohol rehabilitation centers with admission capacity of 226 alcoholics at a time. Approximately 70, 40, 43% of the alcoholics were aged 26 to 35, had middle education and had no formal employed respectively. More than half of alcoholics were in inpatient past treatment option prior to admission in current center.

### **3.4 Sampling Procedure and Sample Size.**

Probability proportionate to size, purposive and simple random sampling methods was used to select the participating centers and respondents. In this study, a sample size of 8 centers was obtained using a formula recommended by Nassiuma (2000).

Then, a sample size of 144 alcoholics was obtained using a table (appendix C) for determining sample size as recommended by Kathuri and Pals (1993). Stratified proportionate to size sampling method was used to ensure that the sample is proportionately and adequately distributed among the 8 centers according to the admission capacity of each centre. In doing this, each centre (stratum) was allocated a proportion of the sample by dividing the estimated number of alcoholics in the centre by the total number of estimated alcoholics in the 8 centers and then multiply by the sample size (144). In cases where the alcoholics in a centre include male and female, the calculated proportion of the sample allocated to each centre were divided according to gender. Simple random sampling was used to select alcoholics to participate in the study.

Purposive sampling was used to select 8 counselors from 8 rehabilitation centers. However, 82 alcoholics and 5 professional helpers were included in data analysis as some were lost due to inconsistent responses and non-responses. Table shows the details of population and sample sizes from each center.

**Table :3. 1 Population and Sample Size of the Respondents**

<b>Center</b>	<b>Population (N)</b>	<b>Expected Sample Size</b>	<b>Actual sample size</b>
Maisha House	15	9	6
Mathare Hospital	45	29	17
Asumbi Karen	45	29	17
Nairobi Place	25	16	9
Chiromo Lane Medical Center	20	13	5
Dapar Counseling Center	28	18	10
Nairobi Probation Hostels	32	20	12
Nziwa Springs Counseling Center	16	10	6
<b>Total</b>	<b>226</b>	<b>144</b>	<b>82</b>

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### **3.5 Instruments of the Study**

The study used two sets of questionnaires of alcoholics and counsellors. The questionnaire consisted of mainly closed-ended items and a few open-ended items. The alcoholics' questionnaire elicited information on demographic and background, alcohol use history, factors that predispose to relapse and adequacy of services provided in centers. The counselors' questionnaire sought information on the demographic and background history, academic and professional training, and counseling experience and challenges the professional helpers face while in the treatment and rehabilitation services.

### **3.5.1 Validity of Research Instrument**

Validity were established for the research instruments. Content validity of the research instrument was established in order to make sure that they reflect the content of the concepts. First, the researcher read through the instruments and compared them with the set objectives and ensured that they contained all the information that answered all the research questions and addressed the objectives. Second, expert (supervisors) from the Department of Guidance and Counselling of Moi University were consulted to scrutinize the relevance of the questionnaire items against the set objectives of the study.

### **3.5.2 Reliability of Research Instrument**

The instrument was then taken for piloting on a population that was similar to the research population; one of alcohol rehabilitation centre in Nairobi that is not part of the 8 selected. The piloting included 1% of sample size (Orodho, 2004). The objective of piloting was to eliminate some ambiguous items and allow preliminary data analysis to test whether methods were appropriate. To ensure consistency, the pilot data was subjected to reliability tests using the split-half method to determine the internal consistency of each research instrument. Each instrument was conceptualized as consisting of two parts; odd numbered items and even numbered items. The split-half procedure involved scoring two halves (odd items versus even items) of the instrument for each person and then calculating a correlation coefficient for the two sets of scores. The correlation coefficient indicated the degree to which the two halves of the instrument provided the same results and hence described the internal consistency of the instrument. The reliability coefficient was calculated using the *Spearman- Brown prophecy formula* (Fraenkel & Wallen, 2006).

$$\text{Reliability coefficient of the scores =} \frac{2 \times \text{reliability for half test}}{1 + \text{reliability for half test}}$$

on total test

The instruments were adopted, as the reliability co-efficient for each instrument was at least 0.8 as recommended by Mugenda and Mugenda (1999). This method was convenient for these instruments because it eliminated chance errors that would be caused by different test conditions (if test-retest method will be used) and it allowed for the determination of inter-item consistency (Raiken, 1994).

### **3.6 Data Collection Procedure**

The researcher obtained an introductory letter from the Department of guidance and counseling through graduate school, Moi University. Permission to conduct the research was sought from Ministry of science and technology and local ethics council from Kenyatta national hospital. The letters were presented to administrators of selected centers be allowed to collect the data. The counselors assisted the researcher to identify the alcoholics to participate in the study. Then, the researcher administered the research instruments to these alcoholics. The respondents were given time to complete answering the items of the instruments and were collected immediately at end of the response time. The procedure was appropriate as high response rate was expected. The response rate was 56.9%. Also, the researcher had an opportunity to explain the goals of the study and answer questions that the respondents had before they completed filling the instruments (Fraenkel & Wallen, 2006).



### **3.7 Data Analysis**

Statistical Package for Social Sciences (SPSS) version 15.0 for windows was used in analyzing data using like frequencies, cross-tabulations and Chi-square. A summary of the data analysis procedures for each research question is contained in Table 3.2.

**Table 3.2: Summary of Data Analysis**

<b>Research Question</b>	<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>Statistic technique</b>
What is the prevalence of relapse among alcoholics in selected rehabilitation centre in Nairobi, Kenya?	Prevalence	Alcohol relapse	Frequencies, Percentages
Which personal factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi, Kenya?	personal factors	Alcohol relapse	Frequencies, Percentages and chi-square
Which family factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi, Kenya?	Family factors	Alcohol relapse	Frequencies, Percentages and Chi-square
Which social factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi, Kenya?	Social factors	Alcohol relapse	Frequencies, Percentages and Chi-square
Which institution factors influence relapse among alcoholics in drug rehabilitation centers in, Nairobi, Kenya?	Institutional factors	Alcohol relapse	Frequencies, Percentages and Chi-square
Which demographic factors contribute to relapse among alcoholics in rehabilitation centers in, Nairobi?	Demographic factors	Alcohol relapse	Frequencies, Percentages and Chi-square

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **4.0 Overview**

The results of the data analysis on factors influencing relapse among alcoholics in rehabilitation centers in Nairobi were analyzed and presented in this chapter. The chapter gives a summary of demographic and background characteristics of the respondents (alcoholics and counselors). The results were analyzed and presented using frequencies, percentages, cross tabulation, Chi-square pie charts and tables. SPSS, a window computer program version 15.0 aided in data analysis. The results and discussions were guided by research question as follows:

- (i) What is the prevalence of relapse among alcoholics in selected rehabilitation centre in Nairobi?
- (ii) Which personal factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi?
- (iii) Which family factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi?
- (iv) Which social factors contribute to relapse among alcoholics in rehabilitation centers in Nairobi?
- (v) Which institutional factors influence relapse among alcoholics in rehabilitation centers in Nairobi?
- (vi) Which demographic factors contribute to relapse among alcoholics in rehabilitation centers in, Nairobi?

## **4.1 Demographic and Background Characteristics of Respondents**

The respondents of study included alcoholics and counselors.

### **4.1.1 Alcoholic Demographic and Background Characteristics**

The information on the following demographic and background characteristics was collected: Age, gender, level of education, marital status, family size, occupation and past treatment options.

Table 4.1 indicates that most alcoholics were aged 26 to 35 (70.8%) as compared to those who were aged over 45 (6.3%) and 19 to 25(2.1%). Almost all alcoholics were male (95.8 %) and those who were single were 43.7% as compared 41.7% who were married.

**Table 4.1: Summary of Demographic Characteristics of Alcoholic in Nairobi**

<b>Characteristics</b>	<b>Frequency</b>	<b>%</b>
<b>Age</b>		
Non response	2	2.1
19 to 25	2	2.1
26 to 35	78	70.8
36 to 45	18	18.7
Over 45	6	6.3%
<b>Gender</b>		
Non-response	2	2.1
Female	2	2.1
Male	92	95.8
<b>Marital status</b>		
Divorced	2	2.1
Widowed	4	4.2
Separated	8	8.3
Married	40	41.7
Single	42	43.7

The socio-economic status was shown by the following indicators: level of education, occupation and size of the family. The alcoholics who completed middle college and university were 41.7 and 29.2 % respectively. The alcoholics who were not employed were 43.7 % as compared to 20.8 % who were formally employed. Majority of the alcoholics had no children (45.8%) and those who had one to two children were 33.3% as indicated in Table 4.2

**Table 4.2: Distribution of Alcoholics by Socio-Economic Status.**

<b>Characteristics</b>	<b>Frequency</b>	<b>%</b>
<b>Level of education</b>		
Secondary	28	29.2
University	28	29.2
Middle level college	40	41.7
<b>Occupation</b>		
Non-response	4	4.1
No formal employment	42	43.7
Self employed (farming)	6	6.3
Self employed ( business)	18	18.8
Employed	20	20.8
Others	6	6.3
<b>Family size</b>		
More than 4	10	10.4
3 to 4	10	10.4
1 to 2	32	33.3
No children	44	45.8

The alcoholics indicated the past treatment options that they attended in their past treatment prior to the survey. The respondents who indicated that they were in patient treatment programs were 50.0% as compared 14.6% who were attached to the support group as shown in Table 4.3.

**Table 4.3: Distribution of Alcoholics by Past Treatment Option**

<b>Treatment option</b>	<b>Frequency</b>	<b>Percent</b>
Outpatient	4	4.2
Brief intervention	14	14.6
Support group	14	14.6
No response	16	16.6
Inpatient	48	50.0
<b>Total</b>	<b>96</b>	<b>100.0</b>

#### **4.1.2 Counselors Demographic Characteristics**

The following demographic and background teacher- counselors respondents were collected and analyzed as follows: Age, gender, marital status, level of education, and counseling experience. The counselors in the surveyed rehabilitation centers aged 30 were 60.0% and more than half were female (60.0%). While those who aged below 40 and those who did not indicate were the same (28.6%). The counselors who were married were and those who had University education were 60 and 80% respectively as shown in Table 4.4.

**Table 4.4: Distribution of Counselors by Demographic Characteristics**

<b>Characteristics</b>	<b>Frequency</b>	<b>%</b>
<b>Age</b>		
44 years	1	20.0
40 years	1	20.0
30 years	3	60.0
<b>Gender</b>		
Male	2	40.0
Female	3	60.0
<b>Marital status</b>		
Single	1	20.0
Married	3	60.0
Divorced	1	20.0
<b>Level of education</b>		
Middle level college	1	20.0
University	4	80.0
<b>Experience</b>		
1-2 years	1	20.0
3-4 years	3	60.0
More than 5 years	1	20.0

#### **4.2 Responses to research questions**

The results and discussion were guided by research questions which are indicated in 4.0.



**1. The Prevalence of Alcohol Relapses in Selected Rehabilitation Center in Nairobi.**

The question aimed at establishing the prevalence of relapse in selected rehabilitation centers in Nairobi. Of the alcoholics who participated in the study, 62.5 % had relapsed as compared to 22.9 % of those who were in the rehabilitation center for the first time as shown in Table 4.5. Half of the alcoholic relapsees, 50 % had slipped to drinking again after a period of sobriety more than four times as compared to 40% who had relapsed once as indicated in Table 4.5. Forty percent of respondents relapsed to drinking after a period of 30-90 days of abstinence to alcohol as compared to 33.3 % of those slipped to drinking after 30 days of abstinence. Table 4.5: Distribution of Alcoholics by Relapse History.

<b>Behavior</b>	<b>Frequency</b>	<b>%</b>
<b>Relapse</b>		
No response	14	14.6
No	22	22.9
Yes	60	62.5
<b>Frequency of Relapse</b>		
Once	24	40.0
2 to 4 times	6	10.0
More than 4 times	30	50.0
<b>Period of abstinence</b>		
More than 5	-	
2-4 years	-	
1-2 years	6	10.0
6 months to 1 year	10	16.7
30-90 days	24	40.0
Less than 30 days	20	33.3
No response.	8	13.3

## **ii) Personal Factors Contribute To Relapse Among Alcoholics In Rehabilitation Centers In Nairobi.**

The question aimed to determine factors within the alcoholic that predispose him or her to relapse to drinking. Personal factors scale was constructed from the scores for each statement and it was divided into low (13-25), moderate (26-38) and high (39-52) to indicate alcoholic's perception of risk factors within him or her. The results in Table 4.6 indicate that there is statistically significant relationship between personal factors and risk of relapse among alcoholics ( $\chi^2 = 12.59$  df=2,  $p < 0.05$ ). The alcoholics who perceive themselves as being highly at risk relapse after treatment due to factors within them were 43.9% as shown in Table 4.6.

**Table 4.6: Risk Factors within the Alcoholic and Likelihood of Relapse.**

Scale	Non-relapse		Relapse		Total	
	Freq.	%	Freq.	%	Freq.	%
Low	0	0.0	14	23.3	14	17.1
Moderate	14	63.6	18	30.0	32	39.0
High	8	36.4	28	46.7	36	43.9
<b>Total</b>	<b>22</b>	<b>26.8</b>	<b>60</b>	<b>73.2</b>	<b>82</b>	<b>100.0</b>

$\chi^2 = 12.59$  df=2, p<0.05.

Table 4.7 indicates that more than thirty percent of respondents strongly agreed that stopping medication against the advice of professional helper, failure to follow treatment plans,

Dwelling in past hurts and resentments, loss of a job and ignoring relapse signs put them at risk to slip to drinking after a period of sobriety. In same table, more than thirty percent of respondents agree that not attending support groups, feeling overconfident and setting unrealistic goals explain their risk of drinking again after treatment.

**Table 4.7: Perception of Alcoholics on Factors within Individual that Contribute to Relapse.**

Statement	SD		D		A		SA	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Stopping medication	14	14.6	12	12.5	12	12.5	30	31.3
Not attending support group	4	4.2	14	14.6	32	33.3	20	20.8
Keeping alcohol cues	12	12.5	16	16.7	26	27.1	22	22.9
Obsessive thinking about alcohol	12	12.5	16	16.7	22	22.9	24	25.0
Failure to follow treatment plan	12	12.5	8	8.3	24	25.0	30	31.3
Feeling overconfident	12	12.5	10	10.4	30	31.3	26	27.1
Setting unrealistic goals	12	12.5	10	10.4	30	31.3	24	25.0
Feeling overwhelmed	14	14.6	14	14.6	26	27.1	24	25.0
Constant boredom and irritability	20	20.8	14	14.6	20	20.8	22	22.9
Dwelling on past hurt & resent	8	8.3	14	14.6	22	22.9	30	31.3
Refusing to deal with personal issues	6	6.3	14	14.6	22	22.9	28	29.2
Loss of a job	14	14.6	14	14.6	24	25.0	30	31.3
Ignore relapse signs	2	2.1	12	12.5	24	25.0	32	33.3

**iii) Family factors contributing to relapse among alcoholics in rehabilitation centers in Nairobi.**

The research question intended to establish risks within family that predispose the alcoholics to slip to drinking after being sober.

The results in Table 4.8 indicates that there is significant relationship between factors within the family domain and alcoholic's likelihood to relapse to drinking after being sober ( $\chi^2 = 13.66$  df=2,  $p < 0.05$ ). Half of alcoholics (50.0%) perceived that the highly at risk to relapse because of factors within their families.

**Table 4.8: Risk Factors in Family Domain and Likelihood of Relapse.**

Scale	Non-relapse		Relapse		Total		$\chi^2$
	Freq.	%	Freq.	%	Freq.	%	
Low	2	9.1	10	16.7	20	24.4	<b>=13.6</b> <b>6</b> <b>df=2,</b> <b>p&lt;0.0</b> <b>5</b>
Moderate	8	36.4	20	33.3	28	34.1	
High	12	54.6	30	50.0	34	41.5	
<b>Total</b>	<b>22</b>	<b>26.8</b>	<b>60</b>	<b>73.2</b>	<b>82</b>	<b>100.0</b>	

More than half of alcoholics (56.7%) agreed that having a family member who used alcohol put them at risk to use alcohol again after treatment shown in

Table 4.9. Thirty five percent strongly agreed that unsupportive family environment may make them to slip to drinking after treatment.

**Table 4.9: Perception of Alcoholics on Family risks.**

Statement	SD		D		A		SA	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Having relationship difficulties	12	12.5	16	16.7	24	25	26	27.1
Having a family member or spouse using alcohol	10	10.4	12	12.5	34	56.7	26	27.1
Unsupportive family environment	18	18.8	06	6.3	16	16.7	34	35.4

**iv) Social Factors contributing to Relapse among Alcoholics in Rehabilitation centers in Nairobi.**

The research question was to establish to establish the social factors that contribute to relapse. The factors include peer-group influence, ease availability of alcohol, mass media exposure and religious background of the alcoholics. More than 30% of alcoholics strongly agreed that that hanging out with old friends who drink could account for their slip to drinking after a period of sobriety as shown in Table 4.10 This is compared to 14.6% who disagreed to hanging out with old friends explain their risk to relapse. Those who agreed that not attending support group explained their risk to alcohol relapse were 33.3 % as shown in Table 4.10.

**Table 4.10: Perception of Alcoholics on Risks within their Peers**

Statement	SD		D		A		SA	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Hanging around old friends drinking	14	14.6	8	8.3	30	31.3	30	31.3
Isolating and not attending support group	4	4.2	14	14.6	32	33.3	20	20.8

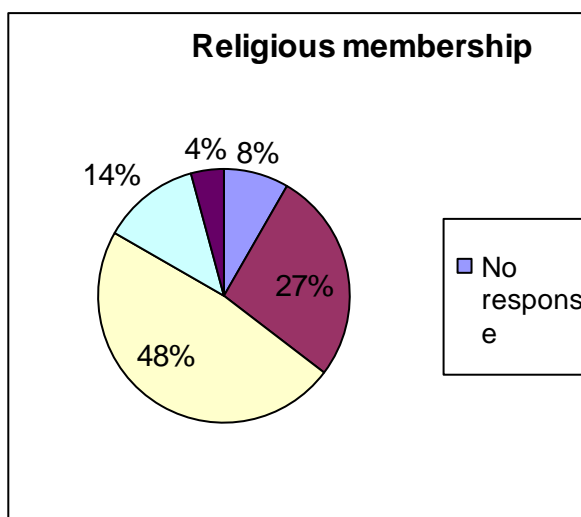
The cross tabulation results (Table 4.11) indicates that there is significant association between ease availability of alcohol and likelihood of being a relapse ( $\chi^2 = 18.66$  df=4,  $p < 0.05$ ). More than thirty percent of relapse indicated that alcohol was very easy to get if they wanted to and was compared to 7% who indicated that alcohol was difficult to get as shown in

**Table 4.11: Availability of Alcohol and Likelihood of Relapse.**

Availability	Non-relapsees		Relapsees		Total	
	Freq.	%	Freq.	%	Freq.	%
Very easy	0	0.0	20	33.0	20	24.4
Easy	8	36.4	12	20.0	20	24.4
Difficulty	8	36.4	10	16.7	18	21.9
Impossible	2	9.0	0	0.0	2	2.4
No	4	18.2	18	30.0	22	26.9
<b>response.</b>						
<b>Total</b>	<b>22</b>	<b>26.8</b>	<b>60</b>	<b>73.2</b>	<b>82</b>	<b>100.0</b>

$$\chi^2 = 18.66 \text{ df}=4, p < 0.05$$

There was no significant relationship that was established between religious membership and likelihood to relapse to drinking after a period of sobriety ( $\chi^2 = 3.915$  df=4 p>0.05). In term religious membership, most of the alcoholics were Protestants (48 %) as compared to Catholics (27 %) and Muslims (13%) as shown in Figure 4.1.

**Figure 4.1: Religious membership**



#### 4.1: Religious membership

However, there was a significant relationship between attendance of religious service and likelihood of being a relapse ( $\chi^2 = 14.371$  df=4,  $p < 0.05$ ). As indicated to in Table 4.12, 41.5% of alcoholics attended a religious service at least once a month and 22% rarely attended the service or cannot remember when they attended any religious service.

**Table 4.12: Attendance to Religious Services and Likelihood of Alcoholic Relapse.**

	Non-relapsees		Relapsees		Total	
	Freq.	%	Freq.	%	Freq.	%
Weekly	6	27.3	16	26.7	22	26.7
Monthly	12	54.5	22	36.7	34	41.5
Yearly	0	0.0	6	1.0	6	7.3
Rarely	4	18.2	14	23.3	18	22.0
N/Response	0	0.0	2	3.3	2	2.4
<b>Total</b>	<b>22</b>	<b>26.6</b>	<b>60</b>	<b>73.2</b>	<b>82</b>	<b>100.0</b>

$\chi^2 = 14.371$  df=4,  $p < 0.05$

The analysis below indicated that there was a significant relationship between mass media exposure and likelihood of alcoholic relapse ( $\chi^2 = 12.739$  df=2,  $p < 0.05$ ). Majority of alcoholics (66.7%) perceived that they were highly exposed to pro-alcohol mass media advertisements. Of these, 62.1% were alcoholic relapse as indicated in Table 4.13.

**Table 4.13: Mass Media Exposure Scale and Likelihood of Relapse.**

Scale	Non-relapse		Relapse		Total	
	Freq.	%	Freq.	%	Freq.	%
Low	0	.0	4	6.9	4	5.1
Moderate	4	20	18	31.0	22	28.2
High	16	80	36	62.1	52	66.7
Total	20	25.6	58	74.4	78	100

$\chi^2 = 12.739$  df=2, p=<0.05.

The respondents who indicated that they were often exposed to daily newspapers' pro-alcohol advertisements were 64.6 % as compared 27.1 % who were often exposed to same advertisement in the internet as indicated in Table 4.14. Those who exposed to pro-alcohol advertisements through the street billboards were 62.2%.

**Table 4.14: Mass media exposure and alcohol relapses.**

Mode	No response		Never		Rarely		Very often	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Television	8	8.3	16	16.7	22	22.9	46	47.9
Movies or video	8	8.3	8	8.3	16	16.7	62	64.6
Radio	6	6.3	6	6.3	24	25.0	58	60.4
Billboards	6	6.3	2	2.1	28	29.2	60	62.5
Daily newspapers	4	4.2	4	4.2	26	27.1	62	64.6
Magazines	4	4.2	6	6.3	24	25.0	58	60.4
Internet	6	6.3	18	18.8	46	47.9	26	27.1
T-shirt or cap	4	4.2	34	35.4	36	37.5	2	2.1

**v) Institutional Factors Influence Relapse among Alcoholics in Rehabilitation Centers Nairobi?**

The research question was intended to determine institutional factors that contribute to alcoholic relapse. They included competence of professional helpers and adequacy of services in the rehabilitation centers. All the professional helpers were professional trained and attended seminars and workshops on alcohol related treatment and rehabilitation. Eight percent of them were university graduates and 60% had diploma training in professional counseling, as indicated in the table below:

**Table 4.15: Academic and Professional Qualification of Professional Helpers**

<b>Level</b>	<b>Frequency</b>	<b>%</b>
<b>Academic</b>		
Middle level college	1	20.0
University	4	80.0
<b>Professional</b>		
Diploma	3	60.0
Bachelors	1	20.0
Masters	1	20.0

The participants were given a list of services supposed to be offered in rehabilitation center and they were asked to rate the level of adequacy of these services in three level scale (adequate, not adequate and not available). The alcoholics who perceived relapse process and management was not adequately given were 18.8% while 20.8% perceived that their families were not involved in the treatment as shown in Table 4.16. Nineteen percent perceived that follow up services were not available in rehabilitation programs.

**Table 4.16: Perception of Adequacy of Services in Rehabilitation Centers.**

Service	Adequate		Not adequate		Not available	
	Freq.	%	Freq.	%	Freq.	%
Detoxification	16	16.7	8	8.3	26	27.1
Recovery and relapse history	30	31.3	12	12.5	8	8.3
Relapse process and management	34	35.4	18	18.8	2	2.1
Warning signs	34	35.4	8	8.3	6	6.3
Support groups	32	33.3	12	12.5	2	2.1
Inventory making	32	33.3	16	16.7	4	4.2
Family involvement	30	31.3	6	6.3	20	20.8
Follow up	26	27.1	10	10.4	18	18.8

The findings indicated that respondents rated different types of services being offered and indicated that some were not available or were not adequately given. These findings supported what had been asserted by previous studies that alcoholism being chronic, progressive and persistent in nature, it means that individuals attend treatment will not be fixed or cured (Rivers,1994;National institute of Alcohol Abuse and Alcoholism, National institutes of Health,200;Moodie,1988; Drake,1996) Therefore ,ability not drink requires on going after care and follows up Alcoholics support around in obtaining and maintaining sobriety.Follow up programs provide ongoing therapy so as relapse has less chance of occurring

**vi) Demographic Factors Contribute To Relapse Among Alcoholics In Rehabilitation Centers in, Nairobi?**

The research question intended to identify demographic characteristics of alcoholics and how the contribute to relapse. They included age gender, level of education and occupation. The results indicated that there were significant relationships between

alcoholic relapse with age ( $\chi^2 = 1.710$  df=5  $p > 0.005$ ) and gender ( $\chi^2 = .752$  df=1  $p > 0.05$ ). However there were relationship between alcoholic relapse with level of education ( $\chi^2 = 14.654$  df=2  $p < 0.05$ ) and occupation ( $\chi^2 = 30.641$  df=5  $p < 0.05$ ). The results in Table 4.17 indicate that 41.5% of alcoholics were graduates of middle level college and 46.7 % of these were relapsees. In terms of occupation, 41.5% of respondents were not formally employed and 53.3% of these were relapsees.

**Table 4.17: Level of Education and Occupation with Likelihood of Alcoholic Relapse.**

Characteristics	Non-relapsees		Relapsees		Total	
	Freq.	%	Freq.	%	Freq.	%
<b>Level of education</b>						
Secondary	14	63.6	12	20.0	26	31.7
Middle level college	6	27.2	28	46.7	34	41.5
University	2	9.1	20	33.3	22	26.8
$\chi^2 = 14.654$ df=2 p<0.05						
<b>Occupation</b>						
No response	2	2.1	0	0.0	2	2.4
Not formally employed	2	9.1	32	53.3	34	41.5
Self employed ( business)	4	18.2	12	20.0	16	19.5
Self employed (farming)	6	27.2	0	0.0	6	7.3
Formally employed	6	27.2	14	23.3	20	24.4
Others	2	9.1	2	9.1	4	4.9
$\chi^2 = 30.641$ df=5 p<0.05						

## **CHAPTER FIVE**

### **DISCUSSION, SUMMARY AND RECOMMENDATIONS**

#### **5.0 Overview**

This chapter deals with the discussion and summary of major findings, the conclusions reached, recommendations to be implemented and areas that require further research.

#### **5.1 Discussion of Results**

The findings that almost half of the respondents in rehabilitation centres were relapses were comparable with prevalence statistics of past studies that indicated majority of alcoholics were likely to relapse over four year period following treatment ( Polish et al. 1981; Rollins et al. 2005). The results that past risks within the individual and family domains accounted for respondents' slip to drinking after the period of sobriety concurred with past studies that posited that relapse was associated with high situations in alcoholics' lives ( Marlatt, 1978; Comey et al., 1987; Rollins et al., 2005).

The findings that alcohol was easily available to respondents supported findings of past studies that asserted that social acceptability, legal status of alcohol and economic factors like price and taxation affect the availability and desirability of drug and thus extent of their use ( Papalia, Olds & Feldman, 1999; Escandor & Galvez, 2005; NACADA, 2004a)

The results indicated that mass media were important cues to motivate the respondents to slip to drinking. These findings concurred with Escandor and Galvez (2005) who asserted that advertisement of alcohol show immediate pleasure that these products generate in the individual and this raise the urges within recovering alcoholic to slip to drinking.



The findings that less alcoholics were Muslims concurred with past study that stated that most members of Muslims community did not take alcohol on religious grounds (NACADA, 2004b). Majority of relapsees were those who had irregular attendance (74.4%) in religious service which supported the past studies that spirituality inversely correlated with alcohol abuse (Willis and Sandy, 2003; Koenig, McCullough & Larson, 2001).

The findings indicated that respondents rated different types of services being offered and indicated that some were not available or were not adequately given. These findings supported what had been asserted by previous studies that alcoholism being chronic, progressive and persistent in nature, it means that individuals who attend treatment will not be fixed or cured (Rivers, 1994; National Institute of Alcohol Abuse and Alcoholism, National Institutes of Health, 2000; Moodie, 1988; Bartels & Drake, 1996). Therefore, ability not drink requires on going after care and follows up. Alcoholics need support around in obtaining and maintaining sobriety. Follow up programs provide ongoing therapy so as relapse has less chance of occurring.

## **5.2 Summary**

From the results of the study and previous studies (Polish et al. 1981; Rollins et al. 2005), there are evidences that alcoholics are likely to experience at least one relapse over a period of sobriety following treatment. Despite exponential growth of rehabilitation centers in Kenya, few studies definitively have shown any single or combined intervention that prevents relapse owing to chilling statistics as shown in previous chapter. Thus, relapse as a central issue of alcoholism treatment warrants further study. To achieve the purpose of this study cross-sectional survey was used. Statistical Package for Social

Sciences (SPSS) window version 15.0, aided in data analysis and the sample size of alcoholics was 144. At data analysis only 82 alcoholics were included as some were eliminated due to non-response. The following is the summary of results:

- i) Of all the respondents surveyed, 62.5% had relapsed to drinking and of these 50 % had slipped to drinking after a period of sobriety more than four times.
- ii) Thirty percent of the alcoholics strongly agreed that stopping medication against advice of the professional helper, failure to follow treatment plans, dwelling in past hurts and resentments, loss of job and ignoring relapse warning signs put them at risk to relapse to drinking.
- iii) than half of alcoholics (56.7%) agreed that having a family member or spouse who used alcohol put them at risk to use alcohol again after treatment.
- iv) Thirty percent of alcoholics strongly agreed that hanging out with old alcohol drinking friends could account for their slip to drinking after a period of sobriety.
- v) Significant relationships were established between alcohol relapse with irregular attendance of religious service ( $\chi^2 = 14.371$ ,  $df=4$   $p<0.05$ ), ease availability of alcohol ( $\chi^2 = 18.666$   $df=4$   $p<0.05$ ) and exposure to pro=alcohol mass media ( $\chi^2 = 12.739$   $df=2$   $p<0.05$ ).
- vi) Alcoholics who perceived that relapse process and management was not adequately given were 18.8% while 20.8% perceived that their families were not involved in treatment programs of the centres.

vii) Significant associations were established between alcoholic relapse with level of education ( $\chi^2 = 14.654$   $df = 2$   $p < 0.05$ ) and occupation ( $\chi^2 = 30.641$   $df = 4$   $p < 0.05$ ).

### **5.3 Conclusion**

Based on the findings of this study which have been presented and discussed the following conclusions have been drawn:

- i) More than half (62.5%) of the alcoholics in rehabilitation centers were relapsees and they had slipped to drinking more than once. The primary goal of alcoholism treatment, as in other areas of medicine, is to help the patient to achieve and maintain long-term remission of disease. For alcohol dependent persons, remission means the continuous maintenance of sobriety. However, this not always true as
- ii) There were factors in family, peers, community and institution domains that account for relapse among respondents. Relapse does take place without outside influences. From the results in previous chapter, there are many factors which contribute to it, as well as identifiable evidence and warning signs which indicate that the individual may be in danger of using alcohol again.

### **5.4 Recommendations**

The primary goal of alcoholism treatment is help the alcoholic to achieve and maintain sobriety. However, there is concern about the high rate of relapse among the alcoholics,

and the increasingly adverse consequences of continuing disease as shown in results of this study. Although relapse is a problem of addiction, it is preventable.

For this reason, preventing relapse should be the fundamental issue in alcoholism treatment. People who have relapsed can usually point back to certain things that they thought and did long

before they actually drink that eventually caused the relapse (risks within the individual). The quicker they learn to spot the signs and signals, the sooner they can take positive actions for their own well-being. From the results of this study relapse did not just take place without outside influences. There were many factors which contributed to it, as well as identifiable evidence and warning signs which indicate that the individual may be in danger of using alcohol again. It is helpful to view relapse as a process that begins well in advance of that act itself. The results of study have shown that relapse was influenced by the interaction of past-risks within the individual, family, community and institutional domains. These risks diminished the level of perceived personal control (self-efficacy) to resist drinking again. In view of these findings, the following recommendations have been made:

- i) The alcoholics should be assisted by rehabilitation centers to assume an active role in changing drinking behavior. This could be done by assisting the alcoholics to modify their lifestyles to enhance their abilities to cope with past-risk situations; identify and respond appropriately to internal and external cues that serve as relapse warning signals;
- ii) and implement self-control strategies to reduce the risk of relapse

- iii) in any situation. The earlier the alcoholics are aware of the risks, the sooner they can intervene by using coping skills and
- iv) by using these cues as both warning signals and as reminder to engage in alternative or remedial actions.
- v) Family members or and significant others should be involved in therapeutic process to help them recognize behaviors and problems related to addiction. Research has shown that understanding and encouragement to alcoholics is the best approach family members can take in dealing with the situation.
- vi) Study findings indicated that non-involvement in support groups accounted for respondents' slip to alcohol. There is higher probability of obtaining and maintaining sobriety for those who seek therapy and also join support groups than those who seek therapy alone. The role of support groups should be emphasized by rehabilitation centers and these should be communicated to the alcoholics.
- vii) The rehabilitation centers should scale-up follow- ups and after care services. Alcoholism being chronic, progressive and persistent in nature, it means that individuals who attend treatment will not be quick fixed or cured.
- viii) Therefore, ability not drink requires on going after care and follows up. Alcoholics need support around in obtaining and maintaining sobriety. After care programs may provide ongoing therapy so relapse has less chance of occurring.
- ix) Results indicated that mass media pro-alcohol advertisements are cues that account for their past risk to relapse. Multi-media campaign against alcohol use

and that relapse is preventable should be scaled up as it has an advantage of reaching large audience that make it cost

- x) Some community factors like ease availability of alcohol contributed to relapse as indicated in results in previous chapter. There is need for government to act law that control availability of alcohol and to intensify community sensitization and mobilization to prevent or intervene in alcoholism problems or relapse.
- xi) From the findings, majority of alcoholics in selected centers were young people and not formally employed. There is need for government and relevant stakeholders to intervene
- xii) and assist the young people in getting jobs or assist them to get involved in business.

### **5.5 Suggestions for Further Research**

The study was cross sectional and association of factors within individual, family, community and institution did not suggest cause effect relationship with alcoholic relapse. There is need for longitudinal study to establish the link of these factors with alcoholic relapse by following the alcoholics over a period of time. The generalization of study findings were applicable to rehabilitation centered surveyed. This requires a replication of study on other rehabilitation centers in other parts of the country to determine consistency and applicability of the results of this study. There are several categories of rehabilitation centers: government sponsored, mission sponsored and privately owned. There is need for comparative study to establish the effectiveness of government sponsored or mission sponsored rehabilitation centers with private owned ones. The study focused on selected factors and their influence in alcoholic relapse and from the experience of researcher in

data collection, cost of treatment may have some influence in alcoholic relapse. Therefore, there is need to examine the cost of treatment and its implications on risks and prevention of alcoholic relapse.

## REFERENCE

- Abasiubong F, Atting I, Basey E, & Ekt J, Mar 2008. A comparative study of use psychoactive substances amongst secondary school students in two local government areas of akwa Ibom state, Nigeria. *Niger Journal Clinical Practice*. 11 (1): 45-51
- Annis, H.M. (1986). A Relapse Prevention Model for Treatment Of Alcoholics. In: Miller, W.R., and Healthier, N.,( eds). *Treating Addictive Disorders: Processes of Change*. New York: Plenum Press, pp. 407-433.
- Annis, H. M., & Davis, C. S. (1989), "Relapse Prevention", In R. K. Hester & W. R. Miller (Eds.), *Handbook of Alcoholism Treatment Approaches: Alternative Approaches* (pp. 170-182), New York: Pergamon Press.
- Bandura, A. (1999). A Socio-Cognitive Analysis of Substance. *Psychological Science*, 10(3), 214-217.
- Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioural Change. *Psychological Review* 84:191-215.
- Bartels, S. J. & Drake, R. E. (1996). Residential Treatment for Dual Diagnosis. *Journal of Nervous and Mental Disease* 184:379-381
- Brink, S. (2001, May 7). Your Brain on Alcohol. US News World Report, 50-57
- Brownell K. D, Marlatt G. A, & Lichtenstein, E. (1986). Understanding and Preventing Relapse. *American Psychologist* 41:765-782.
- Cummings, C.; Gordon, J.R.; & Marlatt, G.A. (1980). Relapse: Prevention and Prediction. In: Miller, W.R., ed. *The Addictive Behaviours: Treatment of Alcoholism, Drug Abuse, Smoking and Obesity*. New York: Pergamon Press, pp. 291-321.
- Escandor, R. & Galvez, C. (2005). *from drugs and addictions: In the face of AIDS and enemies of society*. Madrid: Talleres Graficos Penelara.
- Fatoye FO & Morakinyo O, June 2002. Substance use among secondary school students in rural and urban communities in south western Nigeria. *East African medical Journal* 79 (6): 299-305.
- Flisher AJ, Parry CD, Evans J, Muller M, & Lombaed C, Jan. 2003. Substance use adolescents in Cape Town: prevalence and correlates. *Journal of Adolescence health* 32 (1):
- Fraenkel, R.J. & Wallen, E. N. (2006). *How to design and evaluate research in education* (6<sup>th</sup> edn.). Boston: McGraw-Hill.



- Gacicio, E. (2003). The Role of Stake Holder in Combating Drug and Substance Abuse. Paper Presented at HIV-AIDS Teacher Training Tool Development Retreat Matuu, Kenya From 4<sup>th</sup> to 10<sup>th</sup> May 2003.
- Gorski, T.T. (1989). *Passages Through Recovery: An Action Plan for Preventing Relapse*. Center City, MN: Hazelden.
- Hodgson, R.J. (1980). Degrees of Dependence and their Significance. In: Sandler, M., ed. *Psychopharmacology of Alcohol*. New York: Raven Press, pp. 171-177.
- Hoffman, P. J. & Spelet H. (1984). *Basic Introduction to Counselling*. New York: McGraw Hill Book Company.
- Hunt, W.A.; Barnett, L.W.; & Branch, L.G. (1971). Relapse Rates in Addictions Programmes. *Journal of Clinical Psychology* 27:455-456.
- Kathuri, J.N. & Pals, D. A. (1993). *An introduction to educational research*. Njoro, Kenya: Egerton University Press
- Koenig, H. G., McCullough, M.E. & Larson D. B. ( 2001). *Handbook of religion and health*. New York: Oxford University Press
- Marlatt, G.A. & Gordon, J.R. (1980). Determinants of Relapse: Implications of the Maintenance of Behaviour Change. In: Davidson, P.O., and Davidson, S.M., eds. *Behavioural Medicine: Changing Health Lifestyle*. New York: Brunner/Mazel, pp.410-452.
- 72
- Marlatt, G. A. & Gordon, J.R. (1985). *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors*. New York: Guilford.
- Marlatt, G.A. (1978). Craving for Alcohol, Loss of Control, And Relapse: A Cognitive-Behavioural Analysis. In: Nathan, P.E.; Marlatt, G.A.; and Loberg, T., eds. *Alcoholism: New Directions in Behavioural Research and Treatment*. New York: Plenum Press, pp. 271-314.
- Marlatt, G.A. (1985). *Relapse Prevention: Theoretical Rationale and Overview of the Model*. New York: Relapse Prevention Guilford.
- Mello, N.K. (1975). A Semantic Aspect of Alcoholism. In: Cappell, H.D., and LeBlanc, A.E., Eds. *Biological and Behavioural Approaches to Drug Dependence*. Toronto: Addiction Research Foundation.
- Moos, R.H., Finney, J.W., Ouimette, P.C., & Suchinsky, R.T. (1999). A Comparative Evaluation Of Substance Abuse Treatment: I. Treatment Orientation, Amount Of Care, and 1-Year Outcomes. *Alcoholism: Clinical and Experimental Research*, 23(3), 529–536.

- Mugenda, O. M, & Mugenda G. D. (1999). *Research Methods: Quantitative and Qualitative Approach*. Nairobi: Acts Press.
- NACADA (2004). *Youth at peril: alcohol and drug abuse in Kenya*. Nairobi: MOH
- NACADA (2007). *A Handbook on Prevention of Drug and Substance Abuse in Kenya*. Nairobi: Ministry of Health
- Ngeno, D.K. (2002). Drug Abuse and Its Influence on Student Learning Behaviour in a Study of Secondary School in Kericho District. Unpublished M.Ed. Thesis, Nairobi University, Kenya.
- Nassiuma, D.K. (2000) *Survey sampling: Theory and methods*. Nairobi: University of Nairobi Press
- Obot, I. S. (2000). The Measurement of Drinking Patterns and Alcohol Problem in Nigeria. *Journal of Substance Abuse*, 12: 169-181.
- Orodho A. J. ( 2004). *Techniques of writing research proposal and reports in education and social sciences*. Nairobi: Masola publishers
- Otieno, L.O. (1991). Students in Kenya Secondary Schools Key note address Delivered at Ukweli Catholic Pastoral and Development Centre 12<sup>th</sup> August. Nairobi Christian Churches.
- Papalia, D. E., Olds, W. S. & Feldman, D .R. (1999). *A child's world: Infancy through adolescence*. Boston: McGraw Hill.
- Pham-Kanter, Genevieve. (2001). Substance Abuse and Dependence. *The Gale Encyclopedia of Medicine*
- Polich, J.M.; Armor, D.J.; & Braiker, H.B. (1981). Stability and Change in Drinking Patterns. In: *The Course of Alcoholism: Four Years after Treatment*. New York: John Wiley & Sons, 1981. pp. 159-200.
- Raiken, L. (1994). *Psychological testing and assessment*. Boston: Allyn and Bacon.
- Rivers, P. C. (1994). *Alcohol and human behavior: Theory, research and practice*. New Jersey: Prentice Hall.
- Rollins, A. L.; O'Neill, S. J.; & Davis, K. E. (2005). Substance Abuse Relapse And Factors Associated with Relapse in an Inner-City Sample of Patients with Dual Diagnoses. *Psychiatric Services* 56:1274–1281.
- United Nations Office of Drug Abuse and Crime (UNODC) (2002). *Contemporary Drug Abuse Treatment. A Review of the Evidence Base*

United Nations Office of Drug Abuse and Crime (UNODC) (2005). *World Drugs Report*. (Pg-10). Published by United Nations.

Willis A. T. & Windy M.J. (2003). Adolescents' perceived importance of religion lessens drug use. *Psychology of Addiction Behavior*, 12 (1): 23-31. Retrieved January 2009 from <http://www.apa.org/journal/adb>

Wood, Ron (December 7, 2006). Suit Challenges Court Ordered 12-Step Programs: Constitutionality of Forced Participation in Program Questioned. *The Morning News*.

World Health Organization – WHO (2002). *World Health Report 2002*. Geneva: WHO.

World Health Organization (2004). *Global Status Report on Alcohol 2004*. Geneva: WHO.

## APPENDIX A: ALCOHOLIC QUESTIONNAIRE

Dear Sir or Madam,

I am a student at Moi University undertaking a Masters of Philosophy Degree in Guidance and Counseling. I am doing a research on survey of factors of relapse among alcoholics in rehabilitation centres in Nairobi, Kenya. You have been randomly selected to participate in this study because you are in this facility. The success of the study depends on your truthfulness and honest responses to all the questions asked. Put a tick (✓) appropriately unless instructed otherwise. There is “no right” or “wrong” answers. Do not write your name anywhere and your responses will not be linked to you. The responses you give will be treated with utmost confidentiality.

Thank you.

1. How old are you? Tick (✓) appropriately.

Below 13 years  14 to 18 year

19 to 25 years  26 to 35 years

36 to 45 years  Over 45

2. Gender Male  Female

3. What is the highest level of education that you completed? Tick (✓) appropriately.

No formal education

Secondary education

Middle-level College

University

4. What is your marital status? Tick (✓) appropriately.

Single

Married

Divorced

Widowed

Separated

5. What is the family size?

I do not have any children or dependents

1 to 2 children or dependants

3 to 4

More than 4

6. What is your occupation (what do you for the living)? Tick (✓) appropriately.

No formal employment

Self-employed (Business)

Self-employed (Farming)

Employed

Others (specify) \_\_\_\_\_

7. Under which treatment program option were you placed while seeking treatment in former rehabilitation center?

Brief intervention (least intensive treatment) program

Inpatient treatment program

Outpatient treatment program

Support program

8. a) Have you ever quit drinking for a time and only to start again?

Yes

No

b). If so as asked in (8a), how many times?

None

Once

2-4 times

More than 4 times

c). What was your longest period of abstinence from alcohol since first deciding to quit?

Less than 30 days

30-90 days

3-6 months

6 months- 1 year

1-2 years

2-4 years

More than 5 years

9. Please read the following statements and agree or disagree to what extent they may explain your risk of drinking after treatment.

Statements	Strongly disagree	Disagree	Agree	Strongly agree
Stopping medications on one's own or against the advice of medical professionals				
Hanging around old drinking friends				
Isolating and not attending support groups				
Keeping alcohol cues(things associated with alcohol)around the house or wearing T- shirts or caps with alcohol advertisements for any reason				
Obsessive thinking about drinking				
Failing to follow ones treatment plan by quitting therapy and skipping doctors' appointments				
Feeling overconfident that you no longer need support				
Having relationship difficulties - ongoing serious conflicts with a spouse or family member				
Setting unrealistic goals during treatment				
Having a spouse or family member who still uses alcohol or has positive attitudes towards the use of alcohol				
Feeling overwhelmed, confused and useless				
Constant boredom and irritability				
Loss of a loved one				
Dwelling on resentments and past hurts that provoke anger due to unresolved conflicts				
Refusing to deal with personal issues and other problems of daily living				
Loss of a job				
Unsupportive family environment				
Ignoring relapse warning signs and				

triggers				
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10a). Please indicate whether the following alcohol treatment and relapse prevention activities were adequately given to you at last rehabilitation centre you attended.

Activities	Adequate	Not adequate	Not available
Stabilization through detoxification.			
Assessment on your life, alcohol, recovery and relapse history			
Guidance and education on relapse process and how to manage it			
Warning signs identification and management			
Recovery planning on network of professional support and attendance of support group			
Morning and evening inventory making			
Family involvement in supporting in recovery and relapse prevention			
Follow up- at monthly, quarterly and annually			

11. a). How easy or difficult is it for you to get alcohol if you wanted?

Impossible  Difficult  Easy  Very easy

b). In your view what are the factors that made you to slip to drinking alcohol after treatment?

Craving  Peer-group influence   
 Stressful event or situation  Influence of family member   
 Others (specify) \_\_\_\_\_

c). How often have you seen or heard or read pro-alcohol messages on the following mass media? Tick (✓) appropriately.

Media	Alcohol		
	Never	Rarely	Very often
Television pro- alcohol advertisement			
Movies or videos with character using alcohol			

Radio pro-alcohol advertisement			
Street billboard pro-alcohol advertisements			
Daily newspapers pro-alcohol advertisements			
Magazines pro-alcohol advertisements			
Internet pro-alcohol advertisement			

d). How often have you worn a T- shirt or cap with pro-alcohol messages? Tick (✓) appropriately.

Never  Rarely  Often  Others

(e) What is your religion? Tick (✓) appropriately.

Catholic  Protestant  Muslim  Others   
(specify)\_\_\_\_\_

f) How often do you attend the religious services? Tick (✓) appropriately.

- At least once a week  
 At least once a month  
 At least once a year  
 Rarely or cannot remember when I last attended a religious service

12. In your opinion, rank the following activities in order of importance on what should be done to prevent alcohol relapse

Activities	Very important	Important	Not important
Counseling in after care programs			
Follow up activities			
Preparedness during treatment			
Adherence to treatment programs			
Family involvement			
Participation in support group			
Avoidance of alcohol cues			
Anger and stress management			

Thank you so much for taking your time to answer the questions asked. I hope you have answered ALL questions applicable to you.



## APPENDIX B: PROFESSIONAL HELPER QUESTIONNAIRE

Dear Sir or Madam,

I am a student at Moi University undertaking a Masters of Philosophy Degree in Guidance and Counseling. I am doing a research on survey of factors of relapse among alcoholics in rehabilitation centres in Nairobi, Kenya. You have been purposively selected to participate in this study because you are an employee in this facility. The success of the study depends on your truthfulness and honest responses to all the questions asked. Put a tick (✓) appropriately unless instructed otherwise. Do not write your name anywhere and your responses will not be linked to you. The responses you give will be treated with utmost confidentiality.

1. Age (in complete years) \_\_\_\_\_
2. Gender      Male            Female
3. What is your marital status? Tick (✓) appropriately.  
Single        
Married        
Divorced        
Widowed        
Separated
4. What is the highest level of education that you completed? Tick (✓) appropriately.  
No formal education        
Secondary education        
Middle-level College        
University
5. Do you have any professional training in counselling? Yes       No
6. If yes, what is your level of training in counselling?  
Certificate            Diploma        
Bachelors Degree            Masters Degree        
Phd            Any other (specify) \_\_\_\_\_
7. Do you ever attend any seminar(s)/workshops in guidance and counseling, and especially that related to alcohol and drug abuse?      Yes       No
8. For how long have you been working as a counselor in this centre? (*in years*)  
 Less than a year

- 1-2 years
- 3-5 years
- More than 5 years

9. In order of importance what are the main factors that the clients report to have influenced their alcohol relapse?

<b>Factors</b>	<b>Very important</b>	<b>Important</b>	<b>Not important</b>
Stopping medications on one's own or against the advice of medical professionals			
Hanging around old drinking friends			
Isolating and not attending support groups			
Keeping alcohol cues(things associated with alcohol)around the house or wearing T- shirts or caps with alcohol advertisements for any reason			
Obsessive thinking about drinking			
Failing to follow ones treatment plan by quitting therapy and skipping doctors' appointments			
Feeling overconfident that you no longer need support			
Having relationship difficulties - ongoing serious conflicts with a spouse or family member			
Setting unrealistic goals during treatment			
Having a spouse or family member who still uses alcohol or has positive attitudes towards the use of alcohol			
Feeling overwhelmed, confused and useless			
Constant boredom and irritability			
Loss of a loved one			
Dwelling on resentments and past hurts that provoke anger due to unresolved conflicts			
Refusing to deal with personal issues and other problems of			

daily living			
Loss of a job			
Unsupportive family environment			
Ignoring relapse warning signs			

10. What are the challenges facing this rehabilitation centre in effectively addressing relapse? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. In your opinion, what measures should be put in place by the rehabilitation centers to reduce cases of alcohol relapse? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. In your opinion, what measures should be put in place by the alcoholics to avoid cases of relapse? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. In your opinion, what measures should be put in place by the community and family of the recovered person to reduce cases of alcohol relapse and ? \_\_\_\_\_

\_\_\_\_\_

<p>Thank you so much for taking your time to answer the questions asked. I hope you have answered <b>ALL</b> questions applicable to you.</p>
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**Appendix C: Required**

N	S	N	S	N	S	N	S
10	10	140	103	550	226	4500	354
15	14	150	108	600	234	5000	357
20	19	160	113	650	241	6000	361
25	24	220	140	700	248	7000	364
30	28	230	144	750	254	8000	367
35	32	240	148	800	260	9000	368
40	36	250	152	1200	291	10000	370
45	40	260	155	1300	297	15000	375
50	44	270	159	1400	302	20000	377
55	48	280	160	1500	306	30000	380
60	52	290	165	1600	310	50000	381
65	56	300	169	1700	313	100000	384
70	59	320	175	1800	317		
75	63	340	181	1900	320		
80	66	360	186	2000	322		
85	70	380	191	2200	327		
90	73	400	196	2400	331		
95	76	420	201	2600	335		
100	80	440	205	2800	338		
110	86	460	210	3000	341		
120	92	480	214	3500	346		
130	97	500	217	4000	351		

**Source:** Kathuri & Pals (1993).

N=Population size

S=Sample size

**APPENDIX D: RESEARCH PERMIT LETTER**



**Tel:** (053) 43001-8  
(053) 43095  
**Fax:** (053) 43047

**MOI UNIVERSITY**

P.O. Box 3900  
Eldoret  
KENYA

*OFFICE OF THE DEAN  
SCHOOL OF EDUCATION*

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**REF: MU/SE/PGS/54**

**DATE: 7<sup>th</sup> April, 2010**

The Executive Secretary,  
National Council for Science and Technology  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH PERMIT IN RESPECT OF BIRGEN JULIA -  
EDU/PGGC/28/08**

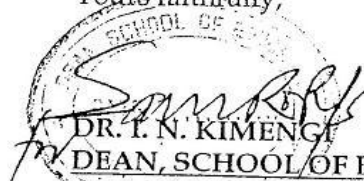
The above named is a 2<sup>nd</sup> year Master of Philosophy (M.Phil) student at Moi University, School of Education, Department of Educational Psychology.

It is a requirement of her M.Phil studies that she conducts research and produces a thesis. Her research is entitled:

**"A Survey of Factors in Relapse Among Alcoholics in Selected Rehabilitation Centers in Nairobi, Kenya."**

Any assistance given to her to facilitate the successful conduct of her research will be highly appreciated.

Yours faithfully,

  
**DR. I. N. KIMENGI**  
**DEAN, SCHOOL OF EDUCATION**

INK/db

APPENDIX E: RESEARCH AUTHORIZATION LETTER  
REPUBLIC OF KENYA



**NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY**

Telegrams: "SCIENTECH", Nairobi  
Telephone: 254-020-261345, 2213102  
254-020-318571, 2213123  
Fax: 254-020-2213215, 318245, 318249  
When replying please quote

P.O. Box 26633-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

Our Ref:

NCST/RRI/12/1/SS/321

Date:

14<sup>th</sup> May, 2010

**Birgen Julia**  
Moi University  
P.O Box 3900  
Eldoret

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*A Survey of Factors in Relapse Among Alcoholics in Selected Rehabilitation Centers in Nairobi, Kenya*" I am pleased to inform you that you have been authorized to undertake your research in *Nairobi Province* for a period ending *30<sup>th</sup> June, 2010*.

You are advised to report to *the Provincial Commissioner and the provincial Director of Education of Nairobi Province* before embarking on your research project.

Upon completion of your research project, you are expected to submit two copies of your research report/thesis to our office.

**P. N. NYAKUNDI**  
FOR: SECRETARY/ CEO

Copy to:

APPENDIX F: RESEARCH PERMIT

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THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss JULIA

BIRGEN

of (Address) MOI UNIVERSITY

P.O. BOX 3900, ELDORET

has been permitted to conduct research in

Location,

NAIROBI District

NAIROBI Province.

on the topic A SURVEY OF FACTORS

IN RELAPSE AMONG ALCOHOLICS

IN SELECTED REHABILITATION

CENTERS IN NAIROBI, KENYA.

for a period ending CONDICIONS JUNE 20 10

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

GPK/6055/Inst/10/2109

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Research Permit No. NCST/ERI/12/1/88/32

Date of issue 14/05/2010

Fee received SHS 1,000



Applicant's  
Signature

*[Handwritten Signature]*  
Secretary  
National Council for  
and Technology



REPUBLIC OF KENYA

RESEARCH CLEARANCE  
PERMIT

(CONDITIONS— see back page)