

RESEARCH TITLE

**THE ROLE OF TRAUMATIC LIFE EVENTS IN THE ADDICTION PROCESS
AMONG PATIENTS AT THE MATHARI DRUG REHABILITATION CENTRE**

**A DESSERTATION SUBMITTED TO THE UNIVERSITY OF NAIROBI IN
PARTIAL FULFILLMENT FOR THE AWARD OF MASTERS OF SCIENCE IN
CLINICAL PSYCHOLOGY**

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STUDENT DECLARATION

Declaration

The undersigned, declare that this proposal entitled “**the role of traumatic life events in the addiction process among patients with substance use disorders** at the Mathari Drug Treatment and Rehabilitation Center.” is the result of my own work and that it has not been submitted either wholly or in part to this or any other university for the award of any degree.

Signed.....Date.....

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DECLARATION BY THE SUPERVISORS

This dissertation has been submitted for the award of the Master of Science in Clinical Psychology with my approval as the appointed supervisor

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CERTIFICATION

This is to certify that this Research entitled “**the role of traumatic life events in addiction process among patients with substance use disorders**” at the Mathari Drug Treatment and Rehabilitation Centre is a research work carried out independently by **Matilda Mghoi Omollo** under the guidance and supervision.

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to all lecturers in the department of psychiatry and more so to my supervisors **Dr. Mathai, and Dr. Khasakhala** who guided me during the development of the concept and the subsequent Research

To all the directors of the **Mathari Hospital** who have allowed me to carry out the study in the facility, I say thank you.

DEDICATION

I dedicate this research to my children **Tracy, Alex and Jared** for being there for me during this enduring moment

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ABSTRACT

INTRODUCTION: A high number of people from the general population experience traumatic events during their lifetime. Possible psychological types of trauma include both posttraumatic stress disorder (PTSD) and substance-use disorders (SUDs). While SUDs often occur in the context of PTSD, little is known about the degree to which SUDs are attributable to specific traumatic event.

OBJECTIVE: This study therefore aimed at to exploring the types of traumatic life events and their association in the initiation, progression and relapse to addictive behaviour of Substance Abuse.

The purpose of this study was to document that patients admitted at Mathari Hospital diagnosed with SUDs co morbid with or without PTSD may have experienced traumatic events in their life.

METHODS: Study design: The study is an exploratory Qualitative study using in-depth interviews and focus group discussion. The study explored Respondents who were Purposive Sampled from the patients admitted at the Mathari Hospital Drug Treatment and Rehabilitation Center with Substance use disorders. Data was thematically coded, transcribed and analyzed qualitatively and results presented in summaries that included direct quotations.

RESULTS: Drinking to cope with negative affect predicted alcohol consumption after trauma. Three other issues served as obstacles to abstain from abusing drugs/alcohol, includes battling with depression and despair, destructive habits, patterns of alcohol use and lack of personal control. The results also showered that some of the participants had experienced painful and traumatic childhoods in their families of origin, which contributed to their subsequent addictive behaviour and which they felt had affected their current familial relationships. All participants and their families had suffered from various forms of family disruption, such as loss of loved ones, loss of employment, financial constrains, marital breakdown, physical and psychological abuse, depression and ill health. Some participants had also experienced accidents as a result of their addictions, which also affected their relationships with their families.

Conclusions: Findings of this study and hence the conclusions confirmed that indeed traumatic life events do have a role in the process of substance abuse particularly in the initiation and progression stages. As for the relapse stage of addiction in the participants, contrary to majority of the studies, traumatic life events didn't really influence the outcome of relapse into addiction. But since traumatic events will continue to occur, understanding how drinking motives lead to increased drinking after trauma can assist with future Treatment planning and may lead to a general improvement in understanding the etiology of heavy drinking , Substance Use Disorders and Trauma

Definitions of Terms

Key terms

Addiction The state of being both physically and psychologically dependent on a substance.

Dependence A state in which a person requires a steady concentration of a particular substance to avoid experiencing withdrawal symptoms.

Detoxification A process whereby an addict is withdrawn from a substance.

Intoxication The desired mental, physical, or emotional state produced by a substance.

Substance abuse In DSM-IVTR "psychoactive substance abuse" is defined as "a maladaptive pattern of use leading to clinically significant impairment or distress as indicated by one or more of the following occurring within a 12 month period

- i. Recurrent substance use resulting in failure to fulfill major obligations at work, school or home.
- ii. Recurrent use of substance in situations in which it is physically hazardous.
- iii. Recurrent substance related legal problems.
- iv. Continued use despite knowledge of having a persistent or recurrent social, occupational, psychological or physical problem that is caused or exacerbated by the use [or by] recurrent use in situations in which it is physically hazardous.

Dependence syndrome refers to a cluster of behavioral, cognitive, and physiological phenomena that may develop after repeated substance use. Typically, these phenomena include a strong desire to take the drug, impaired control over its use, persistent use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and a physical withdrawal reaction when drug use is discontinued. The dependence syndrome may relate to a specific substance (e.g. tobacco, alcohol, or diazepam), a class of substances (e.g. Opioids), or a wider range of pharmacologically different substances.

Substance use disorders as listed in DSM IV TR include substance intoxication, substance abuse, substance dependence, substance withdrawal, substance induced disorders (include substance induced delirium, amnestic disorder, dementia, psychotic disorder, mood disorder, anxiety disorder, sexual dysfunction, and sleep disorder)

Tolerance: this refers to a decrease in response to a drug dose that occurs with continued use. Increased doses of alcohol or other drugs are required to achieve the effects originally produced by lower doses. Both physiological and psychosocial factors may contribute to the development of tolerance, which may be physical, behavioural, or psychological.

Withdrawal syndrome is a group of symptoms of variable clustering and degree of severity which occur on cessation or reduction of use of a psychoactive substance that has been taken repeatedly, usually for a prolonged period and/ or in high doses. The syndrome may be accompanied by signs of physiological disturbance. It is one of the indicators of a dependence syndrome.

Rehabilitation in the field of substance use, this is the process by which an individual with a substance use disorder achieves an optimal state of health, psychological functioning, and social well-being typically following the initial phase of treatment (which may involve detoxification, medical and psychiatric treatment). It encompasses a variety of approaches including group therapy, specific behavior therapies to prevent relapse, involvement with a mutual-help group, residence in a therapeutic community or half-way house, vocational training, and work experience. There is an expectation of social reintegration into the wider community.

Traumatic events include experiences or situations that are emotionally painful and distressing and overwhelm people's ability to cope, leaving them powerless. The person has to be exposed to a traumatic event in which both of the following are present; the person experienced, or witnessed, or was confronted with an event (s) that involves actual or threatened death or threat to the physical integrity of self or others. The person's response involved intense fear, helplessness or horror ((*Diagnostic and Statistical Manual of Mental Disorders*; DSM – IV-TR, 2013).

Dual diagnosis is a term referring to co-morbidity or the co-occurrence in the same individual of a psychoactive substance use disorder and another psychiatric disorder. Such an individual is sometimes known as a mentally ill chemical abuser (MICA). Less commonly, the term refers to the co-occurrence of two psychiatric disorders not involving psychoactive substance use (Regier et al., 1990).

ABBREVIATIONS, ACRONYMS & CONCEPT DEFINITIONS

PAS	-Psychoactive Substance
REHAB	-Rehabilitation
MHDR	-Mathari Hospital Drug Rehabilitation Center
SUD	-Substance Use Disorder
AUD	-Alcohol Use Disorder
SA	-Substance Abuse
SAMHSA	-Substance Abuse and Mental Health Services Administration
USA	-United States of America.
APA	-American Psychological Association
NIAAA	- National Institute on Alcohol Abuse and
Alcoholism	

CHAPTER ONE

1.0 INTRODUCTION / BACKGROUND

The connection between trauma and substance abuse has been known for decades by professionals treating people who have experienced trauma and are using substances of abuse, (Jacobsen, et al, 2001). Trauma experiences are emotionally and/or physiologically challenging and therefore activate stress responses and adaptive processes to regain homeostasis.

The emotional stressors such as interpersonal conflict, loss of relationship and property, death of a close family member or a child, and common physiological stressors such as hunger, food and sleep deprivation more often than not may cause an individual to use alcohol and other substances of abuse as one tries to seek a quick relieve from these stressors (Cohen S, et al 2007).

Moreover, the effects of child abuse have also been shown to have profound physiological, spiritual emotional and social consequences that are carried on by survivors for the rest of their lives (McEwen BS 2007). Also, some studies have indicated that most abused children grow up to be alcoholics or addicts, and most alcoholics and addicts have had an abusive childhood. (Cohen S, Kessler RC 2006). This is because; the scars of child abuse are sometimes psychologically exhibited or demonstrated through ones defense mechanisms that become maladaptive and self-defeating in adulthood (Laurence J., et al 2008).

Previous research findings have shown the rates of PTSD range from 28–55% in individuals seeking treatment for alcohol/substance use (Coffey & Schumacher, et al 2007), Comorbidity of PTSD and alcohol use disorders (AUDs) is particularly common, with epidemiological studies indicating that up to 52% of men and 28% of women with PTSD also meet lifetime criteria for alcohol abuse or dependence (Kessler & Nelson, et al 1995). This high prevalence is notable, given that individuals living with comorbid PTSD and SUD use greater amounts of time in addiction treatments (Brown, Stout, & Mueller, 1999).

Because of the high comorbidity of PTSD and AUD, as well as the synergistic impact of traumatic life events and AUD on impairment of individual functioning, a greater understanding of this relationship is needed so that appropriate and effective care can be administered to individuals admitted with SUDs with traumatic life events.

Furthermore, misdiagnosed trauma-related symptoms do interfere with Substance abuse help seeking individuals, hamper engagement in treatment leading to early dropout and resulting in relapse (NIDA, 2002). Consequently, there is need to critically address trauma as part of substance abuse treatment. Hence, a highly efficacious substance abuse Treatment approaches with components to address trauma issues during treatment is highly recommended.

In addition “trauma-informed” and “trauma-specific” approaches take into account knowledge about trauma, its impact, interpersonal dynamics, and paths to recovery and incorporate this knowledge thoroughly in all aspects during service delivery. Moreover, the primary goals of trauma-specific services should be more focused to address directly the impact of trauma on people’s lives and to facilitate trauma recovery and healing, thus, substance abuse treatment programs should create trauma-informed environments, provide services that are sensitive and responsive to the unique needs of trauma survivors, and offer trauma-specific interventions for a better recovery (Brown, 2000; Brown, 1994).

This is important in the management of the psychological type of trauma which includes SUDs and PTSD. This study is designed to bridge this gap by documenting qualitatively presentation of clinical features of SUDs with or without PTSD and how these features are predicted with prior traumatic events in the life of sampled patients admitted at Mathari Hospital.

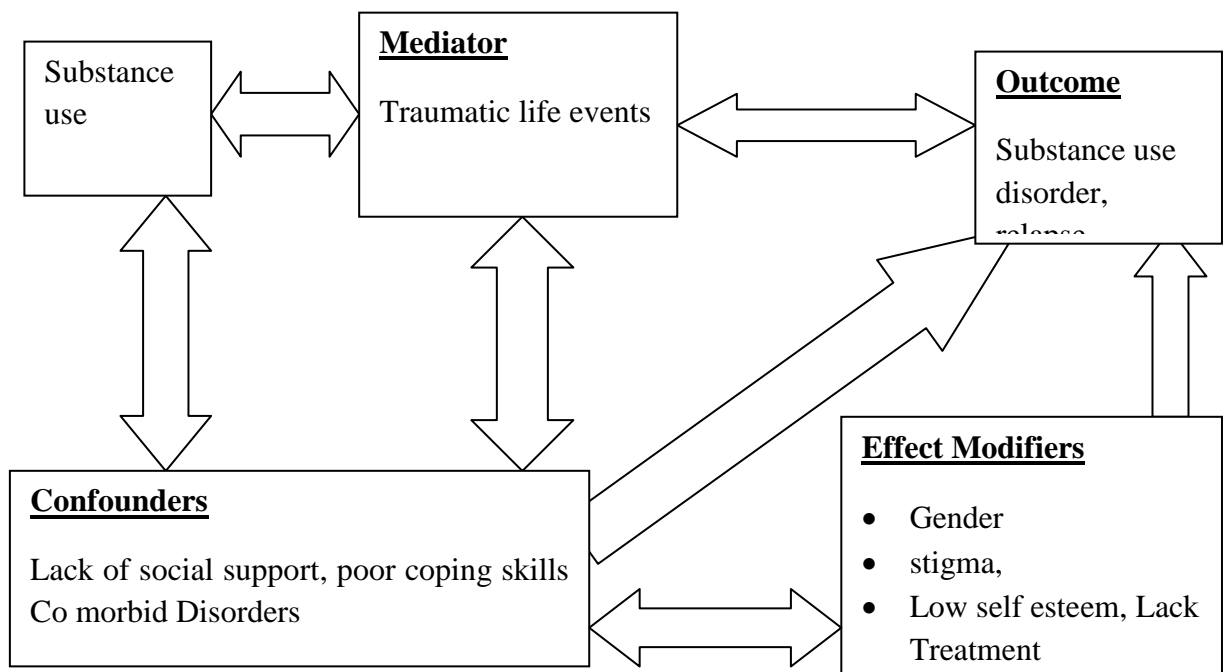
1.1 CONCEPTUAL FRAMEWORK OF ADDICTION PROCESS

There are a variety of models that try to explain complexity of addictive behavior. These Models falls into four categories: The disease model, the learning theory model, the psychoanalytic model and the family systems Model.

Of importance here is the Psychoanalytic Model. The Psychoanalytic Model tries to explain how life traumatic event affects the addiction process in one's life by suggesting that addiction is an adaptive mechanism by which individual attempts to cope with self-regulatory deficits arising from early infantile deprivation and maladaptive parent-child interactions as Self-medication hypothesis, (Khantzian ,1997).

The Self-regulatory deficits affects tolerance, exaggerate emotional feeling thus ending up over whelmed or with no feelings at all and finding all of it confusing, thus turning into Substance use.

CONCEPTUAL FRAMEWORK



Moreover, Substance abuse can lead to trauma to an individual because most people who use alcohol/drugs fail to take caution and desist from behaviors that have damaging consequences as they find themselves in risky situations which are likely to expose them to various type of trauma, e.g. violence, rape, assaults, loss of property, loss of a job or separation and divorce. These traumatic life events in turn may by themselves lead to substance use disorders, worsen substance use disorder and lead to relapse even after a reasonable time of abstinence has been achieved.

From the undocumented observations, confounders such as the lack of social support and comorbidity and the effects modifiers as gender, stigma, low self esteem and lack of proper treatment, can also acts as predisposing, precipitating and perpetuating factors to substance use, abuse and trauma for that matter.

1.2 PROBLEM STATEMENT

Current studies have been focused on history of childhood traumatic experiences with ample evidence showing the association of trauma exposure and substance use. These studies show that childhood trauma compromises brain structure and function, rendering an individual susceptible to later cognitive deficits and psychiatric illnesses, including schizophrenia, major depression, bipolar disorder, Posttraumatic Stress Disorder (PTSD), and substance abuse (Barnard et al., 1989).

Adolescent who had experienced physical or sexual abuse/assault were three times more likely to report past or current substance abuse than those without a history of trauma (National Survey of Adolescent and Teens 2008). Stress load in childhood in particular was related to both the number and severity of depressive and PTSD symptoms in patients with these disorders. Thus, trauma load during the stress-sensitive period of childhood may be especially important when considering psychiatric outcomes and addiction process (Weber et al., 2005).

Moreover, most studies emphasize the importance of treating trauma because if left untreated it can lead to a person's quality of life being compromised by a variety of psychopathology. Trauma affects more than one aspect of life for all generations. The effect causes clinically significant distress, or impairment in academic, social, occupational, financial or other important areas of functioning. The trauma that may be related to drug abuse often goes unnoticed and mostly the treatment offered is only for drug abuse probably due to lack of unskilled personnel to handle the co morbidity (Rice et al., 2001)

Alluding to the aforementioned is a survey carried out by NACADA on Rehabilitation centres, in 2007, and the findings established that out of 47 Drug Rehabilitation centres country wide, the emphasize on Treatment and Rehabilitation of Persons with SUDs was mostly focused on the abstemious from Substance Abuse and not on any other related disorders like Trauma. The Mathari Drug Rehabilitation Centre which is within the Mathari National Teaching and referral hospital is not exceptional. As a result, many patients with co-occurring disorders receive treatment for one disorder mostly the substance induced disorders while the trauma which is increasingly being singled out as a major contributor to addiction process goes unnoticed or totally unmanaged (NACADA, 2007) It is for this reason that this Study is being conducted at the MDTR Center in order to help find out facts and also inform appropriate intervention.

1.3 RATIONALE/JUSTIFICATION OF THE STUDY

Research emphasis a positive correlation between exposure to traumatic events and substance induced disorders (Foa et al., 2013). Many people who have experienced child abuse, criminal attack, disasters, war, or other traumatic events turn to alcohol or drugs to help them deal with emotional pain, re-experiencing traumatic memories, insomnia, guilt, shame, anxiety and depression, or terror (Foa et al., 2013). Studies states that people with alcohol and or drug use problems are more likely to experience traumatic events as compared to non-alcoholics and drugs abusers. This is because many of these people find themselves in a vicious cycle in which exposure to traumatic events influence them to high levels of alcohol and drugs consumption. In turn this behaviour tends to compound their problems (Costello, 2002).

It is therefore important to note that traumatic events and substance use disorders tend to co morbid with each other than occurring as the sole diagnosis (Foa et al., 2013). For example, several studies have confirmed that there is marked comorbidity for trauma-related disorders, such as Post- Traumatic Stress Disorder (PTSD) and both depressive and other anxiety disorders (Kessler, & Walters et al 2005). Additionally, trauma related and a substance use disorder impairs individual functioning in relation to interpersonal, health, social and occupational aspects (Foa et al., 2013; World Psychiatry, 2005).

Hence, this study aims to establish the role of Traumatic life events play in the addiction process among Persons with Substance use disorders, because despite the consistent research on the effects of traumatic events and substance use disorders amongst individuals coupled with impaired functioning, it is saddening to note that in Africa particularly East Africa, very little research has been conducted on the same. Furthermore, no studies have been done locally, Kenya in particular with special reference to the role of traumatic life events in patients with substance use disorders.

1.4 RESEARCH QUESTION

What role does traumatic life event play in addiction process in patient with SUD at the Mathari Drug Rehabilitation centre?

1.5 OBJECTIVES

1.5.1 Main objective

To describe how traumatic life events are associated with the initiation, progression and relapse in addiction among patients at the Mathari Hospital drug Rehabilitation centre (MHDR).

1.5.2 Specific Objectives

1. To establish the types of traumatic life events common among patients at the MHDR.
2. To describe how these traumatic life events lead to the initiation of addictive behaviour among the patients at the MHDR.
3. To describe how these traumatic life events are associated with the progression of addictive behaviour among patients at MHDR.
4. To explore how traumatic life events are linked to relapse of the addictive behaviour among Patients at MHDR

CHAPTER TWO

2.0 LITRATURE REVIEW

Substance abuse and dependence refer to abusing of any psychoactive substances leading to maladaptive pattern of behavior and clinically causing significant impairment of functions or distress. It's normally distinguished as follows: a pattern of substance use that results in repeated adverse social consequences related to drug/alcohol-taking, leading to interpersonal conflicts, failure to meet work, family, or school obligations, or legal problems. Substance dependence commonly known as addiction comprises of two key concepts tolerance and withdrawal.

Dependency is characterized by physiological and behavioral symptoms related to substance use. These symptoms include the need for increasing amounts of the substance to maintain desired effects known as tolerance. Withdrawal occurs when drug-taking ceases or is reduced, (Jacobsen, et al, 2001).

Substance-dependent women who have been exposed to interpersonal trauma and violence represent a particularly high-risk group. The majority of women dually diagnosed with PTSD and SUD are not only victims of childhood abuse but (Brown and Wolfe, 1994; Polusny and Follete, 1995), are also vulnerable to repeated interpersonal traumas throughout their lives (Fullilovet al., 1993, Dansky, Brady, and Sladin, 1998). Men are equally exposed to interpersonal trauma, but more women frequently experience such types of trauma as compared with their men contour parts, with the co morbidity rates being higher among substance-using women than substance-using men (Cottler et al., 2001). This could be due to the fact that the symptoms of trauma are complex as they encompass the self-regulatory effectiveness and cognitive systems that represent a developmental domain, which has also been implicated in the clinical addictions literature as vulnerability factors for substance use disorders.

Moreover, individuals with history of trauma and related PTSD use substances in order to manage or avoid distressing symptoms (e.g. intrusive memories and flashbacks) and to relieve painful emotions (e.g. anger and sadness) or physical sensations (hyper arousal) (DSM5, 2013). Self-regulation deficits have also been implicated in the Findings from the addictions literature which shows that the difficulties in emotional regulation and tolerance of

painful feelings, inability to self-soothe, and instability of behavioural control is typical of adolescent and adult substance abusers (Horowitz, et al., 1992; Khantzian and Schneider, 1986; Krystal, 1997).

Self-medicating with alcohol and drugs can lessen the effects of hyper arousal and numbing symptoms in individuals with posttraumatic stress Disorder. This is because hyper arousal symptoms would be diminished or masked by alcohol and also by other depressants, thereby providing temporary relief from the deregulated feelings that go along with PTSD (Khantzian and Schneider, 1986 Horowitz, et al., 1992)

Furthermore, some potential pathways between PTSD and SUD have been proposed, including the high-risk and susceptibility hypotheses (Chilcoat & Breslau, 1998). The high-risk hypothesis speculates that substance use and associated high-risk activities increase the risk to traumatic exposure thereby indirectly increasing the likelihood of PTSD. The susceptibility hypothesis posits that substance use may play a causal role, in that substance users may be more susceptible to PTSD following a traumatic event due to psychological or neurochemical systems resulting from extensive substance use. It has been noted that individuals seeking treatment for PTSD have consistently been found to have a high prevalence of drug and/or alcohol abuse (Meisler, 2002).

Similarly, research indicates that the level of neurobiology and substances of abuse operate through similar pathways in the brain. The chemical changes induced by the stimulation of these pathways by initial use of the substance leads to the desire to continue substance use, and eventual substance dependence (Costello, 2002). The fact that there is positive correlation between trauma and substance abuse has been known for decades by professionals treating people who experience both trauma and substance abuse. The stress-reduction model of substance abuse posits that stress is managed by some people by intake of alcohol, tobacco, or other drugs (ATOD, 2008). As reported earlier, trauma creates stress. The state of being in stress is uncomfortable, thus causing a need to seek a return to normalcy (Jacobsen, et al, 2001). Therefore, stress is considered a major contributor to substance abuse, its continuation, and relapse (Brady & Sonne, 1999). Studies have consistently shown that there is a greater likelihood of alcohol and drug abuse when one experiences high levels of stress (Dawes et al., 2000).

Most persons with substance use disorders identify stress and distress as the reasons for abusing substances and the cause of relapse. A presentation at Syracuse Regional Conference, June 6, (2003) indicated that an immediate relief from either anxiety or pain by consumption of the drug of choice seems to provide some temporary relieve, however, in reality it complicates and confounds the healing and recovery process, this is because drugs only provides a temporary relief, if any at all; as mostly it often blocks the necessary psychological processing and prevents or delay the natural completion of the grieving process; resulting in lower functioning capacity poor choices and poor decisions making and even behavioural dysfunction. Moreover, rather than calming nerves, alcohol and other drugs can actually increase both anxiety and fears, by intensifying and exaggerating emotions. They can disrupt sleep, especially stage four or deep sleep, and they can increase nightmares and make them more vivid and believable (Syracuse Regional Conference, 2003).

Likewise, substance abuse to traumatized persons becomes a means of managing distress symptoms such as nightmares, avoidance, and numbing and low self-esteem. In addition, traumatic sexual abuse often leads to confusion about sexual identity, hence, sex may increasingly be used as a means of giving and receiving attention, over-sexualization, and phobias related to sex. (NIDA, 2004).

Symptoms of sexual abuse among persons in substance abuse treatment facilities may be difficult to recognize since sexual abuse presenting symptoms frequently mirror those associated with substance abuse. Left untreated, victims of sexual abuse may use alcohol as a coping strategy to numb feelings and suppress painful, recurring memories as well as deal with overwhelming feelings of powerlessness, shame, and betrayal (NIDA, 2002).

The cycle of substance abuse and sexual abuse spiral is evident without intervention. However, intervention must be handled carefully as discussions of past abuse may trigger painful memories and patients may revert to substance abuse to handle memories. Besides, the climate of secrecy which generally accompanies sexual abuse, a shame-based sense of self may develop. Feeling of being bad, and at fault for the abuse are normally common. Feelings of being different can be eased with substance abuse and within the substance abuse environment in which one may feel accepted (SAMSHA, 2002).

Being connected to and accepted by others who abuse substances can lead to further stigmatization and shame increasing reliance upon substances to reduce negative feelings

about the self but as the self-perception continues to be lowered, feeling of self-harm may increase. Substance use may facilitate the tendency to carry out such actions and a sense of worthlessness may develop from the failure of trusted adults to protect the abused child, due to the perceived failure of the self to protect the child-self. Similarly, adults' relationships may rely upon drugs in order to allow the self to test the partner at the same time emotionally numbing or protecting the individual from experiencing further betrayal (Barnard et al., 1989).

On the other hand, the severity of the psychosocial problems in a consolidated domain had a high proportion of the students who were using substances, suggesting that disturbances in the schools were related to substance abuse (Ndetei et al., 2009). It is possible that drug abuse led to problems or problems had a causative role in drug abuse. Either way, a holistic approach is needed to deal with the problem. But for now, the following areas need to be taken into consideration. First and for most, is the distinctions between trauma exposure and its consequences e.g.; the traumatic stress disorders and revictimization in order to determine the vulnerability factors that precede substance use and abuse (Ndetei et al., 2009).

Equally, the extent to which childhood versus adulthood trauma serve as risk factors for later substance use disorders remains an unanswered question. Additional identification of other related risk factors, and the potential mediator or moderators in the paths between trauma, traumatic stress and later addictive behaviour needs to be established. Interdisciplinary efforts which aim to unravel the multiple negative outcomes of trauma and their effect on developmental and neurobiological systems will serve to further refine existing models of trauma and addiction and comorbidity. The successful accomplishment of these aims may rely upon research designs that can test direct and indirect causal relationships among the most significant, empirically-derived risk factors, (American Academy of Addiction Psychiatry 2005).

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study design

The study is an exploratory Qualitative study using in-depth interviews and focus group discussion.

3.2 Study Area

The study will be conducted in Nairobi Country at the Mathari Hospital which is about 10 km from city centre along Thika road opposite Muthaiga Police Station. The Hospital has about 400 members of staff and a bed capacity of 700 both civil and forensic patients. Currently it has integrated other medical services including diabetic clinic, general outpatient services, Maternal and Child Health clinic (MCH) Voluntary Counseling and Testing (VCT), laboratory, Pharmacy, dental services, Comprehensive Care Clinic (CCC), Mortuary, Radiology, Occupational Therapy, Physiotherapy, Tuberculosis clinic and the Drug Treatment and Rehabilitation centre.

The government in conjunction with the United Nation office of Drug and Crime (UNODC) started the Mathari Drug Treatment and Rehabilitation Centre in May 2003, with a bed capacity of 15 clients all male. However, in 2006 there was a growing need for treatment of female patients and in October 2006 a male wing, of a 32 bed capacity, was upgraded leaving the 15 bed capacity initially occupied by males to the females patients.

It is a 90-day program based on the matrix model incorporating some of the concepts of the therapeutic community model.

3.3 STUDY POPULATION AND SAMPLING PROCEDURES

The study was be purposive sampling in accordance with the principle of Qualitative design because the Drug Rehabilitation has a total capacity of 47 patients, all patients who can communicate and give consent will be invited for the FGDs. Maximum number of participants is 14 and a minimum is 8 so we expect to conduct 3 FGDs, using the static groups in Rehabilitation comprising of Singles, Married and the Separated/divorced. These Groups have been chosen because they share common problems and are already existing groups in the rehabilitation as Special Groups. From the discussion patients with information

rich material with reference to the Subject matter (addiction and traumatic life events) was be purposively sampled for in-depth interview research.

3.4 Sample size

The population study will comprise of 42 patients.

Just to be sure that there is no over representation of some age groups, 6 patients were selected for in-depth interviews going by the sampling process described below;

3.5 CASE STUDY SAMPLING

Number	Age Range in Male patients	Number
1	18-24	1
2	25-34	1
3	35-44	1
4	45-55	1
5	56-65	1
6	female	1

Given the low number of female patients' turnover in the Rehabilitation centre, where the ratio is usually approximately 10:1 (Male to Female) admissions; only 1 Female were purposively selected for the in-depth interview.

3.6 DATA COLLECTION

Collection of data commenced August 2014 after approval of the proposal by the Kenyatta Hospital Ethics committee.

Focus group discussions were conducted in group sessions room within the rehabilitation center using a FGD guide (See Annex-2) and all discussions were audio recorded.

In-depth interview was conducted in the counseling rooms using an interview guide and audio recorded

3.7 DATA ANALYSIS

The interview from the focus group discussions was transcribed, thematic coded then analyzed using Qualitative data analysis software and presented in summary and direct Quotations

3.8 INCLUSION CRITERIA

1. Those \geq 18 yrs of age
2. Inpatient in the Mathari Drug Treatment and Rehabilitation centre with Substance use disorders.
3. Those who gave consent to participate in the study.
4. Those not mentally disturbed

3.9 EXCLUSION CRITERIA

1. Patients who will not give consent or are Psychotic, violent and had no insight were excluded.

3.10 LIMITATIONS

- Despite assurance of confidentiality, some patients admitted at the Drug Treatment and Rehabilitation Center may decline to participate in the study either willing or due to lack of insight. This may lead to a shortfall in achieving the sample size that the researcher is aiming at.
- Another limitation may be due to substance induced disorders such as amnesia that preceded psychiatric co- morbidity leading to poor identification of prior traumatic events in their life.
- In order to minimize the afore-stated limitations the researcher would employ selection criterions such as the inclusion criteria in order to get a sample size that will be a true representation of the of the subject matter.
- Persons with Substance Use Disorders were generally grouped as opposed to their individualized drug of choice disorders.

3.11 ETHICAL CONSIDERATION

3.11.1 Confidentiality

Due to the sensitive nature of the subject, principles of confidentiality and respect are very important in carrying out this research. Any information given to the study by participants will be treated in strict confidence and no identity will be revealed. Tapes and other filled data collection tools will be kept under lock and key and will be destroyed after research findings have been disseminated. Only the investigator and research assistants will have access to this information. Data collection tools shall be coded and no clients' real names will be used in the study.

3.11.2 Benefits of the study

This study is designed to add value in the management of patients with Substance use disorders with Traumatic life experiences at the Mathari Drug Rehabilitation.

3.11.3 Risks

There was risk of re-traumatizing some of the subjects during the questioning process and also arousing negative feelings such as anxiety and stigmatization. This risk was reduced by ensuring that the patients are subjected to staffs who will have been well trained and experienced counselors in the Drug Treatment and Rehabilitation Centre. No further harm, be it psychological, physical or emotional shall be added to the patient.

3.11.4 Compensation mechanisms

No compensation shall was to participants of the Study.

3.11.5 Voluntarism

Patients volunteered information, no coercion or force was used

CHAPTER FOUR:

4.0 RESEARCH FINDINGS

The perception that Trauma leads to drug abuse in vulnerable individuals and relapse in Persons with Substance Use Disorder is not new. Most major theories of addiction postulate that Trauma plays an important role in increasing drug use and relapse.

In this study a total of 42 respondents were involved in three different focused group discussions and a selected six in an in-depth interview to ascertain whether life traumatic events at different stages in their lives contributed to the condition of substance use disorder. During the focused group discussion which lasted two to two and a half hours each, the respondents reported to have experienced some kind of traumatic life events among other life stressful situations in their lives. Out of the 47 patient only 5 patients who were un willing to give consent did not participate in the study.

4.1 Socio-Demographic Profile of the Respondents

Majority of the respondents, 15 were between the ages of 26 years and 33 years, the other age groups had more or less equal representation. With regards to gender, just as it was anticipated and stated during sampling, the number of male respondents was very high 39 compared to that of the 3 female respondents; the ratio here being; 13:1. Though this seemed biased, the number of the female patients attending rehabilitation (Rehab) is lower than the number of male patients attending rehab at Mathari hospital.

As for whether the respondents were married, single, separated or divorced; most of the respondents 20 were married and 16 were single. The rest were either divorced or separated. It's however important to note that some of the respondents who indicated that they were married, were actually living in separate homes. Majority of the respondents 34 had attained college/ university education. None of the respondents was completely uneducated or lacking formal education. As for the respondents occupations; most of the respondents 23 were formally employed and Majority of the respondents were Christians, affiliated with the protestant churches in Kenya. It is also important to note that most of the respondents participating in the study reported that it was their first time admission to the Rehab.

4.2 Table 1 shows a summary of the above findings.

Socio-Demographic Profile of the Respondents

Table 4. 1: Summary of Socio-Demographic Profile of the Respondents

	Frequency
Gender	
Male	39
Female	3
Age	
18 to 25yrs	6
26-to 33 yrs	15
34 to 41yrs	9
42 to 49 yrs	7
50 yrs & above	4
No Response (Not indicated)	1
Education Background	
Secondary	8
T. college/ university	34
Previous Admissions	
Yes	8
No	34
No of Previous Admissions	
Once due Substance Abuse related issues	4
Twice due to Substance Abuse related issues	1
Patients how have ever relapsed (after 1month or more of sobriety)	4
First admission	33
Total	42

Marital Status	Marital Status
Single	16
Married	20
Separated	4
Divorced	2
Religion	Religion
Catholic	14
Protestant	25
Others	2
No Religion	1
Occupation	Occupation
Student	8
Formal employment	23
Informal employment (casual)	2
Business person	5
Unemployment	4
Total	42

4.3 Types of Traumatic Experience of Addiction

Some respondents reported various traumatic experiences while intoxicated and as a result of the adverse consequences of prolonged substance use, some reported as having experienced Loss of relationships, financial problems, unemployment, homelessness, incarceration, hospitalization, sexual assault, physical assault, accidents, that occurred as a direct result of addiction.

Respondent; “my drinking made me develop a bad relationship with my family and I also had money problems because of unrealistic financial decisions that I made reiterate a 28years male”.

Respondent: “We both take alcohol with my wife and when she got a miscarriage, I first of all fell into a slight depression but recovered.”

Interviewer; continue please,

“ You know, I used to drink daily and one night when we were coming from a drinking spire with a friend we were almost involved in a head on coalition, I jumped out of the car and was hit by a Matatu and got a fracture of my left leg. The healing took too long and I started battling with depression and had suicidal thoughts and also suffered from emotional imbalance...the psychiatrist later diagnosed me with bipolar I disorder and this threw me of balance. As far as I was concerned; this was a very serious mental illness and this lead me to further drinking and depression.

4.4 Initiation of Addictive Behaviour Due To Traumatic life Events

Substance use played a significant role in both the lives of trauma victims as well as in the lives of those who traumatize others. Some Respondent’s associated their substances abuse as a reaction to trauma they experienced in their life, such trauma included, child abuse, neglect, domestic violence and other acts of antisocial behaviour and that both as victims and perpetrators who abused substances experienced increased risk of being involved in further and worsening episodes.

Respondent; as long as I can remember, my step father used to drink at home and physically abuse my mother, reports a 32years old female.

Many individuals with substance use disorders reported a history of childhood abuse. This included, physical, sexual, emotional and psychological trauma. Moreover, many respondents reported that their substance use began during a period of prolonged trauma or just after a traumatic event.

Respondent; “I don’t relate well with my father, as he used to beat me when I did something wrong, I was beaten for any flimsy reason and it affected me so much and this made me start drinking alcohol to date, reiterated a 34 years male”FGD-2 “and I think alcohol use is what made me separate with my wife and this really affected me afterwards”

Some Respondent reported that it was some kind of trauma that made them turn to substance use to sedate and numb the effects of traumatisation. Self-medication in these instances was used to treat the painful memories and feelings associated with adverse traumatic events and situations. To many, substance use was viewed as having been an essential part of their psychological and emotional coping with victimization.

Respondent: I started taking alcohol after the death of wife...The death of my wife was unbearable; I was psychologically affected because every time I would think about the gap she left. Therefore I started taking alcohol at home to help me sleep and to avoid the loneliness

Substance use while victimization is ongoing was also mentioned by the Respondents to have been used to medicate fear and anxiety experienced between episodes of abuse. Substance use after abuse had ended, dulled the symptoms of a trauma reaction. Intrusive thoughts, distressful memories, flashbacks and emotional pain were ‘managed’ temporarily with substance use. Many survivors also used substances to ‘medicate’ sleeplessness and nightmares caused by traumatisation.

*Respondent: In 1998 when I was in high school; I was involved in a road accident together with my classmates; the bus rolled several times and I was the first one to fall out...and in fact we were two who fell out through the window. When it first rolled, I was seeing it as if I was in a dream and then it rolled several times; I still remember it up to now as if it happened yesterday **FGD-2,a 45years male reports.** actually, I started drinking after the accident. For a long time I was bothered by the fact that I almost died leave alone the feeling of being dead that follows me to this day. May be that’s why I drank so much and was always unhappy even if I succeeded in my carrier”*

4.5 Progression to Substance use

Individuals who became intoxicated while continuing in abusive relationships became more vulnerable to further abuse. They also reported episodes of more severe abuse while using substances. Impaired by intoxication, they became less submissive, less vigilant and less able to use their usual coping skills. Intoxicated victims who were actively in abusive relationships, moreover, were unable to attempt to seek self-protective measures about their life.

Respondent; “first, I was quarrelling constantly with my husband and eventually we separated and this really stressed me...so continued to use to avoid boredom though not so much”

Interviewer; “the separation was a serious blow to you; how did you deal with it”.

Respondent: “I didn’t know what to do, so I continued drinking and this made the situation worse but I drank anyway.”

Respondent reported that their abusers used the victim’s lessened responsiveness to justify escalation, violence or more severe forms of violence. Reported also was an increased risk to the victims who used substances and intimate partner violence to effectively implement safety plans was lacking, consequently, they sustained many injuries when they were impaired by substance use.

Respondent “I started abusing drugs and alcohol after I was raped and also to cope with stress of not doing well in school as well as stigmatization and victimisation both at home and in the society. The drugs and alcohol were also readily available and came in handy and rescued my situation”

Interviewer; Please continue

Respondent; I started by smoking bhang and drinking alcohol as soon as I finished my high school. This is because I was subjected to a most humiliating experience (rape) by a friend. We were coming from an outing at night and I wasn’t drunk that much but my friend was. We were friends since way back in high school and I considered him like a big cousin. Unfortunately that day he brutally raped me near our house and beat me in the process! This ordeal really traumatized me and left me psychologically affected. My dad and brother confronted him but he insisted that he didn’t rape me but had sex with me and that I agreed to it, and wasn’t the first time and anyway I had been known to have sex with a number of guys in the estate anyway...that changed everything...my father came back home and beat me up and called me useless and that’s when my drinking became worse as I used to drink to relieve stress and Psychological pressure”.

Some respondents reported that the batterers were less dangerous when intoxicated. This was, however, rarer. However men who were batterer were considered significantly more dangerous when they were using, abusing or dependent upon substances. This was particularly true when alcohol was used by the batterer. The risk of serious injury to the

battered victim was reported to have significantly increased in the abusive men who used alcohol too.

Rationalization of the abuse and denial of its significance as a problem which was also reported. This dynamic was also seen in individuals who perpetrated sexual assault. as a domestic violence and the risk of sexual assault incidents increased as the sexual perpetrators were using substances.

*Respondent: "I can't say that anything happened to me during my childhood or adulthood but what I can say **accelerated** the drinking to where I am now is when I got married. My marriage was satisfactory for the first five years and after that it became turbulent. There was constant conflict between me and my wife and regardless of how many times we tried to solve the issues, it would change the situation for may be a year and the problem would crop up again" a 39years old male reports.*

Interviewer: "would you please mind sharing more".

Respondent: "ok, we were all alone in the house and our kids were in boarding school and I had taken some alcohol but I wouldn't say that I was drunk, I could sense some tension between the two of us and so I initiated the discussion and asked her to tell me what was really the problem and so she told me that her father who was a substance abuser used to sexually molest her while she as a child and it was still continuing and if he got her in a dark corner he would do it again and that is the reason her father didn't really like me because according to him I snatched another wife from him...I couldn't believe it but she insisted that it was the truth and that is why when she met me it was like she was running away from her father and not that she really wanted me and that to her I was like a refuge and not that she had found someone she could love and that was why we were having all those problems in our marriage"

Again some respondents reported that as children of addicts and alcoholics, they became vulnerable to emotional and psychological neglect that interfered with their normal childhood development. Such interrupted development led to involvement in other traumatizing relationships later in their lives. Additionally, prolonged parental addiction exposed them to

many high risk situations while they were still dependent upon their parents. Some of the risks included traumatisation through poverty, poor nutrition, school failure, poor peer relationships, inadequate socialization and the lack of physical safety. The appropriate development of skills for intimacy, problem-solving and emotional management necessary to be safe and successful later in life was also inadequate so they said

Respondent “I started using alcohol to escape from problems, to gain courage to defend my mother from my step father and also be able to cope with death of my sibling”.

Interviewer: please continue.

Respondent; “My mother got married to this person; my step dad who was very mean and abusive. He would drink at home, beat her up and mistreat her and therefore I always found myself as young as I can remember intervening to protect her from his cruelty...I guess this was too much responsibility for a teenager to handle and so I started drinking but it was just a little because I needed to be courageous...moreover, being the first born; I helped my mother to cope with the death of our younger sister but I wasn't coping so well myself. After the burial; I started indulging more into alcohol. My mother even noticed but I always thought that she was overreacting and she needed to calm down and this made our relationship very problematic,” 32 years female reports.

4.6 Relapse to Addiction

Some informants also said that they relapsed whenever they had extra money to spend on the alcohol, while others cited depressions, Stress, family discord as reasons for relapse.

Respondent; “Yes, I was trying to stop but the most I had managed was 3 to 5 days and that is how I ended up here”. A 28 old male went on to say that, “Sometimes I would think about it and I would tell my mother that I had stopped and then I would stay for a few days then the urge would be too strong and it would become too hard to control and so I would go back and drink and then feel very guilty because I had

promised that I wouldn't drink. "Again as long as I had some little money, I would go to the brewer as the appetite for drinking was totally uncontrollable."

Respondent: I tried stopping to drink and I managed to stop for two and a half years and then I am not really sure what happened but I thinks it was due to pressure from friends, that I relapsed"

Most of the respondents gave more of social factors as to the cause of relapse and others were not sure of what caused them to relapse again and again. Of course this does not mean that no respondent had linked their relapse to a traumatic life event, it only means that majority of the respondents didn't. The most emergent theme here was peer pressure as reasons for relapse. But despite peer pressure being the most emergent theme, reported by the respondents as the cause of relapse, other factors usually associated with relapse cannot be ignored.

4.7 Negative Consequences Experienced By Respondents Due To Addiction

Though not part of the overall or specific objectives of the study, the researcher enquired if at all the respondents had experienced any negative effects of indulging in alcohol and Drug abuse.

Many varied responses were given by the respondents with regards to their negative experiences resulting from their alcohol or/and Drug abuse with no major emergent theme.

Respondent; "my alcoholism seems to have affected my memory and this is because I keep forgetting people's names and have lost many phones, I am also suffering from a terminal disease which according to me came as a result of my addiction,

But what affected me most was the car accident that left me with a fractured leg and my wife whom also used to drink had a miscarriage, i started battling with depression and had suicidal thoughts. I also suffered from emotional imbalance...the psychiatrist later diagnosed me with bipolar 1 disorder and this threw me of balance. As far as I was concerned; this is a very serious mental illness and this lead further in to depression and drinking"

Respondent: "I was involved in a motorcycle accident and I got physical injuries reports a 29 years male"

Interviewer: "what happened, were you riding or you were a passenger"?

Respondent: "I was from drinking spree and boarded a "boda boda" motorcycle and we crashed...I think the boda boda" rider was also drunk".

Respondent: " Alcoholism as you may call it made me have poor health as i was drinking most of the time and my appetite was very poor up to now, but these appetite drugs have helped me quite a lot, I just drunk more and more alcohol and it started to even affect my work and i was interdicted because there was a time I went to work very drank and while using a machine and due to lack of concentration, I got hands and chest injuries. I was rushed to hospital and admitted for a few days and discharged, report a 37 years male"

4.7 Some of the Interventions Strategies Undertaken To Help With Addiction

Majority of the respondent indicated that being at the rehabilitation centre was a positive step taken to seek help and hoped they would leave the hospital cured. A considerable number of the respondents also indicated that it has been a personal struggle for them to stop their alcohol or substance use and abuse and some of the strategies they had tried before being admitted to the rehabilitation centre were for example attending Alcoholic Anonymous meetings but without success, some had tried to engage in more positive activities instead of drinking but they still failed. One of the respondents had also tried to be more spiritual but still relapsed. A few respondents had tried to see a psychologist or psychiatrist but they still struggled with their addiction they said.

Respondent; "I tried to actually overwork myself in order to stop the addiction but that didn't work because one addiction doesn't get rid of another addiction, hence i eventually found myself at the Drug rehabilitation centre"

CHAPTER 5:

5.0 DISCUSSIONS, SUMMARY AND RECOMMENDATIONS

Majority of the respondents, 15 were between the 26 to 33 years. There are more male respondent 39 compared 3female respondents. Though this seemed biased, the number of the female patients attending rehab has always been lower than the number of male patients. This concurring with Mugisha, Arinatwe and Hagembe (2003) who reported in their survey done in Nairobi Urban Slum in 2003 that adolescent males are more than 20 times more likely to engage in drugs, and 5 times more likely to consume alcohol than girls. In addition, being out-of-school increases the risk of alcohol and drug abuse and this is because of the societal expectation, division of labor, and nature of upbringing which is said to be different for males and females.

Most of the respondents 20 were married. 2 and 4 respondents openly admitted that they were separated or divorced respectively with their spouses. The respondents who were single 16 were the second majority in this study; this could be due to early Substance abuse initiation as Substance abuse is reported to have been a major cause of marital discord and poor interpersonal relationships. Again majority of the respondent reported having started abusing Alcohol / drugs either in secondary or college and this could have interfered with forming of a lasting intimacy relationship among the respondents.

The study also found out that most of the respondents 34 had attained the highest level of education (college/ university and most of the respondent were from the Christian faith, affiliation with the protestant churches. This is not surprising since other religions like Islamic do not condone Substance abuse.

None of the respondents were completely uneducated or lacking formal education. Again majority of the respondents 23 were formally employed that means they could afford to pay for treatment as opposed to the unemployed.

On the contrary as reported by NACADA 2007 survey, the Levels of abuse were worsened by easy access to alcohol and other drugs (both licit and illicit) as well as a permissive society and that, one in every 10 alcohol or drug users seek help for chemical dependence related problems, but majority do not even know such help existed (NACADA 2007). Moreover, the ability of the affected persons to afford the drug dependence treatment was in doubt owing to their inaccessibility and affordability.

The Study also established a number of traumatic life events that the respondents had gone through from their adolescence, early adulthood and mid adulthood. One such traumatic life event was for example experiencing and dealing with the death of a loved one's or significant other.

With regards to whether these traumatic life events led to initiation of addictive behaviour among the patients at the MHDR; the study showed that there was association between traumatic experiences and Substance Abuse among the respondent and some of the trauma were reported as having been experienced earlier in their lives; of course other mediating environmental factors like stressful situation and peer pressure also played a role in Substance Abuse.

This study outcome concurred to several other studies conducted in the United States of America that also found out that substance use and abuse developed following trauma exposure (25% to 76%) or the onset of post traumatic stress disorder (14% to 59%) in a high proportion of teens with substance abuse disorders. Meaning that; there is growing evidence that has linked traumatic life events that have caused chronic stress to individual as a major predisposing factor for alcohol and drug use and abuse.

Majority of the respondent according to this study started alcohol consumption after exposure to a significant trauma. The findings showed that drinking to cope with negative affect and drinking for enjoyment at baseline predicted greater alcohol consumption shortly after the fateful trauma of rape incidences, loss of loved ones, loss of a job or interdiction and fatal road accidents. The study therefore adds to evidence that drinking motives have an enduring and robust influence on alcohol-related behaviours, even after many years, Bennett et al.(1999)

This observation aids in explaining the relationship between proximity to fateful trauma, drinking motives and drinking, among vulnerable individuals and such drinking motives may contribute to the onset of, or relapse to, an alcohol use disorder later. Bennett et al.(1999) Jackson and Sher, (2005) Beseler et a (2008)

Another Study also done in New-York reported that drinking motives were significantly associated with post-09/11/2001 bombing where alcohol consumption was used as coping with negative affect and drinking for enjoyment and others were seen as alteration or management of an individual's internal state (i.e., attempts to increase positive feelings or

reduce negative ones). In this sense, the two drinking motives that significantly predicted post-09/11/01 drinking in the study can be considered internalizing motives, Cox and Klinger, (1990), Cooper, (1994). In contrast, drinking motives such as drinking to gain social acceptance or for social conformity were insignificant.

According to (Tice, et al 2001) experiencing trauma or chronic stress inducing life events, increases the risk of developing substance abuse disorders and vice versa. This is because high emotional stress has been associated with loss of control over impulses and inability to inhibit inappropriate behaviours and to delay gratification. Therefore adolescents and young adults who are at risk of substance use and abuse, are known first of all to have decreased executive functioning, low behavioural and emotional control, poor decision making and addiction risk. Hence this is the age at which most addicts start their alcohol or Drug abuse.

This fact was also noted in this study conducted at Mathari Hospital Drug Treatment and Rehabilitation (Rehab) Centre, which showered that majority of the respondents with substance use disorders at the rehab 15 were between 26 to 34 years old and most of them had started using alcohol and illicit drugs in secondary school and college after traumatic experiences, while intoxicated and as a result of the adverse consequences of prolonged substance use. Respondent expressed Loss of relationships, financial problems, interdiction, sexual assault, physical assault, accidents and terminal illnesses, unwanted pregnancies, miscarriages as some of the traumas they went through.

With regards to progression into addiction in relation to experiencing traumatic life events; as previously mentioned, exposure to traumatic life events increases the chances that one could be an addict especially by reducing inhibition and decreasing executive functioning of the brain leading to poor decision making Tice et al (2001); now, under progression in to addiction, we look at an individual who has already started substance abuse. This individual probably suffers from seriously diminished capacity to make the right decision because he/she is already intoxicated him/herself. This individual will contain even less inhibition to pleasure seeking activities especially when stressed.

In this study some respondent both male and females with substance use disorders reported history of childhood abuse. This included physical, sexual, emotional and psychological trauma. Also, some respondent reported that their substance use began during a period of prolonged trauma or just after a traumatic event. *I drank to numb the painful feelings after losing my wife.* Some respondent turned to substance use to sedate the effects of

traumatization. They reported using substances abuse as means of Self-medication in an effort to relieve painful memories and feelings which were associated with adverse traumatic events and situations. For many of the respondent, substance use was viewed as having been an essential part of their psychological and emotional coping with victimization.

Substance use was also used to relieve the fear and anxiety experienced between episodes of abuse, and after a terrific road accident to minimize the symptoms of trauma, distressful memories, sleeplessness and emotional pain.

Concurring with this study is a Study conducted in USA where a sample of adult drinkers originally living about 12 miles from lower Manhattan following the a terrorist attack of the Twin towers and the findings showed that drinking to cope with negative affect and drinking for enjoyment at baseline predicted greater alcohol consumption shortly after the fateful trauma of the 09/11/01 in the united State of America. The Alcohol dependence problem was diagnosed using of DSM-IV. This observation showered that there was some relationship between trauma and drinking among vulnerable individuals whose drinking behaviour may eventually contribute to the onset of Substance use disorder and relapse.

However the respondents in this Study did not associate relapse to traumatic life events they had experienced but rather attributed their relapses into addiction to peer pressure, bad company and having access to attain the Alcohol/drugs, these findings could be justifiable because the stress allostasis concepts helps to explain how neuro- adaptations in reward, learning and stress pathways enhance craving, loss of control and compulsion. Meaning that because the body has already adapted to the use and gratification-which is the pleasure it gets from the Alcohol/drug use, then this in itself becomes a strong enough reason to continue the substance use and abuse. Another explanation that leads to chronic addiction is the fear of Alcohol/ drug withdrawal symptoms by the addicted individual. Robinson & Berridge, (2003).

5.1 Conclusions

In conclusion, the results suggest that drinking motives constitute an important and enduring influence on drinking behaviour. The findings suggest that drinking motives should be assessed when evaluating the mental health needs of individuals in close proximity to traumatic such as sexual abuse. Since traumatic events will continue to occur, understanding how drinking motives lead to increased drinking after trauma can assist with future Treatment planning and may lead to a general improvement in understanding the etiology of heavy drinking , alcohol use disorders and Trauma.

The Study concludes that indeed traumatic life events do have a role in the process of substance abuse particularly in the initiation and progression stages. As for the relapse stage of addiction in the participants, contrary to majority of the studies, traumatic life events didn't really influence the outcome of relapse into addiction.

5.2 Recommendations

Since it has always been a fact that prevention is better than cure, some cases of individuals turning to drugs as a means of reprieve from their traumatic life experiences can be averted if the right actions are taken early enough. Some of the strategies that should looked into and implemented are:

- ✚ Therapist working in Drug Treatment and Rehabilitation Centers should be trained on how to screen and assess trauma among persons with substance use disorder.
- ✚ Therapists and counselors can and should develop skills to provide a comprehensive and integrated treatment approach for patient exhibiting trauma and predisposed to drug and alcohol use
- ✚ Treatment should be encourage early particularly during the initiation stages before any progression into further addiction. This of course will involve all stakeholders including parents, relatives, teachers etc being able to tell if there are noticeable changes in behavior that may imply the adolescent, teenager or adult has started to use drugs or alcohol.

5.3 Suggestions for Further Studies

The socio-demographic data from the study showed that there was a disparity in the number of male to female patients attending rehabilitation centre and in fact the ratio of male to female patients in this particular study was; 13:1. This clearly made the data quite biased because it mostly came from one gender as opposed to a more gender balanced research population. The question here then becomes, why is there this huge difference in the number of female patients as opposed to the male patients, does it mean that women do not engage in use and abuse of alcohol and drugs or does it simply mean that they don't seek help for it? Are women aware that they can seek help at the facility? A study should be done to determine the factors as to why this is the situation at the Mathari Hospital Rehabilitation Centre and more so to determine how they can reach out to more women who are addicts and need to be assisted.

REFERENCES

1. Neuroscience of psychoactive substance use and dependence: World Health Organization (WHO) 2004
2. A survey of Alcohol and Drug Addiction treatment and Rehabilitation facilities in Kenya. NACADA; 2007
3. Lexicon of Alcohol and drug terms published by the World Health Organization
4. Diagnostic and Statistical Manual of Mental disorders; 5th edition, Washington DC, American Psychiatric Association, 2013
5. Reggie, D.A., Farmer, M. E., Rae, D. S. Comorbidity of mental disorders with alcohol and other drug abuse: results from the Epidemiological Catchment Area Study. *Journal of the American Medical Association*. 1990
6. Kessler, R.C. The Epidemiology of Dual Diagnosis. *Biol. Psychiatry* .2004 Nov
7. Kessler, R.C., Crum R. M., Warner L.A., et al. Lifetime concurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorder in the National Comorbidity Survey 1997.
8. Breslau, N. Psychiatric comorbidity of smoking and nicotine dependence. *Behaviour genetics*. 1995
9. American Group Psychotherapy Association 2004.
10. Foa, E. & Meadows, E. (1997) psychosocial treatments for posttraumatic stress disorder: A critical review.
11. Foy, D. *Introduction to Group Interventions for Trauma Survivors*. Unpublished manuscript.
12. Goodman, M. & Weiss, D. (2000) Initiating, screening, and maintaining psychotherapy groups for traumatized patients. In R. Klein and V. Schermer (Eds.) *Group Psychotherapy for Psychological Trauma*. New York:
13. www.samhsa.gov 1-800-662-HELPCSAT National Helpline 1-800-662
14. Kessler RC. The Epidemiology of Psychiatric Comorbidity. In: Tsuang M, Tohen M, Zahner G, editors. *Text book of psychiatric epidemiology*. 1st ed. New York: Wiley; 1995
15. Kokkevi A, Stefanis K. Substance use and psychiatry co-morbidity. *Comprehensive psychiatry* 1995 June 26;36(5)
16. Keane TM, Gerardi RJ, Lyons JA, Wolfe J. The interrelationship of substance abuse and posttraumatic stress disorder.

17. Epidemiological and clinical considerations. *Recent Dev. Alcohol.* 1988 Ndeti DM, Kathuku DM, Othieno CJ, Mburu JM, Kigamwa D, Kang'ethe R, et al. *Economic-Social*
18. TP, Holt LJ. PTSD symptom clusters are differentially related to substance use among community women exposed to intimate partner violence. *J Traumatic Stress.* 2008
19. DeBellis M. Developmental traumatology: a contributory mechanism for alcohol and substance use disorders. *Psychoneuroendocrinology.* 2002
20. KT, Dansky BS, Sonne SC, Saladin ME. Posttraumatic stress disorder and cocaine dependence. Order of onset. *Am J Addict.* 1998
21. Scherrer JF, Xian H, Lyons MJ, et al. Posttraumatic stress disorder; combat exposure; and nicotine dependence, alcohol dependence, and major depression in male twins. *Comp. Psychiatry.* 2008
22. Brady KT, Dansky BS, Back SE, Foa EB, Carroll KM. Exposure therapy in the treatment of PTSD among cocaine-dependent individuals: Preliminary findings. *Journal of Substance Abuse Treatment.*
23. Brady KT, Dansky BS, Sonne SC, Saladin ME. Posttraumatic stress disorder and cocaine dependence. *American Journal on Addictions.*
24. Brady KT, Killeen T, Saladin ME, Dansky B, Becker S. Comorbid substance abuse and posttraumatic stress disorder: Characteristics of women in treatment. *American Journal on Addictions.* 1994
25. Breslau N, Davis G, Andreski P, Peterson E, Schultz L. Sex differences in posttraumatic stress disorder. *Archives of General Psychiatry.* 1997
26. Brown PJ, Wolfe J. Substance abuse and post-traumatic stress disorder comorbidity. *Drug and Alcohol Dependence.* 1994
27. Calkins SD. Origins and outcomes of individual differences in emotion regulation. In N. A. Fox (Ed.) *The development of emotion regulation. Monographs of the society for research in child development; Serial.*
28. Chilcoat HD, Breslau N. Investigations of causal pathways between PTSD and drug use disorders. *Addictive Behaviors.* 1998
29. Chilcoat HD, Breslau N. Posttraumatic stress disorder and drug disorders: Testing causal pathways. *Archives of General Psychiatry.* 1998
30. Cicchetti D, Ganiban J, Barnett D. The development of emotion regulation and

- dysregulation. New York: Cambridge University Press; 1991. Contributions from the study of high risk populations to understanding the development of emotion regulation. In J. Garber, & K. Dodge (Eds.)
31. Cloitre M, Scarvalone P, Difede J. Posttraumatic stress disorder, self and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress*. 1997
 32. Cole P, Putnam FW. Effect of incest on self and social functioning: A developmental psychopathology perspective. *Journal of Consulting and Clinical Psychology*. 1992
 33. Cottler LB, Nishith P, Compton W. Gender differences in risk factors for trauma exposure and post-traumatic stress disorder among inner-city drug abusers in and out of treatment. *Comprehensive Psychiatry*. 2001
 34. Crick NR, Dodge KA. A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*. 1994
 35. Dansky BS, Brady KT, Saladin ME. Untreated symptoms of PTSD among cocaine-dependent individuals: Changes over time. *Journal of Substance Abuse Treatment*. 1998
 36. Dansky BS, Saladin ME, Brady KT, Kilpatrick DG, Resnick HS. Prevalence of victimization and posttraumatic stress disorder among women with substance use disorders: Comparison of telephone and in-person assessment samples. *The International Journal of the Addictions*. 1995
 37. De Bellis MD. Developmental traumatology: A contributory mechanism for alcohol and substance use disorders. *Psychoneuroendocrinology*. 2002
 38. Fullilove MT, Fullilove RE, Smith M, Winkler K, Michael C, Panzer PG, et al. Violence, trauma and posttraumatic stress disorder among women drug users. *Journal of Traumatic Stress*. 1993
 39. Herman JL. Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*. 1992
 40. Hien DA, Nunes EV, Levin FB. Violence, psychiatric comorbidity and gender: Predictors of outcome in methadone patients. Presented at the 57th Annual College on Problems of Drug Dependence; Arizona. 1995.
 41. Hien DA, Scheier J. Short term predictors of outcome for drug-abusing women in deter: A follow up study. *Journal of Substance Abuse Treatment*
 42. Horowitz HA, Overton WF, Rosenstein D, Steidl JH. Comorbid adolescent substance

- abuse: A maladaptive pattern on self-regulation. *Adolescent Psychiatry: Developmental and Clinical Studies*.
43. Horwitz AV, Widom CS, McLaughlin J, White HR. The impact of childhood abuse and neglect on adult mental health: A prospective study. *Journal of Health*
 44. Hatzinger M, et al. Hypothalamic-pituitary-adrenocortical (HPA) activity in kindergarten children: importance of gender and associations with behavioral/emotional difficulties. *J. Psychiatry. Res.* 2007
 45. Arnsten AFT, Goldman-Rakic PS. Noise stress impairs prefrontal cortical cognitive function in monkeys: Evidence for a hyperdopaminergic mechanism. *Arch. Gen. Psychiatry.* 1998
 46. Li CS, Sinha R. Inhibitory control and emotional stress regulation: Neuroimaging evidence for frontal-limbic dysfunction in psycho-stimulant addiction. *Neurosci. Biobehav. Rev.* 2008
 47. Kendall, Josh. "How Child Abuse and Neglect Damage the Brain." *The Boston Globe*, 2002.
 48. Mukerjee, Madhusree. Hidden Scars: "Sexual and Other Abuse May Alter a Brain Region." *Scientific American* (1995).
 49. Bremner, J. Douglas, M.D. *Does Stress Damage the Brain: Understanding Trauma Related Disorders from a Neurological Perspective?* W.W. Norton & Company, 2002.
 50. Kirmayer, Laurence J., Robert Lemelson, and Mark Barad, eds. *Understanding Trauma: Integrating Biological, Clinical, and Cultural Perspectives*. Reprint ed. Cambridge University Press, 2008.
 51. Science Daily. "Low Levels of Neurotransmitter Serotonin May Perpetuate Child Abuse Across Generations." *ScienceDaily*, 2006.
 52. Perry, Bruce D., M.D., and Ph.D. "Neurobiological Sequelae of Childhood Trauma: Post-traumatic Stress Disorders in Children." *Child Trauma Academy*. Middleton-Moz, Jane. *Children of Trauma: Rediscovering Your Discarded Self*. HCI, 1989.
 53. Herman, Judith. *Trauma and Recovery*. Basic Books, 1992.
 54. Giaconia, R., Reinherz, H., Paradis, A. & Stashwick, C., 2003. Comorbidity of Substance Use Disorders & PTSD in Adolescents. In: *Trauma & Substance Abuse: Causes, Consequences & Treatment of Cormobid Disorders*. Washington, DC.: American Psychological Association, pp. 227-242.
 55. Gibbs, R., 2007. *Analyzing Qualitative Data*. Thousand Oaks: CA: Sage Publications.

56. Miles, M. & Huberman, A., 1994. *Qualitative Data Analysis (2nd Edition)*. Thousand Oaks: CA: Sage Publications.
57. Robinson, T. & Berridge, K., 2003. Addiction Annual Review. *Psychology*, Pub-Med:12185211].
58. Saladin, M. et al., 2003. PTSD Symptom Severity as a Predictor of elicited drug craving in victims of violent crime. *addict behaviour*, pp. 28(9), 1611-29.
59. Sunha, R., 2001. How does stress increase risk of drug abuse & relapse?. *Psychopharmacology (Berl)*, [Pub-Med.
60. Tice, D., Bratslavsky, E. & Baumeister, R., 2001. Emotional Distress Regulation takes precedence over Impulse Control: If you feel bad, do it!. *J.Per.Soc.Psychology*, (Pub Med-12700686).
61. Frederick Fredrick Mugisha^a, Jacqueline Arinaitwe-Mugisha^b, Bilhah O.N Hagembe 2003. Alcohol, substance and drug use among urban slum adolescents in Nairobi, Kenya
62. American Psychological Association. Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family. Washington, DC: American Psychological Association; 2002.
63. Mills KL, Teesson M, Ross J, Peters L. Trauma, PTSD, and substance use disorders: findings from the Australian National Survey of Mental Health and Well-Being. *Am J . Schneider R, Baumrind N, Kimerling R. Exposure to child abuse and risk for mental health problems in women. Violence Vict. 2007*
64. Weber K, Rockstroh B, Borgelt J, et al. Stress load during childhood affects psychopathology in psychiatric patients. *BMC Psychiatry. 2008 Powers A, Ressler KJ, Bradley RG. The protective role of friendship on the effects of childhood abuse and depression. Depress Anxiety. 2009Garnefski N, Diekstra RF. Child sexual abuse and emotional and behavioral problems in adolescence: gender differences. J Am Acad Child Adolesc Psychiatry. 1997*
65. Cox WM, Klinger E. A motivational model of alcohol use. *J Abnorm Psychol. 1988*
66. Cox WM, Klinger E. Incentive motivation, affective change and alcohol use: a model. In: Cox WM, editor. *Why people drink: parameters of alcohol as a reinforcer. Gardner Press; New York: 1990.*

APPENDICES

INFORMED CONSENT EXPLANATION

THE ROLE OF TRAUMATIC LIFE EVENTS IN THE ADDICTION PROCESS AMONG PATIENTS AT THE MATHARI DRUG TREATMENT AND REHABILITATION CENTRE

Appendix i

My name is Matilda Mghoi Omollo, a Master of Science in Clinical Psychology student at the University Of Nairobi Department Of Psychiatry. I am carrying out a study to find out whether there is a relationship between Traumatic Life Events and the process of addiction among patients at the Mathari Drug Rehabilitation Centre.

I am doing this study under the Supervision of Dr Muthoni Mathai and Dr. Lincoln I. Khasakhala both of who are lecturers at the University of Nairobi, Department of Psychiatry.

I wish to request you to participate in this study by completing a short questionnaire and an interview. The Questions are in two sections and the first part asks about your demographic data and any previous admission to hospital related to Drug Use. The interview discussion will be on Traumatic Events in your life that is linked to the addiction process. The third part will be on the selected few on an individual in-depth interview.

In case emotions rise, counselling services will be provided as need be. Confidentiality will be maintained and no names will be required on the filled questionnaires and on the recorded interviews.

Participation is voluntary and if you decide not to participate there will not be any negative consequences. You may also withdraw at any time in the course of completing the questionnaire or interview.

The researcher will seek approval from the Kenyatta National Hospital Research and ethical Committee and will also get a research permit from the Ministry of Health. Name of the Research Subject.....Signature.....

Appendix ii

INFORMED CONSENT

The discussion and interview will not include anybody’s name or any information that might identify you personally. This is the way we will keep what you say confidential. Your participation in the interview is voluntary and you can stop at any time or refuse to answer any particular question. The discussion will last 30 to 45 minutes. Do you have any questions? [ANSWER QUESTIONS] If no, who will like to start?

Questionnaire

Serial number_____

Demographic Data of the patient

1. Age in years_____

2. D.O.A

3. IPNO.

4. Sex Male [] Female[]

5. Marital status.

Single [] Married []

Separated [] Divorced []

Widowed []

7. Highest level of education.

- No formal education [] Primary []
 Secondary [] Tertiary (College/University []

. Occupation

- . Student [] Formal employment []
 Informal employment [] Business person []
 Unemployed [] others []

specify_____

8. Religion

- Catholic [] Protestant []
 Muslim [] Others []

Specify _____

SECTION 2:

9. Previous admissions in Drug and Alcohol rehabilitation center (Yes) [] (No) []

If Yes,

Number of previous admissions and reason for admission

- 1 [] 2 []

>2 { }

Relapse,others specify.....

Duration of Previous admissions

	1 st	2 nd	3rd	4th Admission
--	-----------------	-----------------	-----	---------------

	admission	Admission	Admission	
1 month				
2 month				
3 month				

Reason for admission.....

Diagnosis on admission.....

Treatments (pharmacological).....

Section 3:

Appendix iii

INTRODUCING TO THE DISCUSSION

Focused group guide;

Welcome to our group discussion today. My name is -----.

Let us talk about how you started to use drugs-----progression into habit then dependence.

Let us talk about your attempts to stop using drugs and how you have relapsed into re-using the drugs over and over-----

Let us now talk about the negative consequences you have had as a result of using drugs (physical, psychological, family, economic-occupation, academic achievement) -----

Let us talk about life experiences that you think have contributed to your addictive behaviour

Of All these Traumatic life events you have mentioned,

What leads to initiation.....

What leads to Progression.....

What leads to Relapse.....

Short prompt/probes

- Can you describe these Traumatic life experiences in, childhood

.....
Adolescence.....

Early
Adulthood.....

Mid
adulthood.....

Use of alcohol and Drug to relieve distress?

.....

To fill
emptiness.....

Major losses in your life, to include, death of significant others, loss of properties, Job,
Separation or divorce?

.....

**Any life threatening events, accident, i.e.; involved or experienced, Terminal illness by
self or significant
others.....**

Physical
injuries.....

IN-DEPTH INDIVIDUAL INTERVIEW

In-depth Guide;

Welcome to today’s session...

**Let us talk about how those significant life negative experience led to your addiction
initiation and progression (one by one)**

.....

**What are some of the effects you have experienced during your active addiction to
alcohol and/or drugs?**

Physical.....
.....

Psychological
.....

Social

.....

Spiritual

.....

What are some of the intervention taken to overcome the addiction?

Individual.....

Others, Specify.....

Appendix:vi

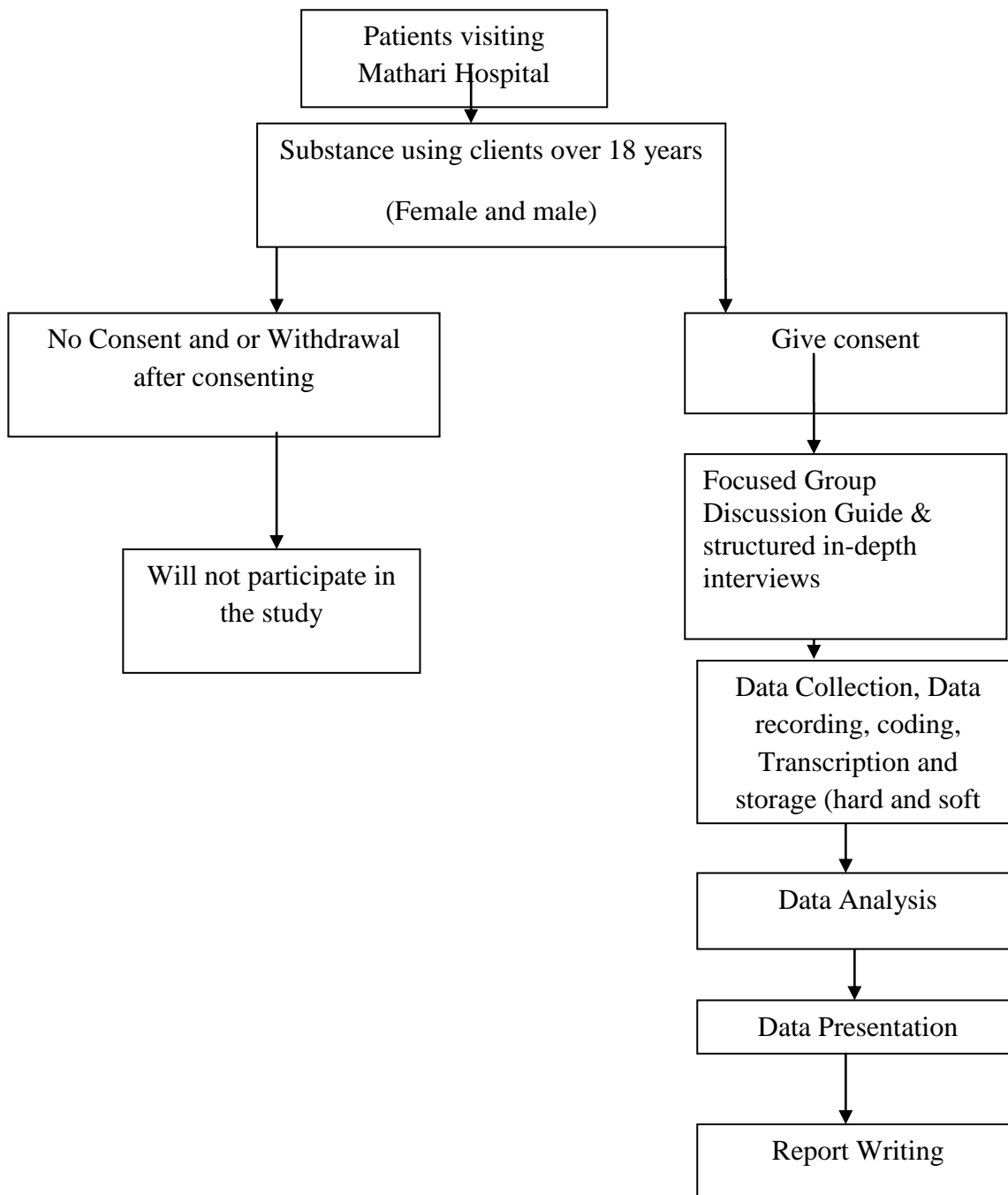
SAMPLE BUDGET

Research funds will be sourced from the Kenyatta National Hospital Research Committee. However, should these funds be unavailable, alternative funding shall be sought by the investigator. Here below is the budget estimate for the exercise.

Components	Unit of Measure	Duration/Number	Cost (KEs)	Total
Transcription cost per interview	36 questionnaires'	36 interviews	3000 per questionnaires	108,000
	6 questionnaires	6 questionnaires	3000 per questionnaire	18,000
Stationeries				
Questionnaires	36	2 pages	10 per page	720
Sugar, Tea leaves and bread	36 patients	All Per Week for 4 weeks	250/patient	9000
Training of 2 Recruits (2 Psychiatric Nurses/counselors)			3500/pax	70000
Final report printing and binding	3		3	20,000
KNH Ethic fees	1		3000	3000
Data analysis			50,000	50,000
Contingencies			5% of the approved budget	10,786
Total				226506

Appendix iv

FLOW CHART



Appendix v

WORKPLAN

	MAR	APRIL	MAY	JUNE	JULY	AUGUST
PROPOSAL WRITING						
PROPOSAL DEFENDING						
PRESENTING AT THE ETHICS						
DATA COLLECTION						
DATA ANALYSIS						
REPORT WRITING						
BINDING THE FINAL PROJEC						