

THE FAMILY BURDEN OF CARE FOR PERSONS WITH SUBSTANCE USE DISORDERS: A CASE OF REHABILITATION CENTERS IN NAIROBI COUNTY

KABIRA GEORGE GITHAMBO

H56/67926/2013

A Research Thesis Presented As Part Fulfillment of the Requirement For The Degree Of Master of Science In Clinical Psychology In The Department of Psychiatry, University Of Nairobi

©2019

i

DECLARATION

I hereby declare that the work contained in this thesis is my original work and has not been presented in any other university or institution of higher learning for examination

Signature......Date.....

KABIRA GEORGE GITHAMBO

H56/67926/2013

This thesis is presented for examination with my approval as university supervisor.

PROFFESOR MARY WANGARI KURIA LECTURER DEPARTMENT OF PSYCHIATRY UNIVERSITY OF NAIROBI

Signature......Date.....

DR ANN MBWAYO LECTURER DEPARTMENT OF PSYCHIATRY UNIVERSITY OF NAIROBI

Signature..... Date.....

DEDICATION

I dedicate this thesis to my loving mother, for always being with me throughout my academic journey. All that I am, I owe to you mum. Thank You.

I also dedicate this thesis to my family for their constant encouragement and for being patient enough to see me go through my academic struggle thus realizing my long

ACKNOWLEDGEMENT

A special thanks to my supervisors, for the guidance, insight and encouragement in the writing and compilation of this case study. Your invaluable support and patience throughout this journey has been real and is appreciated from the bottom of my heart. To my classmates and friends without whose interest and co-operation I could not have produced this study, I wish to thank them for supporting this initiative and affording me their time and sharing their experiences.

Finally, I thank my family for instilling in me unquestionable values and morals, thank you for your love, guidance and for always believing in me throughout the year.

TABLE OF CONTENTS

DECLARATIONii
DEDICATIONiii
ACKNOWLEDGEMENTiv
LIST OF TABLESx
LIST OF FIGURES
OPERATIONAL DEFINITIONS
ABSTRACTxiii
CHAPTER ONE
INTRODUCTION1
1.1. Introduction
1.2. Background of the study1
1.3. Problem statement
1.4. Research Questions
1.5. Objectives
1.5.1. General Objectives
1.5.2. Specific objectives
1.6. Justification
1.7. Significance of the study6
1.8. Scope and Limitation of the Study7
CHAPTER TWO

LITERATURE REVIEW	8
2.1 Introduction	8
2.2 The burden of the family caring persons with Substance Use disorder	8
2.3. Role of Family in Caring for persons with Substance User disorder	0
2.4. Empirical review	2
2.4.1. Economic Burden	2
2.4.2. Social Burden14	4
2.4.3. Psychological Burden	5
2.5. Theoretical framework1	7
2.5.1. Family Dynamics of Caregiver1	7
2.5.2. Family Focused Therapy	8
2.6. Conceptual Framework	0
2.6.1. Economic Burden	1
2.6.2. Social Burden	2
2.6.3. Psychological Burden	2
2.7. History of drug rehabilitations	2
CHAPTER THREE	5
RESEARCH METHODOLOGY2	5
3.1. Study design	5
3.2. Variables	5

3.3 Research site
3.4 Target Population
3.4.1. Inclusion criteria
3.4.2. Exclusion criteria
3.4.3. Recruitment Procedure
3.5 Sampling and sample size27
3.6. Data Collection Instruments
3.6.1. Socio-Demographic Questionnaire
3.6.2. General Health Questionnaire Version 12
3.6.3. Caregiver Burden Scale
3.7. Data Collection Procedure
3.8. Data Analysis and Presentation
3.9. Ethics Statement
3.9.1. Informed Consent Form
3.9.2. Confidentiality
3.9.3. Risks
3.9.4. Benefits
CHAPTER FOUR
RESULTS
4.0 Introduction

4.1	Response Rate
4.2	Respondents' Socio Demographic Profiles33
4.3	Economic Burden On Caregivers
4.3.1	Cost of SUD Treatment Impact on Finances35
4.3.2	Cost of Caregiving & Impact on Finances
4.3.3 Econo	Association between socio-demographic factors and Respondents views on omic ` Burden
4.3.4	Association and Correlation Between Socio-Demographic Factors and
Respo	ondents Views On the Level of Impact SUD Treatment Had On the Family's
Econo	omic Burden
4.4	Social Burden On Caregivers40
4.5	Caregivers Psychological Burden42
4.5.1 the Ge	Determining Respondents at Risk of Developing Psychological Problems using eneral Health Questionnaire
4.5.2	Association & Correlation between Socio-Demographic Factors & Respondents
Psych	ological Health43
4.6	Care Giver Burden Scale
4.6.1	Care Giver Burden Scores & Interpretation44
4.6.2	Prevalence of Caregiver Burden45
4.6.2	Binary Logistic Regression to Determine the Predictors of Caregiver Burden 45
CHAI	PTER 5: DISCUSSION, CONCLUSIONS AND RECCOMMENDATIONS47
5.1	Discussion

5.1.1	Caregivers Socio-demographics	47
5.1.2	Overall Caregiver Burden	49
5.1.3	Economic Burden on Caregivers	50
5.1.4	Social Burden On the family Caregiver of the Members with Substance Use	
Disord	ers	52
5.1.5	Caregiver Psychological Burden	54
5.2	Conclusions	55
5.3	Recommendations	55
5.4	Suggestions for Further Studies	56
REFE	RENCES	57
APPEN	NDICES	61
APPEN	NDIX 1: SOCIO DEMOGRAPHIC QUESTIONNAIRE	61
APPEN	NDIX II: GENERAL HEALTH QUESTIONNAIRE VERSION 12	65
APPEN	NDIX III: CAREGIVER BURDEN SCALE	66
APPEN	NDIX IV: VIAMBATANISHO	69
APPE	NDIX V: LIST OF TREATMENT CENTRES IN NAIROBI	77

LIST OF TABLES

Table 4. 1:Resp	ondents Socio-Demographic P	rofiles 3	5
Table 4. 2: Assoc	ciation & Correlation Between	Socio-Demographic Factors &	
perceived Levels th	hat the SUD Treatment Has Ha	d On Family's Finances	9
Table 4. 3: Respon	dents View on Psychological E	3urden 4	2
Table 4. 4: Respon	dents level of Psychological h	ealth4	3
Table 4. 5: Associa	ation & Correlation between So	ocio-Demographic Factors & Risk of	
developing psycho	logical Illness		4
Table 4. 6: Respon	dents Level of Care Giver Bure	den 44	4
Table 4. 7: Binary	logistic regression to determine	e the predictors of Caregiver Burden . 4	6

LIST OF FIGURES

Figure 4. 1: Factors Showing The Level Of Economic Burden SUD Treatment has on	
Family	. 36
Figure 4. 2: Extra arrangement and its impact on Family	. 37
Figure 4. 3: Addicts' Social Burden on Caregiver	. 40
Figure 4. 4: Social Burden on Caregiver	. 41
Figure 4. 5: Prevalence of Caregiver Burden	. 45

OPERATIONAL DEFINITIONS

Family- means people with strong economic, psychological and economic commitment to each other. This is regardless of nature of relationship they have. It also includes people joined by adoption, friendship and marriage.

Caregiver: This is someone providing unpaid care at home or in the home of the recipient to a friend, neighbor or family member whose diagnosis is addiction or mental health.

Drug: Has been defined as something causing addiction, a marked change in consciousness or habituation and is often illegal. In the study, it will be used to mean an abused substance and not exclusively food.

Substance abuse: this is where a substance is used for reasons other than the medical ones. Psychotropic substances are misused and result in bodily functions changes. The individual is therefore negatively affected cognitively, physically and socially. Cognitive effects occur whereby the individual concentrates less and less on academic work and experiences memory loss like "blackouts". Socially, the effects are seen in the individual's increased tendency to conflict with school authorities, teachers and friends.

Substance dependence: having an addiction to alcohol or drugs means that the body cannot be able to function without the said substances anymore. These substances have negative effects to the individual such that their behaviour and mental state is altered to that point where the individual is deemed a danger to himself as well as others. Unless with intervention, it is not easy to stop using drugs.

ABSTRACT

Introduction: Substance use disorder (SUD) is a family disease and its presence in one family member has enormous impact on the whole family with the greatest burden being bone by the primary caregiver. Pressure on family caregiver increase especially when he/she is forced to assume some of the responsibilities of the affected family member. Kenyan studies on the same are scarce.

Study objective: The study aimed to find out the psychological, economic and social burden bone by family care giver of persons suffering from substance use disorders (SUD) admitted in rehabilitation centers in Nairobi County.

Method: The study used cross sectional design, and targeted the primary family caregivers whose relatives have been admitted in rehabilitation centers in Nairobi county. Simple random sampling was used to get 187 study participants with patients recovering in 4 rehabilitation centers. The study instruments used in the study were, a researcher designed sociodemographic questionnaire, General Health Questionnaire(GHQ) and Care Giver Burden Scale(CGBS). Data was analysed using SPSS version 23.

Findings: The study recruited 187 participants. There were more females caregivers than male caregivers. The Caregiver burden scale mean scores of the respondents was 48.98 (SD 12.35). the median was 49 and the mode was 49. The prevalence of caregiver burden was 91.4%. 89.8% (168) of the respondents felt that SUD treatment of the addict had affected the family's finances. Eighty-nine point three percent (89.3% (167)) of them indicated that the addicts' problem had caused social problems like tension within the family. The GHQ determined that 24.6% (46), were having psychological concerns or were at risk of developing psychological problems. Gender was the only sociodemographic variable that was highly associated with psychological health at (X_2 =7.368, df=1 and p=0.007).

Conclusion: The study concludes that caregiving is physically, mentally and emotionally demanding. The study also concludes that more females than males' caregivers are usually affected and that other factors such as income, level of education could impact how one views their level of caregiver burden. The study also concludes that psychological wellness is a major predictor of caregiver burden.

CHAPTER ONE

INTRODUCTION

1.1. Introduction

The chapter brings forth the background of the study which focuses on the issue of burden from various perspectives specifically economic social and psychological burdens. The chapter also provides the objectives of the study, problem statement, research questions, significance of the study, justification of the study, definition of terms, scope and limitations of the study

1.2. Background of the study

Substance use disorders (SUD) is a major public health and society burden and it is the most commonly identified among those diagnosed with other mental health disorders (Schulze, 2015). Family as a system, has a primary responsibility of ensuring the well-being of their members especially when affected by health issues which are chronic, for example co-occurring mental health disorders or substance use disorder.

Enough evidence might exist that substance abuse and mental health disorder treatments are effective and cost effective (Schulze, 2015) but families still find it hard to support their family members because there are still so many unreasonable restrains in treatment support. The restraints exist in areas such as benefit program and health insurance coverage. Substance use disorder (SUD) is a real source of concern globally as a major social problem. Global estimate shows that about 205 million people abuse illicit drugs and this include 25 million people who suffer from substance dependence. Substance use disorder normally affects people at all developmental levels and mostly children introduced at early ages of between ten to fourteen years (Rice and Miller, 2016). Family, especially the primary caregivers may experience high levels of burden in the process of caring for their loved ones affected by substance use disorder.. These burdens may include economic, social, psychological, emotional, and physical burdens (Dickey and Azeni 2016). The burden may affect their ability to care for the addicted individuals.

The effects of the caregiver burden may have been studied widely in different areas of health for example, patients suffering from cancer, alzyma, dementia but the burden of caring for persons with substance use disorder has largely been ignored (Weisner *et al.* 2013). As a result of this ignorance, many people caring for persons with Substance Use Disorder continue to suffer resulting to poor health of the care giver and care recipient, especially when the caregiver assisting the recipient with activities like bathing, feeding or elimination. The number of people who have substance use disorder is reflected by the all time mushrooming numbers of rehabilitation facilities worldwide (Tessler *et al.* 2015).

Caring for a loved one with SUD and other related mental health disorders heavily burdens caregivers which is shown to be having a large impact on their quality of life (Hsiao at al 2010). The familial system undergoes many pathological and dysfunctional changes (Franks, 2016). Most of the families become disengaged, disorganized and disjointed. Others lose psychological boundaries as a result of becoming highly enmeshed (Tennstedt *et al.* 2014) which may lead to negative stress among family members leading to behavioral problems like divorce, domestic violence, younger children may develop oppositional defiant behaviors, stealing or dropping from school (Carpentier *et al.* 2012) and this become fertile ground for initiation of substance use disorders. It is common to see families going through immense economic suffering as they try to assist their loved ones rehabilitation and specialized mental health services (Rice & Miller, 2016). They often incur huge bills as a result of harm done to others e.g. restitution, legal costs and incarceration. Some even end up becoming bankrupt while attempting to seek a 'cure' for their family member.

A study by Brannan and Heflinger (2016) discovered that 30.3% of carers for the youth having mental health or substance use disorders had taken alcohol thirty days before. Dixon (2014), discovered such results in a study of spousal caregivers, with the same number having reported some alcohol use and 3.5% with increased use of alcohol ever since they assumed responsibilities of caregiving. Saad (2015) discovered that 10% of carers in their sample reduced stress using alcohol. Dickey, (2016) discovered that female caregivers with dementia have a higher likelihood of using alcohol than the rest. Kenya, like other countries in the world has her share of problems related to substance abuse and especially among youth. It has now become an issue of concern to teachers, parents, non-governmental organizations and relevant agencies (Perlick et al. 2015) Most parents have limited knowledge about substance use and by the time the disorder is diagnosed, the patient has escalated to dependence level.

This level of substance abuse is alarming and even more frightening due to the fact that a lot of young people are getting hooked on drugs every passing day. (Goldman, 2012). Seizure statistics and research already show that this is a trend in motion. Those between

ages 16-30, which a critical developmental stage are most affected (Rice and Miller 2016). This upward trend of substance use has created burden among families, as parents who are caregivers. Most of research carried out on burden of care has not focused on the trend and how the substance abuse impacts on the primary family caregiver (Miklowitz *et al.* 2015).

1.3. Problem statement

Substance use disorder (SUD) is a family disease and its presence in one family member has enormous impact on the whole family in different ways, with the greatest burden experienced by the immediate members of the family especially the parents and the spouses (Schulze, 2015). These effects may include but not limited to deaths from overdose, long-term adverse health effects, dependence, and a lacking in homeostasis within the family (Weisner et al. 2013). These caregivers in particular, have a high likelihood of encountering high distress levels as they have to care for a person having problems with substance abuse and can even include a touch of mental illness or rather a 'dual diagnosis' (Carpentier et al. 2012).

These effects heavily impact on the Kenyans that take care of loved ones with SUD, burdening communities and governments with negative consequences that include low worker productivity, school failure, financial and health issues, violence and theft (Tennstedt et al. 2014). As the rates of substance use continue to increase to epidemic proportion, many more caregivers are burdened with the difficult situation of caring for people with SUDs (Schulze and Rössler, 2015). While it is clear that there is demand for care giving to persons with SUDs in rehabs by family members, there is paucity of literature on burden among these carers in Kenya which constitute a knowledge gap. It is for this reason that the current study will seek to address this knowledge gap by studying the family burden of caring for persons with substance use disorder in Nairobi County.

1.4. Research Questions

- i. What is the economic burden on the family caregiver of the members with substance use disorders?
- ii. What is the social burden on the family caregiver of the members with substance use disorders?
- iii. What is the psychological burden experienced by the family caregiver of the individuals with substance use disorders?

1.5. Objectives

1.5.1. General Objectives

The study's general objective was determining the family's burden of care for persons with substance use disorders in Nairobi County.

1.5.2. Specific objectives

The following specific objectives were:

- i. To examine the economic burden on the family caregiver of the members with substance use disorders
- ii. To assess the social burden on the family caregiver of the members with substance use disorders
- iii. To determine psychological burdens experienced by the family caregiver of the individuals with substance use disorders

1.6. Justification

Studies have been done internationally on family's burden of care for persons with substance use disorders (Weisner *et al.* (2013), Hsiao at al (2010), Carpentier *et al.* (2012), and Dixon (2014)). They have established that substance use has an overall effect to the user and the family at large. Despite these studies no local research in Kenya has been conducted on family's burden of care for persons with substance use disorders thus creating a knowledge gap. Presence of this knowledge gap would mean the primary care giver will continue suffering, socially economical and even physical. The effect of substance use cannot be realized if no research is carried out locally. It is for this reason that the current study was conducted to address this gap in knowledge.

1.7. Significance of the study

A number of stakeholders will benefit from the study:

Firstly, the study will benefit the caregiver, in that it will generate information on burden of care for persons with substance use disorder. This will form a basis for training caregivers on how to take care of themselves hence lessen the related burden of care.

Secondly, the study will benefit the rehabilitation centers in that they will get the ample knowledge on the various burdens that the caregiver experiences. This will help them improve the services such as the counseling the family on how well they can deal with people with SUD to prevent burnout in the process of caring.

Thirdly, the study informs the government on the current situation of the burden of care bone to the families and hence be more proactive in implementing the alcohol and substance use policies to prevent increase of SUDs incidences. Forth the study adds to available literature and acts as reference material for other researchers who would be interested to carry out studies on related topics in the future.

1.8. Scope and Limitation of the Study

The study was conducted only in rehabilitation sites within Nairobi County and the targeted population were the family members of the residential patients in the rehabilitation sites. The notable limitation of the study was that the level of substance use was not investigated. The other limitation was some respondents' reluctance to participate in the study through missing of interview appointment dates. This interfered with scheduling considerably.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter brings forth the literature review, that specifically lays focus on the study's variables, and the discussion includes the burden of the family of substance users, role of family in caring from substance abusers, burdens associated with substance abuse, and theoretical framework which involves the theories explaining the concept of drug abuse. The review of literature focuses on burden of caring for persons with substance use disorder in Kenya.

2.2 The burden of the family caring persons with Substance Use disorder

People who have had a family member abusing drugs know how painful and disruptive this condition is to the family life (Dyck et al. 2016). Addiction neither begins nor ends with the abuser but extends its fangs to the whole family. It also extends to the health and welfare agencies, schools, justice system, communities and the society as a whole. All of us deal with the costs. However, children suffer the most. This is from their own use of alcohol, tobacco or drugs which has an effect on their mental and physical health. Those families that have a known history of social and psychological pathology are at increased risk of SUD problems. Similar problems may apply to other drugs but the degree is not well established. Most heavy drug and alcohol users show psychotic symptoms like depression. An individual dysfunctionally abusing drugs may be masking an underlying emotional disease. Multiple family problems are also not rare. Reports of familial drug related disturbances related to SUD frequent the literature (McHugo *et al.* 2016).

The problematic drug use by any family member has a lot of enduring and significant impacts on family functioning and dynamics. Families continually report anxiety, conflict and great stress as a result of trying to protect a member from the harms and dangers that come along with the use of drugs as well as limit the damages arising from their behaviour towards the other family members. Both children and parents have reported destructive and bitter exchanges over how best to deal with a child abusing drugs (Franks, 2016). The existing push and pull on whether to help and to what extent and in what way created so much stress among the members of the family. Most of the illnesses are quite disabling and pose great challenges in their consequences and management. The individuals affected usually suffer from physical and emotional limitations interfering with their capacity to care for themselves which automatically puts them under the care of family members in their finances and everyday activities. This disrupts the usual pattern of roles, function and the leisure of the family members which causes considerable distress and interferes with their personal lives (McNary, and Lehman, 2015)

Burden of care is a construct normally defined by the consequence and effect it has on caregivers. Psychological, emotional, economic and physical impacts of care giving have been used to assess and define the burden of care. Additionally, experiences of guilt, embarrassment and shame have widely been reported (Goldman, 2012). Members of the family find it hard to deal with the immediate problem or the complex situation arising as a result. In the UK, estimates show that serious alcoholic problems double divorce and separation risks and incidences and substance abuse contributes to 62% of the known child abuse cases. In the last thirty years the effects have been well documented and the

phenomenon appears rather universal. 50-80% is the estimated number of persons with SUD and other related mental illnesses living with or having regular contact with family care-givers (Schulze, 2015). These said care-givers have reported high burden levels related to giving their family member care. Caring demands for rehabilitation and detoxification as well as the treatment of other psychiatric co morbidity disorders while at the same time handling stigma in society associated with emotional distress and SUDs resulting from family members' symptoms.

2.3. Role of Family in Caring for persons with Substance User disorder

The literature on substance abuse and involvement of places emphasis on family involvement impact on outcomes of clients and has significantly ignored the mental health impacts of the involvement of family involvement on the said members themselves and predictors of mental health effects of SUDs on the family members (Weisner *et al.* 2013). The concept of family members' "burden" in fact appears nowhere in the literature of substance abuse. However, the literature of mental health places emphasis on how the illness of the client affects the family. Findings in research from the literature in mental health shows that resources and stress are both vital when it comes to the explanation of caregiver burden. The research shows that adults having serious mental illness possess the best predictors of the caregivers' burden. Behavioral problems in care recipients have in fact been discovered as being the strongest predictor of caregiver burden cutting across illnesses. (Leventhal *et al.* 2014).

A lacking in formal and informal social support, is a most important resource in predicting burden of family caregiver of those adults who have mental illness. Previous

research findings in mental health department on burden predictors are useful in identifying those variables expected to affect family members of the women with SUDs or mental disorders and co-occurring substance use (Schulze, 2015). Stress sources for families providing care for any adult member of the family with a mental or substance disorder have previously been cited. The mostly identified ones include not having enough help from professionals, how to cope with behavioural problems, problems in familial relationships, insufficient help in caring for their relative and isolation.

The documented impacts of the stresses include shame, guilt, anger and worry; emotional and financial strain; marital discord and dissatisfaction; the hopefulness of amily members and the quality of lie diminishes; physical victimization; physical effects that come with the stress of living with an abuser; negative effect on normal development and children's growth in the family (Birchler *et al.* 2015). To persons having SUD and mental disorder, families are the major social support system providing financial support and direct care to them. The symptomatology that mental health and SUD individuals present is significantly worse and therefore the effect on their families are expected to be worse as compared to those families having a member with a single disorder. For instance, people with co-occurring disorders experience significantly higher rates of violence, hospitalization, serious infections like hepatitis an HIV, violence and hospitalization (Tessler *et al.* 2015) than those with just one diagnosis. Those drug abusers with comorbid mental disorders have a higher likelihood of engaging in risky behavious like needle sharing and unprotected sex and hence jeopardize their health.

2.4. Empirical review

This section presents empirical literature based on the objectives of the study:

2.4.1. Economic Burden

According to Tennstedt et al. (2014), the harms families experience due to the use of drugs by their relatives amounts to billions every year. The harms include physical and mental health, domestic violence (that often accompanies substance misuse), distress, negative financial effects including theft to pay of drug debts, stress created in employment whereby one needs to provide for the user or his children and/or other relations. Most abusers struggle to pay bills or buy necessities as they send their allowance or pay on drugs and are unable to have savings. Regular use of drugs can get really expensive.

Bollinger et al. (2015), states that in extremes, when people highly depend on drugs funding their habit takes top priority and leads to crime or worse still, risking their everything on gambling only or them to lose it all. The families of the drug users ends up suffering from financial burdens since they end up settling the bills for those being taken to the rehabilitation centers. The families and the caregivers also ensure that they purchase all the requirements of the addicted individual and thus this creates a financial constraint. The caregiver will also end up taking care of the financial needs of the addicted person family, settling the school fees for the kids, caring for the wife or the husband among other needs. This creates a financial constraint to both the caregiver and the families of the addicted person. The complex role played by families in substance dependence should not be ignored. Their assistance is multifaceted, including financial assistance, management of symptoms, financial assistance, helping directly the retention and engagement as well as direct care. They must manage the effects of addictive behaviour because they can be a treatment source to the process of treatment. Usually, family members have concern for an individual's substance abuse behaviour but they also have problems of their own (Perlick et al. 2015). Sometimes, mirroring or complementary problems might crystalize the relationship into a codependent dimension where the 'non-ill' member gets overly concerned about the other person's difficulties, and renounces their own needs. This concept of course runs the risk of pathologizing other normal caring functions, especially those to do with self-sacrifice and empathy.

In a highly unstable 'role play', members must either add new or change their otherwise conventional family roles, mostly inappropriate functions so as to adapt to unreliable, unpredictable and at times demanding behaviour of the substance abuser. The person engages in the search or use of substances most times and is usually incapacitated by effects of drugs or alcohol, leaving them unable to fulfil any familial responsibility. Vacant roles end up getting distributed and some members of the family, particularly children, find themselves having to bear the excess responsibilities. (Shakya, 2016).

To complicate the picture further, those burdened family members or caregivers have no idea how to seek help or are prevented from doing so by the fear of stigma and shame. The burdensome effects reach out to beyond the nuclear family. Some of the extended family members may share the feelings of guilt, anger, fear, or embarrassment and wish to recoil from or ignore the one abusing substances. That effect affecting families sometimes ends up affecting generation.

Trans-generational impacts of drug abuse can have negative effects on concepts of normal behaviour and role modelling. This damages the generational relationships and influences family functioning beyond the 'sick' member's life, and especially in cultures where the extended family is a vital point of reference. (Miklowitz et al. 2015). Therefore, making treatment for the whole family possible improves the effectiveness of the treatment and also contributes to cost containment and social prevention, as in substance abuse or alcohol families singke members are usually connected not only to one another but also to numerous public agencies like criminal justice, child protective services or social services.

2.4.2. Social Burden

Drug abusers find it difficult to function without drugs. Taking drugs comes with the risk that you may become dependent on them. This therefore means that there is the feeling of dependency where they cannot operate without the drugs and a lot of energy and time is spent on finding the drug. Dependence is also seen when one takes the drug to avoid or cope with comedown related symptom (Dyck et al. 2016). This also creates dependence to relatives, to the substance and to drug abusers, it becomes a burden where they use all kind of drugs and cannot sustain themselves even in the most basic of needs. Drug dependence poses various kinds of problems impacting not just on the dependents, but also on the family and community in general. The caregiver suffers most since he or she will be required to do all the tasks that needs to be done by the drug user. It might reach

to an extent where the caregiver even washes the drug user since he or she cannot be able to perform the activity.

In the family unit, the woman, who is the wife, is often the one who is mostly affected by the dependence, and shoulders a large part of family burden. This dependency aspect receives very little attention (Shakya, 2016). These types of families are characterized by violence, child neglect, increased exposure to illness, domestic violence, crime exposure, social isolation and inconsistent child care. To top it all up, children growing up here risk turning to drugs or tobacco. They may never know how healthy families behave and end up continuing the generational addiction cycle and its impacts (Bollinger, et al. 2015).

It is not once that families change their usual family roles or take on new and inappropriate roles so as adapt to the unreliable, unpredictable behaviour of the families' drug dependents. These depends use up most of their valuable time in trying to acquire and use drugs and are normally incapacitated by their effects, rendering them unable to fulfil responsibilities. Family roles get distributed in such a way that some members shoulder the responsibilities burden because the dependent member renounces the traditional role (Cook et al. 2014). Drug dependents are looked upon in a very negative manner and attitude is often extended to their families as well, making it difficult for them to function normally within their communities

2.4.3. Psychological Burden

The psychological stress vehicles are conceptualized as role strains, adjustment to change and daily hassles. Lazarus and Folkman (2014) describes stress as 'a certain relationship between the environment and person where the person appraises as exceeding or taxing his/her resources which endangers his or her well-being. The relationship between the caregiver role and the burdensome feelings has been well documented (McNary, and Lehman, 2015). Caregivers help with emotional support, dealing with incontinence, mobility, feeding and overall daily living activities. Because of the high burden, they experience poor health, and report low satisfaction in life. The depressive symptoms and burden experienced by caregivers are the most researched care-giving results.

Reports show that depression is more common in caregivers than in the non-caregivers. The family caregivers with depressed moods may not perform well the recommended health maintenance and personal care behaviours responding to the symptoms. Familial carers undergo significantly more mental and physical strain than the non-caregivers of their age (Legg et al. 2013). Studies also suggest that caregivers run the risk of undergoing clinical depression. Almost half of them in the studies met the domestic depression criteria where structured clinical interviews were utilized. Some evidence also suggests that depression is causally relative to the state of care-giving.

Dura et al (2015) discovered that 25% of the caregivers met the depression criteria while still in the caregiving situation and have never been previously diagnosed with depression. If the functional impairment and problem behaviour in the abuser is worse, then the score of the strain is reportedly higher and the chances for the caregiver to be depressed are high. Reports indicate that this brings about the likelihood of the caregiver institutionalizing the recipient as a societal implication.

Risks for depression or psychological distress for the carer are related to age, health, gender, status, lack of support, cultural and ethnic affiliation and other characteristics

relative to the caregiver. Some drug addict factors relative to psychological distress in caregivers are: functional impairments, behavioural disturbances, fear of suicide, cognitive and physical impairments (Raschick & Ingersoll-Dayton 2014). The frequency of behavioural disturbances shown by the user is the strongest predictor of the carer's distress and is significant in his/her decision to institutionalize the addict. The literature shows that this can be better relied on as a predictor of the depression and burden than the cognitive and functional impairment of the individual. Carers experience unpredictable and unfamiliar situations that increase anxiety and stress (Schulz et al. 2015). Anxiety is increased by problems in behaviour of patients that cannot be easily managed continently. It is associated with stress, ill physical health and depression

2.5. Theoretical framework

The study will utilize the two theories to determine the burdens that are associated with the substance use. The two theories will include the Bowen's theory and the social learning theory.

2.5.1. Family Dynamics of Caregiver

American psychiatrist Murray Bowen started developing the family dynamic theory in the 1950s while in the National Institute of Mental Health where he was a psychiatrist. Based on systems theory and family patterns, which look at system parts as a whole , he believed that behaviours, emotions and personalities of grown ups result from their order of birth, role within their original family and coping mechanisms developed to deal with emotional family issues. In an effort to understand the family system, it must be viewed as a whole, and that its defining factor is not only the people that make it up but also the way they internally interact to create that unique dynamic.

Family Dynamics of Caregiver is a form of psychotherapy helping people solve their problems in terms of family units as tis is where many of issues begin. Every one of the member works with the rest to understand better the dynamic of the group and how their actions affect them individually and the whole family. One important premise of this therapy is that whatever happens to a single member happens to all.

Most of the psychological issues start early in life stemming from the relationships in the family of origin, although the issues surface later a bit later in life. Conflicting families and individuals or couples with concerns and issues relative to their original families can really benefit from family type therapy this approach is helpful in conditions like bipolar disorder, depression, food-related disorders, addiction and anxiety. It also helps individuals to cope and better control disorders and physical disabilities.

During therapy, the family works together and individual to solve a problem directly affecting one or more of the family members. Each one gets the opportunity to express their feelings and thoughts of how they feel affected. Together, the help the addict relieve strain on the family, learn how to support each other, and how to necessarily switch roles. All this in an effort to rebuild healthy family systems and restoring relationships.

2.5.2. Family Focused Therapy

FFT (Family-focused therapy) was developed by David Miklowitz, Ph.D., and Michael Goldstein, Ph.D., for the treatment of bipolar disorder. The assumption put in in its design the relationship that a patient has with family members is vital in managing the

illness. It includes family members in the therapy sessions. This may improve family relationships therefore increasing chances of success.

FFT is a product of two psychotherapy forms i.e. psycho-education, which is a type of therapy designed to teach families and patients the nature of the illness and family therapy. We can distinguish family therapies from other therapies by the attention they give to family relationships and dynamics as the factors that either hurt or help the illness. They are sometimes called ecological therapies as they pay attention to the fact that the individuals and in this case, their bipolar disorder, cannot be truly considered separate from family systems containing them.

FFT begins with an appreciation of how a patient's family system and the complex relationship web found therein supports the patient's condition or exacerbates him. The therapists identify conflicts and difficulties in the family that might contribute to family and patient stress and later assist the involved member in finding a way of solving those conflicts and difficulties. "expressed emotion" refers to over-involved, hostile or critical behaviours and attitudes that the members of the family may act out or have with other members with psychiatric disorders. The therapists help the family members become aware of any sort of expressed emotion they may be acting out and how to bring it under control.

The therapists also educate the members of the family about bipolar treatment, ways to best support the affected member and the nature of the illness. The therapist might for example teach them need for bipolar medications as the primary therapeutic means, the difference between Bipolar 1 and 11 Disorder, and the nature of depressive and manic mood swings. In addition to providing information in handouts and lectures, they give training and assistance to support the growth of problem-solving skills and development in the family.

Bipolar disorder is a condition associated with self-destructive and impulsive behaviour. Reckless spending, suicidal thoughts and impulsive sexual behaviours are frequent. Families also experience some deeply felt emotions including a sense of helplessness in fixing bipolar symptoms. This helplessness easily turns into aggravation, frustration and anger directed at the affected family member. Caring for the affected members can also become infuriating and frustrating.

The members also get burned out from trying to assist, especially if there is reluctance in the patient. They end up halting support for the member. It is these feelings and interactions or lack thereof that Family focused therapists look for, work towards rechanneling any present aggression, promote re-engagement of checked out family members and generally steer everyone towards the acceptance of the limitations of the patient and the need for him/her to responsibility of their well-being. Addressing family emotion serves as a powerful tool in fostering stability within the family.

2.6. Conceptual Framework

Conceptual framework is a diagrammatic representation of the relationship between the study variables. Here, conceptual framework considered the of caring for addicts in Kenya. independent variables are those ones that have values presumably dependent on effects of independent variables (Mugenda, 2008). The variables below will form the basis of the research conceptual framework for this study that is caring for persons with

substance use disorder will be the independent variable while economic burden, social burden, and psychological burden will form the dependent variables.

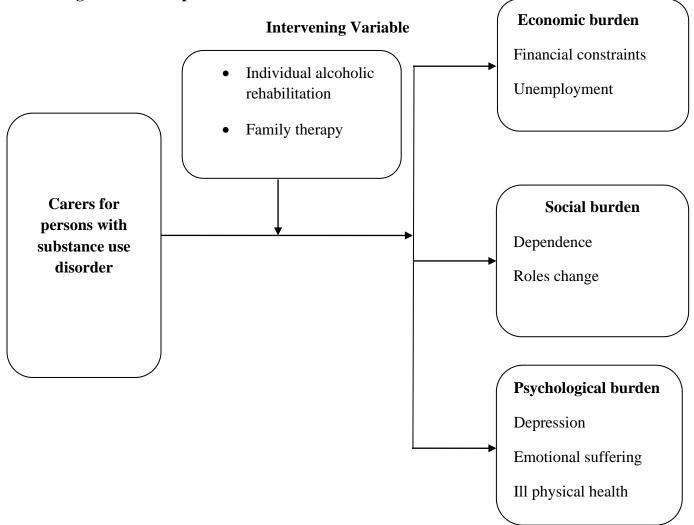


Figure 2.1. Conceptual Framework

Independent Variable

Dependent Variables

Source: Author, 2017

2.6.1. Economic Burden

The cost of the harms experienced by families due to substance abuse of a relative gets to millions annually. The harms include ill physical and mental health, impacts on finances

including theft, distress, stress resulting from the need to give care and financial implications like theft.

2.6.2. Social Burden

Drug dependence poses various kinds of problems impacting not just on the dependents, but also on the family and community in general. The caregiver suffers most since he or she will be required to do all the tasks that needs to be done by the drug user. It might reach to an extent where the caregiver even washes the drug user since he or she cannot be able to perform the activity.

2.6.3. Psychological Burden

Caregivers help with daily living activities, deal with incontinence, support the patient emotionally and help with mobility and feeding. Because of the responsibilities and high burden, carers experience poor health, find themselves in less health promoting actions compared to non carers, and have reported low satisfaction in life. The depressive and burden symptoms sustained remain the most widely studied outcomes of caregiving.

2.7. History of drug rehabilitations

Drug and alcohol rehabilitation refers to a process of psychotherapeutic or medical treatment for dependency of psychoactive substances with the aim of restoring biopsychosocial health to the affected persons, by learning skills on how to cope with life without use of drugs or alcohol. People who go for rehabilitation can commit them for voluntarily inpatient treatment but they can also be referred by healthcare providers, family members, court orders or by any other referring agency involuntarily.

Concept of drug rehabilitation has in existed way back in 1750s by native Americans who realized that, although alcohol was culturally accepted and used in many of their ceremonies, it also had serious negative impact on the users. In 1935, Bill W. and Dr Bob who were both hopeless alcoholics started the alcoholic anonymous (AA) movement. They published their first book on AA philosophy in 1939 explaining its principles and method of recovery. This book later came to be known as the twelve step of recovery and it is widely used in rehabilitation centers as a guide worldwide (AA big book)

Although the preference of substance abuse in Africa is low compared to western countries, the rate and type of substance abuse is escalating at alarming rate calling for need of establishing more rehabilitation facilities.

In Kenya, history of rehabilitation centers goes back to early 1990s when the first facility was established in the western part of Kenya. Later, good number of rehabs was established all over the country following increase in reported cases of substance. Currently, total number of rehabs in Kenya stands at fifty (NACADA report 2017). In Nairobi County where this study will be carried out, there are a total of fifteen rehabs sparsely distributed within the county. Most of the rehabilitations are privately owned and the only government owned located within Mathare national referral hospital.

The process of rehabilitation has three stages:

• Detoxification- the is the initial and acute phase. It is done by a qualified medical practitioner and patient is observed for physical withdrawal symptoms, physical

laboratory test are done to rule out any damage or infections and patient is treated accordingly. This phase takes approximately fourteen days

- Psychological rehabilitation. In this phase, patient is stable physically and he is engaged counseling and psychotherapy on substance use disorders, family therapy or couple therapy. This phase in most rehabilitation takes ninety days
- The last phase is following up care where the patient is discarged home but continues with psychotherapy as out- patients. Some people will prefer going to halfway house where they can continue with therapy in free to go about their business during the day.

The rehabilitation centers are regulated by Kenya government through NACADA which set the standards. They are run by addiction professionals or professional trained on treatment of patients with mental health issues like psychiatrist, clinical psychologists and psychiatric nurses. They admit both males and females above eighteen years.

The cost of rehabilitating patients differ from one rehab to another but in average, the cost does not go below three thousands per day interpreting to over two hundred thousand for ninety days. Patients while in rehab are allowed to be visited by family members and friends at least once a month

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Study design

The study employed a cross section research design which was appropriate for the study in that data was collected on the whole study population at one point in time to keenly look at the relationship existing between variables of interest and disease.

3.2. Variables

The independent variable was caring for persons with substance use disorder. The intervening variables in the study were the social demographic characteristics. The dependent variables in the study included economic, social, and psychological burden.

3.3 Research site

This study was conducted in rehabilitation centers in Nairobi County. The target rehab centers included public rehabilitation centers and private rehabilitation centers. Public rehabilitation centers included Mathare rehabilitation center where both male and females were admitted. Private rehab centers include: Eden village in parklands, Nairobi place all located in Karen, and Serenity Place located in Kahawa Sukari among others. They also admit male and females. The study chose four rehabilitation centers due to various reasons. First the proximity of the rehabilitation centers was more appropriate as the researcher was able to easily access the sites. Another reason was due to the cost of travel to the selected rehabilitation centers. The selected rehabilitation centers minimized the transport cost the researcher incurred.

3.4 Target Population

The study targeted family caregivers whose relatives have been admitted to the rehab centers. Family Caregivers provide unpaid care in the recipient's home or their own to a friend, family member, or neighbor diagnosed with addiction or a mental health disorder.

3.4.1. Inclusion criteria

- ➤ Family caregivers.
- Those who will have consented to the study
- Individuals between the age of 18-55 years

3.4.2. Exclusion criteria

- Friends and distant relatives
- Family members who have not been in contact with the patient within the last one year
- Individuals below 18 years and those above 55 years

3.4.3. Recruitment Procedure

The researcher recruited respondents by using the client register at the rehabilitation centers and contact them for possible meeting with the family caregivers at the respective rehabilitation centers. The client register had the numbers of persons in it indicating their places of residence as well contacts among other information. The researcher used Microsoft Excel program to randomly recruit 196 respondents who the researcher contacted. The respondents were required to give informed consent so as to participate in the study by the researcher prior to administration of the questionnaires. The researcher administered the questionnaires by the help of the research assistants which took a duration of two weeks.

3.5 Sampling and sample size

The study used proportionate sampling to select participants from the rehabilitation centers. Proportionate sampling method involves the subdivision of population onto equal portions and then applying random sampling to select the respondents. In addition, the study used simple random sampling to get the study sample size for the participants who are the family caregivers of the patients recovering in the rehabilitation site. Simple random sampling was utilized for the study in that it gives the respondents equal chances to chosen to participate in the study. The study further adopted Fishers (1961) formula. Where a 95% confidence level and P = 0.05 was chosen in view of social science nature of the study

 $n = \frac{N}{1 + N(e)^2}$

Where n = Sample size

N = Population

e = Level of significance

 $\frac{384}{1+384(0.05)^2} = 196$

The sample size for this study was 196 family care givers.

In a bid to get the sample size of 196 respondents, the researcher was requested the register of the people admitted to the rehabilitation centers. The researcher made personal call to the caregiver of the respective patients admitted to the rehabilitation centers. To select the study participants random sampling was utilized. The researcher and the

research assistants were in possession of a box consisting of 196 cards that bore a yes and a no marker.

Every caregiver who had consented to participate in the study and met the eligibility criteria, and picked a yes marker was interviewed for the study purposes. The sample size for the current study is as depicted in the table below.

Rehabilitation Centre	Total Number of patientsadmittedintherehabilitation center	Sample size determination	Sample size
Eden village	81	81/334x196	48
Chiromo lane medical center	78	78/334x196	45
Mathare rehabilitation center	85	85/334x196	50
Asumbi rehabilitation center	90	90/334x196	53
Total	334		196

Table 3.1. Sample Size

3.6. Data Collection Instruments

3.6.1. Socio-Demographic Questionnaire

The researcher generated a socio-demographic questionnaire that aimed to capture the unique characteristics of the study population. This questionnaire consisted of 17 items such as gender, level of education, marital status, religion, means of livelihood, and items on burdens brought about by addiction. The study adopted the drop and pick method to collect primary data. The drop and pick method functioned for the caregivers since they first filled the questionnaires then leave them at the rehabilitation centers where the researcher picked them later. The questionnaire consisted of two sections. Section A

assessed the background information of the respondents, while section B provided the questions that measure the level of economic burden, social burden, and the psychological burden.

3.6.2. General Health Questionnaire Version 12

The general health questionnaire was used to measure the health of an individual at a current date. The questionnaire was initially developed consisting of 60 items but has later been modified into other versions that have 30, 28, 20, and 12 items. The items in GHQ are rated using a 4-point scale. The questionnaire has been found to be simple and easier to use even for the respondents who do not possess adequate knowledge. It was been adopted through the permission of Goldberg.

3.6.3. Caregiver Burden Scale

This refers to a questionnaire that consist of 22 items which are mainly used to assess the level of burden a caregiver experiences. The questionnaire has been adopted by various researchers through the permission form Reever KE, Zetit SH, Bach-Peterson. The scale measure three domains that includes patient needs, caregiver tasks, and the caregiver burden. It also rates the conditions on a 4-point scale.

3.7. Data Collection Procedure

So as to guarantee a good enough setting when collecting data, the researcher introduced himself to the respondents through explanation of the purpose before going on to administer the instrument. A close rapport was established between the respondents and the researcher. The questionnaire was then administered on a 'drop and pick' later technique. All efforts were made to ensure personal delivery and instrument administration. To collect the data, the researcher distributed the questionnaire to the respondents.

Respondents were reminded by the researcher of the impending interview a day before, through texts messaging. They were informed of the venue and time. On the interview day, the researcher welcomed them at the rehabilitation centers and directed them to the interview venue. The nature and content of the research was explained i.e. par taking in it was voluntary and the respondent had freedom to leave if they wished to anytime during the study.

The researcher sought help from the center counselors to assist in cases where there was language barrier. The researcher then took them through the instruments beginning with the social demographic questionnaire to the last respondent. Afterwards, he thanked the respondents for participating and gave them room to leave at their own pleasure.

3.8. Data Analysis and Presentation

Data was coded, entered and managed by using the statistical package for social studies version IBM (SPSS) Statistics version 24 by applying descriptive and inferential statistics. Presentation of results was done by using pie charts, bar charts, frequency tables. In addition, inferential data analysis was done using multiple regression analysis to establish predictive variables. Correlation statistics were done to determine the relationship between the variables.

3.9. Ethics Statement

This thesis was developed under the supervision of academic staff. Before commencing the study, approval was sought from the department of psychiatry. It was then be presented to the Kenyatta National Hospital/ University of Nairobi Ethics and Research committee for approval. The procedures and the objectives of the study were explained to the respondents at the rehabilitation offices. The details of the ethical considerations were laid down in the letter of consent and they included: consent explanation, confidentiality, benefits, risks and right not to participate as well as to withdraw anytime were explained.

3.9.1. Informed Consent Form

The researcher sought consent from the respondents before carrying out the study. This was based on the information that was provided in the consent form where appropriate time was provided for the purposes of asking and answering questions. The consent form was in written format and contained the ethical consideration such as the purpose of the study, the risk and the benefits involved, the procedure to be utilized for carrying out the study among others.

3.9.2. Confidentiality

All information obtained was stored in a locker only accessible by the researcher to ensure confidentiality.

3.9.3. Risks

The researcher didnt anticipate any risks to the respondents other than those encountered in day-to-day life.

3.9.4. Benefits

A long term benefit may include presentation of the study findings to the stakeholders involved in formulation of policy to cater to the psychological needs of the addicted persons in Nairobi County and Kenya in general. The respondents found to be suffering from any of the drug disorders under study, were also referred for appropriate help.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter entails the analysis of the data collected. The results are presented according to the study objectives which were:

- iv. To examine the economic burden on the family caregiver of the members with substance use disorders
- v. To assess the social burden on the family caregiver of the members with substance use disorders
- vi. To determine psychological burdens experienced by the family caregiver of the individuals with substance use disorders

4.1 **Response Rate**

The sample size population for the study was 187 respondents and the response rate was 95.4%. Respondents participated in the full interviews once they signed the consent forms.

4.2 **Respondents' Socio Demographic Profiles**

Table 4.1 presents socio-demographic characteristics of the respondents who were caregivers of individuals that had been admitted in rehab facilities for substance use disorders treatment.

The male respondents were 91 which represented 48.7% of the sample population while the remaining 50.8% (95) were females. Most females' respondents were mothers to the addicts. The male respondents were mostly fathers to the addicts.

The mean age of the respondents was 42.24 yrs (SD = 8.768). The mode was 42 yrs while the median was also 42.

Forty-seven point six percent (47.6% (89)) were married while 39.0% (73) were single or never married and 12.3% (23) were divorced.

Sixteen percent (16.0% (30)) of the respondents had reached primary school, 26.7% (50) had either started or completed secondary school education only, and 55.6% (104 had been to college or University.

Majority of the respondents indicated that they were self-employed. 17.1% (32), were self-employed but meagre income while 33.7% (63) were self-employed with adequate income. 32.6% (63) indicated that they were employed and 16.6% (30) had no source of income.

As for respondents' religions, 44.9% (88) were protestants while 36.4% (68) were roman catholic. Only 5.9% (11) were Muslims. Eight percent of the respondents didn't give a response to this question and 4,8% (9) respondents indicated they were from other religions.

Variable		Outcome 187/100%			
		Frequency (n)	Percentage (%)		
Gender	Male	91	48.7%		
	Female	95	50.8%		
	NR	1	0.5%		
Age	28-35yrs	56	29.9%		
C	36-43yrs	41	21.9%		
	44-51yrs	56	29.9%		
	52-60yrs	34	18.2%		
Marital Status	Married	89	47.6%		
	Divorced	23	12.3%		
	Single	73	39.0%		
	Others	2	1.1%		
Religion	Roman Catholic	68	36.4%		
	Protestant	84	44.9%		
	Muslim	11	5.9%		
	Others	9	4.8%		
	NR	15	8.0%		
Level of education	Primary	30	16.0%		
	Secondary	50	26.7%		
	College/University	104	55.6%		
	NR	3	1.6%		
Source of livelihood/	Employed	61	32.6%		
Occupation status	Self- employed(Meagre Income)	32	17.1%		
	Self- employed(Adequate Income)	63	33.7%		
	No Source of Income	31	16.6%		

 Table 4. 1:
 Respondents Socio-Demographic Profiles

4.3 Economic Burden On Caregivers

4.3.1 Cost of SUD Treatment Impact on Finances

As indicated in Fig 4.1 below, 89.8% (168) of the respondents felt that SUD treatment of the addict had affected the family's finances. Forty-six percent (46% (86)) of them felt that the impact had moderate while 67(35.8%) felt that the impact had been severe. Forty-seven percent (47% (88)) indicated that they borrowed money to cater for the SUD treatment costs.

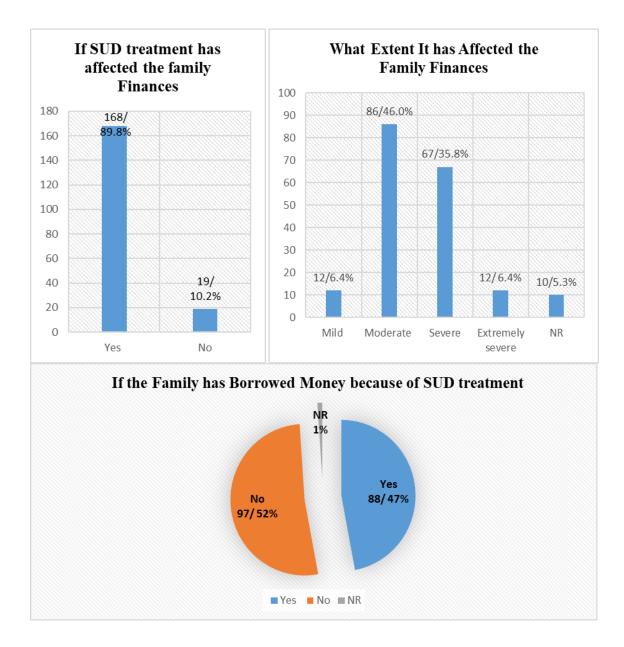


Figure 4. 1: Factors Showing The Level Of Economic Burden SUD Treatment has on Family

4.3.2 Cost of Caregiving & Impact on Finances

The caregivers were further asked if they had to make extra arrangements to ensure that the addict was cared for and 50.3% (90) said Yes. Amongst the caregivers that said Yes, 9.6%(9) indicated that the financial impact of this arrangement had been extremely

severe, 50%(47) indicated that the impact was moderate and finally 35.1% (33) indicated that the impact had been severe.

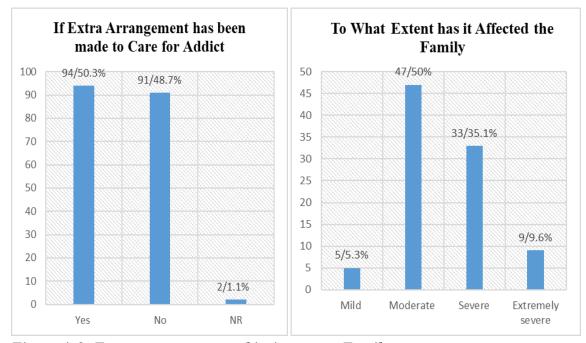


Figure 4. 2: Extra arrangement and its impact on Family

4.3.3 Association between socio-demographic factors and Respondents views on Economic ` Burden

To establish association between socio-demographic factors and economic burden on family, the Pearson chi square test was done. Being that all the variables are categorical, to establish the correlation strength of relationship and effect of independent variable on dependent variables, Cramer's Phi Coefficient test was carried out for significantly associated variables.

As indicated in Table 4.2, religion was significantly associated with family's economic burden (X_2 =9.943, df=3 and p=0.019).

The effect that religion had on the respondent's view on the SUD treatment costs impact on the family's finances was moderate at a Cramer's V of 0.240.

Variable			c Burden as affected Income)	Chi Square (P Value)	Correlation statistics (Cramer's V)	
			Yes No		(Cranici s V)	
Gender	Male	80(43.0%)	11(5.9%)	0.409		
	Female	87(46.8%)	8(4.3%)			
Marital Status	Married	79(42.2%)	10(5.3%)	0.936		
	Divorced	21(11.2%)	2(1.1%)			
	Single	66(35.3%)	7(3.7%)			
	Others	2(1.1%)	0(0.0%)			
Religion	Roman Catholic	64(37.2%)	4(2.3%)	0.019	0.240	
-	Protestant	76(44.2%)	8(4.7%)			
	Muslim	8(4.7%)	3(1.7%)			
	Others	6(3.5%)	3(1.7%)			
Level of	Primary	27(14.7%)	27(14.7%) 3(1.6%)			
education	Secondary	45(24.5%)	5(2.7%)			
	College/University	95(51.6%)	9(4.9%)			
Source of	Employed	58(31.0%)	3(1.6%)	0.181		
livelihood/	Self- employed(30(16.0%)	2(1.1%)			
Occupation	Meagre Income)					
status	Self- employed(53(28.3%)	10(5.3%)			
	Adequate Income)					
	No Source of Income	27(14.4%)	4(2.1%)			

Table 4. 2: Association & Correlation between Socio-Demographic Factors &Economic Burden on Family

4.3.4 Association and Correlation Between Socio-Demographic Factors and Respondents Views On the Level of Impact SUD Treatment Had On the Family's Economic Burden

As indicated in Table 4.3, gender was associated with respondent's opinion on level/

Extent of financial impact at (X_2 =8.544, df=3 and p=0.036). Generally female

respondents seemed to feel that the family's financial situation had been severely

affected. The effect that gender had on these views was moderate at a Cramer's V of

0.220.

Religion was highly associated with respondent's opinion on level/ Extent of financial

impact at (X₂=38.298, df=9 and p = <0.001). Respondents who were Protestants seemed

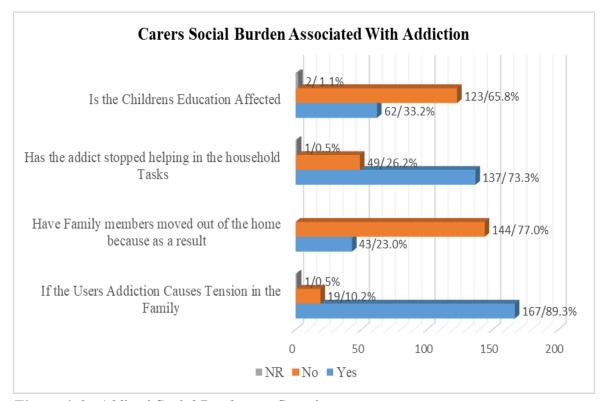
to feel that the family's financial situation had been severely affected. The effect that religion had on these views was moderate at a Cramer's V of 0.281.

The level of Education was also associated with respondent's opinion on level/ Extent of financial impact at (X_2 =13.475, df=6 and p=0.036). Generally, highly educated (college/ University) respondents seemed to feel that the family's financial situation had been severely affected compared to other respondents. However, the effect that education level had on these views was weak or small at a Cramer's V of 0.196.

Variable		Level S	P- (P	Correlati on			
		Mild	Finar Moderate	Severe	Extremel y Severe	Value)	statistics (Cramer' s V)
Gender	Male	8(4.5%)	43(24.4%)	26(14.8%)	9(5.1%)	0.036	0.220
	Female	3(1.7%)	43(24.4%)	41(23.3%)	3(1.7%)		
Marital	Married	5(2.8%)	37(20.9%)	36(20.3%)	5(2.8%)	0.554	
Status	Divorced	0(0.0%)	12(6.8%)	10(5.6%)	1(0.6%)		
	Single	7(4.0%)	35(19.8%)	21(11.9%)	6(3.4%)		
	Others	0(0.0%)	2(1.1%)	0(0.0%)	0(0.0%)		
Religion	Roman Catholic	2(1.2%)	39(24.1%)	23(14.2%)	3(1.9%)	<0.001	0.281
	Protestant	6(3.7%)	35(21.6%)	32(19.8%)	6(3.7%)		
	Muslim	4(2.5%)	5(3.1%)	0(0.0%)	0(0.0%)	-	
	Others	0(0.0%)	2(1.2%)	2(1.2%)	3(1.9%)		
Level of	Primary	1(0.6%)	14(8.0%)	11(6.3%)	4(2.3%)	0.036	0.196
education	Secondary	0(0.0%)	28(16.0%)	18(10.3%)	0(0.0%)		
	College/ University	11(6.3%)	44(25.1%)	37(21.1%)	7(4.0%)		
Source of	Employed	2(1.1%)	34(19.2%)	18(10.2%)	3(1.7%)	0.001	0.230
livelihood/ Occupatio n status	Self- employed(Meagre Income)	1(0.6%)	8(4.5%)	16(9.0%)	7(4.0%)	-	
	Self- employed(Adequate Income)	5(2.8%)	34(19.2%)	21(11.9%)	0(0.0%)		
	No Source of Income	4(2.3%)	10(5.6%)	12(6.8%)	12(6.8%)		

Table 4. 3: Association & Correlation Between Socio-Demographic Factors &perceived Levels that the SUD Treatment Has Had On Family's Finances

Finally, income was also associated with the respondent's opinion on level/ Extent of financial impact at (X_2 =28.108 df=9 and p=<0.001). Generally, self-employed respondents with meagre income and those with no income seemed to feel that the family's financial situation had been severely affected compared to other respondents. The effect that income had on these views was moderate at a Cramer's V of 0.230.



4.4 Social Burden On Caregivers

Figure 4. 3: Addicts' Social Burden on Caregiver

Figures 4.3 illustrate the social burdens that the respondents felt they dealt with because of caring for an addict. Eighty-nine point three percent (89.3% (167)) of them indicated that the addicts' problem had caused tension within the family, 23%(43) respondents indicated that there were some family members that had moved out of the home as a

result of addicts habits and 73.3% (137) respondents also mentioned that the addict had stopped helping with household tasks. Thirty-three point two percent (33.2% (62)) indicated that the children's education had been affected since some of them could no longer attend school due to financial burden

Figure 4.4 below similarly also illustrate the social burdens that the caregivers endure. As illustrated, clearly most respondents were more concern with the distress they felt because of user's addiction.

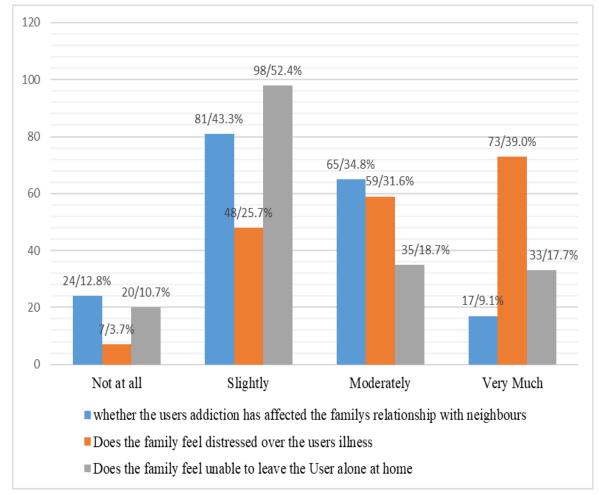


Figure 4. 4: Social Burden on Caregiver

Thirty-two point one percent (32.1% (60)) also indicated that there were other social burdens that had not been mentioned. From the responses given, stealing and selling home properties or items was the most prevalent concern for the caregivers. Others mentioned concerns like user attempting suicide, coming home late and domestic violence among others.

4.5 Caregivers Psychological Burden

Respondents were asked if the encountered psychological burden and 77.5(145) indicated that they did, 80.7% (151) indicated that they got stressed when they had to give care to the addict and meet their daily needs. Financial concerns, employment concerns and stress were mentioned as the common stressors. 34.5% (50 out 145 respondents) indicated that they suffered from Stress. 11% (16) of these respondents indicated that they suffered from anxiety while 11.72% (17) indicated that they depression.

VariablesOutcome 187/100%Have you encountered Psychological burden145(77.5%)Do you get stressed because of giving care and trying to
meet your needs151(80.7%)Psychological Illness you have developed due to this Burden50(34.5%)Stress50(34.5%)Anxiety16(11.0%)Depression17(11.7%)

Table 4. 4: Respondents View on Psychological Burden

4.5.1 Determining Respondents at Risk of Developing Psychological Problems using the General Health Questionnaire

For the purpose of this study, the GHQ scoring method (0-0-1-1) was used to avoid bias in responses given by respondents. Since there are various thresholds for the GHQ, in this study, the mean GHQ score for the study population was used as the best cut off point (Goldberg, Oldehinkel & Ormel, 1998). Descriptive analysis showed that the mean GHQ score for the study respondents was 5.45 (SD 2.32). using a cut off score of 7, the respondents psychological wellbeing was determined where individuals scoring below 7 were said to be psychologically healthy while those scoring above 7 were seen as most likely to develop or experience psychological problems.

As indicated in Table 4.5, 68.4% (128) of the respondents were found to be having no psychological problems and were not at risk of developing any either, 24.6% (46), were found to be having psychological concerns or were at risk of developing psychological problems.

Table 4. 5: Respondents level of Psychological health

GHQ Interpretation	Outcome 187/100%		
	(n/%)		
No psychological Problems	128(68.4%)		
Risk of experiencing & Developing Psychological Problems	46(24.6%)		
NR	13(7.0%)		

4.5.2 Association & Correlation between Socio-Demographic Factors & Respondents Psychological Health

Gender was the only socio-demographic variable that was highly associated with

psychological health at (X_2 =7.368, df=1 and p=0.007). Data showed that females were

more at risk of developing psychological problems. There was a positive correlation

between the two variables at (φ) =0.206.

Variable		GHQ Inte	erpretation	Chi Square	Phi-	
		No Risk	Risk	(P Value)	Coefficient	
					(φ)	
Gender	Male	67(38.7%)	13(7.5%)	X ₂ =7.368,	0.206	
	Female	61(35.3%)	32(18.5%)	df=1 and		
				<i>p</i> =0.007		

Table 4. 6: Association & Correlation between Socio-Demographic Factors & Risk ofdeveloping psychological Illness

4.6 Care Giver Burden Scale

4.6.1 Care Giver Burden Scores & Interpretation

The level of burden the caregiver experienced was assessed using the care giver burden scales and the mean score of the respondents was 48.98 (SD 12.35). The median was 49 and the Mode was 49.

The scores interpretation was as indicated on Table 4.7. one point six percent (1,6%(3))

of the respondents had little or no caregiver burden, 19.8% (37) had mild to moderate

caregiver burden. Most of the respondents (57.2%(107) were found to have moderate to

severe care giver burden while 14.4% (27) respondents were found to have severe care

giver burden.

Tuoto n'n Respondents Dever of Care Stren Dunaen					
Care Giver Burden Scores Interpretation	Outcome 187/100%				
	(n/%)				
0 -20 (Little or No Burden)	16(8.6%)				
21-40 (Mild to Moderate Burden)	37(19.8%)				
41-60(Moderate to Severe Burden)	107(57.2%)				
61-88 (Severe Burden)	27(14.4%)				

 Table 4. 7: Respondents Level of Care Giver Burden

4.6.2 Prevalence of Caregiver Burden

The prevalence of caregiver burden was determined by considering every respondent that was found to have mild to severe burden. As shown in the Fig. 4.5, the prevalence was 91.4%.

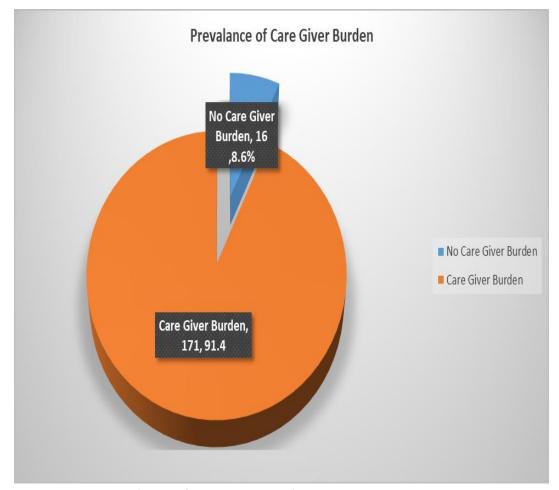


Figure 4. 5: Prevalence of Caregiver Burden

4.6.2 Binary Logistic Regression to Determine the Predictors of Caregiver Burden

Multiple Binominal/Binary logistic regression was performed to ascertain the effects of marital status, education, employment, psychological health on the likelihood that participants have or develop caregiver burden. The Wald chi square test was used to

determine statistical significance for each of the independent variables. Table 4.8 below indicates that; no socio-demographic factor was a risk factor for developing caregiver burden. The results show that; psychological health (p = 0.043) added significantly to the model/prediction.

			Variables	in the	Equatio	n		
Variable	В	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Gender	3.889	3.167	1.508	1	.219	48.846	.099	24221.346
Edu	.748	1.212	.381	1	.537	2.114	.197	22.734
Marital	1.239	1.436	.744	1	.388	3.452	.207	57.631
Religion	764	1.200	.405	1	.524	.466	.044	4.891
Income	294	.791	.138	1	.710	.745	.158	3.512
Economic	16.017	7530.517	.000	1	.998	9034263.895	.000	
Burden								
Social	4.051	17.715	.052	1	.819	57.455	.000	
Burden								
Psychological	-1.934	.955	4.101	1	.043	.145	.022	.940
Health								
Constant	-	7530.542	.000	1	.997	.000		
	23.714							
a. Variable(s) en	tered on st	ep 1: gender,	Edu, Mar	ital, R	eligion,	income, Econom	nic Burden	, Social
Burden, Psychol	ogical burc	len, Psycholo	gical Hea	lth				

 Table 4. 8: Binary logistic regression to determine the predictors of Caregiver Burden

 Variables in the Equation

CHAPTER 5: DISCUSSION, CONCLUSIONS AND RECCOMMENDATIONS

5.1 Discussion

5.1.1 Caregivers Socio-demographics

Though there was a near similar number of male caregivers to female caregivers in this current study, it was established that most of the caregivers were women. These women were mostly mothers and wives with very few being sisters to the addicts. This has been noted in other similar studies. In an Indian study that was done to determine the level of caregiver burden among caregivers of individuals with alcohol dependence syndrome, the findings showed that there were more female caregivers because out of 200 caregivers that were engaged in the study, 180 were females (Ramanujam, Selvaraj, Balakrishnan, & Ramanathan, 2017). In this Indian study, majority of the women were spouses while the others were the addicts' mothers'. In a different study that was done in Sau-Paulo in Brazil, it was reported that almost 91% of the caregivers that involved in the study were female, mostly spouses and mothers too. The study sought to establish the quality of life and the stress caregivers of drug addicts endured (Samira, Elizete, Mariano, Angélica, & Dulce, 2012). Overall the findings on this current study on the caregivers being predominantly females, is concurrent with literature on caregiver burden that have generally depicted that indeed most women tend to be the caregivers in similar situations. They also find that these females are usually family members, either the mothers or the spouses (Marcon et al, 2012, Matoo et al, 2013).

This study also found that the caregivers mean age of the respondents was 42.24yrs (SD = 8.768). The mode was 42yrs while the median was also 42. The Brazilian study mentioned (Samira, et al., 2012) also reported relatively the same average age for their

respondents at 47.66yrs. Other reviewed study finding report a slight lower mean age especially for the female respondents (Walker & Druss, 2016 & Ganesh, Bhat, & Latha, 2017). In a study that was undertaken in the United states that looked into the cumulative burden of mental disorders, substance use disorders, chronic meidcal conditions and poverty had on adults health in the USA, they reported that caregivers mean age was 33.45yrs. The study also reported that these caregivers were mostly wives to the individuals with these health concerns (Walker & Druss, 2016). Ganesh et al(2017), in their study found that the mean age of the caregivers who were mostly female to be 39yrs.

Similar to the studies whose findings have been reviewed in this section and in line with the findings that most of the caregivers were spouses, most of the caregivers in this current (Kenyan) study were also married (Samira, et al., 2012 & Ganesh et al., 2017). But unlike other studies that have found that education is a considerable factor in the level of care giver burden, in that most of the respondents report to have lower levels of education (primary level education) or are illetrate (no formal education) (Ramanujam, et al., 2017, Samira, et al., 2012), this current study reported that majority of the caregivers had attained college degrees or were in college by the time they took part in the study. It was further established that these group of individuals also found the care giver burden to be severe. In addition this, most of the respondents were also reported to be having adequate income which is contrary to other studies that have reported that most caregivers have low incomes and come from low socio-economic backgrounds (Charkhchi, Fazeli, & Carlos, 2018). Charkhchi (2018), found that housing and food

security were key factors in determining how persons with mental and other illnesses and their families cope. However, to explain the obvious bias in this study results, it is important to mention that majority of the sampled study participants came from rehabilitation centres that were considered high end facilities in Kenya. The probabilities of finding individuals with adequate income and high education levels was high.

5.1.2 Overall Caregiver Burden

The prevalence of caregiver burden in this current study was determined by considering every respondent that was found to have mild to severe burden as measured by the Caregiver Burden Scale. The study found that the prevalence was 91.4%, where 8.6% were found to having mild to moderate caregiver burden, while 57.2% had moderate to severe care giver burden. 14.4% of the respondents were found to be having severe burden. Other studies have reported similar high prevalence rates of care giver burden. Ramanujam, et al (2017), reported that 95.5% prevalance rates where 58% of the caregivers in their study experienced severe burden and 36.5% had moderate burden. Another Indian study which sought to determine the level of family burden was felt by families of narcotics users that had experienced and re-experienced relapse reported the following results (Rico & Novrikasari, Imelda, 2018). Overall, 89.9% reported that caregiving had completely overwhelmed them. 90.5% of their participants felt that caregiving was inconvenient, that caregiving was a physical strain (89.9%), caregiving is confining (72%), and that some addicts behaviours was upsetting (77.4%), there have been work adjustments (61.9 %) and that care giving was a financial strain (87.5 %). These results reflect most of the sentiments that the caregivers had in this kenyan study.

5.1.3 Economic Burden on Caregivers

The study revealed that majority of the respondents (89.8%) felt that they had been affected financially and therefore faced economic burden. 81.8% of the participants also indicated that the effect had been moderate to severe. Nearly half of the participants also indicated that they had to borrow money to take care of the treatment costs incurred by their family member with substance use disorder. Indications that substance use disorders treatments are costly to individuals were estbalished by three Canadian studies that found that mentally ill patients or patients with addiction issues incurred 30 percent more healthcare cost per capita than individuals with other physiological or health problems (de Oliveira, Cheng, Rehm, & Kurdyak, 2016). The researchers then carried 2 subsequent studies in 2016 and 2017 and they found that these individuals could incur health care costs more than 40% the average individual with other health concerns (de Oliveira, Cheng, Rehm, & Kurdyak, 2017). Though not directly related to caregiver economic burden, a study that was done to determine the effect of good housing on how well mentally ill patients faired with treatment, it was found that it improved health outcomes overall for mental health and addiction patients (Kerman, Sylvestre, Aubry, & Distasio, 2018). This study highlights how essential economic stability or less economic burden positively impact on treatment success for individuals with substance use disorders. However, in their state and probable inability to provide adequaltely for themselves and their families the assumption would be that it will increase economic burden for the caregiver who assumes such roles for the addict.

In a systematic review of studies that had been done in sub-Sarahan Africa on caregiver economic burden, it was reported that only 5 out 7 fully studies estimated the full economic burden of persons taking care of mentally ill patients (Addo, Agyemang, Tozan, Nonvignon, & Bowen, 2018). It is important to mention that the researchers didn't review studies done focusing particularly on caregiver burden for individuals caring for substance use disorder patients but nevertheless, being a mental disorder, the study findings are relevant to this current study.

Similar to this current study, the reviewed studies found that caregivers in different studies reported moderate to severe caregiver burden characterised by financial constraints, productivity loss and lost employment. They found that overall, the caregiver's level of income and employment status clearly affected the level of economic burden that the caregiver experienced. Findings that were established by this current study. Other factors such gender and level of education were also found to be significant in the systematic review. A finding that was also established by this current Kenyan study (Addo, et al., 2018). Other factors that were found to be significant and were not fully considered in this study were severity of patient's condition and duration of mental illness (in this case, the duration of substance use disorder). Both factors were reported to negatively affect the economic burden experienced by caregivers. Three of the reviewed studies had been conducted in Nigeria and one each in Ethiopia, Ghana, Zimbabwe and South Africa. The caregivers were recruited mainly at psychiatric health facilities, with sample size ranging from 8 (Prince, 2004) to 191 caregivers (Addo, Nonvignon, & Aikins, 2013). For all the studies that were reviewed, a Zarit Burden Instrument (ZBI) or Global Health Questionnaire (GHQ-12) or both were used (Addo, et al., 2018).

Finally the study also found that religion was significantly associated with economic burden among caregivers where protestants seemed to less economic burden as opposed to other religion. However, the association can be explained as a consequence of the significant statistical noise because the difference in figures in insignificant. Other studies that have established that there is an association between religion and caregiver burden, have really devled into the practice of religion where respondents religious activities are weighed or measured based on intensity and frequency (Asadi et al., 2019). This study lacks that depth, however, it is noted that belonging to a religion has been found to be important as a coping strategy (Malhorta & Thapa (2015). Clearly, there is need to look into the religious contruct to fully understand its impact on financial burden in this study.

5.1.4 Social Burden On the family Caregiver of the Members with Substance Use Disorders

The study revealed that nearly all respondents felt some form of social burden. 89.3% reported that the addiction had caused tension in the family, some family members had opted to move out of the homes for 23% of the respondents. Amritsar, Sanjeev, Shyam, & Tejbir (2018), in their study reported that substance use disorder directly caused continuous conflicts in the family. The study was conducted in India. Another study that looked into the familial influence of substance use disorder on emotional disorder across three generations found that a family is most likely to be affected by substance use disorders (Leventhal, Pettit, & Lewinsohn, 2011). The researchers reported the extent of the impact could be felt even by the extended family members and greatly impact the

family functioning. This was primarily because they shared concerns, fear, anger and embarrassment. Some could even try to ignore the substance user.

Another social concern that was established in this current Kenyan study was that the addict had been unable to play his/her role in taking care of the house hold chores. This was reported by 73.3% of the respondents. Similar findings were reported in another study where it was determined that a consequence of the social and occupational dysfunction, vacant roles would have to be redistributed and some family members, especially children, might have to bear excessive responsibilities (Brown, Biegel, & Tracy, 2011).

In their study (Brown, Biegel, & Tracy, 2011); in which they looked at the social impact of caregiver burden on women who took care of family members who had substance use disorders and other mental disorders, they established that overburdened caregivers actually didn't know how to ask for help or even refused to do so because of the accompanied social stigma. The study specifically sought to assess their help asking/ seeking behaviours and the researchers Hence they felt shame and fear. This, however, is partly contrary to this current study where nearly half of the respondent had organised for some assistance to care for their relative with addiction despite feeling that the addict had somewhat interfered with how they associated with their neighbours. Other social concerns in this Kenyan study were stealing and selling home properties or items, attempting suicide, coming home late and domestic violence among others.

The study also revealed that 52.4 % of the respondents were slightly concerned about leaving the addict at home alone for one reason or the other, predominantly the fact that

they would seek means of using again. Similar findings were reported from an Indian study that sought to determine the social problems caregivers had (Amritsar, et al., 2018). The study reported that 28 (8.02%) had social problems and didn't carry out any recreational activities, and that 18 (5.15%) left their recreational activities, 17 (4.87%) lost their social interactions because of lack of time (Amritsar, et al., 2018).

5.1.5 Caregiver Psychological Burden

The General Health Questionnaire was used to determine the psychological health of the respondents and it was established that 24.6% of them were having psychological problems/ concerns or were at risk of developing psychological problems. However, selfreports on what psychological disorder they thought they suffered from, indicated that 57.2% of them felt they had suffered from either depression (17%), stress (34.5%) and anxiety (11%). Similar statistics of presence of psychological problems and diagnosis have been reported in other studies. For instance, (Amritsar, et al., 2018) reported that 54.15% of their study participants developed stress while caregiving. The study concluded that the caregivers' quality of life was significantly affected due to their nature of commitment and that they needed emotional support. Gender was found as a significant factor in the Kenyan study and in the Indian study mentioned (Amritsar, et al., 2018). This current study also found that psychological health was a key predictor of caregiver burden, study findings that were also found in a Brazilian study where they found that caregiver burden was positively related to depression among the caregivers (Samira, et al, 2012).

5.2 Conclusions

Based on the study findings, caregiving is physically, mentally and emotionally demanding. Walker & Druss (2016), in their study found that individuals that had mental illness and dealing with substance use disorders generally had complex care needs especially due to various deficits in their social determinants of their health. These researchers suggested that an individuals' income, their housing situation and their income or ability to earn an income and their level of education was affected by their incapacity to be self sufficient. Hence the caregivers are left with the tasks of ensuring these needs are catered for. Clearly these burden creates a psychological strain which presents as caregiver stress, role strain . In addition, there is the social burden that it imposes on the caregiver that basically presents as reduction of social activities, disruption of the usual routine and financial pressure, sources of social support and family rituals.

The study also concludes that more females than males' caregivers are usually affected and that other factors such as income, level of education could impact how one views their level of caregiver burden. The study also concludes that psychological wellness is a major predictor of caregiver burden.

5.3 **Recommendations**

Clearly, the caregivers undergo through significant challenges and in turn they get exposed to a number of negative consequences. The study therefore recommends that,

- The caregivers be considered during therapy for the addicts. This is because they
 have emotional and psychological concerns that could be weighing on them and
 would probably interfere with their ability to provide care
- Psychological assessment should also be done for them to ensure that they are well or if they need help
- 3. Training and awareness of what they are going to face and where they can seek help is very important because it helps them to be fully aware of what their roles entail.
- 4. They should also be made aware of negative self-perception and self-stigma that could arise and what healthy ways they could deal with these challenges.
- 5. Caregivers should be encouraged to improve their help seeking behavior. they should be encouraged to ask for assistance if they need it. These reduces emotional, social, psychological and financial burden.

5.4 Suggestions for Further Studies

Though the study data was collected from two different types of rehabilitation centers. A comparative study couldn't really be done as the sample determination could not permit a non –biased assessment. Therefore, another study needs to be done to compare findings from these two types of institutions. These could highlight relevant factors that are key to a certain population with particular socio-demographic factors. The level of substance use disorder and type of substance can shed more light on the level of caregiver burden is faced.

REFERENCES

- Addo, R., Agyemang, S. A., Tozan, Y., Nonvignon, J., & Bowen, M. (2018). Economic burden of caregiving for persons with severe mental illness in sub-Saharan Africa: A systematic review. *PLoS One*, 13(8).
- Addo, R., Nonvignon, J., & Aikins, M. (2013). Household costs of mental health care in Ghana. *The journal of mental health policy and economics*, 16(4):151–9.
- Amritsar, A. K., Sanjeev, M., Shyam, S. D., & Tejbir, S. (2018). Assessment of role of burden in caregivers of substance abusers: a study done at Swami Vivekananda Drug De-addiction Centre, Govt. Medical College, . *International Journal of Community Medicine & Public Health*, 5(6): 2380-2383.
- Brown, S., Biegel, D., & Tracy, E. (2011). Likelihood of asking for help in caregivers of women with substance use or co-occurring substance use and mental disorders. *Care Manag J.*, 12:94–100.
- Carpentier N, Lesage A, Goulet I, Lalonde P, Renaud M. (2012). Burden of care of families living with drug addict relatives. Hospital and Community Psychiatry; 43:38-43.
- Charkhchi, P., Fazeli, D. S., & Carlos, R. C. (2018). Housing and food insecurity, care access, and health status among the chronically ill: an analysis of the behavioral risk factor surveillance system. *Journal of General Internal Medicine*, 33(5), 644-650.
- Cook JA, Lefley HP, Pickett SA, Cohler BJ. (2014). Age and family burden among parents of offspring with severe drug abuse. Am J Orthopsychiatry; 64:435-447.
- de Oliveira, C., Cheng, J., Rehm, J., & Kurdyak, P. (2016). The economic burden of chronic psychotic disorders in Ontario. *The Journal of Mental Health Policy and Economics*, 19(4), 181–192.
- de Oliveira, C., Cheng, J., Rehm, J., & Kurdyak, P. (2017). The role of mental health and addiction among high-cost patients: a population-based study. *Journal of Medical Economics*, 1–8.
- Dickey B, Azeni H. (2016). Persons with dual diagnosis of substance abuse and major mental illness: Their excess costs of psychiatric care. Am J Public Health 1996; 86(7):973-977

- Dixon LB, Lehman AF. (2014). Family interventions for drug abuse. Drug Bull; 21(4):631-643.
- Dyck DG, Short R, Vitalliano PP. (2016). Predictors of burden drug abuse caregivers.Psychosom Med 61:411-419. Dixon L. Providing services to families of persons with drug abuse
- Franks, D.D. (2016). Economic contribution of families caring for persons with severe and persistent drug addiction. Administration and Policy in Mental Health, 18:9-18.
- Ganesh, S., Bhat, M. S., & Latha, K. S. (2017). Burden and Quality of Life among Care Givers of Persons with Alcohol Dependence Syndrome - A Hospital based Interventional Study. *IOSR Journal of Humanities and Social Science*, 22(12): ver 8; pp. 20-28.
- Goldman, H.H. (2012). Drug abuse and family burden: A public health perspective. Hospital and Community Psychiatry, 33(7):557-560, 1982.
- Kerman, N., Sylvestre, J., Aubry, T., & Distasio, J. (2018). The effects of housing stability on service use among homeless adults with mental illness in a randomized controlled trial of housing first. . *BMC Health Services Research*, 18(1):190.
- Leventhal AM, Pettit JW, Lewinsohn PM. (2014). Familial influence of substance use disorder on emotional disorder across three generations. Psychiatry Res. 2014; 185:402–7.
- McHugo GJ, Drake RE, Burton HL, Ackerson TH. (2016). A scale for assessing the stage of substance abuse treatment in persons with severe mental illness. J Nerv Ment Dis; 183:762-767.
- McNary, S.; and Lehman, A. (2015). Substance abuse and family relationships of persons with severe substance addiction. *American Journal of Psychiatry*, *152:456-458*.

- Miklowitz DJ, Goldstein MJ, Nuechterlein KH, Snyder KS, Mintz J. (2015). Family factors and the course of drug abuse disorder. Arch Gen Psychiatry; 45(3):225-231.
- Perlick D, Clarkin JF, Sirey J, Raue P, Greenfield S, Struening E, (2015). Burden experienced by caregivers of persons with drug abuse disorder. Br J Psychiatry; 174:55-62
- Prince, M. (2004). Care arrangements for people with dementia in developing countries. *International journal of geriatric psychiatry*, 19(2):170–7.
- Ramanujam, V. M., Selvaraj, K., Balakrishnan, R., & Ramanathan, S. (2017). Caregiver Burden in Alcohol Dependence Syndrome. *Journal of Addiction*, vol 2017.
- Rice DP, Miller LS. (2016). The economic burden of drug abuse: conceptual and methodological issues, and cost estimates. In: Moscarelli M, Rupp A, Sartorius N, editors. Volume I in the Handbook of Mental Health Economics and Health Policy. West Sussex, England: John Wiley and Sons.
- Rico, J. S., & N. G. (2018). Family Burden of Narcotics Abusers Experiencing Relapse and Factors Exacerbating It . *E3S web of Conferences 68, 0100*, 1st SRICOENV.
- Samira, R. M., Elizete, A. R., Mariano, M. E., Angélica, B., & Dulce, A. B. (2012). Quality of life and stress in caregivers of drug- addicted people. *Acta Paul enferm*, 25(2).
- Schulze B, Rössler W. (2015). Caregiver burden in mental illness: review of measurement, findings and interventions in 2014-2015. Curr Opin Psychiatry; 18:684–91.
- Tennstedt SL, Crawford SL, McKinlay JB. (2014). Is family care on the decline? A longitudinal investigation of the substitution of formal long- term care services for informal care. Milbank Q; 71(4):601- 624.
- Tessler R, Fisher G, Gamache G. (2015). A role strain approach to the measurement of family burden: the properties and utilities of a new scale. Paper presented at Rutgers University, Institute for Health, Health Policy and Aging Research.

- Walker, E. R., & Druss, B. G. (2016). Cumulative burden of comorbid mental disorders, substance use disorders, chronic medical conditions, and poverty on health among adults in the U.S.A. *Psychology, Health & Medicine*, 1-9.
- Weisner C, Parthasarathy S, Moore C, Mertens JR. (2013). Individuals receiving addiction treatment: are medical costs of their family members reduced? Addiction. 2013; 105:1226–34.

APPENDICES

APPENDIX 1: SOCIO DEMOGRAPHIC QUESTIONNAIRE

This questionnaire aims at collecting information and data for academic use by the researcher. Your kind participation will go a long way in providing useful information required to complete this research. The information provided will be treated in confidence. You need not indicate your name. Please answer the questions precisely and objectively; the information will be treated confidentially

SECTION A: BACKGROUND INFORMATION

1. What is your gender?

Male [] Female []

2. What is the highest level of education you have attained? (specify)

······

3. What is your marital status?

Married [] divorced [] single [] others []

4. What is your religion? Roman Catholic [] Protestants [] Muslim [] Hindu []

Others []

5. What is your means of livelihood?

.....

SECTION B- BURDEN OF CARE FOR PERSONS WITH DRUG ABUSE DISORDER

ECONOMIC BURDEN

Tick the correct answer as applies to you

6. Has the substance use disorder treatment affected the family's income?

Yes [] No []

7. If yes, to what extent has it affected the family's income?

Mild [] Moderate [] Severe [] extremely severe []

8. Has the family borrowed money or organized fundraising to pay for bills incurred by the drug user?

Yes	[]	No	[]
	L J		L 1

9. Have you made extra arrangements for someone to look after your loved one?

Yes [] No []

If yes, to what extent has it affected the family?

Mild [] Moderate [] Severe [] extremely severe []

SOCIAL BURDEN

Tick the correct answer as it applies to you

Would like to find out whether the patient's illness has affected the social life of the family

10. Does the drug user's addiction cause tension within the family?

Yes [] No []

11. Has any member of the family moved out of the house due to the drug user's addiction?

Yes	(specify who)	No []
-----	---------------	-------

12. Has the drug user stopped helping with the household tasks due to addiction?

Yes [] No []

13. Is the education of the children affected because of the drug user's addiction?

Yes (Specify) []	No []
------------------	-------

14. Has the drug user's addiction affected the family relationship with the neighbors?

Not at all [] slightly [] moderately [] very much []

15. Does the family feel distressed over the loved one's illness?

Not at all [] slightly [] moderately [] very much []

16. Does the family feel unable to leave the drug addict alone at home?

Never [] occasionally [] often [] always []

17. Is there any other problem in the family caused by the drug user's addiction which I have not asked you? Yes (specify.....) No []

To what extent has it affected the family?

- a) Very great extent []
- b) Great extent []
- c) Moderate extent []
- d) Little extent []
- e) No extent at all []

PSYCHOLOGICAL BURDEN

Would like to find out whether caring for the drug user has some psychological burden to the care giver in the family. Tick the correct answer as it applies to you

18. Have your encountered any psychological burden as a result of caring for drug addicts?

Yes	[]	No	[]

19. Do you get stressed when you give care to your relative who is a drug addict and at the same time trying to meet your daily needs? Explain

·····

20. State the psychological illness that you have suffered as a result of caring for your loved ones who are drug users?

.....

21. State the extent to which the psychological burden has affected your normal life?

Very great extent	[]
Great extent	[]
Moderate extent	[]
Little extent	[]
No extent at all	[]

THE END

THANK YOU

	Less than usual	No more than usual	Rather more than usual	Much more than usual
Able to concentrate	0	1	2	3
Lost much sleep over worry	0	1	2	3
Playing a useful part in things	0	1	2	3
Capable of making decisions	0	1	2	3
Constantly under strain	0	1	2	3
Couldn't overcome difficulties	0	1	2	3
Enjoy your normal activities	0	1	2	3
Able to face up to problems	0	1	2	3
Feeling unhappy and depressed	0	1	2	3
Losing confidence in yourself	0	1	2	3
Thinking yourself worthless	0	1	2	3
Feeling reasonably happy	0	1	2	3

APPENDIX II: GENERAL HEALTH QUESTIONNAIRE VERSION 12.

APPENDIX III: CAREGIVER BURDEN SCALE

Caregiver Burden Scale. This self-administered 22-item questionnaire assesses the "experience of burden." Adapted with permission from Zetit SH, Reever KE, Bach-Peterson 1. Relatives of the impaired elderly: correlates of feelings of burden. Gerontologist 1980; 20:649-55.

	Never	Rarely	Sometimes	Frequently	Nearly Always
Do you feel that your relatives asks for more help than he or she needs	0	1	2	3	4
Do you feel that because of the time you spend with your relative, you do not have enough time for yourself	0	1	2	3	4
Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work	0	1	2	3	4
Do you feel embarrassed over your relative's behavior	0	1	2	3	4
Do you feel angry when you are around your relative	0	1	2	3	4
Do you feel that your relative currently affects your relationship with other family members or	0	1	2	3	4

friends in a negative way					
Are you scared of what the future holds for your relative	0	1	2	3	4
Do you feel your relative is dependent on you	0	1	2	3	4
Do you feel strained when you are around your relative	0	1	2	3	4
Do you feel your health has suffered because of your involvement with you relative	0	1	2	3	4
Do you feel that you do not have as much privacy as you would like, because of your relative?	0	1	2	3	4
Do you feel that your social life has suffered because you are caring for you relative?	0	1	2	3	4
Do you feel uncomfortable about having friends over, because of your relative?	0	1	2	3	4
Do you feel that your relative seems to expect you to take care of him or her, as if you were the only one he or she could depend on?	0	1	2	3	4
Do you feel that you do not have enough money to care for your	0	1	2	3	4

relative, in addition to the rest of your expenses?					
Do you feel that you will be unable to take care of your relative much longer?	0	1	2	3	4
Do you feel you have lost control of your life since your relative's illness?	0	1	2	3	4
Do you wish you could just leave the care of your relative to someone else?	0	1	2	3	4
Do you feel uncertain about what to do about your relative?	0	1	2	3	4
Do you feel you should be doing more for your relative?	0	1	2	3	4
Do you feel you could do a better job in caring for your relative?	0	1	2	3	4
Overall, how burdened do you feel in caring for your relative?	0	1	2	3	4

Total

score:_____

SCORING KEY:

o to 20 = little or no burden; 21 to 40 = mild to moderate burden; 41 to 60 = moderate to severe burden; 61 to 88 = severe burden.

APPENDIX IV: VIAMBATANISHO

Kiambatanisho 1 : Hojaji ya Masuala ya Kijamii

Hojaji hii inalenga kukusanya habari na data kwa matumizi ya kiakademia na mtafiti. Ushiriki wako utasaidia katika utoaji wa habari muhimu inayohitajika kukamilisha utafiti huu.habari zinazotolewa zitawekwa kama siri.Unahitaji kuandika jina lako.Tafadhali jibu maswali kwa makini na shabaha ; habari hizi hazitatolewa kwa watu.

Sehemu ya A : Habari ya Kibinafsi

1. Jinsia yako ni gani ?

Kiume [] kike []

2. Kiwango chako cha juu cha elimu ni kipi ? (Fafanua)

5. Unafanya kazi gani kukimu maisha yako?

SEHEMU YA B : GHARAMA YA KUSHUGHULIKIA MWATHIRIWA WA DAWA ZA KULEVYA

Gharama ya Kifedha

Weka alama ya mkwaju panapokufaa;

- 6. Je, matibabu ya mwathiriwa wa dawa za kulevya yameathiri mapato ya familia?
 Ndio []
 La []
- Kama ni ndio, ni kwa kiwango gani mapato ya familia yameathiriwa ?
 Kidogo [] Wastani [] Zaidi [] Zaidi mno []
- 8. Je, familia imeomba pesa au kuandaa harambee kugharamia mtumiaji wa dawa za kulevya ?

Ndio [] La []

9. Je, familia imekuwa na mpango wa kuwa na mtu wa ziada kumwangalia mwathiriwa wa dawa za kulevya/

Ndio [] La []

Kama ni ndio, hatua hiyo iliathiri familia kwa kiwango gani ?

```
Kidogo [] wastani [] zaidi [] zaidi mno []
```

MZIGO WA KIJAMII

Weka alama ya mkwaju panapofaa

Tungependa kujua kama ugonjwa wa mwathiriwa umeathiri hali ya kijamii ya familia

- 10. Je, uraibu wa mtu anayetumia dawa za kulevya umeletea familia wasiwasi?Ndio []La []
- 11. Je,kuna mtu yeyote wa familia amewahi kuondoka nyumbani kwa sababu ya kuwepo mtu mwenye uraibu wa dawa za kulevya ?
 Ndio (Ni nani) La []
- 12. Mtumiaji wa dawa za kulevya ameacha kufanya majukumu yake ya nyumbani kwa sababu ya uraibu ?

Ndio [] La []

13. Masomo ya watoto yameathiriwa kwa sababu ya uraibu wa mtumiaji dawa za kulevya ?

Ndio (fafanua) La []

14. Je, uraibu wa mtuamiaji dawa za kulevya umeathiri uhusiano wa familia na majirani ?

La [] kidogo [] wastani [] zaidi []

- 15. Je, familia imekuwa na msumbuko kutokana na hali ya mwathiriwa wa dawa ?La [] kidogo [] wastani [] zaidi [s]
- 16. Familia inaona vigumu kumwacha mwathiriwa wa dawa nyumbani peke yake ?La [] wakati fulani [] mara nyingi [] kila mara []
- 17. Kuna shida nyingine yoyote katika familia inayoletwa na uraibu wa mtumiaji dawa za kulevya ambayo sijauliza ?
 Ndio [] (fafanua) La []

Ni kwa kiwango gani familia imeathiriwa?

- (a) Kiwango kikubwa mno []
- (b) Kiwango kikubwa []
- (c) Wastani []
- (d) Kidogo []

(e) Hapana []

MZIGO WA KISAIKOLOJIA

Tungependa kujua kama kumshughulikia mwathiriwa wa dawa za kulevya kumekuwa na tatizo la kisaikolojia kwa anayemwangalia katika familia. Chagua jibu sahihi.

- 18. Umewahi kuwa na tatizo lolote la kisaikolojia katika ushughulikiaji wa mraibu wa dawa ?
 Ndio [] La []
- 19. Huwa unapata msongo wa mawazo unapomshughulikia mwathiriwa wa dawa za kulevya na kushughulikia mahitaji yako ya kila siku? Eleza

.....

20. Taja hali za kisaikolojia ambazo umepitia kutokana na kumshughulikia mgonjwa wa dawa za kulevya

.....

21. Taja kiwango cha athari ya mzigo wa kisaikolojia kwa maisha yako ya kawaida Kiwango kikubwa sana []
Kiwango kikubwa []
Wastani []
Kidogo []
La []

Mwisho

Asante

KIAMBATANISHO 2: HOJAJI YA KIAFYA KWA JUMLA

Hojaji hii inapima hali ya afya ya akili na tangu kuanzishwa na Goldberg miaka ya 1970 imetumika kwa mapana katika miktadha na tamaduni mbalimbali. Kila elementi inapimwa kwa viwango vinne (chini ya kawaida, si zaidi ya kawaida, kidogo juu ya kawaida au zaidi ya kawaida) na kwa mfano ukitumia mfumo huu, unapata alama 36 au 12 kutegemea mbinu unazotumia.

	Chini ya	Si zaidi ya	Kidogo Juu	Zaidi ya
	Kawaida	Kawaida	ya Kawaida	Kawaida
Uwezo wa kuwa na makini	0	1	2	3
Kutolala kwa sababu ya	0	1	2	3
mawazo				
Kushiriki pakubwa katika	0	1	2	3
mambo				
Uwezo wa kufanya	0	1	2	3
maamuzi				
Hutatizika kila mara	0	1	2	3
Hungeweza kudhibiti	0	1	2	3
matatizo				
Unafurahia shughuli zako	0	1	2	3
za kawaida				
Unaweza kukabiliana na	0	1	2	3
shida zako				
Huna furaha na una	0	1	2	3
msongo wa mawazo				
Umeanza kutojiamini	0	1	2	3
Kufikiria kuwa wewe mtu	0	1	2	3
ovyo				
Kuhisi furaha	0	1	2	3

KIAMBATANISHO 3 : KIWANGO CHA MZIGO CHA ANAYESAIDIA MGONJWA

Kiwango cha mzigo cha anayemsaidia mgonjwa wa dawa za kulevya. Hojaji hii inatathmini 'mzigo unaoshuhudiwa ' . Kimejengwa kutoka kwa Zetit SH, Reever KE, Bach-Peterson 1. *Relatives of the impaired elderly: correlates of feelings of burden. Gerontologist 1980; 20:649-55.*

	La	Kwa	Wakati	Mara	Karibu
	kabisa	nadra	mwingine	kwa	kila
				mara	mara
Unadhani jamaa wako hutaka	0	1	2	3	4
msaada kuliko inavyostahili?					
Unafikiri kwa sababu ya kuwa na	0	1	2	3	4
jamaa wako, huna muda wa					
kutosha wewe					
Unapata msongo wa mawazo	0	1	2	3	4
unapomsghulikia mgonjwa na					
kutaka kufanya majukumu yako					
pia?					
Unapata aibu kutokana na tabia za	0	1	2	3	4
jamaa wako?					
Huwa unakasirika ukiwa karibu na	0	1	2	3	4
jamaa wako?					
Unafikiri jamaa wako anaathiri	0	1	2	3	4
uhusiano wako na jamaa wako au					
marafiki kwa njia mbaya					
Je, unaogopa hali ya maisha ya	0	1	2	3	4
baadaye ya jamaa wako ?					
Unadhani jamaa wako	0	1	2	3	4
anakutegemea					

Huwa unasumbuka ukiwa karibu	0	1	2	3	4
na jamaa wako					
Unadhani afya yako imeathriwa	0	1	2	3	4
kwa kumshughulikia jamaa wako					
Unadhani maisha yako ya siri	0	1	2	3	4
yametatizwa na jamaa wako?					
Unadhani maisha yako ya	0	1	2	3	4
kutangamana na watu					
yameathiriwa kwa kumshughulikia					
jamaa wako?					
Unaogopa marafiki kukutembelea	0	1	2	3	4
kwa sababu ya jamaa huyu?					
Unadhani jamaa wako anatarajia	0	1	2	3	4
umshighulikie kana kwamba ni					
wewe tu anayetegemea?					
Una huna pesa za kutosha	0	1	2	3	4
kugharamia jamaa na familia					
Unadhani utashindwa kuendelea	0	1	2	3	4
kumshughulikia jamaa wako					
baadaye?					
Unahisi umepoteza mwelekeo	0	1	2	3	4
tangu ugonjwa wa jamaa wako					
ulipoanza?					
Unatamani ungeweza kumwachia	0	1	2	3	4
mtu mwingine jamaa wako?					
Una wasiwasi kuhusu	0	1	2	3	4
unayomfanyia jamaa wako					
Unadhani unastahili	0	1	2	3	4
kumshughulikia jamaa wako zaidi					
Unahisi unafaa kuwa	0	1	2	3	4

ukimshughulikia jamaa wako					
zaidi?					
Unadhani unastahili kuongeza	0	1	2	3	4
juhudi zako katika kushughulikia					
jamaa wako					
Kwa ujumla, ni mzigo kiasi kipi	0	1	2	3	4
kushughulikia jamaa wako					

Alama ya Jumla : -----

Mwongozo wa Alama

0-20 mzigo mdogo au haupo 21-40-mzigo wastani 41-60 mzigo wastani hadi mkubwa 61-88 mzigo mkubwa sana.

APPENDIX V: LIST OF TREATMENT CENTRES IN NAIROBI

- 1. Freedom From Addiction Organization(Alcohol & Drug Rehabilitation)
- 2. Nairobi Place Addiction Treatment Centre
- 3. Marula Rehabilitation & Treatment Centre
- 4. National Campaign Against Drug Abuse Authority
- 5. Brightside Drug Abuse Rehabilitation & Treatment Centre
- 6. Asumbi Treatment Centre
- 7. Masaa Home Rehabilitation & Treatment Centre
- 8. Nairobi Outreach Services
- 9. Teen Challenge Of Kenya
- 10. The Retreat Ltd Rehabilitation & Treatment Centre
- 11. Asumbi Treatment Centre
- 12. Serenity centre, Kahawa sukari
- 13. SAPTA- out-reach clinics
- 14. Kenyatta national hospital department of mental health
- 15. Spring of hope rehabilitating center