RELATIONSHIP BETWEEN FAMILY RESILIENCE AND RELAPSE RISK AMONG DISCHARGED SUBSTANCE USERS ATTENDING ALCOHOLIC ANONYMOUS GROUPS IN NAIROBI CITY COUNTY; KENYA.

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DECLARATION

"This thesis is my original work and has not been presented for a degree in any other university."

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DEDICATION

This project is dedicated to my loving children Kayden Imani, Karston Adili, Kayson Wega, my dear husband Moses Njoroge, my brother Stanley Shadrack and my inspiring parents, Millicent Warukira and Onesmus Kibera as well as Scola Wanjiku Njoroge.

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ABBREVIATIONS AND ACRONYMNS

DOC	**:**	Drug of Choice
DSM-V	**:**	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
NACADA	**:**	National Campaign Against Drug Abuse
NSDUH	**:**	National Survey on Drug Use & Health
PWUD	:	People with Use Disorder
SAMHSA	**:**	Substance Abuse and Mental Health Services Administration.
SUD's	**:**	Substance Use Disorders

OPERATIONAL DEFINITION OF TERMS

Discharged - Those going through substance use recovery and are between one to three months post rehabilitation treatment.

Family resilience - Process and outcome of a family's healthy adaptations to stressful situations, emotions and adjustment to internal and external demands.

Rehabilitation - A 90-day medical and psycho-therapeutic program with the intent of allowing the client to confront substance use.

Relapse risk - Process of having warning signs that point to resuming substance use after a period of non-use that creates a form of persistent chronic consumption of psychoactive drugs that leads to persistent negative emotional, behavioral and social problems.

Substance Use Disorder - An illness affecting an individual's brain and behavior, that results in incapability to control consumption of a legal or illegal substances.

ABSTRACT

Relapse is the greatest hindrance to fight against drug and substances abuse globally because it makes it very hard for people to stay away from substance abuse even after they have utilized resources in rehabilitation process. Understanding all the aspects that impact relapse either positively or negatively is the foundation of understanding measures that can be established to curb this menace hence the importance of this investigation. The investigation aimed to determine whether a relationship between family resilience and relapse risk existed among discharged individuals with SUD attending alcoholic anonymous groups in Nairobi City County, Kenya. Study objectives included to determine the level of resilience among families of discharged substance users, to determine the status of relapse risk among discharged individuals with substance use disorder, and to establish the relationship between family resilience and relapse risk among the discharged substance users attending alcoholic anonymous groups in Nairobi city County, Kenya. The Alcoholic Anonymous groups is an aftercare program often used by recovering substance use disorder individuals. The study employed a correlational research design using self-administered questionnaires to collect information on both relapse risk and family resilience. A sample of 93 respondents participated in the study. The theoretical framework used was Family Adjustment and Adaptation Response (FAAR). The SPSS version 23 was used to analyze the data that showed significant correlation between family resilience and relapse risk. This concluded that individuals with higher family resilience have a lower risk of relapse to substance use disorder. The findings have a major implication for relapse prevention such as recommending that facilitators at the alcoholic Anonymous groups help recovering substance users explore their relationship with their loved ones. This would ensure that the individuals worked on their resentments.

CHAPTER ONE: INTRODUCTION

The chapter presented the study background, statement of the problem, study objectives, research questions, assumptions, justification, significance, scope, and limitations.

1.1 Background to the Study

The process of recovery from substance use disorder is personal and one that requires growth. There are risks of relapse making its dynamics an incredibly critical area of concern to focus on. Relapse risk is the process of having warning signs that point to resuming substance use after a period of non-use that creates a form of persistent chronic consumption of psychoactive drugs that leads to persistent negative emotional, behavioral, and social problems. Relapse is the biggest threat associated with substance use disorder (Milhorn, 2018). The National institute on Drug Abuse; NIDA, (2016) noted that relapse risk remains for more than 5 years post substance uses disorder treatment. Sobriety indicates that an individual is returning to pre-adversity despite treatment and relapse prevention.

A study conducted in Pakistan indicated that approximately 70% of substance abusers have a history of relapse (Masood & Sahar, 2014). The National Institute of Psychology researcher (Lapsley, 2015) noted that to prevent a relapse, it was necessary to identify warning signs early for effective results. Nikmanesh, Baluchi & Motlagh, (2017) demonstrated that social factors for example, support from the society and family influence contributed to the occurrence of relapse.

In the United States of America NIDA (2018) conducted a relapse report and indicated that relapse rates varied from 40% to 60% and despite rehabilitation, relapse rates as noted by NIDA were high. McQuaid et al., (2016) conducted research on

examining barriers as risk factors for relapse, the findings revealed that recovering substance users lived meaningful lives and contributed to their families and society. The survey conducted a logistical regression analysis that revealed, there was an association between prolonged delays before seeking SUD treatment, lack of supportive social networks, not having stable housing, a lack of programs and the cost for seeking treatment services with increased risk of relapse.

The countries with elevated levels of accomplishment of inpatient rehabilitation upon research conducted revealed a rise in occurrence of relapse with Nepal at 33%, China at 55.8% and Switzerland at 60% (Hasin, 2013). Other research such as: Hubbard, (2001) and Adinoff, (2010) established that relapse occurred between one month and one year following discharge from treatment programs. Ibrahim (2014) noted that individuals often overlooked the relapse risk warning signs during these periods. (Moos, 2011; Azmi, 2018) noted that individuals who relapsed underwent frustration and required a support group during that phase. Braddiza, (2017) noted that stress, history of substance use or re-exposure could prompt relapse occurrence.

A study by Chepkwony et al., (2013) on the incidence and aspects causing relapse among substance users in rehabilitation centers selected within Nairobi City County, Kenya found out that the relapse risk rate was high among individuals who had completed treatment within the first month after treatment to one year post treatment. That study noted an increase in the number of rehabilitation centers and increased demand for the services due to increased relapse. The study focused on inpatient relapsed individuals in the rehabilitation centers where the relapse risks were minimal while in treatment. The findings indicated that peer group influence, lack of family support, curiosity, stressful events among easy availability of the substances contributed to relapse risk. A gap was noted in that the research focused on relapsed

individuals in the rehabilitation centers, who upon treatment are okay however, when they are discharged, they relapse and a need to assess them in their support groups and help them identify relapse risk before it occurs is what this study aims to fill. Githae (2015) noted in the study that hostile family environment that did not support recovery potentially encouraged relapse risk.

Chetty (2011) noted that there were studies that substantiated drugs consumption after an effective medication and recovery process. Relapse risk was the greatest concern that necessitated advanced protective approaches. Above 50% of persons with SUD went back to substance use after rehabilitation (Hasin, 2013). Moradinazar (2020) noted that high relapse risk rates following treatment ranged between 40-75% in three weeks to six months after discharge (Hasin, 2013: Maehira, 2013: Sapkota, 2019: Hubbard, 2001).

Degenhardt (2018) noted that substance use dependency was episodic and involved times of abstinence, reduced consumption, and relapse. Studies conducted by Ibrahim (2014), highlighted social-demographic features linked with relapse risk and they included peer pressure, family background, substance usage, and poor social support from significant others along with unemployment. Sapkota (2019) and Ibrahim (2014), highlighted that the social backgrounds acted as enabling or a hindrance aspect for behavior modification by the patients during post recovery. For instance, destructive peer pressure was determined to result to substance abuse and increased levels of relapse. Other more studies showed that recovered substance users were incapable to resist direct or indirect influence of other people to involve in substance use (Hendershot, 2011; San, 2013).

Relapse risk remains a critical factor that impedes the treatment process which involves an individual going through health assessments, mental restoration, and

withdrawal management (Phillip, 2020). Nathaniel (2014) noted that relapse risk occurrence and substance use disorder had encouraged different organizations to introduce measures to equip those afflicted with coping skills as a technique of relapse prevention. Without proper support, especially from the family throughout the recovery journey, the possibility of relapse loomed large. A solid continuum in relapse prevention was therefore crucial for individuals receiving substance use disorder treatment (SAMHSA, 2019).

The process and outcome of a healthy family's adaptations to stressful situations, emotions and adjustments to internal and external demands was known as Family resilience. Resilience definition was expanded by scholars such as (Masten & Monn, 2015) as the interaction of multilevel systemic practices enhancing positive adaptations in the substance use disorder crisis. Constructs included strong family support, bonding within family and setting boundaries (Silva, 2016). The above healthy elements had been found to help members of the family cope and overcome adverse situations during recovery.

Families could understand, accept, and deal with stressful situations when they could make meaning to adversity. These in turn increased their perception and as a family, they perceived their difficulties as understandable in the context of the negative situation (Voskuhl,2015). New insight into the stressful situation was perceived as comprehensible, meaningful, and manageable by family members. According to (Walsh, 2013), family resilience was facilitated by open emotional expression that had clarity and collaborative problem-solving skills. Clarity of information was ensured by family members by being consistent for the family to recognize the issues. Natalia, N. et. al (2015) noted that expressing emotions openly during unfavorable circumstances such as relapse allowed members of the family to

express their feelings. Mutual empathy was necessary, this determination to equalize the two was reconciled by the meaning the family attributes to the relapse.

Martin (2015) noted that the main obstacle to change was related to the pressure from the families who lacked adequate knowledge on the recovery process for substance use disorder (SUD) and their role as a protective factor that helped individuals not to relapse. Individuals who had gone through recovery from substance use disorder impacted their families and there was a need for the families to understand how well their adjustment and adaptation influenced their loved one.

Research by Sayette (2016) suggested that the main obstacle to change was related to the pressure from the families who lacked adequate knowledge on the SUD recovery process and their role in relapse prevention. These pressures caused recovering substance users to feel inadequate to face their families and hence took the initiative to isolate themselves, thus continuing their usual activity (Martin, 2015). Distressing life circumstances and conditions changed both the family's quality of life and one's wellbeing. Furthermore, family stress and reduced risk-taking behaviors had been found to be because of the correlation between attachment to family and culture of origin (Agani, & Agani, 2010). Nevertheless, (Medina, 2015) highlighted that enhancing family resilience was a beneficial method to understanding SUD relapse because the family unit went through repeated cycles of adjustments and adaptations when they had a victim of substance abuse.

A study conducted in the United States by the American Psychological Association (2016) among family's showed that, the family went through repeated cycles of adjustment, relapse to substance use and adaptation. When families were going through a crisis, they required protective factors. Taylor (2013) defined protective factors as the capitals that enhanced an individual's response to happenings

that in normal conditions resulted to maladaptive actions and consequences. In New York (Bonanno, Romeno & Klein, 2015) recognized that resilience regularly was derived from external factors to the individual, such as aspects within the families.

Razali (2016) in Malaysia, noted that a family that lacked support, open communication between recovering substance users and their family raised the relapse risk. When family relationships were supported, they become a pillar in the recovery of the substance use disorder individual (SAMHSA, 2017).

In Hawaii, supportive family relationships were found to potentially encourage relapse hence there was a need to further explore these factors within the family system itself (Okamato, Helm, Po'Akekuawela, Chin & Nebre, 2009).

Mokgothu (2015) from South Africa noted that close familial bonds protected individuals from drug offers and relapse. In addition, (Walsh, 2016) noted that families that have encountered hardships and challenges most of the time come out resilient, more purposed, and more capable to handle future difficulties. Research by Swanepoel (2014) and team had revealed a connection between the individual factors of coping, the familial relational elements, friends, communal support, and their predisposition to relapse. A relationship was found between the variables in reducing the problem of relapse among recovering substance users who had completed their treatment and rehabilitation period. Paz (2013) and team found that a lack of support from the family caused recovering substance users to feel alone, unwanted, and thus contributed to their inclination to relapse.

In Nairobi, Kairanya (2010) also found that there was low family support among individuals who had relapsed. Showing that family support and relapse were negatively related. Birgen (2013) further found that family care reduced relapse. However, a gap was noted since he did not show how family support influenced

resilience among recovering substance users. Wangithi & Ndurumo (2020) conducted research in Limuru sub county, Kenya and found out that high support from the family, led to an enhanced self-efficacy and lessened relapse opportunities.

1.2 Statement of the Problem

Studies on relapse risk had identified the family as being affected by substance use disorder of the recovering individual in moments of a relapse (Voskuhl, 2015; Nikmanesh, Baluch & Motlagh, 2017; Martin, 2015; Sayette, 2016; Birgen, 2013.) Efforts by the institutions and researchers in substance use treatment and management had comprised proposing adherence to attending support groups post rehabilitation. These recommendations did not seem to make much difference in addressing family resilience (NIDA, 2016; McQuaid et al., 2016; Phillip, 2020; SAMHSA, 2019; Gachara, 2019; Orey, 2015). Failure to effectively focus on the family among discharged SUD individuals was explained by the increased relapse cases in the first three months after rehabilitation. Although research done to examine the relationship of family resilience and relapse risk among discharged substance users attending Alcoholic Anonymous groups was insufficient, this research therefore sought to fill that gap.

1.3 Objectives of the Study

i. To determine the levels of resilience among families of discharged substance users attending alcoholic anonymous groups, in Nairobi City County Kenya.

ii. To determine the status of relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi city county, Kenya.

iii. To establish the relationship between family resilience and relapse risk among the discharged substance users attending alcoholic anonymous groups in Nairobi city County, Kenya.

1.4 Research Questions

i. What are the levels of resilience among families of discharged substance users attending alcoholic anonymous groups in Nairobi city County, Kenya?

ii. What is the status of relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi City County, Kenya?

iii. What is the relationship between family resilience and relapse risk among the discharged substance users attending alcoholic anonymous groups in Nairobi city County, Kenya?

1.5 Research Hypothesis

$H_0$1. There is no significant relationship between family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi Kenya.

1.6 Assumptions of the Study

Several assumptions were made, as follows:

1. There was an active involvement of family members in the therapeutic process and offered a supportive role to the substance user during recovery.
2. Recovering substance users discharged from in-patient treatment would be attending the A.A group meetings.
3. Honest responses would be given by participants.

1. 7 Justification and significance

Importance of the study on relationship between family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups was

informed by the need to understand how recovering individuals could be able to assess their relapse risk and how the family members could support them through the recovery process.

The findings would also benefit the ministry of health and NACADA in policy development that would be beneficial to the community and to the addiction treatment practitioners by highlighting the relationship between relapse risk and family resilience. This studies might contribute to evaluating the conceptual assumptions about the resilience process empirically. A more meaningful and conventional outlook of family elements might make it easy to understand issues in family resilience hence making it easier to make adjustment when needed to prevent relapse risk.

In addition, the study findings might be beneficial to various fields such as family science and substance abuse treatment fields. In the family science arena, measurable experiential substantiation that might possibly contribute to the theoretical justification of the resilience approach might be attained.

The research findings might contribute also to the treatment of substance use disorder by creating conceptual preciseness to elements connected to family resilience. By providing the clarity of these elements, future researchers would find it easier to understand these concepts and might incorporate them in their studies while also filling the research gaps on what had been examined.

The study findings might benefit recovering substance users to have a better understanding of their role and that of their family in identifying the relapse risk. Practitioners in the fields of psychological wellbeing, development and social sciences might benefit in their understanding of family resilience.

1.8 Scope/Delimitations and Limitations

The study selected discharged individuals between 1-3months post-inpatient treatment with substance use disorder from the alcoholic anonymous groups within Nairobi City County. Male and female respondents were evaluated. All age groups above 18years were also involved in the study. The participants then proposed a family member who answered the family resilience assessment questionnaire.

Some limitations experienced in the research were that, the study was restricted to discharged individuals attending the A.A groups. This was a limitation since some might have been discharged but had begun attending the Alcoholic Anonymous (A.A) meetings upon discharge. The researcher overcame this limitation by getting contacts from rehabilitation centers on individuals who had been discharged within the past 1-3months and as a part of aftercare, follow-up with them and their families they participated in the research. Finally, patients who had verbal ability to communicate and give their consent participated.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

The chapter explored available information in accordance with the study objectives with the purpose of identifying research gaps in matters family resilience and relapse risk among discharged individuals with substance use disorder. A theoretical framework which provided a base for the investigation; literature review summary, and lastly the conceptual framework that illustrated the relationship between family resilience and relapse risk as the variables.

2.1 Literature review

2.1.1 Levels of family resilience

High levels of family resilience and low levels of family resilience were considered with factors such as a strong family support, bonding within the family and setting boundaries. These relational factors have been shown by research to have an influence on the treatment dynamics of people with SUD as noted by (Barber et al 2013).

The process and outcome of a family's healthy adaptations to stressful situations, emotions and adjustment to internal and external demands was operationalized as family resilience. Constructs included communication skills and skills of problem solving within the family; economic and social resources utilization, positive outlook maintenance; strength and connectedness; making meaning of situations, coping ability with adversity and flexibility (Silva, 2016). The above positive and effective elements had been found to help members of the family cope and overcome adverse situations during recovery. These elements would enable

professionals to have a therapeutic look at the family strengths that would strengthen family resilience.

Some studies on healthy adjustment and adaptation considered focusing on communication and problem solving as to suggest that families overcame these adversities by so doing. Nevertheless, Medina (2015) highlighted that it was important to enhance family resilience since repeated cycles of adjustments and adaptations were experienced by the family when they had a victim of substance abuse. Research also noted that a probability of heavy drinking within two months after discharge would be indicated by a higher score and more warning signs of relapse risk.

Family cohesiveness was conceptualized as an external resource within family resilience. For instance, Abasi and Mohammadkhani, (2016) conducted research on related problems faced by women in the family context going through addiction. They concluded that studies ought to focus more on mediating factors between family risks and SUD.

2.1.2 Status of relapse risk among discharged SUD persons

Literature on treatment of substance use disorder had centered on the relapse rate. For example, Bhandari, Dahal and Neupane (2015) conducted a study of aspects linked with substance abuse among clients in rehabilitation centers. The outcome of the study illustrated that 94.7% relapsed to SUD after a period of sobriety and were readmitted to the treatment facilities.

From the rehabilitative view, relapse and recovery were vital aspects in SUD, they had further been noted to be rampant and frustrating despite the high numbers of individuals with SUD (Moos, 2011; Ibrahim, 2014). Health concerns that could be triggered by stress, SUD diagnosis, background of drug use, re-exposure to

substances were proposed to be a relapse risk (Braddiza, 2017). Chetty, (2011) & Hasin, et. al., (2013) had provided a review of literature in the relapse to substance use field confirming that it was inadequate to adopt an approach in which effective relapse risk preventive measures could be achieved without addressing family resilience. The management of substance use disorder had been found to involve family members for effective results.

The status of relapse risk for example by (Melemis, 2015) that was conducted on relapse prevention had shown that relapse risk occurred emotionally, mentally, and physically. Additionally, SUD caused an individual to be in denial about the possibility of relapsing. Individuals often missed the warning signs before a relapse occurred. Some warning signs were indicated by low family support and lack of boundaries. Relapse risk tended to be high within the first one year after treatment with the first to third month being very vulnerable (Hasin, 2013; Hubbard, 2001; Adinoff, 2010). In Australia, Braddiza, et. al., (2006) and Hasin, et. al., (2013) also highlighted that relapse occurred emotionally, mentally, and physically. Studies for example (Hendershot et. al., 2011 & Moradinazzar, et. al (2020); Maehira, (2013); Sapkota (2019) showed that rates of relapse after treatment usually ranged between 40% to 75% in a period of 3weeks to 6months.

Additional to relapse risk status, from studies conducted in different countries, the following countries showed increased inpatient treatment completion with Nepal at 33%, China 55.8% and Switzerland 60% (Hasin, 2013).

In Nepal, a study conducted by Bhandari, Dahal, and Neupane, (2015) on elements linked to substance use among patients in rehabilitation centers, indicated that majority of the respondents 9. 7 % had relapsed when they were discharged from the rehab centers. The average number of times individuals relapsed to SUD was 3.29

times. They further found out that external causes, varied wildly from individual to individual hence making it harder to define. Some of the external causes included, triggers such as roads where individuals purchased the drug of choice or meeting people they used with, family dysfunction, stress, social pressure and a lower level of social support (Sinha, 2001: Mattoo, Chakrabarti & Anjala, 2009).

In Kenya, Osborn (2017) conducted a study that utilized an ex-post factor causal comparative study model. The study targeted the cases of drug users who had relapsed in the 14 drug treatment facilities approved by NACADA in Nairobi. The outcome of the investigation revealed that relapse risk was as a result of the interrelations of previous threats within the person and surrounding circumstances and the rate of family resilience. The current investigation employed a correlational research design.

In conclusion, the status of relapse risk after discharge from the SUD treatment is seen as high and the risk elements established incorporated family battles, distress, peer pressure and social economic status like the obtainability and ease of access of drugs, peer pressure and lack of self-confidence. Hence, the drug abuse control cannot be focused only on detoxification, but it should incorporate on extended follow ups to avert relapse.

2.1.3 Relationship between family resilience and relapse risk

A study was conducted by Zeng, X et. al (2021) in China using a moderated mediation model on the relationship between family intimacy and relapse tendency among substance users. The research noted that family and individual factors that were underlying mechanisms for relapse remained unclear. Assessments were administered to 817 males who used substances. Analysis using the Haye's process macro was sought, and the results noted that relationship between family members

and substance users needed to be improved, and that the rehabilitation centers ought to enhance psychological capital to the recovery individuals to reduce relapse tendency. This current study aimed to focus on the individuals who had completed treatment and were in the alcoholic anonymous groups and assessed whether there was a relationship.

Medina, (2015) noted that all families had resilience, however, exploring how they used their resilience to their advantage could be a powerful strategy. Rajesh et al. (2015) noted that when family' had poor emotional connections, it could increase the risk of relapse. A gap was seen in a need to focus on family resilience, which was protective against substance use. The family was then required to employ their resources available to meet those demands and explore the meanings attached to those crises (Mokgothu, Du Plessis, & Koen, 2015).

A study by (Mokgothu, Du Plessis, and Koen, 2015; Asay and DeFrain, 2012) had shown that exploring the concept of family resilience towards SUD individuals after treatment had seemed necessary to foster a healthy recovery from substance use. High levels of family resilience had been found by researchers (Wu & Zheng ,2020; Azmi et al 2018) to have a protective stabilizing effect on substance use problems that had resulted to the increased ability of psychological repair and reduced the occurrence of relapse to escape stress.

The inadequacy of literature on family resilience and relapse risk had been revealed in the findings that clear authority structures within families involved mutual respect, communication are high functioning and are good at problem solving, decision making, working towards maintaining family's boundaries and routines hence enhanced family resilience and had in-turn led to focusing on relapse risk. Because of the recognitions that there was a lack of clear understanding between

relapse risk and family resilience researchers sought to explore how a shared meaning is constructed among family members overtime about the stressors (relapse to SUD), their available resources and capabilities to navigate family stresses. That implied that they were empowered with coherence and hardiness when challenges arose. However, negative family meaning made it difficult for the family to develop strength during adversities, utilize their organization skills, hence portrayed ineffective coping skills. Dary (2016), noted that enabling individuals and family cope with and mitigate warning signs of relapse was an important strategy in minimizing the relapse risk following rehabilitation. The research on the relationship between family resilience and relapse risk aimed to fill these gaps by quantitatively seeking a correlation between family resilience and relapse risk among discharged individuals within 3months period to assess relapse risk based on AWARE scale and chance of actual relapse in alcoholic anonymous groups. The scores would then be compared between those who had relapsed and those who had not yet relapsed based on their score on family resilience scale.

2.2 Theoretical Framework

This study adapted the Family Adjustment and Adaptation Response (FAAR) model. This approach was established by Patterson (2002a). It postulated that the family had available resources to address any family demands, the ability to form family meanings to situations that in turn helped them to understand resilience. Additionally, the family would either adjust or adapt to the crisis which for this study was relapse risk to substance use disorder.

Based on this view, the family demands comprise normative and non-normative stressors. Patterson, (2002a) noted that non-normative types of demands fitted the definition of significant demands whereas normative demands were

characterized by high-risk status and distressing experiences. For instance, when the relapse of a family member to SUD after being discharged suddenly and unexpectedly would be a stressor to the family. That model emphasized that SUD called for the family members to communicate openly on everything they were facing, and the family would begin to construct meanings about that and their capabilities to avoid pile-up for better management.

Patterson (2002b) further argued that the level of experienced stress and adjustment to demands within the family might predict not only their vulnerability, but also their stress management skills. In addition, family meanings were the "interpretations, imaginations and opinions" that relatives constructed together in various situations. It comprised situational meaning which was the family's perception of the demands and capabilities that had created a pattern within the family structure.

Patterson (2002a) noted that a family might experience difficulties when building a range of family protecting skills because of the subjective challenges in managing demands. For example, when relapse occurred, the first level of family meanings could be relatives, disbelief, or denial (Patterson & Garwick, 1994). Family adaptation and adjustment were two outcomes in the FAAR model. Patterson (2002a) described family adaptation as a procedure of reestablishing equilibrium between competences and requirements at two levels of relations: person-to-family and family-to-society.

The family adjustment stage comprised of family connection configurations, functions and relationship functions that had been determined so that things were predictable. In that phase members of the family generally knew what to expect from one another when they experienced demands (Patterson, 1988). The level of

adjustment reflected how well the family met demands. Research conducted by Patterson reflected that quality adjustment indicated family's competences linked to the quantity and kind of family requirements. Family inequality came in when the family was incapable of meeting their requirements and when the family-operation was no longer steady, and the disproportion escalated the rate of family crisis.

A family disaster ushered the family to the family adaptation stage in which new forms and regulations in the family would surface since the old family structures did not exist in similar ways. The family catastrophe might result to the family's trajectory of operation either in the direction of enhanced operation or family maladaptation (Patterson, 2002a). Even while the family was experiencing maladaptation, the family would still face considerable continuous imbalance, instability, and ineffectiveness in the family along with the weakening of the family-unit independence (Patterson, 1988). If the family outcome was prosperous, the family would experience the balance: equilibrium, and organization in the family.

Family competencies mediated the connection between families' experience with requirements and their capacity to show ability in achieving family adjustment. According to FAAR approach, there were two main kinds of family capacities: 1) resources, which were assets the family had, and 2) coping behaviors, which is how the family reacted (Patterson, 1988, 2002a, 2002b). Family abilities that incorporated coping mechanism and resources resulted to advanced family adjustment or adaptation and the ability to meet the requirements.

A resource was a feature, proficiency, or a trait. In the FAAR approach the family structure was referred to as a resource-exchange program (Patterson, 1988). The procedure of assigning funds to meet family needs was a vital element in family adjustment and adaptation (Patterson, 1988). Resources could be physical like finance

or immaterial like social support. These two resources based on opinions were given emphasis by various scholars who had examined the concept of stress. The studies illustrated essential aspects in the stress and resilience process for effective management of needs (Patterson, 2002a).

The FAAR model provided a basis for comprehending the methods in which family adaptations molded both positive and negative substance use disorder patterns. Family's effort to balance demands was mediated by the meaning they ascribed to the relapse (Patterson, 2002a). This helped explain comparatively stable patterns of interactions within the family as they tried stabilizing their needs with their present abilities to attain a level of family adjustment.

From this perspective, assessing family resilience and its association to relapse among SUD individuals FAAR model became relevant because families expressed their own adaptive functions in various ways.

2.3 Conceptual Framework

This illuminated the understanding of relapse risk changes brought about by the interference of family resilience. This study would analyze family resilience which was operationalized as the process and outcome of a family's healthy adaptations to stressful situations, emotions, and adjustment to internal and external demands. A healthy family resilience was characterized by strong family support, bonding within the family and setting boundaries. These were noted to lower the risk of relapse. Upon discharge from treatment, the individual was likely to explore these areas through A.A (alcoholic anonymous groups) and family therapy which would be the intervening variables. When family resilience was low it was characterized by poor family support, lack of bonding within family and lack of boundaries. The

results were likely to increase probability of relapse risk and the individuals were likely to have higher relapse warning sign.

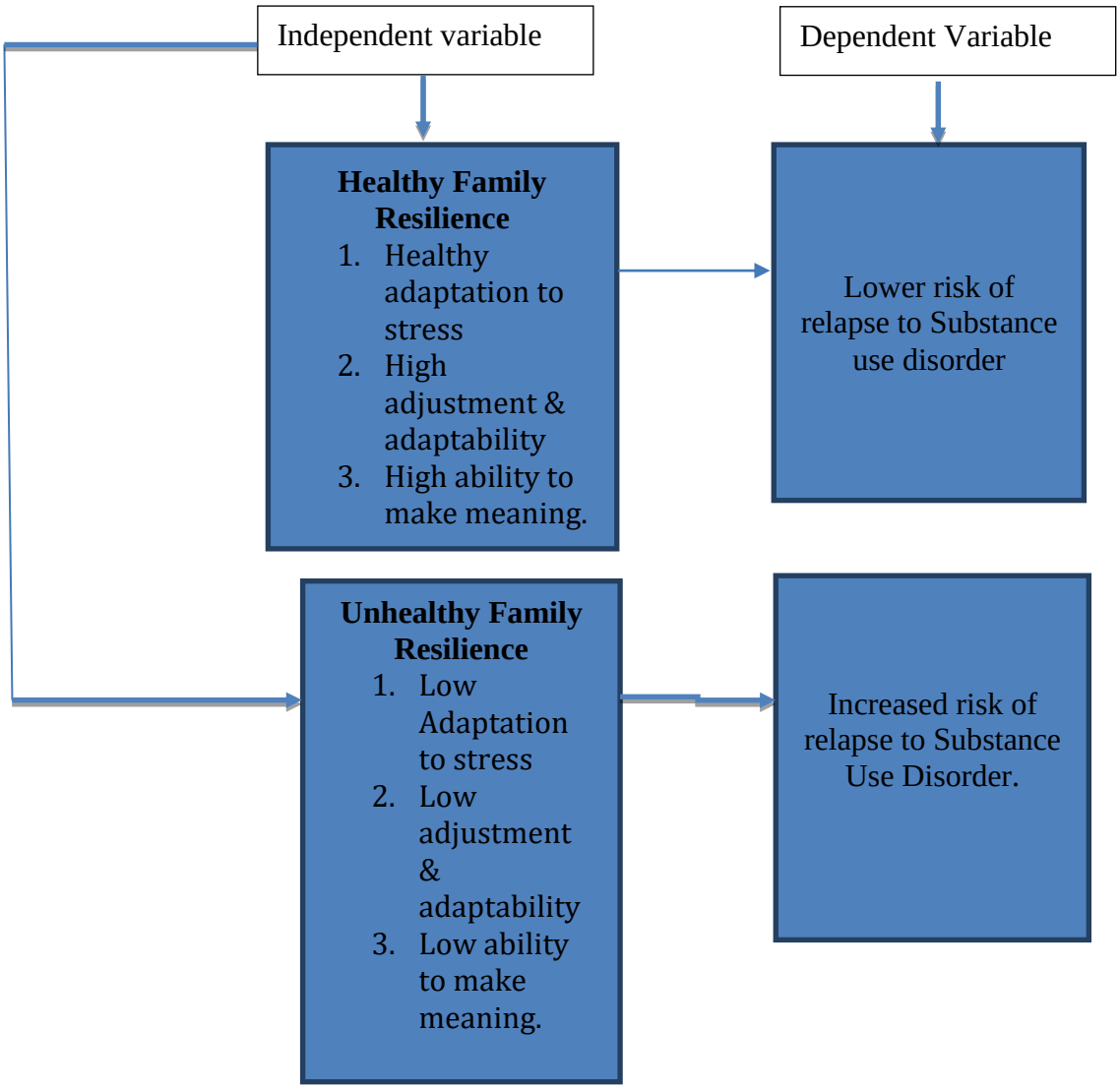


Figure 2.1 *Relationship between family resilience and relapse*

Source: Author

As shown in the conceptual framework the independent variable is family resilience. The constructs of a healthy family resilience included: Healthy adaptation to stress, high adjustment and adaptability and high ability to make meaning. The outcome was lower risk to relapse to SUD. Unhealthy family resilience resulted in increased relapse

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The structure of these chapters involved; research design, the study variables, location, population and sample size, sampling techniques, tools pilot study, procedure for collecting and analyzing the data, data management and ethical considerations.

3.2 Research Design

The Spearman's rank Correlation was adopted; to generate both quantitative and qualitative data and determine the relationship between the study variables. A correlation was found between family resilience and relapse risk that indicated that high family resilience resulted in low relapse risk.

3.3 Variable/Categories of Analysis

Family resilience was the independent variable of the study, while relapse risk is the dependent variable. The constructs of family resilience included family support, bonding within the family and having boundaries. Relapse risk was affected by unhealthy family resilience.

3.4 Location/ Site of the study

Nairobi City County is the capital city of Kenya and was the location for the study. The increased number of A.A groups and the high cases of substance use disorder individuals who sought treatment from many rehabilitation centers within the city also contributed to the selection of this county. Its residents incorporated the various cultural groups and races found within the county. The appropriateness of this county for this study was proved by NACADA statistics 2021 that indicated that Nairobi was second with registered and accredited rehabilitation centers after Kiambu County (NACADA, 2021). Nairobi city County has 15 listed alcoholic anonymous

groups which was a good number considering that Kenya was at its infancy in establishing drug and substance treatment centers with some counties lacking even a single A.A group (NACADA, 2021).

3.5 Target population

Recovering substance users discharged within 3 months from in-patient treatment and were attending alcoholic anonymous groups were participants to assess relapse risk. A family member of the participants attending the alcoholic anonymous groups would also participate in this study. Adults attending the A.A groups and both male and female respondents who had been discharged would be evaluated in the study.

3.6 Sampling techniques and Sample size

3.6.1 Sampling Techniques

The sample was selected using probability and non-probability sampling methods. The study used multi-stage sampling technique. In the first stage, purposive sampling identified Nairobi city, County. In line with the Alcoholic Anonymous principles which strongly upheld anonymity, the A.A open group meetings were purposively sampled. Recruitment of the initial contact persons both males and female were done using snowballing sampling method. That was used for individuals who may have missed the Alcoholic Anonymous groups, and they were identified by other participants and requested to attend the A.A group so that they may participate in the research. Convenience sampling was used to identify family members to participate in the study by the participants.

3.6.2 Sampling Frame

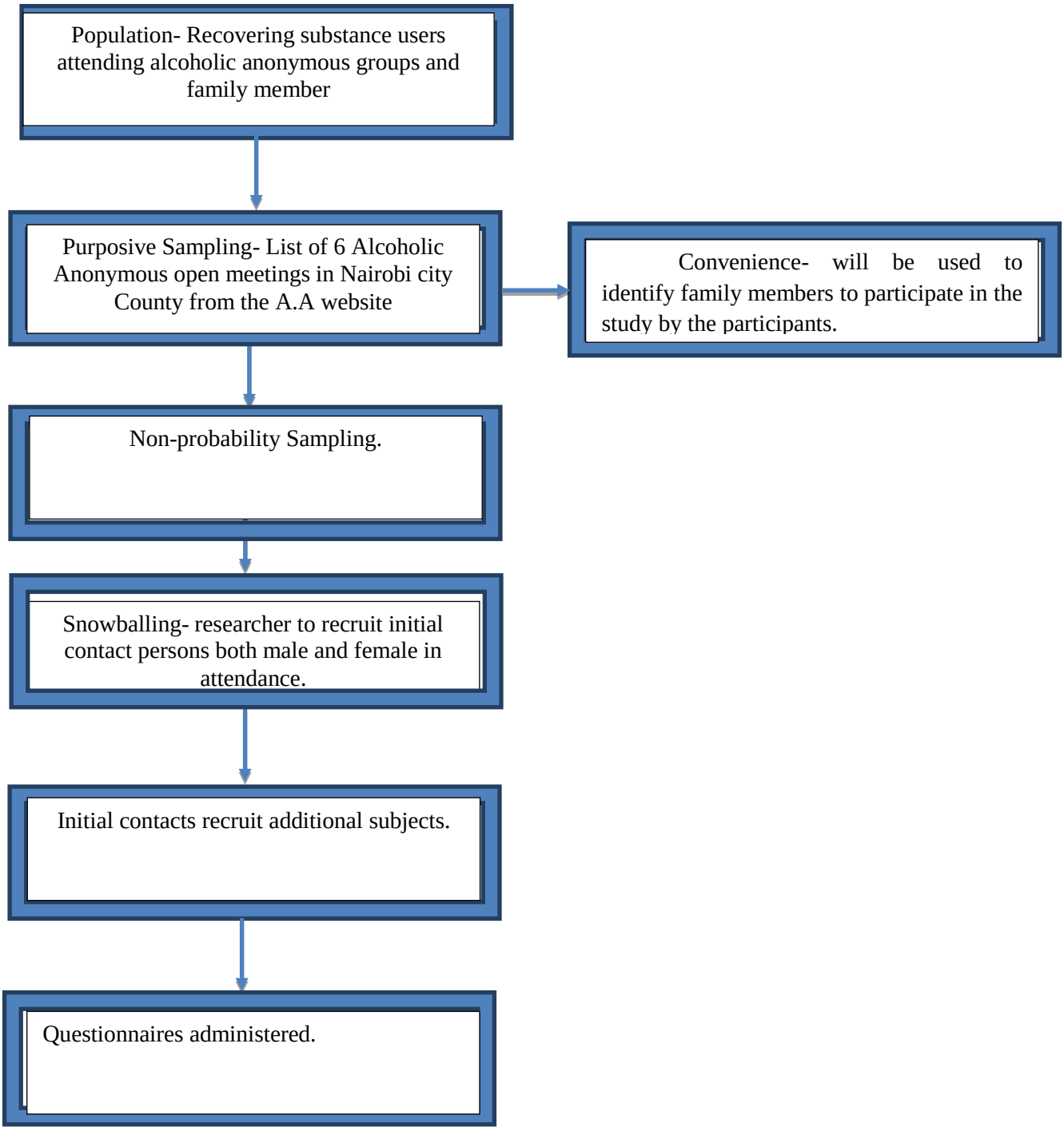


Figure 2.2 *Sampling Frame*

3.6.3 Sample size

Miot (2011) formula was used to determine sample size in this study. According to (AA-Kenya, 2020) meeting list there were twenty-one (21) A.A meetings available in Nairobi city county and six (6) open A.A meetings that were open to non-alcoholics in Nairobi. Research conducted by (Gachara et. al, 2020) with the population being persons recovering from substance abuse attending alcoholic anonymous meetings in Nairobi city county indicated, 66.7% were male and 28.9% were female. Due to Covid-19 disrupting many physical meetings, there were approximately 15 individuals who attended each A.A meeting.

$$n = \frac{(Z\alpha /2\ \delta)}{E}$$

Where:

n=sample size

Zα /2= value for desired confidence degree; 1.96

δ= population standard deviation; 2.517

E=standard Error; 0.506

n= (1.96x2.517/0.506) 2 = 95 respondents.

3.7 Research Instruments

This investigation utilized two questionnaires to measure the study variables namely, family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups.

3.7.1. Family Resilience Scale (FRAS)

Tucker Sixbey, (2006) developed the Family Resilience Scale (FRAS) as an improvement from Walsh's (1998) conceptual model. A 66-item instrument designed to measure family resilience from a family member's perspective. Identical forms of

FRAS were administered. Section A captured demographic information while Section B consisted of a 5-point Likert scale, respondents responded from 1(Strongly Disagree) to 5(Strongly Agree). A reversed score on items 62, 57,48, 42, was done.

FRAS measured six factors of family resilience that were yielded by principal components factor analysis. These included: (20 items with an alpha score of 0.96) family communication and problem solving, (16 items with an alpha score of 0.85) utilizing social and Economic Resources, (7items with an alpha score of 0.86) Maintaining a positive outlook, (6items with an alpha score of 0.70) Family connectedness, (4items with an alpha 0.88) family spirituality and (13items with an alpha score of 0.74) ability to make meaning of adversity.

Scoring the Family resilience Assessment Scale was by using the average of mean scores for every family member. Scores for every family member on each item were added and then divided the total with the number of items on the scale. Statements which had a high discriminatory power for each item were arrayed. The purpose was to determine the statements that consistently correlated with low or high favorability. Family resilience was indicated by high scores.

3.7.2. Advance Warning of Relapse (AWARE) Questionnaire.

This questionnaire by (Gorski & Miller, 1982) assesses the relapse warning symptoms. Questions were organized in the order that warning signs manifested. Section A captured demographic information while section B consisted of 28likert scale on different relapse warning signs. The questionnaire was administered as a self-report questionnaire to be answered by the respondents.

To score the AWARE questionnaire, numerical scores of 1-7 were assigned as follows: a score of 1 for Never, 2 for rarely, 3 for sometimes, 4 for fairly-often, 5 for often, 6 for almost always and 7 for always. All items were answered, and none

omitted. The questionnaire was scored by totaling all responses, but scores for items: 8, 14,20, 24, 26 were scored with a score of 7 assigned to never and a score of 1 assigned to always.

Scoring the AWARE questionnaire was by summing up the individual scores. The lowest possible sum score was from 28 and the highest was 196. Three categories namely low, moderate, and high were developed to assess for the occurrence of relapse warning signs. Interpretation was the more warning signs of relapse, the higher the score.

3.8 Pre-testing/Piloting Study

Piloting was carried out in 2 of the alcoholic anonymous groups. The pilot study sampled 11 individuals and a family member each who had been discharged within 3months which was 10% of the sample size being investigated. The purpose of the piloting study confirmed that the study design was feasible in achieving its goal as well as pretesting the instrument to determine reliability and validity. Modification of the questions was then made where necessary.

3.8.1 Validity

Validity of the standardized tools; Family Resilience Assessment scale (FRAS) and Advanced Warning of Relapse (AWARE) were enhanced making the items in the scale relevant to the Kenyan context. Easily recognizable terminologies for the Kenyan context were used to enhance face validity.

3.8.2 Reliability

Instruments were pre-tested prior to conducting the study and defective items on the instruments were removed to ensure reliability. A calculated Cronbach’s alpha

for both instruments was used. An alpha value of .96 among the Polish who adapted the scale (Natalia et al, 2020). The Advance Warning signs of Relapse (AWARE) scale internal consistency estimates were alpha .90.

3.9 Data Collection techniques

Questionnaires were administered in the A.A groups with the assistance of the facilitators. The participants then suggested a family member who filled in the family resilience questionnaires electronically or physically. The participants were given 10-20 minutes to fill in the questions independently. Data from participants who attended the alcoholic anonymous groups were collected within a period of 2months by the researcher.

3.10 Data Analysis and Presentation

Descriptive statistics in form of measures of central tendencies, percentages, frequencies were used to summarize and analyze data while Spearman's Rank Order correlation was used to establish relationships. Data was organized and coded using the statistical package for the Social Sciences (SPSS) software version 23 was used to analyze data.

Data from the study objectives will be analyzed as follows:

i. Level of family resilience among families of the discharged substance users attending alcoholic anonymous groups in Nairobi City County were analyzed using measures of central tendency due to the reason that the data was ordinal. Data was presented in tables in which each row indicated a distinct category. In addition, bar charts were used.

ii. To determine the status of relapse risk among discharged substance users attending alcoholic anonymous groups, in Nairobi city county. Data collected from the 7-point Likert scale were analyzed using measures of central

tendency. Data was presented in a table in which each row indicated a distinct frequency distribution in numbers and range to indicate variability. The bar chart was also used to represent these data.

iii. The relationship between family resilience and relapse warning signs was determined by the data collected from the two variables that formed a bivariate population. The Spearman's Rank-Order Correlation were used to determine relationships. Graphs and tables were used to present the data. A multiple comparison test was done to determine which means differed significantly.

3.11 Logistical and Ethical considerations

Authorization to collect data was sought from the significant university leadership and ethical approval from the ethics review board. The researcher also sought the approval to commence the data collection from the Graduate school committee of Kenyatta University and the Kenya National Commission for science, Technology, and Innovation (NACOSTI). Letters of approval were presented to the alcoholic anonymous group meetings earlier before the data collection date to obtain consent of the administrators to use their institutions for the study. Confidentiality was upheld, consent was also given by the participants, and they were also debriefed. The findings were published in The African Journal of Alcohol and Drug Abuse (AJADA) which is a publication of the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA).

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction

This chapter contained the findings of the study on the relationship between relapse risk and family resilience among recovering substance users attending alcoholic anonymous groups, in Nairobi City County Kenya. It was subdivided into five sections. The first section contained demographic characteristics of the sample in the study. The second and third section comprised data analysis on relapse risk and family resilience during recovery from substance use disorder respectively. The fourth section indicated the findings on the relationship between the two study variables while the fifth section contained a summary of the findings.

4.2 Demographic Data

In this section the data sample was analyzed by looking into the gender and age of the respondents and respondent's family support.

4.2.1 Age of the Participants

The respondents of this study were drawn from recovering substance users attending alcoholic anonymous groups who were 18 years and above. The participants distribution across various ages was shown in Table 4.1. The frequency and percentages of the age of the respondents in the sample is shown below.

Table 4.1 *Age of the Participants*

Participant`s age	Frequency	Percentage
18-28	12	12.9
28-38	54	58.1
Above 38	27	29.0
Total	**93**	**100.0**

As indicated in table 4.1 58.1% there were 28 to 38year old's that were represented, 29% aged above 38 years, 12.9% consisted of participants between 18 to 28years. Most of the participants were in the age range of 28 to 38years.

4.2.2 Gender of the Participants

Participants analysis of gender was conducted, and the results were shown in Table 4.2.

Table 4.2 *Gender of Respondents*

Gender of Respondents	Frequency	Percentage
Male	58	62.4
Female	35	37.6
Total	**93**	**100.0**

Table 4.2 shows the findings that 62.4% of the respondents were males recovering from substance use disorder and 37.6% were female.

4.2.3 Respondent's Family Support System

The participants were asked to indicate their loved ones who supported their recovery from substance use disorder and the results are shown in Table 4.3

Table 4.3 *Respondent's Relationship with their loved ones who supported them during recovery from substance use disorder.*

Respondent's Family Support	Frequency	Percentage
Spouse	39	41.9
Child	14	15.1
Sister	20	21.5
Mother	13	14.0
Father	7	7.5
Total	93	**100**

From Table 4.3 majority of respondents (41.9%) received support in their recovery from substance use disorders from their spouses, 15.1% of the respondents mentioned to receive support from their children, while 21.5% of respondents received support from their sisters, 14% of the respondents received support from their mothers and only 7.5% of the respondents mentioned to receive support from their fathers. Family involvement in treatment is crucial.

4.3 Findings on the study Objectives

The findings of the study following the study objectives are presented in sub-sections 4.3.1.

4.3.1 Descriptive Analysis to determine the level of resilience among families.

Objective one sought to determine the levels of resilience among families of discharged substance users attending alcoholic anonymous groups, in Nairobi City County Kenya. This objective was achieved by the participants who filled in the family resilience questionnaire.

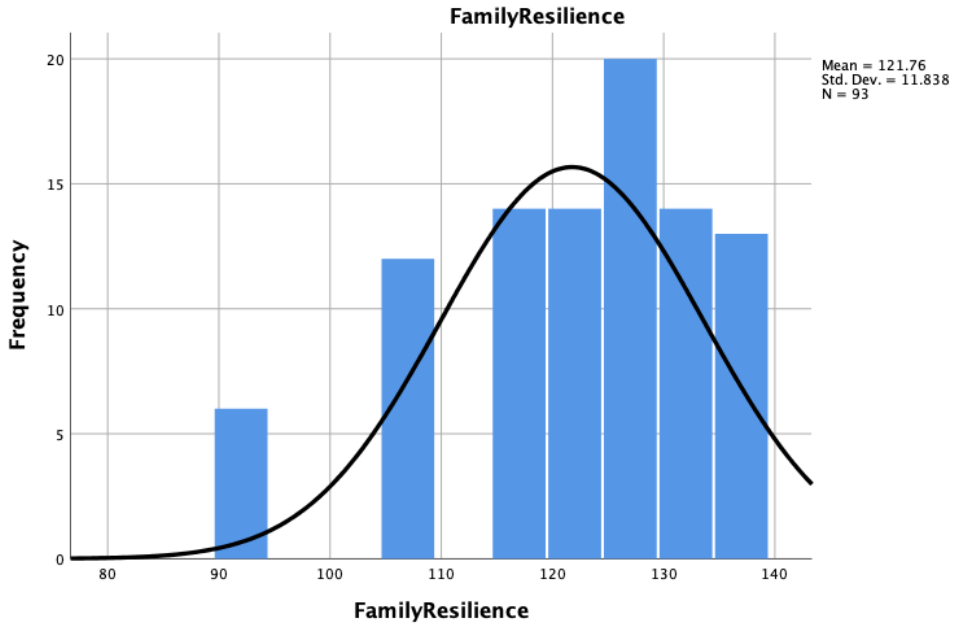


Figure 4.1 *Descriptive analysis of family resilience*

A mean of 121.76 and a standard deviation of 22.838 from a population of N=93 was achieved in determining the level of resilience among families. The scores with high frequency indicated family resilience.

4.3.1.1 Descriptive Analysis to determine the family resilience scores.

The FAAR scale was done by calculating the average mean scores for each family member. Scores for every family member on each item were added and then the total was divided with the number of items on the scale. Statements which had a high discriminatory power for each item were arrayed. The purpose was to determine the statements that consistently correlated with low or high favorability. Family resilience was indicated by high scores.

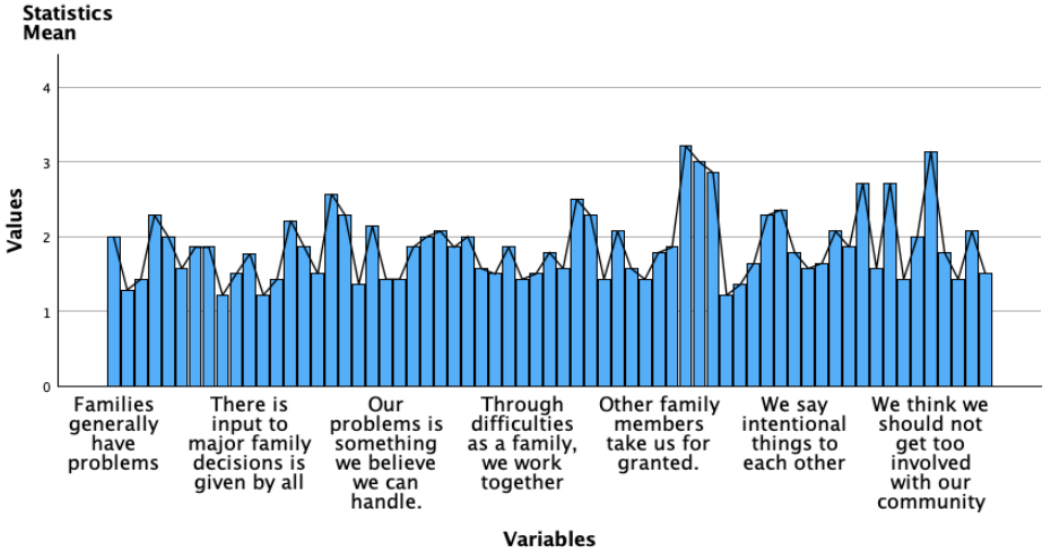
Table 4.4 *Scores from the family resilience questionnaire*

Valid	Frequency	Percent	Cumulative Percent
92	6	6.5	6.5
107	6	6.5	12.9
108	6	6.5	19.4
116	7	7.5	26.9
119	7	7.5	34.4
120	7	7.5	41.9
121	7	7.5	49.5
125	7	7.5	57.0
126	6	6.5	63.4
128	7	7.5	71.0
130	7	7.5	78.5
134	7	7.5	86.0
136	8	8.6	94.6
137	3	3.2	97.8
138	2	2.2	100.0
Total	93	100.0	

From table 4.4 participants answered the 66 questions and the least total score was 92 while the total score was 138 the highest cumulative percent was 97.8. The high scores indicated family resilience among the individuals that participated in the research. Research by Gachara, (2020) noted some families succumb to stress by coping negatively and some thrive in such fathomless suffering of persistent relapse of their loved ones. Additional to subjectively perceived resources (i.e., intangible resources) within family resilience, this factor has been proposed as having greater effects than objective resources. This conquered with the family resilience scores from table 4.4.

4.3.1.2 The statistics mean for the family resilience questionnaire.

Figure 4.1 *Family resilience Statistics mean.*



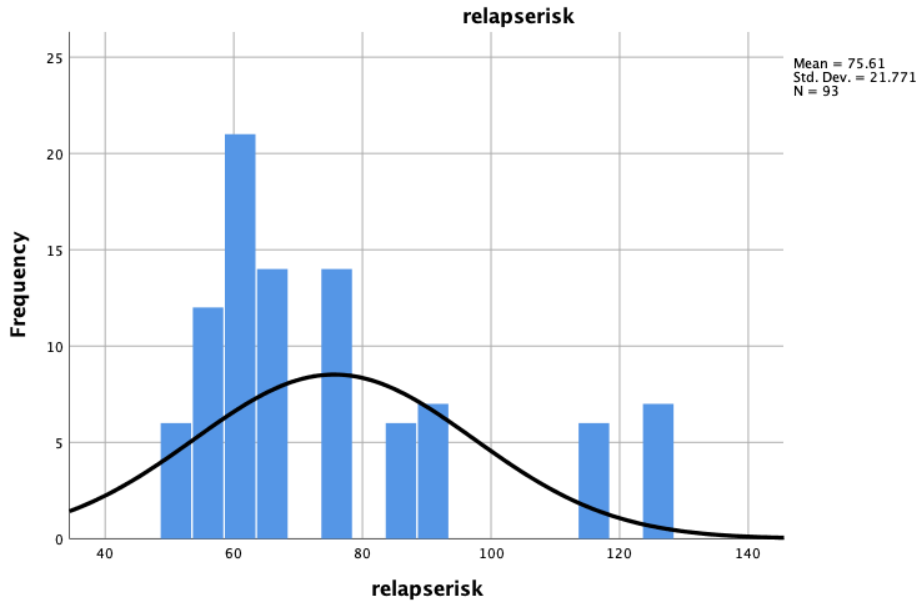
The family resilience questionnaire had 65 questions and 7 themes namely, “families generally have problems, there is input to major family decisions that is given by all, family problems is something we believe we can handle, through difficulties the family works together, other family members take us for granted, we say intentional things to each other, and we think we should not get involved with our community.” The values assigned were 1(Strongly disagree) 2(Disagree) 3 (Agree) 4

(Strongly Agree). These themes were concurred with research conducted by Dary (2016), which noted that negative family meaning made it difficult for the family to develop strength during adversities, utilize their organization skills hence portraying ineffective coping skills. As indicated in figure 4.2 several participants indicated that other family members took the recovering substance user for granted hence the high value on that variable. Research by Medina (2015) highlighted the importance of enhancing family resilience since repeated cycles of adjustments and adaptations were experienced by the family when they had a victim of substance abuse.

4.3.2 To determine the status of relapse risk among discharged substance users attending alcoholic anonymous groups.

Objective two sought to determine the status of relapse risk among recovering substance users attending alcoholic anonymous groups within Nairobi city County, Kenya. The objective was achieved by participants filling in the AWARE questionnaire.

Figure 4.2 *Descriptive analysis of relapse risk.*



A 75.61 mean and a 22.771 standard deviation from a population of N=93 was achieved in determining the status of relapse among recovering substance users attending alcoholic anonymous groups. These findings conquered with (Gachara 2020) on perceptions and quality of life among persons recovering from alcohol use in Kirinyaga county, Kenya, they indicated that opinions affected how people perceived and utilized accessible resources. These findings conquered with a study by Chepkwony et al., (2016) on the incidence and aspects causing relapse among substance users in rehabilitation centers selected within Nairobi City County, Kenya. The relapse risk among inpatient substance users was minimal compared to those who had completed treatment.

4.3.2.2 Descriptive Analysis to determine the scores from the Advanced Warning Signs of Relapse Questionnaire (AWARE)

The AWARE questionnaire scoring was done by summing up the individual scores. The lowest possible summed score was to be from 28 and the highest was to be 196. Three categories namely low, moderate, and high were developed to assess for the occurrence of relapse warning signs. Interpretation was the more warning signs of relapse, the higher the score.

Valid	Frequency	Percent	Cumulative Percent
51	6	6.5	6.5
54	6	6.5	12.9
56	6	6.5	19.4
61	1	1.1	20.4
63	20	21.5	41.9
66	7	7.5	49.5
68	7	7.5	57.0
75	7	7.5	64.5
76	7	7.5	72.0
88	6	6.5	78.5
91	1	1.1	79.6
92	6	6.5	86.0
116	5	5.4	91.4
117	1	1.1	92.5
126	7	5	100.0
Total	93	100.0	

Table 4.5 *Scores from the Advanced Warning Signs of Relapse*

From table 4.5 participants answered 28 questions from the AWARE questionnaire. The least score from the participants was 51 and the highest score was 126. A prospective study conducted by (Harris & Miller, 2000) on the relapse risk post treatment of substance use disorder, that showed the probability of heavy drinking (during the next two months). The relapse risk AWARE questionnaire was found to be a good predictor of the relapse occurrence ($r=.42$, $p<.001$). No evidence was found that showed the warning signs occurred in the order indicated in the questionnaire in real time (Miller & Harris, 2000). The total score was the best predictor of an impending relapse.

Table 4.6 *Assessing the occurrence of Relapse Risk Warning Signs*

Relapse Risk	**Frequency**	**Percentage**	**Min**	**Max**
Low	39	41.9	51	63
Moderate	34	36.6	66	88
High	20	21.5	91	126
Total	**93**	**100.0**		

Table 4.6 showed that most of the participants (41.9%) had a low relapse risk following discharge from the treatment facilities and were attending the alcoholic anonymous groups. Only 21.5% of participants showed high relapse risk warning signs while 36.6% indicated moderate relapse risk warning signs. These findings agreed with the research by Hendershot et. al. 2011 & Moradinazzar, et. al (2020); Maehira, (2013); Sapkota (2019) which showed that rates of relapse after treatment ranged between 40% to 75% within a period of 3weeks to 6months.

Sapkota (2019) findings were higher compared to a study conducted by Bhandari, Dahal, and Neupane, (2015) on elements linked to substance use among patients in rehabilitation centers which indicated that 9.7% of respondents relapsed when they were discharged and the average number of times that the individual relapsed was 3.29 times.

Table 4.7 *Probability of Heavy drinking during the next two months*

AWARE Score	If *already* drinking in the prior 2 months	If *abstinent* during the prior 2 months
28-55	37%	11%
56-69	62%	21%
70-83	72%	24%
84-97	82%	25%
98-111	86%	28%
112-125	77%	37%
126-168	90%	43%
169-196	>95%	53%

Findings in Table 4.7 showed that a score of 51 indicated a probability of 37% of the respondents were already drinking in the prior 2months or that a probability of 11% were abstinent during the prior 2months. A score of 63 as indicated in table 4.5 had 20 participants out of the total 93 participants it indicated a probability of 62% were already drinking in the prior two months or a probability of 21% were abstinent during the prior two months. The highest score was 126 which indicated a probability of 90% of the participants were already drinking in the prior two months or that 43% were abstinent during the prior two months. Bhandari, Dahal and Neupane (2015)

conducted a study of aspects linked with substance abuse among clients in rehabilitation centers. The outcome of the study illustrated that 94.7% relapsed to SUD after period of sobriety. These concurred with the table 4.7 on probability of heavy drinking during the next two months which indicated that an individual with high relapse warning signs 169 to 196 had a 95% probability of relapsing withing two months.

4.3.3 The relationship between family resilience and relapse risk among recovering substance users

Objective three sought to assess the relationship between family resilience and relapse risk among recovering substance users attending alcoholic anonymous groups in Nairobi city county, Kenya. The following null hypothesis was formulated:

$H_0$1. There is no significant relationship between family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi Kenya.The hypothesis was tested using the Spearman rank-order correlation that was conducted since the data was measured on the ordinal scale. Table 4.8 presented the study findings that revealed that there was a strong positive correlation on family resilience and relapse risk, a relationship that was statistically significant r_s (93) = -.522, p > 1.0. The significance level correlated at the 0.01 level. This was an indication that higher family resilience correlated to relapse rate while a lack of family resilience resulted to a high relapse rate.

Table 4.8 *The relationship between family resilience and relapse risk among recovering substance users attending alcoholic anonymous group.*

			Relapse risk.	Family Resilience
Spearman's rho	relapse risk	Correlation Coefficient	1.000	.522**
		Sig. (1-tailed)	.	.000
		N	93	93

**. Correlation is significant at the 0.01 level (1-tailed)

Findings from table 4.8 concurred with past findings like Osborn (2017) who conducted a study that utilized an ex-post factor causal comparative study model. The study targeted the cases of drugs users who had relapsed in the 14 drug treatment facilities approved by NACADA in Nairobi. The outcome of the investigation revealed that relapse risk was because of the interrelations of previous threats within the person and surrounding circumstances and the rate of family resilience. That study concurred with the findings that healthy family resilience resulted to a low relapse risk in the recovering individuals.

Additionally, high levels of family resilience had been found by researchers (Wu & Zheng ,2020; Azmi et al 2018) to have a protective stabilizing effect on substance use problems that had resulted to the increased ability of psychological repair and reduced the occurrence of relapse. Research conducted by Rajesh et al. (2015) noted that when families have poor emotional connections, it could increase the risk of relapse. As noted in this research unhealthy family resilience was characterized by low adaptation to stress, low adjustment and adaptability and low ability to make meaning. These in return resulted to increased probability of relapse

and higher warning signs of relapse. A correlational study on the relationship between supportive family and relapse was conducted by Okamato, Helm, Po'Akekuawela, Chin & Nebre (2009) that found a relationship between supportive family and its potential to encourage relapse. The researchers noted that the identified patient who had relapsed despite the supportive family had got used to the family bailing them out of trouble related to substance use. These in turn made them dependent and the relapse increased. These findings differed from this study in that high adaptability and adjustment was characterized by the family's ability to support their family member. When the family had healthy family resilience it resulted in a decreased probability of relapse and lower warning signs of relapse.

Mokgothu (2015) used a population of families and mentally ill patients with the focus being strengths of families in supporting mentally ill family members. The findings demonstrated that family resilience was a strength necessary in supporting their loved ones. This research was on the relationship between family resilience and relapse risk among discharged substance users attending Alcoholic Anonymous groups, it agreed with the research in that family resilience played a major role in ensuring SUD individuals felt supported by their loved ones while in recovery.

4.4 Summary of Findings

The demographic findings showed, an equal distribution of both genders at 62.4% for the male and 37.6% for the female. Most respondents 58.1% were aged between 28 to 38-year-old, followed by those above 38 years old at 29%. The majority reported having the highest family support from their spouses 4.9%. Others reported 15.1% family support from their child, 21.5% reported support from their

sister, 14% reported support from their mothers and the least was at 7.5% who reported family support from their fathers.

The first objective sought to establish the levels of resilience among families of discharged substance users attending alcoholic anonymous groups in Nairobi City County, Kenya. The findings established a significant association between high frequency and family resilience; however, the findings were not statistically significant. There was a significant association between family members taking the recovering substance users for granted and family resilience.

Objective two aimed to determine the status of relapse risk among recovering substance users attending alcoholic anonymous groups within Nairobi City County, Kenya. Findings indicated a mean of 75.61% and a standard deviation of 21.771 from a population of 93 participants. 21.5% scored 63 out of a possible total score of 196 from the Advance Warning Signs and Relapse Risk Questionnaire. 5% had the highest score of 126 out of a possible total score of 196. The study further indicated a 41.9% Low relapse risk from the participants, a 36.6% moderate relapse risk and 21.5% High relapse risk from the participants.

Objective three sought to assess the relationship between family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi City County, Kenya. The findings of the study revealed that there was a positive strong correlation between family resilience and relapse risk that was statistically significant. Findings conquered with past research like Osborn (2017) who conducted a study that utilized an ex-post factor causal comparative study model. The study targeted the cases of drug users who had relapsed in the 14 drug treatment facilities approved by NACADA in Nairobi. The outcome of the investigation revealed that relapse risk was because of the interrelations of previous threats within

the person and surrounding circumstances and the rate of family resilience. Healthy family resilience was characterized by high adaptability to stressful situations, high adjustment and adaptability and high ability to make meaning. Additionally, high levels of family resilience had been found by researchers (Wu & Zheng ,2020; Azmi et al 2018) to have a protective stabilizing effect on substance use problems that had resulted to the increased ability of psychological repair and reduced the occurrence of relapse. Rajesh et al. (2015) noted that when families had poor emotional connections, it increased the risk of relapse. Additionally, this study differed with findings from research by Okamato et. al (2009) that found a relationship between supportive family and its potential to encourage relapse. The findings of the current research found out that a decreased probability of relapse and lower relapse warning signs were noted with healthy family resilience.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented the discussion of the findings, conclusions, and recommendations of the study on the relationship between family resilience and relapse risk among discharged substance users attending alcoholic anonymous groups in Nairobi City Count, Kenya.

5.2 Discussion of Findings

The findings' discussion was done as per the three study objectives.

5.2.1 The level of family resilience

The findings established a significant association between high frequency and family resilience; however, the findings were not statistically significant. As indicated by (Medina, 2015) she highlighted that enhancing family resilience could be a beneficial method to understanding SUD relapse because the family unit went through repeated cycles of adjustments and adaptations when they had a victim of substance abuse.

These findings contrasted with a past finding by Sayette (2016), who indicated that there was a significant association between participants feeling that family members took them for granted and family resilience. It suggested that the main obstacle to change was related to the pressure from the families who lacked adequate knowledge on the SUD recovery process and their role in relapse prevention. These pressures caused recovering substance users to feel inadequate to face their families and hence took the initiative to isolate themselves, thus continuing their usual activity (Martin, 2015). Distressing life circumstances and conditions could change both the family's quality of life and one's wellbeing. When family relationships were

supported, they become a pillar in the recovery of the substance use disorder individual (SAMHSA, 2017). As shown from the findings, a high number of individuals were supported by their spouses and this in turn translated to low relapse risk signs being the highest among the participants.

As the Family Adjustment and Adaptation Response (FAAR) model postulates that the family had available resources to address any family demands, the ability to form family meanings to situations that in turn helped them to understand resilience. Additionally, the family either adjusted or adapted to the crisis which for this study was relapse risk to substance use disorder.

5.2.2 The status of relapse risk

The findings indicated that most of the participants (41.9%) had a low relapse risk following discharge from the treatment facilities and were attending the alcoholic anonymous groups. Only 21.5% of participants showed high relapse risk warning signs while 36.6% indicated moderate relapse risk warning signs. These findings agreed with the research by Hendershot et. al. 2011 & Moradinazzar, et. al (2020); Maehira, (2013); Sapkota (2019) which showed that rates of relapse after treatment ranged between 40% to 75% within a period of 3weeks to 6months.

Paz (2013) and team found that a lack of support from the family caused recovering substance users to feel alone, unwanted, and thus contributed to their inclination to relapse.

Additionally, research by NIDA (2018) in the United States of America, on relapse, indicated that relapse rates varied from 40% to 60% and despite rehabilitation, relapse rates were considered still high. Relapse risk was the greatest concern that necessitated advanced protective approaches. Above 50% of persons with SUD went back to substance use after rehabilitation (Hasin, 2013). High relapse

risk rates following treatment had also been documented in other studies (Chetty, 2011: Moradinazar, 2020) who noted that, relapse usually ranged between 40-75% in three weeks to six months after discharge (Hasin, 2013: Maehira, 2013: Sapkota, 2019). The previous statistics conquered with this research since most of the participants (41.9%) had a low relapse risk following discharge from the treatment facilities and were attending Alcoholic Anonymous groups.

Also, a study by Mokgothu (2015) and team showed that close familial bonds protected individuals from drug offers and relapse.

5.2.3 The relationship between family resilience and relapse risk

The study findings revealed a positive correlation between family resilience and relapse risk, a relationship that was statistically significant r_s (93) = -.522, p > 1.0. The significance level was at the 0.01 level. These findings agreed with a past study by (Walsh, 2016) who noted that families that had encountered hardships and challenges often came out resilient, more purposed, and more capable to oversee future difficulties. However, these study's findings disagreed with a couple of past scholars who found a significant relationship between individual factors of coping, the familial relational elements, friends, communal support, and their predisposition to relapse; Swanepoel (2014) and team. A relationship was found between the family resilience variable in reducing the problem of relapse among recovering substance users who had completed their treatment and rehabilitation period. Paz (2013) and team found that a lack of support from the family caused recovering substance users to feel alone, unwanted, and thus contributed to their inclination to relapse. The above past findings indicated that the findings of this study might be because families with family resilience ended up moving on with their lives and the individuals got comfortable even while in recovery and relapse risk occurred.

As per the family adjustment and adaptation response model that guided this study, it was clear that the family had available resources to address any family demands, the ability to form meanings to situations that in turn helped them to understand resilience. However, it was clear that the family was able to adjust or adapt to the relapse risk of their loved ones, hence the correlation between the variables.

5.3 Conclusion of the study

From the findings, the following conclusions were made:

The majority of the participants reported to have received the highest family support from their child while the least support came from father's further research is needed to explore the feeling surrounding the lack of a father's support.

There was a significant association between family members taking the recovering substance user for granted and family resilience. The research showed a significant correlation between family resilience and relapse risk. Meaning that individuals with higher family resilience had a lower risk of relapse to substance use disorder.

The lower the relapse risk warning signs the lower the relapse risk. 5% of the participants scored 126 out of a possible 196 relapse warning signs and the majority 41.9% indicated low relapse risk, 36.6% indicated moderate relapse risk and 21.5% indicated high relapse risk.

The overall finding indicated there was a positive strong correlation between family resilience and relapse risk that were statistically significant.

5.4 Recommendations of the study

The recommendations were made as per the findings of the study. The recommendations were for the Alcoholic anonymous groups, the recovering substance users, the families and for further research.

5.4.1 Recommendations for Alcoholic Anonymous Groups

1. The study recommended that facilitators at the alcoholic anonymous groups help recovering substance users explore their relationship with their loved ones. This would ensure that the individuals worked on their resentments.
2. The study recommended that the alcoholic anonymous groups explore further the reasons that some individuals still had a high relapse risk despite them receiving the support from the group. This would help the individuals track their triggers and be on the lookout for warning signs.

5.4.2 Recommendations for Recovering Substance users

1. The study recommended that recovering substance users resolve underlying issues with their family members and focus on their recovery. This would help them to avoid carrying baggage and unresolved issues especially with loved ones.
2. The study also recommended that recovering substance users consistently attend alcoholic anonymous groups and be intentional about their recovery. This would help with discipline and working on their recovery better and more thoroughly.

5.4.3 Recommendations for Families of Recovering Substance users.

1. The study recommended that each family member have follow-up sessions with their loved ones on their recovery as well as giving them feedback. This would help in improving communication between the family and the recovering substance user.

2. The study also recommended that Father's assess the reason as to why they were the least supportive to majority of the recovering substance users.

5.4.4 Recommendation for further research

1. The study recommended future scholars examine lack of family support especially from a parent affects the sobriety of a recovering substance user.
2. Future research should also examine whether the relationship between the fathers and the children impacts substance use.
3. Future scholars could also study the relationship between family dysfunction and substance use on a larger scale. Including al-anon groups.

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APPENDICES

Appendix A1: Study Timeline

Activity	Sept 2017-Feb 2022	March-July 2023	August 2023	Sept-Oct 2023	Nov-April 2024
Working on the proposal and Submission.					
Data Collection.					
Analysis of data.					
Report writing.					
Data and report presentation.					

Appendix A2: Informed Consent Form for Respondents

RELATIONSHIP BETWEEN FAMILY RESILIENCE AND RELAPSE RISK AMONG DISCHARGED SUBSTANCE USERS ATTENDING ALCOHOLIC ANONYMOUS GROUPS IN NAIROBI CITY COUNTY, KENYA.

Informed Consent

I Tabitha Susan Wanjiku Kibera, a Master of Arts Student in Counselling Psychology at Kenyatta University, Nairobi City County Kenya; invites you to participate in a research study on family resilience and relapse risk. The goal of this research study is to collect data on relapse warning signs and family resilience.

Qualifications to participate include:

(1) You are 3months in recovery

(2) You are a family member who has been supporting the recovery

(3) You are above 18 years

Participation in this study may not benefit you directly, but it will help us learn how to identify the relapse warning signs. You are expected to answer all questions and are free to ask for any clarification.

Confidentiality will be upheld regarding all the information shared during this study.

Kindly sign below, as an indication of consenting to be a participant.

Thank you.

Signature _____ Date _____

APPENDIX A3: STUDY QUESTIONNAIRE

Family Resilience Assessment Scale (FRAS)

SECTION A-DEMOGRAPHIC DATA

Kindly tick the box for number 2 and 3 that best describes you with an (X) or (V)

1. Age _____

2. Male ☐ Female ☐

3. What is your relationship with your loved one?

☐ My Sister My brother ☐ Child ☐

☐ My Mother My Father ☐

☐ My Spouse Other (explain) ……

SECTION B

Kindly tick in the box that corresponds with your answer in relation to how you have handled your loved ones substance use.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Families generally have problems				
2. There is a reason for all we go through as a family				
3. As a family we have flexibility to deal with the unexpected.				
4. In the everyday activities our friends are a part of it.				
5. Who we are is valued by our friends				
6. The family rules are not cast on stone				
7. Family rules change according to needs in the family				
8.				

I feel as part of the family because of the things we do for each other				
9. I accept stressful events as part of life				
10. There is acceptance of problems that occur unexpectedly.				
11. There is input to major family decisions is given by all				
12. Even through pain, I can work through it and come to an understanding.				
13. As a family, I can adapt to demands placed on us.				
14. As a family, how much we do for our friends we do it cautiously.				
15. What are cautious about what we say to each other				
16. We are open to new ways of doing things as a family.				
17. Other family members understand us.				
18. We are able to ask for help and assistance from our neighbors.				
19. We go to the places of worship for prayers				
20. As a family we feel that friends can take advantage of us.				
21. Our problems is something we believe we can handle.				
22. If we do not understand each other, we can ask for clarification.				
23. We are honest and direct with each other				
24. Issues can be solved without upsetting someone.				

25. I compromise when problems come up.				
26. Accepting a loss is how we deal with family differences.				
27. As a family people in this community can be depended upon.				
28. Meaning behind messages can be questioned.				
29. Major problems can be solved				
30. Survival if another problem comes up, is some we can do.				
31. Communication in our family is something we talk about				
32. Through difficulties as a family, we work together				
33. Decisions made are a consultation with each other				
34. Problem solving is done positively				
35. Problems discussed make us feel happy about the solutions				
36. Resolutions are reached at through discussions				
37. Voluntary work in the community is done by the family				
38. Opinions are expressed freely.				
39. Time and energy given to the family makes us feel good				
40. Community members can help in an emergency				
41. Living in our community makes us feel secure				
42. Other family members take us for granted.				
43. We face big problems with strength				
44. We get upset if someone complains in our family,				

45. There are close family friends we really care about				
46. As a family we have faith in a supreme being				
47. We have problem solving skills				
48. Our feelings are kept to ourselves				
49. If there is trouble, our community will help				
50. As a family we are important to our friends				
51. Mistakes are a learning process for us				
52. We say intentional things to each other				
53. Activities we participate in are for our situation				
54. As a family we are participants in church activities				
55. Our neighbors give us gifts and favors				
56. Religious advisors give us advice whenever we seek it.				
57. Concerns and problems of family members is something we do not listen to				
58. Responsibilities in the family are shared				
59. We show love and affection for family members				
60. We tell each other how much we care about them				
61. Our community is good to raise children				
62. We think we should not get too involved with our community				
63. We believe things will work out even in difficult times				
64. We shall try new ways of working with problems				
65. Communication is well understood.				
66. We ensure family members are not emotionally or physically hurt				

67.Mention something else that has helped your family through this adverse event that has not been described or discussed above ?	

Thank you for your participation.

APPENDIX A4: RELAPSE RISK QUESTIONNAIRE

(Advanced Warning of Relapse) **AWARE Questionnaire**

SECTION A

Demographic data. Kindly tick the box that best describes you with an (X) or (V)

1.How old are you? _____

2.Male ☐ Female ☐

SECTION B

A self-report questionnaire with a 1-7 rating scale. Answer all questions by ticking the box that describes you currently.

	Never	Rarely	Sometimes	Fairly Often	Often	Almost Always	Always
1. I am in doubt of my ability to remain sober.							
2. I am constantly thinking about my life problems.							
3. I overreact and am impulsive							
4. I feel lonely and keep to myself.							
5. I am too focused on one area of my life.							
6. I feel or depressed.							
7. I have wishful thinking.							
8. Plans that I made succeeded.							
9. My concentration is poor, I prefer day dreaming							

		Never	Rarely	Sometimes	Fairly Often	Often	Almost Always	Always
10.	Things do not work out for me.							
11.	I feel confused.							
12.	My family irritates and annoys me.							
13.	I feel angry and frustrated.							
14.	My eating habits are good.							
15.	I feel trapped and stuck.							
16.	My sleep is troubled							
17.	I have long periods of serious depression.							
18.	I do not care what happens.							
19.	I feel like things are so bad that I can use my substance of choice.							
20.	My judgement of situations is not clear.							
21.	I feel sorry about my state.							
22.	Thoughts on using my substance of choice are constantly in mind.							
23.	I lie to others.							

		Never	Rarely	Sometimes	Fairly Often	Often	Almost Always	Always
24.	I have a sense of hope and confidence about relapse.							
25.	I am generally angry at the world.							
26.	I have begun doing things to stay sober.							
27.	I had the fear that I was losing my mind.							
28.	My substance use was out of control.							

Thank you for participating.

APPENDIX A6: NACOSTI Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **343922**

Date of Issue: **04/April/2023**

RESEARCH LICENSE

This is to Certify that Ms.. Tabitha Susan of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: RELATIONSHIP BETWEEN FAMILY RESILIENCE AND RELAPSE RISK AMONG DISCHARGED SUBSTANCE USERS ATTENDING ALCOHOLIC ANONYMOUS GROUPS IN NAIROBI CITY COUNTY; KENYA. for the period ending : 04/April/2024.

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