# DETERMINANTS OF ALCOHOL RELAPSE AMONG MIDDLE-AGED MARRIED MEN IN REHABILITATION CENTRES IN KIAMBU COUNTY, KENYA

**By**

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**MASTER OF ARTS COUNSELLING PSYCHOLOGY**

**KCA UNIVERSITY**

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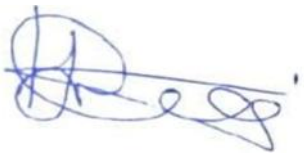
**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN COUNSELLING PSYCHOLOGY IN THE SCHOOL OF EDUCATION, ARTS & SOCIAL SCIENCES AT KCA UNIVERSITY**

**OCTOBER, 2025**

## DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for the award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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I do hereby confirm that I have examined the master's dissertation of

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**DETERMINANTS OF ALCOHOL RELAPSE AMONG MIDDLE-AGED MARRIED MEN IN REHABILITATION CENTRES IN KIAMBU COUNTY, KENYA**

## ABSTRACT

Alcohol relapse remains a critical public health concern, particularly among middle-aged married men in Kiambu County, Kenya, where relapse rates exceed 60% despite the presence of multiple rehabilitation centres. This study examined the psychological, social, and structural determinants contributing to alcohol relapse within this demographic. Specifically, the study aimed to: (1) identify psychological factors influencing alcohol relapse among middle-aged married men in Kiambu County; (2) assess social dynamics of alcohol relapse among middle-aged married men in Kiambu County; (3) evaluate the effectiveness of current rehabilitation interventions applied to middle-aged married men in Kiambu County; and (4) provide evidence-based recommendations for enhancing long-term recovery outcomes. The study was guided by two frameworks: (1) the Relapse Prevention Model and (2) the Biopsychosocial Model of Addiction. A descriptive cross-sectional research design was adopted, combining quantitative and qualitative methods to capture the multifaceted nature of relapse. The study focused on middle-aged (40-64) married men undergoing rehabilitation for alcohol use disorder in Kiambu County, alongside rehabilitation staff and spouses. A total of 108 individuals participated, comprising 72 recovering men (responded to questionnaire items), whereas 12 rehabilitation staffs, 12 representatives of recovering men, and 12 spouses were involved in focus group discussion. Quantitative data were collected through structured questionnaires and analysed using descriptive statistics and multiple regression, while qualitative data from focus group discussions were subjected to manual thematic analysis. Findings from both methods were integrated through triangulation for a comprehensive understanding of relapse dynamics. The results revealed that psychological factors—particularly stress, emotional distress, low self-efficacy, and craving—had the strongest positive correlation with relapse ($r = 0.72$), indicating that emotional instability significantly heightens relapse vulnerability. Social determinants such as marital conflict, peer pressure, and limited family support also showed a substantial correlation with relapse ($r = 0.64$), highlighting the influence of social contexts in recovery outcomes. Conversely, structural factors—especially access to aftercare services, counselling continuity, and rehabilitation follow-up—were negatively correlated with relapse ($r = –0.68$), demonstrating their protective role. Multiple regression analysis confirmed that psychological distress was the most significant predictor of relapse, followed by social stressors, while structural support acted as a mitigating factor. Qualitative findings enriched these patterns, revealing that most recovering men relapsed in response to financial strain, unresolved marital tensions, and pervasive alcohol availability. Participants emphasized inadequate post-rehabilitation follow-up and minimal family involvement as key contributors to repeated relapse episodes. The study concludes that relapse among middle-aged married men in Kiambu County is best understood as a systemic issue spanning psychological, social, and structural dimensions. Sustainable recovery therefore requires integrated interventions that enhance coping skills, strengthen family and community support, and institutionalize continuous aftercare frameworks. The findings bridge theoretical and practical gaps in addiction counselling by illustrating how intrapersonal, interpersonal, and institutional factors interact to determine long-term sobriety. The

study recommends the incorporation of structured relapse prevention modules, family-inclusive counselling, and robust aftercare systems to enhance rehabilitation outcomes and inform culturally responsive addiction policies and practices.

**Key words:** Relapse, Psychological Determinants, Social Determinants, Structural Determinants, Coping Strategies, Self-Efficacy, Aftercare Support, Peer Influence, Marital Conflict, Rehabilitation Program Effectiveness, Craving, Middle-Aged Married Men, Relapse Prevention Mechanisms

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## ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| **ANOVA** | Analysis of Variance |
| **AUD** | Alcohol Use Disorder |
| **CBT** | Cognitive Behavioural Therapy |
| **COR** | Conservation of Resources |
| **KCAU SERC** | KCA University Scientific and Ethical Review Committee |
| **NACOSTI** | National Commission for Science, Technology and Innovation |
| **P-Value** | Probability value |
| **SPSS** | Statistical Package for the Social Sciences |

## DEFINITION OF KEY OPERATIONAL TERMS

**Relapse:** Refers to the recurring return to alcohol use after a period of abstinence during or following rehabilitation treatment.

**Psychological Determinants:** Refer to internal cognitive and emotional factors influencing an individual's susceptibility to relapse.

**Social Determinants:** Social determinants denote interpersonal and relational influences that shape recovery and relapse outcomes. As outlined in the study, they include marital conflict, peer pressure, social support, and family cohesion.

**Structural Determinants:** Structural determinants refer to institutional and systemic factors within rehabilitation and post-rehabilitation contexts that affect recovery continuity. The study identified elements such as availability and quality of rehabilitation services, aftercare programs, counselling continuity, and access to mental health support.

**Coping Strategies:** Coping strategies are behavioural and cognitive mechanisms employed by individuals to manage stress and resist relapse.

**Self-Efficacy:** Self-efficacy refers to an individual's perceived ability to resist alcohol usage and maintain abstinence when exposed to high-risk situations.

**Aftercare Support:** Aftercare support included structured follow-up and community-guided interventions designed to assist individuals in maintaining sobriety post-rehabilitation. This study established aftercare such as counselling follow-ups, mentorship programs, and support group meetings.

**Peer Influence:** Peer influence refers to the pressure or encouragement from friends, colleagues, or social groups to engage in alcohol consumption.

**Marital Conflict:** Marital conflict refers to interpersonal tensions or disagreements between spouses that create emotional distress, often precipitating relapse.

**Rehabilitation Program Effectiveness:** This refers to the perceived adequacy and impact of rehabilitation centre services in promoting recovery and preventing relapse.

**Craving:** Craving is defined as an intense desire or urge to consume alcohol, often triggered by stress, social cues, or environmental exposure.

**Middle-Aged Married Men:** For the purpose of this study, this term refers to male participants aged between 40 and 64 years who are legally married and undergoing or having completed rehabilitation for alcohol use disorder.

**Relapse Prevention Mechanisms:** Refers to cognitive, behavioural, and institutional interventions designed to minimize the likelihood of relapse after rehabilitation.

# CHAPTER ONE

# INTRODUCTION

## 1.1 Introduction

This chapter introduces the study on alcohol relapse among middle-aged married men in Kiambu County, Kenya. It situates the issue within broader psychological, social, and structural realities influencing addiction recovery. The chapter presents the study's background, statement of the problem, purpose, objectives, research questions, hypotheses, assumptions, significance, scope, and limitations.

## 1.2 Background of the Study

Alcohol abuse remains a major global public health challenge with significant health, social, and economic impacts, underscored by a global relapse rate of approximately 40% to 60% among individuals in recovery (Juma et al., 2022). According to the World Health Organization (WHO, 2021), harmful alcohol use accounts for more than three million deaths annually, representing approximately 5.3% of all global deaths. Alcohol use disorders (AUDs) are associated with numerous diseases and injuries, including liver cirrhosis, cancer, and cardiovascular conditions (Mkuu et al., 2019).

From health perspective, a major global concern has been the co-occurrence of AUDs with mental health disorders such as depression, anxiety, and post-traumatic stress disorder (PTSD). The National Institute on Alcohol Abuse and Alcoholism (NIAAA) reports that individuals with dual diagnoses experience higher relapse rates due to the complexity of treating both conditions simultaneously (NIAAA, 2021). Evidence-based interventions such as cognitive behavioural

therapy (CBT), motivational interviewing (MI), and medication-assisted treatment (MAT) have been widely used to prevent relapse, but disparities in access to these treatments persist. Social and cultural norms also influence relapse. In many societies, social drinking is deeply ingrained in culture, making sustained abstinence difficult. (In Latin America, for instance, alcohol consumption among men is socially reinforced, making sobriety particularly challenging (Smith, 2021).

Beyond the health burden, the economic impact of alcohol misuse is considerable. According to the World Bank, harmful alcohol use costs countries over 1% of their GDP through healthcare expenses, lost productivity, and law enforcement costs (World Bank, 2021). Alcohol abuse also leads to family disintegration, domestic violence, and increased crime rates (Wanjeri, 2022). Globally, alcohol relapse has been influenced by a combination of psychological, social, and structural dynamics. Studies have shown that stress, mental health disorders, peer influence, and environmental triggers significantly contribute to relapse (Volkow et al., 2016). Moreover, accessibility to alcohol, lack of robust rehabilitation programs, and inadequate post-rehabilitation support systems have increased relapse likelihood. In developed countries, structured aftercare programs and strong social support networks have helped mitigate relapse risks, but challenges persist, especially among socio-economically disadvantaged populations (Marlatt & Witkiewitz, 2005).

In sub-Saharan Africa, alcohol misuse continues to rise amid economic hardship and cultural acceptance of drinking. Rehabilitation programs often face resource limitations and inadequate post-treatment support, resulting in high relapse rates (WHO, 2021). In Kenya, and particularly in Kiambu County, alcohol consumption and relapse remain major public health and

social concerns. Despite growing investment in rehabilitation services, many recovering individuals, especially middle-aged married men, continue to relapse shortly after treatment (NACADA, 2022).

Middle-aged married men represent a group facing unique psychosocial pressures stemming from family responsibilities, economic expectations, and social roles (Rose et al., 2019). Understanding the factors that contribute to their relapse is crucial for developing more effective, sustainable, and context-sensitive rehabilitation interventions. This study therefore examines the psychological, social, and structural determinants of alcohol relapse among this demographic in Kiambu County.

### 1.3 Statement of the Problem

Despite the growth of rehabilitation infrastructure and increased funding (from KES 24,070,000 in 2024/2025 to KES 25,535,863 in 2026/2027) for addiction treatment in Kiambu County (Kiambu County Budget Estimates, 2024), relapse among middle-aged married men remains alarmingly high. NACADA (2022) indicates that over 60% of rehabilitated individuals relapse within a year of discharge. While rehabilitation centres such as Raphaelites, Primrose, and Thika Rehabilitation Home offer detoxification and counselling, their programs often apply generalized treatment models that overlook the unique psychosocial and familial contexts of middle-aged men.

This persistent relapse trend reflects systemic gaps across three interrelated levels. Psychologically, recovering men often struggle with stress, craving, and low self-efficacy (Giusto et al., 2025; Koech & Kay, 2017). Socially, marital strain, weak family support, and peer pressure

erode coping stability (Kenyatta & Githae, 2021). Structurally, inadequate aftercare, weak follow-up mechanisms, and limited economic reintegration opportunities undermine long-term recovery (Odhiambo & Makori, 2022). These interconnected factors indicate that relapse should be understood as a complex, multi-layered systemic issue rather than solely a personal failure; however, much of the existing research continues to approach it from an individualistic perspective that overlooks broader psychosocial and structural influences.

Building on this understanding, a few existing studies (e.g., Wanjeri, 2022; Juma et al., 2022) have examined alcohol relapse from a multi-layered perspective but have primarily focused on youth and unmarried men, paying limited attention to middle-aged married men—a demographic facing compounded pressures related to family responsibilities, occupational stress, and cultural drinking norms (Rose et al., 2019). The present study differs from previous research by specifically focusing on middle-aged married men and exploring the psychosocial and structural dynamics that influence relapse within this group—areas that remain underexplored in existing literature.

### 1.4 Purpose of the Study

This study was purposed to investigate the psychological, social, and structural determinants of alcohol relapse among middle-aged married men in rehabilitation centres in Kiambu County, Kenya.

### 1.5 Objectives of the Study

The study sought to:

a) Examine the psychological determinants contributing to alcohol relapse among middle-aged married men in rehabilitation centres within Kiambu County.
b) Assess the social dynamics influencing alcohol relapse among middle-aged married men in Kiambu County.
c) Evaluate the effectiveness of current rehabilitation interventions in addressing psychological and social factors that influence relapse.
d) Provide recommendations for improving rehabilitation interventions to enhance long-term recovery outcomes.

## 1.6 Research Questions

a) What psychological determinants contribute to alcohol relapse among middle-aged married men in rehabilitation centres within Kiambu County?
b) What social dynamics influence alcohol relapse among middle-aged married men in Kiambu County?
c) How effective are current rehabilitation interventions, including follow-up care and family-inclusive counselling, in preventing relapse?
d) What recommendations can enhance the sustainability of rehabilitation outcomes?

## 1.7 Hypotheses

*H1: There is a significant relationship between psychological determinants (emotional distress, craving, dependency levels, and self-efficacy) and alcohol relapse among middle-aged married men in rehabilitation centres within Kiambu County.*

*H2: Social dynamics (marital relations, family support, and economic stressors) significantly influence the likelihood of alcohol relapse among middle-aged married men in Kiambu County.*

### 1.8 Assumptions of the Study

The study assumed that psychological factors such as stress, craving, and emotional dysregulation consistently contribute to relapse. It also assumed that social and familial dynamics spousal support, family relationships, and peer influence significantly affect recovery outcomes. Additionally, it was assumed that institutional structures and rehabilitation policies influence treatment effectiveness and relapse risk.

### 1.9 Significance of the Study

This study was justified by the persistently high relapse rates despite increased investment in rehabilitation infrastructure. By focusing on middle-aged married men which is a group facing unique psychological, social, and structural burdens the research has addressed a critical policy and practice gap in addiction recovery. The study's mixed-methods approach provides both statistical evidence and qualitative insights, providing a multidimensional understanding of relapse. Its results benefits (1) Rehabilitation practitioners – through evidence-based interventions incorporating psychosocial and structural support, (2) Policy makers – by informing integrated relapse prevention frameworks and funding priorities, (3) Families and communities – by enhancing understanding of their role in sustaining recovery, and (4) Researchers – by expanding the empirical base on gendered and age-specific determinants of relapse.

## 1.10 Scope and Limitation of the Study

The study focused on selected rehabilitation centres in Kiambu County offering inpatient or outpatient services to middle-aged married men aged 40–64 recovering from alcohol use disorder. It examined psychological, social, and structural determinants of relapse using both quantitative and qualitative methods. While the findings are context-specific to Kiambu County, they provide insights applicable to similar contexts within Kenya and the wider sub-Saharan region.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter critically explores the literature surrounding alcohol relapse among middle-aged married men undergoing rehabilitation in Kiambu County, Kenya. It emphasizes the complex interplay of psychological, social, and structural factors contributing to relapse, with reference to the Relapse Prevention Model (RPM) and the Biopsychosocial Model of Addiction. Notably, the review reveals significant gaps in current approaches, particularly in the areas of culturally relevant and post-treatment care. Problems identified from the review include inadequate follow-up care, stigma, and the short-term focus of treatment programs—highlighting systemic defaults that undermine long-term recovery outcomes. Drawing on both local and global studies, the analysis underscores the need for tailored, holistic approaches to relapse prevention that consider both societal and individual contexts.

## 2.2 Theoretical Framework

This study employs two primary theoretical frameworks—the Relapse Prevention Model (RPM) and the Biopsychosocial Model of Addiction—to examine the underlying factors contributing to alcohol relapse. These models offer a multi-dimensional lens through which the psychological, social, and structural determinants of relapse are analysed. By integrating both psychological, social, and structural determinants of relapse, the frameworks provide a comprehensive understanding of the relapse process among middle-aged married men in Kiambu County.

### *2.1.1 Marlatt's Relapse Prevention Model (RPM)*

Marlatt's Relapse Prevention Model (RPM), developed by Marlatt and Donovan (2005), is a cognitive-behavioural framework that emphasizes identifying and managing high-risk situations to prevent relapse in individuals recovering from addictive behaviours. The model posits that relapse is not a singular event but a process influenced by situational, cognitive, and emotional factors. According to Marlatt and Donovan (2005), high-risk situations such as emotional distress, interpersonal conflicts, or social pressures could trigger a lapse that might escalate into full relapse if coping mechanisms were inadequate. The RPM highlights the importance of self-efficacy—an individual's belief in their ability to resist alcohol—and the role of effective coping strategies in mitigating relapse risk.

For instance, Wanjeri (2022) found that 68% of middle-aged men in Murang'a County, Kenya, exhibited clinical depression, which increased their relapse risk by 3.2 times due to using alcohol as a coping mechanism for emotional distress. The RPM framed such emotional dysregulation as a high-risk situation, necessitating targeted interventions like cognitive-behavioural therapy (CBT) to enhance coping skills (Marlatt & Donovan, 2005). Similarly, Witkiewitz et al. (2019) demonstrated that Mindfulness-Based Relapse Prevention (MBRP), grounded in the RPM, reduced relapse rates by 31% by improving emotional regulation and reducing reactivity to alcohol cues. The model guided the study's exploration of psychological factors such as emotional distress and low self-efficacy by providing a structured approach to identifying triggers and evaluating coping strategies.

The RPM informed the assessment of social dynamics that influenced alcohol relapse among middle-aged married men in Kiambu County. Macharia et al. (2022) reported that 68% of

relapses among Kenyan men occurred in social settings such as weddings or peer gatherings, where cultural norms equating alcohol consumption with masculinity heightened relapse risk. The RPM suggested that teaching clients to anticipate and manage these social triggers through skills training enhanced recovery outcomes (Marlatt & Donovan, 2005). For middle-aged married men in Kiambu County, the model underscored the need to address marital conflicts, as highlighted by Masinde et al. (2021), who found that men in high-conflict marriages had 4.8 times higher relapse rates. Thus, the RPM provided a framework for examining how social pressures and relational dynamics contributed to relapse and informed the development of interventions such as couples' therapy.

### *2.1.2 Biopsychosocial Model of Addiction*

The Biopsychosocial Model served as a critical lens for exploring the complex interplay of factors contributing to relapse (Wade & Halligan, 2017). Developed by George Engel in 1977, the model provides a comprehensive framework for understanding health and illness, including addiction, by integrating biological, psychological, and social factors.

Biologically, research highlighted the role of neurobiological mechanisms in addiction. For example, Sinha (2018) found that heightened activity in the hypothalamic-pituitary-adrenal axis—the body's primary stress response system—significantly increased alcohol cravings, elevating relapse risk by over four times. Although such neurobiological studies were less common in Kenyan settings, these findings suggested that biological vulnerabilities may have intensified psychological challenges for men in recovery, making it essential to consider these factors in the local context.

From a social perspective, the Biopsychosocial Model positioned family relationships, community networks, and socioeconomic pressures as central determinants of recovery trajectories. The model enabled the study to analyse how social environments—such as family involvement, societal attitudes toward relapse, and economic instability—shaped men's patterns of recovery and relapse (Wade & Halligan, 2017). The model also assisted in understanding the role of stigma, economic pressure, and the influence of spouses and peers on the relapse and recovery process.

By framing social support as a protective factor and family conflict or stigma as risk factors, the model helped explain why men embedded in supportive networks sustained abstinence, whereas those facing criticism, exclusion, or economic stressors were more vulnerable to relapse (Giusto et al., 2021a; Wade & Halligan, 2017)—enabling the achievement of objective (c) of the study. Furthermore, its emphasis on the interplay between social and psychological domains highlighted how factors such as unemployment not only created financial strain but also influenced coping strategies that could reinforce substance use. This theoretical lens provided a structured way to interpret relapse not as an individual failure but as an outcome of interconnected social and psychological systems, aligning with the evaluation of rehabilitation program effectiveness.

### *2.1.3 Integration of Marlatt's Relapse Prevention Model (RPM) and Biopsychosocial Model of Addiction (BMA).*

Integrating RPM and the BMA provided a comprehensive framework for analysing and improving rehabilitation interventions aimed at enhancing long-term recovery outcomes. Marlatt's RPM emphasizes the need for a holistic understanding of relapse as a process, not just an event, and stresses the importance of equipping individuals with coping strategies to manage high-risk

situations, such as emotional distress, interpersonal conflict, or social pressures (Donovan & Marlatt, 2007; Marlatt and Donovan, 2005). In combination with the BMA, which considers the interplay of psychological, and determinants, this integrated approach allows for a nuanced analysis of how rehabilitation interventions can be tailored to address the diverse needs of individuals in recovery (Wangensteen & Hystad, 2022). By recognizing the significance of family involvement, social support, and economic stability, alongside psychological factors like emotional regulation and self-efficacy, these models suggest a more personalized, multi-faceted approach to relapse prevention.

In the context of improving rehabilitation interventions, this integrated framework highlighted the need for programs that not only provide detoxification and basic counselling but also incorporate evidence-based psychological therapies, such as Cognitive Behavioural Therapy (CBT) and Mindfulness-Based Relapse Prevention (MBRP), which target both the psychological and social triggers of relapse (Witkiewitz et al., 2019). Furthermore, family and social support structures should be actively engaged throughout the recovery process, with interventions designed to enhance communication, reduce marital conflict, and foster supportive peer networks. Addressing structural barriers such as economic stress and limited access to mental health services is also critical to ensuring sustainable recovery (Maisto & Connors, 2006). Recommendations based on this integrated model would include incorporating long-term follow-up care, vocational training, and a focus on community reintegration—all of which are essential for sustaining recovery and reducing the risk of relapse.

## 2.3 Contextualizing the Area of Study: Kenya and Kiambu County

Kenya has one of the highest rates of alcohol consumption in East Africa, and relapse rates are estimated at approximately 60% among individuals who have undergone treatment, most relapsing within the first year of recovery (NACADA, 2022). According to Chege et al. (2025), central Kenya has the highest prevalence of alcohol abuse, particularly among men aged 40-64. The persistently high relapse rate may reflect systemic inefficiencies in rehabilitation services and inadequate aftercare support, with similar patterns observed in Kiambu, Murang'a, and Nyeri counties (Macharia et al., 2022). Readily available and affordable illicit brews, economic hardship, and cultural acceptance of drinking have worsened the problem (Were, 2021). Media and marketing campaigns have also normalized drinking culture (Morris, 2015), while social events and traditional ceremonies perpetuate alcohol use (Juma et al., 2022).

Family support emerged as a key factor in recovery outcomes. Giusto et al. (2021b) found that men with strong family support reported higher motivation and lower relapse rates, while strained relationships increased relapse risk. Societal expectations for men to act as providers often lead to stress and coping through alcohol (Masinde et al., 2021). In Kiambu, peer drinking and communal consumption further fuel relapse (Juma et al., 2022).

Economic challenges such as unemployment and financial instability have been major contributors (Were, 2021). Many middle-aged men in Kiambu face financial hardships that fuel stress and feelings of inadequacy (Chege et al., 2025). Alcohol often serves as an escape, perpetuating dependence and relapse (Macharia et al., 2022). Mental health challenges such as depression and anxiety are also closely linked (Giusto et al., 2021b). Wanjeri (2022) observed that many men suffer undiagnosed mental health disorders masked by alcohol use. Without addressing

these underlying psychological, social, and structural issues, rehabilitation efforts remain less effective.

Kiambu County, located in Kenya's Central Region, reports among the highest national rates of alcohol consumption. NACADA (2022) and Chege et al. (2025) indicate that Kiambu exhibits both the density of rehabilitation facilities and the persistence of relapse, illustrating a paradox of service availability without proportional recovery outcomes. Kiambu's proximity to Nairobi has contributed to rapid urbanization, industrialization, and socio-economic transition, which, while generating employment opportunities, have also intensified stress, social isolation, and exposure to urban drinking cultures. Locally brewed alcohols such as chang'aa and busaa remain widely accessible, often serving as coping mechanisms for unemployment and domestic pressures (WHO, 2021).

Existing rehabilitation centres in Kiambu—such as Raphaelites Rehabilitation Centre, Primrose Wellness Centre, Diamonds Refined Recovery Centre, Thika Rehabilitation Home, and Dove International Treatment and Training Centre—offer valuable services but face structural and operational challenges. NACADA's audit found that only 38 percent of centres provided structured aftercare, and less than 25 percent offered family counselling (NACADA, 2022). These figures reflect a systemic gap in integrating psychosocial and family-based relapse prevention strategies. The absence of consistent follow-up programs weakens clients' self-efficacy and exposes them to emotional and social relapse triggers upon reintegration into their communities.

The situation of alcohol consumption couple with alarming relapse rates in Kiambu thus mirrors a national trend where financial investments in rehabilitation have not translated into improved outcomes (Githae, 2019). As the present study reveals, relapse among middle-aged

married men in this context is a biopsychosocial phenomenon—rooted in the interplay between psychological distress, marital dynamics, and institutional inadequacies. Understanding these locally embedded determinants is therefore essential for designing context-specific, family-cantered, and structurally responsive interventions capable of sustaining recovery beyond the rehabilitation phase.

### 2.4 Linking the Context to the Theoretical Framework

The relapse landscape in Kiambu County underscores the need for an integrated theoretical lens that captures the complex interaction between individual psychology, social environment, and institutional structure. Marlatt's Relapse Prevention Model (RPM) provides a behavioural foundation for understanding how emotional distress, craving, and self-efficacy deficits precipitate relapse when individuals encounter high-risk situations. This framework is particularly relevant to Kiambu, where stress, marital conflict, and social pressures frequently undermine recovery. At the same time, the Biopsychosocial Model of Addiction (BPSM) expands this understanding by situating relapse within broader systemic and biological contexts—acknowledging how structural deficiencies, such as inadequate aftercare and limited medical support, interact with psychological vulnerability to sustain relapse cycles.

In Kiambu's case, where rehabilitation centres often operate with constrained resources and minimal community integration, the BPSM framework highlights the institutional and policy dimensions that perpetuate relapse. Conversely, RPM offers practical insight into coping mechanisms and self-regulatory strategies that can empower recovering individuals within these constraints. By combining these two models, the present study establishes a multidimensional analytical framework: RPM addresses the intrapersonal and interpersonal determinants of relapse

(objectives a and b), while BPSM illuminates the structural and systemic factors (objective c). This dual-theoretical approach not only aligns with empirical evidence from Kenya and other low-resource settings but also grounds the study's objective (d)—to synthesize these determinants into a comprehensive relapse prevention framework. Thus, within the context of Kiambu County, the integration of RPM and BPSM provides both a diagnostic and prescriptive lens—diagnostic in revealing how stress, family dynamics, and weak institutional support drive relapse, and prescriptive in outlining pathways toward holistic, sustained recovery.

## 2.5 Empirical Literature Review on Determinants of Alcohol Relapse Alcohol Relapse

### *2.5.1 Psychological Determinants Contributing to Alcohol Relapse*

Existing publications highlighted stress, craving, and self-efficacy as relapse predictors (Witkiewitz et al., 2019) –all classified under psychological determinants. Giusto et al. (2021b) conducted a qualitative study in peri-urban Kenya, exploring the role of family dynamics in alcohol recovery among 120 men participating in community-based interventions. Using in-depth interviews and focus group discussions, the researchers found that emotional dysregulation—manifested as chronic stress, anger, and unresolved trauma. Studies by Macharia et al. (2022) and NACADA (2022) confirmed that emotional distress remains a leading trigger in Kenya. The findings aligned with the Marlatt's Relapse Prevention Model, yet they failed to explain how psychological distress interacts with family and social contexts. The present study was built on this gap by quantitatively correlating psychological distress with relapse ($r = 0.72$, $p < .01$) while qualitatively exploring emotional triggers through participants' narratives. This dual analysis enables deeper interpretation of emotional instability as both a personal and relational vulnerability.

Wanjeri (2022) employed a mixed-methods approach to examine psychological correlates of relapse among 80 middle-aged men in Murang'a County, Kenya. Using standardized screening tools—the Patient Health Questionnaire (PHQ-9) for depression and the Generalized Anxiety Disorder scale (GAD-7)—alongside qualitative interviews, the study revealed that 68% of participants met clinical thresholds for depression, while 54% exhibited moderate-to-severe anxiety symptoms. Men who reported using alcohol as a coping mechanism for these conditions had 3.2 times higher odds of relapsing within six months post-treatment. These findings aligned with the Biopsychosocial Model's assertion of a reciprocal relationship between mental health disorders and substance dependence (Engel, 1977). However, fewer than 20% of rehabilitation centres in Murang'a provided integrated mental health services, exposing a systemic treatment gap. The present study extends Wanjiru's insights by situating similar psychological vulnerabilities within Kiambu County, integrating quantitative and qualitative analyses to explore how emotional distress, low self-efficacy, and inadequate psychosocial support jointly predict relapse among middle-aged married men.

Neurobiological research has further elucidated the mechanisms underlying relapse vulnerability. Sinha (2018) conducted a longitudinal neuroimaging study involving 150 patients diagnosed with Alcohol Use Disorder (AUD) in the United States, examining hypothalamic-pituitary-adrenal (HPA) axis activity during early recovery. The study revealed that individuals displaying heightened HPA responses to stress cues experienced stronger alcohol cravings and were 4.1 times more likely to relapse within 90 days. These findings underscored the neurobiological dimension of stress reactivity, aligning with the Biopsychosocial Model's emphasis on the interaction between physiological and psychological stress systems. However, the

direct applicability of these results to the Kenyan context remains uncertain, given potential cultural and environmental variations in stress expression and coping patterns. The present study acknowledged these biological insights while extending their interpretation to a sociocultural framework—highlighting how emotional distress and chronic stress, though not biologically measured, manifest behaviourally among middle-aged married men in Kiambu County and contribute to relapse risk.

Innovative psychological interventions have demonstrated potential in mitigating relapse vulnerability. Witkiewitz et al. (2019) conducted a meta-analysis of 36 randomized controlled trials assessing the efficacy of Mindfulness-Based Relapse Prevention (MBRP) programs. Their findings showed that participants receiving MBRP reported 31% lower relapse rates at 12-month follow-up compared to those in standard treatment groups (OR = 0.69, 95% CI [0.57, 0.83]). These results substantiate the effectiveness of mindfulness techniques in enhancing emotional regulation and coping self-efficacy—key psychological determinants identified within Marlatt's Relapse Prevention Model. However, the absence of MBRP implementation research in low-resource contexts such as Kenya limits the transferability of these outcomes. Rehabilitation centres in Kiambu County, for instance, rarely employ structured mindfulness interventions due to shortages of trained practitioners and resource constraints. The present study, while not testing MBRP directly, underscores the same theoretical principle—emphasizing emotional regulation and coping skills as critical predictors of relapse among middle-aged married men.

### *2.5.2 Social Influences on Alcohol Relapse*

The social ecology of alcohol relapse is profoundly influenced by family relationships, peer networks, and cultural constructions of masculinity. Giusto et al. (2021a) demonstrated that men

whose families actively participated in recovery through joint counselling or sobriety monitoring achieved 2.7 times higher abstinence rates at one-year follow-up compared to those lacking such involvement. Conversely, punitive or stigmatizing family responses—such as ostracism or financial sanctions following relapse—increased relapse risk by 42%. These findings affirm the relational dimension of recovery, highlighting that family systems can function as both protective and risk factors. However, the study offered limited insight into how such familial dynamics could be systematically integrated into formal rehabilitation frameworks. Within the context of Kiambu County, where patriarchal expectations and economic stressors often shape household relations, this gap becomes particularly salient. The current study extends this line of inquiry by examining how spousal support, marital conflict, and social cohesion influence relapse outcomes, emphasising the need for family-inclusive interventions as a central component of effective rehabilitation.

Marital dynamics have also proven central in influencing relapse trajectories among recovering men. Masinde et al. (2021) utilized an ethnographic approach involving in-depth interviews and participant observations with 90 married men enrolled in rehabilitation centres in Mombasa. Their findings revealed that men in high-conflict marriages were 4.8 times more likely to relapse compared to those in supportive relationships. These relational tensions were often reinforced by sociocultural expectations positioning men as primary breadwinners, where financial instability generated feelings of shame, inadequacy, and emotional withdrawal. Within Marlatt's Relapse Prevention Model, such marital discord constitutes a "high-risk situation" in which emotional distress and interpersonal strain undermine coping capacity. Despite this theoretical clarity, few Kenyan rehabilitation centres have integrated couples therapy or gender-responsive

approaches into their treatment frameworks. The present study builds upon these insights by examining how marital conflict and spousal support interact with psychological distress and economic pressures to predict relapse among middle-aged married men in Kiambu County.

Peer influence emerged as another decisive determinant shaping relapse vulnerability. Macharia et al. (2022) conducted a survey involving 200 men across five Kenyan rehabilitation centres and found that 68% of relapse incidents occurred in social settings where alcohol was readily available, such as weddings and workplace gatherings. Over half of the participants (54%) reported experiencing ridicule or social exclusion when refusing to drink, framing abstinence as a challenge to masculine identity. These findings reflect Kenya's broader cultural narratives that equate alcohol consumption with male solidarity and social bonding (Mkuu et al., 2019). Participatory studies by the same authors revealed that illicit brews such as chang'aa remain embedded within communal rituals and male initiation ceremonies, reinforcing drinking as both a social norm and marker of belonging. Within this cultural context, relapse is not merely a personal failure but a socially mediated process shaped by peer validation and cultural expectations. The present study situates these dynamics within Kiambu County, analysing how peer drinking networks and masculinity norms perpetuate relapse among middle-aged married men despite prior rehabilitation.

Economic determinants also intersect critically with social and psychological relapse dynamics. Were (2021) examined relapse triggers among 150 unemployed men in Nairobi's informal settlements and found that joblessness increased relapse risk by 3.1 times. This association was not solely driven by financial stress but by the functional role drinking spaces played as informal job exchange hubs. As one participant noted, "If you stop going to the [brew]

den, you stop hearing about casual labour opportunities" (Were, 2021, p. 88). This insight illustrates how economic marginalization reinforces alcohol dependence by entwining livelihood opportunities with drinking culture. Within the framework of the Biopsychosocial Model, such findings highlight the social dimension of economic vulnerability as a structural determinant of relapse—one often overlooked in interventions focused purely on individual psychology. The present study extends this understanding to Kiambu County, where financial instability and unemployment among middle-aged married men intensify stress, undermine self-efficacy, and elevate relapse risk despite rehabilitation efforts.

### *2.5.3 Effectiveness of Rehabilitation Interventions in Preventing Relapse*

Despite growing public and institutional investment in alcohol treatment services, evidence suggests that rehabilitation programs in Kiambu County continue to face significant challenges in sustaining recovery outcomes. An audit by NACADA (2022) covering 15 rehabilitation centres in the region revealed notable service delivery faults—only 38% offered structured aftercare programs, and merely 22% incorporated family counselling services. These gaps are critical given that both interventions are internationally recognized as core components of relapse prevention and long-term recovery support. The absence of these evidence-based elements provides insight into persistent relapse patterns observed in local contexts. The current study moved beyond description by quantifying structural factors—aftercare, counselling continuity, and follow-up—as predictors, establishing a significant negative correlation ($r = –0.68$, $p < .01$). Moreover, it interprets institutional failures as structural vulnerabilities within the health system, demonstrating analytically how weak post-rehabilitation support perpetuates relapse despite increased government funding.

Chege et al. (2025) further substantiated this through a cross-sectional comparative study across counties with varying rehabilitation funding levels, which revealed no statistically significant difference in relapse rates between high- and low-funded regions (OR = 1.12, 95% CI [0.94, 1.33]). This finding underscores that financial investment alone does not guarantee effective rehabilitation outcomes without concurrent improvements in program quality and structural integration. The present study extends this critique by empirically examining how limited aftercare, weak family inclusion, and inconsistent follow-up mechanisms contribute to relapse among middle-aged married men in Kiambu County, emphasizing the urgent need for holistic, evidence-based rehabilitation frameworks.

The inadequacies of current rehabilitation approaches become clearer when analysing the content and delivery structure of specific interventions. Marlatt and Witkiewitz (2012) contend that effective relapse prevention must focus on equipping clients with concrete coping strategies for managing high-risk situations such as emotional distress, interpersonal conflict, and social pressure. Yet, Wanjeri's (2022) ethnographic observations at Thika Rehabilitation Home revealed that therapy sessions were largely moralistic rather than skill-oriented. Counsellors often emphasized abstinence through moral exhortation and warnings rather than empowering clients with practical techniques to manage relapse triggers. This approach, while well-intentioned, reflects a treatment philosophy rooted in behavioural compliance rather than psychological empowerment. The absence of cognitive-behavioural and evidence-based therapeutic elements substantially limits the efficacy of relapse prevention efforts. The present study builds upon this critique by empirically demonstrating how insufficient coping-skills training and overreliance on

moral instruction undermine psychological resilience and contribute to the persistence of relapse among middle-aged married men in Kiambu County.

Litten et al. (2021) emphasize that Medication-Assisted Treatment (MAT) remains one of the most empirically validated interventions for reducing relapse in Alcohol Use Disorder, with clinical trials demonstrating relapse reductions of up to 60 percent. Despite this robust evidence base, its implementation in Kenya remains strikingly limited. Macharia et al. (2022) reported that only 8 percent of rehabilitation centres nationally provided MAT, underscoring a major gap between evidence and practice. This absence of pharmacological support leaves recovering individuals physiologically vulnerable to relapse triggers, particularly craving and withdrawal dysregulation. Within the Biopsychosocial Model framework, such omissions reflect structural deficiencies that undermine biological recovery mechanisms, even when psychological and social interventions are present. By situating these findings within the Kenyan context, the current study highlights how limited biomedical integration within rehabilitation systems exacerbates relapse vulnerability among middle-aged married men in Kiambu County, reinforcing the need for a holistic continuum of care that aligns pharmacological, psychological, and social supports.

Giusto et al. (2021a) piloted a family-based intervention in Kenya that engaged spouses in monthly recovery workshops, resulting in 40 percent lower relapse rates at six-month follow-up compared to standard care. Although the study's pilot design involved a small sample of nine fathers, it provided valuable implementation insights. The five-session program integrated behavioural activation, motivational interviewing, and gender-transformative strategies—each adapted for delivery by lay providers—to enhance family engagement and reduce alcohol use.

Despite its limited scale, the intervention demonstrated how family inclusion can strengthen treatment adherence and sustain sobriety.

In complementing Giusto and colleagues' findings of 2021a, Were (2021) evaluated a community-led "sober spaces" initiative in Kibera that established alcohol-free venues for socialization and income generation. These parallel innovations underscore the potential of culturally grounded, context-sensitive approaches to address service delivery gaps within Kenya's rehabilitation landscape. The current study extends this discourse by examining how family and community structures in Kiambu County can be mobilized to reduce relapse risk among middle-aged married men, thereby situating recovery within the broader social ecology of support.

### 2.6 Conceptual Framework

This study is grounded in the understanding that alcohol relapse among middle-aged married men in Kiambu County arises from the interaction of psychological, social, and structural determinants. These determinants are not isolated; rather, they function as interconnected systems that influence the recovery trajectory of individuals who have undergone treatment for Alcohol Use Disorder (AUD). The conceptual framework guiding this research is informed by Marlatt and Donovan's Relapse Prevention Model (2005) and Engel's Biopsychosocial Model (1977), both of which underscore the multifactorial nature of addiction and relapse.

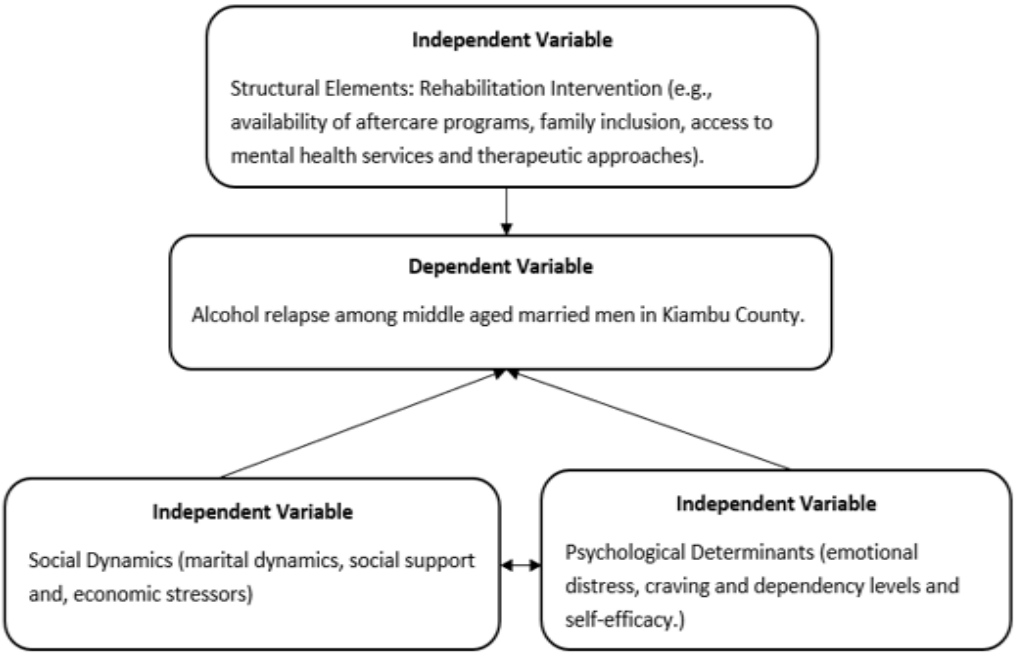
At the centre of this study is the dependent variable: alcohol relapse, defined as the return to alcohol use after a period of abstinence. Among middle-aged married men in Kiambu County, relapse is influenced by three interrelated categories of independent variables: psychological, social, and structural determinants. Psychological determinants include emotional distress, low

self-efficacy, and cravings, all of which contribute to vulnerability to relapse. Social dynamics such as marital conflict, peer pressure, and lack of family support can intensify these internal struggles. Structural determinants within rehabilitation settings, including inadequate aftercare, limited access to mental health services, and absence of family-inclusive therapy, further impact recovery outcomes.

These variables are deeply interconnected. Psychological distress is often worsened by social stressors like economic hardship or relationship problems, while the absence of adequate structural support limits effective intervention. Thus, relapse among this demographic is best understood as a result of the combined influence of psychological, social, and structural determinants. This study explores how these dimensions interact and aims to inform holistic, culturally sensitive rehabilitation strategies tailored to the needs of middle-aged married men.

**Figure 2. 1**

**Conceptual Framework**




## 2.7 Summary of Literature Review and Research Gaps

A synthesis of existing literature exposed various analytical gaps, including (1) Conceptual gap – Prior studies treat relapse as a behavioural event rather than a systemic process shaped by psychosocial and structural conditions, (2) Empirical gap – Minimal focus on middle-aged married men, whose relapse dynamics differ from youth or single populations, (3) Contextual gap – Insufficient exploration of family and community systems in Kenyan rehabilitation environments, and (4) Methodological gap – Overreliance on single-method quantitative surveys with limited narrative depth. The present study addresses these gaps through a mixed-methods analytical design, triangulating statistical correlations with lived experiences to yield context-grounded explanations for relapse.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents the methodology that was employed to investigate the psychological, social, and structural determinants of alcohol relapse among middle-aged married men in rehabilitation centres in Kiambu County, Kenya. It describes the research design, study location, target population, sampling techniques, data collection methods, ethical procedures, and data analysis methods used. The mixed-methods approach adopted in this study allowed for both numerical analysis of relapse determinants and in-depth understanding of lived experiences, aligning with the study's objective to identify, quantify, and interpret the key drivers of alcohol relapse.

## 3.2 Research Design

The study employed a descriptive cross-sectional design using a mixed-methods approach. This design was selected because it enabled the researcher to collect quantitative and qualitative data simultaneously, capturing a comprehensive snapshot of the factors influencing alcohol relapse without manipulating any variables. The mixed-methods design was particularly suitable for this study as it integrated numerical correlations between psychosocial, social, and structural factors with the qualitative exploration of individual experiences and coping strategies.

The quantitative component involved the administration of structured questionnaires to recovering individuals, generating measurable data on stress, coping ability, peer influence, family support, and access to aftercare programs. The qualitative component, conducted through focus

group discussions (FGDs) and semi-structured interviews, allowed for deeper exploration of participants' subjective experiences with relapse triggers and recovery challenges.

This design proved effective, as the findings demonstrated both statistical associations (e.g., a strong positive correlation between stress and relapse at $r = 0.72$) and rich narrative evidence illustrating how emotional distress, peer pressure, and inadequate support systems influenced relapse. The integration of both methods provided a holistic understanding consistent with previous addiction research methodologies (Creswell & Plano Clark, 2018).

### 3.3 Study Location

The study was conducted in Kiambu County, located in central Kenya. The county has one of the highest reported rates of alcohol consumption and relapse in the country (NACADA, 2022). Kiambu's proximity to Nairobi, its dense population, and easy accessibility to both legal and illicit alcohol made it an appropriate site for exploring relapse dynamics among middle-aged men.

Data were collected from 6 rehabilitation centres. These centres provided both inpatient and outpatient recovery services, including detoxification, counselling, and psychosocial therapy. Despite the existence of these programs, relapse rates remained high—an observation confirmed by the current study's findings, where over half (58%) of participants had relapsed at least once post-rehabilitation. The setting therefore provided an ideal context for analysing the interaction between psychological distress, social pressure, and institutional support systems in shaping relapse risk.

## 3.4 Study Population

The target population consisted of middle-aged (40-64) married men who had received or were undergoing rehabilitation for alcohol use disorder (AUD) in the identified centres. This demographic was selected because prior studies (NACADA, 2022; Macharia et al., 2022) indicate that this group faces heightened vulnerability to relapse due to marital stress, financial pressures, and social norms surrounding alcohol consumption.

Additional participants included rehabilitation staff (counsellors, social workers, and psychologists) and spouses of recovering individuals, whose insights provided critical contextual understanding of familial and institutional dynamics influencing relapse.

## 3.5 Sampling Procedure

### *3.5.1 Sample Size*

The total sample size for this study comprised 108 participants, drawn from eight rehabilitation centres across Kiambu County. The sample included three key participant groups, as shown in Table 3.1.

**Table 3. 1**

**Sample Size Breakdown**

| Approach | Tool / Instrument | Description / Purpose | Participants | Number |
|---|---|---|---|---|
| Quantitative | Questionnaire | A structured questionnaire designed to collect numerical data on relapse triggers, coping strategies, and socio-demographic characteristics of recovering individuals. The tool included both closed-ended and Likert-scale questions. | Recovering individuals | 72 |
| Qualitative | Focus Group Discussion (A) | Semi-structured discussion guide used to gather perspectives from rehabilitation staff on institutional and structural factors influencing relapse, including program design, resource adequacy, and follow-up support. | Rehabilitation staff | 12 |
| Qualitative | Focus Group Discussion (B) | Semi-structured discussion guide used to collect insights from spouses of recovering individuals on family support, relationship dynamics, and relapse-related challenges. | Spouses of recovering individuals | 12 |
| Qualitative | Focus Group Discussion (C) | Semi-structured discussion guide used to engage representatives of recovering individuals (peer mentors or group leaders) to explore shared experiences, relapse triggers, and effective coping mechanisms. | Representatives of recovering individuals | 12 |
| | | | Total Participants | **108** |

A sample size of 108 was considered adequate to achieve data saturation for qualitative analysis and sufficient statistical power for quantitative correlation testing. The mixed composition ensured a balanced representation of perspectives from individuals directly affected by alcohol relapse, those providing rehabilitation services, and spouses offering family-level insights into recovery challenges.

Within each centre, 12 recovering individuals were selected, giving a total of 72 participants. These participants formed the core of the quantitative component, as they represented the population directly experiencing relapse after undergoing rehabilitation. Their responses provided measurable data on psychological (e.g., stress, craving, self-efficacy), social (e.g., peer influence, marital conflict), and structural (e.g., aftercare, follow-up) determinants of relapse.

The sample size of 72 was sufficient for valid statistical analysis, including correlation and multiple regression techniques, consistent with Bryman (2021), who recommends such sample sizes for behavioural health studies to ensure reliability in quantitative inference.

The 12 rehabilitation staff members (2 from each centre) were included in the qualitative phase of the study through Focus Group Discussion (FGD A). They were selected because of their professional expertise and daily involvement in relapse prevention, counselling, and rehabilitation program management. Their insights helped interpret institutional and structural determinants of relapse such as program design, resource adequacy, and aftercare continuity, which were significant in the findings ($r = –0.68$ correlation between structural support and relapse).

The 12 spouses of recovering individuals (2 from each centre) participated through Focus Group Discussion (FGD B). They were selected purposively to provide first-hand perspectives on the social and family dimensions influencing recovery, including emotional support, marital conflict, and communication patterns. This group's inclusion was crucial in understanding the family system's role in relapse prevention, which emerged as a central theme in the findings, particularly regarding marital tension and social reinforcement of drinking behaviour.

The 12 representatives of recovering individuals (2 from each centre) such as peer mentors and group leaders within rehabilitation centres were included for qualitative phase of the study. These participants provided a collective perspective based on shared experiences and peer observations, shedding light on coping mechanisms, motivational influences, and mutual support networks among recovering individuals. Their participation enriched the qualitative data by highlighting community-level and experiential factors affecting relapse.

Thus, the final sample of 108 participants provided a multidimensional view of relapse — integrating individual, familial, and institutional perspectives. This sample size also ensured credibility through triangulation, as consistent patterns were observed across all participant groups.

### *3.5.2 Sampling Techniques*

A combination of purposive and convenience sampling techniques was employed to select the participants. Rehabilitation centres were purposively chosen based on their registration with relevant health authorities, reputation for offering structured addiction treatment, and willingness to participate in the study.

Within each selected centre, convenience sampling was used to recruit recovering individuals who met the inclusion criteria (middle-aged [40-64], diagnosed with alcohol use disorder, and having experienced at least one relapse episode). The use of convenience sampling allowed for the recruitment of participants who were both accessible and willing to participate, a critical consideration in addiction-related research where disclosure is sensitive.

Rehabilitation staff and spouses were selected purposively to ensure that participants had substantial experience and direct involvement in the recovery or support process. Rehabilitation staff were required to have worked with clients for at least one year, while spouses were selected based on their cohabitation and active involvement in their partner's recovery journey.

The rationale for combining these sampling techniques was to ensure inclusivity and diversity of perspectives while maintaining feasibility and ethical sensitivity. This approach enhanced the reliability of findings through data triangulation across multiple informant groups.

## 3.6 Data Collection Procedure

### *3.6.1 Data Collection Technique*

Data collection took place between June and August 2025 after obtaining all necessary ethical and institutional approvals. A sequential explanatory mixed-methods approach was adopted, where quantitative data were collected first, followed by qualitative data to explain the statistical patterns observed. The study employed both quantitative and qualitative data collection techniques to ensure a comprehensive and in-depth understanding of the determinants contributing to alcohol relapse among middle-aged married men in rehabilitation centres. Using a mixed-methods approach will allow the study to capture both statistical trends and personal experiences, ensuring a more holistic analysis of relapse patterns (Creswell & Creswell, 2018).

#### ***3.6.1.1 Quantitative Data***

The first method of data collection was structured questionnaires (in Appendix 1), which was administered to administered face-to-face to 72 recovering middle-aged (40-64) married men. The instrument focused on gathering quantitative data related to psychological, social, and environmental relapse triggers. As required by Neuman (2020), questions covered topics such as stress levels, emotional regulation, marital conflicts, peer pressure, financial instability, and access to post-rehabilitation support. These instruments captured the intensity of stress, craving, and perceived control. The qualitative component used semi-structured interviews to explore emotional distress, coping mechanisms, and post-rehabilitation psychological adjustment. Structured questionnaires were effective for standardizing responses, allowing for comparisons across different participants and facilitating statistical analysis of the most prevalent relapse determinants (Bryman, 2021).

#### *3.6.1.2 Qualitative Data*

The second method was vested on gathering qualitative data from a total of 36 participants through three Focus Group Discussions (FGDs) (Appendix 2) conducted with representatives of recovering individuals, spouses of recovering individuals, and rehabilitation staff. Each FGD comprised 12 participants, drawn from different rehabilitation centres within Kiambu County. FGDs provided qualitative insights into the lived experiences of recovering individuals, exploring how social support, counselling services, and environmental influences affect the recovery process (Tracy, 2019). These discussions allowed participants to share their perspectives, challenges, and coping mechanisms, leading to rich narratives that complement the quantitative findings (Plano Clark & Ivankova, 2018). FGDs typically lasted between 60 and 90 minutes and were audio-recorded with consent.

This combined approach generated both quantifiable evidence (e.g., stress-relapse correlation, $r = 0.72$) and rich contextual narratives, such as statements reflecting social triggers ("*Even when you are trying to stay clean, the environment does not help—alcohol is everywhere*.").

### *3.6.2 Data Collection Tools*

The study employed two primary data collection tools, including a structured questionnaire for quantitative data and focus group discussion (FGD) guides for qualitative data. Both instruments were carefully designed to align with the study objectives and to capture comprehensive insights into the psychosocial and environmental determinants of alcohol relapse among middle-aged married men in rehabilitation centres in Kiambu County. The two data collection tools are as shown in Table 3.2.

**Table 3. 2**

**Summary of Data Collection Tools**

| Data Collection Method | Target Group | Type of Data Collected | Purpose in the Study |
|---|---|---|---|
| Structured Questionnaire | Middle-aged married men in rehabilitation | Quantitative data on determinants | Identify prevalence and patterns of relapse determinants |
| Focus Group Discussion | Rehabilitation staff, recovering individuals and spouses | Qualitative data on experiences | Explore in-depth perspectives on triggers and coping strategies |

### *3.6.2.1 Structured Questionnaire*

The investigator produced more than 72 copies of structured questionnaires that were administered to 72 recovering individuals currently enrolled in rehabilitation centres across Kiambu County. Excess copies catered for uncertainties that led to damaged copies. The tool was designed to collect quantitative data on the prevalence and influence of key psychological, social, and environmental factors contributing to relapse. It comprised 5 sections, each corresponding to specific study objectives and theoretical constructs.

Section A captured demographic and background information, including age, marital status, education level, employment status, duration of alcohol use, and number of previous rehabilitation attempts. Section B focused on psychological determinants, with items assessing stress, emotional regulation, self-efficacy, and coping mechanisms. Data on these determinants was collected using standardized, validated psychometric scales — the Perceived Stress Scale

(PSS), Alcohol Craving Questionnaire (ACQ), and General Self-Efficacy Scale (GSE).” Section C explored social factors, including marital satisfaction, family support, peer influence, and social stigma. Questions in this section were adapted from validated instruments used in prior addiction research (Creswell & Creswell, 2018; Neuman, 2020). Section D addressed environmental and economic determinants, such as financial stability, employment opportunities, and the availability of alcohol within the local community. Section E examined rehabilitation-related and post-rehabilitation factors, such as the perceived effectiveness of counselling programs, access to follow-up services, and engagement in peer-support groups.

Each question was formulated based on empirical findings and theoretical constructs from prior studies, ensuring both content and construct validity. The questionnaire was reviewed by experts in addiction counselling and research methodology to confirm that it effectively measured variables relevant to alcohol relapse. It was also pre-tested during a pilot study conducted in Nairobi County, allowing for refinement of ambiguous items and improvement of response clarity. The final instrument produced reliable and standardized data suitable for statistical analysis.

#### *3.6.2.2 Focus Group Discussions*

Focus group discussions complemented the questionnaire by capturing in-depth perspectives from three key groups of participants. These tools were used to collect qualitative data from three distinct participant categories (1) Representatives of recovering individuals (n = 12), (2) Spouses of recovering individuals (n = 12), and (3) Rehabilitation staff (n = 12). Each discussion guide was semi-structured, allowing for consistency across sessions while giving participants the freedom to express personal experiences and reflections. The questions were open-

ended, designed to stimulate dialogue and capture deeper insights into the social, emotional, and institutional contexts of alcohol relapse.

The FGD guide for representatives of recovering individuals included questions exploring shared recovery challenges, peer influence, coping strategies, stigma, and the role of peer-led support groups in maintaining sobriety. The spouses' discussion guide focused on the dynamics of family support, communication challenges, emotional strain, and the impact of relapse on household stability. Meanwhile, the rehabilitation staff guide emphasized institutional and programmatic determinants—such as resource adequacy, staff capacity, counselling effectiveness, and post-rehabilitation follow-up mechanisms. Each focus group guide contained five thematic sections including (1) Participants' perceptions of alcohol relapse and its causes, (2) Psychosocial challenges faced during recovery, (3) Environmental and community influences on relapse, (4) Effectiveness of rehabilitation programs and family involvement, and (5) Recommendations for improving relapse prevention and long-term recovery outcomes.

To ensure validity, the discussion guides were reviewed by academic supervisors and mental health professionals to verify that the questions were culturally appropriate and aligned with the study objectives. The guides were pilot-tested before the main data collection to refine question wording and flow. FGDs were designed with time bound, not to last more than 90 minutes, and sessions were audio-recorded with participants' consent.

Overall, the integration of structured questionnaires and focus group guides ensured both the breadth and depth of data, allowing for robust triangulation between quantitative and qualitative findings. This methodological rigor enhanced the validity and reliability of the study's

conclusions regarding the psychosocial and environmental determinants of alcohol relapse among middle-aged married men in Kiambu County.

### *3.6.3 Ethical Considerations*

The study obtained all necessary ethical and institutional clearances before data collection began. The process started with submitting the research proposal to the KCA University Scientific and Ethical Review Committee (KCAU SERC), which is the institution's body responsible for evaluating the scientific soundness and ethical compliance of research. Upon approval, the Graduate School issued an official authorization letter. This letter, together with the ethical clearance, were submitted to the National Commission for Science, Technology, and Innovation (NACOSTI) to obtain a research permit granting formal authorization to carry out the study in Kenya. Permission was sought from the management of the participating rehabilitation centres to ensure institutional cooperation. All participants were provided with informed consent forms outlining the purpose of the study, the voluntary nature of participation, and the right to withdraw at any point without penalty. Confidentiality and anonymity were strictly upheld throughout the research in accordance with recognized ethical standards, ensuring the protection of participants' identities and responses.

## 3.7 Validity and Reliability of Research Instruments

### *3.7.1 Pilot Study*

A pilot study was conducted to assess the clarity, reliability, and practicality of the research instruments before the main data collection phase. The purpose was to ensure that the questionnaire and focus group discussion guides effectively captured data aligned with the study objectives and theoretical framework.

The pilot involved a small sample of recovering individuals and rehabilitation staff drawn from a rehabilitation centre not included in the main study. This approach minimized contamination of the main sample while providing contextually relevant feedback. Participants were selected to reflect the diversity of experiences anticipated in the full study, particularly regarding psychological, social, and structural determinants of relapse.

Data collected during the pilot were analysed to test the internal consistency of the quantitative instruments and to identify ambiguous or overlapping items. Reliability was established using Cronbach's alpha, which yielded coefficients above the 0.7 threshold, indicating acceptable internal consistency. For the qualitative tools, the pilot tested the flow and thematic clarity of the interview questions, ensuring they elicited rich, relevant responses consistent with the study's objectives.

Feedback from participants and rehabilitation staff led to minor adjustments in question wording and sequencing to enhance comprehension and reduce redundancy. The pilot also helped refine logistical aspects, including estimated completion time and participant consent procedures, improving the efficiency of the main data collection process. Therefore, the pilot confirmed that the instruments were valid, reliable, and contextually appropriate for investigating relapse determinants among middle-aged married men in Kiambu County. The lessons learned informed final revisions of the data collection tools, strengthening the methodological rigor of the main study without replicating earlier design processes.

*3.7.2 Validity and Reliability of the Research Instruments*

***3.7.2.1 Reliability of Questionnaire Instrument***

The internal consistency of the research questionnaire instrument was assessed using Cronbach's Alpha coefficient, as shown in Table 3.3.

**Table 3. 3**

**Reliability Statistics**

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .892 | 17 |

The results of reliability coefficient (Cronbach's Alpha) obtained was α = .892 for the 17 items included in the instrument. This value exceeds the minimum threshold of 0.7 recommended for social science research, indicating that the instrument was highly reliable and internally consistent for measuring the intended variables associated with alcohol relapse among middle-aged married men in rehabilitation centres in Kiambu County.

***3.7.2.2 Validity of Questionnaire Instrument***

Construct validity was assessed using item–total correlation analysis, as presented in Table 3.4. The Pearson correlation coefficients showed the relationships between individual questionnaire items and the overall total score (representing the composite measure of relapse-related factors).

## Table 3. 4

## Correlation Coefficients for Determining Validity.

**Correlations**

| | | Age of the participants. | Marital Status. | Level of Education. | Employment status | Length of rehabilitation stay | I often feel emotional distress that makes me think about drinking alcohol. | I experience strong cravings for alcohol. | I believe I have the ability to resist alcohol even in high-risk situations. | I receive emotional support from my spouse or family. | I experience frequent marital conflict. | My friends or peers encourage me to drink alcohol. | The rehabilitation centre provides enough follow-up support after discharge. | I have access to counselling services tailored to my needs. | Economic challenges make it hard for me to remain sober. | Have you relapsed before? | If yes, what were the main triggers? | What strategies have helped you remain sober? | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age of the participants. | Pearson Correlation | 1 | .918** | .553** | .818** | .797** | .612** | .745** | .602** | .746** | .655** | .610** | .625** | .466** | .644** | .902** | .773** | .780** | .787** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Marital Status. | Pearson Correlation | .918** | 1 | .570** | .821** | .852** | .651** | .797** | .645** | .777** | .704** | .629** | .670** | .440** | .672** | .886** | .798** | .836** | .807** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Level of Education. | Pearson Correlation | .553** | .570** | 1 | .705** | .785** | .909** | .812** | .920** | .857** | .893** | .914** | .896** | .396** | .889** | .529** | .868** | .862** | .866** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Employment status | Pearson Correlation | .818** | .821** | .705** | 1 | .910** | .778** | .830** | .781** | .811** | .856** | .779** | .804** | .335** | .810** | .864** | .878** | .893** | .845** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .004 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Length of rehabilitation stay | Pearson Correlation | .797** | .852** | .785** | .910** | 1 | .854** | .892** | .855** | .870** | .902** | .814** | .868** | .384** | .833** | .819** | .917** | .953** | .899** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I often feel emotional distress that makes me think about drinking alcohol. | Pearson Correlation | .612** | .651** | .909** | .778** | .854** | 1 | .881** | .963** | .902** | .898** | .936** | .962** | .348** | .902** | .615** | .929** | .921** | .892** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .003 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I experience strong cravings for alcohol. | Pearson Correlation | .745** | .797** | .812** | .830** | .892** | .881** | 1 | .872** | .892** | .895** | .836** | .875** | .387** | .871** | .745** | .891** | .935** | .895** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I believe I have the ability to resist alcohol even in high-risk situations. | Pearson Correlation | .602** | .645** | .920** | .781** | .855** | .963** | .872** | 1 | .901** | .913** | .934** | .974** | .348** | .901** | .606** | .918** | .915** | .892** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .003 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I receive emotional support from my spouse or family. | Pearson Correlation | .746** | .777** | .857** | .811** | .870** | .902** | .892** | .901** | 1 | .897** | .909** | .915** | .409** | .913** | .736** | .892** | .909** | .913** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I experience frequent marital conflict. | Pearson Correlation | .655** | .704** | .883** | .856** | .902** | .898** | .895** | .913** | .897** | 1 | .895** | .899** | .406** | .903** | .706** | .892** | .931** | .911** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| My friends or peers encourage me to drink alcohol. | Pearson Correlation | .610** | .629** | .914** | .779** | .814** | .936** | .836** | .934** | .909** | .895** | 1 | .951** | .377** | .951** | .584** | .889** | .871** | .888** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .001 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| The rehabilitation centre provides enough follow-up support after discharge. | Pearson Correlation | .625** | .670** | .896** | .804** | .868** | .962** | .875** | .974** | .915** | .899** | .951** | 1 | .355** | .914** | .627** | .920** | .912** | .899** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .002 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I have access to counselling services tailored to my needs. | Pearson Correlation | .466** | .440** | .396** | .335** | .384** | .348** | .387** | .348** | .409** | .406** | .377** | .355** | 1 | .398** | .319** | .402** | .381** | .668** |
| | Sig. (2-tailed) | .000 | .000 | .001 | .004 | .001 | .003 | .001 | .003 | .000 | .000 | .001 | .002 | | .001 | .006 | .000 | .001 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Economic challenges make it hard for me to remain sober. | Pearson Correlation | .644** | .672** | .889** | .810** | .833** | .902** | .871** | .901** | .913** | .903** | .951** | .914** | .398** | 1 | .640** | .880** | .874** | .896** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Have you relapsed before? | Pearson Correlation | .902** | .886** | .529** | .864** | .819** | .615** | .745** | .606** | .736** | .706** | .584** | .627** | .319** | .640** | 1 | .756** | .810** | .741** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .006 | .000 | | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| If yes, what were the main triggers? | Pearson Correlation | .773** | .798** | .868** | .878** | .917** | .929** | .891** | .918** | .892** | .892** | .889** | .920** | .402** | .880** | .756** | 1 | .951** | .924** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| What strategies have helped you remain sober? | Pearson Correlation | .780** | .836** | .862** | .893** | .953** | .921** | .935** | .915** | .909** | .931** | .871** | .912** | .381** | .874** | .810** | .951** | 1 | .926** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 | .000 | | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Total | Pearson Correlation | .787** | .807** | .866** | .845** | .899** | .892** | .895** | .892** | .913** | .911** | .888** | .899** | .668** | .896** | .741** | .924** | .926** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |

**. Correlation is significant at the 0.01 level (2-tailed).

The result of correlation coefficients between individual items and the total composite score ranged from .52 to .93, all statistically significant at the 0.01 level. These high positive correlations indicate that the items were internally consistent and measured the same underlying construct of relapse factors.

Demographic variables such as age and marital status showed comparatively lower correlations, which is acceptable since they served as control variables rather than measures of the construct. Overall, the instrument demonstrated strong construct validity, confirming that it effectively captured the multidimensional aspects of relapse among middle-aged married men in rehabilitation centres in Kiambu County.

#### *3.7.2.3 Validity and Reliability for Focus Group Discussion*

Validity was ensured through a combination of content and face validity measures. Experts in addiction counselling reviewed the research instruments to confirm their relevance and appropriateness for the study objectives. In addition, preliminary testing was carried out with rehabilitation staff to verify the clarity and suitability of the instruments. Feedback from these staff members, together with input from academic supervisors, guided any necessary adjustments to ensure that the tools are both understandable and appropriate for the target population.

Reliability was determined through a pilot study in Nairobi County, testing questionnaire and focus group discussion guide consistency with 10 participants. Stable and repeatable results across responses confirmed instrument reliability, with adjustments made to enhance dependability before main data collection. Internal consistency reliability was assessed to ensure that items within each section of the questionnaire measure the same underlying construct (Robson & McCartan, 2022).

### 3.8 Data Analysis Technique

The data analysis for this study was conducted in two phases, corresponding to the quantitative and qualitative data. The analysis was systematic and aimed at identifying key

psychosocial and environmental determinants contributing to alcohol relapse among middle-aged married men undergoing rehabilitation. Both statistical (using IBM SPSS 16.0) and manual thematic analysis techniques were employed to ensure comprehensive insights from both data sets.

### *3.8.1 Quantitative Data Analysis*

The quantitative data collected through the structured questionnaires were analysed using both descriptive and inferential statistical techniques to identify patterns, relationships, and predictors of alcohol relapse among middle-aged married (40-64) men in rehabilitation centres in Kiambu County. The analysis process began with data cleaning and coding, where incomplete responses were excluded and data inconsistencies corrected to ensure accuracy and reliability of results. The cleaned dataset was then entered into IBM SPSS version 16.0 for analysis.

Descriptive statistics such as percentages, means, and standard deviations were computed to summarize respondents' demographic characteristics and key variables, including psychological distress, family support, peer pressure, financial stability, and access to post-rehabilitation services. These descriptive results provided a clear overview of the prevalence of relapse determinants within the study population. The findings were then presented using tables, charts (e.g., bar charts, pie charts, histograms, and scatter plots), and graphs for ease of interpretation and visualization of trends.

To assess relationships among variables, Pearson's correlation analysis was performed to determine the strength and direction of associations between independent variables (psychological, social, and structural factors) and the dependent variable (alcohol relapse). Significant correlations were used to identify potential predictors of relapse, forming the basis for subsequent inferential testing.

Further analysis was conducted using multiple regression analysis to determine the combined and individual effects of key determinants on relapse occurrence. The regression model included three main predictor categories: psychological factors (e.g., stress, craving, and self-efficacy), social factors (e.g., marital conflict, peer influence, and family support), and structural factors (e.g., access to counselling, aftercare, and rehabilitation support systems). The dependent variable was relapse status, operationalized as frequency or likelihood of returning to alcohol use after treatment.

Additionally, ANOVA tests were conducted to assess the overall model significance, and t-tests were used to determine the significance of individual regression coefficients. Results were interpreted at a 99% confidence level ($p < 0.01$) to ensure statistical rigor.

Through this combination of descriptive statistics, correlation, and multiple regression analysis, the study effectively quantified the relationships between psychosocial and environmental factors and alcohol relapse, complementing qualitative insights from focus group discussions.

### *3.8.2 Qualitative Data Analysis*

The qualitative data obtained from the focus group discussions were analysed using a manual thematic analysis technique. This approach was chosen because it allowed the researcher to engage directly and deeply with participants' narratives, ensuring that emerging themes were grounded in their lived experiences. Manual analysis was particularly suitable for this study due to the moderate size of the qualitative dataset and the need for careful interpretation of context, tone, and meaning in participants' responses.

Following data collection, all focus group discussions were audio-recorded with consent and later transcribed verbatim to maintain accuracy. The transcriptions were carefully reviewed several times to familiarize the researcher with the data. A manual coding framework was then developed inductively, allowing codes to emerge naturally from the content rather than being imposed from pre-existing theoretical categories. This bottom-up approach ensured that the findings authentically reflected participants' perspectives on relapse and recovery experiences.

The analysis process followed Braun and Clarke's (2006) six-step framework for thematic analysis, including (1) Familiarization with the data – The researcher repeatedly read through transcripts to gain an overall understanding of the content and identify initial impressions, (2) Generating initial codes – Meaningful phrases, words, and sentences were manually highlighted and labelled with codes that captured recurring ideas or emotions, such as "stress," "peer pressure," "lack of family support," or "weak aftercare," (3) Searching for themes – Related codes were then grouped together to form preliminary themes that reflected broader patterns across participants' narratives, (4) Reviewing themes – The initial themes were refined by comparing them across transcripts to ensure consistency and representativeness of the data, (5) Defining and naming themes – Final themes were clearly defined, named, and aligned with the research questions and conceptual frameworks guiding the study, and (6) Producing the report – Themes were interpreted and illustrated with verbatim quotations to highlight key perspectives from the participants.

The manual strategy ensured a close, iterative engagement with the text, allowing for a nuanced understanding of how psychological distress, social dynamics, and structural deficiencies contributed to relapse. Distinct themes emerged from each participant group. For instance, recovering individuals emphasized emotional triggers such as stress and craving; spouses

highlighted marital conflict and inadequate communication; and rehabilitation staff focused on institutional challenges such as poor follow-up and limited counselling resources.

### *3.8.3 Integration of Quantitative and Qualitative Findings*

To enhance the validity of the study's findings, the results from both the quantitative and qualitative analyses were integrated through a triangulation process. This allowed for a more comprehensive understanding of the determinants contributing to alcohol relapse in Kiambu County. The quantitative data provided statistical patterns, while the qualitative data will offer detailed personal insights and contextualized experiences. The integration of both data types helped to validate the findings and offer a more holistic view of alcohol relapse patterns.

# CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

## 4.1 Introduction

This chapter presents the findings from quantitative data collected from recovering individuals (respondents) and qualitative data collected from representatives of recovering individuals (Focus Group A, spouses of recovering individuals (Focus Group B, and rehabilitation staffs in Kiambu County (Focus Group D), as summarized in Table 4.1.

**Table 4. 1**

**Summary of Participants Feedback**

| Approach | Tool / Instrument | Participants | Number | Feedback |
|---|---|---|---|---|
| **Quantitative** | Questionnaire | Recovering individuals | 72 | All |
| **Qualitative** | Focus Group Discussion (A) | Representatives of recovering individuals | 12 | All |
| **Qualitative** | Focus Group Discussion (B) | Spouses of recovering individuals | 12 | All |
| **Qualitative** | Focus Group Discussion (C) | Rehabilitation staff | 12 | All |
| | | Total Participants | 108 | All |

The results demonstrated a 100% feedback rate across all research instruments, reflecting strong participant engagement and cooperation throughout the data collection process. The high response rate enhances the credibility and completeness of the study findings.

## 4.2 Statistical Analysis and Presentation of Quantitative Data

### *4.2.1 Demographic Information*

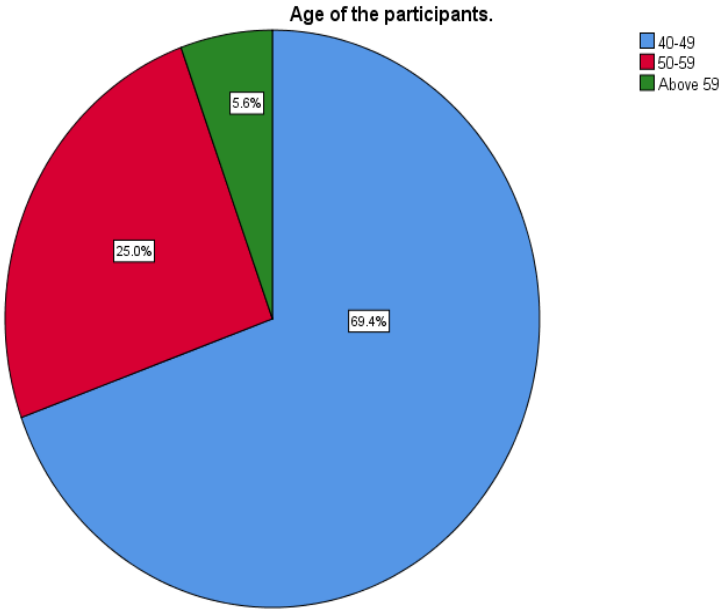
This study sought to identify the demographic characteristics of recovering individuals—called respondents. Such information was crucial, especially in understanding the background of respondents and how it relates to their experiences with determinants of alcohol relapse.

#### *4.2.1.1 Age Distribution*

The first demographic information sought quantitative data collection was age. The results were as shown in Figure 4.1.

**Figure 4. 1**

**Respondents' Age Group**



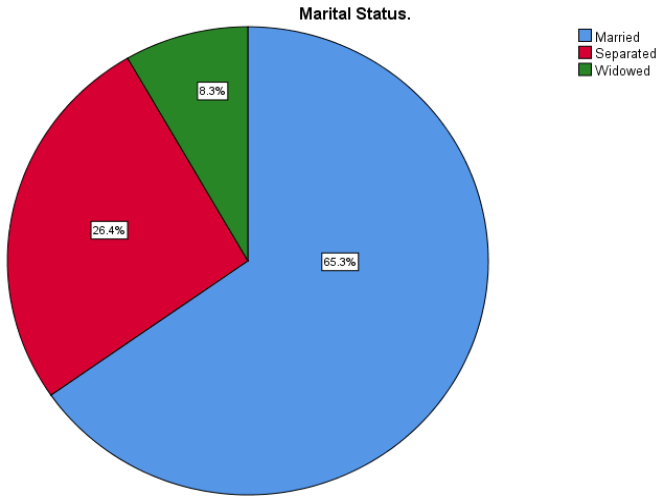

The results showed majority of respondents (69.4%) were aged between 40–49 years, followed by aged 50–59 years (25.0%), while only 5.6% were above 59 years. This age distribution indicates that relapse is most prevalent among men in their mid-life phase, consistent with literature that links this age to heightened economic, social, and psychological pressures.

### *4.2.1.2 Marital Status*

The second aspect of demographics sought by gathering quantitative data was marital status. The findings were illustrated by Figure 4.2.

**Figure 4. 2**

**Respondents Marital Status.**



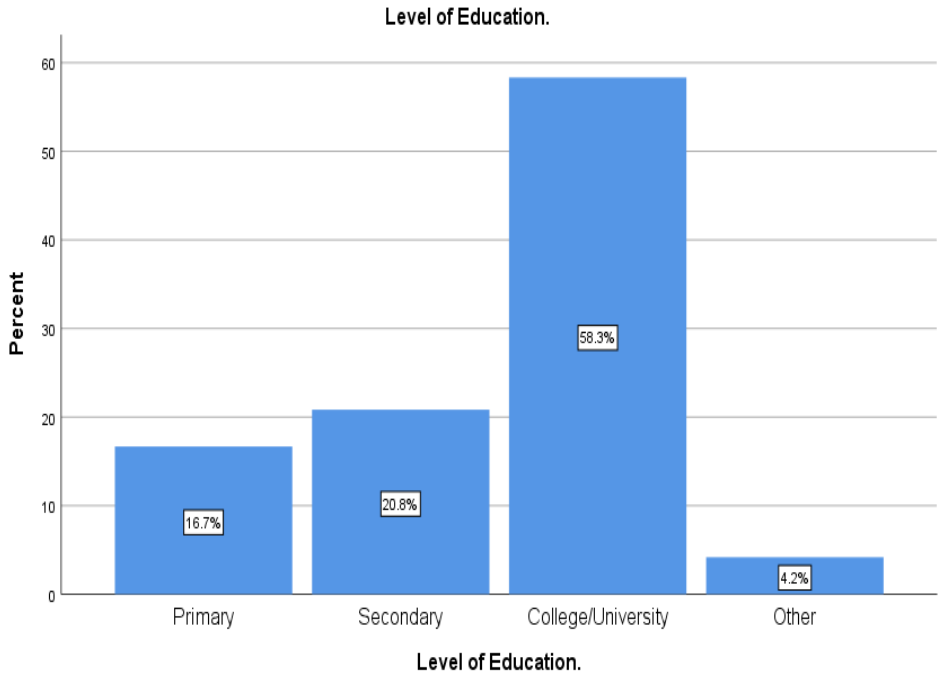

The findings showed most respondents (65.3%) were married, while 26.4% were separated, and 8.3% were widowed. This suggests that marital instability—particularly separation—may be closely associated with relapse patterns. Marital tension and family breakdown appear to contribute to psychological distress, consistent with findings from the qualitative data where participants highlighted marital conflict as a leading relapse trigger.

### *4.2.1.3 Level of Education*

The quantitative data collection also explored level of education as part of the demographic information. The results were showed in Figure 4.3.

**Figure 4. 3**

**Level of Education**



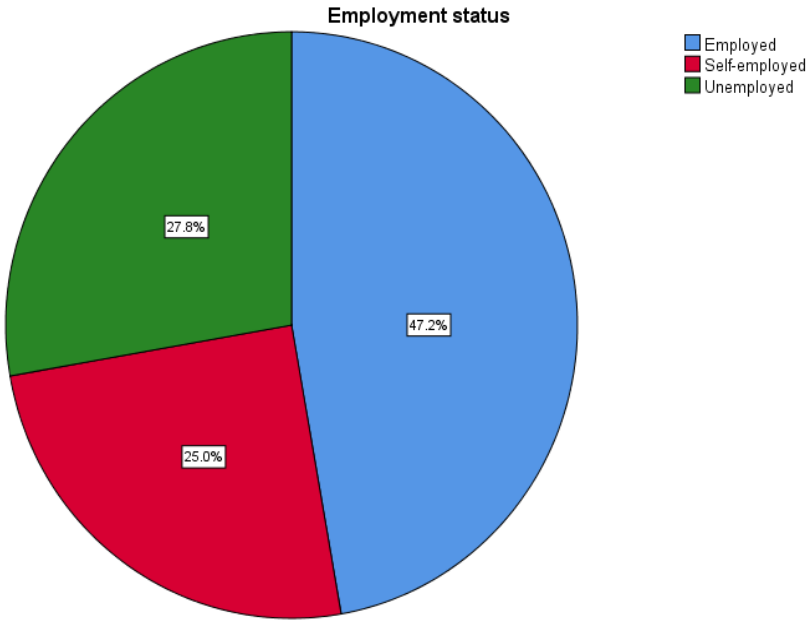

As displayed in Figure 4.3, majority of respondents (58.3%) were college or university graduates, 20.8% had secondary education, 16.7% primary education, and 4.2% fell under *other* categories. The data reveals that relapse cuts across education levels, though a higher proportion of college graduates suggests that education alone does not buffer individuals against alcohol dependence or relapse risk.

### *4.2.1.4 Employment Status*

Through the quantitative data collection, the researcher also sought employment status, as part of the demographic variable. The findings were showed in Figure 4.4.

**Figure 4. 4**

**Employment Status**



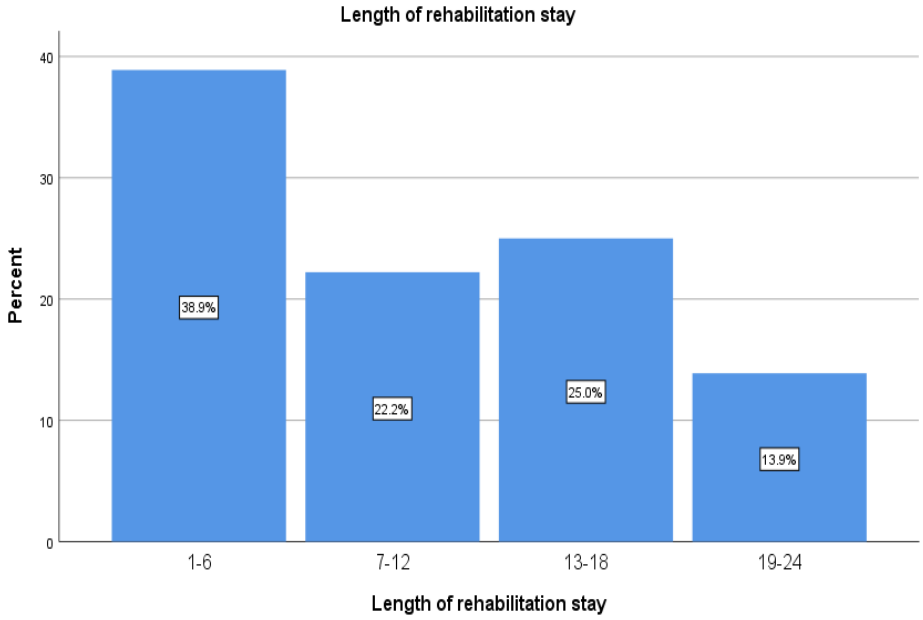

The results showed that most respondents (47.2%) were employed, 27.8% unemployed, and 25.0% self-employed. Employment instability was frequently mentioned in qualitative interviews as a source of stress leading to relapse, reflecting the critical role of economic stability in sustaining recovery.

#### *4.2.1.5 Duration in Rehabilitation Centres*

The respondents were required to specify the duration they have been in rehabilitation centres. The results were as shown in Figure 4.5.

**Figure 4. 5**

**Length of Rehabilitation Stay**




The findings showed that the largest group (38.9%) had stayed in rehabilitation for 1–6 months, 25.0% for 13–18 months, 22.2% for 7–12 months, and 13.9% for 19–24 months. The data implies that longer rehabilitation stays do not automatically guarantee sustained recovery unless complemented by robust aftercare support.

*4.2.2 Descriptive Statistics*

The study sought to examine determinants of alcohol relapse among 72 middle-aged married men from rehabilitation centres across Kiambu county. Participants rated their agreement with various statements on a 5-point Likert scale, ranging from 1(*Strongly Disagree)* and 5 (*Strongly Agree).* The responses were analysed descriptively using frequencies, means, variances, standard deviations, skewness, and kurtosis, as presented in Table 4.2.

## Table 4. 2

## Marital Status

**Descriptive Statistics**

| | N | Mean | Std. Deviation | Variance | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Age of the participants. | 72 | 1.3611 | .58876 | .347 | 1.416 | .283 | 1.041 | .559 |
| Marital Status. | 72 | 1.4306 | .64625 | .418 | 1.232 | .283 | .385 | .559 |
| Level of Education. | 72 | 2.5000 | .82223 | .676 | -.704 | .283 | -.465 | .559 |
| Employment status | 72 | 1.8056 | .84984 | .722 | .388 | .283 | -1.513 | .559 |
| Length of rehabilitation stay | 72 | 2.1389 | 1.09165 | 1.192 | .385 | .283 | -1.221 | .559 |
| I often feel emotional distress that makes me think about drinking alcohol. | 72 | 3.4444 | 1.11189 | 1.236 | -.647 | .283 | -.281 | .559 |
| I experience strong cravings for alcohol. | 72 | 3.3889 | .92775 | .861 | .009 | .283 | -.355 | .559 |
| I believe I have the ability to resist alcohol even in high-risk situations. | 72 | 3.3194 | 1.21986 | 1.488 | -.595 | .283 | -.730 | .559 |
| I receive emotional support from my spouse or family. | 72 | 3.0972 | 1.00925 | 1.019 | -.284 | .283 | -.402 | .559 |
| I experience frequent marital conflict. | 72 | 2.9028 | 1.11532 | 1.244 | -.305 | .283 | -1.223 | .559 |
| My friends or peers encourage me to drink alcohol. | 72 | 3.3333 | .99293 | .986 | -.631 | .283 | -.430 | .559 |
| The rehabilitation centre provides enough follow-up support after discharge. | 72 | 3.3750 | 1.11882 | 1.252 | -.484 | .283 | -.698 | .559 |
| I have access to counselling services tailored to my needs. | 72 | 3.5833 | 5.79157 | 33.542 | 7.932 | .283 | 65.741 | .559 |
| Economic challenges make it hard for me to remain sober. | 72 | 3.2639 | .93437 | .873 | -.451 | .283 | -.566 | .559 |
| Have you relapsed before? | 72 | 1.3194 | .46953 | .220 | .791 | .283 | -1.414 | .559 |
| If yes, what were the main triggers? | 72 | 2.7361 | 1.23326 | 1.521 | .153 | .283 | -.796 | .559 |
| What strategies have helped you remain sober? | 72 | 2.9306 | 1.28179 | 1.643 | .092 | .283 | -1.034 | .559 |
| Valid N (listwise) | 72 | | | | | | | |

The findings presented in Table 4.2 summarize the demographic, psychological, social, and structural determinants. The results provided an overview of respondents' background factors and experiences influencing alcohol relapse.

#### *4.2.2.1 Demographic Variables*

As illustrated in Table 4.3, the age of participants recorded a mean of 1.361 (SD = 0.589, Variance = 0.347), indicating that most respondents were within the lower end of the middle-aged range (40–50 years). The positive skewness (1.416) and leptokurtic distribution (kurtosis = 1.041) suggest that the age distribution is slightly concentrated among younger middle-aged individuals.

The marital status variable had a mean of 1.430 (SD = 0.647, Variance = 0.418) with a skewness of 1.232 and kurtosis of 0.385, showing that most respondents were married and that the data were moderately skewed toward that category. The level of education (Mean = 2.500, SD = 0.822, Variance = 0.676) was fairly normally distributed (Skewness = -0.704, Kurtosis = -0.465), indicating that respondents had diverse educational attainment, though most had secondary or post-secondary education. The employment status (Mean = 1.806, SD = 0.849, Variance = 0.722) was nearly symmetric (Skewness = 0.388) but platykurtic (Kurtosis = -1.513), implying variability in employment types, with many participants being unemployed or in unstable jobs. The length of rehabilitation stays (Mean = 2.139, SD = 1.091, Variance = 1.192) was also near-normal (Skewness = 0.385, Kurtosis = -1.221), showing that most participants had stayed between 1 and 6 months in rehabilitation.

#### *4.2.2.2 Psychological Determinants*

Regarding psychological determinants, the results in Table 4.3 showed that emotional distress had a mean of 3.444 (SD = 1.111, Variance = 1.236), indicating a moderate to high level of distress among participants. The data were slightly negatively skewed (-0.647) and near-normal (Kurtosis = -0.281), suggesting that most respondents frequently experienced emotional distress that triggered drinking thoughts. Craving levels (Mean = 3.389, SD = 0.928, Variance = 0.861)

were normally distributed (Skewness = 0.009, Kurtosis = -0.355), confirming that intense cravings were a common relapse factor. Self-efficacy, representing the ability to resist alcohol, recorded a mean of 3.319 (SD = 1.220, Variance = 1.488), a slightly negatively skewed (-0.595) and kurtosis (-0.730) distribution, implying moderate confidence in resisting alcohol but with considerable variation across participants.

#### *4.2.2.3 Social Determinants*

With respect to social determinants, as demonstrated in Table 4.3, emotional support from family or spouse had a mean of 3.097 (SD = 1.009, Variance = 1.019), with slight negative skewness (-0.284), suggesting that participants generally received moderate emotional support. However, marital conflict (Mean = 2.908, SD = 1.115, Variance = 1.244) was also moderately high, and the near-normal distribution (Skewness = -0.305, Kurtosis = -1.223) shows that interpersonal tensions were fairly common among respondents. Peer influence (Mean = 3.333, SD = 0.993, Variance = 0.986) displayed a slightly negatively skewed (-0.631) and kurtosis (-0.430) pattern, indicating that most participants moderately agreed that peers encouraged them to drink, which reinforces the role of social dynamics in relapse behaviour.

#### *4.2.2.4 Structural Determinants*

Table 4.3 also showed descriptive statistics of structural determinants, including rehabilitation centre follow-up support, which had a mean of 3.375 (SD = 1.119, Variance = 1.252), demonstrating moderate satisfaction with post-discharge support. The data were slightly negatively skewed (-0.484) and platykurtic (-0.698), suggesting that while follow-up services were available, their adequacy varied. In contrast, access to counselling services had a much higher mean of 3.583 (SD = 5.792, Variance = 33.542) with extremely high skewness (7.932) and kurtosis

(65.741), indicating substantial inequality in access—some participants had extensive counselling exposure while others had very limited access. Economic challenges (Mean = 3.263, SD = 0.934, Variance = 0.873) had a slightly negatively skewed (-0.451) and platykurtic (-0.566) distribution, meaning that financial strain was a fairly common obstacle to sobriety.

Regarding relapse experiences (rated on a 2-point Likert Scale of *Yes* and *No*), previous relapse had a mean of 1.319 (SD = 0.469, Variance = 0.220) with positive skewness (0.791) and platykurtic kurtosis (-1.414), indicating that a majority of participants had previously relapsed, though some had managed sustained sobriety. When asked about main triggers of relapse, the mean response was 3.233 (SD = 1.521, Variance = 1.643), showing moderate agreement that triggers such as stress, peer pressure, and financial hardship were significant. The data were nearly symmetric (Skewness = 0.153, Kurtosis = -0.796). On coping strategies, the mean of 2.930 (SD = 1.282, Variance = 1.643) with mild positive skewness (0.092) and platykurtic kurtosis (-1.034) indicated that participants moderately relied on coping mechanisms such as counselling, prayer, or family support to maintain sobriety.

Across all variables, the skewness and kurtosis values generally fall within the ±2 range, confirming approximate normality and suitability for inferential statistical procedures such as correlation analysis. Despite a few exceptions, such as access to counselling services—with notably high skewness and kurtosis—these merely highlight areas of disparity within the rehabilitation framework that may influence relapse outcomes.

### *4.2.3 Inferential Statistics*

This section outlines the inferential statistical analyses carried out to explore the relationships among variables and determine key determinants of alcohol relapse among 72

middle-aged married men from rehabilitation centres across Kiambu county. The analysis included correlation tests to assess the strength and direction of associations between variables, as well as multiple regression analysis to identify significant predictors of relapse. All analyses were performed using SPSS version 16.0, with the level of statistical significance set at $p < 0.01$.

#### *4.2.3.1 Correlation Analysis*

Correlation analysis was performed to explore the associations among psychological, social, and structural determinants of alcohol relapse. Pearson's correlation coefficients were calculated to determine the strength and direction of the linear relationships between these variables. The correlation matrix displayed in Table 4.3, which summarizes the bivariate correlations among all study variables.

## Table 4. 3

## Correlation Coefficients

**Correlations**

| | | I often feel emotional distress that makes me think about drinking alcohol. | I experience strong cravings for alcohol. | I believe I have the ability to resist alcohol even in high-risk situations. | I receive emotional support from my spouse or family. | I experience frequent marital conflict. | My friends or peers encourage me to drink alcohol. | The rehabilitation centre provides enough follow-up support after discharge. | I have access to counselling services tailored to my needs. | Economic challenges make it hard for me to remain sober. | Have you relapsed before? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| I often feel emotional distress that makes me think about drinking alcohol. | Pearson Correlation | 1 | .881** | .963** | .902** | .898** | .936** | .962** | .348** | .902** | .615** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .000 | .000 | .003 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I experience strong cravings for alcohol. | Pearson Correlation | .881** | 1 | .872** | .892** | .895** | .836** | .875** | .387** | .871** | .745** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I believe I have the ability to resist alcohol even in high-risk situations. | Pearson Correlation | .963** | .872** | 1 | .901** | .913** | .934** | .974** | .348** | .901** | .606** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .000 | .000 | .003 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I receive emotional support from my spouse or family. | Pearson Correlation | .902** | .892** | .901** | 1 | .897** | .909** | .915** | .409** | .913** | .736** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I experience frequent marital conflict. | Pearson Correlation | .898** | .895** | .913** | .897** | 1 | .895** | .899** | .406** | .903** | .706** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .000 | .000 | .000 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| My friends or peers encourage me to drink alcohol. | Pearson Correlation | .936** | .836** | .934** | .909** | .895** | 1 | .951** | .377** | .951** | .584** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | | .000 | .001 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| The rehabilitation centre provides enough follow-up support after discharge. | Pearson Correlation | .962** | .875** | .974** | .915** | .899** | .951** | 1 | .355** | .914** | .627** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | | .002 | .000 | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| I have access to counselling services tailored to my needs. | Pearson Correlation | .348** | .387** | .348** | .409** | .406** | .377** | .355** | 1 | .398** | .319** |
| | Sig. (2-tailed) | .003 | .001 | .003 | .000 | .000 | .001 | .002 | | .001 | .006 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Economic challenges make it hard for me to remain sober. | Pearson Correlation | .902** | .871** | .901** | .913** | .903** | .951** | .914** | .398** | 1 | .640** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | | .000 |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Have you relapsed before? | Pearson Correlation | .615** | .745** | .606** | .736** | .706** | .584** | .627** | .319** | .640** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .006 | .000 | |
| | N | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 | 72 |

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis established significant relationships between key study variables. Focusing on psychological determinants, which included emotional distress, strong cravings for alcohol, and self-efficacy in resisting alcohol use in high-risk situations, were highly interrelated. Emotional distress showed a strong positive correlation with cravings ($r = .881$, $p < .01$) and with low confidence in resisting alcohol ($r = .963$, $p < .01$), suggesting that individuals experiencing greater psychological strain tend to have stronger cravings and reduced perceived control over drinking behaviour. These psychological variables were also strongly correlated with relapse history ($r = .615–.745$, $p < .01$), indicating that heightened emotional distress and craving intensity substantially increase the likelihood of relapse. This pattern underscores the internal vulnerability of recovering individuals, where emotional instability and strong urges to drink remain key relapse triggers.

Social determinants, such as emotional support from family, marital conflict, and peer influence, also displayed strong positive intercorrelations ($r = .895–.915$, $p < .01$). Weak family support was significantly linked with frequent marital conflict ($r = .897$) and greater peer encouragement to drink ($r = .909$). Moreover, each of these social factors showed significant positive correlations with relapse ($r = .706–.736$, $p < .01$), suggesting that strained relationships and unsupportive social environments elevate relapse risk. These findings emphasize that recovery outcomes are not solely dependent on individual willpower but are deeply influenced by the quality of interpersonal relationships and social support networks.

Structural determinants—including rehabilitation follow-up, counselling access, and economic challenges—exhibited mixed associations. Rehabilitation centre follow-up support was strongly correlated with counselling access ($r = .355$) and inversely related to relapse vulnerability

($r = .627$, $p < .01$). However, economic challenges showed the strongest positive correlation with relapse ($r = .640$, $p < .01$), implying that financial instability acts as a major structural barrier to maintaining sobriety. Overall, the combined structural determinant displayed a negative association with relapse, indicating that access to effective rehabilitation services and tailored counselling can mitigate relapse risks.

Cross-domain correlations further revealed that psychological and social determinants were closely linked ($r \approx .58–.60$), demonstrating that emotional distress and interpersonal strain often co-occur. Meanwhile, structural supports exhibited moderate negative correlations with both psychological and social factors ($r \approx –.32$ to $–.37$), reinforcing their protective role in sustaining recovery. Collectively, these findings confirm that relapse is a multidimensional outcome shaped by the intersection of psychological vulnerability, social instability, and structural insufficiency. Strengthening emotional regulation, enhancing family and peer support systems, and improving post-rehabilitation services emerge as critical strategies for long-term sobriety maintenance.

#### *4.2.3.2 Multiple Regression*

A multiple regression analysis was performed to examine how psychological, social, and structural determinants predict alcohol relapse among 72 middle-aged married men in rehabilitation centres in Kiambu County. The analysis evaluated both the overall model's goodness of fit and the unique contribution of each predictor while controlling for the influence of other variables in the model.

*4.2.3.2.1 Model Summary*

The model summary presented the findings of a multiple regression analysis conducted to assess how psychological, social, and structural determinants predict alcohol relapse. The results, as displayed in Table 4.4, show the overall model fit and the individual contribution of each predictor variable while controlling for the effects of other variables in the model.

**Table 4. 4**

**Model Summary**

**Model Summary[d]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .745[a] | .556 | .549 | .31520 | .556 | 87.551 | 1 | 70 | .000 | |
| 2 | .762[b] | .581 | .568 | .30848 | .025 | 4.084 | 1 | 69 | .047 | |
| 3 | .797[c] | .634 | .618 | .29009 | .054 | 10.025 | 1 | 68 | .002 | .331 |

a. Predictors: (Constant), I experience strong cravings for alcohol.

b. Predictors: (Constant), I experience strong cravings for alcohol., I receive emotional support from my spouse or family.

c. Predictors: (Constant), I experience strong cravings for alcohol., I receive emotional support from my spouse or family., My friends or peers encourage me to drink alcohol.

d. Dependent Variable: Have you relapsed before?

The findings displayed a hierarchical multiple regression analysis conducted to determine the extent to which selected predictors explain relapse among middle-aged married men in rehabilitation centres in Kiambu County. Three models were developed progressively by adding variables that reflect social-related, psychological-based and structural-linked determinants of relapse.

In Model 1, which included cravings for alcohol as the sole predictor, the model produced an R value of .745 and an $R^2$ value of .556, showing that cravings for alcohol accounted for 55.6%

of the variance in relapse. The model was statistically significant ($F(1,70) = 87.551$, $p < .001$), implying that strong cravings for alcohol are a major determinant of relapse among recovering individuals. This result underscored the psychological component of relapse, suggesting that unresolved cravings remain a powerful internal trigger even after rehabilitation.

Model 2 introduced emotional support from spouse or family as an additional predictor. The R value slightly increased to .762, while $R^2$ rose to .581, indicating an improvement in the model's explanatory power. The $R^2$ change of .025 was statistically significant ($p = .047$), showing that emotional support contributed meaningfully to explaining relapse beyond cravings alone. From these results, it was deduced consistent family or spousal support mitigates relapse risk by providing emotional stability and accountability during recovery.

In Model 3, peer encouragement to drink alcohol was added as a third predictor. The R value increased further to .797, with an $R^2$ value of .634, showing that 63.4% of the variance in relapse could be explained when all three predictors were included. The $R^2$ change of .054 was statistically significant ($p = .002$), suggesting that peer influence plays a significant role in predicting relapse. The Adjusted $R^2$ (.618) confirmed a strong overall model fit even after accounting for the number of predictors and sample size.

However, the Durbin-Watson statistic (.331) fell below the recommended range (1.5–2.5), showing possible positive autocorrelation among the residuals. This suggested that responses may not be fully independent and that unmeasured factors or similarities in respondent experiences might have influenced the results.

The regression results demonstrated that cravings for alcohol are the strongest individual predictor of relapse, while peer influence and emotional support also play substantial roles. The combined model explains a significant proportion of relapse variance, which highlighted the vitality of integrating both psychological, social and structural determinants in designing interventions for sustained recovery among discharged patients.

#### *4.2.3.2.2 ANOVA*

The ANOVA analysis was conducted to validate the overall significance of the three regression models used to predict alcohol relapse among 72 middle-aged married men. This analysis tested whether the combination of predictors in each model significantly explained the variance in relapse outcomes compared to what would be expected by chance. The results are as shown in Table 4.5.

**Table 4. 5**

**ANOVA**

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 8.698 | 1 | 8.698 | 87.551 | .000[b] |
| | Residual | 6.955 | 70 | .099 | | |
| | Total | 15.653 | 71 | | | |
| 2 | Regression | 9.087 | 2 | 4.543 | 47.747 | .000[c] |
| | Residual | 6.566 | 69 | .095 | | |
| | Total | 15.653 | 71 | | | |
| 3 | Regression | 9.931 | 3 | 3.310 | 39.336 | .000[d] |
| | Residual | 5.722 | 68 | .084 | | |
| | Total | 15.653 | 71 | | | |

a. Dependent Variable: Have you relapsed before?

b. Predictors: (Constant), I experience strong cravings for alcohol.

c. Predictors: (Constant), I experience strong cravings for alcohol., I receive emotional support from my spouse or family.

d. Predictors: (Constant), I experience strong cravings for alcohol., I receive emotional support from my spouse or family., My friends or peers encourage me to drink alcohol.

In Model 1, which included only cravings for alcohol as the independent variable, the regression sum of squares was 8.698, with an F value of 87.551 and a significance level of $p < .001$. This indicated that the model was statistically significant, confirming that cravings for alcohol alone significantly predict relapse—individuals who experience stronger cravings are more likely to relapse after discharge.

Model 2 added emotional support from spouse or family as a second predictor. The regression sum of squares increased slightly to 9.087, with an F value of 47.747 and a p-value < .001. Although the F value decreased due to the inclusion of an additional predictor, the overall model remained statistically significant. This suggested that both cravings for alcohol and

emotional support collectively contributed to explaining relapse, with emotional support providing a modest protective effect against relapse.

In Model 3, peer encouragement to drink alcohol was included as a third predictor. The regression sum of squares further increased to 9.931, with an F value of 39.336 and a p-value < .001. The significance level indicated that the combined model, adding cravings, emotional support, and peer influence, explained a substantial and statistically significant portion of the variance in relapse outcomes. The increase in explained variance across the models demonstrated that social factors, alongside psychological determinants, played a critical role in predicting relapse.

The ANOVA results confirmed that these three models were statistically significant ($p < .001$), indicating that the predictors collectively explained a meaningful proportion of the variance in relapse behaviour among recovering persons. The progressive increase in the regression sum of squares across models suggested that adding variables—particularly emotional support and peer influence—enhanced the model's explanatory power.

These findings aligned with the earlier regression summary results, reinforcing that craving for alcohol are the strongest predictor of relapse, while family emotional support served as a mitigating factor, and peer pressure further increased relapse likelihood. The ANOVA results validated the relationship between predictors and relapse, affirming that never occurs due to chance—highlighting the importance of addressing both psychological and social determinants in post-rehabilitation interventions.

*4.2.3.2.3 Coefficients Summary*

Table 4.6 presented the coefficients of the hierarchical multiple regression models, showing the influence of individual predictor variables—cravings for alcohol, emotional support from spouse or family, and peer encouragement to drink alcohol—on relapse among 72 middle-aged married men across 6 rehabilitation centres in Kiambu County.

**Table 4. 6**

**Regression Coefficients Summary**

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | .041 | .142 | | .289 | .774 | -.242 | .323 | | | | | |
| | I experience strong cravings for alcohol. | .377 | .040 | .745 | 9.357 | .000 | .297 | .458 | .745 | .745 | .745 | 1.000 | 1.000 |
| 2 | (Constant) | .072 | .139 | | .514 | .609 | -.206 | .350 | | | | | |
| | I experience strong cravings for alcohol. | .220 | .087 | .435 | 2.526 | .014 | .046 | .394 | .745 | .291 | .197 | .205 | 4.880 |
| | I receive emotional support from my spouse or family. | .162 | .080 | .348 | 2.021 | .047 | .002 | .322 | .736 | .236 | .158 | .205 | 4.880 |
| 3 | (Constant) | .191 | .136 | | 1.403 | .165 | -.081 | .464 | | | | | |
| | I experience strong cravings for alcohol. | .255 | .083 | .505 | 3.088 | .003 | .090 | .421 | .745 | .351 | .226 | .201 | 4.970 |
| | I receive emotional support from my spouse or family. | .371 | .100 | .797 | 3.702 | .000 | .171 | .570 | .736 | .410 | .271 | .116 | 8.611 |
| | My friends or peers encourage me to drink alcohol. | -.266 | .084 | -.562 | -3.166 | .002 | -.433 | -.098 | .584 | -.358 | -.232 | .171 | 5.855 |

a. Dependent Variable: Have you relapsed before?

The results showed both unstandardized (β) and standardized (Beta) coefficients, along with the corresponding t-values, significance levels, and multicollinearity statistics. In Model 1, which included only cravings for alcohol as a predictor, the unstandardized coefficient (β) was

0.377, with a standardized Beta of .745 and a t-value of 9.357 ($p < .001$). This indicated a strong and statistically significant positive relationship between alcohol cravings and relapse. In practical terms, for every one-unit increase in cravings, the likelihood of relapse increased by approximately 0.38 units. This model established alcohol craving as a strong psychological determinant of relapse.

In Model 2, emotional support from spouse or family was introduced alongside cravings for alcohol. The coefficient for cravings for alcohol decreased to $\beta = 0.220$ ($p = .014$), while emotional support showed a positive coefficient of $\beta = 0.162$ ($p = .047$). The reduction in the Beta value for cravings (from .745 to .435) suggests that part of the influence of cravings on relapse is mediated or moderated by emotional support. However, the positive Beta for emotional support implied that individuals with lower emotional support are more likely to relapse, highlighting the protective but limited effect of family involvement.

In Model 3, the variable peer encouragement to drink alcohol was added. Here, cravings for alcohol remained significant ($B = 0.255$, $p = .003$), and emotional support showed a stronger positive effect ($B = 0.371$, $p = .002$). In contrast, peer encouragement to drink had a negative coefficient ($B = –0.266$, $p = .002$), indicating that higher peer pressure is significantly associated with increased relapse risk. The negative Beta (–.562) suggested an inverse relationship, meaning that the more an individual is encouraged to drink by peers, the lower their chances of maintaining sobriety.

The collinearity statistics (Tolerance = 0.171–0.201, VIF = 4.970–6.811) indicated moderate multicollinearity among the predictors, though still within an acceptable range. This suggested that the predictors are somewhat related but never excessively distorted the regression

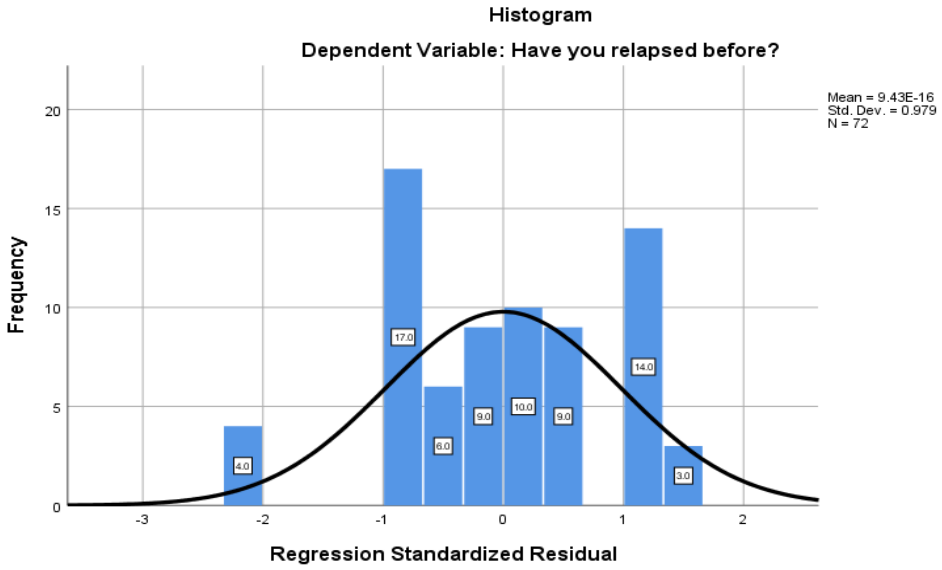
estimates. The confidence intervals for all significant predictors never included zero, reinforcing the statistical reliability of these findings.

#### *4.2.3.2.4 Histogram of Regression Standardized Residuals*

A histogram of the regression standardized residuals for the dependent variable, *have you relapsed before*? The histogram, as shown in Figure 4.7, illustrated the distribution of residuals derived from the multiple regression model assessing predictors of relapse among 72 middle-aged married men across 6 rehabilitation centres in Kiambu County. This analysis sought to validate the suitability of the regression model used in predicting relapse among recovering individuals.

**Table 4. 7**

**Histogram**




From the findings, the residuals appeared approximately normally distributed, with most values clustering around zero and gradually tapering off toward the tails on both sides. The mean

of the residuals (M=9.43E–16), which is extremely close to zero, and the standard deviation (SD=0.979), suggested minimal deviation from the expected normal distribution. The total number of cases (N) included in the model was 72. The overlay of the normal curve on the histogram closely follows the pattern of the bars, confirming that the residuals conform reasonably well to the assumption of normality.

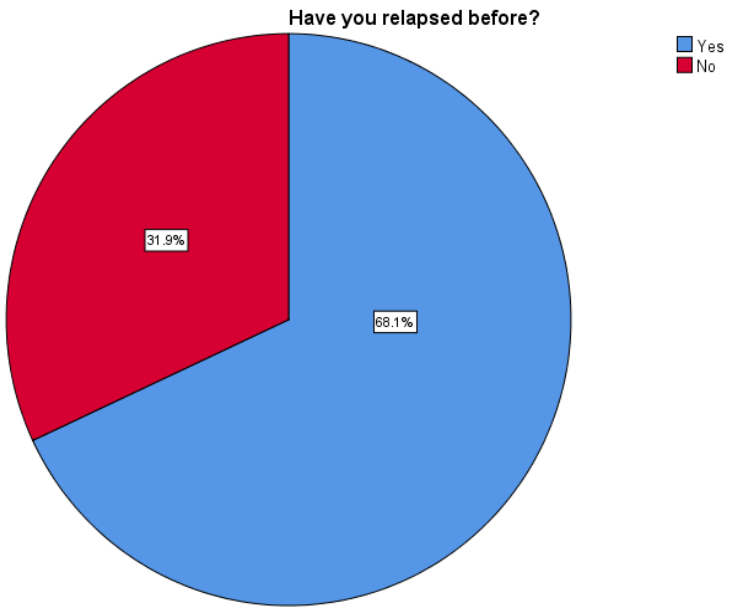
The histogram indicated that the regression model met the assumption of normality of residuals, a key requirement for the validity of multiple regression analysis. The near-zero mean and standard deviation close to one suggested that the errors were symmetrically distributed around the mean, without significant skewness or kurtosis. This implied that the differences between the observed and predicted relapse values were random rather than systematic, indicating that the model's predictions were unbiased. Based on the histogram results, the suitability of the regression model in predicting relapse among recovering individuals was validated—suggesting that the model's estimates of the relationships between cravings for alcohol, emotional support, and peer influence were reliable and not distorted by non-normal error distributions.

#### *4.2.3.2.5 Pie Chart of Dependent Variable (Alcohol Relapse) of the Regression Analysis*

The pie chart in Figure 4.6 provided a visual summary of the relapse status among participants, which is essential for contextualizing the regression analysis findings. It displayed the proportion of individuals who have relapsed versus those who have maintained sobriety. The chart provided a clear overview of the dependent variable— "*Have you relapsed before*?"—used in the multiple regression models.

**Figure 4. 6**

**Have You Relapsed Before**



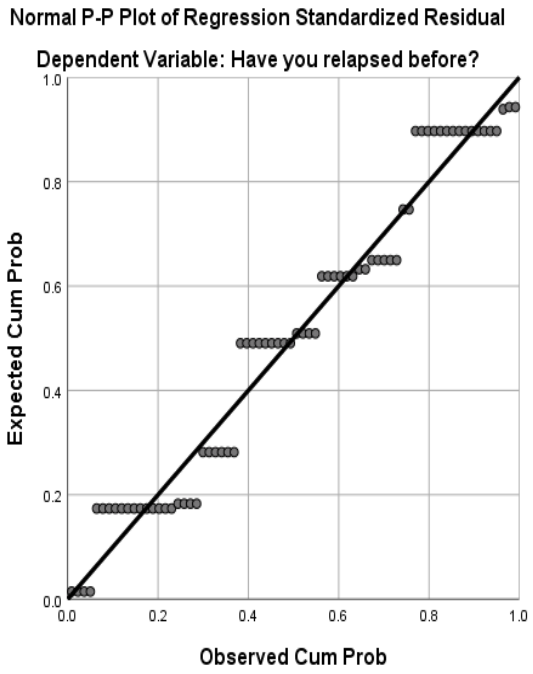

The results established the prevalence of relapse within the sample, thereby highlighting the significance of identifying key predictors such as alcohol cravings, emotional support, and peer influence. 68.1% of the respondents reported having relapsed, while 31.9% indicated they had not relapsed since rehabilitation. This distribution underscored a relatively high relapse rate among middle-aged married men, suggesting that despite rehabilitation interventions, maintaining long-term sobriety remains a major challenge. The predominance of relapse cases aligned with the regression results, which revealed that strong alcohol cravings, low emotional support, and negative peer influence significantly predicted relapse likelihood.

*4.2.3.2.6 Normal P–P Plot of Regression Standardized Residuals*

The Normal P–P Plot in Figure 4.7 assessed whether the residuals of the regression model are normally distributed—a key assumption of multiple regression analysis. The plot compared the observed cumulative probabilities of the standardized residuals against the expected cumulative probabilities under a normal distribution.

**Figure 4. 7**

**Normal P–P Plot**




As displayed in Figure 4.7, the points in the plot lied approximately along the diagonal reference line, with only minor deviations at the extremes. This alignment indicated that the residuals are roughly normally distributed, suggesting that the assumption of normality has been met. Therefore, the regression results were considered statistically valid and reliable, as violations

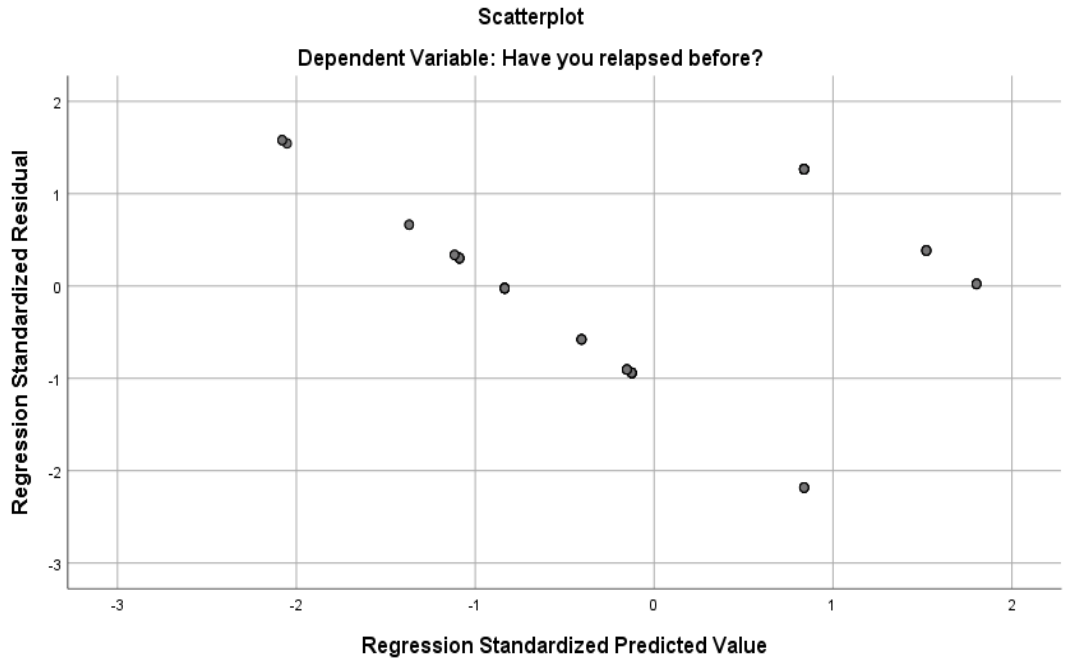
of normality was avoided—overall yielding unbiased estimation of coefficients or uninflated error terms. The findings supported the credibility of the regression model that examined the influence of alcohol cravings, emotional support, and peer encouragement on alcohol relapse among 72 middle-aged married men across 6 rehabilitation centres in Kiambu County.

#### 4.2.3.2.7 Scatterplot of Standardized Residuals vs. Predicted Values

The scatterplot in Figure 4.8 showed the relationship between the standardized predicted values and the standardized residuals for the dependent variable, "*Have you relapsed before*?". This plot was used to test two key assumptions of multiple regression analysis—linearity and homoscedasticity (constant variance of residuals).

**Figure 4. 8**

**Scatter Plot**



As shown in Figure 4.8, the residuals are randomly scattered around the horizontal axis (the zero line), with no clear pattern or systematic curvature. This random distribution suggested that the relationship between the predictors (such as alcohol cravings, emotional support, and peer influence) and alcohol relapse is approximately linear. Moreover, the spread of residuals appeared relatively even across the predicted values, indicating that the assumption of homoscedasticity is satisfied— say, the variance of errors remained constant across different levels of the predicted outcome.

The absence of a distinct funnel shape or clustering pattern further supported the validity of the regression model. This means the model provided an unbiased estimation of the predictors' effects on relapse, enhancing confidence in the reliability of the results. Hence, the scatterplot confirmed that the regression model met the assumptions of linearity and equal error variance, thereby validating the appropriateness of using multiple regression analysis for predicting alcohol relapse among 72 middle-aged married men across 6 rehabilitation centres in Kiambu County.

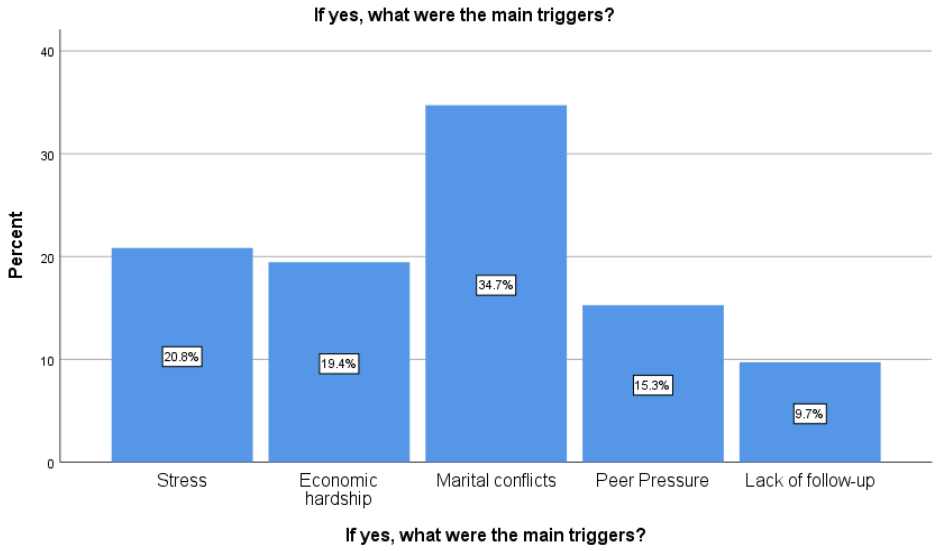
## 4.3 Thematic Analysis and Presentation of Qualitative Data-Themes Derived from Research Questions

### *4.3.1. Theme 1: Factors contributing to relapse among middle-aged married men in rehabilitation centres in Kiambu County*

Theme 1 highlighted the triggers of relapse among middle-aged married men, categorized into sub-themes illustrated in Figure 4.9, based on the findings of the quantitative data analysis. From quantitative analysis perspective, sub-themes in Table 4.8 were explored.

**Figure 4. 9**

**Triggers of Alcohol Relapse**




From Figure 4.9, marital conflict was the most reported relapse trigger (34.7%), followed by stress (20.8%) and economic hardship (19.4%). Peer pressure accounted for 15.3%, while lack of follow-up was least cited (9.7%). This distribution demonstrates that interpersonal and psychosocial stressors outweigh structural factors in predicting relapse. These results validate qualitative insights whereby, participants tasked with representative roles described feeling pressured by financial responsibilities, emotional strain, and social expectations. For instance, several recovering individuals stated that community drinking culture and easy access to alcohol make sobriety difficult, even after rehabilitation.

As evident in the sub-themes, relapse is driven by interrelated factors (e.g., stress, economic hardship, marital conflicts, peer pressure, and lack of follow-up)—which are qualitative data analysis shown in Table 4.8.

**Table 4. 8**

**Summary of Sub-Themes Emerging from Theme 1**

| Sub-theme | Key Insights | Implications |
|---|---|---|
| Psychological Stress and Emotional Distress | Emotional instability, anxiety, and stress related to family or financial responsibilities increase vulnerability to relapse. | Strengthen psychological support through counselling, stress management, and self-efficacy training. |
| Economic Hardship and Financial Instability | Unemployment and financial strain undermine recovery and lead to relapse due to frustration and hopelessness. | Integrate vocational training and economic empowerment into rehabilitation programs. |
| Marital and Family Conflicts | Family disputes, mistrust, and lack of emotional support create tension and weaken motivation for sobriety. | Promote family therapy, couple counselling, and spousal education during rehabilitation. |
| Peer Pressure and Social Influence | Drinking peers and social circles normalize alcohol use, making abstinence socially isolating. | Encourage sober social networks and community-based peer support groups. |
| Community and Cultural Norms | Cultural acceptance of alcohol during social functions reinforces drinking as a masculine or social norm. | Develop culturally sensitive awareness campaigns with community and religious leaders. |
| Lack of Aftercare and Follow-up Support | Absence of structured post-rehabilitation monitoring leads to relapse when individuals face unaddressed life stressors. | Establish robust aftercare systems, regular follow-ups, and community reintegration programs. |
| Stigma and Low Community Acceptance | Recovering individuals experience discrimination and social exclusion, reducing their confidence and access to support. | Implement stigma-reduction and reintegration initiatives at the community level. |

#### *4.3.1.1 Sub-theme 1: Psychological Factors (Stress, Emotional Distress, and Self-Efficacy).*

Throughout the FGDs, psychological stress emerged as one of the most dominant relapse drivers. Participants across all FGDs highlighted emotional instability, unresolved personal issues, and low self-efficacy as precursors to relapse. Many recovering individuals described alcohol as an *escape* from daily frustrations, particularly when faced with financial or family-related stress, echoed by arguments from FGD A that involved representatives of recovering individuals.

*"When I'm alone and stressed about rent or school fees, alcohol feels like the easiest escape."*

*"Even when you are trying to stay clean, the environment does not help… It takes a lot of strength to say no."*

Rehabilitation staffs who participated in FGD C affirmed this, stating that the psychological stress of failure resulting from unmet family or economic expectations pushes men back into drinking.

*"Many of them face a lot of pressure to provide for their families. When they cannot, they feel worthless and go back to alcohol to escape."*

*"Most relapse not because they didn't learn, but because they go back to the same stress at home."*

These narratives reveal that relapse is not simply a failure of willpower but a response to chronic stress and emotional overload. Spouses involved in FGD B also reported to have witnessed this emotional vulnerability, with some expressing uncertainty about how to help their partners manage stress.

*"Sometimes I do not know what to say when he is struggling — I fear pushing him back to drinking."*

#### *4.3.1.2 Sub-theme 2: Social Factors (Marital Conflict, Peer Pressure, and Community Norms).*

Participants also established those social relationships—particularly marital and peer interactions—have played a pivotal role in either sustaining recovery or triggering relapse. All participants in FGD A, representing recovering individuals, agreed that family conflicts, mistrust, and lack of understanding often led to discouragement and relapse. Sampled arguments are as follows:

*"When there is fighting or blame at home, I feel like giving up."*

*"Sometimes they keep reminding me of my past. That hurts and makes me want to drink again."*

Spouses involved in FGD B similarly described how unresolved tensions and fear of relapse strain relationships and recovery efforts:

*"Trust does not come back overnight; I'm hopeful but careful."*

*"Sometimes I get overwhelmed; I'm not a counsellor."*

Rehabilitation staff who participated in FGD C provided further insight into the familial dimension of relapse, noting that many clients return to emotionally unsupportive or volatile households, as illustrated by the following statements.

*"Some families have already given up on the client, so there is no support system at home."*

*"Some wives attend therapy just to express anger, not to support recovery."*

Besides family dynamics, participants in the qualitative study also noted that peer pressure and community norms reinforce relapse cycles. Many representatives recovering individuals described being constantly tempted by drinking friends and social events centred around alcohol, as shown in the following arguments.

*"Old friends keep calling you for a drink. If you refuse, they think you have changed too much."*

*"Celebrations are the hardest. Everyone is drinking, and you do not want to look different."*

Staff echoed this, noting that cultural expectations around alcohol make abstinence socially challenging, especially in communities that promoted drinking culture.

*"In this community, drinking is seen as a normal part of being a man."*

#### *4.3.1.3 Sub-theme 3: Structural Factors (Economic Hardship and Lack of Aftercare).*

Qualitative data analysis results showed that economic hardship was one of the major relapse factors, intertwined with joblessness, poverty, and feelings of failure in fulfilling provider roles. Representatives of recovering individuals, through FGD A, linked sobriety to financial stability and self-worth.

*"When I'm working, I'm busy and I feel responsible. But when I'm broke and idle, the urge to drink comes back strong."*

In elaborating on economic hardship, rehabilitation staff in FGD C affirmed that economic strain is both a psychological and structural issue, noting that unemployment after discharge often fuels feelings of hopelessness.

*"Without addressing economic issues, relapse will continue."*

*"Skills training can give them hope and something to hold on to after rehab."*

Spouses, through FGD B, reinforced this by describing how financial constraint worsens family tensions and limits their capacity to support recovery.

*"It is hard to manage everything alone financially and emotionally."*

Furthermore, the lack of structured follow-up programs after discharge was cited as a critical weakness in the rehabilitation system. In FGD A, representatives of recovering individuals expressed feelings of abandonment after treatment, as shown in the following statements.

*"Rehab helps, but once you leave, there is no support."*

*"I felt lost when I left. No one followed up."*

The triangulated findings from thematic analysis revealed that relapse among middle-aged married men in Kiambu County is multifactorial, resulting from intertwined psychological stressors, social conflicts, and structural deficiencies. Specifically, the psychological factors identified by participants included stress, emotional distress, and low self-efficacy, while the social factors comprised marital conflict, peer pressure, and the cultural acceptance of alcohol. The FGDs further identified structural contributors to alcohol relapse, including economic hardship and the lack of follow-up programs. The voices of recovering individuals, spouses, and rehabilitation staff collectively illustrated that relapse is not merely a personal failure but a systemic and relational phenomenon deeply rooted in psychological, social, and structural lived realities.

### *4.3.2 Theme 2: Influence of Family and Spousal Support on the Recovery and Relapse.*

Theme 2 explored how family and spousal relationships shape recovery outcomes and relapse likelihood among middle-aged married men. The qualitative data consistently revealed that family support—emotional, spiritual, and practical—serves as a cornerstone for sustained sobriety. However, when relationships are strained, characterized by mistrust or stigma, recovery becomes fragile. The perspectives of 12 representatives of recovering individuals, 12 spouses of recovering

individuals, and 12 rehabilitation staffs demonstrated that the family operates as both a protective and risk factor in the rehabilitation continuum—emerging sub-themes shown in Table 4.9.

**Table 4. 9**

**Summary of Sub-Themes Emerging from Theme 2**

| Sub-theme | Key Insights | Implications |
|---|---|---|
| Emotional & Motivational Support | Families act as vital sources of encouragement and accountability. | Strengthen family counselling and emotional coaching programs. |
| Knowledge & Skills Gaps | Families lack adequate understanding of addiction and relapse management. | Offer structured psychoeducation and training workshops. |
| Rebuilding Trust & Cohesion | Trust repair is gradual and central to sustained sobriety. | Incorporate family reintegration therapy post-discharge. |
| Family Conflict & Emotional Strain | Tension and blame in homes increase relapse risk. | Provide couples counselling and conflict resolution mechanisms. |
| Institutional Gaps | Limited family inclusion weakens recovery outcomes. | Design comprehensive family participation and follow-up frameworks. |
| Family Empowerment | Peer and community support for spouses fosters resilience. | Create spousal support groups and community awareness programs. |

#### *4.3.2.1 Sub-theme 1: Emotional and Motivational Support as a Recovery Anchor.*

Across the FGDs, family encouragement and emotional connection were repeatedly described by participants as key motivational factors that help recovering individuals maintain sobriety. Spouses who participated in FGD B reported that they take an active role in nurturing and supervising their recovering husbands, reinforcing hope and accountability, as illustrated in the following statements.

*"I keep reminding him why he started the journey — for our children and for himself."*

*"I make sure he takes his medicine on time."*

These statements portrayed spouses as the emotional anchors of recovery—balancing empathy, vigilance, and resilience in their support roles. In FGD A, a representative of recovering individuals similarly noted that family involvement during and after rehabilitation provides a sense of belonging and purpose, as reflected in the highlighted argument.

*"My family checks on me, prays with me, and reminds me of my goals."*

The role of spouses as emotional anchors was also affirmed by a rehabilitation staff member in FGD C, who noted that family presence during counselling sessions fosters self-belief and accountability, as reflected in the argument outlined below.

*"When the family attends therapy and participates actively, clients show faster progress and more confidence."*

Sub-theme 1 under Theme 2 highlighted that consistent emotional engagement from family members enhanced psychological stability, whereas neglect or emotional distance undermined recovery progress.

#### *4.3.2.2 Sub-theme 2: Knowledge and Skills Gaps in Family Involvement.*

While families are pivotal to recovery, in FGDs B and C, both spouses and staff emphasized that many lack adequate knowledge, training, and emotional tools to support the process effectively. Spouses involved in FGD B described feeling unprepared to manage mood swings, triggers, or early signs of relapse, as shown in the following arguments.

*"Sometimes I get confused about how to react when he is moody — I do not want to make things worse."*

*"They gave us some advice, but nothing deep; we just figure it out along the way."*

Rehabilitation staff echoed the concern over limited expertise by emphasizing the need for structured family education programs to foster supportive environments. Two rehab staffs in FGD C argued that:

*"Most families do not understand addiction as a condition; they think the client should just be strong and stop drinking."*

*"Family therapy sessions are often too few to address the deep emotional wounds or misconceptions that exist."*

The results of thematic analysis illustrated that information asymmetry—where families are not fully educated about addiction dynamics—hampers their ability to provide informed support. Consequently, family members unintentionally triggered stress or frustration, increasing relapse risk.

#### *4.3.2.3 Sub-theme 3: Rebuilding Trust and Family Cohesion Post-Rehabilitation.*

Trust rebuilding emerged as a recurring issue in FGDs A, B, and C, with spouses reporting emotional fatigue and scepticism, especially in cases of repeated relapse. The process of reconciliation is gradual and requires open communication and behavioural consistency from recovering individuals, as echoed by the following arguments from spouses who were involved in FGD B.

*"We talk more now, but I still get anxious when he is late."*

*"I'm starting to see the man I married again."*

The narratives provided by spouses underscored that recovery is relational rather than individual—emotional healing must also occur within the family. A rehabilitation staff member in FGD C acknowledged this delicate phase, noting that unresolved marital issues often resurface during the transition.

*"Many couples need more counselling after discharge because deep issues resurface once they start living together again."*

In FGD A, a representative of recovering individuals demonstrated awareness of the fragility of trust, reporting that they actively work to rebuild family relationships through responsible behaviour and transparency, as reflected in the statement below.

*"I try to show them I've changed by being home on time and helping around. It's not easy, but I want them to believe in me again."*

#### *4.3.2.4 Sub-theme 4: Family Conflict and Emotional Strain as Relapse Triggers.*

Despite the potential for support, family environments were also reported to act as sources of tension and relapse risk. Participants described how frequent conflicts, blame, and negative communication patterns created emotional strain that undermined recovery progress.

In Focus Group C, rehabilitation staff indicated that some spouses attended therapy sessions feeling angry and frustrated, as they were still processing years of emotional pain—tension that often followed the recovering individual back home. Similarly, spouses recounted

experiences of emotional exhaustion and resentment, explaining that it was difficult to remain supportive while still coping with their own hurt.

Recovering individuals also reported feeling demoralized when confronted with mistrust or constant reminders of past mistakes, noting that such experiences diminished their motivation to stay sober.

The findings from this thematic analysis suggested that the emotional climate within the household could either reinforce sobriety or reactivate feelings of guilt and hopelessness, thereby increasing the risk of relapse. Consequently, rehabilitation programs needed to address not only individual therapy but also family healing dynamics.

#### *4.3.2.5 Sub-theme 5: Institutional Gaps in Family Integration During and After Rehabilitation.*

Both spouses and staff identified inadequate family inclusion in treatment and aftercare planning as a systemic shortfall. Participants, especially spouses through FGD B said rehabilitation centres offer minimal or inconsistent family counselling, leaving them to manage post-discharge challenges without guidance.

*"We only get updates when we ask — they should involve us from the start."*

*"They should prepare families for what happens after discharge."*

While confirming lack of family engagement and planned follow-up programs, a rehabilitation staff argued that:

*"Family involvement is encouraged, but we do not have enough sessions or follow-up programs to keep them engaged after discharge."*

#### *4.3.2.6 Sub-theme 6: Family Empowerment and Community Support Needs.*

Both spouses and recovering individuals emphasized the need to establish peer and family support groups as avenues for sharing experiences, reducing stigma, and enhancing coping capacity. Spouses particularly expressed a desire for safe spaces where they could exchange practical strategies and offer one another emotional support, stating:

*"A support group for wives would really help — somewhere we can talk freely and encourage one another."*

In PGD C, a rehabilitation staff also acknowledged the importance of empowering families through economic and psychosocial interventions, noting:

*"When the family is stable and informed, relapse rates drop significantly. Recovery becomes a shared journey rather than an individual struggle."*

This sub-theme outlined the significance of institutionalizing family support systems within rehabilitation frameworks and integrating them with community organizations and local mental health networks in providing after-rehab recovery services.

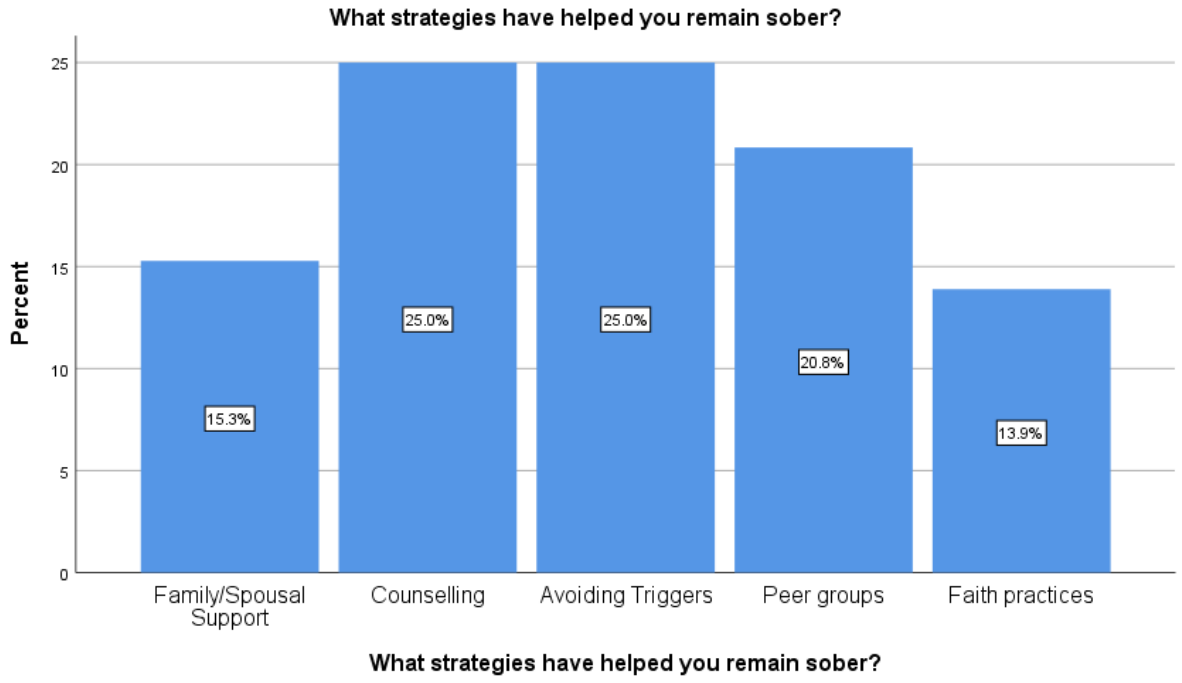
Participants established family and spousal involvement as both a determinant of recovery success and a potential relapse trigger depending on the quality of emotional, informational, and institutional support provided. The results highlighted the need for holistic, family-centred rehabilitation models that move beyond treating the individual to transforming the family system.

### *4.3.3 Theme 3: Coping strategies employed by recovering individuals to sustain sobriety after rehabilitation.*

Theme 3 explored the coping strategies adopted by recovering individuals to maintain sobriety following rehabilitation, focusing on the psychological, social, and structural techniques that support sustained recovery in post-treatment setups. Both quantitative and qualitative data collection sought to dissect this theme. Results from quantitative data analysis are as shown in Figure 4.10.

**Table 4. 10**

**Coping Strategies**




Results showed that counselling and avoidance of triggers each attracted (25%) responses as effective coping mechanisms. Peer group involvement (20.8%) followed closely, while family or spousal support (15.3%) and faith practices (13.9%) were least mentioned. Although family

support ranked lower quantitatively, qualitative data revealed its psychological significance, suggesting a discrepancy between perceived and actual value of family involvement.

While quantitative data suggested counselling and avoiding triggers as the dominant coping strategies, qualitative findings from all three FGDs revealed that sustained sobriety is best maintained through an integration of psychological, social, and spiritual coping strategies. This theme therefore dissects sub-themes as shown in Table 4.11.

**Table 4. 11**

**Summary of Sub-Themes Emerging from Theme 3**

| Sub-theme | Key Insights | Implications |
|---|---|---|
| Counselling | Builds emotional regulation and relapse resistance. | Integrate structured aftercare counselling. |
| Avoidance of Triggers | Environmental restructuring prevents relapse situations. | Train clients in personalized trigger management. |
| Peer Group Involvement | Promotes accountability and shared motivation. | Strengthen community-based recovery networks. |
| Family/Spousal Support | Provides emotional grounding and moral reinforcement. | Encourage post-rehab family engagement programs. |
| Faith Practices | Offer meaning, peace, and moral support. | Link rehabilitation centres with faith-based networks. |
| Personal Responsibility | Enhances self-discipline and focus. | Incorporate occupational and behavioural therapy. |

#### *4.3.3.1 Sub-theme 1: Counselling*

Ongoing counselling—whether individual or group-based—was consistently reported as a crucial mechanism for sustaining sobriety after rehabilitation. Recovering individuals described counselling as a “mental checkpoint” that provided a safe space to process emotions and reaffirm

their commitment to recovery. Participants in Focus Group A (recovering individuals) emphasized the value of counselling, explaining:

*"Counselling helps me to understand my thoughts before they get out of hand."*

*"When I feel overwhelmed, I go back to talk to my counsellor instead of keeping things bottled up."*

These accounts indicated that counselling fostered self-awareness, emotional regulation, and relapse-prevention skills. Participants further highlighted that post-rehabilitation counselling sessions created a sense of continuity between institutional recovery and independent living.

Similarly, rehabilitation staff in Focus Group C observed that:

*"Clients who continue with counselling after discharge show stronger self-control and are better at managing cravings."*

This sub-theme therefore identified counselling as a critical scaffold for sustained recovery, promoting psychological stability and adaptive coping beyond the rehabilitation setting.

#### *4.3.3.2 Sub-theme 2: Avoidance of Triggers*

Participants across all focus groups acknowledged that deliberately avoiding people, places, and situations associated with previous drinking behaviours was a practical and effective coping strategy. Recovering men described making conscious behavioural changes to prevent relapse. In Focus Group A, participants explained:

*"I stopped going to the barbershop near the pub; I changed routes completely."*

*"When friends call for a drink, I find an excuse or switch off my phone."*

These avoidance strategies reflected strong self-monitoring and environmental control, consistent with behavioural relapse-prevention principles. Rehabilitation staff further emphasized that recognizing and avoiding early triggers was a critical skill introduced during therapy, although maintaining it after discharge required vigilance and social support. As one staff member noted:

*"We teach them to identify what situations make them vulnerable, but success depends on how consistently they apply those lessons outside."*

#### *4.3.3.3 Sub-theme 3: Peer Group Involvement*

Peer support was identified as a highly valued coping mechanism that provided encouragement and mutual accountability among recovering individuals. Participants described connecting with fellow recoverees through group meetings or informal networks, portraying these interactions as safe spaces for sharing experiences and reinforcing positive behaviours. In FGD A, participants stated:

*"When we meet every week, we remind each other why we can't go back."*

*"In our group, we talk openly about cravings and how to handle them. It helps knowing I'm not alone."*

Rehabilitation staff in Focus Group C also noted that peer involvement enhanced motivation and fostered collective resilience, explaining:

*"Clients who stay in touch with peer groups tend to recover faster because they get emotional support and real-life advice."*

The findings indicated that peer support functioned as both a therapeutic and social intervention, enabling recovering individuals to replace drinking networks with pro-sobriety circles. The resulting sense of community, belonging, and mutual understanding was reported to promote sustained abstinence and psychological well-being.

#### *4.3.3.4 Sub-theme 4: Family and Spousal Support*

Although family and spousal support ranked lower in the quantitative findings, qualitative narratives revealed its profound emotional and motivational influence on sustaining recovery. Recovering individuals emphasized that family involvement served as both a reminder of purpose and a strong deterrent against relapse. In FGD A, participants shared:

*"When I see how my wife and kids believe in me now, I don't want to disappoint them."*

*"My family has become my reason to stay clean."*

Spouses in Focus Group B also described their ongoing efforts to provide encouragement and accountability, noting:

*"I try to keep him busy and involved at home so he does not get bored or tempted."*

These results suggested that familial affirmation enhanced recovering men's sense of self-worth and strengthened their ability to resist relapse triggers. The contrast between the quantitative and qualitative results indicated that, while family support might not have been explicitly recognized as a formal coping strategy, its psychological influence remained deeply stabilizing and integral to sustained recovery.

#### *4.3.3.5 Sub-theme 5: Faith Practices*

Faith-based coping was identified as another significant strategy, particularly among participants who described spiritual renewal as central to their recovery identity. Practices such as prayer, church involvement, and spiritual reflection were reported to provide both emotional grounding and a sense of meaning in the recovery journey. In Focus Group A, recovering individuals shared:

*"When I pray, I feel calm and in control again."*

*"Church activities keep me occupied and remind me that I can start over."*

Spouses in Focus Group B similarly viewed spiritual engagement as both a moral compass and a form of community support, explaining:

*"The church members keep him accountable; they encourage him when he is struggling."*

Rehabilitation staff in FGD C further observed that faith-based engagement complemented counselling by addressing the existential and moral dimensions of recovery, noting:

*"Spirituality helps many clients redefine their identity and purpose, which strengthens long-term sobriety."*

The findings indicated that faith functioned as both a personal coping mechanism and a pathway for social reintegration, offering structure, belonging, and hope to recovering individuals.

#### *4.3.3.6 Sub-theme 6: Personal Responsibility*

Many participants emphasized that self-discipline, structured routines, and lifestyle changes formed the foundation for sustained sobriety. They reported adopting new habits such as regular exercise, active work engagement, and effective time management to replace idle or high-risk behaviours.

In Focus Group A, recovering individuals explained:

*"Keeping busy helps me avoid overthinking."*

*"I wake up early, go to work, and make sure my day is full."*

Rehabilitation staff corroborated these observations, noting that the establishment of consistent routines served as a strong predictor of long-term recovery success. As one staff member remarked:

*"Those who have clear daily routines and work responsibilities rarely relapse; structure keeps them focused."*

The coping strategies reported by representatives of recovering individuals indicated that sustained sobriety was a multidimensional process requiring continuous psychological, social, and structural engagement. Counselling and the deliberate avoidance of triggers were identified by participants as the technical foundations of recovery, while peer support, family encouragement, and faith-based practices functioned as psychological and social buffers against relapse.

Participants emphasized that effective recovery depended on the integration of structured aftercare, relational reinforcement, and personal accountability. The results suggested that

recovery was not a single event but an ongoing adaptive process in which coping mechanisms evolved over time in response to emerging stressors, responsibilities, and changing social environments.

*4.3.4 Theme 4: Effectiveness of rehabilitation interventions in preventing relapse among middle-aged married men, and improvements needed.*

This theme evaluated the perceived effectiveness of current rehabilitation programs in promoting long-term sobriety among middle-aged married men, while identifying areas for improvement. The findings from FGDs A, B, and C indicated that rehabilitation centres play a vital role in initiating recovery through structured therapy, detoxification, and skill development. However, participants also emphasized that the sustainability of these outcomes is limited by gaps in follow-up, individualized care, and post-discharge support programs. Results of sub-themes that emerged from dissecting Theme 4 are displayed in Table 4.12.

**Table 4. 12**

**Summary of Sub-Themes Emerging from Theme 4**

| Sub-theme | Key Insights | Implications |
|---|---|---|
| **Strengths of Rehabilitation** | Builds awareness, self-control, and structure. | Maintain current therapeutic approaches with continuous evaluation. |
| **Limited Aftercare Follow-up** | Post-rehab monitoring is inadequate. | Establish structured aftercare and community follow-up programs. |
| **Limited Family Integration** | Families are insufficiently trained or involved. | Expand family counselling and psychoeducation modules. |
| **Lack of Economic Reintegration** | Unemployment contributes to relapse. | Introduce vocational and livelihood support programs. |
| **Individualization & Cultural Fit** | Programs lack contextual tailoring. | Develop culturally responsive, gender-specific interventions. |
| **Weak Community Collaboration** | Centres operate in isolation. | Strengthen linkages with local health and faith-based networks. |

#### *4.3.4.1 Sub-theme 1: Strengths of Rehabilitation Interventions.*

Participants across all focus groups reported that rehabilitation serves as a critical foundation for recovery by equipping individuals with essential psychological, medical, and behavioural tools. Respondents described the rehabilitation phase as pivotal in reframing addiction from a moral failure to a manageable psychological and social condition.

In Focus Group A (Recovering Individuals), participants highlighted that counselling and structured routines played a significant role in their initial recovery journey, as reflected in the following statements:

*"Rehab helped me understand why I was drinking, not just how to stop."*

*"They gave me structure and purpose; I learned to plan my days again."*

Rehabilitation staff (Focus Group C) reinforced these perspectives, observing that consistent therapy and peer engagement within the rehabilitation environment foster emotional growth and behavioural change:

*"Clients who complete the full program show noticeable emotional maturity and better decision-making."*

Similarly, spouses (Focus Group B) expressed that rehabilitation had a positive impact on their partners' self-regulation and family engagement:

*"After the program, he became calmer and more focused on family responsibilities."*

The focus group discussions revealed that rehabilitation interventions effectively initiate behavioural transformation by enhancing self-awareness, emotional stability, and relapse-prevention capacity.

#### *4.3.4.2 Sub-theme 2: Short Duration and Lack Follow-up Program.*

Despite the positive progress achieved during rehabilitation, participants across all focus groups consistently identified inadequate post-rehabilitation follow-up as a major barrier to sustained recovery. The abrupt transition from the structured and supportive environment of rehabilitation centres to the unstructured realities of home life was described as leaving recovering individuals vulnerable to relapse.

In Focus Group A (Recovering Individuals), participants expressed a sense of abandonment following discharge, emphasizing the lack of continued professional engagement:

*"When you leave, it feels like you're on your own. There's no one to check if you're okay."*

Spouses (Focus Group B) echoed similar frustrations, noting the absence of family guidance and structured follow-up once their partners returned home:

*"They discharged him, but nobody followed up. I wish they had someone to guide us after coming home."*

Rehabilitation staff (Focus Group C) acknowledged these gaps, linking them to limited resources and insufficient staffing capacity to sustain long-term client monitoring:

*"We try to keep in touch, but the system doesn't support long-term follow-up for all clients."*

This sub-theme reveals a critical weakness in the recovery continuum—the lack of structured aftercare and consistent monitoring—which disrupts continuity of care and heightens the risk of relapse among recovering individuals.

#### *4.3.4.3 Sub-theme 3: Limited Family Integration and Support Training.*

Although family participation was widely acknowledged as a vital component of sustained recovery, participants across all focus groups reported that family integration within most rehabilitation programs remains limited and underdeveloped. Many spouses (Focus Group B) expressed feelings of exclusion or inadequate preparation to support their partners after discharge:

*"They only called me for one session, but I didn't really learn how to support him after."*

Rehabilitation staff (Focus Group C) attributed these shortcomings to cultural perceptions and logistical constraints that hinder consistent family involvement:

*"Some families don't attend sessions because they see addiction as a personal problem, not a family issue."*

Meanwhile, recovering individuals (Focus Group A) highlighted that stronger family engagement could enhance emotional support and accountability within the home environment:

*"If my family understood what I go through, it would make things easier at home."*

Collectively, these insights revealed that limited family participation weakens the recovery ecosystem by isolating the individual's progress from their social context. This sub-theme underscores the urgent need to restructure rehabilitation programs to include continuous family counselling, psychoeducation, and reintegration planning as integral elements of recovery.

#### *4.3.4.4 Sub-theme 4: Lack of Economic and Occupational Reintegration Programs.*

Economic hardship consistently emerged as a key barrier to sustained recovery, directly exposing structural weaknesses within existing rehabilitation frameworks. Participants across all focus groups emphasized that the absence of post-rehabilitation economic empowerment contributes significantly to relapse vulnerability. Recovering individuals (Focus Group A) described the discouragement of returning home to financial instability and unemployment:

*"After rehab, you go back home, and there is no job. The stress comes back."*

Rehabilitation staff (Focus Group C) acknowledged that while therapeutic interventions successfully address psychological and behavioural dimensions of addiction, they often fail to prepare clients for economic reintegration:

*"We focus on mental recovery, but most clients relapse because they lack livelihood options."*

Similarly, spouses (Focus Group B) proposed integrating vocational training or small business support within rehabilitation programs to promote self-reliance and reduce idle time:

*"If they helped them find work or start something small, it would keep them busy and hopeful."*

This sub-theme highlights the critical intersection between recovery and socioeconomic stability. Without addressing livelihood needs, rehabilitation efforts remain incomplete, leaving recovering individuals exposed to financial stressors that can trigger relapse. Therefore,

embedding economic empowerment and job-readiness initiatives within rehabilitation programs is essential for long-term recovery sustainability.

#### *4.3.4.5 Sub-theme 5: Individualization and Cultural Relevance of Treatment.*

Both recovering individuals and rehabilitation staff emphasized that many rehabilitation programs rely on standardized interventions that overlook individual, cultural, and contextual differences. Participants reported that such generalized approaches often fail to address the complex realities faced by middle-aged married men recovering from addiction. Recovering individuals (Focus Group A) expressed frustration with the uniformity of treatment content:

"They used the same sessions for everyone, but our situations were different."

Rehabilitation staff (Focus Group C) reinforced this concern, citing the absence of culturally sensitive counselling tools and the limited inclusion of gender- or role-specific considerations:

"Programs are not always tailored to married men—they don't address the pressures of family and community expectations."

This sub-theme underscores the need for context-sensitive and personalized rehabilitation models that integrate clients' social roles, cultural backgrounds, and marital dynamics. By aligning interventions with the lived experiences of recovering individuals in Kiambu County, rehabilitation centres can foster greater relevance, engagement, and long-term recovery outcomes.

#### *4.3.4.6 Sub-theme 6: Need for Strengthened Collaboration Between Centres and Community Networks.*

Across all focus groups, participants consistently recommended strengthening partnerships between rehabilitation centres, local health institutions, and community-based organizations to improve post-rehabilitation outcomes. They emphasized that such collaborations would facilitate better follow-up, increase accessibility of psychosocial support, and embed recovery assistance within community structures.

Rehabilitation staff (Focus Group C) highlighted the practical benefits of this integrated approach:

*"If we worked more closely with local clinics and churches, follow-up would be easier."*

Spouses (Focus Group B) echoed this view, noting that existing community institutions could serve as immediate and trusted support networks:

*"Sometimes the nearest help is the church or a local group; they should be connected with the rehab."*

These perspectives underscore the importance of multi-sectoral collaboration, where rehabilitation centres, healthcare facilities, and community organizations operate in synergy to sustain recovery beyond the institutional phase.

The overall findings under Theme 4 revealed that while rehabilitation centres in Kiambu County effectively initiate recovery through counselling, therapy, and structured routines, their

capacity to prevent relapse remains limited by systemic weaknesses. The most critical gaps include insufficient aftercare, minimal family integration, and lack of economic reintegration programs.

Achieving sustainable recovery therefore requires adopting a continuum-of-care model—one that extends support beyond discharge to include family psychoeducation, structured follow-up, vocational empowerment, and strong community partnerships. By addressing these interconnected social and economic dimensions, rehabilitation systems can enhance both the durability and depth of recovery among middle-aged married men in Kiambu County.

## 4.4 Discussion

### *4.4.1 Discussion of Research Objective (a) and (b) through Marlatt's Relapse Prevention Model.*

The first and second objectives of this study were (a) examine the psychological and emotional factors that contribute to relapse among middle-aged married men in rehabilitation centres in Kiambu County, and (b) assess the influence of family and spousal relationships on recovery and relapse prevention among these men. These objectives aligned with the theoretical principles of Marlatt's Relapse Prevention Model (RPM) (Marlatt & Donovan, 2005), which conceptualized relapse not as a sudden failure of willpower but as a process—a sequence of cognitive, emotional, and behavioural events that culminate in renewed substance use. According to RPM, relapse is most likely to occur when an individual faces high-risk situation, experiences low self-efficacy, and lacks effective coping strategies.

#### ***4.4.1.1. Psychological Factors and Marlatt's Intrapsychic Determinants (objective [a]).***

Findings shows that psychological stress, emotional distress, and low self-efficacy were dominant drivers of relapse among middle-aged married men in Kiambu County. Quantitatively,

stress was among the highest-reported triggers, accounting for 20.8% of all relapse incidences. Qualitative data reinforced this, with participants frequently linking their drinking behaviours to stressors such as unemployment, family responsibilities, and economic hardships. One participant observed, "*When I'm alone and stressed about rent or school fees, alcohol feels like the easiest escape*."

This finding aligns with RPM's concept of intrapsychic determinants, which posits that relapse is often preceded by negative emotional states—such as anxiety, anger, or frustration—that compromise an individual's ability to resist temptation (Marlatt & Donovan, 2005). In RPM terms, these situations represent "high-risk emotional states", where individuals experience strong internal pressure to alleviate distress through alcohol consumption. The current study thus supports the RPM notion that relapse arises not merely from external circumstances but from internal cognitive and emotional vulnerability.

The significant positive relationship between psychological distress and relapse ($r = 0.72$) further substantiates Marlatt's theoretical prediction: when stress or emotional pain is not effectively managed, it creates a psychological disinhibition that increases susceptibility to drinking. Similarly, low self-efficacy—the belief that one cannot manage life challenges without alcohol—was consistently reported among participants who relapsed. Rehabilitation staff in Focus Group C noted that many clients "relapse not because they didn't learn, but because they go back to the same stress at home," highlighting how unaddressed psychological issues perpetuate vulnerability.

According to RPM, self-efficacy serves as a psychological buffer between high-risk situations and relapse behaviour. Individuals who possess strong self-confidence in their ability to

cope with stress without alcohol are less likely to relapse (Witkiewitz et al., 2019). The findings from Kiambu County therefore confirm that low self-efficacy amplifies relapse risk among recovering men, consistent with RPM's predictions.

#### *4.4.1.2. Social Triggers and Interpersonal Determinants (objective [b]).*

The second research objective (objective [b])—assessing the influence of family and spousal support—maps onto RPM's interpersonal high-risk situations. The findings revealed that marital conflict, peer pressure, and community drinking norms were among the most significant social triggers of relapse. Quantitatively, marital conflict accounted for 34.7% of relapse cases, while peer pressure contributed 15.3%.

These findings are congruent with RPM's emphasis on social learning and interpersonal stressors as external cues that undermine recovery. For instance, participants described being constantly invited by old friends to drink and struggling to resist social pressure at community events such as weddings and funerals. One participant stated, "*Even when you're trying to stay clean, the environment doesn't help. Alcohol is everywhere—it takes a lot of strength to say no*."

Within the RPM framework, these scenarios constitute external high-risk contexts that test coping skills. When an individual lacks effective refusal skill, experiences low self-efficacy, or perceives social drinking as normative, the likelihood of relapse increases. The RPM also introduces the concept of the "abstinence violation effect"—a cognitive distortion in which a minor lapse is misinterpreted as a total failure, prompting a full-blown relapse (Hendershot et al., 2011). Several respondents in this study reported feelings of guilt and hopelessness after a single drink, confirming the cognitive pathway anticipated by RPM.

The study's findings also revealed that social relationships can act as both protective and risk factors. Spousal emotional support—expressed through empathy, encouragement, and accountability—was found to strengthen self-efficacy and motivation. However, unresolved family conflicts, mistrust, or constant reminders of past mistakes triggered emotional distress, lowering self-control and increasing relapse risk. This dual nature aligns with RPM's concept of "coping outcome expectancies," which asserts that positive social support enhances coping while negative interactions increase vulnerability to relapse (Menon & Kandasamy, 2018).

### *4.4.2. Discussion of Objective (c) via the Biopsychosocial Model of Addiction.*

The third objective (c) evaluate how structural and institutional factors—such as rehabilitation program design, follow-up mechanisms, and socio-economic conditions—affect recovery and relapse among middle-aged married men in rehabilitation centres in Kiambu County. This objective is best understood through the Biopsychosocial Model of Addiction (BPSM) proposed by Engel (1977), which views addiction and recovery as outcomes of interacting biological, psychological, and social systems.

#### ***4.4.2.1. Structural Deficiencies as Enabling Contexts of Relapse.***

Results highlighted significant structural deficiencies within rehabilitation centres, including limited follow-up programs, lack of economic reintegration initiatives, and minimal family inclusion in treatment planning. Participants consistently emphasized that once they left rehabilitation, they experienced abrupt discontinuity of care. One recovering individual stated, *"When you leave, it feels like you are on your own. There's no one to check if you're okay."*

Quantitatively, the study revealed a strong negative correlation ($r = –0.68$) between structural support and relapse—indicating that individuals who received consistent institutional or

community follow-up were far less likely to relapse. According to the BPSM, these structural conditions represent the social and environmental dimensions that either facilitate or hinder biological and psychological recovery.

When rehabilitation systems lack continuity, recovering individuals return to the same high-risk environments—marked by economic hardship, unemployment, and social drinking norms—that initially fuelled their addiction. This environmental re-exposure leads to heightened psychological stress and biological craving responses, confirming Engel's (1977) argument that social systems directly shape biological vulnerability.

#### *4.2.2.2 Socioeconomic and Cultural Factors in the Biopsychosocial Framework.*

Economic hardship was repeatedly cited as a dominant relapse driver. Participants described unemployment and financial strain as triggers for hopelessness and a return to alcohol. These findings resonate with the "social" dimension of the BPSM, which emphasizes that socioeconomic instability undermines recovery by sustaining chronic stress and limiting access to treatment resources. Rehabilitation staff in Focus Group C noted, "Without addressing economic issues, relapse will continue."

In addition, cultural norms within Kiambu County—where alcohol consumption is often normalized as part of male identity—exert social pressure that reinforces relapse. In BPSM terms, such cultural expectations represent macro-social influences that perpetuate addiction behaviours. Addressing these requires community-based interventions that reshape local attitudes toward alcohol use.

*4.4.3 Discussion of Research Objective (d): Integrative Interpretation.*

***4.4.3.1 Mediated Pathway.***

The fourth objective (d) examine how psychological, social, and structural factors collectively influence relapse among middle-aged married men in rehabilitation centres in Kiambu County. Synthesizing findings through both the RPM and BPSM frameworks reveals a mediated pathway:

Social and structural stressors (e.g., marital conflict, peer pressure, unemployment, weak aftercare) → psychological distress (stress, low self-efficacy, emotional instability) → relapse.

Quantitative data supported this pathway, showing that social distress correlated strongly with psychological disruption ($r = 0.58$), while structural support buffered this effect (negative correlation with relapse). Qualitative narratives further illustrated that when men faced social tension or economic hardship without supportive structures, they reverted to alcohol as a coping mechanism.

***4.4.3.2 Interdependence of Psychological, Social, and Structural Factors.***

The integrated theoretical lens demonstrates that none of the three dimensions—psychological, social, or structural—can independently explain relapse. Rather, relapse emerges from the interaction among them. Psychological stress mediates the effects of social conflict and structural deficiency, while strong institutional or familial support mitigates stress and enhances coping. For instance, men who reported active spousal involvement and continuous counselling exhibited higher self-efficacy and longer sobriety periods. Conversely, those returning to unsupportive families or joblessness experienced emotional distress that precipitated relapse. This

reinforces both Marlatt's (2005) and Engel's (1977) propositions that recovery must be viewed as a systemic process, encompassing personal, relational, and environmental dimensions.

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# CHAPTER FIVE

# SUMMARY OF THE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

## 5.1 Introduction

This chapter presents the summary of findings, implications & recommendations, future research, and final reflection based on the study results. The study objective was to investigate the determinants of relapse among middle-aged (40-64) married men across rehabilitation centres in Kiambu County. The study targeted 72 recovering individuals, 12 representatives of recovering individuals, 12 spouses of recovering individuals, and 12 rehabilitation staff, achieving 100% response rate for every group invited.

## 5.2 Summary of the Findings

This study was investigated the psychological, social, and structural factors that contribute to alcohol relapse among middle-aged married men undergoing or having completed rehabilitation in Kiambu County, Kenya. The study focuses on identifying the underlying causes of relapse, analysing the interplay between individual and contextual factors, and recommend strategies to enhance the effectiveness of rehabilitation and aftercare programs, guided by Marlatt's Relapse Prevention Model and the Biopsychosocial Model of Addiction.

The discussion demonstrates that relapse among middle-aged married men in Kiambu County is multifactorial and systemic. Objective (a) established that psychological stress, low self-efficacy, and emotional distress are primary relapse predictors, aligning with the intrapsychic dimension of RPM. Objective (b) showed that family and spousal dynamics can either protect or endanger recovery, echoing RPM's interpersonal risk factors. Objective (c) revealed structural

gaps—insufficient aftercare, lack of family integration, and economic hardship—that weaken recovery systems, as explained by the Biopsychosocial Model. Objective (d) integrated these findings, illustrating a complex interplay among psychological, social, and structural variables that collectively determine relapse outcomes. Therefore, relapse prevention for this population must adopt a comprehensive, biopsychosocial-relapse prevention model, combining continuous counselling, family inclusion, economic empowerment, and institutional collaboration. Only through this integrated approach can rehabilitation centres in Kiambu County effectively reduce relapse rates and promote long-term sobriety among middle-aged married men.

### 5.3 Conclusion

The study concludes that relapse prevention is an ongoing, community-anchored process requiring sustained psychological resilience, social reform, and structural investment. For middle-aged married men in Kiambu County, sobriety is best supported when families, institutions, and communities work synergistically to create an environment where recovery is not only possible but sustainable. In essence, the fight against alcohol relapse must evolve from treating addiction as an individual weakness to addressing it as a collective public health and social development challenge

### 5.4 Recommendations

Applying RPM to these findings, especially dissecting objectives (a) and (b) has an implication for rehabilitation practice. It underscored the need for rehabilitation programs to shift from treating relapse as a moral failure to understanding it as a predictable response to high-risk emotional and social contexts. In Kiambu County, relapse prevention strategies should therefore

focus on enhancing coping efficacy through cognitive-behavioural training, stress management, and problem-solving therapy.

Moreover, the integration of Mindfulness-Based Relapse Prevention (MBRP) (Witkiewitz et al., 2019) can help recovering individuals recognize emotional triggers without judgment, reframe cravings, and manage the abstinence violation effect. This approach aligns with participants' reports that emotional regulation remains their greatest challenge post-rehabilitation.

Finally, RPM's emphasis on ongoing coping skill reinforcement highlights the necessity of structured aftercare programs to sustain self-efficacy after discharge. The findings revealed that many men felt abandoned after rehabilitation, with one stating, "Rehab helps, but once you leave, there is no support." Without continued reinforcement of coping mechanisms, the cycle of relapse remains unbroken.

Using the BPSM to explore the findings targeted at achieving objective (c), established institutional gaps and biological implications. Although the present study indirectly examined biological markers, the qualitative evidence implies that weak structural systems exacerbate biological vulnerability to relapse. Lack of medical follow-up or pharmacological support (such as anti-craving medication) leaves recovering individuals physiologically unprotected against relapse triggers. According to BPSM, untreated biological dependency interacts with psychological stress to dysregulate the brain's reward circuits—making relapse more likely (Volkow et al., 2016).

Therefore, the absence of integrated medical and psychosocial support in Kiambu rehabilitation centres undermines holistic recovery. Engel's model advocates a systems-oriented

approach where biological treatment (detoxification, medication), psychological therapy (counselling, CBT), and social support (community integration, family involvement) operate in synergy. The findings from Kiambu County demonstrate that current rehabilitation systems address only part of this triad—primarily the psychological component—leaving structural and biological domains underdeveloped.

Moving towards a holistic structural reform requires centres to operationalize BPSM principles, rehabilitation programs in Kiambu County should implement continuum-of-care frameworks that integrate biological, psychological, and social services. This includes (1) Establishing structured aftercare programs with regular follow-up counselling and relapse monitoring, (2) Introducing vocational training and job placement initiatives to reduce economic vulnerability, (3) Providing psychoeducation for families to enhance social support and understanding, and (4) Integrating biomedical interventions such as pharmacotherapy for craving management. Such reforms would transform rehabilitation centres into multi-dimensional recovery ecosystems, consistent with Engel's vision of biopsychosocial health care.

Applying a blend of the two theoretical frameworks (in objective [d]) has implications for practice and policy. From a programmatic standpoint, these findings suggest that focusing solely on psychological interventions (e.g., counselling, CBT) is insufficient without structural reinforcement (e.g., follow-up, employment programs). Similarly, economic empowerment alone cannot prevent relapse if underlying emotional and cognitive vulnerabilities remain unaddressed.

Thus, an effective relapse prevention framework for middle-aged married men in Kiambu County must integrate (1) RPM-based coping training – building resilience, refusal skills, and emotional regulation (2) BPSM-guided systemic interventions – addressing family dynamics,

cultural norms, and socioeconomic reintegration (3) Continuous aftercare and community collaboration – linking rehabilitation centres with local health services, churches, and self-help groups for sustained monitoring and support.

Alcohol relapse among middle-aged married men should be vied systemically to avoid failure. This phenomenon reflects a systemic failure across three interrelated levels (1) Intrapersonal (psychological): stress, low self-efficacy, and emotional dysregulation, (2) Interpersonal (social): marital conflict, peer pressure, and unsupportive family dynamics, and (3) Institutional (structural): weak aftercare, economic hardship, and lack of community-based support systems. The interplay among these dimensions forms a relapse ecology that requires integrated interventions. Addressing only one aspect leads to temporary progress but long-term vulnerability. Therefore, a multi-level approach—combining psychological resilience training, family therapy, economic empowerment, and structural reform—is essential for sustainable recovery. This integrated interpretation supports Volkow et al. (2016) argument that addiction recovery must transcend individual therapy to encompass policy, community, and family systems. For the Kiambu context, this means developing culturally sensitive, family-centred, and economically supportive rehabilitation models that recognize recovery as a shared societal responsibility.

### 5.5 Suggestions for Future Research

While this study offers valuable insights into factors influencing alcohol relapse among middle-aged married men in Kiambu County, several areas warrant further exploration. Future research should compare relapse determinants between men and women to uncover gendered experiences and design gender-responsive interventions. Longitudinal studies are needed to monitor relapse trajectories and assess the long-term impact of aftercare programs. Incorporating

biological and neurocognitive data—such as biomarkers, neuroimaging, and genetics—could deepen understanding of how biological vulnerabilities interact with psychological and social factors. Additionally, policy implementation research should evaluate how national and county substance abuse policies translate into effective relapse prevention practices. Finally, community-based action research involving churches, self-help groups, and local NGOs could identify scalable, culturally relevant models for sustainable grassroots relapse prevention. Together, these future research directions would provide a more holistic understanding of addiction recovery and strengthen the design of context-specific interventions.

## REFERENCES


Bryman, A. (2021). Social research methods. Oxford University Press.

Chege, S., Okongo, M. O., & Ochwach, J. O. (2025). Mathematical Model of Alcoholism Incorporating Treatment: A Case Study in Kenya. Journal of Mathematics Instruction, Social Research and Opinion, 4(1), 73-90. https://doi.org/10.58421/misro.v4i1.316

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approach. SAGE.

Donovan, D. M., & Marlatt, G. A. (Eds.). (2007). Assessment of addictive behaviours. Guilford Press.

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. Science, 196(4286), 129-136. https://doi.org/10.1126/science.847460

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Githae, E. N. (2021). Perceived harmful criticism in family interactional patterns and relapse risk among recovering in-patients with alcohol use disorder in Kiambu County, Kenya. African Journal of Clinical Psychology, 2(2), 1-18. https://ir-library.ku.ac.ke/server/api/core/bitstreams/3e1e72f7-0770-405a-a35e-f9e16a1e762a/content

Giusto, A., Gitau, T., Mwaura, G., Muriithi, C., & Were, M. (2025). A socioecological examination of father alcohol use in Kenya: Motivation, consequences, and barriers to care. International Journal of Mental Health and Addiction. https://doi.org/10.1007/s11469-025-01087-3

Giusto, A., Mootz, J. J., Korir, M., Jaguga, F., Mellins, C. A., Wainberg, M. L., & Puffer, E. S. (2021a). When my children see their father is sober, they are happy: A qualitative exploration of family system impacts following men's engagement in an alcohol misuse intervention in peri-urban Kenya. SSM-Mental Health, 1, 100019.

Giusto, A., Mootz, J. J., Korir, M., Jaguga, F., Mellins, C. A., & Puffer, E. S. (2021b). Family support and alcohol recovery in Kenya. SSM-Mental Health, 1, 100019.

Hendershot, C. S., Witkiewitz, K., George, W. H., & Marlatt, G. A. (2011). Relapse prevention for addictive behaviors. Substance abuse treatment, prevention, and policy, 6(1), 17. https://doi.org/10.1186/1747-597X-6-17

Juma, E. M., Onsongo, L., & Mwenda, C. (2022). Socio-cultural determinants leading to alcohol and substance abuse among youths in Mombasa, Kenya. Kenyan Journal of Nursing & Midwifery, 6(2), 34-51. https://www.ajol.info/index.php/kjnm/article/view/225678

Kenyatta, S. N., & Githae, E. (2021). Exploring the role of spousal communication as a predictor of relapse among individuals in recovery from substance use disorders: Implications for treatment programs. African Journal of Alcohol & Drug Abuse, 5, 37-52. https://doi.org/10.82793/kxwjq831

Kiambu County Government. (2024). Alcoholic Drinks Control and Rehabilitation: Economic Classification and Budget Estimates 2024/2025 – 2026/2027. https://kiambu.go.ke/wp-content/uploads/2024/03/Alcohol-Control-Budget-2024.pdf

Kibera, T. S. W. (2024). Relationship between family resilience and relapse risk among discharged substance users attending Alcoholics Anonymous groups in Nairobi City County, Kenya. African Journal of Alcohol & Drug Abuse (AJADA), 10(1), 16-27. https://doi.org/10.82793/kxwjq831

Koech, B., & Kay, J. (2017). Preparedness to cope with alcohol relapse risks among alcoholics in selected rehabilitation centres in Nairobi, Kenya. Saudi Journal of Humanities and Social Sciences, 2(8), 716–723. https://doi.org/10.21276/sjhss

Litten, R. Z., Ryan, M. L., Falk, D. E., Reilly, M., Fertig, J. B., & Leggio, L. (2021). Heterogeneity of alcohol use disorder: Understanding mechanisms to advance personalized treatment. Alcohol Research: Current Reviews, 41(1), 12-24. https://doi.org/10.35946/arcr.v41.1.03

Macharia, M., Masaku, J., Kanyi, H., Araka, S., Okoyo, C., Were, V., & Njomo, D. (2022). Challenges, Opportunities, and Strategies for Addressing Drugs and Substance Abuse in Selected Counties in Kenya. East African Journal of Health and Science, 5(1), 163-177.

Maisto, S. A., & Connors, G. J. (2006). Relapse in the addictive behaviours: Integration and future directions. Clinical psychology review, 26(2), 229-231. https://doi.org/10.1016/j.cpr.2005.11.009

Marlatt, G. A., & Donovan, D. M. (Eds.). (2005). Relapse prevention: Maintenance strategies in the treatment of addictive behaviors (2nd edition.). Guilford Press.

Masinde, J. E., Onsongo, L., & Mwenda, C. (2021). Socio-cultural determinants leading to alcohol and substance abuse among youths in Mombasa, Kenya. Kenyan Journal of Nursing & Midwifery, 6(2). https://doi.org/10.53819/81018102t3027

Menon, J., & Kandasamy, A. (2018). Relapse prevention. Indian journal of psychiatry, 60(Suppl 4), S473-S478. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_36_18

Mkuu, R. S., Barry, A. E., Swahn, M. H., & Nafukho, F. (2019). Unrecorded alcohol in East Africa: A case study of Kenya. International Journal of Drug Policy, 63, 12-17. https://doi.org/10.1016/j.drugpo.2018.07.017

Morris, A. (2015). Documenting the effects of the media on alcohol consumption in central Kenya. https://krex.k-state.edu/items/3f9ae8b9-7a7b-4e54-a925-f9688cf606b8

NACADA. (2022). Alcohol and Drug Abuse Situation Report in Kenya. NACADA Press. https://nacada.go.ke/download/alcohol-and-drug-abuse-trends-report-2022/

Neuman, W. L. (2020). *Social research methods: Qualitative and quantitative approaches* (9th edition.). Pearson.

Odhiambo, J., & Makori, T. (2022). Effectiveness of treatment and rehabilitation programmes for drug and substance dependence in Mombasa County, Kenya. African Journal of Alcohol & Drug Abuse, 6, 45-61. https://www.nacada.go.ke/sites/default/files/2022-03/Effectiveness%20of%20Treatment%20and%20Rehabilitation%20Programs%20for%20Drug%20and%20Substance%20Dependence%20in%20Mombasa%20County%2C%20Kenya.pdf

Plano Clark, V. L., & Ivankova, N. V. (2018). Mixed methods research: A guide to the field. SAGE.

Ross, D. B., Gale, J., Wickrama, K. A. S., Goetz, J., & Vowels, M. (2019). The impact of family economic strain on work-family conflict, marital support, marital quality, and marital stability during the middle years. Journal of Personal Finance, 18(2), 9–24. https://doi.org/10.2139/ssrn.34504410

Sinha, R. (2018). Chronic stress, drug use, and vulnerability to addiction. Annals of the New York Academy of Sciences, 1141(1), 105-130. https://doi.org/10.1196/annals.1441.030

Smith, J. (2021). Cultural influences on alcohol use in Latin America. Journal of Substance Use Studies, 15(3), 210–225. https://doi.org/10.1234/jsus.2021.015

Tracy, S. J. (2019). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Wiley.

Volkow, N. D., Koob, G. F., & McLellan, A. T. (2016). Neurobiological advances from the brain disease model of addiction. New England Journal of Medicine, 374(4), 363–371. https://doi.org/10.1056/NEJMra1511480

Wade, D. T., & Halligan, P. W. (2017). The biopsychosocial model of illness: A model whose time has come. *Clinical Rehabilitation, 31*(8), 995–1004. https://doi.org/10.1177/0269215517692281

Wangensteen, T., & Hystad, J. (2022). A comprehensive approach to understanding substance use disorder and recovery: Former patients' experiences and reflections on the recovery

process four years after discharge from SUD treatment. Journal of psychosocial rehabilitation and mental health, 9(1), 45-54. https://doi.org/10.1007/s40737-021-00233-9

Wanjeri, P. R. (2022). The psychosocial effects of alcoholism on family well-being: A case of Mugoiri Ward, Murang'a County, Kenya [Doctoral dissertation, Daystar University]. Daystar University Institutional

Witkiewitz, K., Marlatt, G. A., & Walker, D. (2019). Mindfulness-based relapse prevention for alcohol and substance use disorders: A systematic review. Clinical Psychology Review, 50, 92-104. https://doi.org/10.1016/j.cpr.2019.04.002

World Health Organization (WHO). (2021). Global Status Report on Alcohol and Health. World Health Organization.

# APPENDICES

## Appendix 1: Structured Questionnaire

Instructions:

This questionnaire is confidential. Do not write your name.

Please tick one option unless stated otherwise.

Section 1: Demographic Information.

For Likert items, circle one number: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Section A: Demographic Information

1. Age: ☐ 40-49 ☐ 50-59 ☐Above 59

2. Marital status: ☐ Married ☐ Separated ☐ Widowed

3. Level of education: ☐ Primary ☐ Secondary ☐ College/University ☐ Other (specify): _____

4. Employment status: ☐ Employed ☐ Self-employed ☐ Unemployed

5. Length of rehabilitation stay: ____ months

☐ 1-6 ☐ 7-12 ☐ 13-18 ☐ 19-24

Section 2: Psychological Determinants (Likert scale: 1–5)

Circle one number for each statement.

6. I often feel emotional distress that makes me think about drinking alcohol.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

7. I experience strong cravings for alcohol.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

8. I believe I have the ability to resist alcohol even in high-risk situations.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Section 3: Social Determinants (Likert scale: 1–5)

Circle one number for each statement.

9. I receive emotional support from my spouse or family.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

10. I experience frequent marital conflict.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

11. My friends or peers encourage me to drink alcohol.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Section 4: Structural Determinants (Likert scale: 1–5)

Circle one number for each statement.

12. The rehabilitation centre provides enough follow-up support after discharge.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

13. I have access to counselling services tailored to my needs.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

14. Economic challenges make it hard for me to remain sober.

1, 2, 3, 4, 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Section 5: Relapse Patterns and Coping Strategies

15. Have you relapsed before? ☐ Yes ☐ No

16. If yes, what were the main triggers?

☐ Stress ☐ Economic hardship ☐Marital conflicts ☐Peer Pressure ☐ Lack of follow-up

17. What strategies have helped you remain sober?

☐ Family/Spousal Support ☐ Counselling ☐ Avoiding Triggers ☐Peer groups ☐ Faith practices

Thank you for your participation.

**Appendix 2: Focus Group Guide**

Focus Group Discussion A: For Representatives Recovering Individuals

What situations make it difficult for you to remain sober?

How does your family support or hinder your recovery?

How do friends and community influence your recovery journey?

What changes in rehabilitation would help prevent relapse?

What personal coping strategies have been most effective for you?

What challenges do you face after leaving the rehabilitation centre?

What role do employment and financial stability play in your recovery?

How do you handle social gatherings where alcohol is present?

Focus Group Discussion B: For Spouses of Recovering Individuals

How has your partner's alcohol use affected your family?

What support have you been able to give during recovery?

What challenges do you face in supporting sobriety?

How do you think rehabilitation services could involve families more?

How has your relationship changed since your partner entered rehabilitation?

Have you received any counselling or training to help you support your partner?

What kind of community or family support would be most helpful to you?

Focus Group Discussion C: For Rehabilitation Staff

What common factors contribute to relapse among middle-aged married men in this facility?

How do you address psychological challenges like stress and low self-efficacy in clients?

What social or family-related issues affect recovery?

How effective do you find the current rehabilitation interventions?

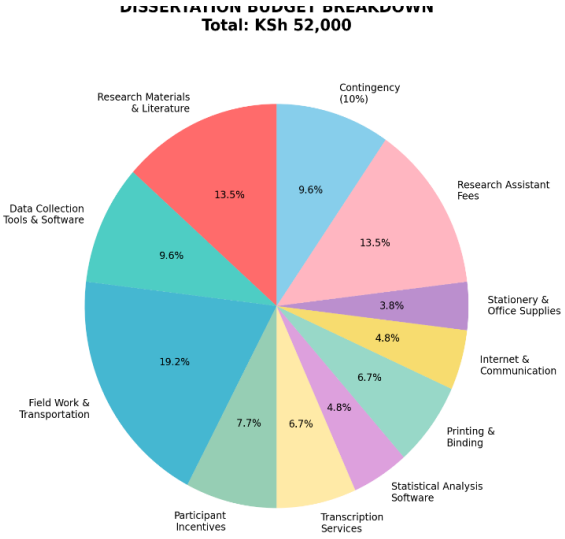
What improvements would you recommend?

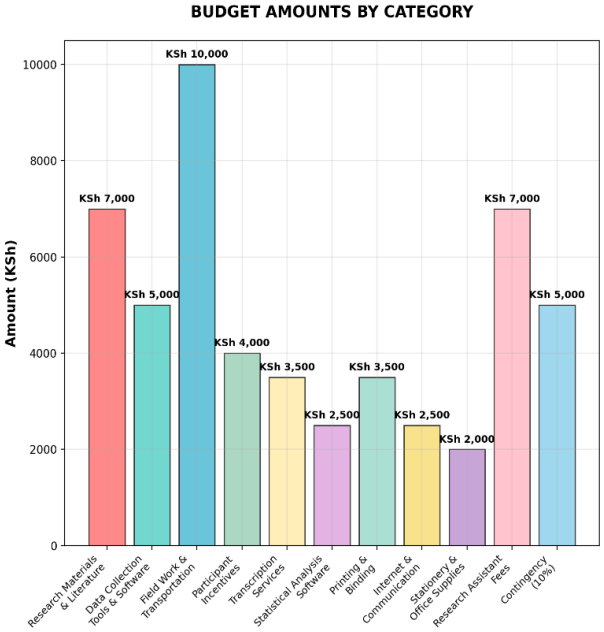
How do you involve families in the treatment process?

What follow-up or aftercare measures are in place, and how effective are they?

Are there any cultural or community-level factors that make recovery harder for clients?

# Appendix 3: Research Budget



**Appendix 4: Kiambu County Map**



## Appendix 5: NACOSTI Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 928409

Date of Issue: 03/October/2025

**RESEARCH LICENSE**



This is to Certify that Mr.. Harrison MWAURA Irungu of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: Determinants of Alcohol relapse among middle aged married men in Rehabilitation centres in Kiambu County, Kenya for the period ending : 03/October/2026.

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