RELATIONSHIP BETWEEN FAMILY EXPRESSED EMOTION AND RELAPSE OCCURENCE AMONG INPATIENT ALCOHOLICS IN NAIROBI COUNTY, KENYA

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DECLARATION

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

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DEDICATION

I dedicate this dissertation posthumously to my brother David, and to all other alcoholics and their families. Though they have been encumbered by the shadow of addiction, may their lives be a little easier. May they suffer less as they discover that together they can fight for their freedom from addiction.

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OPERATIONAL DEFINITION OF KEY CONCEPTS AND TERMS

Abstinence : Practice of staying away from drinking alcohol after treatment.

Adult : An individual 18 years and above.

Emotional Expression (EE): It is a measure of hostile, critical, or emotionally over-involved attitudes expressed by a close relative to an ill family member, in this case, the alcoholic.

Family : Nuclear Family

Family emotional climate: This is the collective and pervasive mood within the family of an alcoholic when it is focused on the alcoholism rather than on the relationships among the family members.

Illness/disorder: Refers to alcoholism

Lapse : The initial return to heavy drinking or the first episode that marks return to drinking.

Patient/ client : Refers to the alcoholic.

Prevalence : Readmission rate.

Rehabilitation : Also referred to as treatment.

Treatment center: Rehabilitation center

Relapse	:	Readmission due to return to heavy alcohol use after treatment

LIST OF ABBREVIATIONS AND ACRONYMS

A	Agreed
ANOVA	Analysis of Variance
AUDIT	Alcohol Use Disorders Identification Test
CFI	Camberwell Family Interview
D	Disagreed
DOC	Drug of Choice
DSM IV	Diagnostic and Statistical Manual of Mental Disorders, 4th Edition
EE	Emotional Expression
EOI	Emotional Over-involvement
FAS	Family Attitude Scale
IP	Identified Patient
NACADA	National Campaign Against Drug Abuse Authority
NCST	National Council for Science and Technology
NHS	National Health and Social Care
NIDA	National Institute on Drug Abuse
NSDUH	National Survey on Drug Use and Health
NTA	National Treatment Agency for Substance Misuse
OCD	Obsessive Compulsive Disorder
PCM	Perceived Criticism Measure
SA	Strongly Agreed
SD	Standard Deviation
SD	Strongly Disagreed
SPSS	Statistical Package for the Social Sciences
U	Undecided
VIF	Variance Inflation Factor
WHO	World Health Organization

ABSTRACT

Alcoholism is a family illness that requires treatment of the whole family, because recovery after rehabilitation seems mostly achievable when both the individual and their family are involved in relapse prevention. While studies have demonstrated that family plays an important role from diagnosis to treatment of alcoholism, few studies have focused on the interpersonal dynamics of family members which would maintain the alcoholic behaviours and lead to relapse. Such interpersonal dynamics would include the family emotional expression (EE) and how it may relate to relapse. In this study, the relationship between family EE (characterized by hostility, criticism and emotional over-involvement) and the occurrence of relapse in alcoholism was examined. The Family Systems Theory informed the current study in helping understand the complex dynamics of interactions of family members and how such interactions maintained maladaptive behaviours such as alcoholism. Samples were derived from populations of inpatient alcoholics (N=186) and their family members (N=135) in Nairobi County, Kenya. The instruments used in the study were the Alcohol Use Disorders Identification Test (AUDIT) to assess for alcoholism. The Family Member Attitude Scale (FMAS) and the Individual Attitude Perception Scale (IAPS) were used for assessing family EE. In addition, individual interview schedules were developed to assess how both the alcoholic and family members perceived family EE and how this may have contributed to relapse. Pearson correlations were used to test the relationship between the dependent variable (relapse) and the independent variables (hostility, criticism, and emotional over-involvement). Regression analyses were used to clarify the nature of the relationship of the variables, and to assess the statistical significance using the Statistical Package for the Social Sciences (SPSS). The study found out that EE was statistically significant at $p=0.000<0.05$ and had a predictive power of 34%. While hostility was found to have an inverse relationship with relapse ($\beta=-.133$), criticism was found to predict relapse at 28.2% and over-involvement at 47.1%. This could mean that EOI was the major EE predictor variable for relapse among recovering alcoholics. The EE/relapse association was also evidenced by interviews by the participants. It was concluded that high levels of family EE were a contributing factor to returning to heavy drinking after treatment of an alcoholic.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The development of relapse in alcohol addiction is dependent upon many factors, some found within the individual and others found within the social milieu in which the individual lives. Treatment of addictive disorders in the recent years has focused on relapse prevention as an important component in recovery from such addictions (Marlatt, Parks & Witkiewitz, 2002). Although some studies on relapse prevention focus on the individual factors (Witkiewitz & Marlatt, 2004), most studies have recognized that the social context in which the alcoholic lives is very significant to whether they remain abstinent from alcohol drinking or relapse after treatment (e.g. Copello, Velleman & Templeton, 2005; Saatcioglu, Erim & Cakmak, 2006). Proponents of the role of the social environment on relapse have revealed that the family context in which an alcoholic lives might be the main contributing factor to relapse (Saatcioglu et al., 2006). A supportive family is considered the strongest source of identity and social support among all contextual relationships (Beattie, 2001) and hence associated with better prognosis and successful reduction of drug use during treatment. Social support in alcoholic families is the encouragement provided by close members of the family to help in dealing with a problem such as alcoholism. Arguments for the role of family on alcohol abstinence maintenance or relapse have contributed to a high impetus in

expansion of the scope of effectiveness in alcohol treatment to include the alcohol-using individual's family (Copello et al., 2005).

Substance abuse and alcoholism are seen as symptoms of a dysfunctional family system, and hence the family is considered as part of the solution to the relapse problem without which the individual would relapse (Pierce, Frone, Russell, Cooper, & Mudar, 2000). There is strong evidence to support the effectiveness of family interventions in treatment of alcoholism, which demonstrates that family therapy for alcoholics is effective in improving overall family relationships and functioning, and which in turn improves overall substance use outcomes, engagement, and retention in therapy (Saatcioglu, et al., 2006). Family treatment also brings about marital satisfaction for alcoholics, improve communication, and improve positive couple functioning which in turn improve prognosis (Antoine, Christophe, & Nandrino, 2009). Family members' involvement in therapy has a great influence on the individual alcoholic's motivation to change and maintain abstinence (Templeton, Velleman, & Russell, 2010). While involved in a treatment program, family members are a rich source of information about the real life interactions and experiences of the addict that may have a contribution to effective treatment planning and relapse prevention (Saatcioglu, et al., 2006).

Although better outcomes and compliance for alcoholism treatment are seen as more effective when approached from the family intervention approach rather than treatment of the individual alcoholic, there is need to look more deeply at

interpersonal dynamics within the family that may enhance relapse. This is especially because despite the effectiveness of family therapy for alcoholic patients, the impression given in many parts of the world is that relapse rates in addiction are still very high and addictions have continued to plague many drug users. For instance the National Survey on Drug Use and Health (NSDUH, 2006) gives relapse rates at 50%-90% in America. And although reports on alcoholism in England and Africa in general are committed to giving a broad picture on health issues relating to alcohol, there is an underlying impression that relapse rates are still high in these areas. In Kenya the National Campaign Against Drug Abuse Authority (NACADA) has given the impression that relapse rates are very high, however it is more committed at providing statistics of areas dominated by drug use and the drug of choice (DOC) in such areas (NACADA 2011). Some available data for four outpatient rehabilitation programs in Kenya from 2007 to the first quarter of 2010 estimated the overall abstinence rates for three drugs: cannabis, alcohol, and heroine as 42%, while that for alcohol and cannabis alone was 46% of users (Deveau, Tengia, Mutua, Njoroge, Dajoh, & Singer, 2010). However, there are no reports on alcohol relapse on its own both regionally or in Kenya.

Perhaps the high relapse rates are due to factors within the family system itself that require to be investigated. There is evidence that some family interactions that appear to be supportive may, in fact, promote relapse (e.g.Orford, Velleman, Copello, Templeton, & Ibanga, 2010; Rotunda & O'Farrell, 1998), and that family members' attitudes toward the alcoholic member have a predictive value to relapse

(Saatcioglu, et al., 2006). Family members may use treatment methods that are counterproductive in their attempts to offer treatment for alcoholism, but such methods may oftenshield the addict from the negative consequences of his actions (Raitasalo & Holmila, 2005). Coping strategies such as pouring out drinks, persuasion, emotional pleading to change, ignoring him/her when drunk, nagging, threats to leave, drinking along with him/her, or indirect and manipulative approaches (Hunter-Reel, McCrady, & Hildebrandt, 2009) are referred to as codependent behaviours and have been found to increase drinking. Heavy drinking is associated with higher frequency of confrontation by family members, which may also serve to unintentionally or inadvertently reinforce or punish the drinking, providing consequences that increase or decrease the likelihood of future drinking episodes (Raitasalo & Holmila, 2005).

Another predictive aspect of family and relapse is that of the emotional state of the family. The emotional state of the family is described as being high in emotional expression or low in emotional expression. High Emotional Expression (EE), which is related to higher levels of relapse, is identified in the tone and content of a family member's communication (Hooley, 2007). In their review of EE, Rotunda and O'Farrell (1998) described the three family attitudes of hostility, criticism, and emotional over-involvement as precipitants for relapse in psychological disorders. That is, hostile family members blame the individual over the alcoholism and the negative effect it causes the family. They also make negative comments (criticism) toward the person, and become over-involved in the patient's condition as though

they are at fault or pity him too much about his/her condition. This view is supported by robust studies in this area (e.g. Renshaw, Blais, & Caska, 2010; Simmons, Chambless, & Gordon, 2008; Hooley, 2007). Such studies allude at the fact that the emotional state of family members is associated with significantly high relapse rates in patients.

High EE is a reaction by some key relatives living in close contact with the alcoholic and leads to relapse of the recovering patient. Earlier studies on alcoholic subjects by O'Farrell, Hooley, Fals-Stewart and Cutter (1998) had demonstrated that a relapse is more likely to occur to alcoholics with a family member with high EE. The predictive value of EE of family members on relapse has been significant in a series of replicated studies in other illnesses such as schizophrenia (e.g. Carlson, 2011), depression (Simmons, et al., 2008), obsessive-compulsive disorder, and agoraphobia (Chambless & Steketee, 1999), and mood disorders (Klaus & Fristad, 2005). All these studies demonstrate consistency of the EE/relapse association.

Decades of research in the area of psychiatric relapse have yielded general patterns of findings; that high emotional expression in families with psychiatric patients contributes to a relapse in such patients (e.g. Linszen, Dingemans, Nugter, Van der Does, Scholte, & Lenior, 1997; Hooley, 2007). These studies allude to the fact that families high in EE are likely to precipitate relapse in the recovering patient, while the families low in EE provide a better environment for nurturing recovery. Some

studies have suggested that it might not always be desirable for the alcoholic patients to return to the close emotional ties often existing with parents or a spouse after treatment due to the emotional state of the family (e.g. Hohman & Butt, 2001). Although these studies seem committed to demonstrate a relationship between the emotional state of family members and relapse, one wonders whether this consistency would be true in alcoholism studies.

While many studies demonstrate that attitudes of family members toward a patient are predictive of relapse, some studies have indicated a disparity in their findings. For instance among the many schizophrenic-relapse studies with schizophrenia, Azhar and Varma (1996) found virtual absence of high levels of EE among families of their Malaysian patients. Similarly, Lopez, Ramirez, Ullman, Kopelowicz, Jenkins, Breitborde, & Placenia, (2009) study among Mexican Americans did not support the EE/relapse association. On the other hand, many studies have demonstrated a relationship between family EE and relapse in alcoholism (e.g. Hooley, 2007). In his studies with alcoholic patients, Fichter et al (1997) demonstrated that one of the constructs of EE, that is over-involvement, did not support relapse of a recovering alcoholic. Again many studies done to demonstrate the relationship between EE and relapse have been done with Western populations. According to these studies, there appears to be a disparity among studies on the family EE-relapse association. A question remains whether or not families of recovering alcoholics are characterized by high EE, and whether family EE has a relationship with return to heavy drinking after treatment of alcoholism.

1.2 Statement of the Problem

While majority of studies done have provided support for the association between family expressed emotion (EE) and relapse, such information is however equivocal. Some findings have offered evidence at odds with proponents of the EE/relapse association (e.g. Azhar & Varma 1996; Fichter et al, 1997; Lopez et al., 2009). Furthermore, there is need for current information on relapse rates of treated alcoholics in Nairobi Kenya, which has the highest number of rehabilitation centers in the country compared to other regions. Whereas much study has been committed in confirming the EE/relapse association, these were done in the West, and none with African populations whose culture is different from the Western culture. Again, it is noteworthy that robust studies on the EE/relapse association have been done among psychiatric populations such as in depression and schizophrenia, while studies with alcoholic populations are very scanty and dated. This begs the question of whether or not EE predicts relapse after treatment for alcoholism. The central problem of the study was therefore to explore the association between family EE and relapse, as well as provide current data in relapse among treated alcoholics in Nairobi County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to elucidate the relationship between family EE and relapse of an alcoholic following treatment.

1.4 Objectives of the Study

This study aimed at exploring the relationship between family EE (characterized by hostility, criticism, and emotional over-involvement) and relapse of a readmitted alcoholic. The specific objectives were:

1. To find out the prevalence of relapse among alcoholics re-admitted in inpatient treatment centers in Nairobi County, Kenya.
2. To establish the relationship between hostility of family members and relapse of the re-admitted alcoholic.
3. To establish the relationship between criticism of family members and relapse of the re-admitted alcoholic.
4. To establish the relationship between over-involvement (EOI) of family members and relapse of the re-admitted alcoholic.
5. To find out possible after-care strategies for recovering alcoholics that would enhance relapse prevention.

1.5 Research Questions

The following were the questions that emerged from the objectives given above:

1. What is the prevalence of alcohol relapse among alcoholics re-admitted in inpatient treatment centers in Nairobi County, Kenya?

2. What is the relationship between family hostility and relapse of a re-admitted alcoholic?
3. What is the relationship between criticism of the family member and relapse of a re-admitted alcoholic?
4. What is the relationship between EOI of family members and relapse of a re-admitted alcoholic?
5. What after-care strategies would improve relapse prevention for treated alcoholics in Kenya?

1.6 Hypotheses

1. There is no significant relationship between family hostility and relapse of the alcoholic.
2. There is no significant relationship between criticism of the family member and relapse of the alcoholic.
3. There is no significant relationship between EOI of family members and relapse of the alcoholic.

1.7 Justification and Significance of the Study

It was important to carry out this study because many treated alcoholics end up relapsing and being re-admitted for rehabilitation, and perhaps there are more unknown factors within the family context that need to be investigated. Besides, the information given in the area of relapse is not conclusive; some findings are at odds with what the general literature proposes. Furthermore, studies on the role the

family EE on alcohol relapse prevention are scanty and dated, and none of these studies have been done with non-western populations such as Kenya.

This study added more current information in relapse rates in the country, as well as helping in the understanding of the role of the family EE on alcoholism relapse. The findings of the study will likely benefit mental health practitioners, especially addiction therapists, in considering different approaches of enhancing relapse prevention. For instance family therapy during rehabilitation should not focus on substance abuse of the addict alone, but should enable family members develop better interactional skills and patterns. Family members need to be involved more in rehabilitation because the whole family is ill and needs to spend time being rehabilitated just like the individual alcoholic. The study also added to the existing cross-cultural literature in the alcohol relapse question. Alcoholics themselves will better understand their role as family members, as well as that of their families in relapse prevention. NACADA and the Ministry of Health may benefit from this study in developing policies that are beneficial to the community. Society in general may benefit from this study because the health of the society begins from the family, hence the study may help society recognize its role in relapse prevention.

1.8 Scope and Limitations of the study

The study selected inpatient respondents in ten alcohol rehabilitation centers within Nairobi County. Due to lack of rehabilitation centers that deal purely with a

particular drug of abuse, the study included participants who combined alcohol with other drugs, but whose main drug of choice (DOC) was alcohol. Both male and female alcoholics were evaluated in the study. Some limitations were anticipated in the study. First, there was a small population of re-admitted alcoholics at any given inpatient rehabilitation center in the country. Therefore the study was carried out within a period of three months so as to increase the sample for the study. Secondly, most alcoholics had cross addictions and were using other drugs alongside alcohol. The researcher assessed for alcoholism using AUDIT and only used data for inpatients whose main DOC was alcohol at the analysis level.

1.9 Assumptions of the Study

This study assumed that

1. Relapse prevention was a core subject of majority of the alcohol rehabilitation centers.
2. Participants were honest in reporting their feelings and attitudes.
3. Research respondents had families; therefore individuals living alone were still part of a family or had family equivalents. That is, they had a close relative who was concerned about their drinking problem (spousal equivalents were regarded as close relatives).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The study aimed at investigating family emotional expression (EE) and its role in the occurrence of relapse for an alcoholic following treatment and re-admission. This chapter discussed the theoretical framework and literature related to family EE and relapse. The theory of focus was the Family Systems Theory (Minuchin, 1974), given its tenets on interpersonal dynamics seen in interactions of members of a system such as a family. Literature reviewed was based on the variables of the study, that is, the prevalence of alcoholism in Kenya, and the family emotional expression (EE) and how its major components related to the occurrence of relapse of a recovering alcoholic. Finally, the chapter captured the conceptual framework which is an illustration of how variables in the study were inter-related.

2.2 Theoretical Framework

The Family Systems Theory by Salvador Minuchin (1974) was used to inform the study in the understanding of alcoholism as a family illness by relating to how parts of the system interacted with each other to maintain dysfunctionality such as that represented by a family with a member who has a drinking problem.

2.2.1 Family Systems Theory (Minuchin, 1974)

The work of Minuchin (1974) though rather dated, is one of the most important contributions made to family therapy. The central concept of his theory is that the family can be viewed as a system. Minuchin drew upon ideas from general systems theory as developed in the 1940's and 1950's, a theory that was originally devised to describe and interpret physical systems. This was concerned with patterns and processes of communication in reference to regulation and control through the operation of feedback mechanisms (Nichols & Schwartz, 2006; Goldenberg & Goldenberg, 2000).

According to the family systems theory, the family is conceptualized as a dynamic system that changes over time and is interpretable only when its many multiple components (known as subsystems) are understood (Minuchin, 1974). Subsystems may consist of individuals, dual groups, triads or more (i.e. parents, sons and daughters, brothers and sisters, male subsystems, etc) which function together. According to the theory, the family as a system is more than the sum of its parts (Goldenberg & Goldenberg, 2000; Nichols & Schwartz, 2006). Families are composed of interdependent members whose interactions, dynamics, rules, boundaries, and patterns each contribute to family behavior. Individual family members affect the system as a whole, and the system affects individual members - there is a considerable degree of "circularity of influence" involved (Minuchin, 1974).

An effective part of the system has an effect on other parts, thus operating to cause reorganization of the system in a continuous manner (L'Abate, 1998; West, 2006). When applied to this study, this basic tenet implies that family interactions are likely to affect the course of alcoholism in their family member who is alcoholic. On the other hand the individual alcoholic member may affect the overall family functioning and behaviour as a result of their illness. For example, an alcoholic who utilizes family resources to maintain his alcoholic habit may anger other family members who may express their anger in a way that may trigger negative emotions, causing him to have a need to take a beer or two to numb the negative feelings. Such a circularity of events makes alcoholism a whole family and not an individual's illness.

Another basic tenet of the systems theory is that unmet needs in a family may lead to frustration as shown by symptomatic disturbance often perpetuated as a role by one member, known as the 'identified patient' or IP (Nichols & Schwartz, 2006). For example, if a parent withholds the needs for acceptance and appreciation from their child, this child may resort to acceptance seeking behaviours from peers and friends, who may in turn require him to conform to their drinking habits in order to fit in. Therefore the IP is the member of the family who represents the family by expressing problematic behaviours such as alcoholism, which shows disturbance within the family system on behalf of all the members of the family (Chan, 2003). It is upon this assumption within the systems theory that the present research will evaluate the alcoholic as an IP, or member of a system whose alcoholic behaviour

represents an illness in the whole family. The symptomatic disturbance, or alcoholism in the research, represents the frustration in the family members.

The tenets of the Family Systems theory that are used in this study are summarized in Figure 1.

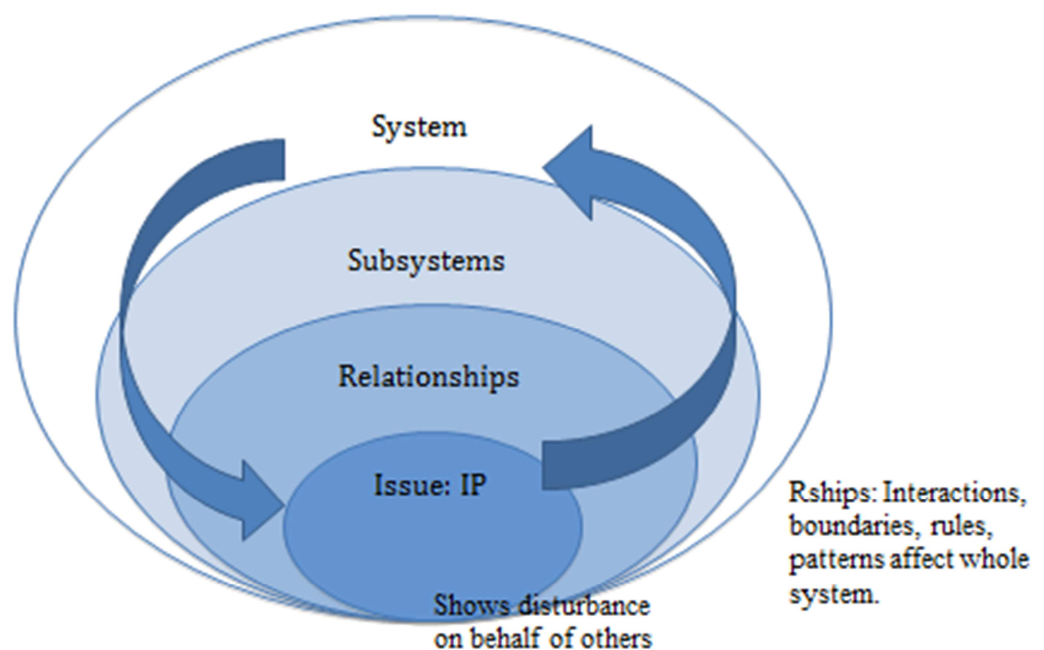

Figure 1. Summary of Concepts in Family Systems Theory

Family systems approaches argue that change, whether positive or negative is stressful and causes tension in the family. This is because change requires families to dedicate resources and energy to adapt and adjust to their new circumstances (Stanton, 2005). Borrowing from this argument, the study focuses on the alcoholic

who has undergone treatment. The family needs to adapt to the positive change that has occurred to the treated alcoholic during rehabilitation. In the event that such a family does not adapt to the positive change, the family members retain the earlier patterns that might have made him start drinking altogether and hence is likely to relapse. As such, dependency progresses as members of the family maintain earlier patterns of behaviour and attitudes (Chan, 2003). The study will focus on the family EE as an earlier pattern of behaviour in the family before rehabilitation, which if maintained may trigger relapse from a recovering alcoholic as suggested by the family systems theory.

In conclusion, the family systems theory formed the basis on which variables in the present research will be observed. Relapse in alcoholism takes place within the social context in which the individual lives. Members of a social network, such as family, may serve to bolster support by communicating their confidence in the drinker's ability to achieve and maintain abstinence. Alternatively, the family as the most important social network may unintentionally communicate lack of support to the abstinence goal through their attitudes (such as EE) and interpersonal dynamics within the family. Such dynamics and attitudes affect family members in a circular manner; that is a problem within a member of the family reverberates around the whole family. The basic tenets of the Family Systems Theory helped in the conceptualization of the relapse as a problem maintained by negative attitudes of family members living with an alcoholic, and therefore gave the framework upon which the research question was tested.

2.3 Review of Related Literature

This section discussed the findings of studies carried out on the main variables of the study and how such findings contributed to the understanding of the current study. The variables, drawn from the study objectives were relapse as the dependent variable and components of expressed emotion; that is criticism, hostility, and emotional over-involvement as the independent variables. The association between these variables formed the basis for argument in the literature review.

2.3.1 Prevalence of relapse

Relapse rates in addiction are high in many parts of the world and addictions have continued to plague many drug users. For example in America, prevalence of relapse in the general U.S. population was found to be 51.0% across all ages (Dawson, Goldstein, & Grant, 2007). Dawson and his colleagues (2007) did a study on adults 18 years and over in Maryland, USA, with individuals who met the Diagnostic and Statistical Manual fourth edition (DSM-IV) criteria of alcohol dependence with a focus on rates of relapse. Relapse was defined as recurrence of any alcohol use disorder symptoms and recurrence of Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) alcohol dependence. However, it is not clear from this study whether participants were treated for alcoholism or not, but it gives the general percentages.

An earlier retrospective study by Dawson, Grant, Stinson, Chou, Huang, Ruan (2005) on a nationally representative sample of adults 18 years and above at Bethesda USA had investigated the prevalence and correlates of recovery from alcohol dependence by examining the past-year status of individuals who met the DSM-IV criteria for alcohol dependence. Of the participants who met the criteria for dependence, 25.0% were still dependent in the past year; 27.3% were classified as being in partial remission; 11.8% were asymptomatic risk drinkers who demonstrated a pattern of drinking that put them at risk of relapse; 17.7% were low-risk drinkers; and 18.2% were abstainers. Only 25.5% of people with dependence ever received treatment. It is not clear what was the nature of treatment, whether inpatient or outpatient, and what percentage of the treated participants relapsed. Though the statistics are useful for comparison with other studies, rates of relapse of treated alcoholics from inpatient treatment centers are not yet known which would otherwise be comparable to the present study. The study demonstrated that there is a substantial level of recovery from alcohol dependence, but fails to tell whether this is with or without treatment.

Moos and Moos (2006) did a study in the Department of Veteran Affairs Health Services Research in the United States of America and found out that in treated samples, estimated long-term relapse rates varied between 20 and 80%, while short-term remission rates in the same samples were lower. They examined the rates and predictors of 3-year remission, and subsequent 16-year relapse, among initially untreated individuals with alcohol use disorders who did not obtain help or

who participated in treatment and/or Alcoholics Anonymous in the first year after recognizing their need for help (n = 461). When comparing individuals who obtained help from those who did not, those who obtained help achieved 3-year remission and subsequently were not likely to relapse. However, it is not clear from this study the nature of 'help' provided to the alcoholics.

The National Survey on Drug Use and Health (NSDUH, 2006) gave relapse rates at 50-90% in America, while the National Institute of Drug Abuse (NIDA, 2008) gave relapse rates of 41.4% of all admissions which involved alcohol use, and 40-60 % of drug addicted patients in America. These percentages for NIDA included all admissions in publicly funded substance abuse treatment programs, in which 23.1% were alcoholics. These statistics however do not give specific information on alcohol on its own but includes relapse for substances of abuse in general. Moreover, it is not known whether or not the substance abusers were involved in inpatient or outpatient treatment programs, if at all.

Reports on alcoholism in England, are committed to giving a broad picture on health issues relating to alcohol, such as the gender statistics on alcohol use, as well as effects on the body after extended alcohol use. One such report from the National Health and Social Care (NHS, 2009) classified 33% of men and 16% women in the general population as hazardous drinkers in 2007. Among adults aged 16 to 74, 9% of men and 4 % of women showed some signs of alcohol dependence in the general population. This report does not give the criterion used to classify alcohol dependence or abuse. Again, there are no relapse rates available that would offer

any comparison to the findings of the study. Majority of this data is committed to discuss the general prevalence of alcoholism in these countries with the majority populations while none gives the alcohol relapse rates of treated alcoholics in inpatient rehabilitation programs.

While there is no available data on relapse rates in China and India, available data on alcohol relapse in Africa in general is mainly on prevalence of drug use in different geographical regions. Report by National Campaign Against Drug Abuse Authority (NACADA, 2011) in Kenya are committed to presenting prevalence of alcohol in various parts of the country, but there are no reports available on relapse rates among individuals that have been treated of alcoholism. For instance, NACADA (2011) demonstrated that Central Province had the highest alcohol use rates (30 %) among the general population in the province. Community members reported that alcohol consumption in their areas was high and that chang'aa (a local brew) as well as traditional liquor were reported to be the most available and accessible types of alcohol (NACADA, 2011). Though the report indicated that dependency of alcohol consumption was higher in Central Kenya, the criterion for dependency was not provided for, and no relapse rates were given for the province.

In a study by Deveau, Tengia, Mutua, Njoroge, Dajoh & Singer (2010) in four outpatient rehabilitation programs in Kenya from 2007 to the first quarter of 2010, one sample estimated the overall abstinence rates for three drugs: cannabis, alcohol, and heroine was estimated at 42%, while that for alcohol and cannabis alone was 46% of users. A second sample provided information about clients who attended an

inpatient treatment services in addition to outpatient treatment. One of the four rehabilitation programs used for the study had the highest overall abstinence rate at 48% and highest abstinence rate among heroin users at 49%. Though the data provides information on relapse of the combined effect of main drugs used in Kenya, there is no known source of data for relapse rates for alcohol alone in the country. To add to the current literature on relapse in Kenya, the present study hopes to elucidate the prevalence rates in the country, more so on alcoholics who relapse and are re-admitted in rehabilitation programs.

2.3.2 Expressed Emotion (Hostility, Criticism and Emotional Over-involvement) and Relapse

Research has clearly outlined differences between families of alcoholics, which are regarded as dysfunctional, with healthier or functional families. In majority of alcoholic families, members have demonstrated interpersonal dynamics characterized by higher levels of negativity, conflict, criticism, estrangement and poorer communication (Copello et al., 2005). Expressed emotion (EE) can be viewed as one of the interactional processes within a dysfunctional family, and is depicted by the interpersonal dynamics within families of alcoholics. These family dynamics have demonstrated a predictable occurrence in the course of alcoholism. EE refers to criticism, hostility and emotional over-involvement (EOI) displayed by family members toward a patient (Carlson, 2011; Hooley, 2007).

Hostility is one of the components of EE that is shown by relatives that are more likely to attribute the patient's negative behaviours to internal and controllable factors such as the patient's personality. They are also more likely than other relatives to hold patients responsible for their difficulties. Criticism on the other hand involves expressing disapproval of another person and is treated as negative in nature (Simmons et al., 2008). Critical remarks are those that, explicitly or implicitly, reflect dislike or disapproval of something that the patient does. More extreme remarks that criticize the patient for who he or she is rather his or her specific behaviours are also rated as denoting hostility (e.g. he is just a messy drunkard). In sharp contrast, emotional over-involvement (EOI) reflects responses that are dramatic, overprotective, over-concerned, devoted, and self-sacrificing to the patient's illness that is out of proportion to the circumstances (Hooley & Gotlib, 2000).

EE is a measure of the extent to which a family member of a psychiatric patient talks about that patient in a critical or hostile manner and in a way that indicates marked over-involvement or over concern. It is a characteristic of family members and not necessarily of the patients themselves. EE has been associated with poor outcome and relapse in a variety of psychopathologies (Hooley, 2007). Though the EE concept originated with schizophrenia research, it has been extended to other studies such as depression, eating disorders, anxiety and studies in children with hyperactivity disorder (Klaus & Fristad, 2005). Patients discharged to homes with high EE after psychiatric treatment demonstrate an average relapse rate of 48%

compared to those with low EE (Carlson, 2011). However, these findings represent populations with psychiatric illnesses and a question remains as to whether or not this would predict the relationship between EE and alcoholism. Hooley (2007) suggested that high EE relatives may be individuals who attempt to cope by trying to exert control over what may be uncontrollable behaviour by the patient. This leads to the high levels of hostility, criticism and negative emotion reflected by EE.

2.3.3 Hostility and Relapse

Hostility, which has been viewed as one of the components of EE, is described as having cognitive, affective and behavioural aspects in relation to other people (Smith, 1994). The cognitive aspects of hostility include negative beliefs about others, such as cynical attitudes and suspiciousness. Affective components include anger, negative feelings such as disgust and contempt. Behaviourally hostility involves the expression of anger, resentment, irritability, assault, and antagonism.

More extreme remarks that criticize the patient for who he or she is rather his or her specific behaviours are rated as denoting hostility (e.g. he is just a messy drunkard).

Though hostility has not been studied as a single unidirectional concept, it should be viewed in connection with other family EE variables such as criticism and emotional over-involvement (EOI). Studies done on hostility combine its role with criticism and EOI as factors predicting EE (e.g. Simmons, Chambless & Gordon,

2008; Blais et al., 2012; Hooley & Gotlib, 2000). However, it is possible to extrapolate from such studies the role of hostility on relationships.

In a description of relationship dynamics common in families struggling with alcoholism in America, Rotunda and O'Farrell, (1998) provided an argument for understanding spousal manifestations of the hostility component of EE. They demonstrated that underlying the hostile attitudes of expressed emotion is negativity toward the person with the problem because the family members put blame on this person because of the disorder. The family perceives the person as the one who is in control of the course of the illness. They feel that the family member is being selfish by choosing not to get better (Rotunda & O'Farrell, 1998). The patient is held accountable for any kind of negative incident that occurs within the family and is constantly blamed for the problems of the family. Hostile relatives are more likely to attribute the patient's negative behaviours to internal and controllable factors such as the patient's personality (Hooley, 2007). They are also more likely than other relatives to hold patients responsible for their difficulties.

This argument by Rotunda and O'Farrell (1998) resonates with Simmons and his colleagues (2008), who posited that hostile family members believe that the ill family member is freely engaging in behaviour that is antagonistic to them, which negatively affects their relationship with him/her. Such relatives view themselves as victims of the patient (in this case alcoholic) negative and harmful choices (Simmons et al., 2008). The relatives therefore use pronouns that attribute the patient's disorder to his/her own internal factors, and use expressions that seem to

blame him for his negative behavioural choices. Using 98 outpatient participants with obsessive compulsive disorder (OCD) they demonstrated that the words used by hostile family members depicted how the patient was negatively affecting them due to his wrong choices, which showed blame for his choices. Such a family was seen as more conflictual and felt that the individual was responsible for causing the family so much trouble. However, this study was done among individuals with OCD and does not tell us whether the compulsions were part of the characteristics of dependence in alcoholism. Alcoholic compulsions would hence need to be investigated further to be able to generalize the findings of the study.

Blais and his colleagues (2012) seem to support the view that hostility is generally predictive of poorer relationship quality and more conflictual relationships. They studied 261 undergraduate students at an American University using the Quality of Relationship Index (QRI) to assess relationship satisfaction. Consistent with their hypothesis, they found out that when relationships were characterized with hostility, the individuals rated the relationship as higher in conflict and lower in support (Blais et al., 2012). Conversely, people who had no hostility in their relationships viewed the relationship as supportive and they were more likely to seek out these relationships for support. However, the study was done among non-clinical populations and hence may not be generalized to alcoholic populations. Notwithstanding, the study was able to show the role of hostility in relationships and gave a general idea about the negative role of hostility in relationships.

Relatives who are characterized by hostile interactional patterns make emotional responses to the patients that are linked to how they understand and interpret events involving the patient (Hooley & Gotlib 2000). For example, the family members have a tendency to blame the patient and view him as responsible for the family member's problems and life difficulties. In view of the Family Systems' Theory such family members would view the alcoholic as the cause of all the problems that the family has been suffering. The family members hold the alcoholic accountable for any kind of negative incident that occurs among them. For instance they are likely to blame him for money problems by associating it with his drinking behaviour. Such an interpretation tends to intensify the drinking behaviours, which was instead supposed to reduce within the course of treatment (Saatcioglu et al.,, 2006). Earlier studies demonstrated that such an attitude leads the family to have poor problem solving skills because they view the answer to their problem as only capable of being settled if the problem is settled (Brewin, MacCarthy, Duda & Vaughn, 1991).

In the family systems theory families see the solution to their problem to be within the individual who has refused to change their negative behaviour/s (Saatcioglu et al., 2006). The family hence puts the pressure to change on the family member as a solution to their problem. They may even confront the individual with the drinking problem and request that he seeks services to help him change the behaviour. This kind of pressure is sometimes counterproductive (Rotunda & O'Farrell (1998), and may undermine the alcoholic's efforts to try maintain his abstinence goal.

Pugovkina, & Popinako (2014) studied 32 alcohol dependent and depressed patients at the Moscow Research institute of Psychiatry in Russia. The analysis of means indicated greater expression of hostility in subjects who have an inclination for alcohol abuse than those who were not. As hypothesized by Pugovkina and Popinako (2014) found out that depressed patients who are subject to alcohol dependence feature marked distress in interpersonal relations, coupled with hostility, and aim at gaining profit and pleasure by manipulating other people. These patients were hostile to others and manipulated interpersonal relationships so as to gain profit and pleasure by manipulating other people. These patients also seemed to think more about their personal safety more than that of the others close to them. Alcoholism can be caused by a combination of traits of hostility such as those manifested as lack of socially positive attitudes and negative judgments about ongoing events within the family (Pugovkina, & Popinako, 2014). That is the alcoholic individuals were seen as judging family events more negatively and used this kind of manipulation for their own personal safety. However, the study examined patients with a cormobidity of alcoholism and depression. The study also failed to show whether relapse in alcoholism was more likely to happen among such hostile subjects.

McCormick and Smith (1995) studied the relationship between aggression and hostility in substance abusers with abuse patterns, coping style, and relapse triggers. The study was done among 3367 substance abusers (mean 39.4 years) seeking outpatient treatment. The subjects were given measures of aggression and

hostility to examine the relationship between their patterns of substance abuse, coping styles and relapse triggers. The participants scored significantly higher on all measures of hostility and aggression, regardless of the substance of abuse. The findings also demonstrated that higher hostility and aggression were reported more in situations that triggered their use of substances. The subjects had less confidence that they could resist using substances when faced with such situations in future, even after treatment had taken place. This was particularly true for situations involving unpleasant internal states, situations involving rejection, and situations involving conflict with family or friends. This study resonates with Simmons, Chambless and Gordon (2008) who argued that hostility was interpreted as likely to bring about conflictual relationships among family members.

2.3.4 Criticism and Relapse

Criticism is the component of expressed emotion (EE) that involves expressing disapproval of the patient and is treated as negative in nature (Simmons et al., 2008). Critical remarks are those that, explicitly or implicitly, reflect dislike or disapproval of something that the patient does. Kwon, Lee, Lee, & Bifulco, 2006 studied perceived criticism among 27 South Korean married couples in a university hospital and how their interaction resulted to relapse in unipolar depression. They demonstrated that perceived criticism by a partner was a powerful predictor of depressive relapse. Using 27 married female outpatients, the study found out that there was a significant relationship between depression and relapse among the

couples, which also reflected negative characteristics of the marital relationship as well as the depressed person's high dependence on the relationship. In other words, when a spouse was criticized by the partner, they were more likely to relapse and also became dependent to the person giving the criticism (Kwon et al., 2006). However, the study was done among depressive subjects and the number under study was too small to make a significant contribution that can be generalized to an alcoholic population.

In a study on the role of perceived criticism on relapse among married or cohabiting substance-abusing patients in America, Fals-Stewart (2001) found that criticism was likely to have a positive relationship with relapse. This study investigated the contribution of perceived criticism to the prediction of relapse among married or cohabiting heterosexual male substance abusing patients (n=106) entering outpatient treatment. Higher levels of perceived criticism by spouses were significantly associated with greater likelihood of relapse and a shorter time to relapse. Most of the subjects relapsed within three months of treatment for alcoholism. However, the study was done among outpatient subjects and though the findings can be used to understand some aspects of the population generally abusing drugs, it may not be generalized among alcoholics undergoing inpatient treatment.

The relationship between criticism and relapse further is supported by robust studies in this area such as Blais and Renshaw (2012) who studied how perceptions of hostile criticism result in conflicting relationships among friends. In their studies

with undergraduate participants at a large American University (N-=261), they demonstrated that perceptions of hostile criticism were positively correlated with conflict in friendships and resulted in poor relationship quality. That is when people perceived greater hostile criticism from their friends; they rated friendships as higher in conflict and lower in support. Conversely, when people perceived greater warmth from a friend, their relationship was perceived as more supportive. Specifically, individuals who perceive greater criticism from others individual tended to rate their relationship quality with that person as poorer than individuals who perceive lower criticism. Though, a youthful population was used in this study, the study is useful in outlining the positive association between relationship satisfaction and perceptions of warmth as may happen in other close relationships such as in a family. However, the population in this study was dominantly White (80.5%), whereas others were minority groups in America such as Asian (9.6%) and Asian American (5.7%). None of these studies were done with African populations and the results are therefore not generalizable to an African cultural context.

The ideas on the positive association between criticism and relapse were earlier supported by Fals-Stewart, O'Farrell, and Hooley (2001) who studied perceived criticism in families of substance abusers. They demonstrated a significant association between perceived criticism from a close relative and relapse of the alcoholic family member. They noticed a greater likelihood of relapse after outpatient treatment among male heterosexual substance abusing patients in an

American psychiatric unit. Though perceived criticism made a significant contribution to relapse of patients perceived to be in high EE families (67%), this study focused on general substance abuse and not on alcohol abuse on its own.

Support of evidence of criticism in families with a member with a psychiatric illness is a common theme in many studies. According to Simmons, and colleagues (2008) criticism involved both the content of the remark and the changes in voice tone that occur when the relative is speaking about the patient. In their study on how EE families view relationships, they used patients with anxiety disorders to demonstrate that majority of families of individuals with psychiatric disorders showed presence of high EE (86%). They studied 98 outpatients with various psychiatric illnesses such as obsessive-compulsive disorder and panic disorder with agoraphobia at the American University in Washington DC whose families were willing to participate in the study. They demonstrated that relatives with high in criticism and hostility blamed the patient for his disorder more than relatives low in criticism and hostility. Again, this study was done with a predominantly White American population and one cannot assume that the same findings would be expected in a non-White, non-American population.

Relatives found to have high EE wee high in criticism and showed more disapproval in situations in which the patient is was seen as violating family norms and appropriate social behaviour such as refusing to offer assistance with family duties (Hooley & Gotlib, 2000). Hooley and Gotlib also criticized the personality characteristics of the patient and remained so even after treatment. That is, no

wonder how well or poorly the patient was doing, they received critical remarks from the family members which created negative affect. Perceived criticism is interpreted as a threat to being rejected (Hooley & Teasdale, 1989) and is a powerful predictor of relapse (Hooley & Gotlib, 2000). This is because the criticized individual focuses on negative stimuli and is likely to have negative affect, which might trigger a need to use more mood altering substances, seeking for a positive feeling. This is likely to cause more possibility of relapse if criticism continues after the individual has undergone treatment from alcoholism.

This argument seems to resonate with Muskin (1994), who studied 32 patients from psychiatric clinics in Cairo and Ismailia, Egypt. The subjects had fulfilled the Diagnostic Statistical Manual criteria for major depression and alcoholism. Results showed that patient with the perception of family criticism were more likely to relapse than those who did not perceive criticism from the family members. All patients were followed up after 9 months to assess relapse and compliance to treatment and found the relation of family criticism and relapse to be statistically significant at a score of 70%, which was found higher than western studies. Though this study was done with an African population and may help reflect on the relapse question in the African context, it has not showed how treatment was done for the alcoholics and it is also dated.

2.3.5 Emotional Over-involvement and Relapse

EOI has been seen to predict and maintain relapse in psychopathology (Hooley, 2007). The EOI component describes relatives who have enmeshed relationships with patients (Rotunda & O'Farrell, 1998). Minuchin (1974) called this concept enmeshment; that is tightly interconnected relationships (e.g. I don't seem to do any work without thinking about him). He described such families as too involved with each other to have clear lines of authority, and so entangled that leadership roles are diffuse in such families. Such enmeshment makes them overreact, give excessive concern to each other, and become intrusively involved with one another. Such family members over identify and attend more to the alcoholic family member than their own problems and have an increased sense of shared identity with him or her. Enmeshed families avoid conflict by denying differences within the members or by constant bickering, which allows them to vent feelings without pressing for change or resolving issues (Nichols & Shwartz, 2006; Goldenberg & Goldenberg, 2013).

Studies linked to EOI as an EE component have shown that an over involved relative becomes so overbearing that the patient can no longer live with this kind of stress from pity, and falls back into their illness as a way to cope (Lopez et al, 2009). EOI has also been linked to relatives' verbally intrusive behaviour and emotionally exaggerated responses during patient- relative interactions which may result in relapse (Simmons et al., 2008; Hooley & Gotlib, 2000). Hooley & Gotlib (2000) used the term codependent to refer to EOI, which is a domineering role in

the family characterized by enabling or rescuing. The codependent theory suggests that the most significant family member has behaviours which are viewed as being as dysfunctional as those of the alcoholics themselves, although it is acknowledged that these are coping mechanisms (Rotunda & O'Farrell, 1998). Codependency exposes the criticism and emotional over-involvement in families struggling with alcoholism and depicts the codependent as a family member who alternates between persecutor of alcoholic behaviours and sympathetic rescuer and caretaker. The codependent's emotional reactions and attitudes have varying intensities of guilt, fear, anxiety, anger, frustration, depression, and alienation. All these eventually wear down the alcoholic's tolerance, resulting in manifestations of high EE, which have implications for relapse (Saatcioglu et al., 2006).

In a study on how hostile and emotionally over-involved families viewed relationships, Simmons and his colleagues, (2008) found that relatives high in emotional over-involvement (EOI), 76% were linked to over identifying with the patients and lacked conventional boundaries as indicated by their intrusive and emotionally exaggerated behaviour (Simmons et al., 2008). The study had been done among 98 outpatients with OCD and agoraphobia in Belmont, Massachusetts. Though the study did not show the EE-relapse association, it is notable that all relatives with high EE showed criticism and hostility during discussions about the psychiatric illness of their family member and majority of the families showed evidence of presence of EOI. The question here remains as to whether or not

families of alcoholics are characterized by high EE or not, and how this is likely to influence relapse of the recovering alcoholic.

However, some studies are at odds with EOI-relapse association, thereby showing inconsistency with the role of EOI in causing relapse. For example, a study by Fichter and his colleagues (1997) demonstrated that EOI was associated with better outcome. The study reported that EOI occurred infrequently and had little predictive power in alcohol relapse. Contrary to predictions, emotional over-involvement (EOI), an example of the so-called codependent behaviour (Rotunda & O'Farrell, 1998), of the nonalcoholic partner was reported infrequently, and was not related to relapse. Fichter and his colleagues (1997) examined 100 male and female alcoholics aged between 20-60 years in a12 week inpatient treatment program at Munich Germany. All the alcoholics and their relatives were assessed with an interview to confirm diagnosis of alcohol addiction; 42% were female. Using the Camberwell Family Interview (CFI), the main components of EE were investigated as critical comments, hostility, emotional over-involvement, and warmth. Critical comments had a predictive value for the drinking status after six-month follow-up, that is, a higher number of critical comments were associated with a less favourable outcome. Few relatives showed hostility toward the patient. There was no relationship between hostility and drinking behaviour after six months follow up. Contrary to what was expected, emotional over-involvement and drinking status had a positive association: high EOI was associated with more abstinence. Seventy-seven percent of the family members were classified as high in

EE because they made critical comments on their addicted family member in combination with other components of hostility and EOI. However, the number of critical comments was the most frequent reason for grouping a relative as high in EE, and not EOI. According to the results, high EOI was associated with less rather than more relapse. This finding is a clear contraindication to operationalizing EE as a combination of critical comments, hostility and EOI. The benefits of EOI in sustaining abstinence among recovering alcoholics merits mention.

A review by Hooley and Gotlib (2000) to help understand the EE concept supported the presence of EOI as a supportive factor for patients with borderline personality disorder. However they argued for the EE-relapse association in other psychopathologies such as schizophrenia and depression. They had a general observation that interactions with family members with high EE caused reactions similar to stressful reactions in the sympathetic nervous system such as high release of cortisol and other neurotransmitters (Hooley & Gotlib, 2000). Such individuals become anxious and stressed when interacting with their family members which may result to negative emotions that might precipitate a relapse (pg137).

When an alcoholic is stressed up or anxious, they seek to numb the discomfort created by these emotions, and may result to alcohol for this relief. Families with more supportive and positive statements –or low EE- were argued to demonstrate a protective factor to relapse (Hooley & Gotlib, 2000). Such families were also more flexible, tolerant, and empathized more with their sick family member. Thus low EE is not just the absence of negative attitudes or absence of stress, but may

actually be indicative of a real positive environment. During treatment, members of the family who learnt to practice low EE helped in improvement of the general functioning of their sick family member. Though this review by Hooley and Gotlib (2000) elucidates the conceptualization of EOI and clinical outcome in psychiatric illnesses, their ideas need examination in alcoholic population outcomes before comparisons can be drawn from the different populations. More research is required with alcoholic families to integrate findings of the impact of EE on recovering alcoholics.

Another view of EOI is given by Kumar and Tiwari (2008), who saw the components of EE as interrelated and one may lead to development of the other. EOI was debated as having a likelihood of causing hostility. Literature on family and psychopathology shows that overprotection "momism" is predictive of psychopathology in children (Kumar & Tiwari, 2008). Maternal overprotection involves smothering of the child's growth, by being too caring and denying the child autonomy. According to Kumar and Tiwari (2008) an overprotective mother may keep watch of the children constantly, protect them from the slightest risk, and take decisions on their behalf on the slightest opportunity. Such a mother makes decisions for the children and makes up her mind on the choices that the children ought to make. Such children are denied the much needed opportunity for reality testing and development of essential competencies. There is little autonomy and freedom for growing their own way, which may nurture dependency and repressed hostility.

Many other studies discuss the combined effect of EE components in relation to substance abuse. For example in a study in Australia, Pourmand, Kavanagh, & Vaughan, (2005), observed sixty inpatients with a DSM-IV psychosis and substance use disorder. The patients underwent assessment to diagnose for substance abuse and family members were interviewed using the Camberwell Family Interview. Sixty-two percent of family members were reported as having high EE and patients within these families had relapsed within a 9 month period after treatment. EE was confirmed to be a common and important risk factor for people with substance abuse as well as other psychopathologies. This view resonates with Carlson (2011) who looked at communication deviance, expressed emotion and family cohesion in schizophrenia. Expressed emotion and family cohesion were found to be related to increase of psychiatric symptoms among 81 families undergoing family therapy in an American city. Carson argued that it was perhaps due to double-bind communication that patients relapsed. Though Pourmand and his colleagues, 2005) agree with the notion that communication problems among family members cause relapse, their study among an Australian population with cormobidity for psychosis with substances of abuse cannot be generalized for alcoholism.

In as far as the present study is concerned, it is the work by Fichter et al, 1997 (earlier discussed) and O'Farrell, Hooley, Fals-Stewart, and Cutter (1998) that have demonstrated the view supporting the EE-relapse association in alcoholism. O'Farrell, and his colleagues (1998) observed consistency in the association after

client symptom variables were taken into account. Using the Camberwell Family Interview to test for EE among 86 alcoholic outpatients (78 men, 8 women) in a behavioural marital therapy program in America, they observed that when alcoholic patients with high EE spouses were compared with their counterparts with low EE spouses, they were reported as having a greater percentage of days in the 12 months after starting the treatment. The content of the interview focused on the onset and development of the client's most recent drinking episode and the impact of this episode on the intrafamilial environment during the 3 months before admission to the alcoholic treatment program. Alcoholics with high EE spouses when compared with their counterparts with low EE spouses were more likely to relapse. These results provide a strong support for the EE-relapse association. However, the population studied was western American and cannot be generalized in an African context. Moreover, the studies are dated and it would be important to find out the current scenario in as far as EE-relapse in alcoholism is concerned.

Atadokht, Hajloo, Karimi, and Narimani (2014) used a descriptive correlation method to study the role of family expressed emotion and perceived social support in predicting addiction relapse. The study population consisted of individuals referred to addiction treatment centers in Ardabil City (Iran) between 2013 and 2014. Eighty subjects with emotional and cognitive problems were randomly selected. They had been married for at least five years and were also addicted to one or more substances. This study demonstrated that there was a significant positive relationship between frequency of relapse and expressed emotion

(p=<0.05), but the relationship between the frequency of relapse and the treatment used was not significant. It was clear from the study that negative relationships predicted frequency of relapse after treatment from drug abuse. The predictability of relapse frequency was based on EE and showed significance of p=<0.01 as a predictive variable to relapse at 21%. The study is recent and can be generalized to populations with problems in substance abuse. However, the study was on general use of substances of addiction and it is not possible to extrapolate the findings to the alcoholic populations. Again, the study does not evaluate the components of EE as separate variables each with a statistical effect on relapse. Another major limitation of this study was that the samples were selected only from male participants.

2.4 Summary of Literature Review and Research Gaps

In sum, the reviewed literature indicated that development, maintenance, or treatment of alcohol use disorders develops within the family system. That is, as the individual alcoholic maintains contact with significant family members such as parents, brothers and sisters, attitudes are likely to emerge that may maintain alcoholism. Such attitudes include the EE factors of hostility, criticism, and over-involvement. Families characterized by high EE have an interactional pattern that is dysfunctional and that enhance progression of the alcoholic disorder. In such families, expressions of emotional warmth and a "love conquers all problems" mentality are often counterbalanced with criticism and hostility "he's a no good

drunk" attitude, and may comprise a classic double-bind for the alcoholic abuser (Rotunda & O'Farrell, 1998). The reviewed literature has elucidated the relapse-EE association.

However, there are gaps within the reviewed studies which demand more examination of the EE variable and it effect on alcoholism. While majority of the reviewed studies have confirmed a positive relationship between relapse and expressed emotion, (Hooley, 2007; Simmons et al., 2008; Fichter et al, 1997; and O'Farrell, Hooley, Fals-Stewart, & Cutter 1998; Pourmand, Kavanagh, & Vaughan, 2005; Atadokht, et al., 2014) a few others were at odds with the relapse-EE association (e.g. Azhar & Varma 1996; Lopez et al, 2009). Again even among the studies that confirmed the EE-relapse association, there was no agreement among the researchers on which among the EE variables predicted relapse (e.g. Fichter et al, 1997; McCormick and Smith (1995; Kwon, et al., 2006; Fals-Stewart, 2001).

Another concern was that the focus of majority of these studies was to represent relapse and EE among patients with other psychiatric disorders, such as panic disorder with agoraphobia (Simmons, et al., (2008), depression (Kwon, Lee, Lee, & Bifulco, 2006), borderline personality disorder, (Hooley & Gotlib, (2000), eating disorders, and schizophrenia (Carlson, 2011). It also appears that the few studies which would be extrapolated for the association between relapse in alcoholism and EE were scanty and those available have discussed general substance abuse (e.g. Pourmand, Kavanagh, & Vaughan, 2005; McCormick & Smith, 1995; NSDUH, 2006; NIDA, 2008) and not necessarily alcoholism. Again, the few studies done

with substance abuse relapse have focused on populations with cormobidities such as psychosis and substance abuse (e.g. Pourmand, Kavanagh, & Vaughan, 2005; Muskin, 1994) and on depression and alcoholism (Pugovkina, & Popinako (2014) and therefore cannot be generalized. As far as this study is concerned, only Fichter and his colleagues (1997) addressed the EE phenomenon with alcoholic populations, and even then the study is done in a different context.

Another gap in the reviewed studies was that the studies were done with western populations (e.g. Fals-Stewart, O'Farrell, & Hooley (2001; Hooley 2007; Blais & Renshaw, 2012; Simmons et al., 2008), while a few were with Asian and Australian populations Pourmand, Kavanagh, & Vaughan, (2005). Very scanty information was found in Africa (in Egypt). Hence the studies did not give sufficient attention to contextual factors that may influence any relationship between relapse and EE.

Besides, the studies linking EE and relapse in alcoholism are dated (e.g. Fichter et al., 1997; O'Farrell et al., 1998), and while their findings on EE-relapse relationship seem to be positive, Fichter et al., (1997) demonstrated that the EOI component is supportive and helps maintain abstinence from alcoholism. In majority of these studies, hostile and critical comments were specifically related to increased risk of relapse, while EOI was viewed as protective against relapse.

Finally, it is notable that most of the studies employed techniques that are based on quantitative research methodology. The current study differed sharply in methodology used to study the relationship between EE and relapse among alcoholics. To maximize the effectiveness of understanding the EE-relapse

association this study blend quantitative and qualitative forms of inquiry so as to provide a more comprehensive understanding of the variables under study. Understanding of the dynamics of the role EE, as well as its expression in a family context, and its application to families struggling to overcome the effects of alcoholism after treatment, should in future help to preserve treatment gains and prevent relapse for the alcoholic.

2.5 Conceptual Framework

The conceptual framework in the present study illuminated the understanding of relapse variations predicted by the occurrence of expressed emotion among family members. Key variables for this study were categorized as independent variable, intervening variable and dependent variable. Mugenda (2008) explains that the independent variables are also called the predictor variables because they predict the amount of variation that occur in another variable. In this case, the predictor variables were three components of family expressed emotion (hostility, criticism, and emotional over-involvement), while the dependent in this study was relapse.

This study analyzed how expressed emotion (EE), which is characterized by hostility, criticism and emotional over-involvement influences relapse of a recovering alcoholic. The variables in the conceptual were derived from many studies done on family expressed emotion (EE) on psychological disorders (e.g. Fichter, et al., 1997; Carlson, 2011; Bullock, Bank, & Buraston, 2002; Azhar & Varma, 1996; Butzlaff & Hooley 1998; Chambless & Steketee, 1999; Hooley,

2007; Hooley & Gotlib, 2000; Ikram, Suhail, Jafery, & Singh, 2011; Lopez, et al., 2009; O'Farrell, et al., 1998; Pourmand, Kavanagh, & Vaughan, 2005).

The conceptual framework for the present study posits a central role of family interactional attitudes of expressed emotion (hostility, criticism, emotional over-involvement) as triggering relapse in an alcoholic family member. Following treatment, the individual alcoholic may go back to his/her family and is exposed to high expressed emotion in the family, thereby increasing the probability of a relapse. Conversely, alcoholics whose families have low EE are likely to maintain the abstinence goal hence reducing the probability of relapse. The conceptual framework is summarized and diagrammatically represented in Figure 2:

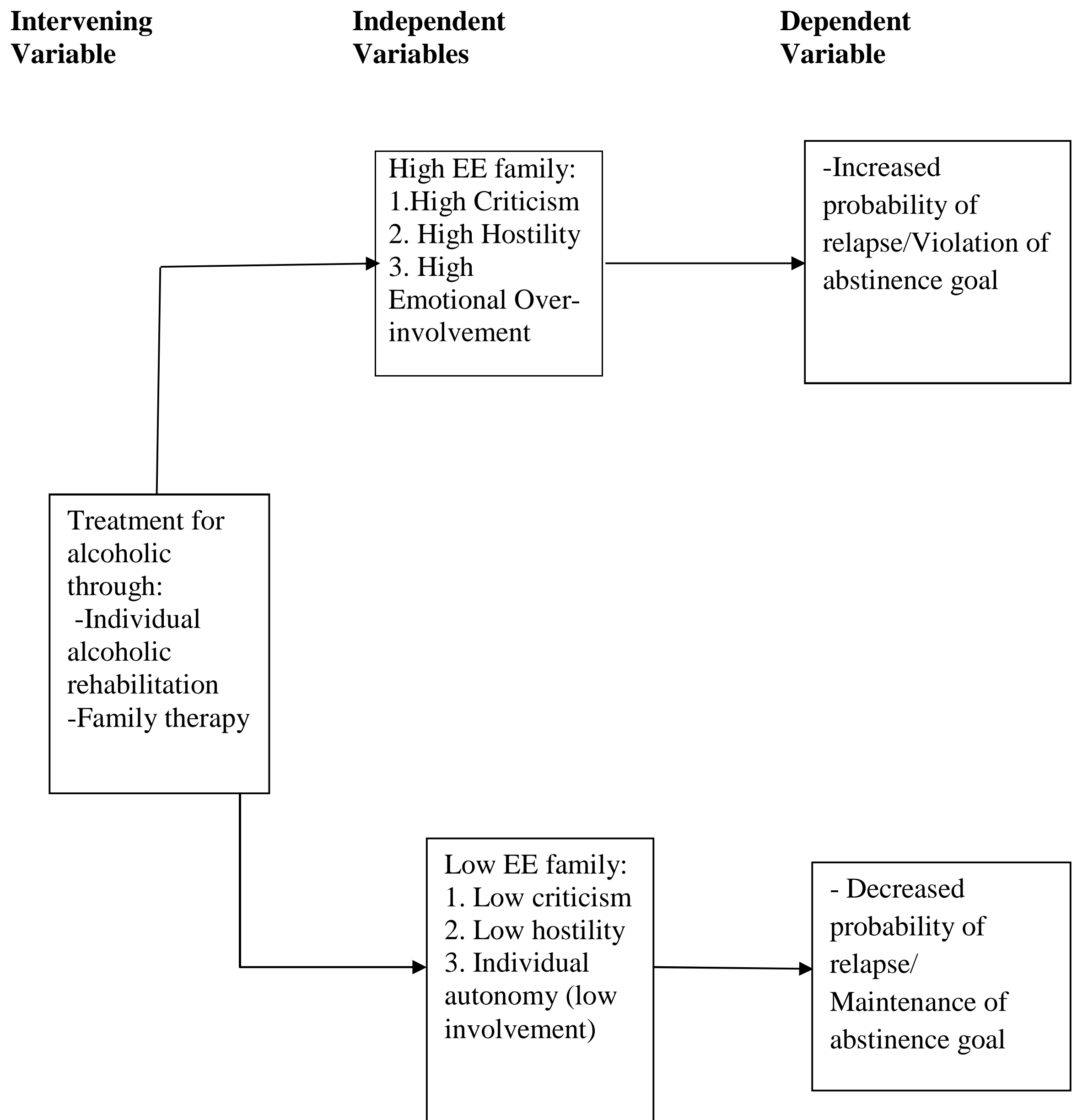

Figure 2**:** Conceptual Framework on Relationships among Study Variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on data collection, processing and analysis method used in the study to measure the various constructs described earlier and show any relationship between them. This section put into consideration the technical procedures applied in undertaking research and was discussed under the following sub-headings: research design, study variables, site of the study, study population, sampling techniques and sample size, research instruments, validity and reliability, pilot study, data collection procedures, data analysis and processing, and data management and ethical considerations.

3.2 Research Design

This study was guided by a correlational design, using mixed methods. Mixed methods research allow a researcher to combine elements of qualitative and quantitative research approaches (Johnson, Onwuegbuzie & Turner, 2007). The study used both questionnaires and interviews in order to get an in-depth exploration of the study variables. The use of mixed method research allows the researcher to compensate for the weakness of one single approach with the strengths of the other in order to achieve the best results (Cresswell & Clark, 2011).

The study therefore used interviews to compensate for any likely bias likely to be brought about by questionnaires.

3.3 Study Variables

The key variables for this study were categorized as independent variables and dependent variable. Mugenda (2008) explains that the independent variables are also called the predictor variables because they predict the amount of variation that can occur in another variable. In this case, the predictor variables were three components of family expressed emotion (hostility, criticism, and emotional over-involvement), while the dependent variable (also called the criterion variable) in this study was relapse.

3.4 Site of the Study

Ten inpatient drug rehabilitation centers in Nairobi County were used for this research (see Appendix 4). According to the NACADA (2011), drug abuse is more rampant in urban than rural areas. Nairobi is also surrounded by regions that have been associated with heavy drinking such as Kiambu (NACADA, 2011) and many alcoholics are likely to seek help from available rehabilitation centers. Therefore the present study assumed that it would not only get a higher population of drug users in rehabilitation centers in Nairobi but also cases of re-admission into rehabilitation centers. The rehabilitation centers selected were those approved by NACADA, which mainly recommends of the 12-step programme of rehabilitation, which is the treatment of choice for addiction. The rehabilitation centers selected

also involve family members in sessions as part of their rehabilitation programme. The rehabilitation centers selected also had an average clientele of more than 10 alcoholics at any given time of the year and therefore provided the required sample for the study.

3.5 Study Population

The target population for the present study observed two groups: the first target population included both men and women who had been admitted for treatment of alcoholism in Nairobi rehabilitation centers. The second target population was the family member who was a close adult relative that was concerned with their family member's drinking problem.

3.6 Sampling Techniques and Sample Size

The study used a purposive sampling procedure to identify both the rehabilitation centers and the respondents. The main objective of using a purposive sample in this study was to produce a sample that could be assumed to be representative of the population. Purposive sampling was done at two levels. The first level was a deliberate selection for the ten rehabilitation centers in Nairobi County. The specific rehabilitation centers provided specific and extensive information about relapse in alcoholism and the role of the family's interactional style. A deliberate selection of particular units of the universe for constituting a sample which represents the universe is supported by scholars such as Miller and Yang (2008) and Kothari (2004). Given the few number of rehabilitation centers in Nairobi,

purposive sampling, which allows for use of samples that have the required information, was therefore done in this study.

The second level of sampling was for the study respondents who were both alcoholics and their close family members. Since the accessible population of the inpatient alcoholics in rehabilitation centers in Nairobi was small, this study used the entire population as a purposive sample. Census sampling is a type of purposive sampling allowed for small populations such as found in this study. Israel (2012) posits that census technique is attractive for small populations such as 200 or less. The first purposive sample included a complete census of both male and female inpatients (sample=population) because of the small numbers found in the rehabilitation centers (N=186). A second purposive sample was derived from a close adult family member of the re-admitted alcoholic (N=135). Family members who were above 18 years were selected to ensure they could clearly discuss their relationship with the alcoholic family member. The selected family member was the one identified during admission into the rehabilitation center as the one concerned with recovery of the alcoholic and who also turned up during family sessions. Interviews were carried out from both alcoholics and their family members using convenience sampling to identify individuals who had characteristics required for the study and based upon their availability.

3.7 Research Instruments

These instruments include questionnaires, mailed questionnaires, observations, personal interviews and phone interviews. This study used questionnaires to obtain quantitative data for analysis which was further corroborated with analysis results from interviews. Mugenda and Mugenda (2003) and Kothari (2004) agree that questionnaires have various merits: it is free from the bias of the interviewer; answers are in respondent's own words; respondents have adequate time to give well thought out answers; respondents who are not easily approachable can also be reached conveniently; large samples can be made use of and thus the results can be made dependable and reliable. In view of the advantages, the questionnaires were administered to both the inpatient alcoholics and to a close family member.

3.7.1 Family Member Attitude Scale (FMAS)

This scale was adapted from the Family Attitude Scale (FAS), which is a structured questionnaire that measures expressed emotion (EE). This scale used a 5-point Likert scale to measure the objectives of the study. Kothari (2009) on the other hand, explains that 5-point Likert scales are used because they are more reliable and can provide more information. Chimi and Russel (2009) suggested that Likert scale is everywhere in nearly all fields of scholarly and business research; that is it is used in a wide variety of circumstances: when the value sought is a belief, opinion or effect; when the value sought cannot be asked or answered definitely and with precision; and when the value sought is considered to be such a sensitive

nature that respondents would not answer except categorically in large ranges. The nature of data that was collected in this study exhibited majority of these features (such as the information being too sensitive because respondents needed to respond to their family attitudes towards them) and so the Likert scale was the most suitable. The 5-point Likert scale in this study ranged from ‘strongly agree’ to ‘strongly disagree’. Open-ended questions gave a chance to respondents to add information which may not have been included in the closed-ended questions.

3.7.2 Individual Attitude Perception Scale (IAPS)

This questionnaire was also developed as a mirror of the FMAS to examine the perceptions of alcoholics of the expressed emotion attitude from their family members. It was a Likert scale ranging from “strongly agree” to “strongly disagree”. It also comprised of a few open-ended questions that gave the respondents a chance to add information on their demographics and other information which had not been included in the closed-ended Likert scale questions.

3.7.3 Alcohol Use Disorders Identification Test (AUDIT)

Given the fact that majority of inpatients in rehabilitation centers in Nairobi County abuse several drugs simultaneously, the inpatient respondents completed the Alcohol Use Disorders Identification Test (AUDIT- appendix A1.1) to screen for alcohol addiction. AUDIT was developed by the World Health Organization (WHO), and is recommended and used by majority of the rehabilitation centers in

Kenya to screen for alcoholism. Questions 1-8 are on a 5-likert scale ranging from: never=0; less than monthly=1; monthly=2; weekly=3 and daily=4. Questions 9 and 10 have three responses, scoring 0, 2, and 4 from left to right. A score of 8 or more was associated with the harmful or hazardous drinking. A score of 13 or more in women and 15 or more for men was a likely indication of alcohol dependence.

3.7.4 Individual Interview Guide for Alcoholics

Participants were interviewed using a semi-structured interview guide (see Appendix A1.2). This study necessitated using interviews so that the strategy of using both questionnaires and interviews to address the same study objectives would improve the interpretive coherence and validity of the study results. Using questionnaires alone would have some demerits such as a possibility of ambiguous replies or omission of replies altogether to certain questions (Kothari 2009) and hence interviews would help validate replies from the respondents. The interviews assessed the individuals' anecdotal perceptions of their family interactions and their experience of relapse. The interview guide also qualitatively suggested the after-care strategies suggested by alcoholics and their families.

3.7.5 Interview Guide for Family Members

Respondents from the families of alcoholics were interviewed using a semi-structured interview guide (see Appendix A1.3) to examine interactional attitudes of family members towards the alcoholic family member.

The interview guide also qualitatively suggested the after-care strategies suggested by alcoholics and their families.

3.8 Validity and Reliability

Though some of the instruments that were used for the research have been evaluated and validated with populations in the West, a pilot study was done to check the reliability and validity of the instruments in the current context. This study adopted the internal consistency method. Internal consistency was tested using the Cronbach's alpha statistic, which assessed how well the set of items measured a particular behaviour or characteristic of the variables within the tests used (Cronbach, 2004). The Individual Attitude Perception Scale (IAPS -Appendix A1.4) and the Family Member Attitude Scale (FMAS –Appendix A1.5) that were used in this study were adapted from the Family Attitude Scale (FAS). Studies have demonstrated that the FAS had very high internal consistency and exhibited sound concurrent validity of 0.8 (Hooley & Parker, 2006). After the pilot study, both tools demonstrated a high Cronbach alpha of 0.789 and 0.790 respectively, demonstrating high reliability.

The Alcohol Use Disorders Identification Test (AUDIT) has been used in the majority of rehabilitation centers in Kenya to assess for alcoholism and has demonstrated accuracy in similar circumstances across different cultures, and age groups, and has proved effective (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993). As suggested by World health Organization (WHO), the study found

AUDIT as a simple way to screen and detect alcohol problems among the study participants and helped the researcher find out who among the inpatients were alcoholics with a validity of 0.80s across countries (Babor, Higgins-Biddle, Saunders & Monterio, 2001).

This study also adopted content validity. Content validity is a qualitative type of validity where the domain of the concept is made clear and the analyst judges opine whether the measures fully represent the domain (Bollen, 1989). To assess content validity the questionnaires asked a number of questions about the instrument, and some questions were reverse coded to help validate the content. The questionnaire was validated by discussing it with experts in the psychology field and their views were evaluated and incorporated to enhance content and construct validity of the instruments.

3.9 Pilot Study

The study carried out a pilot study to test the validity and reliability of the study instruments in gathering data for purposes of the study. Cooper and Schindler (2011) explain that a pilot test is conducted to detect weaknesses in design, instrumentation and to provide proxy data for selection of probability sample. The procedures used in the pre-testing the questionnaires were identical to those that were used during the actual study. In this study, the questionnaire was tested on a complete census of a rehabilitation center in Kiambu County (n=18), where the population bore similar characteristics with those of rehabilitation centers in

Nairobi. This was a 10% (percentage recommended by Cooper & Schindler, 2011; Mugenda & Mugenda, 2008) of the total number of rehabilitation centers that were sampled in this study. The center was an inpatient drug rehabilitation center, which invited family members for sessions with their alcoholic family member twice in a month and utilized the 12-step program. All families of the addicts also met once in a month to enhance support for each other. The rehabilitation had also been chosen due to its consistent monthly mean admission throughout the year (approximately 25), both male and female, and its well organized with a regular follow-up system for the discharged patients. The pilot study assisted in checking the reliability and validity of the measures to be used within the local context. However the results from the pilot test were not included in the final study sample in order to avoid response bias in case they were to complete the same questionnaire twice.

The eighteen questionnaires were coded and input into SPSS version 21 for running the Cronbach reliability test. For the FMAS it was evident that the tool was very reliable with a reliability coefficient of 0.798 for criticism, 0.803 for hostility, and 0.767 for the emotional over-involvement as summarized in Table 3.1.

Table 3.1 Reliability test of Family Member Attitude Scale

Variables	Cronbach's Alpha
Criticism of Family members	0.798
Hostility of family members	0.803
Over involvement	0.767
Mean	0.789

For the Individual Attitude Perception Scale (IAPS), the reliability had coefficients of 0.753 for criticism, that for hostility scored 0.795 and for the EOI the coefficient was 0.821, which scored the highest. This gave an average of 0.789 as shown on Table 3.2.

Table 3.2 Reliability test of Individual Attitude Perception Scale (IAPS)

Variables	Cronbach's Alpha
Criticism of Family members	0.753
Hostility of family members	0.795
Over involvement	0.821
Mean	0.790

The mean results of the reliability test for the FMAS questionnaire yielded an overall Cronbach alpha correlation coefficient of 0.789, while that of the IAPS produced an overall Cronbach alpha correlation coefficient of 0.790. According to (Drost, 2011) the closer the Cronbach’s alpha coefficient is to 1, the higher the internal consistency reliability. According to Pallant (2010) coefficient of 0.7 is recommended where the Cronbach’s alpha is used for reliability test, and therefore 0.0.789 and 0.790 respectively were adequate for this study.

3.10 Data Collection Procedures

Data collection is the gathering of information to serve or prove some facts (Kombo & Tromp, 2009). Research assistants were used in this study due to the depth of the qualitative aspect of the study. These were holders of Master of Arts (MA) in Counseling Psychology who were familiar with rehabilitation counseling. Before data collection, the research assistants were requested to volunteer in the rehabilitation center for a week so that they were conversant with the rehabilitation system and also in order to be able to schedule for individual interviews. Permission for volunteering for the research assistants was sought by the researcher through the programme coordinators of the rehabilitation centers.

Research assistants were taken through a training manual developed by the researcher. The manual contained description of the study, definitions of the variables of the study, and instructions of each section of the instruments. They received instructions on the use of the instruments and were provided with a standard set of data administration and collection procedures.

The research assistants were provided with the questionnaires for distribution to their respective rehabilitation centers. They were also provided with the semi-structured interview questions, where the participants discussed exactly the same questions, in much the same or exactly the same order. An orderly questioning sequence was recommended in order to facilitate the quality of the discussion. They were also requested to be present on 'family days' so as to administer the family

questionnaire to the family members. Family questionnaires (FMAS) were administered during family therapy sessions. The researcher collected the completed instruments bi-weekly. To minimize response bias, the purpose of the study was explained as "*an enquiry to gain a better understanding of the causes of alcohol relapse*"

3.11 Data Analysis and Processing

Ordinarily, the raw data collected is rather extensive and the information from questionnaires and interviews would not easily answer the research questions and hypotheses and therefore the data need to be processed and analyzed in a coherent and orderly fashion. Patterns and summaries were drawn from the data to help in making it sensible to answer the research questions. Zikmund et al (2012) suggested that data analysis need to apply reasoning in order to understand the gathered information with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. Data processing entails editing, classification and tabulation of data collected so that they may be amenable to analysis (Kothari, 2009). The study therefore edited, classified and tabulated the raw data in order to draw conclusions from it. Data entry converted the raw information gathered through questionnaires and interviews to a code book that was be manipulated to provide summaries that would help answer the study questions and test the hypotheses. The IBM Statistical Package for the Social

Sciences (SPSS) version 21 was used for data entry, data cleaning, and running the regression analysis.

This study employed both descriptive and inferential statistical analysis methods. The purpose of the descriptive analysis was to enable the researcher to meaningfully describe a distribution of scores or measurements using a few indices or statistics such as means, modes, and standard deviations.

Data analysis for the study objectives was done as follows:

- Objective one: To find out the prevalence of relapse among alcoholics re-admitted in inpatient treatment centers in Nairobi County, Kenya. The prevalence of relapse was determined using a dichotomous scale to elicit "yes" or "no" answer and further use of Likert scales to yield the number of times one had relapsed.
- Objectives two, three and four showed the relationship between components of family expressed emotion (EE) (hostility, criticism, emotional over-involvement with relapse and read as follows:

    Objective two: To establish the relationship between hostility of family members and relapse of the re-admitted alcoholic.

    Objective three: To establish the relationship between criticism of family members and relapse of the re-admitted alcoholic.

  Objective four: To establish the relationship between over-involvement (EOI) of family members and relapse of the re-admitted alcoholic.

These three objectives yielded the study hypotheses and were analyzed using both descriptive and inferential statistical. Frequencies and means were first determined for objective two, three and four. These three objectives yielded the hypotheses for the study and the hypotheses were tested using the Pearson's correlation coefficient where the analyses were used to determine the interrelationship between independent and dependent variables. The results were summarized in a covariance matrix. These objectives (two, three and four) were then analyzed using regression equations to test the significance of the study hypotheses. Using the Statistical Package for the Social Sciences (SPSS), multiple regression analysis was done to determine the level of influence of each of the independent variables (hostility, criticism, and EOI) to the dependent variable (relapse). Regression analysis is a statistical tool for the investigation of relationships between variables (Cohen, Cohen, West & Aiken, 2003). Usually, the investigator seeks to ascertain the causal effect of one variable upon another. In this study, the effect of components of family expressed emotion (hostility, criticism and emotional over-involvement) on relapse of an alcoholic was investigated. To explore such issues, the researcher assembled data on the predictor variables by asking questions and carrying out interviews on indicators of EE and relapse, and employed regression to estimate the quantitative effect of the causal variables (hostility, criticism and EOI) upon the variable that they influence (relapse). The researcher also assessed the statistical significance of the estimated relationships, that is, the degree of confidence that the true relationship is close to the estimated relationship using the regression analysis.

Jackson (2009) states that multiple regression analysis involves combining several predictor variables in a single regression equation. In this case, multiple regression analysis helped to assess the effects of the three predictor variables (hostility, criticism and EOI) on the dependent measure (relapse). Regression analysis is also valuable for quantifying the impact of various simultaneous influences upon a single dependent variable.

The following multiple regression equation was developed to determine the effect of components of family expressed emotion (Hostility, criticism, and emotional over-involvement) on relapse of the re-admitted alcoholic:

$$y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+€$$

Where y – relapse

X_1 - hostility

X_2 - criticism

X_3 – EOI

€ – error

β_0 – constant

β_{1-3} - Beta coefficient corresponding to variables 1-3

A test of significance was done to each of the variables to check its significance in the variation of the independent variable. The analysis of variance (ANOVA) test was done to determine the fitness of the model.

The study also tested for multicollinearity of the three predictor variables of hostility, criticism and emotional over-involvement (EOI). To test for multicollinearity, Variance Inflation Factor (VIF) was used. If no two independent variables are correlated, then all the VIFs will be 1. In the present study, the VIFs for all the predictor variables were around 1, meaning that the relationship among the predictor variables did not influence each other to a level of interfering with their different association with relapse. This was an indication that the regression model used in the study was stable.

- Objective five was stated as follows: To determine possible after-care strategies for recovering alcoholics that would enhance relapse prevention. To analyze this objective, open-ended responses and interview questions were identified into broader themes. These themes were used to find out the views of respondents to more effective after care strategies that would reduce relapse in alcoholism.

All five objectives were also qualitatively tested and analyzed using thematic analysis which helped identify patterns through theme development. Words used by the participants were examined to identify broader themes or patterns of meaning and contextualizing the themes in relation to the variables of the study. Themes

from interviews were developed by the researcher using categories of constructs of EE. For example words like “shouting”, “quarreling”, “bickering”, “disgust”, etc. were indicative of hostility, while words like “rejection”, “disapproval”, “hate”, “dislike”, etc. were indicative of criticism. Inferences made from the thematic analysis were corroborated with the quantitative data.

3.12 Data Management and Ethical Considerations

Permission to conduct the present research was granted by the Kenyatta University graduate school (see appendix 6) and the National Council for Science and Technology (NCST) (see appendix 7). The administration of the chosen rehabilitation centers granted permission to conduct the research. The researcher explained the purpose of the study as “*an enquiry to gain a better understanding of the causes of alcohol relapse”* to minimize response bias. This would also help the make an informed decision whether to participate in the study or to decline from participation.

In order to handle addicted respondents in an ethically acceptable manner, a consent form was written and duly filled by the participants. Safeguarding confidentiality measures was done by instructing respondents not to put any kind of identifying information on the answer sheets. The answer sheets were used only for the purpose of research and were kept in a safe locker to ensure further confidentiality. Moreover, security codes were assigned all computerized records. In order for the research to benefit participants and ensure there was no

psychological harm caused to the participants, debriefing was carried out after participation in the research.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter gives presentation of findings for the study together with discussions arising from the data collected. The primary purpose of this study was to examine the relationship between family expressed emotion (characterized by hostility, criticism, and emotional over-involvement) and the occurrence of relapse among individuals who had been treated and discharged from rehabilitation centers. The research also aimed at finding out after-care strategies that might be used in helping alcoholics maintain their abstinence goal. Specifically, the study aimed at establishing whether or not existence of expressed emotion (EE) among family members of an alcoholic had a relationship with the occurrence of relapse of the treated alcoholic. Both quantitative and qualitative data were collected from this study and results from the two populations (inpatient alcoholics and their family members) were presented. The data was presented under the following subheadings: demographic data; findings of the study objectives, regression analysis, and a summary of findings. The chapter is organized on the basis of the objectives of the study.

4.2 Demographic Data

Information in this section was based on selected demographic characteristics of respondents including age, gender, educational level, income level, and marital status.

4.2.1 Distribution of Respondents by Age

The topic of the study was the relationship between family expressed emotion and the occurrence of relapse among inpatient alcoholics. Participants from different age groups were sampled.

Age Distribution of Inpatient Alcoholics

As shown in Table 1, there were a total of 186 inpatient alcoholic participants who responded in the study.

Table 1

Age Frequency of Inpatient Respondents

	Inpatient Respondents	
Age bracket	**No**	**Percentage**
Less than 18	4	2.2
19-25 years	41	22.0
26-40 years	107	57.5
41-55 years	30	16.1
56 and above	4	2.2
Total	**186**	**100**

The inpatient respondents targeted in the study were adults 18 years and above, but there were 4 (2.2%) that were below 18 years. Respondents between 19 and 25 years were 41 (22%), while the majority of the respondents, who were between 26 and 40 years, were 107 (57.5%). There were 30 (16.1%) respondents between 41 to

55 years, and 4 (2.2%) of the respondents were aged above 56 years, which is a likely indication that only few elderly people are admitted in rehabilitation centers.

The mean age of inpatient alcoholic participants in this study was 27 years, which indicate that Kenyan youth are majority of the population that is greatly affected by alcoholism. The finding is supported by many findings that have established that the youth are the majority in alcohol use in Kenya (NACADA, 2011). Perhaps the reason more young people are turning to heavy drinking of alcoholics due to frustrations caused by high rates of youth unemployment in Kenya. Youth are regarded as more vulnerable to alcoholism because they may begin drinking alcohol earlier due to curiosity or peer pressure, and they therefore have a greater risk for diverse consequences such as addiction (Brown & Tapert, 2004). Low numbers of adolescents (2.2%) in rehabilitation centers would likely be explained by the fact that most adolescents are in school and might not have a lot of time to spend in drinking sprees. They might also have limited use of alcohol because they are guarded from alcohol use while at school and have therefore not reached the level of alcohol misuse that would result to alcoholism. It is notable from the findings that there were few older people admitted in the rehabilitation centers. Perhaps the low admission of older people can be explained by having fewer older people in the population structure or it might also be possible that older people have learnt coping skills to handle alcoholism over years of treatment.

Age Distribution of Family Member Respondents

It was important for the study to find out the age distribution of family member respondents in the present study so as to provide information on the adult members living with or having regular contact with the patient. The purpose of the study was to examine family expressed emotion, a component that would only be valid when explored among adult relationships (Lopez et al., 2009). The family members that participated in the present study had different age cohorts. Table 2 shows the age distribution of family members respondents.

Table 2

Age Frequency of Family Member Respondents

	Family Member	
Age bracket	**No.**	**Percentage (%)**
Less than 18	3	2
19-25 years	15	11
26-40 years	27	20
41-55 years	61	45
56 and above	29	22
Total	**135**	**100**

For the family members, the majority of the respondents, 61 (45%), were in the age category between 41 and 55 years, while those aged 56 years and above were 29 (22%). Family member respondents in age bracket of 26 to 40 years were 27 (20%), those in the category between 19 to 25 years were 15 (11%), and only 3 (2%) were aged 18 years and below. The likely explanation regarding the age

distribution is that majority of the family member respondents were above 41 years, which would perhaps mean that majority of the family respondents represented parents or spouses of the inpatient alcoholics. Compared to the inpatient alcoholics, the percentage of the individuals below 40 years was significantly lower among the family member respondents. This gives a large difference in the age composition and structure between inpatient alcoholics and their family members, with the family members having an average of 43 years which represents individuals in their middle adulthood and hence most of them may be parents or spouses of the inpatient alcoholics. It is likely that the 3 (2%) family members below 18 years may have been siblings to the inpatient alcoholics.

4.2.2 Distribution of Respondents by Gender

The two populations (both inpatient alcoholics and their family members) in this research comprised of both male and female. Figure 1 below shows the distribution of gender of the inpatient respondents.

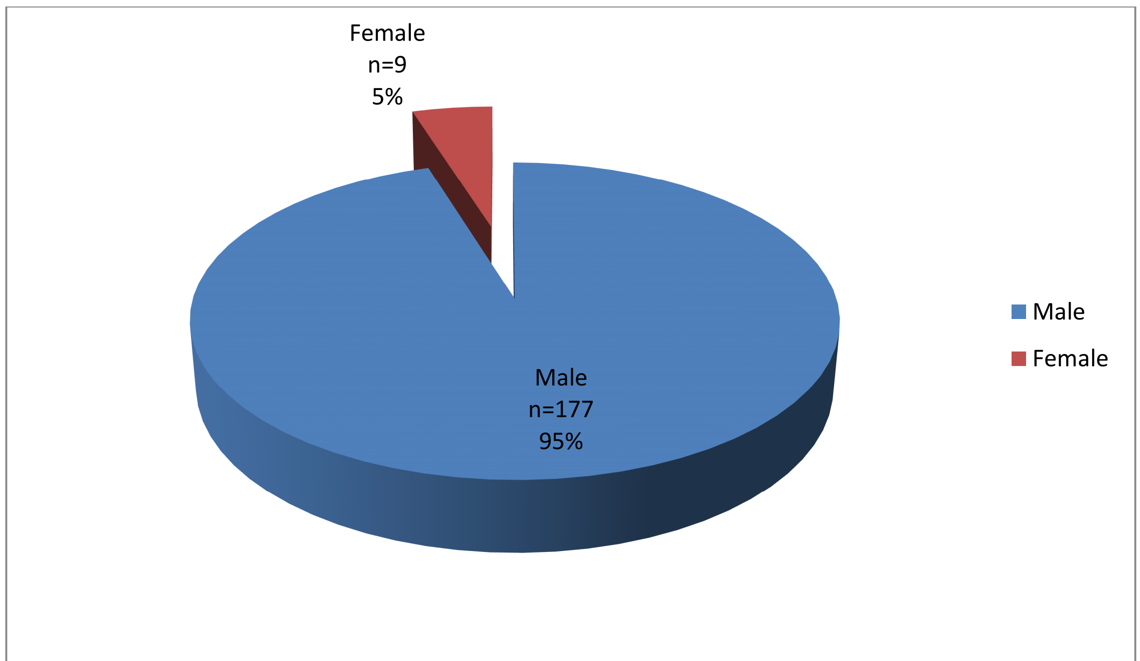

Figure 1: Gender of inpatient alcoholics.

From data illustrated in Figure 1, majority 95% (n=177) of the inpatient alcoholics respondents were male, while only 9 (5%) were female. The small number of female respondents could be a likely indication that fewer women take alcohol and hence fewer women than men are likely to develop negative effects of prolonged alcohol use. Traditionally in most Kenyan communities, men drank more while women were allowed to drink very occasionally which is common to date. In a culture where the traditional drinking patterns between male and female are maintained, it would be expected that more men would likely to drink more and therefore are likely suffer alcohol related problems, and that is perhaps why more men would be found in rehabilitation centers than women. This explanation

resonates with the common ideology that women universally drink less than men (Borovoy, 2005). The local culture is also more intolerant to alcoholic women and the stigma experienced by female alcoholics in the society may hinder them from seeking help for alcohol addiction. It might therefore appear a more acceptable thing for a man to be alcoholic and hence seek treatment, while this may not be the same case for a woman, perhaps leading to the fewer number of women admitted in the rehabilitation centers.

The distribution of gender for the family member participants in this study is shown in Figure 2.

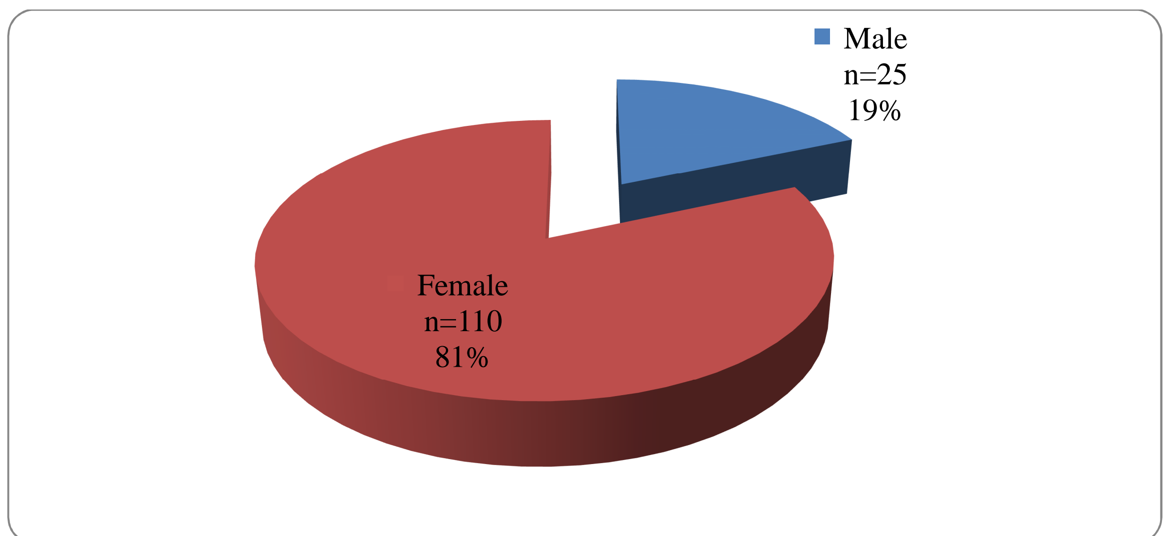

Figure 2: Gender of family members

The findings showed that among the family members, 25 (19%) were male, while the majority, 110 (81%), were female. Larger numbers of females might have been representing mothers or spouses to the alcoholic inpatients who turned up for the family therapy sessions. Further analysis showed that indeed the larger numbers of the female family members that turned up for the family sessions were mothers (n=74; 54.8%) followed by spouses at 24%, compared to the fathers who were 18 (13.3%) as shown on Table 3.

Table 3

Relationship of Family Member to Inpatient

Relationship	**No.**	**Percentage (%)**
Sister	12	8.9
Brother	4	3.0
Mother	74	54.8
Father	18	13.3
Spouse	24	17.8
No response	3	2.2
Total	**135**	**100**

Perhaps larger numbers of the mothers would probably be because of the cultural expectation that mothers play the caretaking role for their children. More women are left at home taking care of their children while the fathers are working and would hence be available for the family sessions. Mothers also form more nurturing and affective bonds with their children than the fathers (Ran, Leff, Hou, Xiang, & Wan (2003).The mothers spend long periods of time taking care of the children until they are independent enough to leave home, and hence would be expected to

turn up for the family therapy sessions at the rehabilitation centers as part of their obligation to nurture.

4.2.3 Educational Qualifications of Inpatient Alcoholics

The study sought to find out the educational level of respondents, in order to establish whether education is a factor in relapse as shown on Table 4.

Table 4

Education Level of Inpatient Alcoholic Respondents

Education Level	Frequency	Percent
Primary	4	2.2
Secondary	35	18.8
Certificate	19	10.2
Diploma	57	30.6
Undergraduate	49	26.3
Technical Training	18	9.7
Masters	3	1.6
Doctorate	1	.5
Total	186	100.0

Given that only 4 (2.2%) of the respondents had attained the basic primary school education, the present findings indicated that majority of the alcoholics in the rehabilitation centers had high levels of education. Out of the 186 study participants, 18.8% (n=35) had attained secondary level education, while a total of 67.1% n=115) had attained a certificate, diploma, or undergraduate training. This finding resonates with Huerta and Borgonovi (2010) who also found out that higher levels of education are likely to be related to more drinking problems. Perhaps this

could be the case because many people get more education with a hope that they might be able to secure better jobs. However, this is not the case given the rising levels of unemployment in Kenya despite increased literacy levels than the previous years (Kempe, 2012). Unemployment has been linked with more alcohol and other drugs use among the youth (Mugisha, Mugisha & Hagembe, 2003;Chesang, R. K. 2013), and being out of employment or school is a risk factor in alcohol and substance abuse. This would perhaps explain why the rehabilitation centers under study had more youth compared to older people.

4.3 Findings of Study Objectives

In this section, findings of the study will be presented as derived from the study objectives: (a) to find out the prevalence of relapse among inpatient alcoholics admitted in rehabilitation centers; (b) to establish the relationship between hostility of family members and relapse of the inpatient alcoholic; (c) to establish the relationship between criticism of family members and relapse of the inpatient alcoholic; (d) to establish the relationship between over-involvement of family members and relapse of the inpatient alcoholic; and (e) to find out possible after-care strategies for recovering alcoholics that would enhance relapse prevention.

4.3.1 Prevalence of Relapse in Inpatient Treatment Centers

The study aimed at finding out the relapse rate among alcoholics in the studied rehabilitation centres. In order to find out the prevalence of relapse among

alcoholics, the study sought the rate of readmission of alcoholics to treatment centers. The respondents were asked to indicate whether or not they had been readmitted into a rehabilitation center after previously being treated from alcoholism as inpatients in a rehabilitation center. All respondents who had been readmitted in a rehabilitation center gave a 'yes' vote, while those who were in the rehabilitation center for the first time gave a 'no' vote. Table 5 shows the summary of responses on readmission to rehabilitation centers as indicated by the respondents.

Table 5

Readmission to Rehabilitation Centers

Response		Frequency	Percent
	YES	73	39.2
	NO	111	59.7
	Total	***184***	***98.9***
	N/A	2	1.1
Total		**186**	**100.0**

As shown in Table 5, 73 (39.2%) of the total respondents had been readmitted to a rehabilitation center after previous treatment, while 111 (59.7%) respondents were in the current rehabilitation center for the first time. The findings are a likely indication that approximately 40% of the alcoholics who had relapsed sought readmission at rehabilitation centers in Nairobi County. This rate appears less than what was expected in the study and from what is reported from many parts of the

world, such as 55% in England (National Treatment Agency for Substance Misuse –NTA- 2013) and 58% in Kenya (Deveau et al., 2010). Such a dissonance would perhaps be explained by the fact that the present study focused on individuals who are inpatients in the rehabilitation centers currently and whose main DOC was alcohol, while Deveau at al., had given 42% abstinence rates for alcohol, canabbis and heroine. Perhaps such figures would change if the study was extended over a longer time period.

The study also sought to establish how many times the inpatient alcoholics had relapsed. The respondents were asked to indicate how many times they had been readmitted due to alcohol dependence after previous treatment from alcoholism in a rehabilitation center within the past three year period. The findings are illustrated in Table 6.

Table 6

Number of Readmissions of Inpatient Alcoholics into Rehabilitation Centers

Number of Readmissions	Frequency	Percent	Valid Percent
Once	25	13.4	34.2
Twice	33	17.7	45.2
Thrice	9	4.8	12.3
More Than 3 Times	6	3.2	8.2
Total	**73**	**39.2**	**100.0**
N/A	113	60.8	
Total	**186**	**100.0**	

As shown in Table 6, out of the 73 (39.2%) readmitted respondents, 25 (34.2%) of them had been readmitted once due to alcohol problems, while 33 (45.2%) of the respondents had been readmitted more than twice. The number of readmissions seemed to reduce, with 9 (12.2%) having been readmitted three times, while 6 (8.2%) had been readmitted more than three times within a three year period. This is an indication that relapse, hence readmission, is more likely expected after the initial treatment, while it reduces with every subsequent treatment. Studies done gave 50% readmission rates in the USA (e.g. NSDUH, 2006) and 42% in England (Humphreys & Weingardt, 2000).

The current findings are notably lower than those in Europe and USA. Perhaps the explanation could be the fact that in Kenya many alcoholics do not offer themselves for treatment in the rehabilitation centers, perhaps due to the high fees charged in the rehabilitation centers or may be due to lack of information on where such centers are located. This could perhaps also be explained by the fact that many alcoholics do not know where they can get help or if they can be helped at all. In fact, most reports given by national surveys in Kenya (e.g. NACADA, 2011) indicate alcoholism has very high rates in Kenya. However, such a survey has not given statistics to show how many among this population of alcoholics were able to offer themselves for treatment. Therefore, the current findings were helpful in showing the prevalence rates in the rehabilitation centers in Nairobi but this may not be generalizable to the whole country.

4.3.2 Relationship between Relapse and Family Hostility

The study aimed at finding out if there existed a relationship between relapse of the inpatient alcoholic and the hostility of a family member. Respondents were asked questions with an aim to establish perceptions of hostility they experienced from their family members. Indicators of hostility were tested on a five-point Likert scales, ranging from 'strongly disagree' to 'strongly agree' as shown on Table 7.

Table 7

Level of Hostility Perceived by Inpatient Alcoholics

Hostility Indicators	**Strongly Disagree %**	**Disagree %**	**Unsure %**	**Agree %**	**Strongly Agree %**	**Mean Response**
He/she shouts at me	19	14	19	35	13	3.09
I wish she/he were not here	48	29	9	10	3	1.90
She/he gets angry with me	15	18	14	42	11	3.15
She/he hates looking after me	10	17	19	41	13	3.31
I purposefully put him/her into trouble	37	31	11	14	7	2.24
It is a pleasure to be with him	17	38	11	28	6	2.69
I quarrel with him/her	9	25	5	52	9	3.27
I feel close to him/her	26	37	7	20	11	2.53
He/she is so sarcastic to me	20	31	10	33	7	2.75
I find myself swearing at him/her	20	28	9	33	10	2.84
He/she can control anger	45	29	13	10	3	1.96
She/he means no good	7	18	10	43	23	3.58
He/she makes a lot of sense	9	12	17	38	22	3.52
I feel disappointed with him/her	5	12	12	51	20	3.69
He/she is trying to get on friendly terms with me	22	34	9	27	8	2.65
Hostility Level (Average)	**21**	**24**	**12**	**32**	**11**	**2.88**

The summary of findings from inpatient alcoholics about their experience of hostility in their families showed that 21% of inpatient alcoholics strongly disagreed to questions measuring hostility in their family members, which is a likely indication that they did not perceive hostility from their family members. Of the participants, 24% disagreed with statements that indicated that their family members were hostile to them. Both the strongly disagree and disagree responses are an indication that inpatient alcoholics did not consider their family members to be hostile to them. This meant that a total of 45% of inpatient alcoholics did not perceive hostility from their family members.

According to the findings, there was an unsure vote of 12% participants, which was a likely indication that some of the respondents were ambivalent about their perceptions of hostility from their family members. They would therefore likely fall on either side of ‘agreeing’ or ‘disagreeing’ to experiencing hostility in their families. Of the inpatient alcoholics, 32% agreed to responses indicating hostility among their family members, while 11% agreed to very strong hostility, given their response ‘strongly agree’. In responding to both ‘agree’ and ‘strongly agree’ statements, a total of 43% of the respondents showed a likely indication of hostility among their family members. It is notable that the percentage of the inpatient alcoholics that experienced hostility and the percentage that did not experience hostility almost tallied with a 43 % (‘strongly agree’ + ‘agree’ statements) and 45% (strongly disagree’ and disagree’ statements) , while the remaining 12% was unsure and could fall on either side.

The present findings indicated that almost half of the families of alcoholics could be characterized as expressing hostility in their family interactions. Further analysis showed that the data had a normal distribution as shown on Figure 3.

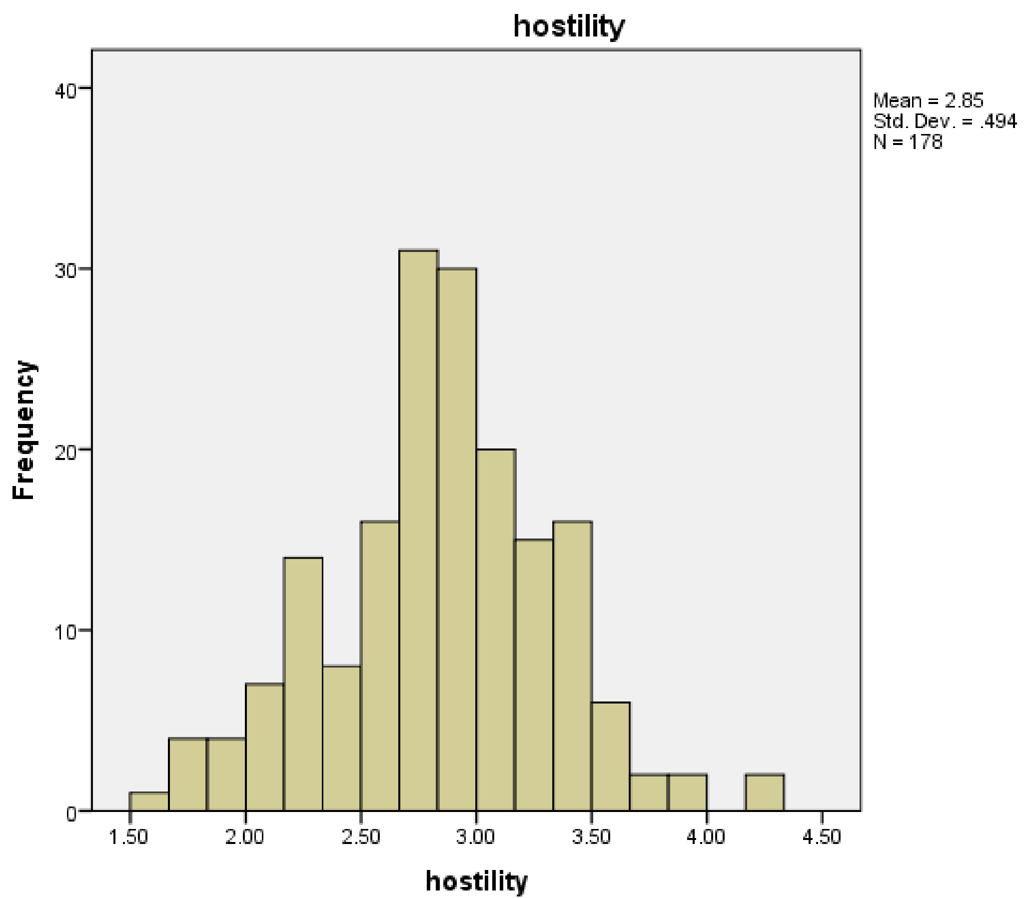

Figure 3: Level of hostility indicated by inpatient alcoholics

Majority of the responses indicating perception of hostility among inpatient alcoholics were distributed about the mean as shown in figure 3. This is a likely

indication that hostility was more likely to be perceived by alcoholics from their family members and that it was a normal occurrence in such families.

Hostility is a negative interaction among family members that has a likelihood of wounding the alcoholic emotionally and causing him to distance himself. An angry family member might use destructive phrases towards the alcoholic who in turn may lose trust or the connection that would help him work on his abstinence goal. He may instead distance himself and go back to his former friends who seem to understand him and give him a sense of connection. According to Renshaw, Blais and Caska (2010) individuals who experienced hostility from their close relationships claimed to have less relationship satisfaction. Perhaps this dissatisfaction was brought about by the hurt caused by words of hostile family members.

After treatment, the alcoholic would be expecting to find family members who would offer the right words to encourage him on his abstinence goal. However, family members may not have changed and may continue causing painful emotional scars that hurt their relationships, leaving the alcoholic with no other option but to turn back to his more intimate connections with the drinking partners. Blais and Renshaw (2012) reported that people who perceived greater hostility from their friends rated the relationships as higher in conflict and low in support. Hostility towards the alcoholic may lessen opportunities for the new options that they might need for recovery after treatment. The hostile statements and phrases

used by family members may destroy their relationship with the alcoholic, who may not have the resiliency to respond positively. He/she may instead go back to the negative patterns of heavy drinking. This was supported by some of the responses of the respondents during the interviews:

> "Sometimes I get so disgusted with them (referring to the wife and grownup sons). They lock themselves in the children bedroom and chat endlessly. They even laugh….Maybe at my drunken state. I am not part of that laughter. I am only shown hatred. It is not like I matter…..".
>
> "She is verbally abusive. She sometimes says such horrible things that I cannot repeat here. She calls me 'her drunkard'. It is very annoying….".
>
> "She blames me for my drunkardness. It's not like I try… to stop. I didn't mean to waste all that money. I hate what they have gone through, but she is too harsh on me".
>
> My wife is so sarcastic. She thinks that I am no good. She called me drunkard….".
>
> If it weren't for them I would not be like this. They make all decisions. They ignore me. I sometimes don't know why I should live under them, begging".

Use of words such as 'disgusted', 'abusive', 'she says horrible things', 'sarcastic', and 'ignore' are all indicative of a hostile climate. Listening to these remarks one could sense the expression of hostility towards the alcoholic, which would likely embarrass and show such internal rejection that it would likely push them to seek solace in heavy drinking. Such statements do not offer much support required for recovery but would instead worsen the recovery goal of the alcoholic and push them to relapse. In the verbatim statements above, there seems to be anger, belittling, and negative attitudes and thoughts that would characterize a hostile environment which is too fragile for an individual to work on their positive

functioning. This implies that family members too needed to be rehabilitated to form new attitudes and habits that would facilitate recovery. It would not be enough to rehabilitate the alcoholic alone but the family as a whole in order for the whole family system to work for sustainable recovery from alcoholism.

Following this argument, it was important to find out how family members viewed themselves in terms of the hostility levels they expressed to their alcoholic family member. The present findings demonstrated that on average, inpatient alcoholics perceived hostility from their family members, but a full picture was needed from the family member's perspective. Table 8 shows how family members responded to statements indicating their own view of the level of hostility they expressed to the alcoholic.

Table 8

Level of hostility from family members

Hostility Indicators	Strongly Disagree %	Disagree %	Unsure%	Agree %	Strongly Agree %	Mean Response
I shout at him/her	3	15	15	45	23	3.70
I wish he/she were not here	24	44	10	17	5	2.34
I get angry with him/her	10	14	5	64	7	3.45
I hate looking after him/her	10	38	13	38	3	2.85
He/she purposefully puts me to trouble	21	33	17	26	2	2.55
It is a pleasure for me to be with him/her	14	48	7	29	2	2.57
I quarrel with him/her	7	30	9	55	0	3.11
I feel close to him/her	8	38	23	31	0	2.77
I am sarcastic of him/her	20	36	9	29	7	2.67
I find myself swearing at him/her	15	44	10	29	2	2.61
He/she can control anger towards me	31	33	14	21	0	2.26
He/she means no good	7	22	15	46	10	3.29
He/she makes a lot of sense	10	39	20	22	10	2.83
I feel disappointed with him/her	8	25	5	53	10	3.33
He/she is trying to get friendly terms with me	12	30	51	0	7	3.12
Hostility Level (Average)	**13**	**33**	**15**	**34**	**6**	**2.90**

According to the findings depicted on Table 8, the percentages of responses given by family members on their perspective of the hostility they expressed to the alcoholic family member slightly differed with those of the alcoholics. From the perspective of the family members, 13% strongly disagreed to being hostile on their alcoholic family member, while 33% disagreed with statements indicating that they were hostile toward their alcoholic family member. Both responses of "strongly

disagree" and those of "disagree" were a likely indication that family members did not view themselves as hostile to their alcoholic family member. Therefore a total of 46% claimed that they were non-hostile to their alcoholic family member. Of the participants, 15% were unsure about expressing hostility, a likely indication that they were ambivalent about whether or not they agreed or disagreed with the responses that indicated hostility within the family. Among the family member respondents, those that agreed to statements indicating presence of hostility were 34%, while 6% strongly agreed with statements showing that they were hostile to their alcoholic family member, giving a total of 40%.

The present findings reported a higher level of hostility from other findings in this area such as Simmons et al (2008), who established 34% of primary relatives of psychiatric families had hostility. However, the study was done in a different culture, with a different population and may not be generalized.

Further analysis showed that the findings indicated a normal distribution of hostility expressed by family members of alcoholics as shown on Figure 4.

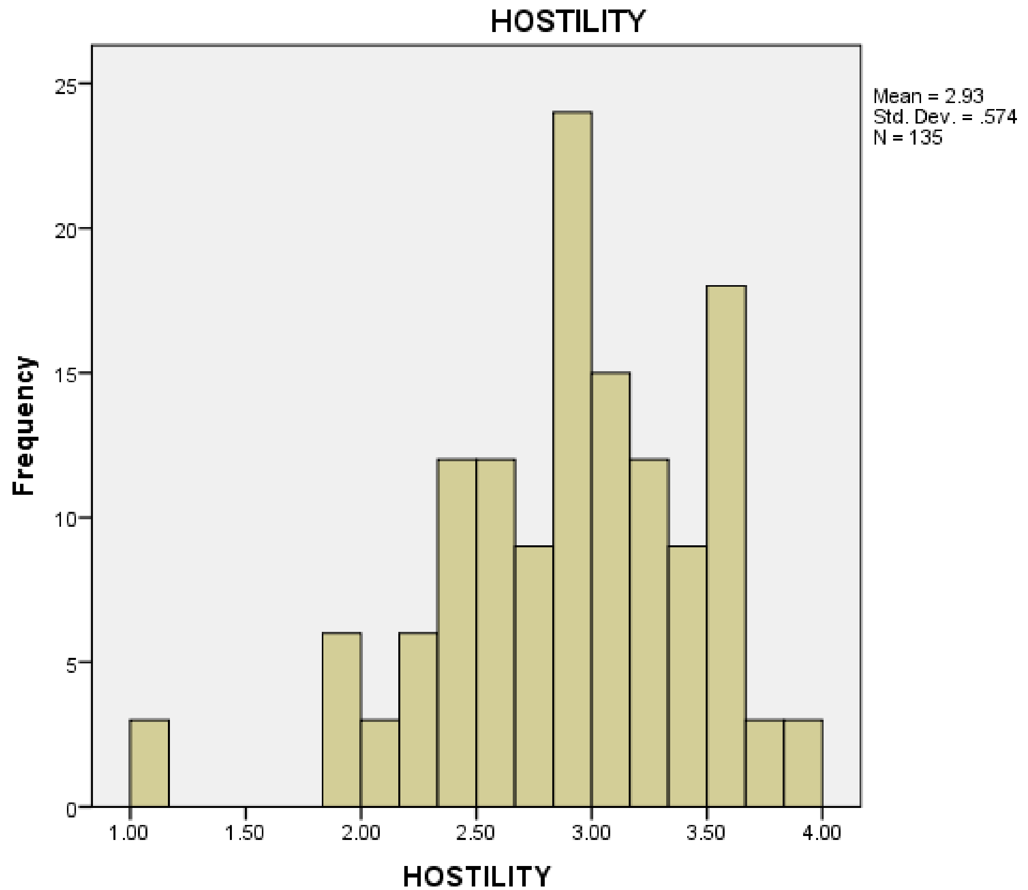

Figure 4: Level of hostility indicated by family members

Majority of the responses of family members were scattered around the mean with a standard deviation of 0.574. This was a likely indication that hostility was normally found among family members of alcoholics. The presence of hostility among such families is also supported by the following statements, which were imbued with hostile undertones:

> "I felt like quitting the marriage many times. He smelled of stale bear. It was so disgusting. I couldn't bring myself to touch him. He must have felt it because he pulled out and created a silent world of his own that I could not

penetrate. But occasionally he would have bouts of anger especially when he was drunk".

Anger and disgust are some of the words that describe hostility as shown in the statement above. From the responses of both the alcoholics and their family members, there was a slight difference in the responses with the inpatient alcoholics reporting higher levels of perceived hostility than that reported by family members. Figure 5 summarizes the distribution of responses from both inpatient alcoholics and their family members on their perception of hostility.

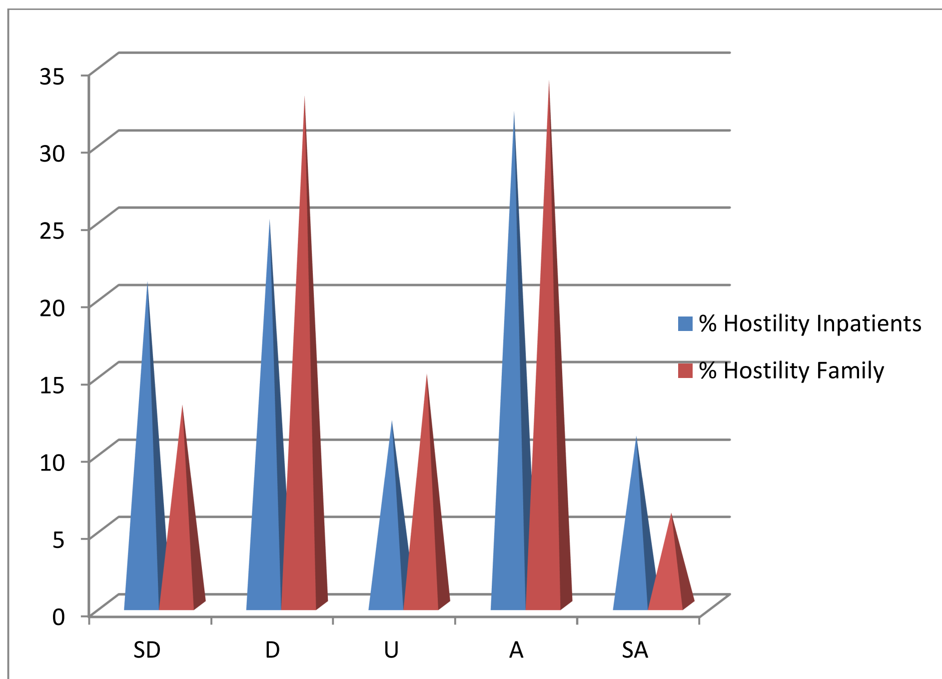

Figure 5. Hostility by Inpatient Alcoholics and Family Members.

It is noticeable that there was a small range among responses given by the inpatient alcoholics and those of their family members. Family members seemed to view themselves in more favourable terms on their expression of hostility compared to the alcoholics' perception, as depicted by the totals given when the 'agree' and 'strongly agree' statements were added up. More family members (33%) disagreed with being hostile compared to 25% of the alcoholics' responses. It is also notable that both groups of participants agreed on hostility statements with alcoholics at 32% while family members were at 34%. This implied that both the alcoholics and their family members agreed on almost equal levels of hostility being perceived by the alcoholic and expressed by the alcoholic family member. However more alcoholics (11%) strongly agreed with statements showing hostility in their families, compared to only 6% of family members. This meant that 11% of the alcoholics perceived high levels of hostility from their family members, while only 6% of family members regarded themselves as expressing high levels of hostility to the alcoholic.

Perhaps the difference in the ratings of hostility of the alcoholics and those by the family member can be explained by the way people judge themselves compared to how others would judge them. Pronin (2008) suggested that people judge their behaviour differently from how they are judged by others depending on their inner motivations. It might be that the family members tend to judge themselves as lower in hostility because their inner motivations would be to see the alcoholic making better decisions in regard to their drinking problems. Perhaps this was what Weiner

(2000) meant in his attributional theory when he argued that our attributions of ourselves are more positive depending on our inner motivations which contribute to how we behave towards others, and sometimes we may not be fully aware of this. This would indicate that the inner motivations of the hostile family member would likely contribute to their reactions to the alcoholic, but they may not be fully aware that they react in a hostile manner. Maybe the reaction from a family member would aim at helping the alcoholic overcome their behavioural problems. This way the family member would not interpret their behaviours as an expression of hostility, although the alcoholic thought differently.

In general, the present findings indicated that hostility existed among families with an alcoholic whereby both the alcoholics and family members indicated the presence of a hostile environment. Though hostility was seen to exist in families of alcoholics, the question remained whether or not such hostility would be a likely cause for relapse after treatment of the alcoholic. To answer this question, it was important to verify whether there was a relationship between relapse of the alcoholic and hostility from family members. This was done using Pearson's correlation test that would help show the direction and strength of the relationship between hostility and relapse.

Test for Hypothesis 1

The study hypothesized that there was a relationship between family hostility and relapse of recovering alcoholics. The study assumed that the presence of such hostility would give an environment where relapse would likely take place. The present findings had demonstrated the existence of hostility among families of recovering alcoholics, but needed to test the study hypothesis so as to show whether such hostility has a relationship with relapse.

H_o There is no relationship between relapse of an inpatient alcoholic and family hostility.

H_1There is a relationship between relapse of an inpatient alcoholic and family hostility.

The present findings had shown that hostility existed in the families of alcoholics, but the exact nature of relationship needed to be established. This was done using the Pearson Correlation Coefficient (r) as shown on Table 9.

Table 9

Correlations between Relapse and Hostility

		Relapse	Hostility
Relapse	Pearson Correlation	1	.367**
	Sig. (2-tailed)		.000
	N	179	177
Hostility	Pearson Correlation	.367**	1
	Sig. (2-tailed)	.000	
	N	177	182

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

Based on the confirmation of directionality shown after application of the Pearson correlation, there was sufficient evidence to fail to accept H_o which states that there is no relationship between relapse of an inpatient alcoholic and hostility of the family member. Findings confirmed that relapse is positively associated with hostility of a family member at a confidence level of ($p=0.000<0.01$). Based on this evidence there was sufficient evidence to accept hypothesis H_1.

Hostility is one of the three components that indicate presence of expressed emotion (EE) in a family, and which would likely be an attitude among family members pushing an alcoholic to more drinking episodes (Hooley, 2007). When family members are hostile to the alcoholic, they show aggression, sarcasm, anger, intense dislike, and they tend to embarrass the alcoholic. Such emotional reaction make the alcoholic feel worthless and no longer needed by the family members and may lead the alcoholic to retaliate by going back to heavy drinking.

The findings imply that when family hostility increased, there was expected to be an increase in relapse of a recovering alcoholic. This also seems to agree with earlier studies done in this area that showed family hostility as one of the EE factors responsible for causing relapse (e.g. Hooley, 2007; Pourmand, Kavanagh & Vaughan, 2005). A hostile family environment tends to blame the alcoholic for failing to get better and overcome his difficulties (Rotunda & O'Farrell, 1998). Such an individual is likely to suffer low self-confidence because he may interpret

this to mean that there is something wrong with them, and which he would therefore give as a good excuse to continue with his drinking problem. One needs high self-confidence to be able to develop the strength and ability to fight a debilitating habit such as alcoholism. Hostility in a family has also been related to high levels of conflict within the relationship (Blais & Renshaw, 2012). Conflicting environments would erode the confidence that the alcoholic would have in being able to fight the drinking problem. Families need to be supportive rather than conflicting in order to nurture the self-confidence required to overcome relapse. However, hostility is not the only negative factor in EE that could push the recovering alcoholic to relapse, family members' criticism could also be a contributing factor.

4.3.3 Relationship between Relapse and Family Criticism

The second objective in the study was to find out if there existed a relationship between relapse of the inpatient alcoholic and criticism from their close family members. Respondents were asked different questions to establish the level of criticism within their families on a five-point scale ranging from strongly agree (5 points) to strongly disagree (1point). Table 10 summarizes distribution of responses on different indicators of criticism perceived by inpatient alcoholics.

Table 10

Level of Criticism Perceived by Individual Alcoholics

Criticism Indicators	Strongly Disagree %	Disagree %	Unsure %	Agree %	Strongly Agree %	Mean Response
I feel good with him/her around me.	15	28	17	32	9	2.91
She/he makes me feel so exhausted	9	12	10	45	24	3.63
I pay no attention to his/her advice	15	11	12	48	14	3.35
He/she takes me for granted	20	36	20	17	7	2.55
I feel she/he is driving me crazy	8	20	20	38	14	3.31
It is easy to deal with him/her	19	38	13	21	8	2.60
We seem to disagree even on small issues	9	26	26	31	7	3.02
I can cope with him/her	21	40	11	24	5	2.53
I am really a burden to him/her	22	28	13	29	7	2.70
He/she appreciates what I have done for him/her	27	32	16	21	4	2.42
I find him/her getting easy to deal with	29	30	11	18	11	2.52
I wish he/she could leave me alone	24	28	11	25	13	2.76
She/he thinks I will mess up	11	29	20	34	7	2.98
I feel he/she is changing to become more difficult to deal with	13	23	18	35	10	3.06
I feel he/she let me down	19	30	18	25	8	2.72
Average Criticism Level	**17**	**27**	**16**	**30**	**10**	**2.87**

Findings depicted by Table 10 show that, out of the 186 participants, 17% of the inpatient alcoholics strongly disagreed with statements indicating criticism, while 27% indicated that they disagreed with such statements. This meant that a total of 44% indicated that there was no criticism experienced from their family. While 16% were unsure, 30% of the respondents agreed with statements indicating that

there was criticism in their families while 10% strongly agreed to such statements. This gave a total of 40% of the 186 inpatient alcoholics who positively indicated that there was presence of criticism in their families. The findings also represented a normal distribution as shown on Figure 6.

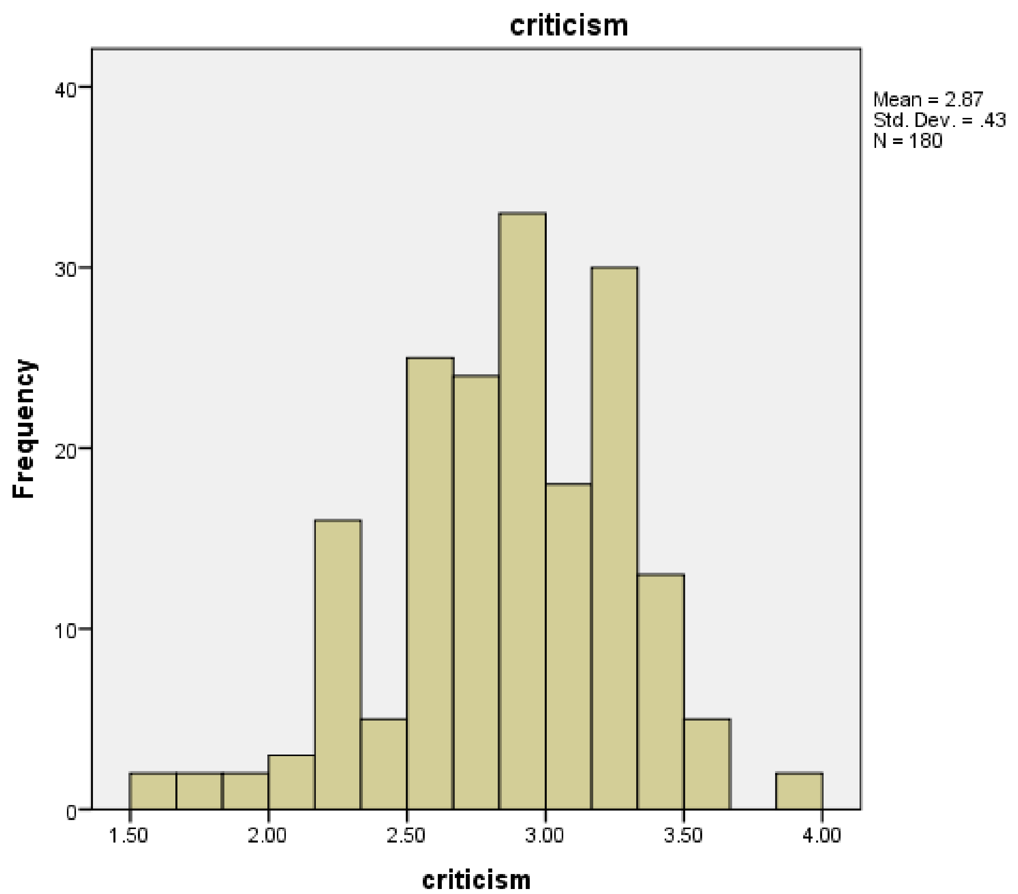

Figure 6: Level of criticism indicated by inpatient alcoholics

The normal curve in Figure 6 showed that responses were distributed around the mean with a standard deviation of.0.43. This is a likely indication that criticism was a normally perceived by alcoholics from their family members.

Criticism is shown by expression of disapproval for the individual's behaviours (Hooley & Gotlib, 2000; Simmons et al, 2008). Such disapproval is depicted by finding fault and active disagreement with the alcoholic, particularly in his ways of dealing with the drinking problem. According to the present findings, 40% of the alcoholics who participated in the study experienced disapproval or dislike on their drinking behaviour from their family members. This indicated that criticism existed in families of alcoholics. The interpretation would likely be that most alcoholics received disapproval of the negative drinking habit, which they may interpret as criticism. Perhaps offering such disapproval would be expressed by family members to try provoking the alcoholic's into a better level of functioning, and make him handle his drinking better. However, the alcoholics might have interpreted this to mean that their family member disapproved of them.

Criticism from family members has to do with attacking the alcoholic's behaviour and character, which was likely to put them in a defensive mode. The criticism was likely to make the alcoholic feel unaccepted which might have eroded his/her self-esteem and confidence gained during rehabilitation. As a result they may have developed a feeling of disconnection in the relationship with the family member, which may likely push them back to people who validated them such as the

drinking partners. Studies that have been done on criticism portray it as negative as it focuses on the negative habits and socially embarrassing behaviour (Ng, Mui, Cheung & Leung, 2001). Perhaps many family members would have been focusing so much on the negative behaviours that they failed to show appreciation of any positive step towards recovery. They might have focused on complete recovery/abstinence and ignored the smaller steps that the alcoholic made that indicated gradual recovery. A supportive family environment would likely give more affirmations for any positive behaviour change than criticism for any negative behaviour. It is the positive affirmations that bring about self-confidence and the efficacy that one would require in behaviour modification, rather than the criticism. Therefore, it is likely that rather than affirm the alcoholic on the steps they would make towards recovery, family members would have been much more likely to criticize.

The findings indicated that the alcoholic perceived criticism from their family members, but it is important to verify this claim from the family member's point of view. This would help find out whether family members agreed to statements showing that they expressed criticism to the recovering alcoholic, and hence show the interaction of such criticism in a family system. Table 11 shows the family member's responses regarding their expression of criticism to the alcoholic.

Table 11

Level of Criticism Expressed by Family Members

Criticism indicators	**Strongly Disagree %**	**Disagree %**	**Unsure %**	**Agree %**	**Strongly Agree %**	**Mean Response**
I feel good with him/her around me	9	13	4	56	18	3.60
He/she makes me feel so exhausted	13	29	9	42	7	3.00
He/she pays no attention to my advice	9	21	19	37	14	3.26
He/she takes me for granted	7	39	9	43	2	2.95
I feel he/she is driving me crazy	14	37	7	35	7	2.84
It is easy to deal with him/her	14	40	23	19	5	2.60
He/she is disagreeing even on small issues	5	23	14	52	7	3.34
I think I can cope with him/her	16	43	18	20	2	2.50
He is too much of a burden for me	23	25	23	30	0	2.60
He appreciates what I've done for him/her	29	45	7	17	2	2.19
I find him/her getting easy to deal with	2	39	20	22	17	3.12
I wish he/she could leave me alone	5	24	24	27	20	3.32
He/she ends up in a mess always	7	33	19	35	7	3.02
I feel he/she is changing to become more difficult to deal with	23	23	8	43	5	2.85
I feel he/she let me down	10	24	10	49	7	3.20
Average Criticism Level	**12**	**31**	**14**	**35**	**8**	**2.96**

For the family members, 12% of the 135 participants strongly disagreed to statements indicating criticism, while 31% disagreed with such statements. This meant that a total of 43% did not view themselves as judgmental or focusing on faults (criticism) towards their alcoholic family member. While 15% were unsure and could fall on either side, 35% agreed to expressing criticism to their family

member, and 8% strongly agreed to such statements that indicated presence of criticism expressed towards the alcoholic family member. This meant that a total of 43% respondents indicated they expressed criticism by either agreeing or strongly agreeing to statements that indicated they expressed criticism to their alcoholic family member. This likely meant that almost half of the family members accepted that they gave remarks imbued with criticism to the alcoholic. Responses indicating criticism among family members showed a normal distribution.

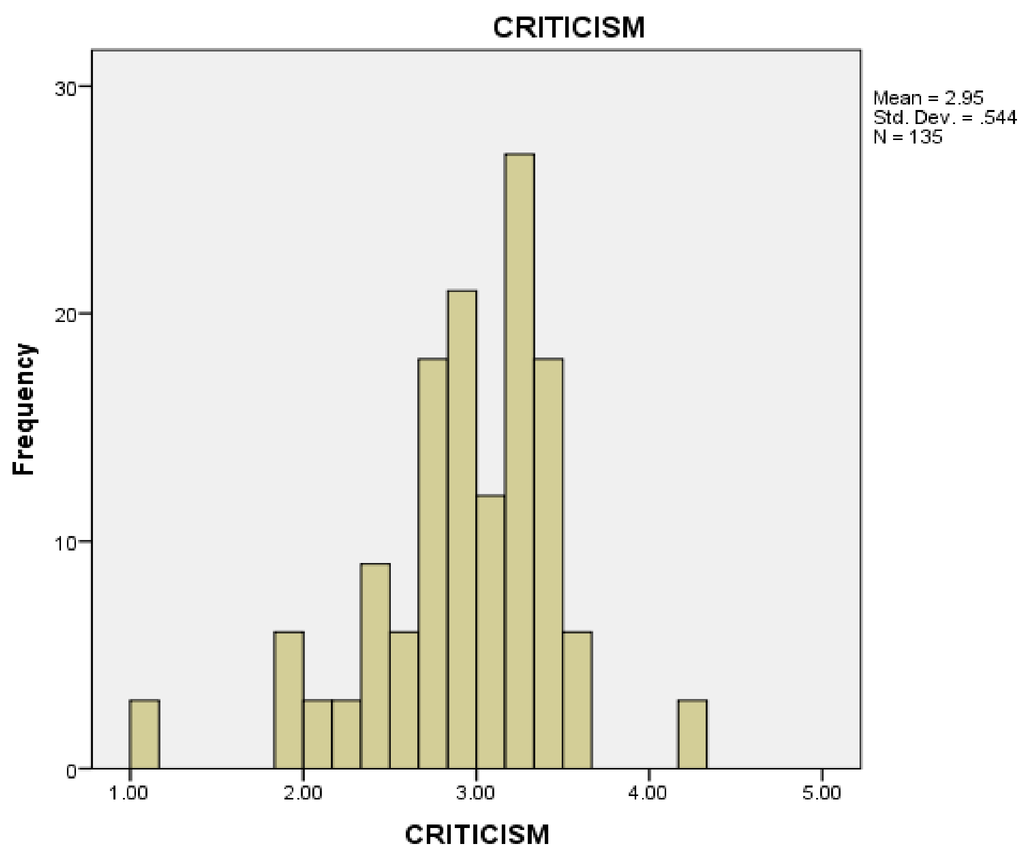

Figure 7: Level of Criticism indicated by family members

Figure 7 shows that majority of responses from the 135 family member participants were distributed around the mean with a standard deviation of 0.544. The above findings verify that criticism is normally expresses by family members with a member who is alcoholic. There seemed to be an agreement between both groups of participants that criticism existed and was expressed in their families. That is, family members expressed criticism to the alcoholics, and the alcoholic themselves were able to perceive such criticism. Rotunda and O'Farrell (1998) has argued that if the emotion such as criticism was not perceived then it was not significant to the person who was receiving it.

This kind of finding seems to give more light to the claim by Vazire & Carlson (2011), who argued that we need our own perspective and that of others to complete the picture when we judge ourselves. In this case, the findings from the alcoholics and that from the family responses give a complete picture of the respondent's perceptions of criticism within their families, and clarifies that indeed family members were critical of the alcoholic. According to the Systems Theory (Minuchin, 1974), an effective part of the system has an impact on all other parts. Therefore the criticism expressed by the family members would not be an isolated phenomenon, but was perceived by other parts of the family system (the alcoholic family member). This could make the alcoholic retaliate by drinking more and the cycle of relapse would continue.

The current research hoped to find out whether criticism expressed by family members to the alcoholic is a likely push factor to relapse. Criticism is part of a bigger construct, EE, which has been described as a kind of psychosocial stressor (Hooley, 2007), which may therefore be part of interactions that inform vulnerability to relapse. This is a likely indication that when criticism in the family was combined with other factors such as hostility, the likelihood of relapse increases for individuals undergoing treatment for alcoholism.

In sum, the present findings showed that both the family members and the inpatient alcoholics indicated the likely existence of criticism in their families. Such responses showed a normal distribution of the presence of criticism in both populations, with the totals of those who agreed and those who disagreed being exactly the same (that is, 43% of the 135 participants, n=58) in the two populations. A comparison of the responses from both groups of participants gave a picture of the levels of criticism from each groups' perspective. Figure 8 showed a summary of the views of both the inpatient alcoholic and their family members.

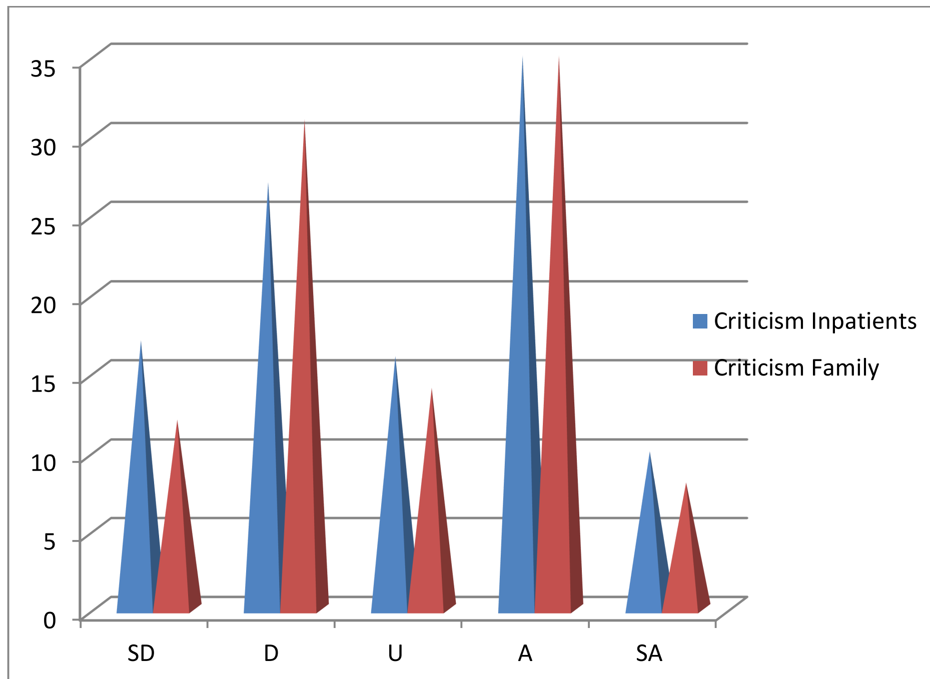

Figure 8. Criticism by inpatient alcoholics and family members.

It is noticeable that the mean percentage of those who agreed (including both who agreed and strongly agreed) almost equaled that which disagreed. There was a total of 42.5% that agreed and 41.5% who disagreed. And given that the unsure group was ambivalent on whether they experienced criticism or not, they could fall on either side, making both groups of 'agree' and 'disagree' to be almost equal. The interpretation here was that there was a likely indication that almost half of the alcoholics experienced criticism from their family members, and that almost half of the family members did not express criticism.

Hooley (2007) described relatives that expressed criticism as those linked to a desire to get the patient to behave differently, which is related to controlling behaviour. This resonated with the utterances of both the alcoholics and their family members concerning their experience of criticism within their families, which indicated existence of criticism within such families:

> "They had already agreed that I get rehabilitated; I guess they had even booked my admission. I was very angry to be treated like I don't have a choice. I sneaked out of home and got into a drunken stupor. I felt dejected…... My dad has treated me badly since I discontinued going to college. He shouted at me. He makes ill comments of me, like I am no good.… I think he hates me….. I cannot concentrate with school. I am not interested in studying but he insists that I must go back to college. He won't talk to me. And I am still angry……"

> "I had not understood that rehabilitation was for my own good. I was very manipulative. Every time my mother quarreled with me I would get into a fit of anger and drink heavily. I am still angry that she brought me to this miserable place (*referring to the rehabilitation center*). It's not like she cares….… I know she has sacrificed a lot to pay my rehabilitation fees……. You see, I have relapsed so many times…... I have been to too many rehabilitation centers. But I intend to get better. I have wasted much time and a lot of her money……"

> "….. they (*family members*) don't treat me well. They think I am such a burden…… they don't seem to be concerned about my feelings and they don't approve of anything I do. I think this is taking me back to my drinking problem".

There was agreement between the questionnaires findings and the interviews with the alcoholics. The statements from alcoholic inpatients showed comments loaded with criticism from their family members. Words such as "dejected", "abandoned", "hate" are all indicative of rejection, a characteristic of criticism. One of the individuals said: "they do not approve of anything I do…", a clear indication of disapproval which is one main characteristic of criticism according to Hooley

(2007). The emotion being expressed by majority of the alcoholics was feeling of discouragement, mixed with anger. Although eleven of the participants stated that they got angry with their family members, only six of them were still having traces of anger at their family members at the time of the interview, particularly for putting pressure on them to get into rehabilitation. These feelings of anger and disapproval were an indication of both hostility and criticism taking place at the same time.

The family members also expressed anger, but this feeling did not stop them from caring for the alcoholic. One family member said:

> "Every time she quarreled with me, I drank more. She therefore had to calm down and the drinking reduced. After some time I considered rehabilitation… I hope to attain sobriety this time….."

Another said:

> "I don't like the way he does things. It is like I have to repeat any task I give him. Even small tasks like cleaning up he is unable to do and I end up cleaning up after him. I quarrel with him and we seem more angry at each other than they were happy"…...

A similar statement was expressed by another family member:

> "It is no good giving him any work, such as doing dishes. He is very careless and breaks up things all the time".

The above statement is directly attacking the individual alcoholic rather than the behaviour. He is labeled as "careless" and one could observe the disgust in which these words were uttered.

Two family members said that there was more drinking during times of anger than times of peace, which showed that the family environment was too emotive to facilitate recovery for the alcoholic. Family roles particularly in decision making seemed such an emotive issue during interviews that it was affecting how members related to each other in the family. Nine of the fifteen inpatient participants were assertive in their expression of being left out in important family decisions. Some expressed negative feelings, mostly disapproval mixed with anger, after knowing that a decision had been reached after it had already been implemented. This was consistent with the questionnaires findings, with a large percentage revealing that family members made each other angry. Mike, (not the real name) said:

> "My mother is very controlling and rejecting. She makes all decisions concerning me. In fact she makes all decisions at home. Poor dad, he just complies; he is a man of peace…... I think he lives his life to make her happy. She wants to treat me in a similar way, but I am not like my dad. She is negative about all that I do and hence makes decisions for me. She commands the watchmen not to let me go out of the gate, I feel like her prisoner. She decides on all matters at home….. I am happier with my friends……. They like me and I feel like a star with them (*smiles*). At home my personality changes…. I am grumpy and withdrawn……."

Mike, clearly agitated, continued to say that the mother forgets that if she were not there, he would be the one to manage the family finances because he is the first born. He argued that he was drinking to hit back at his mother because she was very negative to him. Notice the term "rejecting" which is motivated by criticism of the other person, in this case the son. A conclusion can be made here that when a family member expressed rejection or is negative about the alcoholic member, the reaction was for them to also express anger and revert into heavy drinking. As

argued by Minuchin (1974), it appears then that family EE is cyclic and reverberates among the members of the family as explained by the Family Systems Theory. The study hoped to find out the existence of family EE and how this may cause relapse of a recovering alcoholic. There is support from the data collected in the study that the family EE component of criticism existed in families of alcoholics. According to the System's Theory used in this study, one individual's behaviour affected the rest of the relationships within the family. As such, criticism of the family members affected the negative drinking habits of an individual with alcohol dependency, giving him the likelihood to relapse. The question here was whether or not criticism was linked to occurrence of relapse for the alcoholic, a hypothesis that would be answered by using the Pearson's correlation.

Test of hypothesis 2

The second hypothesis in the research was to find out whether criticism had a relationship with relapse of the alcoholic. The present findings indicated that criticism existed within families of the majority of the respondents. However, more examination was required to find out whether criticism within the alcoholic families might have been a factor resulting in a return to heavy drinking of the alcoholic family member. Hypothesis 2 was stated as follows:

> H_o There is no relationship between relapse of an inpatient alcoholic with family criticism.

H_1 There is a relationship between relapse of an inpatient alcoholic with family criticism.

In order to measure the strength and direction between relapse and criticism, the Pearson Correlation Coefficient (r) was applied as shown on Table 12.

Table 12

Correlations between Relapse and Criticism

		Relapse	Criticism
Relapse	Pearson Correlation	1	.367**
	Sig. (2-tailed)		.000
	N	179	174
Criticism	Pearson Correlation	.367**	1
	Sig. (2-tailed)	.000	
	N	174	179

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

Based on the confirmation of directionality shown after application of the Pearson correlation there was sufficient evidence to fail to retain H_o which stated that there was no relationship between relapse of an inpatient alcoholic with family criticism. Table 12 shows that relapse is positively associated with the criticism of a family member at a confidence level of 99% ($p=0.000<.01$). This meant that based on this evidence there was sufficient evidence to accept hypothesis H_1.

The findings were consistent with those of many previous studies whereby expressing disapproval of the other person, had been found to have a predictive value to relapse in a large number of psychiatric illnesses, including alcoholism (e.g. Bullock, Bank, & Buraston, 2002; Hooley, 2007). For patients with psychological problems, high sensitivity to criticism may trigger a stress reaction that may lead to relapse (Carlson, 2011). Hooley and Gotlib (2000) had described the family EE (with criticism as one of the three characteristics of EE) as a high psychosocial stressor. Stress has been one of the high risk factors for relapse in alcoholism and all relapse prevention programs include stress prevention as a coping strategy in recovery in substance abuse (Witkietwitz & Marlatt, 2004). The interpretation is that the high sensitivity to criticism from the family member is a trigger for stress for the recovering alcoholic, who is then likely to turn to heavy drinking to cope with the stress.

In addition Nesic & Duka (2008), found out that stress was related to increased negative mood and craving for alcohol. That is a likely indication that alcoholics experiencing highly threatening or chronic psychosocial stress (*particularly from their families*) following treatment were more likely to relapse than abstaining individuals who may not be experiencing such stress. In fact experiments done on the brain responses to stress showed an increased susceptibility to relapse (Fox, Bergquist, Hong & Sinha, 2007). This may be a likely indication that the alcoholics treated at the rehabilitation centers may be have been on their way to recovery, but the stressful home environment may have been so fragile that it made them

vulnerable to relapse. Criticism is often interpreted as rejection by the alcoholic, which may provoke a stress reaction, thereby increasing the aversive impact of the criticisms and causing relapse (Hooley & Gotlib, 2000). This is to say that when the alcoholic sensed potent threats of being rejected they inadvertently may turn to alcohol to cope with such rejection. This would hence create a likelihood that the alcoholic would return to heavy drinking if the rejection happens in the home environment after treatment. Majority of the participants in the study reported that the negative reactions when criticized by their family members were an excuse for them to seek out their friends in search of the approval they got from such friends.

In a high EE family environment, criticism does not occur alone but also takes place within an environment that offers too much protection and too much care for the alcoholic, a component of EE referred to as emotional over-involvement (EOI).

4.3.4 Relationship between Relapse and Family Emotional Over-Involvement (EOI)

This section discussed objective four of the study, which aimed at establishing if there existed a relationship between relapse and family emotional over-involvement. EOI comprises of elements of overprotection, self-sacrifice and over caring attitudes. Families that have a member with a problem take it as their responsibility and obligation to take care and provide for this individual (Carlson, 2011). There are no clear boundaries of individual choices which may be

compromised by the larger family needs. Respondents were asked to indicate the level by which they agreed or disagreed with various attributes of family emotional over-involvement (EOI). A summary of the result of their responses is indicated in Table 13.

Table 13

Level of EOI Perceived by Inpatient Alcoholics

Over-involvement Indicators	**Strongly Disagree %**	**Disagree %**	**Unsure %**	**Agree %**	**Strongly Agree %**	**Mean response**
My family doesn't care of the way I live my life.	36	39	11	10	4	2.08
My family encourages me to talk about my difficulties.	29	43	12	11	5	2.20
My family doesn't like how I handle money.	3	7	9	49	32	3.99
My family doesn't like the way I take care of myself.	9	7	6	54	24	3.77
When I have concerns or difficulties my family helps me come up with a solution.	9	17	8	42	24	3.55
My family gives me a lot of attention.	10	8	9	44	30	3.76
My family has sacrificed too much for me.	11	16	13	43	18	3.41
My family tries to get me to change.	3	1	2	56	38	4.24
If I start talking about my concerns, my family changes the subject	20	38	5	31	7	2.68
My family won't talk to me about my health.	29	49	7	11	4	2.12
My family thinks I should be more active.	21	31	21	23	5	2.59
My family is not concerned who cleans up if I mess	29	37	12	16	7	2.34
My family is rarely concerned when I am away from home	19	45	6	25	5	2.53
Average Over- involvement level	**17**	**26**	**9**	**32**	**15**	**3.02**

Findings shown on Table 13 indicate that out of the 186 participants, 17% of the alcoholics strongly disagreed with statements indicating that their family members were over-concerned and overprotective (EOI) about them, while 26% disagreed with such statements. This shows that a total of 43% indicated that there was no experience of EOI from their family member. Some ambivalence was shown by 9% of the participants, indicating that they could fall on either side of agreeing or disagreeing. Among the participants, 32% agreed to the statements indicating family EOI, while 16% strongly agreed to such statements showing presence of family over-involvement. This was an indication that a total of 47% of the participants indicated that their family members expressed over-bearing and over-caring attitude towards them.

Further analysis showed that inpatient alcoholics were likely to experience emotional over-involvement from their family members. This means that they would likely characterize their families as too protective, too caring and too involved in them that it was over-bearing and intrusive. The responses of the inpatient alcoholics about their experience of emotional over-involvement from their family members indicated a normal distribution as shown on Figure 9.

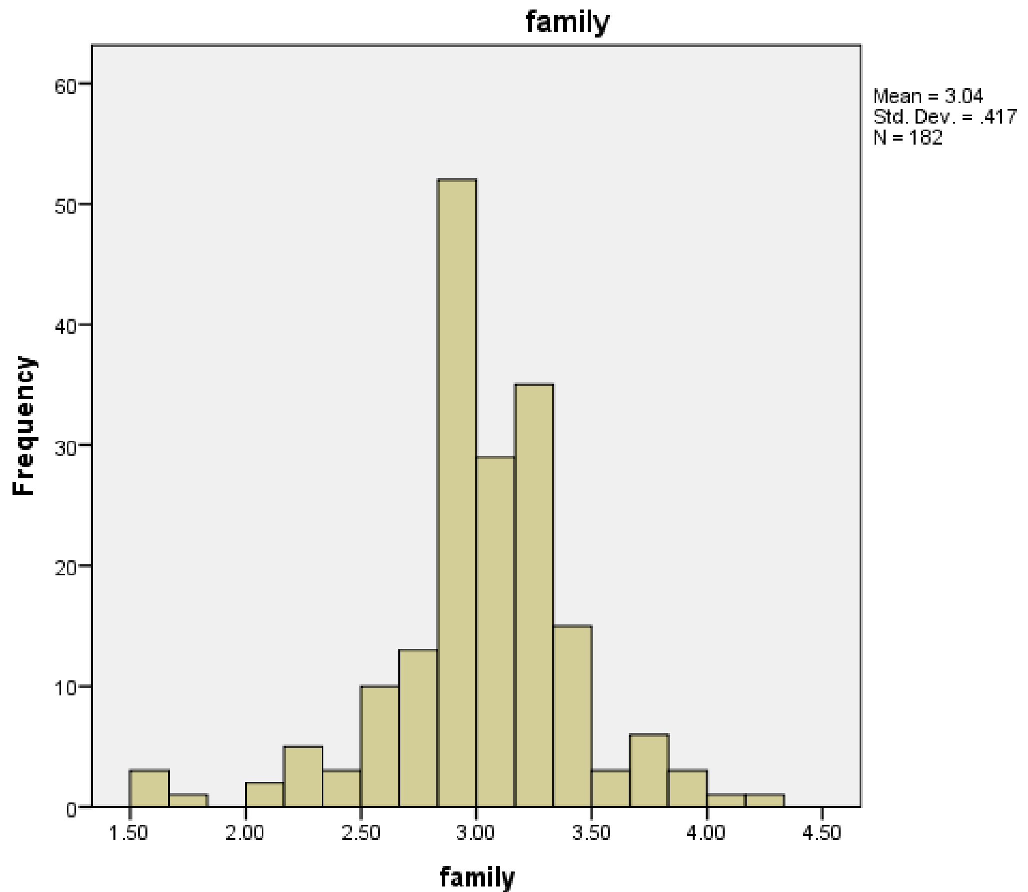

Figure 9: Level of EOI indicated by inpatient alcoholics

Figure 9 shows the distribution of responses from inpatient alcoholics of their perceptions of family members' over-involvement. As discussed earlier, the responses from inpatient alcoholics showed a normal distribution of how they perceived emotional over-involvement from their family members. This is depicted by responses that were distributed about the mean with a standard deviation of 0.417. Such a distribution indicated that more than average inpatient alcoholics had rated their family members as high in EOI.

So far, EOI seemed to have the highest votes in the study showing higher existence of the attitude among families with an alcoholic member. This seemed to tally with the observation by Ng et al (2001) that families with psychiatric families tended to develop self-sacrificing behaviours in the process of caring for the sick family member. Hence the family member/s living with an alcoholic may offer support to the alcoholic as the disease progresses, but too much of this support may develop and become counterproductive. When an individual offers too much care for the alcoholic they seemed to hinder the alcoholic from taking responsibility of their actions. Such behaviours of over-caring and over-concern would perhaps reduce his creativity and autonomy to develop better ways that can help him cope with the drinking problem. Both the carer and alcoholic would get frustrated that 'their' strategies may not be working and such frustration may lead to more drinking episodes. The carer who is too protective, too caring and over-bearing is described as codependent (Rotunda & O'Farrell, 1998).

Borovoy, (2005) found out that the pattern of behaviour referred to as codependence is sometimes characterized by self-sacrificing, too caring and too nurturing, and that it actually becomes destructive. The concept of codependency is not new in the concepts of the Family Systems Theory, describing the same behaviour known as enmeshment, which causes individuals in a system to behave as if they were fused into one way of behaving or thinking (Nichols &Schwartz, 2006). Such fusion stresses more on the 'we' element of the family than the 'I' element, which denies the alcoholic more freedom and creativity to try to fight the

vice of alcoholism. When an alcoholic is given autonomy within an environment where support is well balanced, the motivation to fight the vice would be intrinsic and hence would be likely to develop more effective strategies and self-confidence needed to maintain recovery. On the other hand if the alcoholic was given decisions and instructions by family members on how to handle recovery, he might not be able to own the decisions made by the family. He perhaps would not feel so much affected if the collective decision failed because he might not feel responsible for it. Family members who use the 'we' element in decision making need to understand that they disempower the individuals who need to be able to make decisions and be able to follow through such decisions (Goldenberg & Goldenberg 2013).

The family members' perspective of emotional over-involvement was required in order to show whether their perspectives corresponded with those of the alcoholics. Their views are summarized on Table 14.

Table 14

Level of EOI expressed by family members

Over-involvement Indicators	**Strongly Disagree %**	**Disagree %**	**Unsure %**	**Agree %**	**Strongly Agree %**	**Mean Response**
I don't approve of the way he/she lives	7	5	10	57	21	3.81
I discourage him/her from talking about our difficulties	0	7	16	53	23	3.93
I don't like the way he/she handles money.	5	11	3	61	21	3.82
I don't like the way he/she takes care of himself	10	12	5	55	19	3.62
When we have concerns or difficulties in our relationship, we try to get a solution	12	29	7	43	10	3.10
I am very attentive to his/her needs	0	7	20	49	24	3.90
I have sacrificed too much for him/her	0	7	9	60	23	4.00
I try to get him/her to change	5	12	2	67	14	3.74
I rarely ask him/her about problems he has	16	47	12	19	7	2.53
I think he/she should be more active	10	12	15	51	12	3.44
I won't talk to him about his/her health	18	55	8	15	5	2.35
I don't ever clean up after his mess	21	51	5	15	8	2.38
I am rarely concerned when he/she is away from home	18	48	13	18	5	2.45
Average over-involvement Level	**9**	**23**	**9**	**43**	**15**	**3.31**

From the study findings indicated on Table 9% of the 135 family member participants (n=14) strongly disagreed with statements suggesting that they were over-involved (over-concerned, over-bearing) with their alcoholic family member, while 23% disagreed with such statements. This means that a total of 32% of the

family members did not find themselves being emotionally over-involved with their alcoholic family member. A few of the respondents 19% were unsure that they expressed EOI on the alcoholic. The findings indicated that 43% agreed to statements indicating that they expressed EOI, while 16% indicated that they strongly agreed to such statements. Hence, 58% of family members indicated that they expressed an over-caring, overprotective kind of attitude to the recovering alcoholic, meaning they were emotionally over-involved with them. Responses of family members gave a normal distribution as shown on Figure 10.

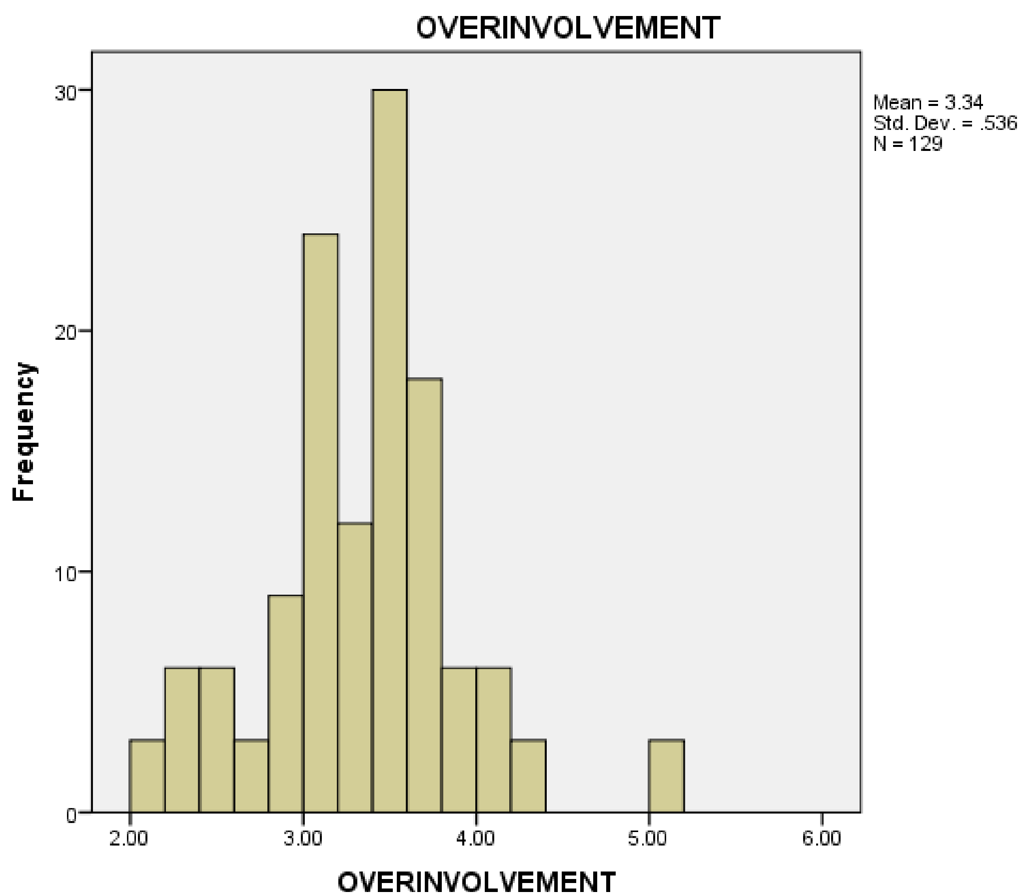

Figure2: Level of EOI indicated by family members

The findings indicated that the responses of the study participants were distributed around the mean with a standard deviation of 0.536. This is likely indication that majority of the family members of alcoholics agreed to the fact that they expressed emotional over-involvement on the alcoholic.

Families are likely to offer much EOI because they hope that when they get over-involved, they are protecting their alcoholic member and this could help win their loyalty thus stop the drinking. However, when too much care and protection are given to the alcoholic they do not seem to promote growth but becomes rather destructive. As Rotunda and O'Farrell (1998) explained, EOI is expressed within an environment of criticism. This would mean that the criticism experienced in a high EE family is counterbalanced by emotional over-involvement that may comprise a double-bind for the alcohol-dependent individual.

Double-bind is a form of communication used in the Systems Theory to mean giving contradictory messages that lead to the patient's confusion. It indicates that on one hand, the family members show disapproval and dislike about the drinking problem, but on the other hand they are too caring, too protective and overbearing (EOI) in trying to overcome the same problem. This is likely to result in confusion for the alcoholic family member, who might wonder why this rejecting and fault-finding individuals also seems to offer too much care. Many experts have proposed use of clear communication to enhance relationships, which clearly is not seen in the confusion given by double-bind communication.

According to Carlson (2011), such confusion also offers a fragile environment that is stressful for the patient, and that can trigger relapse. Many alcoholics turn to alcohol during stressful moments, and such stress that would come from the family would likely trigger relapse.

The present findings found a difference between the experiences of EOI between the two groups that participated in the study. The comparison between the two groups is depicted on Figure 11.

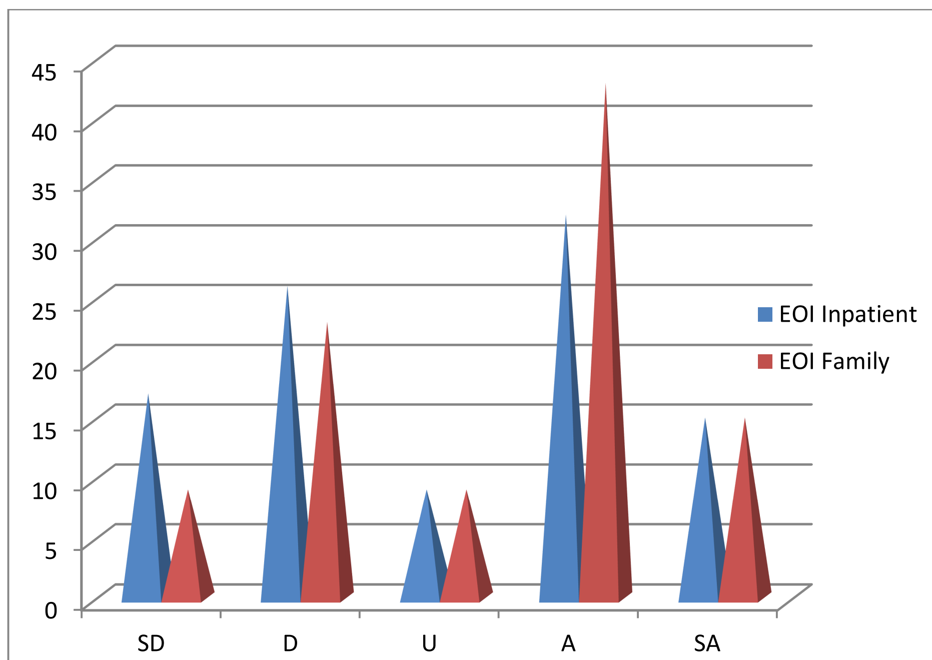

Figure 11. Emotional Over-involvement by Inpatient Alcoholics and Family Members.

Working from the fact that 'agree' and 'strongly agree' statements are responses that affirm the statements to measure the variable in question, it is notable that

among the three components of EE, both the inpatient alcoholics and their family members recorded the highest number of scores on the experience of EOI in their families. Those that agreed to the EOI statements from alcoholic respondents were 47%, while those that agreed on the family members' side were 58%. As expected, the present findings demonstrated high levels of EOI as reported by both the alcoholics and their family members. This is a clear indication that majority of families are highly involved in the lives of the alcoholic family member. According to the Systems Theory, alcoholism becomes the whole family's business, and decisions made in the family surround the alcoholic's drinking problem (Saatcioglu, 2006). Family members blame the alcoholic for all the problems going on in the family and yet they are all trying to look for solutions for the patient. The family members become too domineering that the patient cannot live with this kind of stress from pity and copes by falling back into their illness (Lopez et al, 2009). Families need to learn to give a certain degree of freedom and autonomy to the patient so that he feels responsible to take charge of the illness.

Among the components of EE, EOI seems like a more complex one because in some of the studies (e.g. Fichter et al 1997), it appeared to offer a buffer effect that protected individual alcoholics from relapse. However, other studies (e.g. Hooley, 2007) seem to argue differently by showing an EOI/relapse association. As such, studies on the effect of EOI on relapse are not conclusive. The current study aimed at finding out whether there was a relationship between EOI and relapse in alcoholism. The present findings showed existence of high levels of EOI in the

families of alcoholics that participated in the study. To test for the relationship between EOI and relapse, the Pearson Correlation Coefficient was applied.

Correlation Analysis between Relapse and Emotional Over-Involvement (EOI)

The study hypothesized that there was a relationship between EOI and relapse. Present findings showed that families of alcoholics were described with high levels of EOI and the study sought to show the relationship between EOI and relapse. The hypothesis of the study being tested was stated as follows:

H_o There is no relationship between relapse of an inpatient alcoholic with family emotional over-involvement.

H_1 There is a relationship between relapse of an inpatient alcoholic with family emotional over-involvement.

In order to measure the strength and direction between relapse and EOI, the Pearson Correlation Coefficient (r) was applied as shown on Table 15.

Table 15
Correlations between Relapse and EOI

		Relapse	EOI
Relapse	Pearson Correlation	1	.520**
	Sig. (2-tailed)		.000
	N	179	177
EOI	Pearson Correlation	.520**	1
	Sig. (2-tailed)	.000	
	N	177	182

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

Based on the confirmation of directionality shown after application of the Pearson correlation as shown on Table 15, there is sufficient evidence to fail to retain H_o which states that there is no relationship between relapse of an inpatient alcoholic and EOI of a close family member. Table 15 below confirms that relapse is positively and strongly associated with the EOI of a family member at a confidence level of 99% ($p=0.000<.01$). Based on this evidence there is sufficient evidence to fail to accept hypothesis $H_{0,}$ that there was no relationship between family EOI and relapse of a recovering alcoholic, and H_1 was therefore accepted.

The strong and positive association between relapse and EOI indicated that when EOI was increased, relapse for the alcoholic is likely to increase. EOI is characterized by too much care and concern about the alcoholic. It is a characteristic that makes the family to be too supportive and overprotective that it denies the alcoholic the feeling of individuation because his problems become everyone's problems. Such a family is described as enmeshed (Nichols &Schwartz, 2006). In enmeshed families, the members operate as 'we' and every decision is made by the whole family; the family over-concerns themselves with each other's affairs. Such an environment denies opportunities to the alcoholic to gradually become stronger in the recovery process. If the motivation to change comes from within the alcoholic rather than the family it would likely bring a better outcome and would maintain his abstinence goal.

Again, EOI is experienced in an environment that is also described with criticism or rejecting, giving a classic double-bind. As such, such an environment becomes

too fragile and confusing that it pushes the patient into relapse. That is, the more a close family member is over-involved emotionally with the alcoholic member of the family, the more the chances there are of the alcoholic returning to heavy alcohol use. This view is supported by Simmons, Chambless, and Gordon (2008) who argued that relatives high in EOI are believed to over-identify with patients and lack clear relational boundaries, making it difficult for the patient in recovery. According to the Systems Theory, when families are enmeshed they lack a clear way of separating their thoughts and behaviours as a group (Nichols & Schwartz, 2006). The family in this case operates as one without the autonomy of individual members. Such family members feel that it is their responsibility to ensure the patient's welfare and therefore hinder the patient from taking responsibility of their behaviour, which only works to worsen the situation.

This is also supported by qualitative data obtained during interviews with both inpatient alcoholics and their close family members. As earlier discussed, eleven of the alcoholic participants seemed to express their need to be allowed to make their own choices in life. They felt that their parents were too involved in their lives. Two of them were doing degree programs chosen by their parents and they didn't like it.

> "My dad chose my engineering course for me. I wish I would be allowed to work with people. I would especially prefer to understand alcoholism and help many other people struggling with the disease. I would want to educate society on the alcoholism disease. But my dad will hear none of it. This gives me stress…..".

> “My mother pushed me into this course at the university. She thinks I will get a good job after. But I really hate it”.

One of the alcoholic said:

> “Many times, the mother comes in late at night and wants to discuss something with me. But I can tell that her ‘discussion’ is just for her to talk at close distance so that she can sniff alcohol from me. And if I am drank hell breaks loose. I wish I was living alone but can’t afford to rent a house just yet….. I wish she could leave me alone….”

This argument from the alcoholics resonated with the family member’s contribution in the subject. All six of the mothers to the alcoholic sons seemed to be too involved with their alcoholic son’s lives. One of them was overly worried that her son was receiving good care at the rehabilitation center. Although that particular rehabilitation center had a rule that a parent or spouse should not call in the first month after admission, the mother kept calling to find out whether he was eating properly, taking his shower, and whether he was taking his medication. She didn’t trust that they would take good care of the son. Another mother to a 33 year old alcoholic referred to him as a ‘boy’.

> “This boy does not seem to learn…… What is annoying is that we make all the decisions for him because he just won’t do it right…”

The following are a few statements with a theme that indicated expressed emotion that were made by family members showing their level of involvement included:

> “I care so much for him that is why I do everything for him…..”
>
> “I don’t think anyone else can care for him the same way that I have….”

> "He can't survive without me around. He would kill himself with alcohol…."

> "I have sacrificed everything for him. I am always available when he needs me. I have supported him in so many projects that he does not finish and I have paid for his rehabilitation three times. But he does not seem to see what I have been through…."

> "I would want him to get a job but not too far away. This way I can monitor how he spends his time…"

In sum, there was agreement between the questionnaires and interview questions and majority of the family members indicated high EOI. It is notable that majority (n=74; 54.8%) of the family member respondents were mothers who came to visit their inpatient alcoholics compared to fathers with 13.3% (see Table 3). Majority of the inpatient alcoholics were also males (95% as shown on Figure 1) with the majority being youth. We can therefore conclude that there was a likely indication that mothers seemed more involved with their son's drinking habits. The presence of more mothers in the sample increases the probability that there are more mothers who express EOI, but such an idea can only be confirmed through more research. The traditional role of women is about caring, but a mother may seem to offer more care and protection during times of illness. Perhaps the visits to the rehabilitation centers by the mothers were an indication of the continued care and nurturing given by the mothers to their children.

This would perhaps imply that prolonged periods of offering too much care and protection during chronic illnesses such as alcoholism would probably become characterized by overprotection or over-involvement in this case. This resonates with a finding by Ikram and colleagues (2011) who demonstrated that among the

EE relatives, the majority were females, particularly mothers. Mothers spend more time with their children during the growing up years and as they offer nurture and care they are likely to become too protective, particularly during times of their child's illness. Alcoholism is a chronic illness; hence the care and nurturance needed from the caretaker may be extended for a longer time. This is likely to develop into a self-sacrificing tendency that becomes over-bearing and therefore counterproductive. This argument seemed to get support from Saatcioglu (2006), who observed that mothers of substance addicts have the highest symbiotic ties to their sons, while the fathers were absent. Fathers might be absent doing work and might not develop such bonds with their children given the contact time that they have with the children.

Research on EOI/relapse association has been contradictory in a variety of studies, with some studies arguing for a positive relationship (e.g. Steketee & Van Noppen, 2003), while others argue for a negative relationship (e.g. Fichter et al, 1997). According to Fichter et al (1997) who studied relapse among alcoholics, EOI was associated with less rather than more relapse and it worked as a buffer to relapse. However the findings were contrary to the buffer effect and showed that there appeared to be a strong and positive relationship between EOI and returning to heavy drinking after treatment of an inpatient alcoholic. Respondents in the study indicated high levels of EOI, which also appeared to result to relapse in alcoholism. In general, the present study showed that families of alcoholics are described by all

three variables of EE (hostility, criticism and EOI). All the variables showed a positive relationship with relapse; hence confirmed the EE/relapse association.

The primary hypothesis for the study was that there existed a relationship between family EE and relapse of an inpatient alcoholic. EE was characterized by the three components of hostility, criticism, and emotional over-involvement (EOI). The present findings indicated that all the three components of EE existed in families of alcoholics, and also that all the three components had a positive relationship with relapse of the alcoholic family member. Among the three components, EOI seemed to have the strongest relationship with relapse. In order to draw conclusions relating to the combined effect of the three predictor variables, all the three components of EE were discussed to give a general view of the study and to test the primary hypothesis of the study in the following section.

4.3.5 Summary of Combined Relationship between Relapse and Family Expressed Emotion

The primary objective of the study was to find out if family EE existed in alcoholic families and if it was a predictor variable for relapse. Family EE was described using the variables of hostility, criticism, and emotional over-involvement as defined by Rotunda & O'Farrell (1998). Figure 6 depicts a summary of the means of both groups of participants (inpatient alcoholics and family members) on their ratings of EE components within their families.

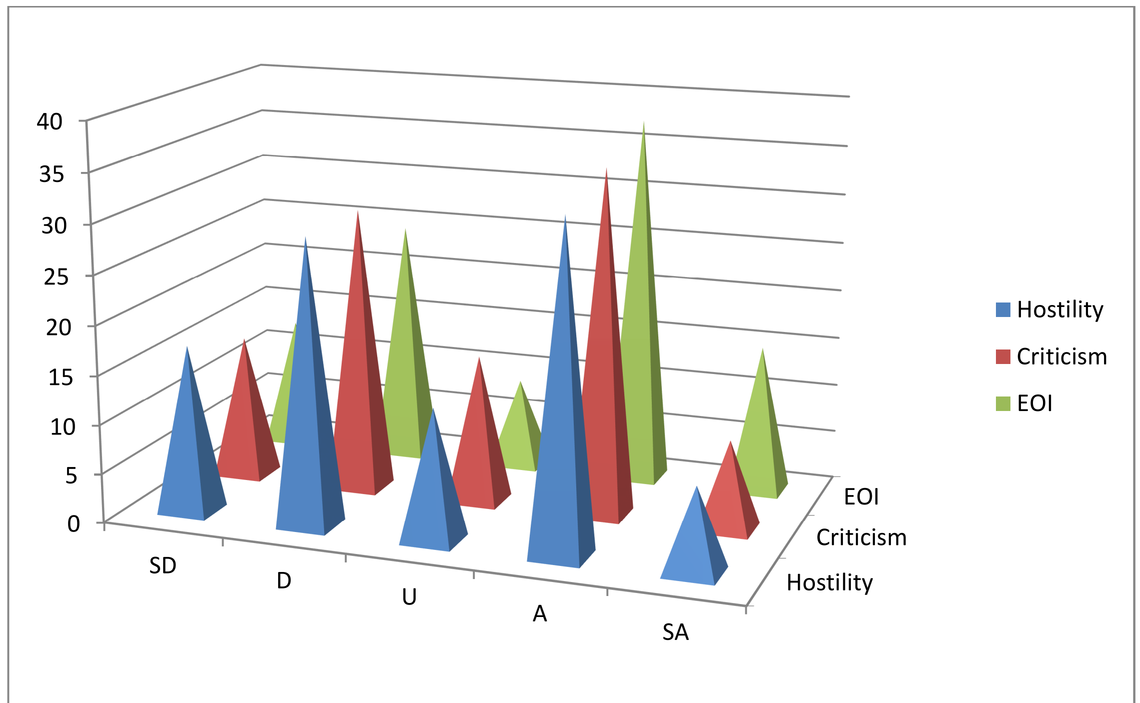

Figure 12. Expressed Emotion by Inpatient Alcoholics and Family Members.

As shown on Figure 6, the means of both populations of the study (inpatient alcoholics and family members) showed that all the respondents mainly agreed to statements indicating high hostility, criticism and emotional over-involvement (EOI). Fewer numbers disagreed to the statements and the findings hence indicated that high EE existed in their families. EOI had the highest positive votes from both groups of respondents, which meant that majority of the study respondents agreed that EOI was a major characteristic of their families. It is notable that the total responses for agree (A) and strongly agree (SA) were higher than all the other responses for all the components of EE, which is a likely indication that high EE seems to be a characteristic feature of families with alcoholic patients.

The kind of EE environment has been described as one that is likely to trigger a high stress reaction for the alcoholic. Hooley and Gotlib (2000) argued that EE is a form of psychosocial stress that was responsible for relapse among individuals with substance abuse. This likely meant that if an individual alcoholic lived with relatives that show anger, rejection, fault-finding, judgmental, yet over-concerned and over-protective, these would trigger a stress reaction for the alcoholic. Stress is a high risk factor for alcoholism because majority of individuals use taking alcohol as a coping strategy to manage stress.

The following section discussed the primary hypothesis for the study in order to help draw conclusions on the effect of all EE components when combined with each other.

Test for the Null Hypothesis

The primary hypothesis of the study was that there existed a relationship between family expressed emotion (EE) and relapse of the inpatient alcoholic. This hypothesis was derived from a combination of the three components of hostility, criticism, and EOI, and which explained the existence of family EE. It was therefore hypothesized that:

H_0 There is no relationship between relapse of an inpatient alcoholic with expressed emotion of the family member.

H_1 There is a relationship between relapse of an inpatient alcoholic with expressed emotion of the family member.

The Pearson Correlation Coefficient was applied in order to test the strength and direction of the relationship between EE and relapse. This is shown on Table 16.

Table 16

Correlation of Combined EE Predictor Variables

		Relapse	Hostility	Criticism	EOI
Relapse	Pearson Correlation	1	.367**	.367**	.520**
	Sig. (2-tailed)		.000	.000	.000
	N	179	177	174	177
Hostility	Pearson Correlation	.367**	1	.498**	.674**
	Sig. (2-tailed)	.000		.000	.000
	N	177	182	179	182
Criticism	Pearson Correlation	.367**	.498**	1	.278**
	Sig. (2-tailed)	.000	.000		.000
	N	174	179	179	179
EOI	Pearson Correlation	.520**	.674**	.278**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	177	182	179	182

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

Table 16 gives the correlation matrix of the main variables of the study. All the sub-variables of expressed emotion, that is, hostility, criticism, and emotional over-involvement had a significantly positive impact on relapse of the inpatient alcoholic. Based on the findings of the correlation matrix of EE and relapse given in table 13 (p=0.01), H_o is not retained in the study and therefore we accepted the

alternate hypothesis H_1. That is, there was a positive relationship between EE and relapse of the inpatient alcoholic.

The value of hostility was 0.367 and the correlation was statistically significant at $p=0.000<0.01$. Criticism also had a positive relationship with relapse ($r=0.367$) and significant at $p=0.000<0.01$. It is notable that both criticism and hostility had an equal association with relapse, an indication that inpatient alcoholics perceived criticism and hostility at an equal measure from their close family members. Emotional over-involvement had a positive relationship with relapse ($r=.520$) at a statistical significance of $p=0.000<0.01$. This is a likely indication that though families of alcoholics were characterized by hostility and criticism, EOI seemed to have a stronger correlation among the three factors.

It is also notable that the EE variables (hostility, criticism, and EOI) had a positive and strong relationship with each other. Hostility and criticism correlates showed $r=0.498$, ($p=0.000<0.01$), an indication that whenever hostility increased in the family, criticism also increased. When hostility increased, emotional over-involvement also increased ($r=0.674$, $p=0.000<0.01$), while an increase in criticism indicated an increase in EOI ($r=0.278$, $p=0.000<0.01$). These findings indicate that all three variables played a role in the existence of each other. Hostility took place in an environment characterized by criticism and EOI. None of these factors would really exist in isolation but were all combined to add up to the construct of expressed emotion (EE).

The findings in this study indicated that there was a positive correlation between relapse and family expressed emotion. This means that the higher the family is characterized by the negative attitudes showing anger, sarcasm, disapproval, and over-protection of the alcoholic, the more likely that the alcoholic would relapse. Hence, the present findings seemed to resonate more with the proponents of the EE/relapse association (e.g. Pourmand, Kavanagh & Vaughan, 2005; Hooley, 2007).

Statements from the interviewed family members suggested the occurrence of high family EE. For example one of the family members expressed how they reacted to the spouse after his initial lapse as a factor that pushed him to more drinking:

> I felt very let down when he went back to drinking after about two months of abstinence. I tried keeping him from his friends. I instructed the watchman not to let him out. I kept calling home to find out whether he had left the house…. I sometimes feel like he is unable to take care of himself…..
>
> I lost it, and shouted at him repeatedly. I really tried controlling myself but it was difficult. He does not seem to see all he has taken us through. He is wasting our lives… He seemed not to care about how I felt. However, the more I got angry the more he seemed to drink. I finally calmed down and was able to persuade him to come for rehabilitation.

The statements "I tried to keep him from his friends", "I instructed the watchman not to let him out", "I kept calling home…", and "He is unable to take care of himself…." show control of the individual, which is indicative of emotional over-involvement. Other statements such as "He is wasting our lives", the anger, and shouting and indeed all these statements are all indicative of a high level of expressed emotion towards the spouse. Such an environment would be too stressful

and fragile that it would push the alcoholic to relapse. This theme was recurrent in most of the interviews carried out from close family members.

A degree of pessimism expressed by a mother of a 33 year old son who had relapsed three times expressed statements that indicated expressed emotion:

> Everyone is going through the economic problems. This boy does not seem to learn (*notice the term "boy'*). Every time he begins something he leaves it unfinished. He has done so many courses and started business ideas that end up wasting my money. I don't want to provide any more, nothing good can come out of him.
> There is no point spending much on him right now. I have a feeling that he will still relapse. I wish they would keep him here for six more months or until I am assured that he is okay.
> After all the effort we have put into him he might not achieve much with his life…..

Such statements as "he is wasting my money", "nothing good can come out of him", "he will still relapse", "after all my effort", indicate a high degree of criticism as indicated by the level of burden. The fact that he is referred to as 'boy' would show a high degree of wanting to nurture as if it were a younger child, which would be indicative of over-involvement. Such a double-bind shown in these statements demonstrated on one side disapproval of the alcoholic, and on the other side the term 'boy' would show that he still needs more care and attention like a little boy would perhaps need from his parents. It is such communication that results into confusion, making it difficult for the alcoholic to be free to make clear decisions on his recovery. Such a family would need to learn clearer ways of communication

that would affirm the alcoholic and would use any positive aspect of him to make him more functional.

From one of the interviewee's point of view, his mother expressed high EE was high in Morris, which made him to passively obey, something he hated to do, waiting his leaving home:

> "My mother searches my room and car. She wants to know how I spend all my money, then claims that I am wasteful. I am in college and she is providing everything for me, but I am treated like a kid. I get angry, my younger brother is treated with more respect than I get. I just quietly obey what she says, but I hate it. Part of how I would like to survive after rehabilitation is following everything she tells me because that way we shall not conflict. Sooner or later I will leave home after college and be able to live my life…"

It is clearly shown from the above claim that the mother was overbearing and disrespectful in the way she treated the son. "I am treated like a child" is perhaps a show of too much involvement and over-concern that is characteristic of codependent relationships as suggested by Rotunda & O'Farrell, 1998). Such over-involvement is likely to make the individual to just act his role as a child in a self-fulfilling prophesy, and refuse to be creative enough to think of how to free himself from alcoholism.

Some studies do not support the EOI/relapse association. For instance, Fichter et al, (1997) suggested that it is the criticism attitude of family members that caused relapse among alcoholics, while the EOI component of EE had a negative relationship with relapse. However EOI seemed to be a major factor, and from the alcoholic's perspective, they felt that the family was too involved in the alcoholic's

own affairs. To support this claim, one interviewee suggested that he needed freedom from the mother.

> "It wasn't that I had enough money to go drinking most times, but my mother was getting too nosey about my whereabouts. She would call all the time or get my sister to call me. They sneaked into my room and searched whenever they got a chance. They were hunting for anything, but mainly drugs. I had not intended to get very drunk, but my mother attitude is bad. Someday I blacked out and could only get home the following day".

> "My mother is interested in total abstinence from taking alcohol, but my interest is to be able to control myself. She makes me angry and I drink more… …but I wish she could just leave me alone".

These remarks are an indication that he perceived the mother as too involved in his life, a theme that was common among the interviewees. Help for the alcoholics would be to allow them more freedom in finding out how to get better without too much demand and control from the family members. These claims confirm presence of high EE in families of alcoholics which have a high chance of causing relapse of an individual addicted to alcohol.

4.3.6 After-Care Strategies for Relapse Prevention

The fifth objective of the study was a find out possible after-care strategies for recovering alcoholics that would enhance relapse prevention. Relapse prevention needs to address every element of life, including the family dynamics and interactions of the family members. Family members need to understand that once the alcoholic leaves treatment, they might continue to face challenges for a long time. Participants gave suggestions of what they hoped would make treatment in

rehabilitation center more effective. The open ended questions yielded suggestions from the inpatient alcoholics on the role they would prefer their family members to play in their recovery process. It was found out that majority of the alcoholics sought for understanding, support, acceptance, trust and sensitivity of their family members towards their drinking problem. They also wished family members would go through psychotherapy alongside them so that they are able to appreciate their own need.

Several participants required that the family members stopped drinking and keeping alcohol away from the house. There is robust literature that supports the view that one of the most important things that a family needs to be aware of when living with a recovering alcoholic is the importance of family members maintaining an alcohol free environment (U.S. department of Health and Human Sciences, 2007). An individual in recovery can hardly be expected to remain sober and clean if family members keep alcohol around the home. For recovery to work a home should be completely free of any alcohol. This would also require a lifestyle that promotes recovery particularly for family members who take alcohol during family celebrations.

These were suggestions that rehabilitation centers come up with support groups to help family members as part of the after care. This would provide encouragement to help the family members cope with the emotional and physical stress that can

accompany supporting an individual in recovery. One of the participants argued that:

> "When I saw my dad asking for support with alcoholism problems from his friend, I felt challenged to seek out my own support group. One of my friends was in AA meetings and I joined him. It was when I stopped attending meetings that I relapsed….."

This statement is an indication that the alcoholic sought help when they saw a close family member seeking out for his own support. Perhaps the rehabilitation centers need to keep the door open for such family members, or develop programs for family support groups.

Family member participants suggested that rehabilitation centers should provide them with support systems during and after treatment of the alcoholic so that they are able to continue discussing the challenges that may affect the whole family and that are likely to precipitate relapse. According to the study participants, it was critical that the entire family should be involved in the treatment as well as the recovery process. This way, the family would need to learn to listen to, and be supportive of the recovering individual once the treatment program had ended. Some suggested that family members needed education, not just about how addiction works but it may also be necessary to equip alcoholics with skills on stress and anger management. Recovering alcoholics and drug addicts may be more susceptible to stress, which can increase their chances of relapses (White & Jackson, 2005). In order to help them maintain recovery, it was important for family members to assist alcoholics in lessening their stresses. Stress had been a

major factor in relapse of the alcoholic and needed to be managed for effective recovery. According to the findings of the study, the family EE components of hostility, criticism, and EOI were likely triggers of stress among individuals in recovery. Hence one way to reduce such stress was to learn better communication patterns that would enhance recovery. Family therapy could help to alleviate many of factors that lead to stress by improving communication skills and helping family members learn how to resolve conflict.

4.4 Regression Analysis of Relapse and EE variables

4.4.1. Introduction

The study sought to establish the relationship between relapse and family expressed emotion (characterized by hostility, criticism, and emotional over-involvement). The Pearson correlations discussed in the previous section (see Table 16) indicated that there was a positive and strong relationship between the dependent variable (relapse) and the independent variables (hostility, criticism, and emotional over-involvement). The study therefore run regression analyses in order to clarify the nature of the relationship and to assess the significance between relapse and each of the family expressed emotion (EE) indicators of criticism, hostility, and emotional over-involvement (EOI). This was done using the regression model developed in chapter 3:

$$y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+€$$

Where y – relapse

X_1 =hostility

X_2=criticism

X_3=EOI

€ = error

β_0 = constant

β_{1-3}=Beta coefficient corresponding to variables 1-3

4.4.2 Step One: Predictor Variable Analysis for Relapse

Given that the study focused on the three EE components (hostility, criticism and emotional over-involvement), these three components were all entered in the first step of the regression model. This would show to what extent the three predictor variables were significant in prediction of relapse for a recovering alcoholic.

The predictor variables used in the regression model were indicators of expressed emotion, that is, hostility, criticism and EOI, while the dependent variable was relapse. Table 17 shows the predictor variables entered in the first step of the regression analysis.

Table 17
Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
dimension	EOI, Criticism, Hostility[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: Relapse

The findings on Table 17 indicated that the predictor variables for relapse entered in this first stage were emotional over-involvement (EOI), hostility, and criticism.

The second stage in the regression analysis after entering the variables was to generate the coefficient of determination (R^2) which would show us how much the dependent variable (relapse) would be determined by the predictor variables (hostility, criticism and EOI). This is shown on Table 18.

Table 18
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Dimension	.590[a]	.348	.337	12.41170

a. Predictors: (Constant), EOI, Criticism, Hostility

The findings indicated that there was a strong and positive relationship of all the three predictor variables (criticism, hostility, family over-involvement) put together in predicting relapse (R=.590). According to findings on Table 18, the adjusted

R^2 of 0.348 implies that 34.8% of the variations in relapse were adequately explained by family criticism, hostility and family over-involvement in this study.

Given the above findings, the study seems to argue that 65.2% of the relapse occurrence seems to be caused by other factors rather than family expressed emotion (EE), which is characterized by hostility, criticism and emotional over-involvement (EOI) of the family members. Many studies have been done on relapse in alcoholism and suggest that relapse is caused by factors within the individual as well as in the environment (e.g. Witkiewitz & Marlatt, 2004). Family EE is categorized as one of the environmental factors causing relapse, but it has an influence of individual factors such as self-confidence and esteem of the alcoholic. This study however looked at the family expressed emotion and controlled for all the other factors that might lead to relapse of the treated alcoholic.

The argument that can be derived from these findings is that families that react in an angry and aggressive manner; that are rejecting and judgmental; and that show an over-protective/over-bearing attitude (high EE) are likely to push the alcoholic back to heavy drinking after treatment. This then requires that even after treatment a conducive family atmosphere be established because it is paramount to the maintenance of recovery from alcoholism.

The third stage in the regression model was to test the overall significance of the regression model, whether it was fit in explaining the direction and strength of the

relationship of the dependent and the independent variables. The overall level of significance is shown on Table 19.

Table 19
ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13988.316	3	4662.772	30.268	.000[a]
	Residual	26188.540	170	154.050		
	Total	40176.856	173			

a. Predictors: (Constant), EOI, Criticism, Hostility
b. Dependent Variable: Relapse

According to the findings on Table 19, the model for predicting relapse with predictor variables of hostility, criticism and EOI was statistically significant at $p=0.000<0.01>0.05$, which was considered as statistically acceptable in that there is only a less than 5% chance that there is no relationship between relapse and predictor variables of hostility, criticism and over-involvement.

With the predictive ability of the model established, further analysis investigated the significance of each of the variables of the overall model, by showing how well hostility, criticism and EOI (independent variables) predicted the dependent variable (relapse). This is shown in Table 20.

Table 20

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	44.086	5.139		8.578	.000
Hostility	-.451	.314	-.133	-1.437	.152
Criticism	.944	.239	.282	3.944	.000
EOI	.900	.137	.548	6.560	.000

a. Dependent Variable: Relapse

The findings on Table 20 depicted significance levels associated with the predictor variables, with hostility having (p=0.152>.0.01), which means it was not significant in predicting for relapse in alcohol dependence. Both criticism and EOI had a significance level at p=0.000<0.01, hence criticism and EOI were found to be significant predictors of variation in relapse. The beta coefficients of the predictor variables gave a clearer view of the level of significance for each predictor variable, and found hostility to have an inverse relationship with relapse (β= -.133). This meant that every increase in hostility would decrease relapse by approximately 13.3%.

Unlike what was hypothesized in the study (that there was a positive relationship between hostility and relapse), the findings found an inverse relationship, which was an indication of a relationship that was opposite of the one predicted by the

hypothesis. This finding was not expected in the study, which had purported the view that the use of hostility to a family member who is alcoholic increased the chances that they were going to relapse. However, the findings implied the opposite of the purported view, and instead demonstrated that the more hostile a family member is to the alcoholic family member, the lower the chances that relapse was going to occur on the recovering alcoholic.

Although there is a general support to the view that hostility is a factor in relapse literature (e.g. Hooley, 2007; Pourmand et al., 2005), attempts made at giving the statistical significance of its exact predictive role are missing. Studies have however indicated that hostile family members are likely to attribute the drinking behaviour to an internal conflict and the client is held accountable for anything negative happening to the family (Simmons, Chambless, & Gordon, 2008). Perhaps this would mean that there might be too much pressure and blame from the family members on the alcoholic, who therefore copes with such pressure through more drinking.

The study also examined criticism and found it to have a predictive value of .282. This is an indication that for every percentage increase in criticism, relapse was likely to increase by approximately 28%, after controlling for hostility and EOI. The study hypothesized that there was a positive relationship between family criticism and relapse of the recovering alcoholic. This hypothesis has therefore been supported by the findings that show that criticism is indeed significant in

predicting relapse. This view is supported by Fichter et al, 1997, who found a strong association between remarks of criticism and relapse. This also resonates with findings that male patients relapsed within a year of treatment after living with a spouse that had highly criticized them (O'Farrell, 1998). Clearly, family members need to give less criticism to the recovering alcoholic in order to create a more nurturing environment for the client to recover from alcohol dependence.

The predictive ability of EOI from the data in Table 20 shows that among the three predictor variables, EOI had the highest predictive power to relapse (beta coefficient .548) compared to hostility and criticism. This is a very high predictive power because it implied that for every percent increase in EOI, there is 54.8% likelihood that relapse would take place in a recovering alcoholic. Perhaps the reason EOI was the highest predictor of relapse was because individuals need autonomy in life which is vital for human growth (Eric Ericson…; Kumar & Tiwari, 2008). Autonomy would enable the alcoholic the ability to make choices according to their own free will. Restrictions on an individual's autonomy would be denying human freedom and the alcoholic would feel coerced by family members to change. The alcoholic might feel the external pressure and therefore inadvertently retaliate by returning to heavy drinking.

In order to develop the best fit regression model, the weakest predictor variable (hostility) was eliminated because it had an inverse relationship with relapse. This

led to the second step in the multiple regression analysis with a new model for criticism and EOI which had a positive significance as predictor variables.

4.4.3 Step Two: Regression of Significant Predictor Variables

From the regression model (see table 20) hostility was found not to be statistically significant in predicting relapse, and therefore was removed from the regression model. This was because hostility had a negative relationship with relapse (-.133; p=0.152>0.05) and was hence rejected as a predictor variable for relapse in alcoholism. The revised regression equation was developed as:

$$y=\beta_0+\beta_1X_1+\beta_2X_2+€$$

Where y – relapse

X_1= criticism

X_2–EOI

€ – error

β_0 – constant

$\beta_{1\text{-}2}$- Beta coefficient corresponding to variables 1-2

A new regression analysis was run with criticism and EOI as the two variables of family EE that were likely to predict relapse of an alcoholic as shown in Table 21.

Table 21

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
Dimension	EOI, Criticism[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: Relapse

Criticism and EOI were the new predictor variables of relapse and were entered in the first step of the new regression model. This would show to what extent criticism and EOI were significant in prediction of relapse for a recovering alcoholic.

The second stage of the regression analysis generated the coefficient of determination (R^2) which showed the strength of the revised regression model as shown on Table 22.

Table 22

Model Summary 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Dimension	.583[a]	.340	.333	12.45033

a. Predictors: (Constant), EOI, Criticism

The findings in the revised model showed that the adjusted R^2 dropped to 0.340 (from 34.8 in the earlier model), which implied that 34% of the variations in relapse were adequately explained by family criticism and EOI in this study. This was an indication that in the absence of hostility, EOI and criticism were still strong predictor variables of relapse at 34%. This meant that though invisible in the

regression model, hostility had a role to play in the expression of criticism and EOI perhaps as a moderating variable. Most studies in this area view EE as a single construct which is regarded as a form of psychosocial stress (e.g. Hooley & Gotlib, 2000). It is not easy to study each of the components in isolation, but the three give the overall characteristic known as EE. However, the present study showed strength by using techniques such as regression that were able to bring out the effect of each of the EE components in predicting relapse.

In the third stage of the regression, the analysis showed that the overall revised model (with criticism and EOI was significant at p=0.000<0.05 as shown on Table 23.

Table 23

ANOVA[b] 2

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13670.013	2	6835.007	44.094	.000[a]
	Residual	26506.843	171	155.011		
	Total	40176.856	173			

a. Predictors: (Constant), EOI, Criticism
b. Dependent Variable: Relapse

According to the findings on table 23, the model for predicting relapse with predictor variables of criticism and EOI was statistically significant, meaning that it could be used to predict relapse in alcohol dependence with only a less than 5%

room for chance. This meant that at least a combination of both variables that are under assessment in this study (criticism, and EOI) was a significant predictor of relapse. According to the current model, one could be confident that there is an actual statistical association between relapse and the predictor variables of criticism, and EOI. In words, families that are high in criticism and in emotional over-involvement offer an environment where relapse in alcohol dependence is likely to happen. Any treatment of alcoholism would therefore aim at helping family members reduce being so overbearing (EOI) and it would also aim at helping them develop more supportive interactional patterns that would likely reduce criticism toward the recovering alcoholic. Helping families on dealing with the criticism and EOI would perhaps be part of the relapse prevention strategies that a family would adopt in sustaining recovery of the alcoholic.

Having arrived at the conclusion that a combination of criticism and EOI were significant at predicting relapse, a further analysis of the exact significance of each of the two variables was required so as to show the extent to which the variables would predict the occurrence of relapse. The findings were depicted on Table 24.

Table 24

Regression Coefficients[a] Model 2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	39.889	4.243		9.402	.000
	Criticism	.794	.216	.237	3.674	.000
	EOI	.774	.106	.471	7.297	.000

a. Dependent Variable: Relapse

According to the findings shown on Table 24, criticism had a beta coefficient of .237, which was a likely indication that criticism would likely predict relapse in alcohol dependence at 23.7% when all other variables were controlled for. This means that any increase in criticism by one percent was likely to increase relapse by 23.7%. This supports the hypothesis made in the study that family criticism has a positive and strong relationship with relapse of a recovering alcoholic. In the revised model, EOI has a beta coefficient of .471, meaning that it would predict relapse to 47.1% when other variables were controlled for. This meant that whenever family members increased EOI by one percent, the individual in the family suffering from alcohol dependence was likely to relapse by 47.1% when all other variables were controlled for. EOI then seemed to have a very high predictive power in the occurrence of relapse.

However, it is also notable that the predictive power of criticism reduced from previous model where hostility was included (28.2% as shown on Table 20) to the

current model at 23.7%, while EOI reduced from 54.8% (see Table 20) to 47.1% in the current model. Such findings would argue for the case of hostility in its moderation role in the occurrence of relapse. A moderating variable usually affects the direction and strength of a relation between a predictor variable and a dependent variable (Miles & Shelvin, 2001). In the present findings, hostility would likely be a moderator variable that affected how both criticism and EOI related to the occurrence of relapse for a recovering alcoholic.

To further explore the role of the combined effects of hostility, criticism and EOI, the study checked on how strongly the predictor variables were associated with each other in order to rule out whether such an association would affect the regression analysis. This is referred to as multicollinearity, and it would indicate that the independent variables may not be distinguishable and would be so closely associated that they would give errant results. According to (Martz, 2013), some of the informal signs of detecting multicollinearity were when coefficients change drastically when adding or deleting an X variable. In this case, the both criticism and EOI beta coefficients reduced when the hostility variable was removed from the regression model. It was therefore necessary to run a regression diagnostic test to check if there were strong associations among the independent variables (multicollinearity) that would reduce the significance of such variables. This is depicted on Table 25.

Table 25

Multicollinearity and Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	44.086	5.139		8.578	.000		
Hostility	-.451	.314	-.133	-1.437	.152	.449	2.228
Criticism	.944	.239	.282	3.944	.000	.749	1.335
EOI	.900	.137	.548	6.560	.000	.550	1.820

a. Dependent Variable: Relapse

The impact of strong associations between independent variables (multicollinearity) is measured using the Variance Inflation Factor (VIF), which measures the impact of the association among the variables in a regression model. In other words, the VIF test helps show how much correlation exists among predictor variables, in this case hostility, criticism, and EOI. As shown on Table 25, the VIF for hostility was 2.228<5, Criticism had 1.335<5, while EOI was at 1.820<5. VIF values above five are considered high and would indicate multicollinearity (HO, 2006). According to the present findings, there was low multicollineality among the predictor variables (hostility, criticism and EOI). This was an indication that there was a low association between hostility, criticism and EOI which were the predictor variables in this study. That is, the relationship among the predictor variables does not influence each other to a level of interfering with their different association with relapse. This is an indication that the regression model used in the study was stable and could hence be used to clarify the actual

significance of each of the predictor variables to relapse. Hence, the study adopted the regression model that suggested that any increase in criticism increased relapse with 23.7%, while an increase in EOI predicted that relapse will take place at 47.1% (see table 21).

In sum, the regression analysis was used in the study to develop a model showing that hostility, criticism, and EOI were the predictor variables of relapse. Though the model had an overall significance of $p=0.000<0.05$ for the three variables, each of the individual variables did not have similar levels of significance. Hostility was seen to have a negative relationship with relapse at Beta=-.0133; $p=.152>0.05$ and was therefore rejected, while criticism and EOI had $p=0.000<0.05$ and were therefore accepted in the current model as predictors of relapse. Though hostility had a relationship with both criticism and EOI, the regression diagnostics proved that such an association was insignificant to have any negative impact on the regression model. Hostility as a predictor variable was rejected due to its negative relationship with relapse and hence a new model was developed to show criticism and EOI as the two predictor variables of family expressed emotion that were likely to influence relapse in the study, with a combined prediction of 34%.

For family EE to predict 34% of relapse, we must consider it as a major factor that needs much attention for any relapse prevention strategies to be effective. Many factors have been recognized as leading to relapse such as the role of individual factors as well as environmental factors. Environmental contextual factors such as

psychosocial stressors, social support and interpersonal factors were significant in relapse prevention (Witkiewitz & Marlatt, 2004). The research argues that family EE is a part of these environmental family stressors that are likely to cause relapse. This is supported by Hooley and Gotlib (2000) who argue that family EE was a family reaction of stress which evokes hostility, criticism and EOI towards the patient. According to the Systems Theory (Minuchin, 1974), an effective part of the system has an effect on other parts, thus an individual is part of a system that influences their behaviour in a continuous manner. This means that when the family expresses attitudes that reduce an alcoholic's self-confidence, they may doubt their self-efficacy in fighting the alcoholism problem.

The alcoholic may hence turn to heavy drinking due to the faulty interactional pattern depicted by family members and the problem becomes cyclic. This argument is supported by Minuchin (1974) who saw family events and interactions as cyclic in nature. The argument here is that self-confidence and self-efficacy could be enhanced by family relationships that are positive, and they can be minimized by negative attitudes such as EE. Hence if the family fails to offer the right kind of support, or is communicating to the alcoholic in a manner that causes him psychosocial stress, then it is likely that the individual's self efficacy may be eroded by such factors and this may reduce his ability to maintain recovery.

4.5 Discussion

The present study demonstrated that high expressed emotion (EE), as predicted, had a significant relationship with relapse of an individual recovering from alcohol dependence. EE is an interactional concept showing the interpersonal relations of members in a family and is characterized by the three attitudes of hostility, criticism, and emotional over-involvement (EOI) (Hooley, 2007). Some studies have argued that such attitudes determine the direction that an illness such as alcoholism will take after illness (e.g. Fichter et al, 1997; Pourmand, Kavanagh & Vaughan, 2005).

It is assumed that after the alcoholics have undergone treatment and were discharged from the rehabilitation centers they came back to families with a supportive and enhancing environment for their recovery and abstinence goal. It is hoped that at the time of discharge from the rehabilitation centers family members have the right attitudes and interpersonal dynamics that would facilitate change for the recovering alcoholic. However, while intensive rehabilitation was done on the individual alcoholics, very little, if any rehabilitation was done for the 'ill' family. This would likely interfere with all the gains got from the rehabilitation of the alcoholic because the system he comes back to is still 'ill'.

Due to lack of family rehabilitation, some close family member's interactions may be still be characterized by the attitudes such as fault-finding, rejection, anger, or being too protective and over-bearing (some aspects of EE), which might play a

role that causes more harm than good and may lead the alcoholic into a relapse. A parallel program of rehabilitation for the 'sick' family members should be done, otherwise relapse of the alcoholic would never be a possibility.

One of the reasons that high family EE is likely to lead to a return to heavy drinking after treatment may be likely because such interactions are stressful on the recovering alcoholic. Hooley and Gotlib (2000) described high EE as a form of psychosocial stress, and argued that such a high stress environment would be a risk factor for relapse. Many individuals in the general population use drinking alcohol as a stress reduction strategy, hence stress for a recovering alcoholic is more likely to push them to return to drinking as a stress management strategy. It is for this reason that majority of relapse prevention programs usually suggest a variety of effective strategies for stress management for recovering alcoholics.

The present findings may be explained in terms of psychosocial stress from family members on the individual with alcohol dependence. The stress from family members for the alcoholic to recover might be too much that is causes the alcoholic to relapse. Witkiewitz and Marlatt (2004) are some of the major proponents of the cognitive –behaviour model for relapse suggested psychosocial stress as a major risk factor in relapse. Psychosocial stress may come from the environment from which the alcoholic expects the highest social support to enable him maintain recovery, which is the family. This means that in a family environment that has high family EE, there is psychosocial stress and hence a high likelihood that the

alcoholic is likely to abandon their recovery goal and return to heavy drinking. Many studies have supported a positive relationship between stress and increase in alcohol craving for alcohol-dependent individuals (e.g. Higley, Crane, Spandoni, Quello, Goodell, & Mason, 2011; Nesic & Duka, 2008). Stress lowers the chances of recovery because an individual is unable to think about better ways of dealing with the stress and instead opts for numbing his/her feelings using alcohol. Other personal abilities such as resiliency in withstanding the craving might also be compromised during periods of stress.

Hostile phrases and statements are described by anger, sarcasm, aggression and intense dislike for the alcoholic's drinking behaviour. When their tempers flare and their frustrations build in the family, members more often use destructive phrases from memories of long-forgotten events. They use statements that blame the alcoholic on all the negative events the family has been going through. Such hostile family members may cause emotional wounds to the recovering alcoholic, making him distance himself from the source of the negative remarks which put blame on the alcoholic because of his/her drinking problem. Hostility is a more intense attitude than criticism because hostile relatives give more extreme remarks that criticize the alcoholic. Receiving hostile remarks from the family members would eventually reduce the trust and connection of family members. The alcoholic distances himself from the negative people and starts seeking his former friends who validated him more than the family members. As a result, he is likely to go

back to former habits and friendships that seemed more understanding, hence he may go back to heavy drinking.

As expected in the study, the combined effect of EE variables of hostility, criticism, and emotional over-involvement (EOI) had a strong and positive relationship with relapse. Though the findings showed a positive relationship between hostility and relapse for the recovering alcoholic, the role of hostility in relapse in the regression analysis showed an inverse relationship between hostility and relapse. However, hostility as a statistically significant predictor of relapse is not to be assumed and may have implications for further research. It would be important to find out the exact nature of hostility because it seems to play a moderating role in relapse that seems to affect how criticism and EOI influence relapse.

Criticism and EOI were particularly found to be strong predictors of relapse among recovering alcoholics in the study. Criticism reflects dislike or disapproval of the alcoholic's drinking problem. Family members show criticism when they are too judgmental, find fault with the alcoholic, and express active disagreement that implies disapproval of the alcoholic's behaviour. Specifically, critical relatives seem to be so much in disagreement with many of the alcoholic's behaviours that this is interpreted as conflict by the alcoholic. According to Blais et al, (2012), people rate relationships as higher in conflict when they perceive criticism in such relationships. That is, when there is disagreement between individuals, this is interpreted to mean conflict which is likely to make an individual anxious and

stressed. The alcoholic would hence get anxious and stressed because he would interpret the disagreements and disapproval to mean that he is being rejected, causing conflict with his family members. He would perhaps interpret this to mean less support from his family which would lower his confidence in his attempts to recover from alcoholism.

In their cognitive-behavioural model of relapse prevention, Witkiewitz and Marlatt (2004) recognized that interpersonal conflict was a risk factor in relapse for alcoholics. This resonates with Simmons et al, (2008) who argued that such perception of conflict in relationships would add to more interpersonal stress that would provoke more anxiety, leading to negative behaviours. Many individuals with alcohol dependence have been found to drink more heavily when anxious to numb such feelings of anxiety. Hence more negative behaviours such as drinking would be expected in an anxiety provoking family environment such as those characterized with criticism. Criticisms would therefore be seen to increase the alcoholic's drinking and therefore be a more powerful predictor of relapse.

High criticism lowers the self-esteem and confidence of an individual which may in turn compromise their self-trust. The judgmental attitude of family members may cause the alcoholic to doubt his own abilities to deal with his problems. Alcohol may offer him a false sense of confidence and he can momentarily ignore the criticism. Criticism has also been found to be particularly prominent among individuals who have elevated levels of interpersonal dependency (Hooley &

Gotlib, 2000; Kumar & Tiwari, 2008). Such interpersonal dependency is common among people described to be in co-dependent relationships such as in alcohol dependence. This means that when criticism is likely to occur in an environment that also has over-concern and over-protection to an individual, which are characteristics of emotional over-involvement (EOI). Rotunda and O'Farrell (1998) used the term over-involvement to describe characteristics of co-dependence in families suffering substance dependence.

When criticism takes place in a codependent or overprotective environment (characteristics of EOI) there is a classic double-bind communication. This means there is caretaking and overprotective behaviours of family members that are combined with a rejecting and fault finding (criticism) attitude. This is likely to confuse the alcoholic who may not understand too much care in the midst of too much rejection from the same family members. During times of such confusion one's self esteem and self-confidence would be eroded, which would likely push one to go back to heavy drinking. As such, criticism would be salient with such family members that are over-involved as in the case of alcoholic families. Criticisms are also often interpreted as potent threats to being rejected, thereby increasing the aversive impact (Hooley 2007). That is criticism is interpreted as rejection, and when one is rejected by family members they might look for acceptance from peers. A recovering alcoholic may revert back to his former friends if they will accept him and thus continue with older drinking habits.

The study showed that EOI was the major predictive variable in relapse of the recovering alcoholic. Why should EOI be so important in the prediction of relapse for individuals with alcohol dependence? Among the EE variables, EOI would appear a positive attitude than hostility and criticism because it depicts warmth, care, protection and concern. However, when families express high levels of EOI, the patient-relative interaction is too caring, overbearing, and over concerned, hindering the individual from differentiating himself and making his own decisions.

Kumar & Tiwari (2008) described maternal overprotection, or what they referred to as "momism", as involving smothering of the child's growth in such a way that children are denied the much needed opportunity for reality testing and development of essential competencies. In the case of alcoholism the mother would keep the alcoholic from suffering the consequences of alcohol abuse. The alcoholic who is too protected would be have little autonomy to test what may work for them, and they would be denied of experimenting with freedom for trying change their own way (Kumar & Tiwari, 2008). The individual is denied autonomy because the family thinks as 'we' and the individual alcoholic lacks freedom to be creative and try out what would work for him in recovery apart from what the family says.

This view resonates with reports by Hooley (2007) suggest that patients living with high EE families make few statements that reflect autonomy. Autonomy is a major goal of many Theories of Counseling such as psychosocial theory by Eric Ericson.

Autonomy helps individuals in pursuing their life goals that they believe in. Much literature advocates for individuation or personal freedom and autonomy for any person to overcome behavioural problems (e.g. Goldenberg & Goldenberg 2013; Nichols & Schwartz, 2006). Hence if a family denies the alcoholic autonomy, he is likely to be frustrated and may abandon the family's strategy in dealing with the drinking problem. Such frustrations are caused by the denial of individual's ability to be creative and a denial of having an internal locus of evaluation that would lead to success in following through with his own goals. He would perhaps see the family strategies for recovery as interference with his own goals; hence lead him into more drinking episodes.

In terms of the Systems Theory, too much care and over-concern make a problem such as alcoholism to become the central organizing principle of the family's life, hence the term "family illness" coined by O'Farrell and Fals-Stewart (1999). What this likely means is that most of the family discussions center on the drinking problem, which is also viewed as the cause of all the family problems. The family members are too protective, devoted, or self-sacrificing in a way that is out of proportion to the circumstances surrounding the problem (Hooley 2007). Such tendencies by family members were interpreted by alcoholics during interviews as being too intrusive and controlling, hence were associated with more drinking. Controlling relatives expect a patient to do more that they are doing in solving their problem and demand for change. This kind of controlling interaction seemed to stress the alcoholics, which is likely to push the alcoholic into more drinking. Stress

caused by high EE has been shown to give a high propensity to alcohol relapse as demonstrated by Nesic & Duka (2008). Individuals in this study may have interpreted the intrusiveness and controlling demands from their family members as stressful. This supports the view that such psychosocial stress may be a major factor that makes recovering alcoholics to be prone to relapse (Pourmand, et al., 2005).

Family environments with high criticism and EOI have unclear communication patterns referred to as double-bind. It is as if on one hand the family is judgmental, and shows disapproval of the alcoholic's behaviour, while on the other hand it is so protective of the alcoholic. For example such a family may cover up for the behaviours of the alcoholic from his neighbours and other extended relatives, yet at the same time criticize him for lacking to attend extended family functions. The individual may get confused at such contradictory communication patterns, hence may lower his ability to make better choices in his life. Rehabilitation efforts should help family members to unlearn using such unclear statements that have a double-bind. The families should be sensitive to the needs of the alcoholic family members who need clear communication patterns and consequences of behaviour that are followed up. Criticism may damage relationships of family members who interpret it to mean rejection, while over-protection has been found to nurture dependency and repressed hostility (Kumar & Tiwari, 2008).

Many studies have demonstrated that stress and the body's response to it does play a role in the vulnerability to alcohol use and relapse (e.g Brady & Sonne, 1999; Hooley & Gotlib, 2000; Janak & Chaundri, 2010). Stress is considered a major contributor to the course of alcoholism, including relapse in recovering users. Animal studies have suggested that exposure to stress facilitates both the initiation and reinstatement of alcohol and other drugs use after a period of abstinence (Janak & Chaundri, 2010). One likely explanation for the connection between stress and alcohol use is that stress modifies the motivational and reinforcing effects of alcohol at the neurobiological level. For example stress increases the activity of the dopamine brain systems, which are involved with motivation and reward. The dopamine centers also mediate use of alcohol with rewarding effects (Nesic & Duka, 2008).

The stress-induced relapse of alcohol use is a well-documented phenomenon (e.g. Janak & Chaundri, 2010). Stressful experiences can contribute to the return to heavy drinking of alcohol after a period of abstinence (Hooley & Gotlib, 2000). In fact, exposure to stress is the most powerful and reliable experimental manipulation used on animals to induce return to drinking of alcohol following a period of imposed deprivation (Nesic & Duka, 2008). Stressful life events and chronic stressors (such as depicted by high EE families tend to explain the association between stress and relapse. According to Brown and his colleagues (1990), the stress vulnerability hypothesis suggests that alcohol use in the face of severe stressors is mediated by the presence or absence of both protective factors (e.g.

good social support) and risk factors (e.g. homelessness and unemployment). The hypothesis is supported by findings that severe stress was related to relapse after treatment (Brown et al, 1990). These findings emphasize the connection between stress and relapse and suggest that resilience to stress-induced relapse should be improved during and after treatment.

By this account the present study suggests that treatment for alcoholism should take into consideration behaviours that family members need to adopt to enhance better treatment outcome. Higley and his colleagues (2011) suggested that to improve treatments for alcohol dependence there is need to address high stress levels among the patients. Such high stress may be emanating from the family interactions, due to negative attitudes such as EE, thus determining the direction of the illness after treatment. Further studies exploring this view are essential for clarifying the findings of this study, which demonstrated that high EE was a strong predictor of relapse in alcohol dependence.

The study had several limitations: Firstly, the study utilized a measure of three major variables of EE, that is, hostility, criticism, and EOI, while controlling for other individual factors. It may be important to include individual factors that motivate recovery of an alcoholic such as self-efficacy (which has been suggested by Witkietwitz & Marlatt, 2004 as the most important aspect in recovery) to find out how individuals that are self-efficacious would respond to EE within their families. Secondly, the family member participants in this study were more female

than male and hence the study cannot generalize the EE concept to apply to both genders equally. Thirdly, the study used inpatient alcoholics whose main drug of choice (DOC) was alcohol; it was beyond the scope of this study to examine the influence of other drugs used together with alcohol. Again, it is uncommon to find 'pure' alcoholics whose only DOC is alcohol. The present findings have elucidated the effect of EE in alcoholic families and may also shed light on inconsistent reports in the literature regarding the EE/relapse association.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of the study was to examine the relationship between family expressed emotion (characterized by hostility, criticism, and emotional over-involvement) and the occurrence of relapse among alcoholics who have been treated and discharged from rehabilitation centers. Specifically, it aimed at finding out the prevalence of relapse in the rehabilitation centers, and establishing whether or not existence of expressed emotion (EE) among family members had a relationship with the occurrence of relapse of the treated alcoholic. The study also aimed at finding out the after-care strategies that would be used to enhance relapse prevention. Both quantitative and qualitative data were collected from this study and findings were presented using both descriptive and inferential statistics.

This chapter presents a summary of the study findings, which showed that there was a strong and positive relationship between family EE (independent variable) and relapse (dependent variable). The chapter also provides conclusions of the findings related to each of the five objectives of the study, and gives recommendations both for action and for further research based on the present findings.

5.2 Summary

The present study hypothesized that there was a relationship between components of family expressed emotion (hostility, criticism, and EOI) with relapse in alcohol dependence and hoped to establish the nature of such a relationship, if it existed. The study investigated experiences of readmitted alcoholics in ten rehabilitation centers in Nairobi Kenya and their close family members. The findings provided invaluable insights in the relapse question.

In order to achieve this purpose, the study adopted five objectives which were: (a) to find out the prevalence of relapse among inpatient alcoholics admitted in rehabilitation centers; (b) to establish the relationship between hostility of family members and relapse of the inpatient alcoholic; (c) to establish the relationship between criticism of family members and relapse of the inpatient alcoholic; (d) to establish the relationship between emotional over-involvement of family members and relapse of the inpatient alcoholic; and (e) to find out possible after-care strategies for recovering alcoholics that would enhance relapse prevention.

The first objective was addressed through summarizing information given by respondents on whether they had been readmitted to a rehabilitation center for treatment. All respondents who had been readmitted in a rehabilitation center gave a ‘yes’ vote, while those who were in the current rehabilitation center for the first time gave a ‘no’ vote. A summary of this data gave a relapse rate of 39.2% relapse rate for readmitted inpatient alcoholics.

The second objective was assessed through the null hypothesis that there was no relationship between relapse of an inpatient alcoholic and family hostility. This hypothesis was tested using the Pearson correlation coefficient so as to give the direction and magnitude of the relationship between relapse and family hostility. Findings ($p=0.000<0.01$) failed to retain the null hypothesis, and it was found that there was a positive statistically significant relationship between relapse and family hostility($r=0.367$). Hostility was further tested using multiple regression analysis to confirm its significance in predicting relapse. It was found to have an inverse relationship ($\beta=-.133$) with relapse and was hence eliminated from the regression model.

The third objective, that there existed a relationship between family criticism and relapse was supported by the study findings. It was also assessed through the null hypothesis that there was no relationship between relapse of an inpatient alcoholic with family criticism. This hypothesis was tested using Pearson correlation coefficient. The findings indicated a positive relationship between relapse and family criticism ($r=0.367$) and showed statistical significance of the two variables ($p=0.000<0.01$), and therefore it failed to retain the null hypothesis. The findings therefore accepted the research hypothesis that there was a statistically significant relationship between relapse and family criticism. Criticism also yielded a strong and positive predictive value in relapse ($\beta=.237$) in the regression model, and was adopted as a strong predictor for relapse among readmitted alcoholics.

The fourth objective that there existed a relationship between family emotional over-involvement and relapse was supported by the findings of the study. It was assessed using the null hypothesis that there was no statistically significant relationship between relapse of an inpatient alcoholic with family emotional over-involvement. This hypothesis was tested using the Pearson correlation coefficient, and findings failed to accept the null hypothesis ($p=0.000<0.01$). The research hypothesis that there was a relationship between relapse and EOI was consequently accepted. It was found that relapse and EOI had a strong and positive relationship ($r=0.520$). Upon further analysis using multiple regression, EOI was found to have the strongest predictive value to relapse at $\beta=.471$ compared to hostility and criticism.

The combined effect of the EE variables of hostility, criticism and EOI showed a statistical significance of relationship with relapse. The study carried out regression analysis with the components of EE as predictors of relapse and found significance at $p=0.000<0.01$. This meant that at least one of the predictor variables was statistically significant in predicting relapse. However, hostility was eliminated from the regression model because it was found to have a negative relationship as a predictor variable. The final regression analysis had a model strength of 34% for both criticism and over-involvement, which were found to be positive predictors of relapse.

The fifth objective of the study was a suggestion of what the inpatient alcoholics hoped would make treatment in rehabilitation center more effective. The open ended questions yielded suggestions from the inpatient alcoholics on the role they would prefer their family members to play in their recovery process. It was found out that majority of the alcoholics sought for understanding, support, acceptance, trust and sensitivity of their family members towards their drinking problem. They also wished family members would go through psychotherapy alongside them so that they are able to appreciate their own need for change in order to cultivate an environment where recovery from alcoholism was possible.

5.3 Conclusions

The study made an important finding relating to relapse rates in the rehabilitation centers in Nairobi County, Kenya. It revealed that there was a relapse rate of 39.2% of the inpatient alcoholics who had been readmitted at rehabilitation centers within the county. The study concluded that there was a statistically significant relationship between relapse of the inpatient alcoholic and family hostility. Both the family sample and the interviews confirmed that there were high levels of hostility in the family. However, the regression analysis revealed that the statistical significance of relapse and family hostility was a negative and it was concluded that hostility was not a predictor variable of relapse. However, the moderating role of hostility as a variable was shown by the fact that in its absence, it reduced the impact of both criticism and EOI as predictor variables.

The study concluded that there was a statistically significant relationship between relapse and criticism. Criticism was found to be a positive predictor of relapse among inpatient alcoholics. The study made important findings relating to emotional over-involvement (EOI) and concluded that EOI was the major predictor of relapse. The primary objective of the study was supported by revealing that there was a statistically significant relationship between relapse and family EE (that combines hostility, criticism and EOI). The study concluded that among the individual and environmental factors that cause relapse in alcoholism, family EE components variables contributed 34.8%. This suggests that rehabilitation programs need to consider how to involve family members in improving the family emotional environment as a nurturing ground for recovery of alcoholics in treatment.

5.4 Recommendations

5.4.1 Recommendations on Research Findings

The present study demonstrated that approximately 40% of individuals who undergo treatment on alcoholism are likely to relapse, and that more than half of these are likely to relapse more than once. Variables of family expressed emotion (hostility, criticism and emotional over-involvement) were found to predict relapse. This is a wakeup call to all stakeholders to come alive to the realization that family interaction patterns need to be addressed in relapse prevention mechanisms. Since expressed emotion (EE) is such an important risk factor for people with alcoholism,

approaches to address it should be considered by all stakeholders particularly those involved in treatment.

Policy makers such as NACADA and the Ministry of Health are charged with the task to give guidance in making policies on regulation of alcohol use, prevention, and treatment, and hence need to have broad and strategic ways in which families of alcoholics can be involved in their campaigns against alcohol abuse. The current NACADA strategy has been to train rehabilitation experts and to sensitize the communities about substance abuse. The present study recognized the role of the family in relapse prevention, and perhaps the policy makers should consider community based rehabilitation, which would reach out to the grassroots where families of alcoholics would be involved in their campaigns against alcohol abuse. Policy makers need to open channels of communication where the conversation about drug use/abuse is open at all times and individuals know where they can turn to for help, such as through media.

Policy makers would also consider licensing of rehabilitation centers depending on whether the particular center has a family program. The present study therefore recommends that rehabilitation programmes be licensed based on the family based interventions that they would provide to the family members.

Community rehabilitation experts should liaise with families by motivating them to form support groups to help deal with challenges of the “sick families”. These support groups for families of alcoholics would replicate alcoholic anonymous

(AA) support groups that help in sustaining recovery. Some of the families may have ex-users who would be involved in providing mentorship to the victims of alcohol abuse. The community based rehabilitation model recommended would 'the doctor' go to where the 'patient' is; and in most cases the patient is suffering helplessly oblivious of where they can turn to for help. Perhaps home visits by the treating practitioners would reach out many alcoholics who are unable to make it to the rehabilitation centers.

One main cause of relapse (and generally a cause of substance abuse) is lack of employment. The alcoholic may be treated through rehabilitation over and over again, but if they lack in vocational skills to replace the drinking habit after recovery, then relapse is likely to become a constant possibility in their lives and hence the battle for sobriety would be lost. The study is therefore suggesting vocational training skills to be enhanced based on interests and aptitudes of the addicts as part of relapse prevention.

Much rehabilitation work in Kenya has its focus on the individual alcoholic and fails to put attention on the family, yet alcoholism is recognized as a family disease. The study therefore recommends that stakeholders develop programmes that would rehabilitate the sick family, not just the individual alcoholic. Presently in Kenya alcohol abuse has reached very high levels and there is an outcry in most counties on the menace that such a vice is causing to the society. This then calls for all actors in society to strategically address alcoholism issues urgently in order to

reduce the escalation of the problem. This study recommends that rehabilitation counselors and mental health practitioners develop strategies to improve communication among family members. It is recommended that the practitioners go beyond family psychotherapy to coaching family members on better communication patterns and use of language that would encourage recovery. Family therapy would address behavioral and attitudinal changes of family members towards the alcoholic, alcoholism, and towards recovery, which are assumed to be the cause of their critical remarks. The present study also recommends that the mental health practitioners come up with more inclusive follow up strategies that are specific to individuals who have undergone treatment.

5.4.2 Recommendations for Further Research

The present study demonstrated that family expressed emotion is a strong predictor of relapse among alcoholics. This study recommends that researchers and academicians develop an interest in studying family factors that may lead to relapse. Much research done in this area has not been addressed to alcoholism but have focused other psychological disorders, and the few studies done with alcoholics give contradictory findings. Future research shed light on such inconsistent reports in literature regarding the family influence on relapse.

Future research should establish the rate of relapse over wider geographical areas and regions and over longer periods of time in order to find out within what time frame an alcoholic would be likely to relapse after treatment. Future research would

also find out how other drugs that might have been used by the alcoholic are likely to influence relapse, and how such would interact with expressed emotion from family members.

The present study established that though the families of alcoholics indicated high levels of hostility, family hostility was not a predictor of relapse in alcoholism. Future research would shed more light on the role of family hostility in relapse, and how it interacts with other EE variables. It would also be important to understand the cultural understanding and interpretation of EE variables in predicting relapse. The finding that hostility was inversely related to relapse should not be interpreted to mean that hostility does not influence relapse in alcoholism. The role of hostility as an EE component needs to be explored further.

The findings involving the association between relapse and family EE variables of hostility, criticism and EOI demonstrated a positive and statistically significant relationship. Future research should examine whether the relationship between family EE and relapse symptoms are more clearly present when examining certain types of family members. The present study demonstrated that EOI is the most likely predictor of relapse in alcoholism. This finding is supported by much literature in the field of codependent behaviour. Future research should measure the EOI variable in multiple family members to see if patients gravitate towards family members who are codependent or not.

It is possible that the methods used in the study led to examining these variables using a family member that the patient felt closest to, rather than the family member that truly has the most influence on the patient and future research would establish such a relationship. There are other directions to take for future research such as the participants in the study were interviewed separately from each other. Expressed emotion would be explored in more depth if both the patient and family member were interviewed together.

Criticism and EOI are contrasting elements of EE, whereby one shows disapproval and the other shows too much care and protection. Family members characterized by these two characteristics of disapproval coupled with over-protection would likely cause a contradictory double-bind communication. Future research would elucidate whether the same family members who criticize are also over involved, and what would be the reason for such dissonance within the family members of an alcoholic. It would also be important to explore more deeply why a variable such as EOI becomes so damaging to the extent of having a high predictive value to relapse, and yet among the three variables of EE it appears like it would represent a more positive attitude.

Finally, the findings help to extend research in relapse/EE association. Research on EE-relapse association has provided contradictory findings regarding in the previous studies and the present findings have added to the cross-cultural literature in this area. One unique quality of the study was the use of different methods of

data collection, that is, qualitative and quantitative methods and was hence more comprehensive. The results of the present study clearly indicate that the family EE as a factor increasing susceptibility to relapse is not unfounded. The present findings highlight the need to take other family factors into account, such as individual factors; the role of peers; and rural vs. urban populations so as to evaluate vulnerability due to family geographical set up. The findings of the present study suggested that high family criticism and high emotional over-involvement confer greater susceptibility to relapse of an alcoholic. Furthermore, EOI appeared to be a very significant factor in return to heavy drinking after treatment.

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APPENDICES

Appendix 1: Research Instruments

A 1.1 Alcohol Use Disorders Identification Test (AUDIT) for Alcoholics

<u>SECTION A</u>

We are interested in gaining a better understanding of the causes of relapse. We would like to ask some questions about what happens when you have been abstinent from heavy drinking for some time and then return into heavy drinking again. Please respond to the following questions depending on how they describe you by putting an (X) or (V) in the box. Please do not put your name on the paper.

1. Age bracket
   - Less than 18 ☐ 18-25years ☐
   - 25-40 years ☐ 40-55 years ☐
   - 55 and above ☐
2. Religion ___________________
3. Marital status
   - Married ☐ Single ☐
   - Divorced ☐ Widowed ☐
   - Separated ☐ Other (explain)___________________

4. Are you currently living with your family?
   - Yes ☐
   - No ☐
5. If yes, what is the relationship with your family member who is closest to you?
   - Sister ☐ Brother ☐
   - Mother ☐ Father ☐
   - Spouse ☐ Other (explain)…………..……………

<u>SECTION B</u>

The following questions will explore the struggles you have experienced when drinking, and gain a better understanding of how it is affecting you. Please think about the last few struggles you have had with drinking then rate your agreement with the statements below about your drinking habits.

1. How often do you have a drink containing alcohol?
   - Never ☐
   - Monthly or less ☐
   - 2 to 4 times a month ☐
   - 2to 3 times a week ☐
   - 4 or more times a week ☐

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

- 1 or 2 drinks □
- 3or 4 drinks □
- 5 or 6 drinks □
- 7 or 8 or 9 drinks □
- 10 or more drinks □

3. How often do you have six or more drinks on one occasion?

- Never □
- Less than monthly □
- Monthly □
- Weekly □
- Daily or almost daily □

4. How often during the last year have you found that you were not able to stop drinking once you had started?

- Never □
- Less than monthly □
- Monthly □
- Weekly □
- Daily or almost daily □

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

- Never □
- Less than monthly □
- Monthly □
- Weekly □
- Daily or almost □

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

- Never □
- Less than monthly □
- Monthly □
- Weekly □
- Daily or almost □

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

- Never □
- Less than monthly □
- Monthly □
- Weekly □
- Daily or almost □

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

- Never □

Less than monthly □
Monthly □
Weekly□
Daily or almost □

9. Have you or someone else been injured as a result of your drinking?
No, never □
Yes, but not in the last year □
Yes, during the last year □

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking?
No, never □
Yes but not in the last year □
Yes, during the last year □

Thank you for your participation.

A 1.2 Individual Interview Guide for Alcoholics

We would like to find out about relapse and have prepared the following questions to help us understand you better in order to develop more effective strategies for relapse prevention. Please respond to the questions to the best of your ability.

1. Have you been treated in a rehabilitation center before due to alcohol problems?
   Yes ☐ No ☐
2. Describe your family's roles in helping you recover from alcoholism by thinking about these questions:
   (a) Who is in charge?
   (b) What are the ways in which they have tried to help you do away with your problems with alcohol?
3. How would you describe communication patterns in your family? Do they make contradictory remarks on your behaviour? Please describe.
4. Please describe some family behaviours and attitudes towards you and your drinking problem? What do they say? How do they describe you?
5. Think about times when you have returned to heavy drinking after treatment. How did your family members react? How did they treat you?
6. Would you describe your family as too protecting and too caring?
   (a) Do you feel you need more space or a chance to participate more in your family?
   (b) Would you say you are appreciated or accepted in your family?
7. How does your family make decisions? Do they take your decisions seriously?
8. Would you say your family members need anger management skills?
9. In which ways do your family members control you?
10. On a scale of 1-10, (with 1 being 'not at all' and 10 being 'criticizes too much') how would you rate the levels of criticism of your close relative towards you? (Not at all) 1…..2……3……4……5…….6……….7…….8……..9…….10(criticizes too much)
11. In which ways would you like to improve your family relationships and communication patterns?
12. Suggest ways that rehabilitation centers would improve alcoholism treatment programs.

Thank you for your participation.

A1.3 Interview Guide for Family Members

We would like to find out how families would like to be assisted in helping the alcoholic maintain sobriety in order to develop more effective strategies for relapse prevention. Please respond to the questions to the best of your ability.

1. Has the alcoholic family member been treated in a rehabilitation center before due to alcohol problems?
   Yes □ No □
2. Describe your family's roles in helping him/her recover from alcoholism by thinking about these questions:
   (a) How do you assist him/her in decision making?
   (b) What are the ways in which you have tried to help him/her do away with their problems with alcohol?
3. How would you describe communication patterns in your family? Do you at times feel confused about giving instructions to the alcoholic? Please describe.
4. Please describe some family beliefs and interpretations about alcoholism, recovery, alcoholics.
5. Think about times when the alcoholic has returned to heavy drinking after treatment. How did you react? How did you treat him/her? Are there some things that you regret saying to him or her?
6. Would you describe yourself as too protecting and too caring?
7. Do you feel the need to monitor the alcoholic's movements and friends? How do you do this?
8. Would you say that the alcoholic is able to make good decisions? Give examples.
9. Would you say your family members need anger and stress management skills? Explain.
10. On a scale of 1-10, (with 1 being 'not at all' and 10 being 'very critical indeed') how much do you criticize the alcoholic?
    (Not at all) 1…..2……3……4……5…….6……….7…….8……..9…….10(very critical indeed)
11. In which ways would you like to improve your family relationships and communication patterns?
12. Suggest ways that rehabilitation centers would improve alcoholism treatment programs.

Thank you for your participation.

A 1.4 Individual Attitude Perception Scale (IAPS)

This questionnaire is a needs assessment to help us improve our counseling services to you and your family. Tick in the box that best suits you. Please do not put your name on the paper.

A. Gender: Male ☐ Female ☐

B. Age group (years)

Less than 18	19-25	26-40	41-54	55 and above

C. Educational Qualifications

Primary	Secondary	Certificate	Diploma	Undergraduate	Graduate	Doctorate

D. Marital status

Single	Married	Separated	Divorced	Widowed	Other

E. Occupation

Services	Business	Professional	Student	Others

F. Income Group (monthly)

Less than Ksh 30,000	Ksh 30000-50,000	50,000-100,000	Above Ksh 100,000

SECTION B

1. Have you ever tried to quit drinking for a time only to start again?

Yes ☐ No ☐

2. If yes, how many times?

Once ☐

Twice ☐

Three times ☐

More than three times ☐

3. How long have you ever been sober after stopping to take alcohol?

1-3 months ☐

4-6 months ☐

6months to one year ☐

1-2 years ☐

More than 2 years ☐

4. What has been your drug of choice?______________________________

5. Have you ever been admitted to another rehabilitation center before for alcoholism?

Yes ☐ No ☐

If yes, how many times?

Once ☐

Twice ☐

Three times ☐

More than three times ☐

Please tick (√) in the box that corresponds with how much you agree or disagree with the following statements about your close family member/s.

	SD	D	U	A	SA
1. He/she shouts at me					
2. I wish she/he were not here					
3. She/he gets angry with me					
4. She/he hates looking after me					
5. I purposefully put him/her into trouble					
6. It is a pleasure for me to be with him					
7. I quarrel with him/her					
8. I feel close to him/her					
9. He/she is so sarcastic to me					
10. I find myself swearing at him/her					
11. He/she can control anger					
12. She/he means no good					
13. He/she makes a lot of sense					
14. I feel disappointed with him/her					
15. He/she is trying to get on friendly terms with me					
16. I feel good with him/her around me.					
17. She/he makes me feel so exhausted					
18. I pay no attention to his/her advice					
19. He/she takes me for granted					
20. I feel she/he is driving me crazy					
21. It is easy to deal with him/her					
22. We seem to disagree even on small issues					
23. I can cope with him/her					
24. I am really a burden to him/her					
25. He/she appreciates what I have done for him/her					
26. I find him/her getting easy to deal with					
27. I wish he/she could leave me alone					
28. She/he thinks I will mess up					
29. I feel he/she is changing to become more difficult to deal with					
30. I feel he/she let me down					
31. My family doesn't care of the way I live my life.					
32. My family encourages me to talk about my difficulties.					
33. My family doesn't like how I handle money.					
34. My family doesn't like the way I take care of myself.					
35. When I have concerns or difficulties my family helps me come up with a solution.					

36. My family gives me a lot of attention.					
37. My family has sacrificed too much for me.					
38. My family tries to get me to change.					
39. If I start talking about my concerns, my family changes the subject					
40. My family won’t talk to me about my health.					
41. My family thinks I should be more active.					
42. My family is not concerned who cleans up if I mess					
43. My family is rarely concerned when I am away from home					

44. Suggest ways that you would like your family members to be involved in your recovery
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Thank you for your participation

A 1.5 Family Member Attitude Scale (FMAS)

We are interested in gaining a better understanding about how family members feel due to the chronic drinking problem of their alcoholic family member. Think about the following questions and tick (√) the one that best suits you. ***Please do not put your name on the paper.***

SECTION A

1. Age bracket
   - Less than 18 ☐ 18-25years ☐
   - 25-40 years ☐ 40-55 years ☐
   - 55 and above ☐

2. Religion ___________________ 3.
Ethnicity_________________________

3. Marital status
   - Married ☐ Single ☐
   - Divorced ☐ Widowed ☐
   - Separated ☐ Other (explain)___________________

4. Are you currently living with the client?
   - Yes ☐
   - No ☐

5. If yes, what is the relationship with the client?
   - Sister ☐ Brother ☐
   - Mother ☐ Father ☐
   - Spouse ☐ Other (explain)…………..……………

6. How much time do you spend with them daily? *(You can make an estimate).*
At least 30 minutes daily ☐ About 1 to 2 hours daily ☐
3-4 hours daily ☐ More than 4 hours daily ☐

SECTION B

Please think about your relationship with your relative and how they make you feel about their heavy drinking patterns. We would like you to tick (√) in the box that corresponds with your answer.

		SD	**D**	**U**	**A**	**SA**
1	I shout at him/her					
2	I wish he/she were not here					
3	I get angry with him/her					
4	I hate looking after him/her					

5	He/she purposefully puts me to trouble					
6	It is a pleasure for me to be with him/her					
7	I quarrel with him/her					
8	I feel close to him/her					
9	I am sarcastic of him/her					
10	I find myself swearing at him/her					
11	He/she can control anger towards me					
12	He/she means no good					
13	He/she makes a lot of sense					
14	I feel disappointed with him/her					
15	He/she is trying to get friendly terms with me					
16	I feel good with him/her around me					
17	He/she makes me feel so exhausted					
18	He/she pays no attention to my advice					
19	He/she takes me for granted					
20	I feel he/she is driving me crazy					
21	It is easy to deal with him/her					
22	He/she is disagreeing even on small issues					
23	I think I can cope with him/her					
24	He is too much of a burden for me					
25	He appreciates what I've done for him/her					
26	I find him/her getting easy to deal with					
27	I wish he/she could leave me alone					
28	He/she ends up in a mess always					
29	I feel he/she is changing to become more difficult to deal with					
30	I feel he/she let me down					
31	I don't approve of the way he/she lives					
32	I discourage him/her from talking about our difficulties					
33	I don't like the way he/she handles money.					
34	I don't like the way he/she takes care of himself					
35	When we have concerns or difficulties in our relationship, we try to get a solution					
36	I am very attentive to his/her needs					
37	I have sacrificed too much for him/her					
38	I try to get him/her to change					
39	I rarely ask him/her about problems he has					
40	I think he/she should be more active					
41	I won't talk to him about his/her health					
42	I don't ever clean up after his mess					
43	I am rarely concerned when he/she is away from home					

44. Please give any suggestions that you may have on how family members would assist in relapse prevention of the alcoholic family member

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Thank you for your participation.

Appendix 2: Informed Consent Form for Respondents

Study Objectives
You have been randomly selected to participate in a study that aims at gaining a better understanding of the causes of alcohol relapse in your community. The study will involve filling in a questionnaire and an interview in which your views about relapse will be sought.

Confidentiality
Your views will be held strictly confidential and will not be divulged to anybody. The interviews will take place in the private setting and anonymity will be upheld in both the oral or written reports. This will ensure that there is no link between you and the information collected; your name will not appear anywhere. Only the researchers will have access to the information, and all records of views shared will be stored in a locked place under the researcher's control.

Risks and Benefits
No risks are anticipated as a result of taking part in this exercise. You will be asked questions about your background such as age, education and marital status. Your personal experience of relapse and understanding of relapse prevention will also be sought. Should you have questions at any time about the procedures being used, you are encouraged to ask the interviewer.

The information you provide in this study will be used for purposes of enhancing relapse prevention among people challenged by drug use and abuse, which will be beneficial to your community and the country at large.

Participation
Your participation in this exercise is voluntary and you may refuse to answer any question or participate in any activity. If you feel uncomfortable participating in this exercise, you may withdraw at any time without penalty. If you agree to participate in this project please sign and tear the consent slip below and return it to the interviewer before you start.

…………………………………………………………………………………......................

I have read and understood the above information and all questions pertaining to this project have been answered to my satisfaction. I also understand that by signing and returning the consent form, I have agreed to participate in this study voluntarily.

Name________________________________ Sign____________________

Date___________________