Relationship Between Family Resilience And Relapse Risk Among Discharged Substance Users Attending Alcoholic Anonymous Groups In Nairobi City County; Kenya.

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Abstract

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

Keywords

Family resilience, relapse risk, substance use disorder (SUD), alcoholic anonymous groups (AA)

Introduction

The process of recovery from substance use disorder (SUD) entails risk of relapse which is associated with SUD treatment (Milhorn, 2018). Relapse risk is the process of having warning signs that point to resuming substance use after a period of non-use. This creates a form of persistent chronic consumption of psychoactive drugs that leads to persistent negative emotional, behavioral, and social

problems. The National Institute on Drug Abuse; (NIDA), (2016) noted that relapse risk remains for many years after post SUD treatment.

Studies on relapse risk have identified the family as being affected by SUD of the recovering individual in moments of a relapse (Voskuhl, 2015; Nikmanesh, Baluch & Motlagh, 2017; Martin, 2015; Sayette, 2016; Birgen, 2013.)

A gap is seen from recommendations of previous research such as (NIDA, 2016; McQuaid et al., 2016; Phillip, 2020; SAMHSA, 2019; Gachara, 2019; Orey, 2015) who conducted research among individuals attending AA groups. The focus was on the recovering person and the family was not a point of focus. Although studies have been conducted to understand relapse risk and the effect it has on family, the Kenyan context has not been investigated. Further, there are limited studies that examine the relationship between family resilience and relapse risk among discharged substance users attending Alcoholic Anonymous (AA) groups was insufficient. This research therefore sought to fill these identified gaps.

Levels of Family Resilience

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

The process and outcome of a family's healthy adaptations to stressful situations, emotions and adjustment to internal and external demands was operationalized as family resilience. Family resilience constructs included communication skills and skills of problem solving within the family; economic and social resources utilization (Silva, 2016). The above positive and effective elements have been found to help members of the family to cope and overcome adverse situations during recovery. These elements would enable professionals to have a therapeutic look at the family strengths that would strengthen family resilience.

Status of Relapse Risk among Discharged SUD Persons

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

From the rehabilitative view, relapse and recovery are vital aspects in SUD. They have been noted to be rampant and frustrating despite the high numbers of individuals with SUD (Moos, 2011; Ibrahim, 2014). Health concerns that could be triggered by stress, SUD diagnosis, background of drug use, re-exposure to substances were identified as potential risk factors for relapse (Braddiza, 2017).

Chetty (2011) & Hasin et al (2013) provide a review of literature in the relapse to substance use field. They confirmed that it was inadequate to adopt an approach in which effective relapse risk preventive measures could be achieved without addressing family resilience. The management of SUD have been found to involve family members for effective results.

Relationship Between Family Resilience and Relapse Risk

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

Over the past decade, the terms of the debate between family resilience and relapse risk had become problematic. The inadequacy had been revealed in the findings that clear authority structures within families involved mutual respect, communication are high functioning and comprehension are good at problem solving, decision making, working towards maintaining family's boundaries and routines hence enhanced family resilience and had in-turn led to focusing on relapse risk. Because of the recognition that there were a lack of clear understanding between relapse risk and family resilience, researchers sought to explore how a shared meaning is constructed among family members overtime about the stressors (relapse to SUD), their available resources and capabilities to navigate family stresses.

There was a great deal of material that questioned what happened to the family when they had adaptive family meaning systems. That implied that they were empowered with coherence and hardiness when challenges arose. However, negative family meaning made it difficult for the family to develop strength during adversities, utilize their organization skills, hence portrayed ineffective coping skills. Dary (2016), noted that enabling the individuals and family cope with and mitigate warning signs of relapse was an important strategy in minimizing the relapse risk following rehabilitation. This research aimed to fill these gaps.

Methodology

A purposive sample of 93 participants was selected to participate in the study. The study used multi-stage sampling technique. In the first stage, purposive sampling identified Nairobi city, County. In line with the AA principles which strongly uphold anonymity, the A.A open group meetings were purposively sampled. Recruitment of the initial contact persons both males and female were done using snowballing sampling method. That was used for individuals who may have missed the AA groups. Participating individuals were randomly selected, and they were recruited to identify other AA members to participate in the research. Purposive sampling was used to identify family members to participate in the study by the participants who attended the AA meeting, and they shared the questionnaire with a family member who was supporting their recovery.

Equation: Miot (2011) Formula for sample size determination

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

Where:

n=sample size

Z /2= value for desired confidence degree; 1.96

= population standard deviation; 2.517

E=standard Error; 0.506

n= (1.96x2.517/0.506) 2 = 93.

Therefore, the sample was 93 participants.

Research Design

Correlation research design was used to assess the degree and variation in the relationship that exists between family resilience and relapse risk among recovering substance users attending AA groups.

Research Instruments

Family Resilience Scale (FRAS) was developed by Tucker Sixbey, (2006) as an improvement from Walsh's (1998) conceptual model. A 66-item instrument designed to measure family resilience from a family members perspective with a 5-point Likert scale where respondents answered from 1(Strongly Disagree) to 5(Strongly Agree). A reversed score on items 62, 57,48, 42, was used in these study.

Advance Warning of Relapse (AWARE) Questionnaire by (Gorski & Miller, 1982) to assess the relapse warning symptoms was used in this study. The questionnaire consisted of a 28 Likert scale questions. To score the AWARE questionnaire, numerical scores of 1-7 were assigned as follows: a score of 1 for Never, 2 for rarely, 3 for sometimes, 4 for fairly-often, 5 for often, 6 for almost always and 7 for always.The questionnaire was scored by totaling all responses, but scores for items: 8, 14,20, 24, 26 were reversed.

The internal consistency reliability of Cronbach's alpha for both instruments was used in this study). The Advance Warning signs of Relapse (AWARE) scale internal consistency estimates were alpha .90.The questionnaires were individually administered to the respondents by the researcher. Descriptive and inferential statistics were used to analyze the collected data. Descriptive statistics such as percentages and measures of central tendency were used to describe the data collected. Inferential statistics including spearman rank-order correlation was used to test hypotheses that "there is no significant relationship between family resilience and relapse risk among discharged substance users attending AA groups",

Ethical Consideration

Authorization to collect data was sought from the significant university leadership and ethical approval from the ethics review board. The researcher also sought the approval to commence the data collection from the Graduate school committee and the Kenya National Commission for science, Technology and Innovation (NACOSTI). Letters of approval were presented to the alcoholic anonymous group meetings earlier before the data collection date to obtain consent of the administrators to use their institutions for the study. The AA group facilitators were also contacted and because of the nature of anonymity participants' identity was uphold.

Results

Demographic Characteristics of the Sample

The age and sex distribution of the respondents in the study is summarized in Table 1 below. The findings show that 58.1% of the respondents were aged 28 to 38year, 29% were above 38 years, while 12.9% were 18 to 28years.

Table 1 *Age of the participants*

Participant`s age	Frequency	Percentage
18 -28	12	12.9
28-38	54	58.1
Above 38	27	29.0
Total	93	**100**

Table 2 shows the findings that 62.4% of the respondents were males recovering from SUD and 37.6% were female.

Table 2: *Sex of respondents*

Sex of respondents	Frequency	Percentage
Male	58	62.4
Female	35	37.6
Total	**93**	**100.0**

Respondent's Family Support System

The participants were asked to indicate their loved ones who supported their recovery from SUD and the results are shown in Table 3. Majority of the respondents (41.9%) received support in their recovery from SUDs from their spouses, 15.1% from their children, 21.5% from their sisters, 14% from their mothers and 7.5% from their fathers as their support system.

Table 3: *Respondent's relationship with their loved ones who supported their recovery from SUD.*

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

Descriptive Analysis to Determine the Level of Resilience among Families

Further analysis was conducted to determine the levels of resilience among families of discharged substance users attending AA groups, in Nairobi City County Kenya. Data for objective was captured in the family resilience questionnaire. As indicated in Figure 1, the study found a mean of 121.76 and a standard deviation of 22.838 from a population of N=93. The FAAR scale was done by calculating the average mean scores for each family member. Scores for every family member on each item were added and then the total was divided with the number of items on the scale. Statements which have a high discriminatory power for each item were arrayed. Family resilience was indicated by high scores.

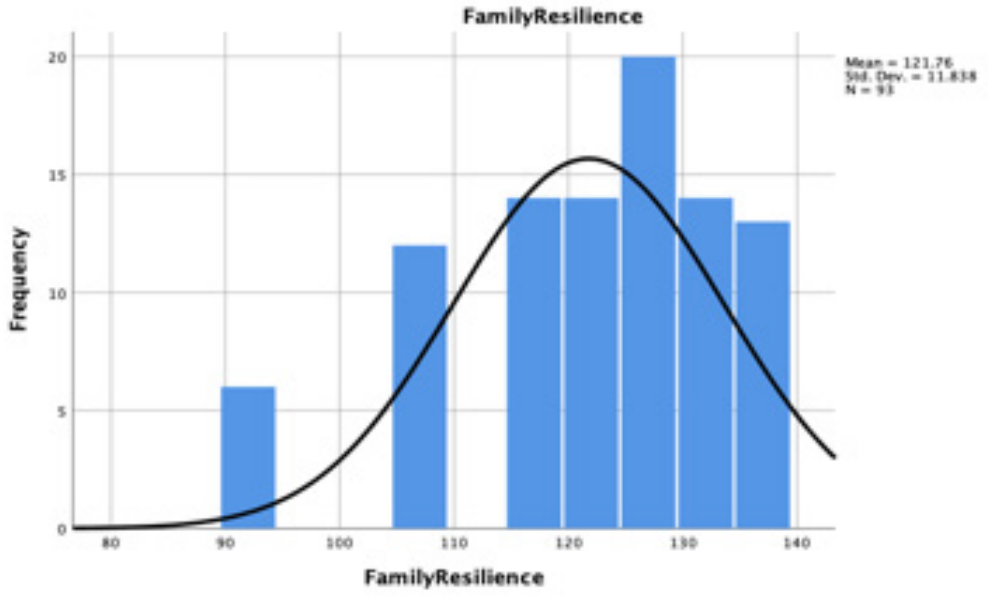

Figure 1 shows the descriptive analysis of family resilience.

Descriptive Analysis to Determine the Scores from the Advanced Warning Signs of Relapse Questionnaire (AWARE)

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

Table 4 shows that the vast majority of the participants (41.9%) have a low relapse risk following discharge from the treatment facilities and have been actively attending the alcoholic anonymous groups. Only 21.5% of participants show high relapse risk warning signs while 36.6% indicates moderate relapse risk . These findings agreed with the research by Hendershot et al 2011 & Moradinazzar, et. al (2020); Maehira, (2013); Sapkota (2019) which show that rates of relapse after treatment range between 40% to 75% within a period of 3weeks to 6months. The findings indicate that the relapse risk was not as high since they were

attending the alcoholic anonymous groups post treatment.

Table 4: Assessing the occurrence of relapse risk.

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

Figure 2 further shows a mean of 75.61 and a standard deviation of 22.771 from a population of N=93 that was achieved in determining the status of relapse among recovering substance users attending AA groups.

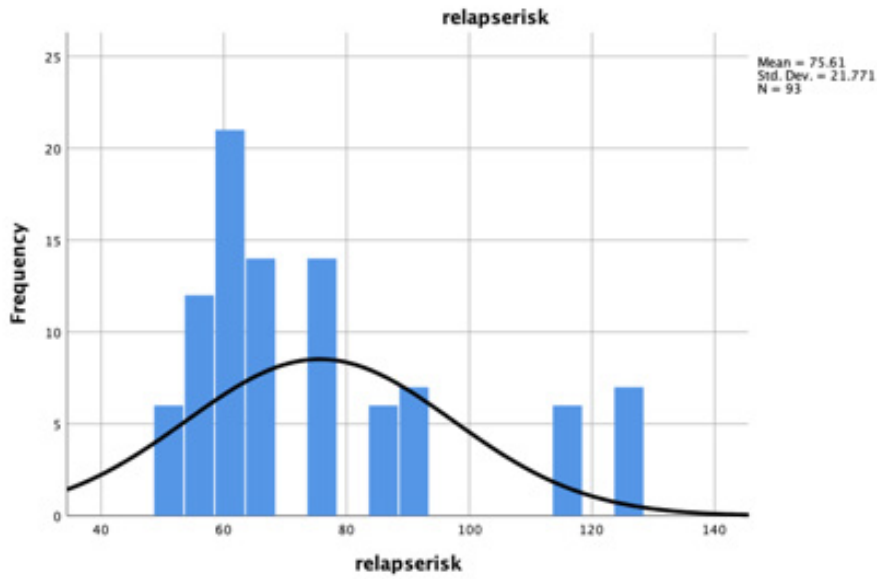

Figure 2 shows the descriptive analysis of relapse risk.

Test of Hypothesis

To test the hypothesis that "there is no significant relationship between family resilience and relapse risk among discharged substance users attending AA groups", the Spearman rank-order correlation was conducted by matching the family resilience score and the relapse risk score for each participant. Table 5 presented the study findings that revealed that there was a strong negative correlation on family resilience and relapse risk, a relationship that was statistically significant r_s (93) = -.522, p > 0.0001. The significance level is assessed at the 95% confidence level.

Table 5 Spearman Correlation

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

. Correlation is significant at the 0.0001 level (1-tailed)

Discussion of Findings

The findings established a significant negative correlation between relapse risk and family resilience. The findings by (Medina, 2015) agreed with this study since she highlighted that enhancing family resilience could be a beneficial method to understanding SUD relapse because the family unit went through repeated cycles of adjustments and adaptations when they had a victim of substance abuse.

These findings on the relationship between family resilience and relapse risk among recovering substance users attending AA groups in Nairobi City; county agreed with a past finding by Sayette (2016), who indicated that there was a significant association between participants feeling that family members took them for granted and family resilience. It suggested that the main obstacle to change was related to the pressure from the families who lacked adequate knowledge on the SUD recovery process and their role in relapse prevention. These pressures caused recovering substance users to feel inadequate to face their families and hence took the initiative to isolate themselves, thus continuing their usual activity (Martin, 2015) . Distressing life circumstances and conditions could change both the family's quality of life and one's wellbeing. When family relationships were supported, they become a pillar in the recovery of the substance use disorder individual (SAMHSA, 2017). As shown from the findings, high number of individuals were supported by their spouses and this in turn translated to low relapse risk signs being the highest among the participants. No evidence was found that showed the warning signs occurred in the order indicated in the questionnaire in real time (Miller & Harris, 2000). The total score was the best predictor of an impending relapse.

The above past findings agreed with this study that the higher the family resilience, the lower the relapse rate. As per the family adjustment and adaptation response model that guided this study, it was clear that the family had available resources to address any family demands, the ability to form meanings to situations that in turn helped them to understand resilience.

Conclusion

The study established a negative correlation between family resilience and relapse risk. There was a need to make more connections with significant others. Majority of the participants reported to have received the highest family support from their child while the least support came from fathers and a need for further research to find out the reason is needed. A significant association between family members taking

the recovering substance user for granted and family resilience was noted. This study suggests that facilitators at the AA groups help recovering substance users explore their relationship with their loved ones. This would ensure that the individuals have worked on their resentments. Additionally, the study recommended that the AA groups explore further the reasons that predispose individuals attending the meetings to high risk of relapse. The outcome would assist the individuals to track their triggers and be on the lookout for warning signs.

This study recommends that each family needs to have follow-up sessions with their loved ones on their recovery journey. The study also suggests that fathers should assess the reasons as to why they are the least supportive persons to majority of the recovering substance users.

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