

RELAPSE AND ASSOCIATED RISK FACTORS AMONG RECOVERING ADDICTS OF SUBSTANCE ABUSE IN ZANZIBAR, TANZANIA

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Abstract: The current study sought to determine the risk factors associated to relapse among recovering addicts in the urban area of Unguja Zanzibar, Tanzania. The study employed cross-sectional research design and the mixed method was also utilized, enabling the collection of both qualitative and quantitative data. Data was collected from a sample of 74 respondents who are recovering drug addicts and have experienced relapse at least once in their recovery journey. The questionnaire and semi structured interview used in as tools of data collection. The Statistical Package for Social Science 18 software was utilized in accomplishing the analysis process. Quantitative data was analyzed through descriptive statistics such as frequencies, means and percentages while regression models were used to estimate the causal relationship between a dependent variable and the independent variables. Tables and figures were also used to present the analysis output. Content analysis was used to analyze qualitative data. The study findings revealed that, social factors such as peer pressure, dysfunctional family relationships, constant criticism of the recovering addict, social triggers and a history of family drug use resulted in relapse tendencies. Lastly self-regulation problems such as inability to regulate drinking habits, inability to learn from mistakes, inability to consider consequences and failure to abide to personal standards resulted in relapse. It was recommended that among others, sober houses should mainstream programs that target the social environment, basic life skills development and emotional regulation as to enhance addict's ability to maintain sobriety upon discharge from sobriety facilities.

Keywords: Relapse, Social risk factors and Self-regulation.

1. INTRODUCTION

Substance Use Disorders (SUDs), which include substance dependence or abuse, tremendously impact individuals, families, and communities. Recurrent alcohol or illicit drug use that results in clinically substantial impairment, such as health issues, disability, or the inability to accomplish important work, school, or household obligations, is known as SUD. Adults' physical and mental health, safety, and quality of life all depend on reducing SUDs and related issues (Lipari et al, 2016)

Tremendous efforts have been made towards developing holistic treatment approaches that ensure the sustenance of sobriety. This is attributable to the extensive and global socioeconomic and health implications of substance use disorders (Global Burden of Disease, 2016). Researchers have suggested that although studies are currently limited, understanding how contexts can impact relapse and learned behaviour could be harnessed to enhance treatment efficacy (LeCocq,2020).

More than 247 million people between the ages of 15 and 64 were reported to use drugs, according to the United Nations Office on Drugs and Crime (UNODC, 2014), an increase of 39 million users since 2006. Among this cohort, over 29 million people (12%) are estimated to have a drug use disorder. 34 million people used amphetamines, 33 million used opioids, and

183 million used cannabis in 2016. About 9% of Americans struggle with substance misuse, and young people are about 5% more prone to addiction than their counterparts in other age demographics.

In the United States, 20.2 million of the 21.5 million adults aged 12 or older who had a SUD in the previous year were adults, making up 94.2% of those who had experienced a SUD. In the United States of America, the relapse rate for substance use disorders is reported to range between 40% and 60% at the Centre for Behavioural Health Statistics and Quality (CBHSQ) (2019).

In Europe, Peacock *et al* (2018) found that the prevalence of SUD among the adult population was 18.4% for heavy episodic alcohol use (in the past 30 days); 15.2% for daily tobacco smoking; and 3.8% for cannabis use, 0.77% for amphetamine use, 0.37% for opioid use, and 0.35% for cocaine use in 2017. The Australian Institute of Health and Welfare (AIHW) (2020) found that in 2019, 11% of people over 14 years old smoke daily; that 9.9% of those who drink alcohol, which equates to 7.5% of the total population aged 14 or older, may qualify as alcohol dependent; that 17.5% of the 2.4 million people who used cannabis within the last year may have hazardous use or a dependence problem; and that 63.5% of about 300000 recent users of meth and amphetamines were at risk for developing problem use.

Studies undertaken in a number of Asian nations with high rates of inpatient treatment completion reveal a significant prevalence of relapse, with 33% in Nepal and 55.8% in China (Adinnof,2010 and Hasin,2013). Similar studies reveal that relapses typically occur between one month and a year after completing treatment programs. Relapse and recovery are crucial difficulties from the standpoint of therapy, extremely common and frustrating issues despite the continued high frequency of patients who use substances. Stress, cues from prior drug use, or re-exposure to the substance can all cause relapse, which is a health risk (Ibrahim and Kumar, 2014).

Although research on drug misuse is well-saturated, one study from Nigeria (Murtala, 2019) found that the predictors of drug relapse tendencies in the nation have not received the best research focus. He used a descriptive survey design for his investigation. The study's main conclusions indicated that drug abuse relapse is moderately common among clients in NDLEA rehabilitation facilities in North Central, Nigeria and that the main causes are easy access to drugs, a drug-abusive environment, routine passing by drug-using locations like bars and smoking joints, as well as being around other drug users.

According to Kukaye (2021) who studied drug addiction in Kenya, drug and substance misuse is a significant public health issue worldwide, particularly in developing nations, with Kenya being one of the most impacted in Africa. According to the research, Mombasa is the most drug-using city in the coastal area of the nation. Effective prevention, treatment, and rehabilitation are required because of the linked negative impacts on practically every element of life development. Successful treatment should address family, legal, economical, medical, and mental requirements. Although the bulk of the clients were opiate addicts, a relapse rate of 38.89% was determined. These results closely relate to a study conducted in Nairobi among in-patients who were alcoholics, where the relapse rate was 39.2%. (Githae, 2016).

In a study done in Zanzibar, Muhammad (2021) discovered that the main factor for individuals falling back to substance misuse after attending treatment facilities was unemployment. The study came to the conclusion that parents, caregivers, and other community members knew little about substance usage and relapsing after quitting. The study suggests mass education, community sensitization, and the hiring of qualified social workers to give social work services to rehabilitation Centre's. Since several probable predictors of relapse tendencies were outside the scope of his study, as intended in the study, the researcher also advised that comparable studies on other factors associated with addiction relapse, other than those considered in his study, be carried out, and this study was conducted in response to this recommendation, to add the currently limited body of knowledge regarding the predictors of addiction relapse tendencies.

The Studies conducted elsewhere (Bashirian et al, 2021; You et al, 2020; Mousali et al, 2021 & Shafiei, 2014) have identified self-regulation, social support, and environmental factors as the main predictors of relapse tendencies among drug addicts however there is currently no empirical evidence linking such relapse tendencies to perceived self-efficacy, social support and environmental factors in Zanzibar.

So, this study was conducted to contribute to the currently limited body of knowledge on the risk factors of relapse tendencies among recovery addicts of substance abuse in a developing country perspective, most particularly Zanzibar, Tanzania.

The study sought to assess the risk factors associated with drug addiction relapse tendencies among recovering addicts of substance misuse in selected sobriety facilities in Zanzibar followed by this research questions.

- i. What are the influences of social contexts associated with relapse tendencies among recovery addicts of substance abuse in Zanzibar sobriety facilities?
- ii. What is the influence of self-regulation on relapse tendencies among recovery addicts of substance abuse in Zanzibar sobriety facilities?
- iii. Is there any relationship between relapse tendencies and associative risk factors among recovery addicts of substance abuse?

2. METHODOLOGY

Research Design

Research designs stipulate the methods or procedures for collecting, measuring, and analyzing data (Dawadi & Giri (2021)). The study was adopted the descriptive cross-sectional design. Descriptive studies can be applied in analyzing the relationship between variables (Creswell, 2017) as intended in the study. The study was also adopted the cross-sectional research design since mixed research approach used in data collection, analysis, and interpretation was conducted at a single point in time.

Population and Sampling.

The study's target population was 90 from three sober house including all recovering addicts who have experienced relapse and 12-step program facilitators at selected sobriety facilities. The choice of recovering addicts is informed by the fact that they have experienced a relapse in the past and therefore have the appropriate information for the study, which was drawn from their personal life experiences. Out of 90 of recovery addicts, 74 were sampled through both purposive and simple random sampling techniques.

Purposive sampling (also known as judgment, selective or subjective sampling) is a sampling technique in which the researcher relies on his or her own judgment when choosing members of the population to participate in the study because a particular sample has the characteristics required to relevantly inform a study, thus saving time and money (Lambert,2020). Simple random sampling techniques were used to select the sobriety facilities that was able to participating in the study. This was to ensure that each facility had an equal chance of being selected to avoid sample bias.

Since the recovering addicts with relapse experiences was purposively sampled, the researcher was solicited the support of facility management to identify participants who meet this criterion. Once all members have been identified systematic simple random sampling techniques was used to ensure that each member has an equal chance to participate and avoid sampling bias. The researcher was therefore creating a list of all members identified and names in terms of coded one and two, thus each member coded two was selected for participation. The process was repeated until the actual sample size was achieved. This technique has the advantage of minimizing bias during the sample selection process by giving each member an equal chance to participate (Devi,2017) as intended in the study.

Hence three (3) respondents out of 74 were purposive sampled in participation on semi structured interview who are leaders of sober house.

Instrumentation

Data was collected through questionnaire and semi structured interview guide.

Validity and reliability

The instruments were validated through sharing with two research experts from University of Iringa to ensure that the contents of the questionnaire are valid, therefore, the researcher was conducted the extensive research on previous tools used in similar studies and was ensured to adopt tools that have been standardized and validated by previous studies.

The internal consistency of the questionnaire was determined using Cronbach's alpha test, which is a statistic commonly used to demonstrate that tests adopted for a study fit the purpose (Hoque et.al, 2021) was applied. As revealed, 0.70 and above is a good fit. 0.80 and above is a better fit, and. 90 and above is the best-fit score in Cronbach's tests.

Statistical treatment

Qualitative data was analyzed through thematic approach in narrative form and Quantitative data was analyzed through frequencies and percentage with help of SPSS.

Ethical consideration

The researcher was obtained introductory letters and permits for data collection from University of Iringa prior to engaging in data collection and also, permission letter from Revolution Government of Zanzibar Drug abuse Department. The researcher was protected his participants from any harm by providing information regarding the study, so that they can make an informed decision to participate or decline. Participation was voluntary and can be cancelled at any point of the process when the participant feels uncomfortable proceeding. The privacy of participants was protected thus; names was not revealed in the dissertation. The researcher was also ensured that plagiarism was avoided through in-text citation and referencing, thus acknowledging the use of other scholars' work. Furthermore, plagiarism was avoided by paraphrasing literature, which was used in fair dealings.

3. FINDINGS AND DISCUSSION

The study sought to assess the risk factors associated with drug addiction relapse tendencies among recovering addicts of substance misuse in selected sobriety facilities in Zanzibar followed by these research questions:

Table 1: Social Risk Factors Associated to Drug Addiction Relapse

S/N	Kinds of responses	Strong Agree		Agree		Neutral		Disagree		Strong Disagree		TOTAL F&%
		f	%	F	%	f	%	F	%	f	%	
1	My friends convinced me to use drugs and I couldn't resist	61	82	10	14	0	0	2	3	1	1	74 (100%)
2	The relationship between me and my parents has been problematic from childhood	54	73	7	9	0	0	10	14	3	4	74 (100%)
3	I am constantly criticized for relapsing and this affects my self-worth	53	72	9	12	1	1	5	7	6	8	74 (100%)
4	There is a history of substance/alcohol use in my family	38	51	3	4	1	1	25	34	7	10	74 (100%)
5	Social events/places often trigger my craving for alcohol/drugs	65	88	4	5	0	0	3	4	2	3	74 (100%)

Keys: f= frequencies.

Research Question 1: What are the influences of social contexts associated with relapse tendencies among recovery addicts of substance abuse in Zanzibar sobriety facilities?

Table 1 represent the response on social factors associate with relapse tendencies among recovery addicts of substance abuse.

Findings from table 1 indicates that the majority 82% of respondents strongly agreed that they could not resist the pressure exerted on them to use drugs, which contributes to their relapse tendencies. The above findings were supported by those established through the interview for instance one interviewee had this to say regarding peer pressure:

"... We do our very best but you see, the patient has the bigger role to play, there is a lot of peer pressure to resume using out there..." (NT3:2023).

Another interviewee also remarked that:

"Clients are required to establish healthier relationships, when you leave the facility, it can get lonely, if one stays idle, they may be trapped back into old friendships that force them to reuse, society has rejected addicts, and most of them feel a sense of belonging when they interact with fellow addict" (NT2:2023).

Recovering addicts may feel more obligated to use a drug, such as cannabis if the people around them are doing it at the time. If recovering addict continues to associate with people who encourage them to reuse drugs, they may relapse. Because

consuming alcohol is so socially acceptable, alcohol is the most commonly used substance in a peer pressure situation. Many individuals start using alcohol due to direct or indirect pressure they feel from peers who are drinking.

Njoroge (2018) similarly found that although much progress has been made in the rehabilitative approaches for SUD, relapse rate among abusers remains high and among others, it was caused by peer or social pressure. Studies have shown that 66% of adult addicts and 75% of adolescent addicts relapse within six months of stopping addiction treatment, partly caused by social pressure

Most studies show that adolescents relapsing after a long period of abstinence fall prey to social pressure even after initiation of detoxification treatment.

Moreover, findings in the table 1 revealed that, the majority of 73% of respondents strongly agreed that the relationship between them and their parents had been problematic from childhood, which contributes to their relapse tendencies. By supported from interview one interviewee said:

“I was raised by a single mother who criticized and constantly insulted me, each time I made mistakes she compared me to my father who denied us and left. My mother has projected all the anger she feels for father on me, it was difficult to please her much as tried, every time I think of all this, I must take alcohol to forget, even if it’s for a short time” (NT1:2023).

Another interviewee had this to say:

My parents were busy chasing their career dreams they never had any time for me, am an only child, I felt invisible in my own family. They provided me everything except their time. Even now, this is the third sober house am attending, but they rarely give me time, they just say if I start again, they will find another sober house for me to go to. I only have my addict friends to talk to.... (NT3:2023).

Hence, the more adverse childhood experiences a child survives, the higher their risk of becoming addicted to alcohol or drugs and also relapsing after treatment, especially if the family environment doesn’t change. Additionally, the way a family reacts to addiction through playing dysfunctional family roles also has an influence. A dysfunctional family is characterized by drug use, all forms of abuse such neglect, sexual and physical abuse all of which may result in relapsing.

Similarly, Zeng (2021) found that family functioning, particularly the relationship between addicts and their parents is closely related to individual drug use and relapse. Studies have shown that individuals are less likely to have problem behaviors when they interact well with family members, especially their parents. Family functioning plays an important role in male drug abuse. Family functioning has also been found to be related to an individual’s illegal behavior and substance use behavior. Compared with adolescents with poor family functioning, adolescents with good family functioning have a lower possibility and risk of drug use

However, in supported of finding in table 1, the majority 72% of respondents strongly agreed that the constant criticism regarding their addictive behavior affected their self-worth which influenced their relapse tendencies. These findings imply that excessive criticism of revering addicts negatively impacts their healing process.

Similar findings were established through the semi structured interview as one interviewee is quoted: “We are called names all the time, you see drug addiction can turn one into a thief, an aggressive person, someone that can’t be trusted. One can be called useless, a thief and this can truly damage a client’s self-esteem, even if they had the intension to quit, they may be discouraged and then get back to using drugs, because drugs is a poor coping mechanism”. (NT2:2023).

Another interviewee added.

Before I quit drugs, I was called the lost child and also the black sheep of the family. My family is wealthy, all my five siblings are educated with master degrees, I am the only one who dropped out in secondary school when I started using cannabis, you won’t believe I am related to my family if you met us together, drugs have completely ruined my physical appearance. In the beginning I used to relapse because I would constantly think about what a failure I have become. (NT1:2023).

In a similar study, Atadokht *et al* (2015) also found a positive relationship between family expressed emotions and the frequency of relapse ($r = 0.26$, $P = 0.011$) and a significant negative relationship between perceived social support and the frequency of relapse ($r = -0.34$, $P = 0.001$). Multiple regression analysis also showed that perceived social support from family and the family expressed emotions significantly explained 12% of the total variance of relapse frequency.

Lasty, the finding in table1, the majority 88% of respondents strongly agreed that social events and situations often trigger their cravings for drugs. Triggers are situations that increase ones craving for drugs and these may include. Keeping old friends who use drugs, coming across a bar and seeing people using drugs, seeing empty bottles, watching programs where alcohol and drugs are being used and attending parties where drugs are used to increase excitement.

Overall, these findings demonstrate that several social factors place recovering addicts at risk of relapsing back to addictive behavior. One interviewee had this to say:

“Social gatherings often trigger relapse especially in alcoholic clients, this is common in families where alcohol is an important part of celebrations. It is often a major reason for relapse, one requires to preplan what they will do to avoid temptation and triggers otherwise they are likely to relapse” (NT2:2023).

Similarly, Appiah et al., (2017) also found that social events such as parties, and wedding were major triggers for the relapse cycle among recovering addicts in Ghana. Overall, these findings demonstrate that several social factors place recovering addicts at risk of relapsing back to addictive behavior.

Table 2: Self-regulation as a Risk for Addiction Relapse

Kind of responses		Strong Agree		Agree		Neutral		Disagree		Strong Disagree		TOTAL
S/N	Self-regulation as a risk for addiction relapse	F	%	F	%	F	%	F	%	F	%	F&%
1	I find it hard to stop even when I have had enough alcohol/substance	65	88%	6	8%	0	0%	0	0%	3	4%	74 100%
2	I don't seem to learn from my mistakes with drug abuse	45	61%	15	20%	2	3%	8	11%	4	5%	74 100%
3	I have personal standards but I rarely adhere to them	61	83%	4	5%	8	11%	1	1%	0	0%	74 100%
4	I seem to relapse mostly when am overwhelmed by negative/positive emotions	47	64%	12	6%	6	8%	5	7%	4	5%	74 100%
5	I rarely think about the consequences before using a substance	49	66%	7	9%	15	20%	2	3%	1	1%	74 100%

Keys: = frequencies.

Research Question 2: What is the influence of self-regulation on relapse tendencies among recovery addicts of substance abuse in Zanzibar sobriety facilities?

As revealed in Table 2, the majority 88% of respondents strongly agreed that they found it hard to stop even when they have had enough alcohol. In support of the above findings, one interviewee had this to say: “After finishing this program, most of the recovering addicts are tempted to for instance take just one beer when they are overwhelmed by cravings, but you see, one beer ends up in many more until they lose sense of themselves, this usually leads them back to the path they are struggling to leave” (NT1:2023).

The study findings Berking et al., (2011) demonstrated that self-regulation skills, such as coping and emotion regulation skills, play a key role in predicting the development and maintenance of and recovery from addictive problems, including tobacco, alcohol and drug use disorders, and pathological gambling.

These findings support those of Axelrod *et al*, (2011) who examined improvement in emotion regulation skills, as measured by the Difficulties in Emotion Regulation Scale among women with substance use disorders and borderline personality disorder receiving dialectical behavior therapy. Results showed that improvement in emotion regulation skills during treatment was associated with decreased substance use frequency and less relapse episodes.

Moreover, the study revealed that, the majority of 61% respondents strongly agreed that they don't seem to learn from their mistakes with drug abuse. In light of this, one interviewee shared:

Sometimes these addicts go through things that should make them stop and rethink their actions but you will be surprised that they will not learn anything. There was one who shared that after he over dozed on heroine, his heart was badly affected and the doctor had warned his family that he would not be able to get out of the hospital alive, he said that surprisingly he survived but resumed drugs after three months (NT2:2023).

The study of Bari and Robbins (2013) also found that Impulsivity negatively impacts addiction recovery and maintenance, as individuals who have difficulty holding back from acting on something, despite their negative consequences – have been shown to be more susceptible to addiction and relapse.

More so, the majority of 64% respondents strongly agreed that they relapse mostly when they are overwhelmed by negative/positive emotions. Addicts with high levels of stress and poor coping skills, may return to drugs and alcohol for relief. Negative emotions, such as anger, anxiety, depression, and boredom, sometimes increase the risk for relapse. Work and marital stress, also contribute to relapse. One interviewee had this to say.

“...I was emotionally unstable, when I didn't have problems, I was able to plan and stay sober for as long as I am stress free, but once problems came, I became sad, angry, worried, frustrated, I would experience all these negative emotions, I would have to use in order to be able to sleep...” (NT1:2023).

Otonello (2019) also studied how difficulties in emotion regulation can be related to metacognitive beliefs during early abstinence. After rehabilitation program, all symptoms of psychological distress decreased. Compared to those still abstinent at 1 month from discharge, it found more difficulties in “Emotional clarity” in those who had an early relapse. Difficulties in “Emotional clarity” were observed also in patients with a high level of craving at discharge.

Murphy *et al.*, (2013) also concur that drug addiction is a persistent disorder characterized by compulsive-seeking and taking of drugs, loss of control over intake, and negative emotional states in withdrawal, such as dysphoria, anxiety, and irritability.

Table 3: Regression Coefficients on the Influence of each Predictor Variable on Relapse

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.055	3.527		6.538	.000
	Social Risk	0.203	.107	.241	2.895	.028
	Self-Regulation	0.188	.120	.195	2.565	.035

a. Dependent Variable: Relapse

Source: Field data (2023)

Research output Question 3: Is there any relationship between relapse tendencies and associative risk factors among recovery addicts of substance abuse?

Regression Output

The regression analysis output also confirmed that there is a significant positive correlation between associated social risk factors and relapse, all of which were less than 0.05. Saunder, et al., (2014), recommend that the p-value should be equal to or less than 0.05 to be significant. Lastly, the regression analysis output confirmed that there is a significant positive relationship between Self-Regulation and Relapse, as the p-value is 0.028, which is less than 0.05. (Saunder, *et al.*, 2014).

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

It is concluded that social factors are significantly associated to relapse incidences among recovering addicts in Zanzibar sober houses. In particular, peer pressure presents a major risk for recovering addicts and other factor such as childhood relationship with parent, self-criticism which is constant criticism and social events that has access of drug, it was difficult for recovery addict not relapse again. Lastly, self-regulation has play big role for recovery addicts in stopping use of drugs

while it has access to the drugs, factors like poor self-emotional control and learn from mistake show positive relation the relapse tendencies.

Recommendations

In order to address social risk factors associated to relapse among recovering addicts, sobriety facilities should design holistic programs that are targeted at not only stopping drug use and addiction but also maintaining sobriety beyond the walls of sobriety facilities. Future studies should adopt a longitudinal research design, where by specific addicts admitted to sober houses will be identified and studied while in rehabilitation and later after rehabilitation to determine the impact of social factors, self-efficacy, and regulation over time.

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