

DETERMINANTS OF RELAPSE AMONG ALCOHOL AND DRUG ABUSERS IN SELECTED REHABILITATION CENTRES IN NAIROBI COUNTY, KENYA

Corresponding Author:

Margaret W. Mukora

Scholar, Department of Psychology, Mount Kenya University

Email:mukoramargaret@gmail.com

Second Author;

Dr Racheal M. Mbugua, Phd

Lecturer, Department of Psychology, Mount Kenya University

rmrayscale@gmail.com

Abstract

This study aimed to determine the factors influencing relapse among alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya. The determinants examined were family support, stigma, gender, and peer pressure. The research design used was descriptive, and data was collected through questionnaires and interviews. A sample of 345 recovering clients was selected using the Yemane sampling formula, and counselors were chosen purposively. The collected data was analyzed using SPSS software, with descriptive and inferential statistics employed. The results showed a negative significant relationship between family support and relapse, a positive significant relationship between stigma and peer pressure on relapse, and no significant relationship between gender and relapse. The study recommends improving communication and understanding within families, providing education and resources to family members, and addressing gender-specific challenges in the recovery process.

Keywords: family support; stigma; gender; peer pressure; relapse

1. Introduction

Substance abuse is a complex issue with significant public health implications. It is recognized as a medical illness rather than a character flaw, leading to maladaptive patterns of substance use that impair functioning (Seitz & Neuman, 2021). Psychoactive substances have been used throughout history for various reasons, such as amusement, curiosity, and stress relief (Kelly, 2019). However, the use of these substances comes at a high cost, including addiction, social disruption, and increased risk of severe diseases (Karch, 2019). Alcohol abuse is particularly concerning, causing millions of deaths worldwide and numerous diseases and injuries. It affects not only individuals but also has substantial societal and economic consequences, including strained relationships, reduced productivity, and increased healthcare costs. Excessive alcohol consumption is a significant public health concern that requires comprehensive prevention strategies, awareness campaigns, and accessible support and treatment services (Singal et al., 2021). Relapse is a common challenge in the treatment of substance abuse, with rates varying depending on factors such as severity and treatment criteria (Singal, 2021).

In Africa, substances like tobacco, alcohol, and Indian hemp have been traditionally used for social and cultural purposes (Mattiuzzi& Lippi, 2019). The prevalence of substance use disorders is expected to increase in Sub-Saharan Africa, while the treatment gap will also grow (Myers et al., 2018). South Africa has observed high relapse rates among individuals in treatment, especially among younger age groups. Nigeria faces challenges with addiction due to the easy availability of alcohol and drugs, limited treatment services, and societal stigma (Olurische, 2019). In Kenya, both men and women are affected by substance abuse, with alcohol being a significant concern (Jaguga et al., 2022). Relapse cases have increased, and the study aims to identify the determinants of relapse among alcohol and drug clients in selected rehabilitation centres in Nairobi County, Kenya (Mutuli, Bukhala&Nguka, 2020). In Kenya, alcoholism affects around 10% of the population aged 15-65, with a majority experiencing severe alcohol use disorders (NACADA, 2017). Despite advancements in treating alcohol and drug addiction in Kenya, there is a growing demand for psychoactive drugs and aftercare services, with a limited focus on the psychosocial aspects of treatment. This has resulted in a high relapse rate among clients who have undergone treatment in Nairobi County and Kenya as a whole. Therefore, this study aimed to examine the factors contributing to relapse among drug and alcohol clients treated at selected rehabilitation facilities in Nairobi.

1.1 Research Hypothesis

- i. H_0 There is no significant relationship between influence of family support on relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.
- ii. H_0 There is no significant relationship between influence of stigma on relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.
- iii. H_0 There is no significant relationship between influence of gender on relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.
- iv. H_0 There is no significant relationship between influence of peer pressure on relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.

1.2 Empirical Literature

Xia et al. (2022) studied family function and relapse propensity in Chinese individuals with substance use disorders. Their mediation study revealed that self-esteem and resilience mediated the relationship between family functioning and relapse propensity, highlighting their importance as factors influencing the likelihood of relapse. Atadokht et al. (2015) found that relapse rates were positively correlated with family members' open expressions of emotion, while strong social support networks were inversely correlated with relapse rates.

Perceived social support and emotional expression within the family explained a significant portion of the variance in relapse frequency.

Crapanzano et al. (2019) synthesized findings from various studies to examine the relationship between stigma perception and recovery from substance abuse. While qualitative research indicated that stigma can significantly impact individuals seeking help, quantitative studies suggested that negative attitudes and cognitive mechanisms, such as low self-efficacy, had a more significant impact on treatment outcomes than stigma itself. Jahn et al. (2020) found that internalized stigma had negative effects on individuals' self-worth and progress towards recovery goals. Addressing internalized stigma was identified as crucial for minimizing the detrimental impact of stigma on the healing process. Arsenault (2018) found that individuals who were more aware of the stigma surrounding mental illness tended to perceive lower overall levels of stigma. Understanding these perceptions and their impact on access to treatment can help develop interventions that address stigma as a barrier to effective care.

Ethirajan et al. (2022) conducted a study in a South Indian teaching hospital to understand why individuals return to drinking after receiving alcoholism treatment. Factors contributing to relapse included peer pressure, misconceptions about not becoming dependent again, intense cravings, exposure to stressors, and health-related challenges. Bhandari et al. (2017) investigated factors associated with drug abuse relapse among individuals receiving treatment in rehabilitation centres in Nepal. Peer pressure, family dynamics, age, and educational level were found to be related to drug relapse. Saravanan and Balsubramaniam (2020) examined the relationship between peer pressure and relapse in tobacco quitting. While peer pressure did not significantly influence relapse, it was found that patients who experienced peer pressure had higher rates of relapse. Mousali et al. (2021) found that addicted friends and close addicted relatives were significant predictors of addiction recurrence in Iran. Kumar (2018) explored the causes of relapse and delayed help-seeking among alcoholics in India and identified issues at home, peer pressure, and a desire to drink as common reasons for relapse.

2. Methodology

The research adopted a descriptive research design and was conducted at Mathari Rehabilitation Centre and Chiromo Lane Medical Centres. The target population consisted of 2453 drug abuse clients receiving treatment and the counsellors providing healthcare and counselling services. The sample size was calculated using the Yemane formula, resulting in a sample of 346 respondents. Proportionate random sampling was used to select the clients from the rehabilitation centres, while purposive sampling was used to select the counsellors. The research instruments included a questionnaire and an interview schedule. Data analysis included descriptive and inferential statistics for quantitative data using SPSS software, while qualitative data were analyzed by identifying themes and presenting them in narrative form.

3. Findings and Discussion

Family Support and Relapse

Table 1: Statements on Family Support and Relapse Occurrence

Statement	SD(%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std. dev
Family support contributes to relapsed addiction tendency	17.8	68.4	7.9	4.6	1.3	2.03	0.750
I feel comfortable discussing my challenges and relapse triggers with my family	32.2	53.9	9.9	2.6	1.3	1.87	0.795
The immediate pressure from families that want clients to heal and turn around helps clients maintain sobriety	27	59.2	7.9	5.9	0	1.93	0.764
I feel understood and accepted by my family in my journey of recovery.	30.3	58.6	7.2	3.9	0	1.85	0.717
Drug abusers who struggle with relapse are supported heavily by their families.	25	62.5	9.9	1.3	1.3	1.91	0.718
Children get entangled in drug misuse because their parents failed to set a good example for them	25	55.3	12.5	7.2	0	2.02	0.818
I believe that my family's support is essential for my long-term recovery and relapse prevention	11.8	13.8	30.3	28.3	15.8	3.22	1.219
Parents must set a high standard of moral behaviour for their children to follow.	11.8	10.5	27	48.7	2	3.18	1.057

The findings showed that the respondents disagreed that they feel understood and accepted by their family in their journey of recovery (mean=1.85, standard deviation of 0.717) and feel comfortable discussing their challenges and relapse triggers with their family (mean=1.87, standard deviation of 0.795). The respondents disagreed that drug abusers who struggle with relapse are supported heavily by their families (mean=1.91, standard deviation of 0.718) and that the immediate pressure from families that want clients to heal and turn around helps clients maintain sobriety (mean=1.93, standard deviation of 0.764). The respondents further disagreed that children get entangled in drug misuse because their parents failed to set a good example for them (mean= 2.02, standard deviation of 0.818) and that family support contributes to relapsed addiction tendency (mean= 2.03, standard deviation of 0.750). The respondents were undecided on the statement that they believe that their family's support is essential for their long-term recovery and relapse prevention and that parent must set a high standard of moral behaviour for their children to follow. From the study interviews, the counsellors explained that family support influences the relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.

Table 2: Correlation between Family Support and Relapse

		Relapse	Family Support
Relapse	Pearson Correlation	1	-.344*
	Sig. (2-tailed)		.011
	N	304	304
Family Support	Pearson Correlation	-.344*	1
	Sig. (2-tailed)	.011	
	N	304	304

*. Correlation is significant at the 0.05 level (2-tailed).

The analysis revealed a moderate negative correlation ($r = -0.344$) between family support and relapse, indicating an inverse relationship between these variables. The statistical significance of this relationship was confirmed by the p-value of 0.011. Consequently, the study rejects the null hypothesis (H_0) that there is no significant relationship between family support and relapse among recovered alcohol and drug abusers in the selected rehabilitation centres.

3.3 Stigma and Relapse

Table 3: Statements Relating to Stigma and Relapse Occurrence

Statement	SD(%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std. dev
Women who abuse psychoactive substances have additional challenges in accessing treatment due to the stigma that surrounds this population.	2	2.6	3.3	80.9	11.1	3.97	0.655
Stigma interferes with a person's full usage of drugs	3.3	2	2	69.7	23	4.07	0.790
Stigma leads to an increase in mental health and substance use problems	0.7	0.7	8.6	77.6	12.5	4.01	0.546
Stigmatization provokes the drug addict to withdraw from relationships and services that could be helpful to him or her	0	2	7.2	70.4	20.4	4.09	0.591
Stigma interferes with the drug addict from fully participating in the society	0	2	7.9	76.3	13.8	4.02	0.546
Stigma hampers with matters to do with the employment of drug abusers	0	2	5.3	73	19.7	4.11	0.566

The majority of the respondents agreed that stigma hampers with matters to do with the employment of drug abusers (mean=4.11, standard deviation of 0.566), that stigmatization provokes the drug addict to withdraw from relationships and services that could be helpful to him or her (mean=4.09, standard deviation of 0.591) and that stigma interferes with a person's full usage of drugs (mean= 4.07, standard deviation of 0.790). Stigma interferes with the drug addict from fully participating in society (mean= 4.02, standard deviation of 0.546) and led to an increase in mental health and substance use problems (mean= 4.01, standard deviation of 0.546). In addition, the respondents indicated that women who abuse psychoactive substances have additional challenges in accessing treatment due to the stigma that surrounds this population (mean= 3.97, standard deviation of 0.655). The counsellors stated that indeed stigma influences the relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.

Table 4: Correlation between Stigma and Relapse

		Relapse	Stigma
Relapse	Pearson Correlation	1	.709*
	Sig. (2-tailed)		.000
	N	304	304
Stigma	Pearson Correlation	.709*	1
	Sig. (2-tailed)	.000	
	N	304	304

*. Correlation is significant at the 0.05 level (2-tailed).

The results show a positive correlation between stigma and relapse ($r = 0.709$, $p\text{-value} = 0.000 < 0.05$). The strength of this relationship was considered statistically significant, as the obtained $p\text{-value}$ of 0.000. Consequently, the null hypothesis (H_0) stating that there is no significant relationship between stigma and relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya, was rejected.

3.4 Gender and Relapse

Table 5: Statements Relating to Gender and Relapse Occurrence

Statement	SD(%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std. dev
Gender differences play a role in drug use from the very beginning.	1.3	1.3	3.3	61.8	32.2	4.22	0.692
Male and female have different drug preferences.	2	2	4.6	65.1	26.3	4.12	0.745
Drugs have varying effects on men and women.	1.3	4.6	8.6	57.9	27.6	4.06	0.816
Some approaches to treatment are more successful for women than for men	0	2.6	15.8	65.1	16.4	3.95	0.654
Women have a higher relapse rates than men after they have quit abusing drugs.	8.8	9.9	42.1	33.6	5.9	3.18	0.992
Women have less success than men in quitting substance abuse.	4.6	9.2	38.8	37.5	9.9	3.39	0.949
Drug replacement treatment is more effective for men than for women.	1.3	11.2	11.2	55.9	20.4	3.83	0.926
The stigma associated with females who have abused psychoactive drugs becomes a barrier to therapy.	1.3	3.3	7.9	63.8	23.7	4.05	0.753
Women with drug abuse suffer more mental illnesses than men like decreased self-esteem and depression.	1.3	2.6	6.6	64.5	25	4.09	0.731
Females experience more anxiety and depression than males	2.6	9.9	22.4	45.4	19.7	3.70	0.983

The majority of the respondents agreed that gender differences play a role in drug use from the very beginning (mean= 4.22, standard deviation of 0.692). The respondents agreed that male and female have different drug preferences (mean= 4.12, standard deviation of 0.745). With a mean of 4.09 and a standard deviation of 0.731, the respondents agreed that women with drug abuse suffer more mental illnesses than men like decreased self-esteem and depression. The respondents further agreed that drugs have varying effects on men and women (mean= 4.06, standard deviation of 0.816) and that the stigma associated with females who have abused psychoactive drugs becomes a barrier to therapy as shown by a mean of 4.05 and a standard deviation of standard deviation of 0.753. Some treatment approaches are more successful for women than for men (mean= 3.95, standard deviation of 0.654) and that drug replacement treatment is more effective for men than for women (mean= 3.83, standard deviation of 0.926). In addition, the respondents agreed that females experience more anxiety and depression than males (mean 3.70, standard deviation of 0.983). The respondents were undecided that women have less success than men in quitting substance abuse (mean= 3.39, standard deviation of 0.949) and a higher relapse rate than men after they have quit abusing drugs (mean= 3.18, standard deviation of 0.992). In the counsellor's

opinion, gender influences the relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya. Men experience greater social acceptance or even encouragement of certain substance use behaviours, while women may face additional stigma or cultural barriers to seeking help.

Table 6:Correlationsbetween Gender and Relapse

		Relapse	Gender
Relapse	Pearson Correlation	1	.009
	Sig. (2-tailed)		.321
	N	304	304
Gender	Pearson Correlation	.009	1
	Sig. (2-tailed)	.321	
	N	304	304

*. Correlation is significant at the 0.05 level (2-tailed).

The results of the correlation analysis indicated that there was no discernible correlation between gender and relapse among individuals who had successfully recovered from alcohol and drug abuse within selected rehabilitation centres in Nairobi County, Kenya ($r = 0.009$, p -value = $0.321 > 0.05$). The strength of the relationship was considered statistically insignificant, as the obtained p -value of 0.321 exceeded the predetermined significance level of 0.05. Consequently, the null hypothesis (H_0) stating that there is no significant relationship between gender and relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya, was not rejected.

3.5 Peer Pressure and Relapse

Table 7:Statements Relating to Peer Pressure and Relapse Occurrence

Statement	SD(%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std. dev
Some individuals comply with their friends simply to make them happy.	1.3	3.3	3.9	68.4	23	4.09	0.718
Some people believe that being unique is more essential than fitting in with the crowd.	2	3.3	7.9	61.8	25	4.05	0.800
For some individuals, it is quite simple for their friends to modify their minds.	1.3	3.3	3.3	59.9	32.2	4.18	0.758
Some drug users will do something they knew was wrong only to keep their pals happy.	1.3	2.6	3.3	61.8	30.9	4.18	0.73
Some individuals conceal their genuine views from their friends if they believe their friends would make fun of them for it.	2	5.3	5.9	70.4	16.4	3.94	0.783
Some individuals will not breach the law simply because their buddies claim they would.	2	4.6	5.3	68.4	19.7	3.99	0.785
Some people alter their behaviour so drastically around their friends that it makes one question who they "truly are."	2	5.3	5.9	70.4	16.4	3.94	0.783
Some individuals take greater risks with their buddies than when they are alone.	1.3	2.6	3.9	64.5	27.6	4.14	0.722
Some individuals say things they do not truly believe in order to get the respect of their peers.	1.3	2.6	6.6	68.5	21.1	4.05	0.707
Some people believe that it is preferable to be an individual, even if it means provoking the anger of others.	1.3	3.3	9.2	57.9	28.3	4.09	0.789

The respondents agreed that for some individuals, it is quite simple for their friends to modify their minds as described by a mean of 4.18 with a standard deviation of 0.758 and that some drug users will do something they knew was wrong only to keep their pals happy as illustrated by a mean of 4.18 with a standard deviation of 0.73. Some people alter their behaviour so drastically around their friends that it makes one question who they "truly are" as shown by a mean of 4.14 with a standard deviation of 0.722. Some people believe that it is preferable to be an individual, even if it means provoking the anger of others as shown by a mean of 4.12 with a standard deviation of 0.709. Some individuals comply with their friends simply to make them happy and that some individuals say things they do not truly believe to get the respect of their peers (mean of 4.09, the standard deviation of 0.789).

Furthermore, the participants agreed that some people believe that being unique is more essential than fitting in with the crowd (mean of 4.05, the standard deviation of 0.800) and that some individuals take greater risks with their buddies than when they are alone (mean of 4.05, a standard deviation of 0.707) and that some individuals conceal their genuine views from their friends if they believe their friends would make fun of them for it (mean of 3.99, a standard deviation of 0.785). Moreover, the respondents also agreed that some individuals will not breach the law simply because their buddies claim they would (mean of 3.94, a standard deviation of 0.783).

The study found from the counsellors that peer pressure influences the relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya. Many clients go back to the same environment after treatment and regroup with the same peers who they used to abuse drugs with leading to relapse.

Table 8: Correlations between Peer pressure and Relapse

		Relapse	Peer Pressure
Relapse	Pearson Correlation	1	.459*
	Sig. (2-tailed)		.001
	N	304	304
Peer Pressure	Pearson Correlation	.459*	1
	Sig. (2-tailed)	.001	
	N	304	304

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis findings revealed that there was a moderate positive correlation between peer pressure and relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya ($r = 0.459$, $p\text{-value} = 0.001 < 0.05$). The study thus rejects the null hypothesis (H_0) that there is no significant relationship between peer pressure and relapse of recovered alcohol and drug abusers in selected rehabilitation centres in Nairobi County, Kenya.

Table 9: Statements Relating to Relapse Occurrence

Statement	SD(%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std. dev
Some individuals isolate themselves from others and don't attend meetings	1.3	2	7.9	64.5	24.3	4.09	0.718
I abused alcohol because I felt its cravings	1.3	2	10.5	68.4	17.8	3.99	0.695
I increased the quantity of drug use/alcohol use	0.7	4.6	10.5	55.9	28.3	4.07	0.795
I have had the problem of thinking about people and places I have been abusing drugs with	2	3.3	3.9	65.8	25	4.09	0.772
I have had poor self-care	9.2	26.3	36.2	21.1	7.2	2.91	1.063
I have had occasional thoughts of using drugs	0	5.3	5.9	70.4	18.4	4.02	0.676
Sometimes I don't feel the urge to engage in sober fun activities	1.3	3.3	5.3	70.4	19.7	4.04	0.708
I believe I can control my drug use	0.7	3.3	6.6	69.7	19.7	4.05	0.674
I used to avoid my problems by taking alcohol	1.3	5.9	7.9	59.9	25	4.01	0.830

With a mean of 4.09 and a standard deviation of 0.718, the respondents agreed that some individuals isolate themselves from others and don't attend meetings and that they have had the problem of thinking about people and places they have been abusing drugs (mean=4.09, standard deviation= 0.772). The respondents agreed that they increased the quantity of drug use/alcohol use as shown by a mean of 4.07 and a standard deviation of 0.795 and that they believe they can control their drug use as demonstrated by a mean of 4.05 and a standard deviation of 0.674.

Furthermore, the respondents agreed that sometimes they don't feel the urge to engage in sober fun activities as illustrated by a mean of 4.04 and a standard deviation of 0.708 and that they have had occasional thoughts of using drugs as shown by mean of 4.02 and a standard deviation of 0.676. In addition, the respondents agreed that they used to avoid their problems by taking alcohol as demonstrated by a mean of 4.01 and a standard deviation of 0.830 and also that they abused alcohol because they felt its cravings (mean of 3.99, and a standard deviation of 0.695). The respondents were however undecided on the statement that they have had poor self-care as shown by a mean of 2.91 and a standard deviation of 1.063.

3.6. Discussion of Findings

The study conducted in selected rehabilitation centres in Nairobi County, Kenya, revealed that family support has a negative significant relationship with relapse among recovered alcohol and drug abusers. It emphasized the importance of involving families in the treatment

and recovery process to provide emotional support and practical assistance. The findings were consistent with previous studies by Xia et al. (2022) and Atadokht et al. (2015). However, the study found that many recovering clients do not feel understood or accepted by their families, and lack of family support contributes to relapse. Stigma was found to have a strong positive correlation with relapse, affecting employment opportunities and social participation. This aligns with the findings of Crapanzano et al. (2019) and Jahn et al. (2020). Stigma also led to an increase in mental health and substance use problems. In contrast, Arsenault (2018) found no significant difference in the perceived stigma of mental illness and drug addiction. Women who abuse psychoactive substances face additional challenges due to stigma, as supported by Arsenault (2018). Peer pressure showed a moderate positive correlation with relapse, indicating its influence on substance abuse decisions. The study emphasized the importance of understanding peer dynamics in relapse prevention, aligning with Bhandari et al. (2017). Some individuals are easily influenced by friends and may engage in risky behaviour to fit in, while others prioritize individuality. Saravanan and Balsubramaniam (2020) found no influence of peer pressure on relapse during the quitting process, contrasting the findings. The study also highlighted the importance of recognizing peer pressure, along with craving and stressors, as reasons for relapse, as supported by Ethirajan et al. (2022) and Mousali et al. (2021).

5. Conclusion

The study conducted in Nairobi County, Kenya, reveals important findings regarding relapse among recovered alcohol and drug abusers. It indicates that family support plays a crucial role in preventing relapse, as individuals who feel unsupported and misunderstood by their families are more likely to relapse. Stigma also has a significant impact, leading to employment difficulties and avoidance of help-seeking, which contribute to relapse. Gender, on the other hand, does not show a significant relationship with relapse, although it influences drug use patterns and treatment approaches. Finally, peer pressure has a positive correlation with relapse, as individuals may compromise their values to please their friends. These findings underscore the importance of family support, addressing stigma, and developing strategies to resist peer pressure in preventing relapse among alcohol and drug abusers.

6 Recommendations

The study suggests several recommendations for supporting the recovery of alcohol and drug abusers. It emphasizes the importance of open communication and understanding within families, with involvement in support groups and therapy sessions. Community organizations and the government should provide education and resources to families, promoting awareness and reducing the stigma around addiction. Gender-specific support programs and mental health services should be available to address unique challenges. Personalized guidance should be provided to prevent relapse, focusing on building a strong support network, engaging in sober activities, and developing assertiveness skills to resist peer pressure.

References

1. Arsenault, B. M. (2018). The stigmatization of mental illness and drug addiction among the criminally involved (Doctoral dissertation, Loyola University Chicago).https://ecommons.luc.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1539&context=luc_theses
2. Atadokht,A., Hajloo,N., Karimi,M., &Narimani,M. (2015). Predicting relapse from substance abuse using family emotional expression and perceived social support. *Journal of Addiction and Risk Behavior*, 4(1).
3. Bhandari, S., Dahal, M., &Neupane, G. (2017). Factors associated with drug abuse relapse: A study on the clients of rehabilitation centres. *Hindu*, 99, 86-4.
4. Crapanzano, K.A., Hammarlund, R.,Ahmad, B., Hunsinger,N., &Kullar,R. (2019). The effects of stigma on the treatment of substance abuse disorders was examined. *Addiction and treatment*10, 1.
5. Ethirajan, P., Simiyon, M., &Thilakan, P. (2022). Alcohol Dependence Relapse Causes after Residential Detoxification in India. *BJPsych Open*, 8(S1), S72-S72.
6. Jaguga, F., Turissini, M., Barasa, J., Kimaiyo, M., Araka, J., Okeyo, L., &Kwobah, E. (2022). An in-depth look at drug and alcohol rehab centres in Kenya's UasinGishu County. *Medical Care Research and Review*, 22(1), 1-8.
7. Jahn, D. R., Leith, J.,Muralidharan, A., Brown, C. H., Drapalski, A. L., Hack, S., &Lucksted, A. (2020). The influence of experiences of stigma on recovery: Mediating roles of internalized stigma,self-esteem, and self-efficacy.*Psychiatric rehabilitation journal*, 43(2), 97.
8. Karch, S. B. (Ed.). (2019). *Drug abuse handbook*. CRC press.
9. Kelly, J. F. (2019). EM Jellinek'sDisease Concept of Alcoholism.*Addiction*, 114(3), 555-559.
10. Kumar, V. (2018). Examining the causes of alcohol relapse and contrasting the factors that lead people to wait before getting help after a relapse. *J Dental Med Sci*, 17(7), 48-53.
11. Mattiuzzi, C., & Lippi, G. (2019). The global drug and alcohol epidemic. *European Journal Of Internal Medicine*, 70, e27-e28.
12. Mousali, A. A., Bashirian, S., Barati, M., Mohammadi, Y., Moeini, B., Moradveisi, L., & Sharma, M. (2021). Factors affecting substance use relapse among Iranian addicts. *Journal of Education and Health Promotion*, 10.
13. Mutuli, L. A., Bukhala, P., &Nguka, G. (2020). Alcoholics' Consumption Patterns and the Foods They Recover on in Kenya. *International Journal of Nutrition*, 5(4), 42-47.
14. Myers, B., Williams,P. P., Govender,R., Manderscheid, R., & Koch, J. R. (2018). Results from the Service Quality Measures Initiative on substance abuse treatment acceptance, persistence, and early success in the Western Cape province of South Africa. Dependence on Drugs and Alcohol. *DrugandAlcoholDependence*, 185, 278-284.
15. National Authority for the Campaign Against alcohol and Drug Abuse. Quick Analysis of the Drugand Alcohol Abuse Crisisin Kenya. (2017).

16. Olurishe, T. O. (2019). Drug and substance abuse in Anglophone West Africa: a mini-review. *West Afr J Pharm*, 30(21), 1-12.
17. Saravanan, K., & Balsubramaniam, A. (2020). Association between peer pressure and relapse during tobacco quit process. *European Journal of Molecular & Clinical Medicine*, 7(01), 2020.
18. Sarkar, S., Tom, A., & Mandal, P. (2021). Barriers and facilitators to substance use disorder treatment in low-and middle-income countries: a qualitative review synthesis. *Substance Use & Misuse*, 56(7), 1062-1073.
19. Sarkar, S., Tom, A., Das, S., Bharadwaj, B., & Ghosh, A. (2022). Indian systematic review of alcohol relapse rates and risk factors.. *Journal of Mental Health and Human Behaviour*, 27(1), 8.
20. Seitz, H. K., & Neuman, M. G. (2021). Alcoholic liver disease's journey from medical obscurity to prominence in the field of hepatology. *Journal of Clinical Medicine*, 10(4), 858.
21. Singal, A. K., Arsalan, A., Dunn, W., Arab, J. P., Wong, R.J., Kuo, Y. F., ...& Shah, V. H. (2021). Alcohol-associated liver disease in the United States is associated with severe forms of disease among young, females and Hispanics. *Alimentary Pharmacology & Therapeutics*, 54(4), 451-461.
22. Xia, Y., Gong, Y., Wang, H., Li, S., & Mao, F. (2022). Relapse Propensity in Substance Use Disorder Is Associated with Family Function, Which Is Mediated by Self-Esteem and Resilience. *Frontiers in psychiatry*, 13.