

# Factors Affecting Substance Abuse-Related Relapse in Uttarakhand

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**Abstract:-** One of the most important factors which become a hindrance in the rehabilitation of an addicted person is relapse which can happen at any time and at any stage. The significance of the study is that there was no study conducted on the Uttarakhand population to know the causes or factor that affects substance abuse-related relapse. To study the causative factors affecting substance abuse-related relapse and find out the relationship between demographic characteristics and the cause of relapse. A descriptive study was conducted in the city of Haldwani district Nainital Uttarakhand. The purposive sampling method was used to take a sample from different rehabilitation centers undergoing treatment for substance dependency in Haldwani city and they had at least one episode of relapse during the period of addiction. The study consists of a self-administered questionnaire and this questionnaire consists of paired comparison method technique. The age of the relapsed patients ranged from 18 to 60 years. The highest percentage (38%) is in the age group 26-33 years. Most of the addicted patients were at the senior secondary level of education. The age of onset of substance abuse ranged from 19-26 years. Most of the patients were addicted to alcohol. The results indicated that the main cause of relapse and return to substance abuse again was the Weakness of the will. The sociocultural cause is the most common cause of relapse among the three. There's a significant positive correlation between the age of the patients and with Family cause of relapse which means that when the age increases the patients would face the family cause of relapse.

**Keywords:-** Relapse, Substance Abuse, Rehabilitation center, ADHD, PTSD, OCD.

## I. INTRODUCTION

Substance abuse is related to disorders that involve maladaptive patterns of substance use leading to significant impairment in functioning, it's not a character flaw but rather a medical condition that has developed over time. Psychoactive drugs are in use since the start of recorded history for pleasure, utility, curiosity, and social reasons. There might be ample reasons for relapse in substance abuse, but some primary features are then suggested as the main cause and furthestmost reasons to conclude a person loses his commitment to not using the same substance further in life and not to be treated for the same issue again and again. (Nyege et al., 2017)

The DSM 5 recognizes substance-related disorders resulting from the utilization of 10 separate classes of drugs which are alcohol, sedatives, hypnotics, or anxiolytics, caffeine, cannabis, hallucinogens (phencyclidine or similarly acting aryl cyclohexylamines, and other hallucinogens, like LSD), inhalants, opioids, stimulants (including amphetamine-type substances, cocaine, and other stimulants), tobacco, and other or unknown substances. Substance use disorder in DSM-5 combines the DSM-IV categories of drug abuse and substance dependence into a single disorder measured on a continuum from mild to severe. Each specific substance (other than caffeine, which can't be diagnosed as a substance use disorder) is addressed as a separate use disorder (e.g., alcohol use disorder, stimulant use disorder, etc.), but nearly all substances diagnosed supported the same overarching criteria. ("substance-related and addictive disorders", 2022)

Relapse is defined conceptually as a transition to regression or a progression within the process of recovery, denoted by a return to the previous behavior of substance use, despite the intention to remain abstinent, or can say that an intention or feeling of returning to drug abuse behavior. Relapse is additionally known as the consistent use of any addictive substance like alcohol or any other drugs in the last 30 days. The essential factors of relapse included in the study are personal factors and personal skills, sociocultural factors, and family factors.

A relapse isn't an indication that the person is 'weak' or a 'failure' – it's just a continuation of old coping patterns that need to be replaced with new ones.

There is a range of circumstances that may promote relapse.

- Situations that tempt the person to return to drug use – for instance, circumstances or places where the person would previously have used alcohol or another drug.
- Circumstances that act as a trigger for substance use as a coping strategy – for instance, insecure housing, professional or personal setbacks, social pressures, or social stigma.
- Pre-existing psychological state or emotional issues.
- Pre-existing physical health issues. Poor physical health can cause some people to use non-prescription pharmaceutical drugs, particularly once they have persistent pain.

Guilt is caused by lapsing. An individual trying to abstain from substance use can experience internal conflict or guilt if they end up lapsing. If not managed properly, this example can lead to self-blame and guilt which in turn means the person is more likely to continue substance use as a coping mechanism. It's going to take several attempts to get the right management strategies to maintain an alcohol and other drug goals in the long term. ("Relapse - Alcohol and Drug Foundation", 2022).

Addiction is defined as an individual who has lost control of how they use a substance. Even knowing that their condition is chronic and that its negative effects are severe, the person will continue to relapse.

Fisher and Harrison (2009) defined relapse as a process of parts:

- Slip – this is often where a person has been abstinent and has a slip. The act is so small the person doesn't feel bad about it and can return to abstinence immediately. This could be, for example, accepting a line of cocaine from a lover without thinking about it.
- Lapse – A lapse is when the person uses the substance after having been abstinent. They'll drink or take more of the substance than what's defined as a slip, but will return to abstinence. This could be an evening where a person uses cocaine but stops again the day after.
- Relapse – this is often when a person has been abstinent for a while and begins using the substance again in an uncontrolled way. Use usually returns to the identical severity as before any treatment began. (MacKey, 2022)

## II. REVIEW OF LITERATURE

The study in Baghdad city investigated that most of the addicted patients relapsed during the first six months after treatment. The highest percentage of the addicted patients were addicted to alcohol. The findings indicated that the main causes of relapse were the availability of the substance and lack of knowledge about the risk to return to addiction, the feeling of urgent desire for abuse, and the tension in family relations. There is no significant association between the occupation of addicted patients and age with the cause of relapse. There is a significant relationship between monthly income and the cause of relapse. The data was taken from malerelapsed patients with ages ranging from 18 years to up to 50 years. The age of onset ranged from 9 years to up to 29 years for substance abuse patients. This was a descriptive study conducted from November 15<sup>th</sup>, 2015, to April 15<sup>th</sup>, 2016, on an addictive patient in Baghdad City. The Purposive (non-probability) samples of 65 relapsed addicts who are inpatients in Ibn-Rushd Psychiatric Teaching Hospital and the Psychiatric unit of Baghdad Teaching Hospital who had undergone treatment for substance abuse and had at least one episode of relapse during the period of addiction. The causes of relapse were assessed by using (the Barakat and Al-Halak, 2011) scale. The study concludes the feeling of urgent desire, the availability of the substance, lack of knowledge, and the tension in the family are the main causes of relapse. There is a significant relationship found between monthly income and the cause of relapse. The

study further concluded the feeling of urgent desire, the availability of the substance, lack of knowledge, and the tension in the family are the main causes of relapse. There is a significant relationship between monthly income and the cause of relapse. There is no significant relationship found between the age and occupation of addicted patients with the cause of relapse. (Dawood, 2018).

The study of Rwanda conducted at the Icyizere Psychotherapeutic Centre (IPC), focuses to examine the prevalence and the factors associated with relapse to substance use. The study of Determinants and prevalence of relapse among patients with substance use disorders shows that the prevalence was 59.9 %. Future studies are recommended to investigate the effectiveness of the existing relapse prevention programs to adjust prevention strategies. The study used a retrospective, cross-sectional survey among 391 patients with SUD at IPC where (84.1 %) of the participants were males. More than half (54.1 %) of them were aged between 18 and 30 years with an age average of 33 years (SD = 11.9 years). Patients who were hospitalized for one to three months were more likely (11.2 times) to relapse following treatment than those who were hospitalized for more than three months. [OR = 9.2, 95 % CI (1.1–77.6), p = 0.02]. Furthermore, people that used more than two substances had a 1.5 greater risk of relapse than those who consumed one substance. Participants were more likely to relapse if they lived with their peers [OR = 2.4, 95 % CI: (1.2–7.8), p = 0.01] or if they lived in a family with conflicts. Logistic regression models were used to determine the factors predicting relapse among patients with substance use disorder. The findings reveal a higher prevalence of relapse among patients with substance use disorder (59.9 %). According to the multivariate analysis, those with SUD who exclusively lived with their moms had a higher probability of relapse than those who lived with both biological parents. [OR = 1.9, 95 % CI (1.02–3.6), p = 0.04]. (Kabisa et al., 2021)

The Indian Study of the Effect of holistic relapse prevention intervention among individuals with alcohol dependence examined the effectiveness of Integrative Body Mind Spirit (I-BMS) intervention among individuals with alcohol dependence. A 2-group single-blind RCT design was used in this study, comparing I-BMS to treatment as usual (TAU) on drinking and psychological outcomes. 100 participants diagnosed with alcohol dependence was randomly assigned to receive 7 sessions of I-BMS or TAU. Measurements done by a registered nurse who was blinded to the experimental design used a standardized questionnaire on well-being, readiness to change, craving, quantity, and frequency of drinking before and up to 6 months after the intervention. Concerning the within-group effects, the I-BMS group demonstrated significant improvement in all outcome measures with a large effect size. Compared to TAU, I-BMS participants showed lesser relapse rates and quantity of drinking at a 3-month follow-up, and a reduction in craving and drinking days at a 2-month follow-up. At 6 months follow-up, participants in the I-BMS group reported significant improvement in well-being and motivation compared to TAU. Results of binary logistic regression showed that the

number of previous attempts and living in an urban area positively predicted the participant's relapse possibility at a 6-month follow-up. In conclusion, it is feasible to implement an I-BMS intervention for individuals with alcohol dependence. (Rentala et al., 2020)

The study of Health and Community Systems, School of Nursing, University of Pittsburgh, Pittsburgh, Pennsylvania, aimed to clarify the meaning of relapse and present a comprehensive definition of relapse concerning substance use. Three key attributes of relapse were identified: (a) interruption of abstinence, (b) vulnerability to uncontrollable substance-related behavior and/or cues, and (c) a transition to potential progression or regression. Relapse is defined conceptually as a transition to regression or a progression in the process of recovery, denoted by a return to the previous behavior of substance use, despite the intention to stay abstinent or can say that an intention or feeling of returning to substance abuse behavior. A conceptual definition and understanding of relapse minimize confusion, inconsistency, and social and self-stigma related to the relapse and also helps to provide relapse-sensitive care. (Moon & Lee, 2020)

A further study on substance abuse shows that the main reasons for relapse are emotional instability, lack of family cooperation, and confinement at rehabilitation centers against the will of the individual for a longer time. Therefore, the rehabilitation process should be initiated with the motivation of the individual, followed by psycho-education of the family and avoidance of unnecessarily prolonged admission without the consent of the individual. The study included 34 males, age range of 25 to 40 years, 58% married, 11% uneducated, 79% employed, 47% with heroin addiction and 11% were using cannabis. The common finding of relapse among self-attempt and assisted-attempt addicts after abstinence in drug addiction were peer pressure (social pressure), negative emotions from family (aggression discouragement, and lack of empathy/sympathy), stress (traumatic events, bad physical/mental health)/ lack of motivation and easy availability of drugs (cheap, affordable and distributors are approachable). (Chughtai et al., 2020)

The investigation of relapse in women and drug abuse and to determine the factors influencing it. The study consists of fifty former addicted women and a cross-sectional method was used to conduct the study. All the ladies responded to the self-structured questionnaire administered to them after 6 months after their discharge from their rehabilitation program and further analyzed using statistical tools. The results show a positive and significant relationship between family support and relapse and a positive relationship between peer support and relapse. On the opposite hand, there was a negative relationship between motivation and self-esteem with relapse. Results also show that ladies are more prone to suffer from multiple relapses at a period. (Razali et al., 2021)

### III. RESEARCH METHODOLOGY

- To study the causative factors affecting substance abuse-related relapse.
- To find out the relationship between demographic characteristics and the cause of relapse.
- To find whether the socio-demographic characteristics of the addict patients such as age, sex, marital status, educational level, occupation, and monthly income affects relapse.
- The purposive sampling method was used to take a sample of patients from different rehabilitation centers. After looking into the objectives of the study, a non-random sampling method was chosen.
- The patients must have undergone treatment for substance dependency.
- The sample is taken from the population of rehabilitation centers in Haldwani city.
- The patient must have at least one episode of relapse during the period of addiction.
- The sample must not contain individuals below the age of 18 and not above the age of 60 years.
- Initially, before gathering the data from patients rapport building was done so that the patient would be more comfortable in responding to the examiner/researcher.
- Informed consent was taken from the patient before giving the questionnaire to respond to.
- After completing all the sections of the questionnaire, the examiner expressed gratitude to the patient and thank him for responding.
- To assess the causes of relapse the study adopted (Barakat and Al-Halak, 26 items, 2011) assessment scale.
- The questionnaire comprised the socio-demographic characteristics of the addict patients such as age, sex, marital status, educational level, occupation, and monthly income.
- The data related to substance abuse such as the age of onset of substance abuse, type of substance abuse, duration of the last interruption from substance abuse, and the number of previous interruptions from substance abuse was also taken on the self-administered questionnaire.
- Assessment of the causes of substance abuse-related relapse (26 items).
- It is further divided into three domains which are personal factors and personal skills (10 items), socio-cultural factors (10 items), and family factors (6 items).
- The response to these items is (Yes, No), and the rating and scoring for these items are yes = 2 and no = 1.
- The data was encountered with a comparative scaling technique.
- A descriptive study was conducted in the city of Haldwani district Nainital Uttarakhand.
- A cross-sectional survey research method was chosen as the method of data collection.
- A survey was conducted using a self-reported questionnaire among the patients of the rehabilitation center of Haldwani city.

- The Independent Variable and Dependent variables of the study are socio-demographic characteristics and cause of relapse respectively.
- The data has been analyzed using descriptive statistics (mean, frequencies, standard deviation, and percentage) and inferential statistics (correlation analysis is used to find out the relationship between the factors affecting

substance abuse-related relapse and sociodemographic characteristics of addicts).

- Null Hypothesis – 1. There will be no significant difference between the cause of relapse and socio-demographic character.
- There would be no correlation between the age of onset and the personal cause of relapse.

#### IV. RESULTS

Demographics		F	%
Age (years)	18-25	12	24%
	26-33	19	38%
	34-41	5	10%
	42-49	8	16%
	≥ 50	6	12%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Sex	Male	50	100%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Marital status	Single	20	40%
	Married	29	58%
	Divorced	0	0%
	Married more than one time	1	2%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Educational level	Illiterate	2	4%
	Primary degree	4	8%
	Intermediate degree	11	22%
	Sr. Secondary degree	16	32%
	Graduation	13	26%
	Post Graduation	4	8%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Occupation	Dependent	12	24%
	Business	11	22%
	Private	21	42%
	Public	6	12%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Monthly income	Sufficient	30	60%
	Barely sufficient	6	12%
	Insufficient	14	28%
	<b>Total</b>	<b>50</b>	<b>100%</b>

Table 1: Distribution of the sample according to their demographic characteristics

The results in this table indicated that the age of the relapsed patients ranged from 18 to up to 60 years with a mean of 34.64 and SD= 11.778. The highest percentage (38%) is located in the age group 26-33 years. All of them

are males (100%), and 58% are married. And 32% of addict patients were at the senior secondary level of education, and 60% reported that they had sufficient monthly income.

Data related to substance abuse		F	%
Age of onset	9-18 years	12	24%
	19-28 years	23	46%
	More than 29 years	15	30%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Type of substance abuse	Alcohol	20	40%
	Heroin	13	26%
	Marijuana	4	8%
	Tobacco	3	6%
	Comorbid	10	20%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Duration of the last interruption from substance abuse after treatment	1-6 months	41	82%
	7-12 months	9	18%
	<b>Total</b>	<b>50</b>	<b>100%</b>
Number of previous interruptions from substance abuse	1 time	5	10%
	2 times	16	32%
	3 times	4	8%
	Up to 4 times	25	50%
	<b>Total</b>	<b>50</b>	<b>100%</b>

Table 2: Distribution of the sample according to the data related to substance abuse

The table shows that the age of onset of substance abuse ranged from 15 to up to 46 years with a mean of 23.66 and SD= 6.372, the highest percentage (49.2%) is located in the age group 19-26 years. Concerning the type of substance abuse and dependence; the highest percentage (40%) of the addicted patients was addicted to alcohol. Most of the

addicted patients relapsed during the first six months (82%) after treatment and interruption from substance abuse. As regards the number of previous interruptions from substance abuse that preceded the current relapse; 50% of the addict patients had up to 4 interruptions.

**Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Personal Factor	50	10	19	755	15.10	2.621
Sociocultural Factor	50	10	20	772	15.44	2.434
Family Factor	50	6	12	413	8.26	1.651
Valid N (listwise)	50					

Table 3: Distribution of the sample according to the causes of relapse (N=50)

This table shows the descriptives of causes of relapse and mentions that the sociocultural cause is the most common cause of relapse among patients. This is further

observed that the personal factor is the second most common cause of relapse.



**ANOVA**

		Sum of Squares	Df	Mean Square	F	Sig.
Personal Factor	Between Groups	145.336	13	11.180	2.105	.039
	Within Groups	191.164	36	5.310		
	Total	336.500	49			
Sociocultural Factor	Between Groups	37.841	13	2.911	.415	.954
	Within Groups	252.479	36	7.013		
	Total	290.320	49			
Family Factor	Between Groups	25.063	13	1.928	.639	.805
	Within Groups	108.557	36	3.015		
	Total	133.620	49			

Table 4: ANOVA table and test of homogeneity of the age of onset and cause of relapse (N=50)

The table of ANOVA shows that there is a statistically significant difference between the personal factor of relapse and the age of onset.

**Correlations**

		Age_of_onset	last_interruption	Number_of_previous_interruptions	Age	Family Factor
Family Factor	Pearson Correlation	-.030	.353*	.070	.339*	1
	Sig. (2-tailed)	.835	.012	.629	.016	
	Sum of Squares and Cross-products	-15.580	93.820	77.000	322.680	133.620
	Covariance	-.318	1.915	1.571	6.585	2.727
	N	50	50	50	50	50
Sociocultural Factor	Pearson Correlation	-.101	.046	.145	.018	.281*
	Sig. (2-tailed)	.487	.750	.315	.903	.048
	Sum of Squares and Cross-products	-76.520	18.080	235.000	24.920	55.280
	Covariance	-1.562	.369	4.796	.509	1.128
	N	50	50	50	50	50
Personal Factor	Pearson Correlation	-.268	.042	.129	.107	.546**
	Sig. (2-tailed)	.060	.772	.372	.460	.000
	Sum of Squares and Cross-products	-219.300	17.700	225.000	161.800	115.700
	Covariance	-4.476	.361	4.592	3.302	2.361
	N	50	50	50	50	50

Table 5: Correlation analysis of demographic and socioeconomic factors and cause of relapse (N=50)

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

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

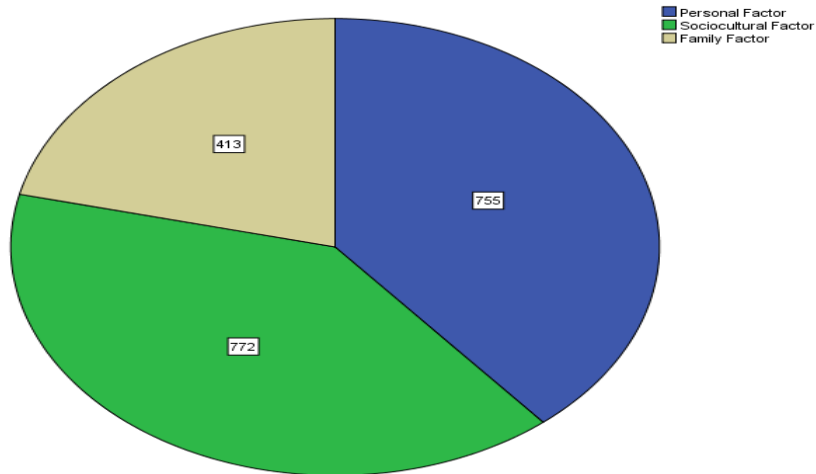


Fig. 1: Pie chart showing the common cause of substance abuse-related relapse

The Pie chart shows the diagrammatical representation of the cause of substance abuse-related relapse. Where Sociocultural factor is seen to be the most common cause of substance abuse-related relapse. And the second most common cause of substance abuse-related relapse is personal factors and personal skills. The green section shows the sociocultural cause of substance abuse-

related relapse with a total score of 772 which is covering the majority part of the pie chart whereas, the blue color in the pie chart, indicates the personal cause and personal skill of substance abuse-related relapse with a total response of 755 and the grey color in the pie chart indicates the family cause of substance abuse-related relapse with a total of 413 responses.

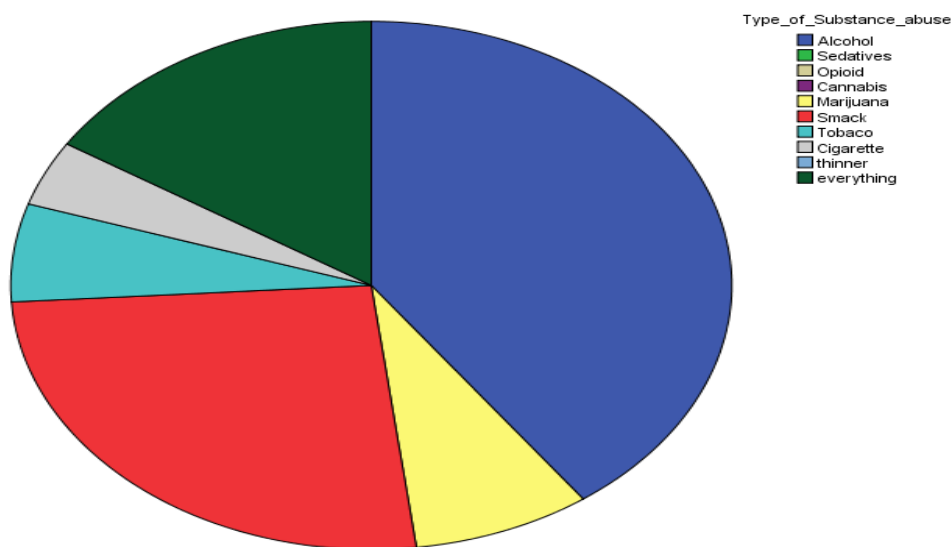


Fig. 2: Pie Chart Showing The Common Type Of Substance Abuse

The pie chart represents the types of substance abuse and demonstrates that alcohol is the most frequent and most common substance being consumed by a majority of the patients after which Heroin comes in the second position of majorly consumed substances and marijuana, tobacco, opioids, cigarette, etc are subsequent substances which are consumed by the patients. The different types of substances which are involved in this study are Alcohol, Marijuana, Heroin, Tobacco, and others. Concerning the type of substance abuse and dependence; the highest percentage (40%) of the addicted patients was addicted to alcohol, 26% were addicted to Heroin, 8% were addicted to Marijuana, 6% were addicted to Tobacco and 20% were addicted to all the substances.

### V. DISCUSSION

The results indicated that there is a significant difference between the cause of relapse and the sociodemographic characteristics of patients suffering from substance abuse and having at least one episode of relapse during the period of addiction. The age of the relapsed patients ranged from 18 to up to 60 years with a mean of 34.64 and SD= 11.778. The highest percentage (38%) is located in the age group 26-33 years. Whereas the patients with ages ranging from 18 to 25 years are 24%, 34 to 41 years 10%, 42 to 59 years 16%, and up to 60 years 12%. All of them are males (100%), within which 58% are married, 40% are unmarried and 2% have married multiple times. And 32% of addict patients were at the senior

secondary level of education whereas, 4% were illiterate, 8% did only primary education level studies, 22% did matriculation level studies, 26% were graduates and at last 8% were post-graduated. Meanwhile, 60% reported that they had sufficient monthly income, 12% reported that they had barely sufficient income and 28% reported that the income they earn is insufficient. The occupation of the patients was reported as 42% as private job holders which is the maximum in all the other criteria. 24% reported that they are dependent on their families, 22% were self-employed and have a business and 12% of them were under public sector services.

The age of onset of substance abuse ranged from 15 to up to 46 years with a mean of 23.66 and SD= 6.372, the highest percentage (49.2%) is in the age group 19-26 years, 24% of them started at the age of 9 to 18 years and 30% of them started abusing the substance at the age of more than 29 years. Concerning the type of substance abuse and dependence; the highest percentage (40%) of the addicted patients was addicted to alcohol, 26% were addicted to Heroin, 8% were addicted to Marijuana, 6% were addicted to Tobacco and 20% were addicted to all the substances. Most of the addict patients relapsed during the first six months (82%) after treatment and interruption from substance abuse and 18% of addict patients relapsed during the 7 to 12 months. As regards the number of previous interruptions from substance abuse that preceded the current relapse; 50% of the addict patients had up to 4 interruptions, whereas 8% of the addict patients had 3 interruptions, 32% of the addict's patients had 2 interruptions and 10% of the addict's patients had 1 interruption.

The feeling of urgent desire for abuse shows a mean score of 1.52 and standard deviation 0.505, Weakness of the will shows a mean score of 1.64 and standard deviation of 0.485, The emergence of psychiatric symptoms shows a mean score of 1.62 and standard deviation of 0.490, the Disease and body pain shows a mean score of 1.580 and standard deviation of 0.499, the Exposure to psychiatric trauma shows a mean score of 1.420 and standard deviation of 0.499, the desire to have pleasure shows a mean score of 1.560 and standard deviation of 0.501, the Inability to acquire skills of change in substance abuse habit shows a mean score of 1.520 and standard deviation of 0.505, Low self-esteem shows a mean score of 1.40 and standard deviation of 0.495, Feeling of isolation and difficult shows a mean score of 1.460 and standard deviation of 0.503, To improve sexual ability shows a mean score of 1.380 and standard deviation of 0.490, Availability of the substance shows a mean score of 1.660 and standard deviation of 0.479, Lack of knowledge about the risk of return to addiction shows a mean score of 1.70 and standard deviation of 0.463, Not receiving adequate support from those around me to resist the return to addiction shows a mean score of 1.660 and standard deviation of 0.479, Weakness of religious faith shows a mean score of 1.460 and standard deviation of 0.503, Peer pressure shows a mean score of 1.460 and standard deviation of 0.503, Return to mingle with addicts shows a mean score of 1.480 and standard deviation of 0.505,

Inadequate treatment shows a mean score of 1.640 and standard deviation of 0.485, Lack of government institutions or civil society to support addicts shows a mean score of 1.580 and standard deviation of 0.499, The contempt of others shows a mean score of 1.340 and standard deviation of 0.479, The nature and type of work encourages me to return to substance abuse shows a mean score of 1.460 and standard deviation of 0.503, Tension of family relations and frequent quarrels shows a mean score of 1.520 and standard deviation of 0.505, Inability to cope with family problems shows a mean score of 1.30 and standard deviation of 0.463, Have money to buy the substance shows a mean score of 1.50 and standard deviation of 0.505, Inability to face marital problems shows a mean score of 1.40 and standard deviation of 0.495, The unemployment shows a mean score of 1.42 and standard deviation of 0.499, Exposure to physical or sexual abuse in childhood shows a mean score of 1.12 and standard deviation of 0.328. As regards the personal factors and personal skills domain; the results indicated that the main cause of relapse and return to substance abuse again was the Weakness of the will which made (up 64%) of the respondent's answers. Regarding the sociocultural factor domain, the highest percentage (70%) of the sample reported that the lack of knowledge about the risk to return to addiction was the major cause of relapse. Concerning the family factors domain; the highest percentage (53%) of the respondents reported that the tension in family relations and frequent quarrels were the main cause of relapse.

The descriptive of causes of relapse mention that the sociocultural cause is the most common cause of relapse among the patients with a mean of 15.44 and a sum of 772 with a standard deviation of 2.434. This is further observed that the personal factor is the second common cause of relapse with a mean value of 15.10 and a sum of 755 with a standard deviation of 2.621. At last, the family factor shows a mean score of 8.26 with a sum of 413 and a standard deviation of 1.651.

The ANOVA table and test of homogeneity of the age of onset and cause of relapse where it is evident that there is a significant difference between the mean scores of the age of onset and the personal cause of relapse. Furthermore, it has to be correlated and interpreted for the actual association and the nature of the association of age of onset and the personal cause of relapse. The test of homogeneity of variance shows that there is a significant difference between variances of the personal cause of relapse and age of onset.

The correlation analysis of several variables like Personal cause of relapse, Family cause of relapse, Sociocultural cause of relapse, age of onset, last interruptions, number of previous interruptions, and age of the patients. results indicated a non-significant weak negative correlation of age of onset with several last interruptions -0.070, Family cause of relapse -0.030, Sociocultural cause of relapse -0.101, and Personal cause of relapse -0.268. There is a significant weak positive correlation between the Last interruption of the patient with Family cause of relapse +0.353. The results also show



that there is a non-significant weak positive correlation between the number of previous interruptions with Family cause of relapse +0.070, Sociocultural cause of relapse +0.145, and Personal cause of relapse +0.129 respectively. Further, the table indicates that there is a significant weak positive correlation between the age of the patients with Family cause of relapse +0.339. The Family cause of relapse is seen to have been in a significant strong positive correlation with the Personal cause of relapse +0.546 and the Sociocultural cause of relapse +0.281 which shows the high level of the construct validity of subscales. This is also seen that the Sociocultural cause of relapse indicates a significantly weak positive correlation with the personal cause of relapse +0.332.

## VI. CONCLUSION

From the findings, we can conclude that the age of the relapsed patients ranged from 18 to up to 60 years with a mean of 34.64 and SD= 11.778. The highest percentage (38%) is located in the age group 26-33 years. All of them are males (100%), within which 58% are married, 40% are unmarried and 2% have married multiple times. And 32% of addict patients were at the senior secondary level of education.

Meanwhile, 60% reported that they had sufficient monthly income. The occupation of the patients was reported as 42% as private job holders which is the maximum in all the other criteria, whereas 24% reported that they are dependent on their families. The age of onset of substance abuse ranged from 15 to up to 46 years with a mean of 23.66 and SD= 6.372, the highest percentage (49.2%) is located in the age group 19-26 years which says that from this age range, there is a high risk of being influenced under the substance abuse. Concerning the type of substance abuse and dependence; the highest percentage (40%) of the addicted patients was addicted to alcohol and 20% were addicted to multiple substances. Most of the addict patients relapsed during the first six months (82%) after treatment and interruption from substance abuse and 18% of addict patients relapsed during the 7 to 12 months.

As regards the number of previous interruptions from substance abuse that preceded the current relapse; 50% of the addict patients had up to 4 interruptions. As regards the personal factors and personal skills domain; the results indicated that the main cause of relapse and return to substance abuse again was the Weakness of the will which made (up 64%) of the respondent's answers. Regarding the sociocultural factor domain, the highest percentage (70%) of the sample reported that the lack of knowledge about the risk to return to addiction was the major cause of relapse. Concerning the family factors domain; the highest percentage (53%) of the respondents reported that the tension in family relations and frequent quarrels were the main cause of relapse. The descriptive of causes of relapse mention that the sociocultural cause is the most common cause of relapse among the patients following the Personal cause and Family cause of relapse respectively. It was also seen that there is a significant difference between the mean

scores and the variance of the age of onset and the personal cause of relapse.

There is a significant weak positive correlation between the Last interruption of the patient and with Family's cause of relapse. There is a significant weak positive correlation between the age of the patients and with Family cause of relapse which means that when the age increases the patients would face the family cause of relapse. The Family cause of relapse is seen to have been in a significant strong positive correlation with the Personal cause of relapse and the Sociocultural cause of relapse which indicates that if a single cause of relapse increases the other cause of relapse would also come into the picture. Hence the results indicated that there is a significant difference between the cause of relapse and the sociodemographic characteristics of patients suffering from substance abuse and having at least one episode of relapse during the period of addiction.

## RECOMMENDATION

- Further work on reducing relapse can be done in rehabilitation centers, if not eliminating drug abuse in our country.
- The treatment programs should be focusing on teaching the clients how to cope with the relapse and control the feeling of craving for substance abuse.
- Future studies are recommended to investigate the effectiveness of the existing relapse prevention programs to adjust prevention strategies.

## REFERENCES

- [1.] Afkar, A., Rezvani, S., & Emami-Sigaroudi, A. (2016). Measurement of Factors Influencing the Relapse of Addiction: A Factor Analysis. *International Journal Of High-Risk Behaviors And Addiction, In press* (In press). <https://doi.org/10.5812/ijhrba.32141>
- [2.] Brandon, T., Vidrine, J., & Litvin, E. (2007). Relapse and Relapse Prevention. *Annual Review Of Clinical Psychology, 3*(1), 257-284. <https://doi.org/10.1146/annurev.clinpsy.3.022806.091455>
- [3.] Bukstein, O. G., Brent, D. A., & Kammer, Y. (1989). Comorbidity of substance abuse and other psychiatric disorders in adolescents. *The American Journal of Psychiatry, 146*(9), 1131–1141. <https://doi.org/10.1176/ajp.146.9.1131>
- [4.] Chong, J., & Lopez, D. (2007). Predictors of Relapse for American Indian Women After Substance Abuse Treatment. *American Indian And Alaska Native Mental Health Research, 14*(3), 24–48. <https://doi.org/10.5820/aian.1403.2007.24>
- [5.] Chughtai, K., Javed, S., & Kiani, S. (2020). Substance Abuse: From Abstinence to Relapse. *Life And Science, 1*(2), 4. <https://doi.org/10.37185/lms.1.1.94>
- [6.] Dawood, K. (2018). *Assessment of the Causes of Substance Abuse –Related Relapse among Patients with Addiction in Baghdad City*. Core.ac.UK.

- Retrieved 12 June 2022, from [https://core.ac.uk/display/235688195?utm\\_source=pdf&utm\\_medium=banner&utm\\_campaign=pdf-decoration-v1](https://core.ac.uk/display/235688195?utm_source=pdf&utm_medium=banner&utm_campaign=pdf-decoration-v1).
- [7.] D. Volkow, N. (2022). *The Matrix Model (Stimulants) | National Institute on Drug Abuse*. National Institute on Drug Abuse. Retrieved 30 June 2022, from <https://nida.nih.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/evidence-based-approaches-to-drug-addiction-treatment/behavioral-therapies/matrix>.
- [8.] Farley, M., Golding, J., Young, G., Mulligan, M., & Minkoff, J. (2004). Trauma history and relapse probability among patients seeking substance abuse treatment. *Journal Of Substance Abuse Treatment*, 27(2), 161-167. <https://doi.org/10.1016/j.jsat.2004.06.006>
- [9.] Gorski, T. (1990). The Cenaps Model of Relapse Prevention: Basic Principles and Procedures. *Journal Of Psychoactive Drugs*, 22(2), 125-133. <https://doi.org/10.1080/02791072.1990.10472538>
- [10.] Harstad, E., Levy, S., Levy, S., Ammerman, S., Gonzalez, P., & Ryan, S. et al. (2014). Attention-Deficit/Hyperactivity Disorder and Substance Abuse. *Pediatrics*, 134(1), e293-e301. <https://doi.org/10.1542/peds.2014-0992>
- [11.] Kabisa, E., Biracyaza, E., Habagusenga, J., & Umubyeyi, A. (2021). Determinants and prevalence of relapse among patients with substance use disorders: a case of icyizere Psychotherapeutic Centre. *Substance Abuse Treatment, Prevention, And Policy*, 16(1). <https://doi.org/10.1186/s13011-021-00347-0>
- [12.] Kumar, R., & Maheshwari, S. (2016). Relapse precipitants, life events & coping behaviors among substance users. *Indian Journal Of Psychiatric Nursing*, 12(1), 14. <https://doi.org/10.4103/2231-1505.132848>
- [13.] Levin, F., & Hennessy, G. (2004). Bipolar disorder and substance abuse. *Biological Psychiatry*, 56(10), 738-748. <https://doi.org/10.1016/j.biopsych.2004.05.008>
- [14.] MacKey, B. (2022). *Four Relapse Prevention Theories - Rehab 4 Addiction*. Rehab 4 Addiction. Retrieved 30 June 2022, from <https://www.rehab4addiction.co.uk/relapse-prevention/four-relapse-prevention-theories>
- [15.] Marlatt, G. (1996). Models of relapse and relapse prevention: A commentary. *Experimental And Clinical Psychopharmacology*, 4(1), 55-60. <https://doi.org/10.1037/1064-1297.4.1.55>
- [16.] Maulik, P., Tripathi, B., & Pal, H. (2002). Coping behaviors and relapse precipitants in opioid dependence. *Journal Of Substance Abuse Treatment*, 22(3), 135-140. [https://doi.org/10.1016/s0740-5472\(02\)00225-8](https://doi.org/10.1016/s0740-5472(02)00225-8)
- [17.] Moon, S., & Lee, H. (2020). Relapse to substance use: A concept analysis. *Nursing Forum*, 55(3), 523-530. <https://doi.org/10.1111/nuf.12458>
- [18.] Nyege, S., Maureen Dike, F., Maureen B, N., Grace, C., R., & Lazarus, W. (2017). *Welcome to International Journal of Development Research | International Journal of Development Research (IJDR)*. Journalijdr.com. Retrieved 12 June 2022, from <http://www.journalijdr.com/>
- [19.] Rahman, M., Rahaman, M., Hamadani, J., Mustafa, K., & Shariful Islam, S. (2016). Psycho-social factors associated with relapse to drug addiction in Bangladesh. *Journal Of Substance Use*, 21(6), 627-630. <https://doi.org/10.3109/14659891.2015.1122099>
- [20.] Ramo, D., & Brown, S. (2008). Classes of substance abuse relapse situations: A comparison of adolescents and adults. *Psychology Of Addictive Behaviors*, 22(3), 372-379. <https://doi.org/10.1037/0893-164x.22.3.372>
- [21.] Razali, A., Madon, Z., & Hassan, M. (2021). Women and Substance Abuse: Examining the Factors Influencing Relapse. *Asian Women*, 37(3), 51-73. <https://doi.org/10.14431/aw.2021.9.37.3.51>
- [22.] *Relapse - Alcohol and Drug Foundation*. Adf.org.au. (2022). Retrieved 24 June 2022, from <https://adf.org.au/reducing-risk/relapse/>.
- [23.] Rentala, S., Ng, S., Chan, C., Bevoor, P., Nayak, R., & Desai, M. (2020). Effect of holistic relapse prevention intervention among individuals with alcohol dependence: a prospective study at a mental health care setting in India. *Journal Of Ethnicity In Substance Abuse*, 21(2), 687-707. <https://doi.org/10.1080/15332640.2020.1793867>
- [24.] Sau, M., Mukherjee, A., Manna, N., & Sanyal, S. (2013). *Sociodemographic and substance use correlates of repeated relapse among patients presenting for relapse treatment at an addiction treatment center in Kolkata, India*. Retrieved 12 June 2022, from <http://dx.doi.org/10.4314/ahs.v13i3.39>.
- [25.] *substance-related and addictive disorders*. Psychiatry.org. (2022). Retrieved 24 June 2022, from [https://www.psychiatry.org/file%20library/psychiatrists/practice/dsm/apa\\_dsm-5-substance-use-disorder.pdf](https://www.psychiatry.org/file%20library/psychiatrists/practice/dsm/apa_dsm-5-substance-use-disorder.pdf)
- [26.] Tam, C., & Foo, Y. (2013). A Qualitative Study on Drug Abuse Relapse in Malaysia: Contributory Factors and Treatment Effectiveness. *International Journal Of Collaborative Research On Internal Medicine & Public Health*, 5(4), 16. Retrieved 12 June 2022, from.
- [27.] Witkiewitz, K., & Marlatt, G. (2005). Emphasis on Interpersonal Factors in a Dynamic Model of Relapse. *American Psychologist*, 60(4), 341-342. <https://doi.org/10.1037/0003-066x.60.4.341>
- [28.] Zlotnick, C., Najavits, L., Rohsenow, D., & Johnson, D. (2003). A cognitive-behavioral treatment for incarcerated women with substance abuse disorder and posttraumatic stress disorder: findings from a pilot study. *Journal Of Substance Abuse Treatment*, 25(2), 99-105. [https://doi.org/10.1016/s0740-5472\(03\)00106-5](https://doi.org/10.1016/s0740-5472(03)00106-5)