



## Adult Male Patients with Alcohol Dependence: Prevalence and Risk Factors for Relapse

Dr. Manish Bathla

Assistant Professor Dept. of Psychiatry Maharishi Markandeshwar (Deemed to be University) Mullana- Ambala, Haryana (India), 133207

### ABSTRACT

**BACKGROUND:** Relapse into alcoholism following a successful detox and recovery program is a global public health risk. Despite the enormous burden of alcoholism on the Indian subcontinent, little is understood about the reasons why people who have been treated for alcohol misuse relapse. The issue of relapse continues to be the biggest obstacle to attaining lasting abstinence from substances, despite the availability of numerous forms of effective therapy. To effectively raise awareness among the general public, it is necessary to organize a number of sensitization campaigns about the burden of alcohol abuse, relapse after treatment, and its effects on people's health and the community at large. At the national and international levels, more research should be done on the likelihood of relapse and the risk factors related to substance use disorders. Clinicians should use the data gathered to raise awareness among those who abuse alcohol as well as among the general public in order to effect the necessary change.

**AIM:** The study's objective is to assess the likelihood of and risk factors for relapse in patients with alcohol dependent disorders.

**MATERIAL AND METHOD:** The Department of Psychiatry carried out this cross-sectional study. The study enrolled 40 male patients admitted to the ward with an alcohol dependence syndrome diagnosis as defined by the Diagnostic Criteria for Research (DCR) of the ICD-10, 10th revision. After receiving informed consent and gathering sociodemographic information, the severity of Alcohol Dependence Questionnaire (SADQ), Presumptive Stressful Life Events Scales (PSLES), and Relapse Precipitant Inventory were used to correlate the factors that lead to relapse among these alcohol abusers.

**RESULTS:** The study comprised 40 patients in total who met both the inclusion and exclusion requirements. Patients who had signed up for the study were asked why they had relapsed after receiving full detoxification and rehabilitation. The cases in the study sample were shown to have a variety of relapse triggers, with craving accounting for the majority of them, followed by low motivation and one or more stressful situations. To investigate typical relapse precipitants among alcohol addicts, the Relapse Precipitant Inventory (RPI) was used. The level of stress the patients had experienced in the previous year—which may have caused relapse in alcohol-dependent people—was assessed using PSLES.

**CONCLUSION:** In India, excessive alcohol intake is becoming a significant public health issue. Along with occupational rehabilitation, regular follow-up with family, peers, and social support is crucial to preventing recurrence. To better comprehend the issue, multi-centric scientific community-based research investigations must be carried out in several different states. It is imperative that different decision-makers, the media, experts, and society as a whole work together to raise awareness of the negative effects of chronic alcohol use through sensitization programs and health education initiatives. Family issues, financial difficulties, and the loss of loved one's rank among the most significant ostensibly stressful life situations that might lead to lapse or relapse. Follow-up counseling sessions should address increased appetite, low self-efficacy, and a lack of social support because these factors were linked to recurrence.

**KEYWORDS:** Alcoholism, Relapse, Alcohol Dependence and Rehabilitation.

### INTRODUCTION:

One of the most prevalent psychiatric disorders, alcohol use disorder is a major public health and social issue that affects people all over the world. Alcohol consumption has decreased over the past ten years in high-income nations, but several low- and middle-income Southeast Asian nations, including India, have seen a sharp increase. According to research, alcohol use in India is thought to be responsible for 3,40,000 fatalities and 14.7 million years of life with a disability-adjusted expectancy in 2019.<sup>1,2</sup> Since alcoholism has both physical and mental symptoms, it is referred to as a "dual disease". According to the WHO, there are 140 million alcohol-dependent individuals worldwide. Men are more likely than women to be alcoholics, although in recent years, female alcoholics have

become more cautious. According to recent research, alcoholism is 50–60% genetically predisposed in both men and women, leaving 40–45% to environmental factors.<sup>3</sup> Alcoholism risk factors include social environment, stress, mental health, age, family history, ethnic group, and gender. In order to successfully prevent a relapse, each of the elements that contribute to alcoholism and motivate a person to keep drinking must be addressed.<sup>4</sup> Relapse is defined as the continuation of drug use after a time of abstinence and the individual returns to the prior levels of use. A lapse is one instance of substance use. Resuming substance use is the final stage of a long chain of maladaptive reactions to internal and external stressors in this process, which is still in progress.<sup>5</sup> Many drinkers who have successfully completed alcohol addiction treatment experience relapse, or the return to heavy drinking after a period of abstinence or moderate use. Three types of situations can potentially lead to relapse: exposure to trace amounts of alcohol, exposure to alcohol-related cues, or stressful or challenging circumstances.<sup>6</sup>

Alcohol-related mortality account for 4% of all fatalities worldwide each year, which is more than HIV/AIDS, violence, or tuberculosis combined.<sup>7</sup> Relapse was previously thought to as the person's failure to succeed in their recovery. Recently, though, it has come to be understood as a process of returning to the same unhealthy behaviors that might tempt one to use substances or drugs again.<sup>8</sup> In the USA, short-term remission rates among those receiving treatment range between 20% and 50%, depending on the severity of the disease and the remission criteria.<sup>9,10</sup>

According to estimates from numerous clinical research, more than two-thirds of patients relapse within weeks to months of starting therapy.<sup>11</sup> The first three months are believed to be the most susceptible time, with the majority of patients in treatment relapsing within a year after beginning therapy.<sup>12</sup> Relapse can be frustrating and frequently has a number of negative effects on patients, caregivers, and therapists.<sup>13</sup> Relapse is a complex phenomenon that most likely arises from the interaction of several neurological, genetic, epigenetic, psychological, social, and environmental components. The central nervous system's neuroadaptive processes, which degrade the systems that mediate positive reinforcement and the formation of emotional alterations, are thought to be the cause of the vulnerability to relapse after withdrawal.<sup>14</sup>

In the four years following treatment, 90% of alcoholics are likely to experience at least one relapse.<sup>15</sup> Most alcoholics become addicted to alcohol throughout their teenage years or early adulthood. Although there has been an increase in research into alcohol use disorders and relapse

following successful detoxification and rehabilitation, little is known about the many elements that are most important in leading to these instances of recurrence among patients. In order to properly treat people with alcohol use disorders, it is crucial to collect knowledge in this area from patients, put it into clinical practice, and train healthcare professionals in doing so.

#### **MATERIAL AND METHODS**

This cross-sectional study was conducted in the Department of Psychiatry. 40 male patients with a diagnosis of alcohol dependence syndrome according to the International Classification of Diseases 10th revision Diagnostic Criteria for Research (ICD-10 DCR) admitted in the ward were recruited in the study. All consecutive patients who fulfilled the inclusion and exclusion criteria and gave informed consent were assigned to the study group. All subjects were taken from the inpatient ward of the hospital after the period of detoxification was complete. They were subjected to a detailed psychiatric interview, and clinical and biochemical examinations including blood glucose and liver enzymes, and assessed on different scales. Sociodemographic and clinical data regarding alcohol consumption were recorded in a semi-structured proforma designed for this study. The severity of alcohol dependence was assessed using the Severity of Alcohol Dependence Questionnaire (SADQ).

#### **Inclusion Criteria:**

Males between the age group 18 to 50 years; subjects fulfilling ICD-10 DCR criteria for alcohol dependence; subjects previously treated for alcohol dependence; subjects having a history of at least one history of relapse; subjects relapsed after 2 months of abstinence; and subjects giving the informed consent and with reliable informant were included in the study.

#### **Exclusion Criteria**

Patients with multiple substance abuse/dependence; patients with chronic medical and surgical diseases; patients diagnosed with mental retardation; patients not confirming substance use/dependence as laid down by diagnostic guidelines by ICD-10 DCR; and patients not giving informed consent were excluded

#### **Tools for assessment**

Semi-structured proforma containing sociodemographic and clinical variables associated with alcohol consumption. ICD-10-DCR was used for diagnosing alcohol dependence syndrome (F10.2).<sup>16</sup> SADQ was employed to assess the severity of alcohol dependence. A score of >31 indicates severe alcohol dependence, 16 to 30– moderate dependence, and <16 indicates mild physical dependence.<sup>17</sup>

The standardized and statistically tested Presumptive Stressful Life Events Scales (PSLES) were designed by Indian scientist Gurmeet Singh. In this scale, 51 different variables (life events) were found to be experienced by the normal Indian population in the past year. For each life event, a mean stress score was given.<sup>18</sup> Relapse precipitant inventory is a 25-item inventory developed by Litman et al that analyzes the situational factors governing alcohol relapse. The entire scale has been divided into three factors – representing negative mood states (factor I), positive mood states (factor II), and cognitive vigilance (factor III).<sup>19</sup>

**Self-efficacy scale**

It is designed for ages 12 and above and was created to assess perceived self-efficacy regarding coping and adaptation abilities in both daily activities and isolated

stressful events. This scale consists of ten items, and each item refers to successful coping and implies an internal-stable attribution of success. Each item is scored between 1 and 4, and the score ranges from 1 to 40.<sup>20</sup>

**STATISTICAL ANALYSIS**

The data so obtained was statistically analyzed using Statistical Package for Social Sciences (SPSS) version 21.0 statistical analysis software. Student “t” test was used for raw data and the Chi-square test for consolidated data to test the significance of the difference between variables.

**RESULT: -**

A total of 40 patients were included in the study who fulfilled both the inclusion and exclusion criteria. The sociodemographic and clinical profile of the study subjects was determined. The mean age of the patients was 33 years.

**Table 1: Reasons for relapse amongst patients with alcohol dependence**

S. no.	Characteristic	No. of patients	Percentage
1.	Craving	39	98
2.	Peer pressure	17	54
3.	Poor motivation	32	84
4.	Stressful events	28	76
5.	Withdrawal	09	24

Patients enrolled in the study were questioned about the reasons for relapse in spite of complete detoxification and rehabilitation. It was found that the cases in the study sample had multiple reasons for relapse, the majority of them being due to craving (n=39; 98%), followed by poor motivation (n=32; 84%) and (n=28; 76%) had one or more stressful events in the past year.

**Table 2: Factors Affecting RPI**

S. No.	Scale	Mean±SD
1.	Negative mood states (factor I)	4.75±1.66
2.	Positive mood states (factor II)	3.22±0.42
3.	Cognitive vigilance (factor III)	1.12±0.27

Relapse Precipitant Inventory (RPI) was utilized to explore common relapse precipitants among alcohol abusers. Table 2 illustrate the study group on the RPI, which had mean negative mood states 4.75+1.66, positive mood states 3.22+0.42, and cognitive vigilance 1.12+0.27.

**Table 3: Presumptive stressful events in the past year as measured on the PSLES**

S. no.	Scale	Mean±SD (range)	
A	PSLES	167.8±44.64 (87-347)	
	PSLES stress category	N	%
B	Moderate stress	25	72.0
	Severe stress	15	28.0
C	<b>Level of stress</b>		
	Desirable	14	32.0
	Ambiguous	24	62.0
	Undesirable	2	6.0

PSLES was utilized to determine the amount of stress the patients had undergone in the past year, which may have led to relapse amongst alcohol-dependent individuals. The findings showed the mean presumptive stress score in the past year is 167.8+44.64, out of which the (n=25; 72%) had a moderate level of stress, whereas the rest had a severe degree of stress, out of these (n=24; 62%) had the ambiguous amount of stress whereas the others accounted for desirable (n=14; 32%) and undesirable (n=2; 6%) amount of stress.

## DISCUSSION

One of the most upsetting and difficult circumstances a patient might encounter during rehabilitation is relapsing into alcoholism. Despite deliberate attempts, recurrence rates after quitting could reach 90% in the first six months.<sup>21</sup> According to studies, patients who received therapy within 30 days of finishing detox were ten times less likely to experience a relapse than those who finished detox alone, who experienced relapses at a rate of 65–80%. However, depending on the type of dependence, the patient's demographics, and a variety of other individual, environmental, and socioeconomic factors, there has been a significant difference in relapse rates. The goal of the present study was to evaluate several characteristics related with relapse in patients with alcohol dependence since it is important to understand the rates of relapse and the reasons governing them in order to develop and improve rehabilitation programs.<sup>22</sup>

**Rongbin et al.2006**<sup>23</sup> conducted a study on risk factors for alcohol use relapse among patients with psychiatric illnesses. They enlisted 451 patients and investigated the many causes of alcohol relapse. They discovered relationships between alcohol use relapse and the length of mental symptoms, marital status, and lying about alcohol use. They came to the conclusion that those who are single are at a higher risk of relapsing into alcohol use, and that this risk is greatest between the first and fifth years after the onset of psychiatric symptoms.

**Kailash Suresh Kumar et al.2010**<sup>22</sup> studied the various demographic, clinical, and psychosocial factors associated with relapse in 66 patients with alcohol dependence. They discovered that among the demographic characteristics, relapses in alcohol use were highly correlated with past relapses and family history of substance dependency. Among the clinical factors, relapse was substantially correlated with younger age at dependency initiation and shorter time to acquire dependent. In a review of various studies on alcohol relapse, **Narendra Choudhary et al.2010**<sup>24</sup> concluded that the main predictors of relapse are pretransplant abstinence, psychiatric comorbidities, and lack of social support. They concluded that studies that had

active involvement by psychiatrists had lower relapse rates.

As per the study conducted by **Mattoo et.al, 2009**<sup>12</sup> the patient who had relapsed were significantly likely to have a positive family history of substance use, to be using maladaptive coping strategies, to have been exposed to a higher total number of the high-risk situation, and to have experienced the number of undesirable life events. As per the study conducted by **Michael et.al 2005**<sup>5</sup>, the most common type of reason given for relapse was negative mood states [61.5%] with far fewer subjects citing external pressures [17.3%] and desire for positive mood states [12.5%] or social/family problems [8.7%].

**Meena et al.2002**<sup>25</sup> in their study with 4691 people aged between 14 and 44 years noticed that 26% consumed alcohol to overcome worries, 15% to think and work better, 14% for cheering up, and 8% to relax. **Singh et al.2000**<sup>26</sup> observed that three-fourths of the men consumed alcohol more to be in the social company of their friends. A similar study from Chandigarh reported that the most common reason for starting alcohol consumption was curiosity (67%) followed by depression (27%).<sup>27</sup>

**Moak and Agrawal2010**<sup>28</sup> concluded that individuals with low perceived social support were more prone to have poor mental and general health outcomes. This might help to explain the concrete social support that was noted to be a relapse independent predictor. This implies that a participant can maintain abstinence when they believe they have access to social and material support during stressful occurrences in their lives. Future participants may benefit greatly from having a strong support system of friends and peers who can provide practical social help when necessary and in a crisis. Additionally, financial stability through programs for income generation during the follow-up will stop financial crises and subsequently relapse.

There were certain restrictions with this investigation. Results cannot be extrapolated to individuals with mild alcohol dependence or use in the community because the study was conducted on a small group of alcohol-dependent patients who were receiving drug de-addiction and medical services in a tertiary care facility. Chronic alcoholism is recognized to have negative impacts on marital functioning and to produce various difficulties in partnerships, which adds to the risk factors for relapse. The present study did not evaluate this region. Future research should therefore concentrate on a bigger sample size, a community-based sample, and the evaluation of marital functioning.

## CONCLUSION:

This study emphasizes the many instances of relapse and the causes behind them in practically every sphere of society. Relapse revealed to be substantially correlated with earlier age of initiation, longer duration of alcohol dependency, higher amount of alcohol used daily, and severity of alcohol dependence. After successful detoxification and rehabilitation, relapse was common, and risk factors for it were found to include family conflicts, psychological stress, peer pressure, socioeconomic status, drug accessibility, peer group influences, and a lack of assertiveness. Each patient's high-risk situations should be evaluated in order to develop personalized relapse prevention plans that are tailored to them. This includes boosting patients' self-efficacy, dispelling common misconceptions about the effects of alcohol, managing lapses, and rethinking how they view the relapse process.

## REFERENCES: -

1. Manthey J, Shield KD, Rylett M, Hasan OSM, Probst C, Rehm J. Global alcohol exposure between 1990 and 2010 and forecasts until 2030: A modelling study. *Lancet*. 2011;393(10190):2493-502.
2. Raj H, Ray R, Prakash B, Relapse precipitants in opiate addiction: Assessment in the community treatment setting. *Indian J Psychiatry*. 2000;42(3):253-7.
3. WHO. Lexicon of alcohol and drug terms published by WHO. Available from: <http://qn.wikipedia.org/wiki/alcoholism>
4. Mary E.L, Rebekkes P, Allen G M, Annis H M.A relapse prevention model for treatment of alcoholics. *Treating addictive behavior; the process of change*. Newyork: Plenum Press,1986; 407-433
5. Micheal RW, Westerberg SV, Harris JR, Tonigan SJ. What predicts relapse? Prospective testing of antecedent models. *Addiction* 2005; 91(1): 155-71.
6. Farren C K, Elroy M S. Predictive factors for relapse after an integrated inpatient treatment program for unipolar depressed and bipolar alcoholics. *Oxford Journal* 2010; 45(6):527-533
7. World Health Organization. *Global Status Report on Alcoholism*. World Health Organization; 2004.
8. Ibrahim F, Kumar N, The influence of community on relapse addiction to drug use: Evidence from Malaysia. *Eur J Soc Sci* 2009;11:471-6.
9. Monahan SC, Finney JW. Explaining abstinence rates following treatment for alcohol abuse: A quantitative synthesis of the patient, research design and treatment effects. *Addiction* 1996;91:787-805.
10. Armor DJ, Meshkoff JE. Remission among treated and untreated alcoholics. *Adv Subst Abuse* 1983;3:239-69
11. Saunders B, Allsop B. Relapse: a psychological perspective. *Br J Addict*. 1987;82:417-29.
12. Mattoo SK, Chakrabarti S, Anjaiah M. Psychosocial factors associated with relapse in men with alcohol or opioid dependence. *Indian J Med Res*. 2009;130:702-8.
13. Weiss F, Ciccocioppo R, Parsons LH, Katner S, Liu X, Zorrilla EP, Valdez GR, Ben-Shahar O, Angeletti S, Richter RR. Compulsive drug-seeking behavior and relapse. *Neuroadaptation, stress, and conditioning factors*. *Ann N Y Acad Sci*. 2001;937:1-2610.
14. Mattoo SK, Basu D. Relapse Precipitants, stressful life events and dysfunction in Alcohol and Opioid-dependent men. *Indian J Psychiatry*. 2003;45(2):39-44.
15. S.K. Mattoo, S. Chakrabarti, M. Anjaiah. Psychosocial factors associated with relapse in men with alcohol or opioid dependence. *Indian J Med Res*, December 2009;702-708
16. World Health Organization. *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research*. 1993;140-5.
17. Stockwell T, Murphy D, Hodgson R. The severity of alcohol dependence questionnaire: Its use, reliability, and validity. *Br J Addict*. 1983;78:145-55.
18. Witkiewitz K, Litten RZ, Leggio L. Advances in the science and treatment of alcohol use disorder. *Sci Adv*. 2009;5(9).
19. Litman, G.K., Stapleton, J., Oppenheim, A.N. ft Ralph, M. An instrument for measuring coping behavior in hospitalized alcoholics: implications for relapse prevention treatment. *Br J Addiction*. 1983;78:269-76
20. Jerusalem M, Schwarzer R. Self-efficacy as a resource factor in stress appraisal processes. In: Schwarzer R, editor. *Self-Efficacy: Thought Control of Action*. Washington, DC: Hemisphere; Taylor & Francis; 1992; 19521.
21. Moos RH, Moos BS. Rates and predictors of relapse after natural and treated remission from alcohol use disorders. *Addiction*. 2006;101:212-22.
22. Suresh Kumar K, Kailash S, Dalal PK, Reddy MM, Sinha PK. Psychosocial factors associated with relapse in patients with alcohol dependence. *Indian J Psychol Med*. 2010;39:312-5
23. Zeng R, Wang L, Xie Y. An analysis of factors influencing drinking relapse among patients with alcohol-induced psychiatric and behavior disorders. *Shanghai Arch Psychiatry* 2006;28:147-53.
24. Choudhary NS, Saraf N, Mehrotra S, Saigal S, Soin AS. Recidivism in liver transplant recipients for alcohol-related liver disease. *J Clin Exp Hepatol* 2020. In press. 2010.08.011.

25. Meena, Khanna P, Vohra AK, Rajput R. Prevalence and pattern of alcohol and substance abuse in urban areas of Rohtak city. *Indian J Psychiatry* 2002;44:348-52.
26. Singh J, Singh G, Mohan V, Padda AS. A comparative study of the prevalence of regular alcohol users among male individuals in an urban & rural area of district Amritsar, Punjab. *Indian J Community Med* 2000;15:73-8.
27. Bhullar DS, Singh SP, Thind AS, Aggarwal KK, Goyal AJ. Alcohol drinking patterns: A sample study. *Indian Acad Forensic Med* 2012;35:37-9
28. Moak ZB, Agrawal A. The association between perceived interpersonal social support and physical and mental health: Results from the national epidemiological survey on alcohol and related conditions. *J Public Health* 2010;32:191-201.