



## A STUDY ON STRESSFUL LIFE EVENTS IN ALCOHOL RELAPSE PATIENTS

### Psychology

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### ABSTRACT

Relapse is an important problem in recovery from alcohol dependence. Among the numerous factors determining relapse, stressful life events play a significant role. The study attempted to find out stressful life events of alcohol relapse patients, and whether stressful events occur more frequently in them. It is a cross-sectional, case-control study conducted at the Institute of Mental Health, Chennai. The study involved thirty cases and thirty controls. A minimum period of one month of abstinence from alcohol was used as inclusion criteria and each case was matched with a control with regard to the duration of relapse. We used presumptive stressful life events scale for assessment. Mean stress score and mean number of stressful life events were higher in cases than controls and the difference was statistically significant. Overall the findings suggest more number of stressful life events in alcohol relapse.

### KEYWORDS

alcohol dependence, relapse, stress, stressful life events

### INTRODUCTION

Alcohol dependence is characterized by craving, compulsion, primacy of drinking over other activities and a state of neuronal adaptation leading to physical and mental disturbances on withdrawal. One of the most important problems in recovery from alcohol and substance abuse is relapse. About 70 to 90% of clients with alcohol dependence relapse within three months. (Mc Lellan et al., 2000).

Relapse literally means 'to go back into a previous condition or into a worse state after making an improvement', or "to regress after partial recovery from illness" (Oxford medical dictionary). DSM IV-TR states four remission specifiers for substance dependence based on the interval of time that has elapsed since the cessation of dependence (early vs sustained remission) and whether there is continued presence of one or more criteria for dependence or abuse (partial vs full remission). According to it, if after a period of remission or recovery, the individual again becomes dependent, in order to apply the early remission specifier there should again be at least one month in which no criteria for dependence or abuse are met.

Relapse can be better understood as resulting from an interaction of client-, family-, social-, and treatment-related factors. Research into the causes of relapse led to classifying relapse determinants into two broad categories-intrapersonal and interpersonal determinants Marlatt et al., 1985). Relapse prevention strategies incorporate various psychosocial interventions and specific coping skills training in the treatment modality.

### Stressful life events and alcohol relapse

The term "stress" is used to describe the subjective feeling of tension or pressure.

Stress is considered a major contributor to the continuation of alcohol use as well as relapse. The notion that stressful life events can cause susceptible people to relapse to alcohol use has an intuitive appeal. Stress and the response of the body to stress play a role in the initial alcohol use, in seeking treatment, and relapse in recovering patients. This relationship may be partly due to neurotransmitters, such as the serotonin, dopamine and opiate peptides, as well as the hypothalamic-pituitary-adrenal (HPA) axis (Kathleen et al. 1999).

Numerous clinical studies have demonstrated a relationship between psychosocial stress and alcohol relapse (Hore, 1971; Miller et al., 1996; Rosenberg, 1983). Various hypotheses describe stressors as cues that elicit anticipatory alcohol or drug use responses (i.e., cue reactivity), as stimuli that evoke negative affective states and prompt alcohol use to alleviate this emotional distress (Marlatt and Gordon, 1985), or as events that place adaptation demands on an individual (Crutchfield and Grove, 1984). Brown and associates (1995), demonstrated that stress that taxes adaptation capacity increases the risk for addiction relapse and hypothesized that use of an addictive substance is mediated by the expectation that the substance will alleviate the distress.

Brown et al, (1995), reported that when compared to those who remained abstinent, relapsed patients experienced twice as much severe stress before their return to drinking. Hence the study of interactions between stressful life events and alcohol relapse has widespread implications for both assessment and treatment of the patients.

### AIM OF THE STUDY

To investigate the role of stressful life events in alcohol relapse patients.

### METHODOLOGY

The study was a Cross-sectional hospital based Case Control study, conducted over a period of five months from May 2009 to September 2009 in the de addiction clinic of the Institute of Mental Health, Madras Medical College, Chennai.

The cases included in the study were consecutive patients aged 20 to 60 years relapsing to alcohol dependence after a period of minimum one month of abstinence. Alcohol-dependent patients in the age group of 20 to 60 years who did not relapse and were coming for regular follow up were chosen as controls. They were matched with cases with regard to the time to relapse. Persons with other axis one disorders, concomitant substance abuse other than alcohol, comorbid medical complications were excluded from both the groups.

### Definition of relapse

In this study, we defined relapse as a condition in which a previously alcohol-dependent individual on treatment, reverts back to dependence pattern after a minimum one-month period of abstinence. This is based on DSM IV-TR course specifier for substance dependence which specifies that there should be a period of at least one month of abstinence during which no criteria for dependence or abuse are met for application of early remission specifier.

The study was approved by the Ethics Committee of the research panel of the Hospital. The cases were selected from a screened sample of 50 consecutive patients who relapsed after a period of minimum one month of abstinence. Informed consent was obtained from all the patients. Of the 50 patients 8 expressed unwillingness to participate, 7 had medical complications and 5 had psychotic features and hence they were excluded. Finally, a sample of 30 patients constituted the study group. They were assessed using routine blood investigations and liver function tests.

The control group was patients diagnosed as alcohol dependence coming for regular follow up at the-addiction clinic. They were under standard treatment and were maintaining abstinence. Each control was matched to the case with regard to the time to relapse. E.g., a case who relapsed after two months of abstinence was matched with a control who follows up at two months of abstinence. Hence a group of 30 patients constituted the control group. The instruments were administered at the de-addiction clinic after obtaining an informed consent.

### Instruments used

1. Presumptive stressful life events scale (Gurmeet Singh, 1984)
2. Proforma- Information regarding age, sex, education, occupation, religion, marital status, type of family, family history of alcohol dependence was obtained.

### Presumptive stressful life events scale (psles)

Presumptive Stressful Life Events Scale developed by Gurmeet Singh et al has 51 items which is based on the consensus a priori method and can be adapted to assess the events in the lifetime or within a short span of time (1-6 months).

The process of administering the scale is that respondents are asked to go through the list events during the lifetime and in the past one year. A cumulative score can be obtained by summing up the individual scores weighed depending upon the stress caused to the individual. The data can be analyzed quantitatively as well as qualitatively. In this study data was analyzed quantitatively.

### Statistical Analysis

Data analysis was done using univariate technique. Two tailed test was applied for all analysis. Analysis was done using Epi Info software with the help of a statistician.

## RESULTS

**Table 1 Comparison of socio-demographic variables of cases and controls**

Demographic variable	Cases	Controls	p-Value
Mean age	35.4	36.6	0.54
Education	19	15	0.25
Primary	8	10	
Secondary	3	5	
Higher secondary			
Occupation	18	14	0.30
Unskilled	12	16	
Skilled			
Marital status	26	28	0.45
Married	2	1	
Separated	2	1	
Unmarried			
Family type	3	7	0.17
Nuclear	27	23	
Joint			
Religion	25	24	0.74
Hindu	2	4	
Muslim	3	2	
Christian			
Family history	23	14	0.01

**Table 2 Comparison of cumulative mean stress Scores (mss) of the two groups on psles**

	MEAN	STANDARD DEVIATION	t STATISTIC	p VALUE
CASES	234	24.08	6.96	0.001
CONTROLS	187	28.09		

Table 2 shows that the alcohol relapse patients as a group score higher than non relapsing patients in the mean stress score. By applying p value, it turns out that the difference is statistically significant.

**Table 3: Comparison of the mean number of stressful Life events of the two groups on psles**

SUBJECTS	MEAN	STANDARD DEVIATION	t STATISTIC	p VALUE
CASES	4.3	0.71	4.24	0.0001
CONTROLS	3.6	0.55		

Table 3 shows that the relapse patients had more stressors (mean=4.3; SD= 0.71) than the non-relapsing patients (mean=3.6; SD= 0.55) and the difference is statistically significant.

## DISCUSSION

In the present study, alcohol relapse patients did not differ significantly from the non-relapse patients in their socio-demographic profiles. There was no statistically significant difference in terms of age, education, occupation, marital status, type of family and religion. However, these findings are not concordant with that of Cronkite and Moos (1980) who point out that patients with a higher socio-demographic status are more likely to possess less severe intake symptoms, are more likely to enter treatment, and are more likely to participate actively in treatment which may lead to a better outcome. Individuals from the lower socioeconomic levels are more likely to return to relapse.

The second objective was to investigate the role of stressful life events in the two groups. It turned out that when compared to controls, relapse patients had higher mean stress score and more number of stressful life events in the past one year, which was statistically significant. Most of the events were undesirable events related to financial loss, family conflict, marital conflict, damage to property and trouble at work with superiors, colleagues, and subordinates.

The findings are corroborated by Maisto et al & O'Farrell, et al. (1988) who found that 67.5% of relapse was preceded by negative events and a majority of these episodes (64%) were reported to involve the alcoholic's spouse. Interpersonal conflict appears to be a prognostic sign of relapse. In a study by Cummings, Gordon, and Marlatt (1980), almost half of the relapse episodes occurred in relation to interpersonal conflict.

The findings were supported by Nordstrum and Berglund. (1986), who did a two-decade follow-up of alcoholics to determine what factors contributed to relapse. The most frequently reported factors included legal complications, financial trouble, establishing a relationship with a new partner, social pressure from partner, and change to a new job.

The findings were also supported by Susan et al. (2006), who found that severe chronic stressors and substance availability predicted an increased risk of initiating substance use post-treatment. It was also found that in contrast to chronic stressors, recent stressful life events were not predictive of post-treatment substance initiation or severity.

Another important finding in this study is that subjects had a family history of alcohol dependence in 76.7 % of cases and in 46.6% of controls. It was statistically significant. The finding suggests that patients with family history of alcohol dependence were more prone to relapse.

## CONCLUSION

The relapse patients as a group score significantly high on mean stress scores and number of stressors as compared to controls. This finding implicates that the relapse patients perceive more life stressors which might have a causal relationship to relapse. It helps to predict at risk group for relapse and hence to plan effective strategies for early identification and treatment of relapsing individuals.

## LIMITATIONS

The study was done only with male patients. The female population could not be included because of the scarcity of the samples. The study was conducted in a tertiary care hospital and hence it may not be representative of the population. The confounding interaction between stressful life events and other factors like personality was not dealt with in this study. The causal effect of stressful life events on relapse was not assessed in this study. The assessment of number and type of stressors was done in this study rather than the assessment of perception and cognitive appraisal of events. Further studies with large samples drawn randomly from the community and representing all the socioeconomic data including both the sexes are required to validate or disapprove the above findings.

## BIBLIOGRAPHY

1. Brown S.A., Peter W., Thomas L., Patterson., Grant. Stress, Vulnerability and Adult Alcohol Relapse. Journal of studies on alcohol relapse, (1995).
2. Cronkite R.C., & Moos R.H. Determinants of the post treatment functioning of alcoholic patients: A conceptual framework. Journal of Consulting and Clinical Psychology (1980). 48, 3: 305-316.
3. Crutchfield R.D., and Grove W.R. Determinants of drug use: A test of the coping hypothesis. Social Sci. Med. 18: 503-509, (1984).
4. Diagnostic and statistical manual of psychiatric disorders- fourth edition. Text revision. American psychiatric association.

5. Hore D. Factors in alcoholic relapse. *Brit. J. Addict.*66: 89-96, 1971.
6. Kathleen T. Brady., Susan C. Sonne. The role of stress in alcohol Use, alcoholism treatment and relapse. *Alcohol Research & Health*, (1999) Vol. 23.
7. Maisto SA, et al. Alcoholic and spouse concordance on attribution to relapse to drinking. *Journal of substance abuse and treatment*. (1988), 5,179-81.
8. Marlatt, G.A., & Gordon, J.R. Determinants of relapse: Implications of the maintenance of behavior change. In: Davidson, P.O., and Davidson, S.M., eds. *Behavioral Medicine: Changing Health Lifestyle*. New York: Brunner/Mazel, 1980. pp.410-452.
9. Marlatt G.A., Gordon JR. Relapse prevention in Maintenance strategies in the treatment of addiction behaviour. Newyork. Guilford Press (1985):147-61.
10. Marlatt GA. Relapse prevention: a self control strategy for the maintenance of behavior change. Newyork: Guilford press (1985).
11. McLellan A., Lewis DC., O'Brien CP., et al. Drug dependence, a chronic mental illness: implications for treatment, insurance, and outcome evaluations. *JAMA* (2000):284(13):1689-1695.
12. Miller, W. R., Westerberg, V. S., Harris R. J. and Tonigan, J. S. What predicts relapse? Prospective testing of antecedent models. (1996) *Addiction* 91, 155-171.
13. Nordstrum G., & Berglund M. (1986) Successful adjustment in alcoholism: Relationships between causes of improvement, personality, and social factors. *Journal of Nervous and Mental Disease*, 11±, 664-668.
14. Oxford advanced learner's dictionary. Oxford university press.
15. Rosenbergh. Relapsed versus non-relapsed alcohol abusers Coping skills, life events and social support. *Addict Behav* (1983):183-186.
16. Singh G., Kaur D., and Kaur HP. Presumptive stressful life events scale- a new stressful life events scale use in India. *Indian journal of clinical psychology*. (1984), 26(2): 107-114.
17. Susan R. Tate. , Sandra A., Brown., Suzette V., Glasner. , Marina Unrod and John R. McQuaid, University of California, San Diego. In: Chronic life stress, acute stress events, and substance availability in relapse (2006).