

# Expressed Emotion and Relapse of Alcohol Use Disorder

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**Abstract-** Expressed emotion (EE) is especially relevant in the Indian cultural context, where patients have longer and more enduring contact with family members, who play an important role as caregivers during the process of treatment & rehabilitation. A cross sectional case control study was carried out to study the relationship between EE and relapse of alcohol use. Participants included 60 participants, comprising of 30 cases and 30 controls. Tools used were FEICS, and additional questionnaires for assessment of alcohol use pattern and socio-demographic data. High expressed emotion and high perceived criticism in the family environment were found to be significantly associated with shorter period of abstinence and more frequent relapses. However, no significant correlation was found between high emotional involvement and relapse, which could perhaps be explained by the influence of cultural factors. Early identification and development of strategies targeting EE could help maintain recovery and prevent relapse.

**Index Terms-** Expressed emotion, Relapse, Alcohol Use

## I. INTRODUCTION

Expressed emotion (EE) is considered to be a measure of family environment, which takes into account the quality of interaction patterns and nature of inter-personal relationships among the family members and patients having a disorder. EE is a significant characteristic of the family milieu that reflects key aspects in inter-personal relationships and has been found to predict symptom relapse in a wide range of mental disorders.

The concept of EE was initially developed for schizophrenia. Subsequently, the role of EE has been assessed in various other psychiatric conditions as well as general medical conditions, including dementia, Parkinson's disease and diabetes(1). Research on EE came forth in the 1950s, with researchers observing that close emotional ties and nature of interaction between family members could influence the course of illness and clinical outcome. Over five decades ago, George Brown described five components of EE, including critical comments, emotional over-involvement, hostility, positive remarks and warmth (2).

The interaction between EE and patient outcome is complex and dynamic. Previous studies have highlighted the role of EE as a paramount psychosocial stressor that has a direct association with recurrence of illness. In particular, attitude of caregivers towards the patient and their understanding of the nature of illness are important.

A considerable amount of data suggests that EE can lead to relapse in vulnerable individuals, even when they are on medication(1). Researchers have highlighted the importance of EE in the understanding and prevention of relapse in a broad range of psychopathological conditions. Expressed emotion appears to be a stronger predictor of relapse in patients with more longstanding illnesses (2). The family's expressed emotion has shown to be predictive of outcome of mental and physical illnesses in a variety of cultural settings.

Family can play an important role in helping in the recovery of a person with substance use disorders. Although research has shown that elevated EE is predictive of relapse in schizophrenia and a variety of other psychiatric disorders, the role of EE in relapse of substance use remains relatively unexplored and much debated.

The aim of our study was to assess the relationship between EE and relapse of alcohol use as well as the maintenance of abstinence from alcohol use in a group of patients with alcohol use disorder.

## II. METHODOLOGY

This is an observational, cross sectional, case control study. Participants were recruited by purposive sampling based on the inclusion and exclusion criteria. Cases for this study included 30 participants, aged 18years-64 years, who met the ICD 10 diagnostic criteria for alcohol dependence syndrome, with history of relapse of alcohol use within 3 to 12 months of previous attempt at abstinence. Cases were recruited from patients admitted for de-addiction or attending OPD under the department of psychiatry in a tertiary care general hospital located in Mangalore, Karnataka, India.

Controls comprised of 30 participants who were maintaining abstinence from alcohol use for a period greater than 12 months, after having previously met the clinical diagnostic criteria for Alcohol Use Disorder. Controls were recruited from patients coming for follow up in the psychiatry OPD as well as those attending de-addiction support groups.

Patients who had comorbid psychiatric disorder(s), other substance use disorder(s) with the exception of nicotine; those in delirium, having severe cognitive impairment; and those who were unable to give written consent were excluded from the study.

Informed written consent was taken from the participants & confidentiality was assured. Participants were interviewed by the authors and expressed emotion was assessed using the Family Emotional Involvement and Criticism Scale. Socio-demographic

data was assessed using the Modified Kuppaswamy Socioeconomic Status Scale. Other relevant clinical history and pattern of alcohol use was assessed using an additional semi-structured questionnaire.

Statistical analysis was carried out using chi-square test, Fishers exact test, t- test and Karl Parson correlation coefficient. This study was ethically approved by the institutional ethics committee.

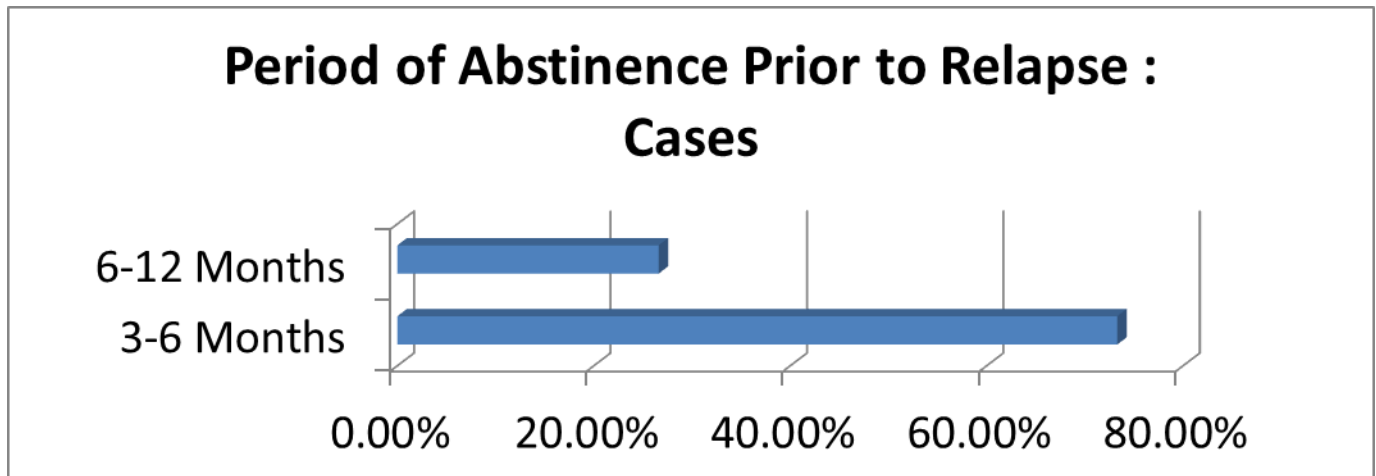
### III. RESULTS

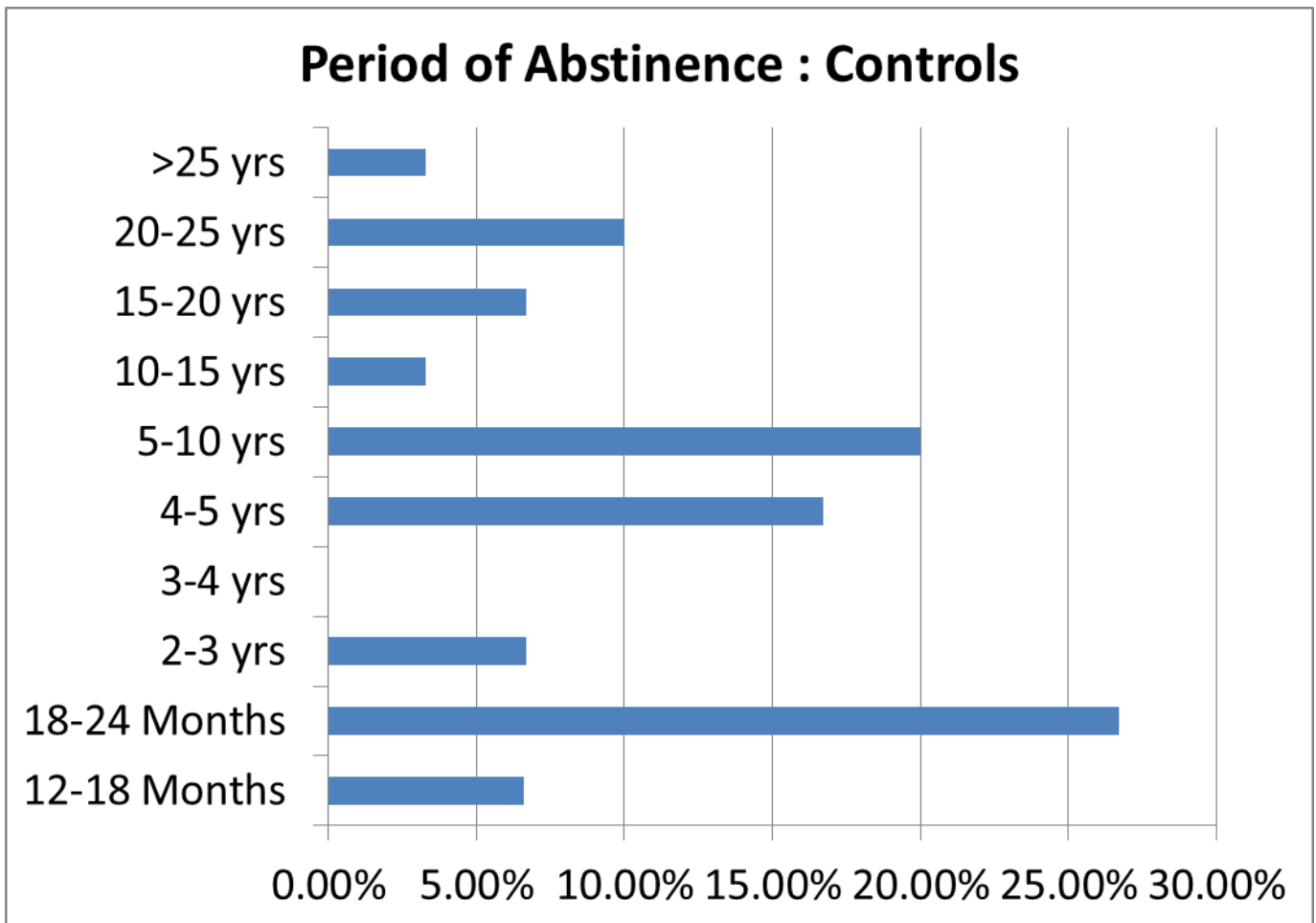
Majority of the cases and controls hailed from urban areas (76.7%; 66.7%) and nuclear families (76.7%; 63.3% respectively). Most of the participants belonged to the middle (43.3%) and upper middle socio- economic categories (41.7%). Majority of the cases were in the age bracket of 31-40 yrs (46.7%), while the controls were, on an average, a decade older (41-50 years; 46.7%). Cases comprised of 53.3% Hindus, 43.3%

Christians and 3.3% Muslims, whereas controls comprised of 80% Hindus and 20% Christians. On an average, most of the cases (36.7%) and controls (43.3%) were educated up to high school. 76.7% of the controls were married whereas the marital status of the cases varied with 46% being married, 43% being unmarried, and the rest being either divorced or remarried.

From amongst the sample, 73.3% cases and 63.3% controls had comorbid nicotine dependence. In both the study groups, diabetes mellitus was the most common medical comorbidity encountered. 80% of the cases and 50% of the controls had family history of alcohol use disorders. Amongst the cases, 73.3% had relapsed within the initial 3 – 6 months of abstinence, and the remaining thereafter, i.e. - 6-12 months since abstinence. The time period of maintaining abstinence amongst controls ranged from 1 year to over 25 years with a mean period of abstinence of 7.7 years (Figure 1).

Figure 1: Period of Abstinence from alcohol use





When the cases were asked for a subjective report of the reason for relapse, craving (36.7%) & cue exposure (33.3%) were cited as the most common reasons for relapse, whereas 23.3% attributed their relapse to inter-personal difficulties and the rest to financial difficulties (6.7%).

The correlation between the total score on FEICS and relapse of alcohol use was highly significant (p value .000). From

amongst the components of EE studied, the correlation between perceived criticism and relapse of alcohol use was highly significant (p value .000). However, in our study, the correlation between emotional involvement and relapse of alcohol use was found to be not significant (p value .308) (Table 1).

**Table 1: Total score on Family Emotional Involvement & Criticism Scale (FEICS), and sub-sections of Perceived Criticism (PC) and Emotional Involvement (EI) in cases and controls**

	Group	N	Minimum	Maximum	Mean	Std. Deviation	Median	t test p value
Totalscoreon EI	Cases	30	18.00	33.00	25.37	4.27	25.00	.308
	Controls	30	22.00	33.00	26.33	2.88	26.00	NS
	Total	60	18.00	33.00	25.85	3.64	26.00	
Totalscoreon PC	Cases	30	30.00	43.00	34.87	2.85	35.00	.000
	Controls	30	10.00	20.00	14.60	2.80	14.50	HS
	Total	60	10.00	43.00	24.73	10.60	25.00	
Totalscoreon FEICS	Cases	30	55.00	65.00	60.23	3.40	60.00	.000
	Controls	30	38.00	46.00	40.93	2.26	40.00	HS
	Total	60	38.00	65.00	50.58	10.14	50.50	

Higher total score on FEICS as well as perceived criticism had a highly significant correlation with shorter period of abstinence from alcohol use ( $p$  value .000) and more number of relapses ( $p$  value .000). However, emotional involvement did not have a significant correlation with shorter period of abstinence ( $p$  value .735) or more number of relapses ( $p$  value .182).

#### IV. DISCUSSION

Family atmosphere is the most persistent environment a patient is exposed to. In this study, a strong correlation was found between high expressed emotion and relapse of alcohol use in persons with alcohol use disorder. EE continued to be associated with relapse after patient's socio economic status, type of family, location of residence, severity of alcohol related problems, family history, medical comorbidities and comorbid nicotine use were taken into account.

Patients with high levels of expressed emotion in their family environment were more prone for relapse of alcohol use. High expressed emotion was associated with lesser time spent being abstinent from alcohol and more frequent relapses. Out of the components of expressed emotions studied, perceived criticism was associated with quicker and more frequent relapses, whereas emotional involvement was not associated with relapse. Emotional involvement was found to be high in both cases as well as controls, but did not correlate with relapse. This could perhaps be explained on the basis of cultural factors, as the social bonds in the Indian cultural context are characterized by a high degree of emotionality. Also, the scale we used for assessment of emotional involvement in our study had been designed and standardized based on a western population, which may not hold ground in the Indian cultural context, as even though the Indian society is in a state of cultural transition, the nature of social relationships and inter-dependence as well as emotional involvement within family members remains thickly knit.

Expressed emotion is especially relevant in the Indian cultural context, where patients have longer and more enduring contact with family. Family members play an important role as caregivers during the process of treatment & rehabilitation. Family members also play an important role in bringing the patient in contact with the mental health care professional and providing financial as well as psycho-social support to the patient during the process of treatment & rehabilitation. Even in the scenario of relapse, family members remain the primary care givers for the patients. However, high expressed emotion may also act as a barrier to care, as the patient may conceal relapse status from his family members for avoidance of excessive criticism, which in turn may delay and hamper the treatment process.

This study attempted to assess a modifiable risk factor for relapse of alcohol use. Few studies are available for the role of expressed emotion on the relapse of alcohol use in the Indian cultural context. However, this study has the limitations of a small sample size and the results may not be generalizable to the general population. This study predominantly focussed on two components of EE, namely perceived criticism and emotional involvement. In this study, the EE was assessed using the patient's report of their perception of their family environment, which may have been biased by rationalization on the part of the

patient. This study is a cross-sectional one, and throws light upon the association between high expressed emotion and relapse. However, it does not establish a clear causality of high EE leading to relapse, or high EE being secondary to frequent relapses. A longitudinal study with a larger sample group, using tools more suitable in the Indian cultural context, taking into account the family members report along with the patients report, may perhaps yield more accurate results.

#### V. CONCLUSION

This study highlights the need for psychosocial assessment of expressed emotion and intervention at the level of family as a unit. An understanding of the role of expressed emotions in alcohol use disorders can help identify and target high expressed emotion during recovery and help in relapse prevention.

#### REFERENCES

- [1] Bhugra, Dinesh, and Kwame McKenzie. "Expressed emotion across cultures." *Advances in Psychiatric Treatment* 9.5 (2003): 342-348.
- [2] Brown GW. The discovery of expressed emotion: Induction or deduction? In: Leff J, Vaughn C, editors. *Expressed emotion in families*. New York: Guilford Press; 1985. p. 7-25.
- [3] Amaresha, Anekal C., and Ganesan Venkatasubramanian. "Expressed emotion in schizophrenia: an overview." *Indian journal of psychological medicine* 34.1 (2012): 12.
- [4] Wearden AJ, Tarrier N, Barrowclough C, Zastowny TR, Rahill AA. A review of expressed emotion research in health care. *Clin Psychol Rev* 2000;20:633-66.
- [5] Butzlaff, Ronald L., and Jill M. Hooley. "Expressed emotion and psychiatric relapse: a meta-analysis." *Archives of General Psychiatry* 55.6 (1998): 547-552.
- [6] Kuipers, E. "Influence of carer expressed emotion and affect on relapse in non-affective psychosis." *The British Journal of Psychiatry* 188.2 (2006): 173-179.
- [7] Hooley J, Hahlweg K. The marriages and interaction patterns of depressed patients and their spouses: Comparison of high and low EE dyads. In: Goldstein MJ, Hand I, Hahlweg K, editors. *Treatment of Schizophrenia: Family assessment and intervention*. Berlin: Springer Verlag; 1986. p. 85-95.
- [8] Vaughn CE, Leff JP. The measurement of expressed emotion in the families of psychiatric patients. *Br J Soc Clin Psychol* 1976;15:157-65.
- [9] ICD-10: Classification of Mental and Behavioural Disorders: Clinical descriptions and diagnostic guidelines. World Health Organization, 2006.
- [10] DSM - 5: Diagnostic and statistical manual of mental disorders. American Psychiatric Association, 2014 .

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