

# **Original Research Article**

# PERSONALITY PROFILES AND STRESSFUL LIFE EVENTS IN ALCOHOL RELAPSE PATIENTS IN A TERTIARY CARE HOSPITAL: A CROSS-SECTIONAL STUDY

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# ABSTRACT

**Background:** Alcohol relapse is a significant challenge in the treatment of alcohol dependence, with complex interactions between personality traits, stressful life events, and sociodemographic factors. This study aimed to assess the personality profiles, role of stressful life events, and associated factors in patients with alcohol relapse at a tertiary care hospital.

**Material and Methods:** A hospital-based cross-sectional study was conducted among 100 patients diagnosed with alcohol relapse as per ICD-10 criteria at the Institute of Mental Health, Hyderabad. Data were collected using a semi-structured proforma for sociodemographic details, Eysenck Personality Questionnaire (EPQ) for personality traits, Severity of Alcohol Dependence Questionnaire (SADQ) for dependence severity, and Presumptive Stressful Life Events Scale (PSLES) for life events. Statistical analysis was performed using SPSS v29, with a p-value < 0.05 considered significant.

**Results:** The mean age of participants was 39 years (SD  $\pm 9.6$ ). Most participants were male (91%) and from a lower socioeconomic class (60%). Stressful life events such as changes in social activities (100%) and sleeping habits (96%) were prevalent. Personality analysis revealed that extroversion (55%) and neuroticism (45%) were more common, with extroversion significantly associated with severe alcohol dependence (21%, p<0.001). The majority of participants (62%) experienced two relapses. Severity of alcohol dependence was positively correlated with the number of relapses and early age of alcohol initiation.

**Conclusion:** Personality traits, stressful life events, and sociodemographic factors play crucial roles in alcohol relapse. Addressing these factors through personalized interventions may improve treatment outcomes.

**Keywords:** Alcohol relapse, personality traits, stressful life events, alcohol dependence, cross-sectional study, Eysenck Personality Questionnaire.

# **INTRODUCTION**

Alcohol is a widely consumed psychoactive substance that can induce feelings of euphoria and well-being. However, excessive alcohol consumption negatively impacts physical, psychological, and social functioning, contributing to the development of alcohol use disorder (AUD), a significant global health problem. Over the past decade, while alcohol consumption has decreased in

high-income countries, a marked rise has been observed in low- and middle-income countries, including India, where alcohol use accounts for substantial disease burden and social issues. [3] According to the National Survey on Extent and Pattern of Substance Use in India (2019), 21% of adult males reported alcohol use in the past year. Relapse in alcohol dependence is a major clinical

Relapse in alcohol dependence is a major clinical challenge, with estimates suggesting that up to twothirds of treated patients relapse within weeks to months after initiating treatment.<sup>[4]</sup> The first three months post-treatment are particularly vulnerable, with relapse being driven by a complex interplay of biological, psychological, social, and environmental factors.<sup>[5]</sup> Stressful life events, neuroadaptive changes in the brain, personality traits, and sociodemographic factors such as age, gender, and family support are critical contributors to relapse. [6] Personality traits. especially extroversion. neuroticism, and impulsivity, have been identified as predictors of alcohol dependence and relapse. Stress, often mediated through life events such as family conflicts, financial losses, and marital discord, exacerbates the risk of relapse.<sup>[7]</sup> Despite growing research in this area, there remains a gap in understanding the relative contribution of these factors in the Indian context.

This study aims to assess the role of personality traits and stressful life events in alcohol relapse patients, along with evaluating sociodemographic correlates and severity of alcohol dependence.

#### MATERIALS AND METHODS

#### **Study Design and Setting**

This hospital-based cross-sectional study was conducted at the Institute of Mental Health, Hyderabad, Telangana, from December 2020 to June 2022. The study included patients diagnosed with alcohol relapse as per ICD-10 criteria.

## Sample Size and Sampling Technique

A total of 100 patients with a history of alcohol relapse were enrolled in the study using convenient sampling.

# **Inclusion Criteria**

- 1. Patients aged 18-60 years.
- 2. Diagnosed with alcohol dependence syndrome with at least one episode of relapse.
- 3. Patients who provided informed consent.
- 4. Patients with reliable informants.

#### **Exclusion Criteria**

- 1. Patients with other substance use disorders (except nicotine).
- 2. Patients with psychiatric or organic comorbidities.
- 3. Patients with medical comorbidities.
- 4. Individuals with intellectual disabilities.

#### **Data Collection Tools**

**Semi-structured Proforma:** Captured sociodemographic details such as age, gender, education, occupation, socioeconomic status, marital status, and family history.

**Eysenck Personality Questionnaire (EPQ):** Assessed personality traits (extroversion, neuroticism, psychoticism).

**Severity of Alcohol Dependence Questionnaire** (SADQ): Measured the severity of alcohol dependence.

**Presumptive Stressful Life Events Scale** (**PSLES**): Identified stressful life events and their impact.

#### Procedure

Ethical clearance was obtained from the institutional ethics committee before commencing the study. Eligible patients attending the outpatient or inpatient departments were interviewed privately to ensure confidentiality and accurate data collection. Written informed consent was obtained. Each participant's sociodemographic and clinical details were recorded, and relevant questionnaires were administered.

#### **Statistical Analysis**

The collected data were analyzed using SPSS version 29. Descriptive statistics were used to summarize categorical and continuous variables. Chi-square tests were applied to compare qualitative variables. A p-value < 0.05 was considered statistically significant.

# **RESULTS**

# Sociodemographic Characteristics of Participants

The study included 100 participants diagnosed with alcohol relapse. The mean age of the participants was 39 years (SD  $\pm 9.6$ ), with an age range of 20 to 58 years. The largest proportion of participants (33%) belonged to the 31-40 years age group, followed by 32% in the 41-50 years age group, as shown in **Table 1**.

In terms of socioeconomic status, the majority of participants (60%) were from the lower socioeconomic class, followed by 30% from the middle class and 10% from the upper class (**Table 2**). Most participants (91%) were male, with a small proportion (9%) being female.

#### Stressful Life Events in Alcohol Relapse

Stressful life events were found to play a significant role in alcohol relapse. The most commonly reported stressful life events included changes in social activities (100%), changes in sleeping habits (96%), family conflicts (93%), reduction in family functions (87.2%), financial problems (84%), and marital conflicts (81%). These findings are detailed in **Table 3**.

# Personality Profiles and Severity of Alcohol Dependence

Personality traits were assessed using the Eysenck Personality Questionnaire (EPQ). Among participants, 55% exhibited extroversion, 45% exhibited neuroticism, and 5% exhibited psychoticism. The severity of alcohol dependence was also analyzed in relation to personality traits. Severe alcohol dependence was most common among individuals with extroversion (21%), followed by neuroticism (18%), and least common in those with psychoticism (2%), as shown in **Table** 

#### **Relapse Frequency**

The distribution of relapses showed that the majority of participants (62%) experienced two relapses, while 19% had three relapses, and 17% had more

than three relapses. Only 2% of participants reported a single relapse (**Table 5**). A higher number of relapses was observed in participants with greater severity of alcohol dependence.

# Association Between Personality Traits and Relapse

The study revealed a significant association between personality traits and relapse frequency. Participants with extroversion and neuroticism traits were more likely to experience severe alcohol dependence and higher relapse frequency, whereas psychoticism was less commonly associated with severe dependence or frequent relapses.

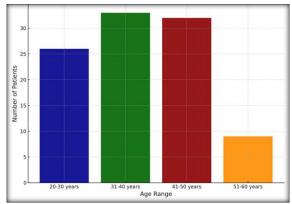


Figure 1: Age Distribution of Study Participants

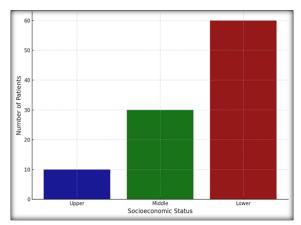


Figure 2: Socioeconomic Status of Study Participants

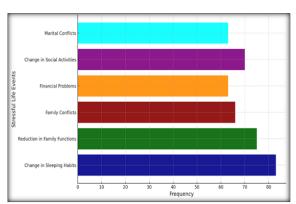


Figure 3: Stressful Life Events in Alcohol Relapse

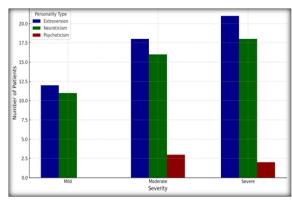


Figure 4: Severity of Alcohol Dependence by Personality Type

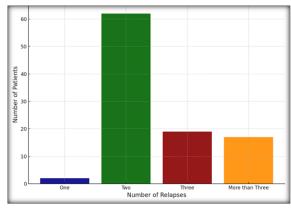


Figure 5: Distribution of Relapse by Frequency

**Table 1: Age Distribution of Study Participants** 

Age Range	No. of Patients	Percentage (%)
20-30 years	26	26
31-40 years	33	33
41-50 years	32	32
51-60 years	9	9

**Table 2: Socioeconomic Status of Study Participants** 

Socioeconomic Status	No. of Patients	Percentage (%)
Upper	10	10
Middle	30	30
Lower	60	60

Table 3: Stressful Life Events in Alcohol Relapse

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Stressful Life Events	Frequency	Percentage (%)	
Change in Sleeping Habits	83	96	
Reduction in Family Functions	75	87.2	
Family Conflicts	66	93	

Financial Problems	63	84
Change in Social Activities	70	100
Marital Conflicts	63	81

Table 4: Severity of Alcohol Dependence by Personality Type

Severity	Extroversion	Neuroticism	Psychoticism
Mild	12	11	0
Moderate	18	16	3
Severe	21	18	2

Table 5: Distribution of Relapse by Frequency

No. of Relapses	No. of Patients	Percentage (%)
One	2	2
Two	62	62
Three	19	19
More than Three	17	17

#### DISCUSSION

This cross-sectional study aimed to evaluate the role of personality traits, stressful life events, and sociodemographic factors in alcohol relapse among patients treated for alcohol dependence at a tertiary care hospital in Hyderabad, Telangana. The findings provide critical insights into the multifactorial nature of alcohol relapse, aligning with existing literature while highlighting unique associations in the Indian context.

#### **Sociodemographic Factors**

The majority of participants in this study were male (91%), reflecting the gender disparity in alcohol consumption and dependence reported in India. The mean age of the participants was 39 years (SD ±9.6), with most relapses occurring in the 31–50 age group. Mid-life stressors such as family and occupational responsibilities significantly contribute to relapse, as highlighted in previous studies (Yadav et al8., 2023) socioeconomic status was observed in 60% of participants, with financial problems emerging as a key stressor, consistent with findings by Pilowsky et al, [9] (2013), who noted that economic challenges exacerbate alcohol dependence and relapse risk.

## Sife Events

Stressful life events were found to play a crucial role in relapse. Common events included changes in social activities (100%), sleeping habits (96%), family conflicts (93%), and financial problems (84%). These findings align with those of Saha et al,<sup>[12]</sup> (2017) who identified interpersonal and financial stressors as significant contributors to relapse. Targeted psychorventions focusing on stress management and coping mechanisms may help mitigate these risks, as suggested by Reyes et al.<sup>[13]</sup> (2009).

Personality Traits Personality traits assessed using the Eysenck Personality Questionnaire revealed extroversion (55%) and neuroticism (45%) as predominant traits, with psychoticism being less common (5%). Extroversion was significantly associated with severe alcohol dependence (21%), emphasizing the role of sensation-seeking and impulsivity in relapse. These results are consistent

with findings by Adhvaryu et al,<sup>[11]</sup> (2022), who noted similar associations between personality traits and alcohol dependence. Neuroticism was linked to moderate and heightened stress sensitivity, corroborating Venkateswaran and Thirumalai,<sup>[10]</sup> (2024), who highlighted the vulnerability of neurotic individuals to relapse.

## **Severity of Alcohol Dependence**

Severity ce, measured using the SADQ, showed that 41% of participants had severe dependence, with a significant correlation between dependence severity and the number of relapses. Participants who initiated alcohol consumption before 20 years of age experienced more severe dependence and frequent relapses, as observed in studies by Ray et al, [14] (2023) and Saha et al, [12] (2017). Early preventive measures targeting this vulnerable poo reducing relapse rates.

## **Comparison with Existing Literature**

The findings are consistent with international and Indian studies, such as those by Yadav et al, [8] (2023) and Pilowsky et al, [9] (2013), which identified stress, early initiation of alcohol use, and personality traits as critical predictors of relapse. However, the high prevalence of financial and familial stressors in this s sociocultural dynamics in the Indian context, emphasizing the need for culturally tailored interventions.

# **Implications for Practice**

The study underscores the need for comprehensive relapse prevention strategies, including: Screening for high-risk personality traits. Addressing stressors through family counseling and financial planning support. Integrating stress management and coping skills training into treatment programs. Future research should explore longitudinal designs to establish causal relationships and assess the efficacy of targeted interventions.

## Limitations

The study was limited by its cross-sectional design, which precludes establishing causality. The use of convenient sampling may limit the generalizability of findings. Additionally, self-reported data on stress and alcohol use may be subject to bias.

#### **CONCLUSION**

This study highlights the significant role of personality traits, stressful life events, and sociodemographic factors in alcohol relapse among patients treated for alcohol dependence. Extroversion and neuroticism were the predominant personality traits associated with severe dependence and higher relapse frequency. Stressful life events, particularly changes in social activities, family conflicts, and financial problems, emerged as critical relapse triggers. Lower socioeconomic status and early initiation of alcohol use were also significant contributors to relapse. These findings highlights the need for comprehensive, individualized relapse prevention strategies that include personality assessment, stress management, family counseling, and socioeconomic support.

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