



PERSONALITY PROFILE AND RELAPSE IN PATIENTS WITH ALCOHOL USE DISORDERS

Psychiatry

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ABSTRACT

Background: Alcohol use disorder is characterised by craving, compulsion, tolerance, causing major obligation at work, school and home. Alcohol consumption has increased from 5.4 billion litres in 2016 to 6.5 billion litres by 2020 in India. One of the most important problem in recovery from alcohol use is relapse. 70 to 90% of patients with alcohol use disorder relapse within three months. (Mc Lellan et al., 2000). Relapse is defined as resumption of alcohol intake following a prolonged period of abstinence within a period of 3 months. Relapse can be better understood as resulting from interaction of individual family, social and treatment related factors. Allport defined personality as "the dynamic organization within the individual of those psychosocial systems that determine his unique adjustment to his environment". Adherence to psychosocial interventions, coping skills, attitude towards recovery and self perception of ability to withstand stress are important determinants which depend heavily on personality traits of individual. Alcohol relapse individuals frequently experience stress related to occupational, social, legal issues. **Objective:** To assess the prevalence of relapse in patients with alcohol use disorders and its relation with personality profile and sociodemographic variables **Methods:** The research design was prospective observational study to be conducted in 3 settings at 0, 3 months and 6 monthly intervals among relapse individuals with Alcohol use disorders attending either OP or IP of Psychiatry Department. **Results:** There is prevalence of relapse in Patients with Alcohol Use Disorders and was significant and statistically significant association was found between prevalence and relapse as well as with personality profile. No association was found between relapse and sociodemographic variables. **Conclusion:** These findings suggest that relapse is very prevalent in patients with alcohol use disorders. Personality Traits & stressful life events plays a major role in relapse. These findings adds on to the literature that considering personality traits and stressful life events is equally important while treating patients and treatment should be provided accordingly.

KEYWORDS

Alcohol use Disorders, Relapse, Personality Profile

INTRODUCTION

Alcohol Use Disorder is a complex, multifaceted cluster of behavioral, cognitive, and physiological symptoms. Alcohol consumption occurs in continuum, with considerable variability in drinking patterns among individuals. According to the Diagnostic and Statistical Manual of Mental Disorders, fifth edition, (DSM -5) (American Psychiatric Association, 2013) includes different severities of Alcohol Use disorders. These substances have in common is direct activation of brain reward systems, which for some individuals leads to excessive substance use and variety of social, medical and Psychiatric disorders.

Alcohol in beverage form is among the most widely used Psychoactive substances in the world [1]. Its pharmacological actions led including Panoply of Psychoactive effects have led societies throughout the world alcoholic beverages with variety of rules and regulations to prevent behavioral, social and psychiatric problems connected with alcohol misuse. Patterns of drinking and types of problems associated with alcohol misuse differ throughout the world (Room et al., 2002) [2]. Where as highest alcohol consumption rates are found in industrialized countries of European and North America, lowest in Islamic countries where use of alcohol is prohibited or discouraged. According to recent estimates from the World Health Organization's Expert Committee (WHO, 2020) [3], the evidence of alcohol's impact on health through its intoxicating, dependence-producing, and toxic qualities is extensive. Alcohol is estimated to cause a net harm of 3.7% of all deaths, and 4.4% of the global burden of disease, as measured in disability-adjusted life-years (DALYs) lost. Studies have shown that 1% of women aged 15 and over drink alcohol, compared to 19% of men in the same age group. This breaks up into 1.6% (rural) and 0.6% (urban) among women, and 19.9% and 16.5% respectively among men. [5] Once a diagnosis of Alcohol Use Disorder is given according to DSM-5, a specification is made concerning course. There are two course specifiers for Alcohol Use Disorder that describe the time frame and completeness of remission: early and sustained. Early remission indicates a period of three months without meeting DSM-5 criteria for Alcohol Use Disorder, except for craving. Sustained remission refers to 12 months without meeting DSM-5 criteria (other than craving).

Personality And Alcohol Relapse

Personality can be defined in totality of the person's emotional and behavioral traits that characterize their day to day living [6]. Allport defined personality as "the dynamic organization within the individual

of those psychosocial systems that determine his unique adjustment to his environment" [7]. Personality factors are considered to be one of the influencing factors in alcohol use have an association mediated by motives in consumption. Relationship with personality and alcohol relapse still remains as research topic of debate. However certain personality traits like Neuroticism, novelty seeking, low ego strength and high ergic tension are the variables commonly associated with alcohol relapse when compared with abstaining individuals. Research evidences show an association between drinking behaviour and personality traits. Adherence to certain psychosocial interventions, various coping skills, attitude towards recovery and self perception of the ability to withstand stress are the important variables which depend heavily on personality traits of the individuals. Relapse prevention and its treatment forms an integral part of management of alcohol dependence as relapse is considered to be a part of the chronic course of the illness. Relapse prevention strategies incorporate various psycho social interventions and specific coping skills training in the treatment modality. In a longitudinal study, the extraversion trait during adolescence predicted alcohol dependence at 30 years of age [7]. In the context of drinking motives, these traits predispose for experiencing the positive reinforcement effects of alcohol [8].

OBJECTIVES

1. To determine prevalence of relapse in a patient with Alcohol use disorder in tertiary care center
2. To assess the association between personality profile and relapse in patients with alcohol use disorder in a tertiary care center.
3. To assess the severity of alcohol use disorder in relapse in a patient with alcohol use disorder in a tertiary care centre

METHODOLOGY

RESEARCH QUESTION

- What are the personality traits associated with alcohol relapse in patients with alcohol use disorder?

AIM:

To assess the impact of personality profile on alcohol relapse in patients with alcohol use disorder in a tertiary care centre

OBJECTIVES:

- To determine the prevalence of relapse in a patient with alcohol use disorder in tertiary care centre.

- To assess the association between personality profile and relapse in patients with alcohol use disorder in a tertiary care centre.
- To assess the severity of alcohol use disorder in relapse in a patient with alcohol use disorder in a tertiary care centre.

Hypothesis:

- Prevalence of relapse in alcohol use disorder is high.
- There is no significant association between personality and relapse in a patient with alcohol use disorder.

Study Design:

This is an observational study conducted in Department of Psychiatry.

Study Population:

All diagnosed cases of Alcohol Use Disorder already diagnosed by a Consultant Psychiatrist using DSM -5 Criteria with a duration of 12 months attending IP or OP at Alcohol and Drug Deaddiction Clinic (ADDC), Department of Psychiatry.

Alcohol Use Disorder is defined as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 2 or more of the following, occurring at any time in the same 12-month period.

Study Setting:

Alcohol and Drug Deaddiction Clinic (ADDC), Department of Psychiatry, Pushpagiri Institute Of Medical Sciences And Research Centre, Tiruvalla, Kerala, India.

Sampling:

Sample Size: 85

Sampling Method: Sample size was calculated using proportion of Personality trait dominance (p) among alcohol use disorders from previous study (ISSN :2474-3631), confidence level (1- α) as 95%, absolute precision (d) as 10%.

The sample size obtained was 85 using the formula

$$n = (Z_{1-\alpha/2})^2 p(1-p) / d^2$$

Inclusion Criteria:

- Consecutive patients with a diagnosis of alcohol use disorder.
- Age: 20–65 years.
- Patients who are willing to give informed consent.

Exclusion Criteria:

- Other Debilitating Medical Illness :Organic brain disorders, MR, Other substance use disorder
- Patients not willing to give informed consent

Sampling Procedure

All consecutive patients who come to the Department of Psychiatry and who satisfy the inclusion and exclusion criteria were included in the study till sample size was achieved.

Study Tools:

- Semistructured Performa containing information regarding age, sex, education, occupation, religion, marital status, type of family, family history of alcohol dependence were obtained.
- The Temperament and Character Inventory Scale to assess the personality

Methods Of Data Collection :

- Sample collection started after receiving Institutional Ethics Committee approval on 25/Feb 2021. After explaining the purpose of study and ensuring confidentiality & lack of any expenses to be incurred by patients. Patients satisfying inclusion and exclusion criteria and with a diagnosis of alcohol use disorder according to DSM 5 by a consultant will be recruited for the study by consecutive sampling after taking an informed consent. They were interviewed using Semistructured Performa will be used to collect sociodemographic details and alcohol related factors
- Patients personality profile will be assessed by Temperament and character inventory scale

Outcome Variable:

Prevalence of Personality disorder in Relapse among alcohol use

disorders.

Other Study Variables:

- Sociodemographic variables
- Severity of Alcohol Dependence

Statistical Analysis:

Quantitative variables will be expressed as mean and standard deviation and categorical variables as frequency and percentage. Association of outcome variables (personality profile, stressful life events) with socio-demographic and illness related variables will be done using Chi-square test/ Fisher's exact test. A p value of <0.05 will be considered as statistically significant.

Ethical Consideration:

The study protocol was submitted to the Institutional Review Board and Ethical Committee for approval which was obtained on February 25 /2021. Written informed consent was obtained from the individuals participating in the study. Confidentiality and anonymity was strictly maintained by allotting a subject identification number to each participant instead of their names. Expenses were borne by the investigator.

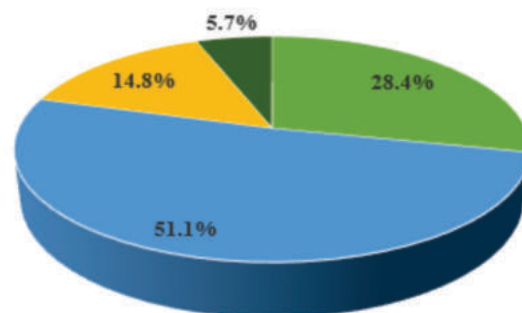
RESULTS

This study was conducted among 105 patients attending Alcohol and Drug Deaddiction Clinic in Dept of Psychiatry-Pushpagiri Institute Of Medical Science and Research Centre, with a diagnosis of alcohol use disorder according to DSM 5. A drop out of 15 patients are seen.

Table 1: Distribution of study population based on age

Age Group (Years)	Frequency	Percentage
≤ 30 years	25	28.4
31-40 years	45	51.1
41-50 years	13	14.8
>50 years	5	5.7
Total	88	100.0

Age distribution of study population



■ ≤ 30 years ■ 31-40 years ■ 41-50 years ■ >50 years

Mean age of the study population was 35.59 years with a standard deviation of 7.346 years (22-58 years). 51.1% of the study population belonged to 31-40 year group

Table 2: Distribution of study population based on gender

Gender	Frequency	Percentage
Male	85	96.6
Female	3	3.4
Total	88	100.0

Table 3: Distribution of study population based on marital status

Marital Status	Frequency	Percentage
Divorcee	17	19.3
Married	33	37.5
Separated	25	28.4
Single	10	11.4
Widowed	3	3.4
Total	88	100.0

37.5 % of the study population were married while 28.4 % were separated and 19.3% were divorced.

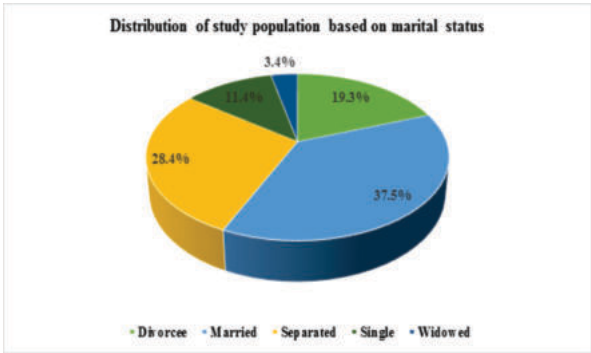


Table 4: Distribution of study population based on education

Education level	Frequency	Percentage
Diploma	13	14.8
Graduate	18	20.5
Primary	23	26.1
Secondary	34	38.6
Total	88	100.0

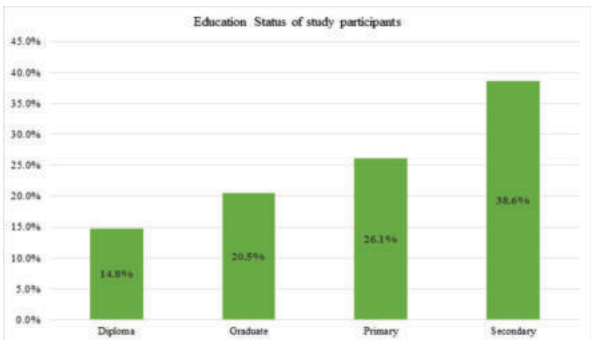


Figure 3: Bar diagram showing distribution of study population based on education.

Table 6: Distribution of study population based on occupation

Occupation	Frequency	Percentage
Professional	20	22.7
Semiskilled	38	43.2
Skilled	30	34.1
Total	88	100.0

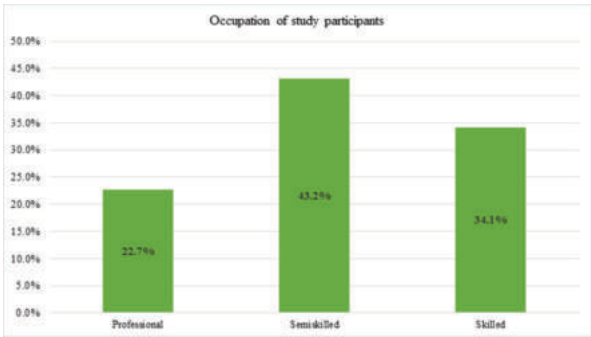


Figure 4: Bar diagram showing distribution of study population based on education.

Table 5: Distribution of study population based on family history of alcohol consumption

Family history of alcohol consumption	Frequency	Percentage
Present	68	77.3
Absent	20	22.7
Total	88	100.0

Table 6: Distribution of study population based on status of anti-craving drug intake

Status of anti-craving drug intake	Frequency	Percentage
Taking	9	10.2

Not taking	79	89.8
Total	88	100.0

Table 7: Distribution of study population based on personality traits

Personality trait	Frequency	Percentage
Harm avoidance	52	59.1
Novelty seeking	18	20.5
Reward dependence	7	8
Self-directedness	6	6.8
Persistence	3	3.4
Cooperativeness	2	2.3
Total	88	100.0

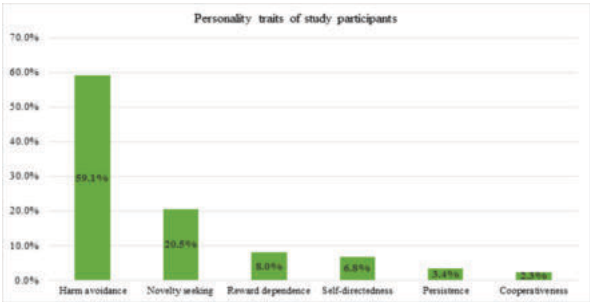


Figure 5: Bar diagram showing distribution of study population based on personality traits

DISCUSSION

- Relapse to Alcohol Dependence is one of the most challenging situation in rehabilitation of patient[9]. Despite concerted efforts in prevention ,relapse rates could be as high as more than 90% within six months of quitting Alcohol . Studies suggested that patients who has received treatment within 30 days of completing detoxification were ten times less likely to relapse, while those completing detoxification alone are getting relapsed at the rate of 65–80%
- However there has been considerable variation in relapse rates based on age ,sex, family history of dependence ,severity of dependence ,demographic profile ,personality traits and other socioeconomic reasons[10] .Considering the relevance of understanding the relapse rates and factors governing for the formulation of relapse ,the present study was carried out with an aim to assess various factors associated with relapse in patients with alcohol dependence which was in agreement with Mattoo et al, Kumar et al and Sharma et al mean age of relapse patients to be about 30 years[11,12,13]. On the other hand, Nagaich et al in their study had all the patients >35 years of age.21 The findings in fact showed that there is extreme variability in age of relapse and dependent on age of patients attempting to quit.As a part of sociodemographic profile of relapse patients majority of the study participants were male (96.6%) and 37.5 % of the study population were married 62.5 % of the study population were Christians, 31.8% were Hindus and 5.7% were Muslims.It is noted that India is diverse nation with cultural variations among ethnic, religious and linguistic groups and there are major differences between urban and rural areas. One cannot accurately generalize the drinking patterns of all Indian ethnic and cultural groups based on the findings from just one of the groups.
- In this study family history of substance abuse was positive n=68 77.3% cases. Family history of substance abuse is a well-known risk factor for relapse.Level of family support provided plays major role in relapse wherein 37.5 % of the study population were married while 28.4 % were separated and 19.3% were divorced.
- There are various predictors of relapse including personality profile, life events, mood states, the existence of self- efficacy, coping behaviours, social support resources and intention to avoid
- Certain High risk situations (Cummings et al. 1980; Jones and McMahon, 1994; Miller et al. 1996;Isenhart, 1997). Among the variables, personality receives attention, as it relates to the prognosis of alcohol dependence. Rounsevell et al. (1987), in his study on alcohol relapse concludes that though all personality disorders have been linked to poor treatment outcome in alcoholics, the antisocial personality disorder is especially strong predictor of early relapse and poor outcome.
- Predicting relapse to substance abuse as a function of personality dimensions was studied by Fisher et al (1998), among 108 alcohol-

- dependent patients under treatment using NEO-five personality inventory.
- Sellman et al. (1997), explored the relationship between the components of Cloninger's tridimensional model of temperament using the tridimensional personality questionnaire (TPQ). When compared with those who did not relapse after 6 months of treatment, subjects who relapsed had lower TPQ persistence scale scores and lower obsessional scores. Works by Janowsky et al. (1999), on alcohol relapse patients, showed increased TPQ novelty seeking scores. Low TPQ persistence scales were related to short-term relapse.

Strength And Limitations

- Few of studies in India which has studied on personality traits and causes for relapse.
- The study population did not include other multiple substance use disorders.
- The study was done only with male patients, female population was not 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 general population.
- The confounding interaction between personality and severity of alcohol not assessed.

CONCLUSION:

- This study highlights that personality trait deviations of the alcohol relapse patients turned out to be significant when compared to abstinent individuals. This finding indicates some degree of association between these traits and alcohol relapse. These findings may have significance on the interventional strategies against alcohol relapse. For example, in planning interventional strategies, those with low superego strength and low frustration tolerance may benefit from coping skills program. This may help in conserving and effectively utilizing the resources available. It helps to predict at risk group for relapse and hence to plan effective strategies for early identification and treatment of relapsing individuals. Wide spread prevalence of relapse in almost all sectors of society, the factors leading to it. Earlier age of onset, longer duration of alcohol dependence, higher amount of alcohol consumed per day, and severity of alcohol dependence appeared to be significantly associated with relapse. The prevalence of relapse after successful detoxification and rehabilitation was high and the risk factors identified included family conflicts, psychological stress, peer influence and socio-economic status such as availability and accessibility of drugs, peer group influences and lack of assertiveness. Thus, the substance use management should not be limited to detoxification only but emphasis should be given longer follow up in order to prevent relapse. The Ministry of Health should recommend the evaluation of the effectiveness of existing relapse prevention strategies and their successful implementation. Organization of several sensitization came longer follow up in order to prevent relapse. The Ministry of Health should recommend the evaluation of the effectiveness of existing relapse prevention strategies and their successful implementation. Organization of several sensitization campaigns for awareness of the burden of alcohol abuse, relapse after treatment and its impacts to the people's health and to the community at large, should be done to adequately raise awareness among the general population. Further studies should be carried out on the prevalence of relapse and factors associated to substance use disorders at the national and international level and this information gathered should be utilized by clinicians in raising awareness, as well as among alcohol abusers to bring about necessary change.

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