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A Study of Prevalence of Personality Disorder in Alcohol Dependent Patients

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doi: [10.33472/AFJBS.6.6.2024.6923-6931](https://doi.org/10.33472/AFJBS.6.6.2024.6923-6931)**ABSTRACT:**

Introduction: According to the World Health Organization, alcohol is the most widely consumed psychoactive substance in the world. There is high rate of alcohol dependence in general population. Alcohol use generally starts during adolescence and tends to escalate in adulthood. Alcohol dependent patients are having high rate of co morbid personality disorders. Our current study was planned to find out the prevalence of personality disorder in alcohol dependent patients.

Method – A cross sectional study was carried out on 266 patients of alcohol dependence with age between 18-55 years. Who were admitted at department of Psychiatry, SMS Medical College, Jaipur after qualifying on the inclusion and exclusion criteria. All data was analyzed by frequencies.

Results – In our study we found that (52.3%) of patients had co morbid personality disorder. Most common types of personality disorder we found in this study were Anxious (15.4%), Dissocial (10.2%) and dependent (7.1).

Conclusion – Almost half of the patients with alcohol dependence were having associated co morbid personality disorder and most common type of personality disorder we found was anxious and second most was dissocial type.

Keywords: Alcohol dependence, Personality disorders, IPDE.

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1. Introduction

According to the World Health Organization, alcohol is the most widely consumed psychoactive substance. In the world International studies report alcohol consumption prevalence rates ranging from 3.9% to 51.6%.^{1,2} Alcohol abuse generally starts during adolescence and tends to escalate in adulthood. In India alcohol has been used from ancient times. Increasing consumption of alcohol has been reported from India only recently as part of social changes occurring in the context of globalization^{3,4} the pattern of drinking in India has undergone a change from occasional and ritualistic use to being a social event. Today, the common purpose of consuming alcohol is to get drunk.⁵

Alcohol dependence is a common global disease affecting a large portion of the population worldwide. Alcohol dependence is a chronic condition with disastrous effects.⁵ According to a nationally representative sample survey of young and adult, alcohol dependence has affected 7–10% in this population. This problem is a challenge for the public health.

Alcohol dependence is defined as a chronic, progressive, potentially fatal disease characterized by physical dependence on alcohol, tolerance to its effects, and withdrawal symptoms when consumption is reduced or stopped, drinking behavior that becomes habitual and takes priority over other activities, and awareness of feeling compelled to drink, and a reinstatement of this drinking pattern after abstinence.⁶

The interest in the co-occurrence of personality disorders among alcohol abusers is fuelled by the idea that studying co morbidity will lead to a better understanding of the etiology of both alcohol use and personality disorders and their interaction. Understanding co morbidity is also thought to be of paramount interest for treatment planning and the development of more effective strategies for treatment of both alcohol abuse and personality disorders. The co-occurrence of alcohol abuse & personality disorder has been shown to be associated with greater substance abuse and psychiatric morbidity & an increased risk of suicide, hospitalization, repeated treatment, admission; over utilization of medical care, employment & legal problems, victimization or perpetration of abuse as well as HIV infection. The presence of co-morbid Personality disorder appears to be associated with failure to complete treatment for substance abuse & poor treatment outcome. Personality disorders are approximately four times more prevalent in psychiatric and addicted patients than in the general population.⁷ Patients admitted with drug and alcohol problems, prevalence for personality disorders have been reported to be over 70%.^{8,9} Specific personality disorders may show elevated rates of substance use disorder compared with others, and some personality disorders may show higher rates of co morbidity with abuse and/or dependence of specific substances. The high rate of alcohol use disorders among individuals with Antisocial and Borderline personality disorders is robust.¹⁰ Both alcohol-related disorders and personality disorders are difficult to treat, individuals with co morbidity represent a challenging population for treatment providers. When there is pathology of personality this is more often associated with difficulties in the therapeutic relationship, poorer compliance and increased drop-out rates. Alcohol-dependent subjects affected by a co morbid personality disorder are reported to more likely be high users of the healthcare system,¹¹ to receive less alcoholism-specific treatment⁷ and to have a more severe course of alcohol dependence than non-co morbid alcohol-dependent individuals.^{12,13}

In this study we aimed to find out the prevalence rate of personality disorder in alcohol dependent patients.

2. Methodology

This was the cross sectional inpatient study carried out upon 266 patients of alcohol dependence admitted at department of Psychiatry, SMS Medical College hospital, Jaipur. We have included only those patients who were between age of 18- 55 years of both sex, meeting criteria of ICD-10 for alcohol dependence, literate enough to understand and perform the questionnaires and willing to participate in the study. We excluded those patients who had severe disorder either in terms of behavior, communication or language that will make the interview almost impossible, history of any substance induced psychotic illness and history of other substance abuse except nicotine since last three months.

Tools for study:

IPDE BY ICD-10: The purpose of this questionnaire was to learn what type of person during the past five years. Total 59 questions were included, answered in TRUE or FALSE-

whichever is more likely to be correct for screening. Then applied IPDE module objectively to identify specific personality disorders in alcohol dependence patients. There is no time limit about the answer to any single questions.

All descriptive data was analyzed by frequencies. All statistical analysis was done using SPSS ver.21 for windows 7, IBM Corp.

3. Results:

In our study we analyzed that most of the patients were males (97.4%), married (80.5%), educated above sr. secondary (79.7%), Hindu by religion (93.6%) and belongs to nuclear-extended family (77.8%). Majority patients were skilled/semi-skilled/unskilled, Farmer/Laborer workers (35.3%), earning Rs. \geq 15000 per month (57.1%) and 66.6% belongs to age $>$ 30 years. All patients studied was having gradual onset of illness, and in most of patients age of onset was \leq 25 years (84.6%) and most of them was admitted through OPD(90.2%). Mean total duration of illness in alcohol dependents was 11.23 years. More than half (57.9%) was having history of morning drinking, was untreated previously and who treated previously (71.8%) was having good compliance. In our study we found that (52.3%) of patient with alcohol dependence was having co morbid personality disorders. And most common type of personality disorder was Anxious (15.4%) and second Dissocial type (10.2%).

Table-1: SOCIODEMOGRAPHIC PROFILE

SOCIODEMOGRAPHIC PROFILE		Frequency	Percent
Age (in years)	\leq 30 years	89	33.5
	31-36 years	93	35
	37+ years	84	31.6
Sex	Male	259	97.4
	Female	7	2.6
Marital status	Married	214	80.5
	Unmarried	51	19.2
	Widowed/Separated	1	.4
Occupational status	Unemployed	12	4.51
	Retired	15	5.64
	Professional	67	25.19
	Businessman	78	29.32
	Farmer/Labourer	94	35.34
Educational status	Upto middle	54	20.3
	Middle to Sr. Secondary	97	36.47
	Graduate/ Postgraduate	115	43.23
Monthly income (in Rupees)	Upto Rs.6000	53	19.92
	Rs.6001-15000	61	22.93
	$>$ Rs.15000	152	57.14
Religion	Hindu	249	93.61
	Muslim	17	6.39
Family type	Nuclear	26	9.8
	Nuclear- extended	207	77.8
	Joint	33	12.4

Locality/Residence	Urban	138	51.88
	Rural	128	48.12

Table-2: CLINICAL PROFILE

CLINICAL PROFILE		Frequency	Percentage
Type of onset	Gradual	266	100.0
Age at onset (in years)	<= 25 years	225	84.6
	26+ years	41	15.4
Mode of admission	OPD	240	90.2
	Emergency	26	9.8
Previous attempt at de addiction	Yes	135	50.8
	No	131	49.2
Family history of AUD*	Yes	93	35.0
	No	173	65.0
Frequency of >5days per week	Yes	90	33.8
	No	176	66.2
History of complicated withdrawal	Yes	75	28.2
	No	191	71.8
History of morning drinking	Yes	154	57.9
	No	112	42.1
Past contact for treatment	No	135	50.8
	Yes	131	49.2
Treatment status	Untreated	135	50.8
	Received	17	6.4
	Partially treated	114	42.9
Compliance	Poor	75	28.2
	Good	191	71.8

Table-3: IPDE

Scale used	Type of personality	Frequency	Percent
IPDE	Paranoid	4	1.5
	Schizoid	13	4.9
	Dissocial	27	10.2
	Emotionally unstable- impulsive	10	3.8
	Emotionally unstable- borderline	8	3.0
	Histrionic	5	1.9
	Anankastic	12	4.5

	Anxious	41	15.4
	Dependent	19	7.1
	No personality disorder	127	47.7

4. Discussion:

In current study of alcohol dependent patients, most of them (66.6%) were above the age of 30 years (table-1). Most of the patients were males (97.4%), and only seven female patients were in our study. This was not consistent with findings of previous studies. Although studies in Asian countries, prevalence of alcohol dependence is significantly more in males. This was a skewed finding in our study, the most probable reason for this skew due to the lack of awareness, greater stigma attached, and negative cultural attitudes that are intensely guilt-provoking and discriminatory about the usage of illicit substances by females, may prevent females from spontaneously reporting such details^{14,8} In this study we found that most of the patients seeking treatment were married (80.5%). One reason for seeking treatment could be pressure from spouse and family, which led to the high proportion of married patients in the sample, a similar scenario is replicated in other Indian studies.¹⁶ Most of the patients were educated above sr. secondary (79.7%) and out of them, maximum were graduate or post-graduate. There was a positive association between alcohol consumption and education status, which may be due to better awareness in educated patients about availability of hospital based treatment for alcohol dependence and lesser educated groups also socially accept and promote alcohol consumption, which does not give it the status of an illness that may need treatment. Less educated groups are also more likely to resort to informal and non-allopathic treatments, and, hence are less present in hospital settings. Most of the patients in our study were belonged to Hindu by religion (93.6%) because catchment area of the hospital in which study was conducted is dominated by Hindu community. Another possible reason for this difference was due to religious factor of non-acceptance of alcohol in the religious teachings of Islam. This scenario also replicated in other Indian studies.¹⁷ Most of the subjects of this study were living in nuclear-extended families (77.8%). Since in this study, almost half the patients belonged to rural background, where it is a social norm to live in a joint or nuclear-extended family, compared to the scenario in the western countries. This also beneficial for alcoholics who attempt to quit, because family support makes quitting alcohol and maintaining abstinence easier. Similar findings were also supported by many past Indian studies.¹⁷ Majority of patients in this study were skilled/semi-skilled/unskilled, Farmer/Labour class workers(35.3%).The increase in use of alcohol among people from low socioeconomic background may be because these individuals are mostly living away from home for earning, so they are exposed more to people from different social and cultural background, have poor family support and have easy accessibility to substances making them more prone to becoming dependent on alcohol.^{18,19} In this study, most of the patients were admission through OPD (90.2%) (Table-2). Patients who were admitted to de-addiction ward through OPD basis were in different stages of change and many of them were highly motivated to quit alcohol. The main reasons for seeking treatment among the substance abusers were social and medical. But they could not abstain while being in community, either due to severe withdrawal symptoms or craving or unprotected environment. All patients studied were having gradual onset of alcohol consumption(100%) because alcohol dependent patients typically starts alcohol with small quantity and occasional consumption, either under peer pressure or as an experiment and they gradually become dependent.²⁰

In current study we found that (52.3%) of patients had co morbid personality disorder (table-3). The prevalence rate similar to this study was also found in many other studies. In clinical settings, the rates of personality disorders among alcoholics range from 22% to 78%^{21,22} As with previous research, approximately 60% of the alcohol dependent inpatients had an additional diagnosis of at least one personality disorder.²³ This rate is significantly higher than in epidemiologic samples.¹⁴ like the NESARC sample but within the personality disorder prevalence range of 25 to 93% of other inpatient samples⁸ with most estimates around 60%.¹⁷ Most common types of personality disorder we found in this study were Anxious(15.4%), Dissocial(10.2%) and dependent (7.1). Previous research found histrionic (34%), dependent (29%), avoidant (19%) and borderline personality disorder (17%) to be the most common diagnosis.^{15,23} Variations in rates of specific personality disorder across studies might be due to differences in specific sample characteristics e.g. inpatient vs. outpatient vs. epidemiologic,⁶ assessment methods and setting of addiction treatment facilities.²¹ In most of the cases we found only one personality disorder, similar to the previous study.²¹ Where 78% of the subjects had at least one personality disorder and the average number of personality disorders was 1.8 per patient.^{21,27} This small difference may be due to use of different diagnostic tool for diagnosis of personality disorders in previous studies. In this study we found more numbers of cases with dissocial personality disorder(10.2%), which was higher than the general population rate of 3.6% found in the NESARC²⁸ but same in range of 7% to 23% rate reported in most other clinical samples of alcoholics.³ This finding was also supported in previous several research studies that reported an earlier onset and more severe characteristics of alcohol dependence in personality disordered individuals.^{3,6} The variation of prevalence rates and type of personality disorders in alcohol-dependent individuals can be accounted for by a number of reasons, which can be classified as either sampling factors, diagnostic criteria applied or assessment procedures used.²⁷ In general, findings suggest that in inpatient samples there is higher occurrence of personality disorders than either outpatient or non-patient samples.²⁷ In addition, self-report questionnaires like MCMI and fully structured interviews like DIS, produce a higher prevalence than semi-structured interviews like Structured Clinical Interview (SCID-II) for clinical assessments.

In this study we concluded that alcohol dependent patient was having high rate of co morbid personality disorder then general population, most common types of personality disorder we found in this study were Anxious(15.4%), Dissocial(10.2%) and dependent (7.1).

We also have some limitations in our study like sample size being culture and area-specific so results could not be generalized, cross-sectional approach results the possibility of incomplete sample matching, though we have ruled out the co-morbid psychiatric disorders in our patients but subclinical anxiety symptoms could be a confounding factor, inconsistencies may be related to inadequate management of confounding variables, study was primarily based on a treatment seeking population, which is possibly different from the community where substance use is still not thought to be a disease, but only a social or legal problem, the most important limitation is that the present study was cross-sectional in design thus, there was no scope for follow-up of the study subjects for any change in the pattern of drinking habits and clinical signs and another limitation of the present findings is that the structure of the relationship between personality pathology and alcohol-use disorders may vary as a function of gender and ethnicity.

5. References:

1. Maldonado-Devincci AM, Badanich KA, Kirstein CL.(2010) Alcohol during adolescence selectively alters immediate and long-term behavior and neurochemistry. *Alcohol*; 44(1):57-66.

2. Wu LT, Schlenger WE, Galvin DM.(2003) The relationship between employment and substance use among students aged 12 to 17. *J Adolesc Health* ; 32(1):5-15.
3. Bottlender M, Preuss UW, Soyka M:(2006) Association of personality disorders with type A and type B alcoholics. *Eur Arch Psychiatry Clin Neurosci*; 256: 55–61.
4. Benegal V, Nayak M, Murthy P, Chandra P, Gururaj G.(2005) Women and alcohol in India. In: Obot I, Room R (Eds). *Alcohol, gender and drinking problems. Perspectives from low and middle income countries*. Geneva, World Health Organization.
5. Kumar MS, Sharma M:(2007) *Women and Substance Use in India*.
6. Goldstein RB, Dawson DA, Compton WM, Grant BF:(2007) Antisocial behavioral syndromes and DSM-IV alcohol use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Alcohol Clin Exp Res*; 31:814–828.
7. Verheul R, van den Brink W, Hartgers C: (1995) Prevalence of personality disorders among alcoholics and drug addicts: an overview.*Eur Addict Res*; 1: 166–177.
8. Murthy P.(2013) *Alcohol, drugs and women: high time to act. One India, One People*, vol 1-2.
9. Singh SK, Schensul JJ, Gupta K, Maharana B,(2010) Determinants of alcohol use, risky sexual behavior and sexual health problems among men in low income communities of Mumbai, India. *AIDS Behav* ;14 (Suppl1):S48–60.
10. Poldrugo F, Forti B (1988) Personality disorders and alcoholism treatment outcome. *Drug Alcohol Depend*, 21: 171–176.
11. Di Sclafani V, Finn P, Fein (2007) Psychiatric comorbidity in long-term abstinent alcoholic individuals. *Alcohol Clin Exp Res*; 31:795–803.
12. Mohan D, Chopra A, Ray R, Sethi H.(2001) Alcohol consumption in India: a cross-sectional study. In: Demers A, Room R, Bourgault C (Eds). *Surveys of drinking patterns and problems in seven developing countries*. Geneva, World Health Organization, pp 103-114.
13. Grant BF, Hasin DS, Stinson FS, Dawson DA, Chou SP,(2004) Prevalence, correlates, and disability of personality disorders in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*. 65:948–958.
14. Das SK, Balakrishnan V, Vasudevan DM.(2006) Alcohol: its health and social impact in India. *The National Medical Journal of India*,19: 94-99.
15. Klaich, K. (1996). *The daily experiences of women with alcoholism teaching tales about women's process*. Unpublished doctoral dissertation, University of Washington, Washington.
16. Nishanth J H, Harish M Tharayil (2014) Analysis of patients admitted with alcohol dependence syndrome in a tertiary care hospital in a calendar year *Health Sciences*;1(3):JS001A.
17. Seth R, Kotwal A, Ganguly KK.(2005) Street and working children in Delhi, India, misusing toluene: An ethnographic exploration. *Subst Use Misuse*;40(11):1659–1679.
18. Waraich BK, Chavan BS, Raj L.(2003) Inhalant abuse: A growing public health concern in India. *Addiction*;98(8):1169.
19. Hesselbrock VM, Hesselbrock MN.(2006) Are there empirically supported and clinically useful subtypes of alcohol dependence? *Addiction*,101 (Suppl 1):97-103.
20. DeJong CA, van den Brink W, Hartefeld FM, (1993) Personality disorders in alcoholics and drug addicts. *Compr Psychiatry*; 34:87–94.
21. Driessen M, Veltrup C, Wetterling T:(1998) Axis I and Axis II comorbidity in alcohol dependence and the two types of alcoholism. *Alcohol Clin Exp Res* 22(1): 77-86.
22. Fernandez-Montalvo J, Landa N, Lopez-Goni JJ, et al. (2006) Personality disorders in

23. GANESH KUMAR, S.(2013)Prevalence and Pattern of Alcohol Consumption using Alcohol Use Disorders Identification Test (AUDIT) in Rural Tamil Nadu, India. *Journal of Clinical & Diagnostic Research* Vol. 7 Issue 8, p1637-1639. 3p.
24. Echeburúa E, De Medina RB, Aizpiri J. (2007) Comorbidity of alcohol dependence.
25. Verheul R, Brink W, van den, Geerlings PJ(1999) A three-pathway psychobiological model of craving for alcohol. *Alcohol* 34: 197-222.
26. Verheul R, Hartgers C, Van den Brink W, Koeter MW(1998): The effect of sampling, diagnostic criteria and assessment procedures on the observed prevalence of DSM-III-R personality disorders among treated alcoholics. *J Stud Alcohol* 59(2): 227-236.
27. Gururaj G, Murthy P, Girish N, Benegal V.(2011) Alcohol related harm: Implications for public health and policy in India, Publication No. 73. Bangalore, India, National Institute of Mental Health And Neuro Science (NIMHANS).
28. Compton WM, Conway KP, Stinson FS, Colliver JD, Grant BF.(2005) Prevalence, correlates, and comorbidity of DSM-IV antisocial personality syndromes and alcohol and specific drug use disorders in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*. 66:677–685.
29. Hales, D., & Hales, R.E. (1995). *Caring for the mind: The comprehensive guide to mental health*. New York: Bantam Books.
30. Moran P:(2002) Dangerous severe personality disorders – bad tidings from the UK. *Int J Soc Psychiatry* 181: 62-66.
31. Pettinati HM, Pierce JD, Belden PP, Meyers K:(1999) The relationship of Axis II personality disorders to other known predictors of addiction treatment outcome. *Am J Addict* 8: 136-147.
32. Sher KJ, Trull TJ, Bartholow BD, Vieth A:(1999) Personality and alcoholism: issues, methods and etiological processes. In: *Psychological Theories of Drinking and Alcoholism*. Leonard KE, Blane HT (eds.). New York: Guilford Press, pp. 54-106.
33. Stewart SH: (2007) Alcoholics in acute medical settings have increased risk for other drug, mood, and personality disorders. *Int J Psychiatry Med*;37: 59–67.
34. Verheul R :(2001) Co-morbidity of personality disorders in individuals with substance use disorders. *Eur Psychiatry* 16: 274-282.
35. Waraich BK, Chavan BS, Raj L.(2003) Inhalant abuse: A growing public health concern in India. *Addiction*;98(8):1169.