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Personality Traits and Disorders among Psychiatric In-Patients with Alcohol Dependence Syndrome in a Tertiary Care Hospital in Eastern Nepal

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Abstract

Background: Alcohol Dependence Syndrome (ADS) is associated with, predisposed and influenced by the presence of various personality traits and disorders. There is a scarcity of its literature from our parts.

Objectives: To intensively look into various personality traits and personality disorders present in the patients admitted with Alcohol Dependence Syndrome in psychiatric ward of a tertiary care hospital.

Materials and Methods: This is a hospital based cross-sectional study, conducted among 54 (calculated sample size) patients of ADS admitted in psychiatry ward of BPKIHS, a tertiary care hospital in eastern Nepal in Dharan. Purposive sampling technique was adopted to enroll the subjects. Respondents were interviewed using the Personality Trait Inventory for the assessment of personality traits and the International Personality Disorder Examination for personality disorders.

Results: Majority of ADS in-patients were married, male of the age groups (30-39) and (40-49) years. Among the traits, Cyclothymia trait was present in the highest number of patients. Personality Disorder was present in 52% of ADS in-patients in which most common was Anankastic, followed by Anxious personality disorder.

Conclusion: Personality traits and personality disorders was a common occurrence, and hence, need to be assessed for effective management of individuals with ADS.

Keywords: alcohol dependence syndrome; personality traits; personality disorders; psychiatry in-patients

Introduction

Personality is the overall quality within a person or characteristics of a person's behavior or the both. Gordon Allport (1937) defines it as 'Dynamic organization within individual of those psychophysical systems that determine his/ her unique adjustment to his/ her environment'. Traits are characteristics that lead people to behave in more or less distinctive and consistent ways across situations. It is the product of learning based on a hereditary foundation [1]. Many researches have shown that alcohol use disorder is commonly seen in persons with personality disorders; four times more prevalent than in general population. Combination of personality disorder and personality traits like impulsivity/ disinhibition, affective neuroticism/ negative affectivity may account for having greater chance of Alcohol Use Disorders, dependence in future and also affecting the outcome of treatments [2,3]. Personality processes must be integrated to forward our understanding of alcoholism. This information could be helpful in alerting the clinician to potential obstacles and difficulties early in therapy, thereby increasing treatment compliance and guiding treatment decisions based on the patient's personality pattern [4,5]. On the basis of personality traits, Cloninger has divided alcoholism into two types [3]:

Type I Alcoholics: Characterized by passive dependent traits, high harm avoidance, low novelty seeking and high reward dependence.

Type II Alcoholics: Characterized by high novelty seeking, low harm avoidance, antisocial traits and little guilt.

Personality traits play an important role in the development of addictive behavior such as alcohol dependence and associated disorders [6]. Thus, it is said that personality traits have been associated with

higher drinking, greater risk of relapse and more severe withdrawal symptoms [3]. Though a few studies have looked into this issue of personality in alcohol problems [7], we lack intensive data in our Nepalese context, making the ground of this study.

Objective

To intensively look into various personality traits and personality disorders present in the patients admitted with Alcohol Dependence Syndrome in psychiatric ward of a tertiary care hospital.

Methods and Materials

It is a hospital based descriptive study conducted among psychiatry in-patients with Alcohol Dependence Syndrome. We enrolled a total of 54 cases which was sample size calculated based on the study: 'Psychiatric Comorbidity in Cases Admitted for Alcohol Dependence. Delhi Psychiatry Journal. 2009 by Shakya DR et al" where 48% had personality problems [7].

Sample size:

The sample size calculation was done using the formula: n = Z2 X p(1-p)/L2
Where, Prevalence (p) = 48%, Compliment of prevalence (q) = 100- 48 = 52%
Z = 1.96 in CI 95 % and Relevant Precision of 20 % of prevalence, value kept in formula
n = Z2 X p(1-p)/L2
Here P=48%, q = 100-p = 52%
L=20% x p = 0.2 x 48 = 9.6
Keeping the value in the given formula,
n = (1.962 x 48 x 52) / 9.62
= (3.84 x 48 x 52)/92.16
= (3.84 x 2496) / 92.16
= 9584.64 / 92.16
= 104
Now, adding the 10% of estimated sample size,
10% x 104 = 10.4
So, the estimated sample size = 104 + 10.4
= 114.4
= 114
Hence, the estimated sample size (n) = 114
Corrected Sample Size:
Since the last year, admitted ADS cases were 104 (including repeated admission of a
single case), total new cases were around 70, and the estimated sample size is greater
than the last year visit, sample size was estimated by using corrected sample size
method.
n = calculated sample size
1 + calculated sample size
Estimated Population
114/[1+114/104]
= 54
Thus, total sample size = 54 taken over the period of one year.

Procedure:

With Purposive sampling method, ADS patients admitted in psychiatry ward of BPKIHS in one year were enrolled in this study.
A written informed consent was taken before enrollment of the subject. Demographic profiles (age, sex, ethnicity, occupation, education and geographical areas, etc.) were documented in a semi-structured proforma. Psychiatric comorbidity was recorded as per detailed psychiatric assessment based on the ICD-10. All enrolled subjects were assessed with the application of the Personality Trait Inventory (PTI) and the International Personality Disorder Examination (IPDE).

Materials/ Instruments

Semi-structured proforma was used to record all information related to socio-demographic profiles and clinical information. Personality Trait Inventory for assessment of personality traits. International Personality Disorder Examination (IPDE) for assessment of personality disorders. International Classification of diseases and Infirmity (ICD-10) for psychiatric diagnosis. We used personality trait inventory consisting of 90 items to look for different traits in alcohol dependent cases. Measurement of each trait was based on the questions of 10 items assigned for those particular 9 traits. As per the questions based on the inventory: Activity trait refers to an individual's tendency as outgoing, ambitious, rigidly organized, highly status-conscious, impatient, anxious, proactive, and concerned with time management. They are often high-achieving 'workaholics'. Superego are those who generally have high internal controls or standards. Introversion is withdrawn and reclusive; an introverted person is often cautious and secretive in dealing with others. Dominance trait reflects a person's tendency to be sociable, outgoing, active and assertive [8].
For Personality disorder, we used the IPDE which is a semi structured clinical interview, used as an evaluation tool to assess the personality disorders in ICD-10 and DSM IV. The IPDE has two manuals to assess personality disorders, one according to the

DSM-IV and the other according to the ICD-10. Both of these classificatory systems are overlapping but different. There is difference in nomenclature as well as in diagnostic criteria. The ICD-10 has Anankastic, Anxious and Dissocial instead of Obsessive Compulsive, Avoidant and Antisocial Personality Disorders respectively. Moreover, in the ICD-10, Borderline and Impulsive are considered subtypes of Emotionally Unstable Personality Disorder, and narcissistic personality disorder is not included. The ICD-10 manual of IPDE consists of 67 items. It consists of a screening questionnaire as well, which consists of 59 items (cut off point is 3), which are self-reported by the patient as true or false [9].

Data Processing

The coded proforma was collected and information were entered into computer. Quantitative and qualitative data processing were used with computer processing. The output of the project was able to provide data on the percentage, mean and standard deviation and summarized using frequency distribution tables. This is a part of the study titled, 'Psycho-Social Factors among Psychiatric In-Patients with Alcohol Dependence Syndrome in BPKIHS.'

Ethical Consideration

The study was done after obtaining the approval for of Research Committee of BPKIHS (Ref. No. 508/077/078 and Code: IRC/1960/020). Cases were enrolled after informed written consent from the subjects. Strict confidentiality of information was maintained and the results were utilized for management of the problem concerned and similar problems in general.

Results

Out of total of 54 cases enrolled in this study, 11 (20.4%) were female and 43 (79.6%) were male. Mean age was 41.8 years with mean standard deviation of 10.43 years. Age groups (30-39) and (40-49) years were the largest.

Among these subjects, 49 (90.7%) were Hindu and 5 (9.3%) belong to other religions (Buddhist, Christian, Atheist). Most of the subjects 49 (90.7%) were married, 1 (1.9%) was single and others (separated and divorced) were 4 (7.4%). Many 35 (64.8%) belonged to Janajati, 10 (18.5%) belonged to Brahmin/Chhetri and 9 (16.7%) belonged to Dalit. Eleven cases 11 (20.4%) were illiterate, primary education included 18 (33.3%), secondary education included 17 (31.5%) and others (Higher secondary, Bachelors and above) included 8 (14.8%). About 31 (57.4%) were from lower socioeconomic status and 23 (42.6%) were from middle socioeconomic status. Occupation-wise; 28 (51.9%) were farmers, 7 (13%) were Mason, 3 (5.6%) were Home-maker and others were 16 (29.6%) (Table. 1).

Table 1: Sociodemographic profiles of psychiatric in-patients with ADS

Characteristics	Categories	Number (%)
Gender	Female	11 (20.4)
	Male	43 (79.6)
Age (years)	20- 29	6 (11.1)
	30- 39	19 (35.2)
	40- 49	14 (25.9)
	50- 59	13 (24.1)
	> 60	2 (3.7)
	Mean ± SD: 41.80 ± 10.435	
Religion	Hindu	49 (90.7)
	Others	5 (9.3)
Marital	Married	49 (90.7)
	Single	1 (1.9)
	Others	4 (7.4)
Ethnicity	Brahmin/ Chhetri	10 (18.5)
	Janajati	35 (64.8)
	Dalit	9 (16.7)
Education	Illiterate	11 (20.4)
	Primary	18 (33.3)
	Secondary	17 (31.5)
	Others	8 (14.8)

Socio-economic Status	Middle	23 (42.6)
	Lower	31 (57.4)
Occupation	Farmer	28 (51.9)
	Home Maker	3 (5.6)
	Mason	7 (13.0)
	Others	16 (29.6)

According to the Personality Trait Inventory, Cyclothymia trait was present in the highest number of patients 13 (24.07%), followed by Activity trait 12 (22.2%). Emotional Instability was present in 11 (20.3%), Social desirability in 10 (18.5%), Dominance in 8 (14.8%), Superego in 7 (12.9%), Introversion in 6 (11.11%) and Depressive tendency was present in 4 (7.4%) (Table. 2).

Table 2: Personality Traits among psychiatric in-patients with ADS

Personality Trait	Number (%)
Activity	12 (22.2)
Cyclothymia	13 (24.07)
Superego	7 (12.9)
Dominance	8 (14.8)
Depressive tendency	4 (7.4)
Emotional Instability	11 (20.3)
Introversion	6 (11.11)
Social Desirability	10 (18.5)

According to the International Personality Disorder Examination, personality disorder was present in 52% of ADS in-patients in psychiatry ward. Anankastic Personality Disorder was present in 8 (14.8%), Anxious Personality Disorder in 6 (11.1%), Schizoid Personality Disorder in 5 (9.3%), Dependent Personality Disorder in 4 (7.4%) and 1 (1.9%) each with Paranoid, Dissocial, Impulsive, Schizoid-Anxious and Borderline-Anankastic Personality Disorder (Table. 3).

Table 3: Personality Disorders among psychiatric in-patients with ADS

Personality Trait	Number (%)
Paranoid	1 (1.9)
Schizoid	5 (9.3)
Dissocial	1 (1.9)
Impulsive	1 (1.9)
Anankastic	8 (14.8)
Anxious	6 (11.1)
Dependent	4 (7.4)
Schizoid-Anxious	1 (1.9)
Borderline-Anankastic	1 (1.9)
None	26 (48.1)
Total	54 (100.0)

Discussion

In our study, Cyclothymia trait was present in the highest number of patients 13 (24.07%), followed by Activity trait 12 (22.2%). Emotional Instability was present in 11 (20.3%), Social desirability in 10 (18.5%), Dominance in 8 (14.8%), Superego in 7 (12.9%), Introversion in 6 (11.11%) and Depressive tendency was present in 4 (7.4%).

There is a lack of literature based on Personality traits within the country. Even though there are some studies done outside, it was difficult to compare our finding due to differences in the tools used. So, this, study might open an avenue for further more intensive studies on alcohol and personality trait. Personality disorder was present in 52% of ADS in-patients of psychiatry ward in this study. Anankastic Personality Disorder was present in 8 (14.8%),

Anxious Personality Disorder in 6 (11.1%), Schizoid Personality Disorder in 5 (9.3%), Dependent Personality Disorder in 4 (7.4%) and 1 (1.9%) each having Paranoid, Dissocial, Impulsive, Schizoid-Anxious and Borderline-Anankastic Personality Disorder. This finding corresponds with the report of hospital-based study by Shakya DR et al. done in the same setting, in which, 48% had personality problems severe enough to affect the course of alcohol dependence syndrome [7].

In other study of the same institute carried out among the patients with multiple substance use, Anxious Personality Disorder was high (72%) compared to Impulsive (46%), Anankastic and Borderline both were (50%) followed by Paranoid and Schizoid (14%), Dissocial (10%), Histrionic (8%) and Dependent (6%) [10]. Our finding is in contrast with a cross-sectional study done in Tribhuvan University Teaching Hospital, Kathmandu which showed that only 12.8% had Personality traits/ disorders with combination of Antisocial, Borderline and Anxious traits. In that, 4 (4.7%) had Impulsive disorder and1 (1.2%) had Borderline disorder [11]. This disparity may be because of the differences in the tools used. The likely explanation for the low prevalence of antisocial personality disorder in our study is that the patients were not referred for detoxification only, but also for long-term clinical psychosocial intervention and overall management of comorbid psychiatric illness.

In a study done at Italy by Casadio P et al. among Addiction Out-patients, Personality Disorder was present in 62.2% in which Borderline in 48 (15%), followed by Antisocial 44 (13.8%), Avoidant 25 (7.8%), Obsessive-Compulsive 15 (4.7%), Paranoid 14 (4.4%), Schizoid 12 (3.7%) and Others [12]. This disparity may be due to the differences in sample size and the tools used for the diagnosis. In other study done by Echeburua E et al; 40% of the alcoholics met DSM-IV-TR diagnostic criteria for a Personality Disorder compared with 16.6% of the non-addict patients and 6.4% of the normative controls [4]. Findings are variable in various studies. Variations could be due to sampling factors (setting, gender, age group), diagnostic criteria (time-frame, exclusion of substance-related pathology), and assessment procedures (method, time of measurement). So, further more studies are needed in various settings (community/out-patient/in-patient).

Conclusion

Cyclothymia trait was present in the highest number of psychiatric in-patients with alcohol dependence 13 (24.07%), followed by Activity trait 12 (22.2%). Emotional Instability was present in 11 (20.3%), Social desirability in 10 (18.5%), Dominance in 8 (14.8%), Superego in 7 (12.9%), Introversion in 6 (11.11%) and Depressive tendency was present in 4 (7.4%). Personality Disorder was present in 52% of ADS in-patients in psychiatry ward. Anankastic Personality Disorder was present in 8 (14.8%), Anxious Personality Disorder in 6 (11.1%), Schizoid Personality Disorder in 5 (9.3%), Dependent Personality Disorder in 4 (7.4%) and 1 (1.9%) each having Paranoid, Dissocial, Impulsive, Schizoid-Anxious and Borderline-Anankastic Personality Disorder. With this, we conclude that Personality traits and personality disorders was a common occurance, and hence, need to be assessed for effective management of individuals with ADS.

Declarations

Conflict of interests

None.

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Authors' contributions

SN drafted, enrolled the subjects and done in all sections. DRS supervised, designed, rewrote and edited all sections. All other coauthors contributed to the editing and review of literature. All authors read and approved final manuscript.

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