

Profile of Alcohol- Dependent Patients Admitted in De-addiction Ward of Tribhuvan University Teaching Hospital (TUTH), Kathmandu

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Abstract

Introduction: Alcohol dependence is a global problem worldwide and the global burden of disease study published in 2010 concluded alcohol use to be the third leading risk factor for death and disability. This study was conducted to find out the diagnostic profile, socio- cultural determinants, motivation level and other related variables in patients diagnosed as alcohol dependence in hospital admitted patients.

Material And Method: This was a cross- sectional study carried out in patients diagnosed as alcohol dependence and admitted in the deaddiction ward of Tribhuvan University Teaching Hospital over a period of eight months. SPSS version 18 was used for the statistical analysis of the data obtained.

Results: A total of 86 patients were admitted during the period of 8 months. Among those, 48% were admitted with the diagnosis of alcohol dependence- complicated withdrawal while remaining 52% were admitted with alcohol dependence- uncomplicated withdrawal. Assessment of motivation revealed that majority of the patients i.e.43% were in precontemplation phase, 27.9% were in the contemplation phase, 9.3% were in preparation phase, and 19.8% were ready to take action for remaining abstinent. Sociodemographic variables were not statistically significant except for family type where more than 70% of patients with complicated withdrawal belonged to nuclear family when compared to uncomplicated withdrawal.

Conclusion: In this study, we assessed the overall profile of patients admitted with alcohol dependence syndrome in a tertiary care hospital so that this data can be used for better management of our patients.

Keywords: Alcohol Dependence, Profile, Nepal

INTRODUCTION

Alcohol is a very commonly used substance and its use has been there with mankind since time immemorial.¹ Alcohol dependence is very commonly seen and accepted as social problem rather than a medical disease in context of

Nepal. Multiple factors account for this problem varying from biological, psychological to social. Risk factor and risk factor cluster for death and disability analysis reported in 2010 by the special issue of Lancet highlighted the burden due to alcohol use.² Alcohol was found to be the

third leading risk factor for death and disability accounting to 5.5% of disability adjusted life years (DALYs) lost globally and this was an increase from the 4.6% reported in 2004 and 4.0% in 2000.³ Alcohol use was seen to be the number one leading risk factor for death and disability in the age group 15- 49 years followed by tobacco smoking and high blood pressure. These findings support the call by the World Health Organization for countries to give greater priority to addressing harmful alcohol use via evidence-based population level intervention strategies. This study was conducted to find out the socio-demographic and other illness related variables including the level of motivation among patients diagnosed as alcohol dependence.

MATERIAL AND METHOD

This is a cross- sectional study of all patients diagnosed as alcohol dependence syndrome admitted over a period of eight months in de-addiction ward under the department of Psychiatry and Mental Health of Tribhuvan University Teaching Hospital. All patients admitted in the deaddiction ward regardless of the age and gender meeting the criteria for alcohol dependence were enrolled in the study. There were a total of eighty- six patients. The only exclusion criteria were patients with dependence on other psychoactive substances except for nicotine and those with a primary diagnosis of other psychiatric disorders. Psychiatric comorbidity, family support system, personality characteristics and factors such as motivation level in Prochaska's cycle of change were also included and later analyzed with descriptive statistics using SPSS version 18. Patients were broadly classified into two groups as alcohol dependence with complicated withdrawal and alcohol dependence with uncomplicated withdrawal.

RESULT

A total of 86 patients were admitted during the period of 8 months. Among those, 48% (n=41) were admitted with the diagnosis of alcohol dependence- complicated withdrawal while remaining 52% (n=45) were admitted with alcohol dependence- uncomplicated withdrawal. The mean age of patients was 39.9 ± 9.4 years (range; 19-60 years). Majority (90%)

were males. The total duration of alcohol intake was 7.5 ± 4.2 years (range; 1-30 years). The mean duration of stay was 13 days and there was not much difference in duration of stay among patients with complicated versus uncomplicated withdrawal. The mean monthly income of the head of the family of these patients was Rs 18,455. Regarding the educational status, majority of the patients (43%) had attained secondary level education while 16% had attained bachelor degree and above. Majority (58%) were from out of Kathmandu valley. Ninety-one percent of the patients were married. Regarding their religious belief, majority (85%) were Hindus followed by 10.5% Buddhists, 3.5% Christians and 1.2% belonging to other religions. Ethnicity wise, majority were Brahmins (40.7%) followed by Newars, 20.9%; Mongolians, 15.1%; Chhetris, 14 %; and others being 9.3%.

Regarding their occupation, majority of the patients were involved in some kind of business (22.1%), service holders (20.9%), agriculture (14%), some other occupations (19.8%), while 12.8% were unemployed. Only few patients (5.8%) were students and 4.7% were homemakers. Family wise, 59.3% of patients belonged to nuclear family while 40.7% had extended/ joint family.

On assessing the level of support from family, 90.7% had satisfactory family support while only 9.3% described their family to be non-supportive. Regarding relationship with family members, 74.4% of the patients reported it to be good while 23.3% had average relationship and remaining 2.3% reported it to be not good. Assessment of motivation level in these patients was done as per the prochaska's stages of change. Majority of the patients (43%) were in precontemplation phase, 27.9% were in the contemplation phase, 9.3% were in preparation phase, and 19.8% were ready to take action for remaining abstinent. More than half (54.7%) of the patients had no past history of alcohol withdrawal symptoms while 45.3% had previous history as well. Regarding presence of family history of alcohol dependence, 31.4% of patients replied affirmatively meaning by, they had at least one family member suffering from alcohol dependence. Only 2.3% of the patients had positive history of psychiatric illness in family. While assessing for the presence of personality disorder or traits, majority (87.2%) of

Table 1: Socio-Demographic Distribution of Subjects

Variables; n (%)	Overall (n=86)	ADS complicated (n=41)	ADS uncomplicated (n=45)	P value
Age, years, mean± SD (range)	39.9±9.4 (19-60)	41±10.3 (19-60)	39±8.4 (19-58)	.345
Sex; male	78 (90.7)	38 (92.7)	40 (88.9)	.545
Duration of stay, days, mean± SD (range)	12.6±3.1 (6-21)	12.8±2.5 (6-17)	12.5±3.4 (7-21)	.654
Monthly income, Rs, mean± SD (range)	18455±10693 (2400-75000)	18068±10985 (2800-75000)	18808±10533 (2400-50000)	.750
TDI (Intake of alcohol) in years, mean± SD (range)	7.5±4.2 (1-30)	7.9±5.1 (1-30)	7.1±3.3 (2-15)	.351
Educational status				.184
Illiterate	12 (14.0)	8 (19.5)	4 (8.9)	
Primary	11 (12.8)	7 (17.1)	4 (8.9)	
Secondary	37 (43.0)	15 (36.6)	22 (48.9)	
Higher secondary	12 (14.0)	7 (17.1)	5 (11.1)	
Bachelors and above	14 (16.3)	4 (9.8)	10 (22.2)	
Address				.611
Kathmandu	36 (41.9)	16 (39.0)	20 (44.4)	
Out of Kathmandu	50 (58.1)	25 (61.0)	25 (55.6)	
Marital status				.378
Single	8 (9.3)	5 (12.2)	3 (6.7)	
Married	78 (90.7)	36 (87.8)	42 (93.3)	
Religion				.176
Hindu	73 (84.9)	35 (85.4)	38 (84.4)	
Buddhist	9 (10.5)	6 (14.6)	3 (6.7)	
Christian	3 (3.5)	0 (0)	3 (6.7)	
Others	1 (1.2)	0 (0)	1 (2.2)	
Ethnicity				.601
Brahmin	35 (40.7)	14 (34.1)	21 (46.7)	
Chhetri	12 (14.0)	7 (17.1)	5 (11.1)	
Newar	18 (20.9)	9 (22.0)	9 (20.0)	
Mongolian	13 (15.1)	8 (19.5)	5 (11.1)	
Others	8 (9.3)	3 (7.3)	5 (11.1)	
Occupation				.348
Agriculture	12 (14.0)	8 (19.5)	4 (8.9)	
Business	19 (22.1)	9 (22.0)	10 (22.2)	
Service	18 (20.9)	5 (12.2)	13 (28.9)	
Home maker	4 (4.7)	2 (4.9)	2 (4.4)	
Student	5 (5.8)	4 (9.8)	1 (2.2)	
Unemployed	11 (12.8)	5 (12.2)	6 (13.3)	
Others	17 (19.8)	8 (19.5)	9 (20.0)	
Family type				.012
Nuclear	51 (59.3)	30 (73.2)	21 (46.7)	
Joint/ Extended	35 (40.7)	11 (26.8)	24 (53.3)	
Family support				.890
Satisfactory	78 (90.7)	37 (90.2)	41 (91.1)	
Not satisfactory	8 (9.3)	4 (9.8)	4 (8.9)	
Family relation				.968
Good	64 (74.4)	30 (73.2)	34 (75.6)	
Average	20 (23.3)	10 (24.4)	10 (22.2)	
Not good	2 (2.3)	1 (2.4)	1 (2.2)	

the patients had no significant personality traits or disorder while rest had combination of antisocial, borderline and anxious traits.

Majority of the patients (65.1%) had no history of treatment for alcohol related conditions in the past. Regarding the presence of comorbidities,

Table 2: Distribution of Clinical Profile of Subjects

Variables; n (%)	Overall (n=86)	ADS complicated (n=41)	ADS uncomplicated (n=45)	P value
Motivation level				.328
Action	14 (16.3)	5 (12.2)	9 (20.0)	
Contemplation	24 (27.9)	9 (22.0)	15 (33.3)	
Preparation	8 (9.3)	3 (7.3)	5 (11.1)	
Action	3 (3.5)	2 (4.9)	1 (2.2)	
Precontemplation	37 (43.0)	22 (53.7)	15 (33.3)	
Past history of alcohol withdrawal symptoms				.261
Yes	39 (45.3)	16 (39.0)	23 (51.1)	
No	47 (54.7)	25 (61.0)	22 (48.9)	
Family history				.234
Substance use	27 (31.4)	11 (26.8)	16 (35.6)	
Psychiatric history	2 (2.3)	0 (0)	2 (4.4)	
None	57 (66.3)	30 (73.2)	27 (60.0)	
Personality traits/disorder				.224
Antisocial trait	2 (2.3)	2 (4.9)	0 (0)	
Borderline disorder	1 (1.2)	0 (0)	1 (2.2)	
Borderline traits	3 (3.5)	0 (0)	3 (6.7)	
Impulsive disorder	4 (4.7)	2 (4.9)	2 (4.4)	
Impulsive traits	1 (1.2)	1 (2.4)	0 (0)	
None	75 (87.2)	36 (87.8)	39 (86.7)	
Previous treatment for alcohol related conditions				.135
Yes	30 (34.9)	11 (26.8)	19 (42.2)	
No	56 (65.1)	30 (73.2)	26 (57.8)	
Comorbidities				.111
None	41 (47.7)	23 (56.1)	18 (40.0)	
Medical	28 (32.6)	14 (34.1)	14 (31.1)	
Psychiatric	14 (16.3)	4 (9.8)	10 (22.2)	
Combined medical and psychiatric	3 (3.5)	0 (0)	3 (6.7)	

about half of the patients (47.7%) had no comorbidity while 32.6% had medical comorbidity, 16.3% had psychiatric comorbidity and remaining 3.5% had combined medical and psychiatric comorbidity.

DISCUSSION:

The mean age of patients in our study was 39.9 ± 9.4 years (range; 19-60 years). Similar findings were reflected in other studies.⁴⁻⁸ Males dominated in our study accounting to 90%. This was comparable with almost all studies considered assessing the demographic profile.^{4, 9-12} The mean duration of stay in hospital for patients in this study was 12 days. The average monthly income of the head of family of the patients in our study was Rs 18455. This was consistent with some other studies reporting similar income range from Rs 10,000 to Rs

25,000.¹⁰ However, there are studies which have reported less average monthly income ranging from Rs.1000 to Rs 5000.¹¹ Regarding the educational status, we found that majority of the patients (43%) had attained secondary level education while 14% of them had attained bachelors and above. This finding is in line with results from other studies.^{4,10,12} However, one study had different findings where more than half of the sample population had received their education under high school level.¹³ Talking about their permanent residence, majority (58.1%) were from within Kathmandu valley. This finding is also replicated in other studies.⁴ Marital status assessment revealed that 90% of the patients in our study were married and this finding is comparable to other similar studies.^{8,10,12,14,15} Considering their religion, our study showed preponderance of Hindus and is

comparable to one similar study given the main religion followed in Nepal.¹⁰ Ethnicity wise, our study showed preponderance of Brahmins while other studies had varying results; Khetriya⁴ ,and Rai¹⁴.

Occupation wise, majority of the patients were involved in some kind of business or service in our study and results were comparable to other studies.^{4,14} Around 60% of patients belonged to nuclear family in our study which is comparable to one other study.¹² Assessment of support from family revealed that 90% of the sample had good family support with 75% of the patients having good relation with family members. Motivation level in majority of the patients was in the precontemplation phase in our study. Around 45% of the patients had no prior history of alcohol withdrawal while 31% of patients had positive family history of alcohol dependence. Assessment of personality traits or disorder revealed that only 13% of patients had some personality disorders with combination of antisocial, borderline and anxious traits. Personality disorder assessment was done in one similar study which showed dependent personality disorder to be the most prevalent seen in 13% of the patients.¹⁶ Medical comorbidity was seen in 32% of the patients while 16% had psychiatric comorbidity. The most prevalent medical comorbidity was gastroenterology related conditions such as hepatitis, cirrhosis and fatty liver which is comparable to other studies showing similar results.¹⁴⁻¹⁷

CONCLUSION:

In this study, we assessed the overall profile of patients admitted with alcohol dependence syndrome in a tertiary care hospital so that this data can be used for better management of our patients. However, it is a retrospective study, thereby has all the flaws related to retrospective study. This is only one hospital - based study and involves only admitted patients of alcohol dependence so this has to be taken into consideration before generalizing the results to all alcohol dependent patients.

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