Original Article

Study of socio demographic and psychosocial aspects of male alcoholics with admission in psychiatry ward

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Abstract:

Alcohol is one of the leading causes of death and disability globally. Alcohol use has association with physical and psycho-social implication. We studied the socio-demographic and psycho-social factors in patients of alcohol dependence and to find the correlations among them. 50 consecutive male alcoholic patients of 18 years or older admitted in psychiatry ward, who fulfilled the diagnostic criteria for alcohol dependence as per Diagnostic and Statistical Manual of Mental disorder IV, Text revision were included in the study after obtaining written informed consent. Each patient was individually interviewed, by using a semi-structured proforma prepared for the study. Data thus collected was tabulated and analyzed. Most of the subjects in our study belonged to lower economic group. Majority of the subjects were earning less than 10,000 rupees per month and 42% were spending more than 2000 rupees per month on alcohol. Motivation was low in majority of the participants. Around 64% of the subjects had more than 2 admissions in psychiatry ward. Compliance to the treatment was poor in 90% of the patients. There was positive correlation between presence of stress and more number of admissions.

Keywords: Alcoholics, Psycho-social aspects, Admission.

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Introduction:

Alcohol consumption has been considered as one of the leading cause of death and disability worldwide. According report of world health organization, about 2 billion people consume alcohol containing drinks and about one third may have diagnosable alcohol use disorder (1). About 3.2 % of all deaths can be attributable to alcohol use (2). Alcohol use has been increasing in south East Asian countries including India (3-4). The estimated prevalence of alcohol use in India is said to be 21 % in male, with increasing trends in women as well (5). The per capita alcohol consumption is about 2 litres of absolute alcohol equivalents per adult per year (6). The consumption of alcohol in our country had been increased by about 106 % (4).

Various health and social problems are directly or indirectly related to alcohol use. It has been implicated in family disorganisation, crime and loss of productivity and thus the economic loss of country (6-7). About one fifth of hospital admissions can be attributable to alcohol use. High association has been found with deliberate self-harm, high-risk sexual behaviour, HIV infection, tuberculosis, oesophageal cancer, liver disease and duodenal ulcer and its use (8).

There are numerous studies regarding alcohol use, but there is paucity of studies from central India. Scenario of the mental health in Central India is changing remarkably. This is considered as a “suicide belt” of India where alcohol addiction is a major determinant. It is worthwhile to know about the psychosocial aspects of alcoholism, for effective planning of interventions. With this back ground in mind present study was carried out to find out various psychosocial factors responsible for alcohol consumption.

Materials and Methods:

It was a cross-sectional single interview study carried out in a tertiary care hospital, which caters to needs of people residing in suburban area and having industrial units in the vicinity. Study was conducted after permission from institutional ethics committee during January 2013 to June2013. 50 consecutive male alcoholic patients of 18 years or older admitted in psychiatry ward, who fulfilled the diagnostic criteria for alcohol dependence as per Diagnostic and Statistical Manual of Mental disorder edition IV ,Text revision were included in the study after obtaining written informed consent. The aims of the study were to assess the socio-demographic and psycho-social factors in patients of alcohol dependence and to find the correlations among them. Each patient was individually interviewed, by using a semi-structured proforma prepared for the study which included socio-demographic profile, family, personal and socio-occupational history, monthly income, amount spent on alcohol per month, presence or absence of stressors, reasons for restarting alcohol, number of admissions for de-addiction treatment, history related to alcohol consumption, motivation, compliance. Data thus collected was tabulated and analyzed using non parametric tests under guidance of statistician to draw the conclusions. For analysis Chi-square test and Fisher exact test were used.

Results:

Results of the study were tabulated and analyzed as follows:

Table 1: Socio-demographic and psychosocial factors of the patients

Sr. No	Factors		N=50	Percentage
1	Age in years	< 25	02	04 %
		25-30	09	18 %
		30- 35	05	10 %
		35- 40	21	42 %
		>= 45	13	26 %
2	Monthly income in rupees	< 5000	21	42 %
		5000 – 10,000	17	34 %
		10,000 – 20,000	04	08 %
		> 20,000	08	16 %
3	Amount in rupees spent of alcohol every month	< 500	04	08 %
		500 - 2000	25	50 %
		2000 - 5000	12	24 %
		> 5000	09	18 %
4	Family history of alcohol consumption	Absent	28	56 %
		Present	22	44 %
5	No. of admissions in psychiatry ward	First	11	22 %
		Second	07	14 %
		Third	14	28 %
		Fourth	02	04 %
		> Four	16	32 %
6	H/o stressor	Present	20	40%
		Absent	30	60%
7	Treatment compliance	Good	05	10 %
		Poor	45	90 %
8	Motivation	Average	13	26 %
		Low	37	74 %

1)Age distribution: Out of total participants 42% of the patients were in the age group of 35-45 years of age, 26 %of the participants were of the age more than 45 years age group and only 4% of the participants were of 20-25 years age group.

2) Education: Maximum participants (66%) were educated up to secondary to higher secondary level. 42% of the patients were doing non-skilled work while only 18 % were professional workers.

3)Income: About 42% of the participants had monthly income of less than Rs. 5,000, followed by 34% earning rupees between 5,000-10,000 per month (Table 1).

4)Income spent on alcohol: About 50% of the participants use to spend 500 - 2000 rupees per month on alcohol whereas around 18 % of the subjects were spending more than 5000 rupees per month on alcohol (Table 1).

5)Family history and support: In this study 84% of the subjects were married and majority of the participants (62%) were having good family support (supportive family members and friends). Family history of alcohol consumption was found in around 44% of the participants whereas 56% reported no such history (Table 1). Ninety six percent of the subjects gave no family history of any other mental illness. In 40% of the cases, participants were the only earning members of their families and 24% of the subjects were having at least 2 other earning members in the family.

6)Distribution by residence: There was no significant difference in the distribution of the subjects according to their residence as 52% belonged to the rural area and an almost equal number that is 48% were from suburban population.

7)Comparison between various socio demographic variables: Above findings show that 76% of the subjects were earning less than 10000 rupees per month and 42% were spending more than 2000 rupees on alcohol each month. Following table illustrates these findings (Table 2).

Table 2: Comparison between various socio demographic variables

Patient having monthly income < Rs. 10,000	Patients spending > Rs. 2,000 on alcohol per month	Total no. of patients married	No. of patients with positive family history of alcoholism
76 %	42%	84%	44%

8) Alcohol related details and reasons for relapse and readmission:
40% of the subjects attributed stress as a reason for continued alcohol consumption while majority, 60%, admitted that stressor was not the reason for the continued intake of the same (other reasons like drinking for festival, celebrations, to reduce craving, because of withdrawal symptoms). Most of the alcoholics reported more than 5 admissions in the psychiatry ward in the past and comprised of 32% of the total participants, while 22% of them was admitted for the first time (Table 1). About 86 % of the participants had history of abstinence periods (multiple times), while 14 % never remained abstinent from the alcohol. Alcohol withdrawal related problems (restlessness, anxiety , nausea, weakness, etc.) were the most common reason for the admission in the hospital and constituted 88% of the total subjects and 12% got admitted due to other reason (for de addiction or associated medical problems). Most of the patients (92%) were brought by family members and only 4% came by their own for treatment. Rest of the patients (4%) were brought by social workers. 90% of the subjects had history of poor compliance to treatment (Table 1). A proportionately large number of the subjects (76%) had consumed alcohol 2 days prior to the admission. Finally, low motivation level to quit alcohol was found in almost 74% of the subjects (Table 1).

Table 3: Association of motivation with various factors

Variable	Motivation		Chi Square	p value
Age	Average	Low		
<35	5	11	0.337	0.562
≥35	8	26		
Family H/o alcoholism				
Present	6	16	0.033	0.856
Absent	7	21		
Stress				
Present	5	15	0.017	0.895
Absent	8	22		
Reason for admission				
Physical	12	32	Fisher	1.00
Withdrawal	1	5	exact test	

Table 4: Association of Compliance with various factors

Variable	compliance			p value
Age	Average	Low		
<35	4	12	Fisher	0.031
≥35	1	33	exact test	
Family H/o alcoholism				
Present	2	20	Fisher	1.00
Absent	3	25	exact test	
Stress				
Present	3	17	Fisher	0.377
Absent	2	28	exact test	
Reason for admission				
Physical	3	41	Fisher	0.103
Withdrawal	2	4	exact test	

Table 5: Association of number of admissions with various factors

Variable	no. of admission		Chi Square	p value
Age	0ne	More than one		
<35	8	8	2.002	0.157
≥35	10	24		
Family H/o alcoholism				
Present	9	13	0.411	0.522
Absent	9	19		
Stress				
Present	10	10	2.836	0.092
Absent	8	22		
Reason for admission				
Physical	15	29	Fisher	0.654
Withdrawal	3	3	exact test	

Those having history of some or the other stress were found to be having more number of admissions for de addiction though this was not significant statistically. We also found that those having more number of admissions had low motivation to quit alcohol and poor compliance to treatment.

Discussion:

In the study conducted by Sarkar et al. most of the patients were in the third decade of their age and married which was similar to the finding of present study with similar age group as commonest one and 84 percent of the patients were married (7). This can be due to the fact that most of the Indian population marries before or during their thirties. However in this study most of the patients were educated up to secondary or higher secondary as opposed to those in study by Sarkar et al where most of the patient had no formal education (7). But this finding was consistent with results of a study by Pradeep RJ et al (8). Most of the patients in this study were non skilled workers and most of the patients (42%) had monthly income of less than 5000 rupees/month. This suggests most of the patients in our study belonged to lower socio-economic strata. This finding is similar to a population based study in Bangalore in which 40 % participants had monthly income of 3000- 6000 and 38 % had monthly income of less than 3000 rupees (9). 34% of the patients in our study had monthly income 5000-10,000 rupees. 4% of the patients in this study were divorced as opposed to 1 % in a study by Sarkar et al. We did not find any difference between numbers of patients according to their locality which was similar to the finding by Girish N et al (3) who also found no significant difference in number of patients from urban or rural area. In present study, 44 % of the patients had family history of alcoholism whereas few studies say that almost 83 % of the patients had positive family history for alcoholism (7). This finding in our study can be explained on the basis of catchment area of the hospital as most of the subject had come from distant places and are away from their families and environmental factors have a major role to play than the genes. In this study, 60 % of the patients continued consuming alcohol for reasons like periodicity of consumption, increased opportunities of consumption, easy availability, etc. whereas 40 % attributed their drinking to financial or family stressors. In the study by Girish N et al (3) 58 % of the subjects used to consume alcohol to reduce pain and only 20 % attributed it to financial or family stressors. Positive correlation was noted between presence of stressors and number of repeated admissions in present study. This suggests that stress is the major factor for acute increase in alcohol consumption and related complication for which patients seek medical help. It has long been known that stress increases the risk of alcohol relapse. Clinical observations, surveys, and epidemiological studies document an association between self-reports of stressors and subsequent return to drinking (10). Studies assessing alcohol relapse after treatment completion and discharge also indicate the contribution of highly stressful events independent of alcohol use history that increase the risk of subsequent relapse. Furthermore, negative mood and stress are associated with increased craving, and high levels of urges to use alcohol predict relapse (10). Most common reason for admission was found to be withdrawal related problems which suggests that most of the patients seek medical help

only when they have withdrawal symptoms.

It was also noted that most of the patients had been brought to hospital due to pressure from their family members and had poor motivation to quite alcohol. The compliance to treatment was poor in most of them.

Conclusions:

Most of the participants in our study belonged to lower economic group. Majority of the subjects were earning less than 10,000 rupees per month and 42% were spending more than 2,000 rupees per month on alcohol. Motivation was low in majority of the participants. This can explain why maximum participants were brought by their family members. Around 64% of the subjects had more than 2 admissions in psychiatry ward. Compliance to the treatment was poor in 90% of the patients but compared to younger age group compliance was relatively good in those more than 35 years of age. Stress also plays major role in relapse and readmissions as evident by the positive correlation between presence of stress and more number of admissions.

Implications:

Motivation is a deciding factor with respect to the number of admissions and compliance to the treatment. Planning therapies to improve motivation and improving coping skills of the patients may reduce the relapse and number of admissions for alcohol related problems.

Limitations:

1) Sample size was small and this was a cross-sectional study hence findings can't be generalized.
2) Most of the participants were selected from suburban Industrial area and rural area.
3) All subjects were males. Findings can differ with inclusion of female patients.

References:

1. Global status report on alcohol. Geneva: World Health Organization; 2004.
2. The World health report 2002 – reducing risks, promoting healthy life. Geneva: World Health Organization; 2002.
3. Girish N, Kavita R, Gururaj G, Benegal V. Alcohol use and implications for public health: Patterns of use in four communities. Indian J Community Med 2010; 35:238-44.
4. Pal H, Kumar A. Epidemiology of substance Use. In: Lal R. Substance use disorder manual for physician, New Delhi AIIMS 2005: 8.
5. Gururaj G, Girish N, Benegal V, Chandra V, Pandav R. Public health problems caused by harmful use of alcohol – Gaining less or losing more? Alcohol Control series 2, World Health Organisation. New Delhi: Regional Office for South East Asia; 2006.
6. Park K. Parks textbook of preventive medicine 21st ed. Jabalpur, India: M/S Banarsides Bhalnot, 2011; 77.
7. Sarkar AP, Sen S, Mondal S, Singh OP, Chakraborty A, Swaika B. A study on socio-demographic characteristics of alcoholics attending the de-addiction center at Burdwan medical college and hospital in West Bengal. Indian J Public Health 2013; 57:33-5.
8. Pradeep RJ, Banu S, Ashok MV. Severity of alcoholism in Indian males: Correlation with age of onset and family history of alcoholism. Indian J Psychiatry 2010; 52:243-9.
9. Gururaj G, Girish N, Benegal V, Chandra V, Pandav R. Burden and socio-economic impact of alcohol: The Bangalore study. World Health Organization New Delhi, India 2006.
10. Sinha R. How does stress lead to risk of alcohol relapse? Alcohol research: Current Reviews 2011; 34(4): 432-440.