# **Original Research Article**

# Clinical profile and coping in patients of alcohol dependence syndrome during their abstinence: A cross sectional study

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#### **Abstract**

**Background:** Alcohol is a ordinary commodity, used since time immemorial. People start consuming early in their life sometimes as early as in childhood, usually initiated by the family members or relatives and they lack specific precipitating and maintaining factors for their dependence pattern. In order to have impact on relapse rates, clinician must device multimodal treatment programs that address different etiological factors and combine different theoretical orientations, which incorporates peer, family, intra and inter personal factors. It requires a systemic study of identifying risk factors and coping styles.

**Objectives:** To study the socio demographic and clinical profile of alcohol dependence patients and to identify the coping mechanisms used by alcohol dependent patients.

**Materials and methods:** A consecutive sample of 100 Alcohol Dependence Syndrome patients attending outpatient were selected. A questionnaire was administered to collect sample and alcohol dependence characteristics. The Severity of Alcohol Dependence Questionnaire (SADQ) was administered to assess the severity of alcohol consumption in the recent past. Coping check list was administered to identify the different coping mechanisms.

**Results:** Majority of the subjects were young adults with a mean age of 42 years, 58% started consuming alcohol at a very young age (<21 years), and younger the age of initiation, more was the duration of drinking. 47% were drinking for more than two decades. 83% made at least one attempt to stop drinking. Higher age group and unemployed had significantly more severity of alcohol dependence (p<0.05). Coping strategies commonly used are emotion focused (positive distraction, negative distraction, acceptance, denial, religion).

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**Conclusions:** Majority of the subjects were young adults, they started drinking from very early in their life, drank for long periods. Unemployment could be a risk factor or conversely be the effect of high levels of alcohol dependence. Most of them used emotion focused (negative distraction), hence identification of these coping mechanisms should be incorporated in to treatment strategies for effective management and to prevent future relapses.

# **Key words**

Alcohol dependence, Severity, Coping.

# Introduction

Alcohol has been in use since time immemorial. Cultural attitudes towards alcohol use therefore have been and continue to be highly ambivalent and fluctuate between being "Sternly negative prohibitive" to actually "idolizing intoxications". India also has the unique distinction of having some of the most varied varieties of alcohol beverages. Country liquor, from locally available cheap raw material such as sugarcane, rice, palm, coconut, and cheap grains is available as arrack, desi sharab, tari, and toddy. According to ICD 10 classification alcohol dependence is a cluster of behavioral, cognitive, and physiological phenomenon that develops after repeated substance use. And typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities obligations, increased tolerance and sometimes a physical withdrawal state.

Alcohol dependence has often been described as a chronic relapsing illness where continued care and support from the best strategy of management [1]. However, continued care is compromised by the addictive nature of the illness with alcohol dependence affecting 5.4% of the general population during lifetime [2] and by the increasing co-morbidity noted among both the persons with alcohol dependence and their first and second degree relatives [3].

There is high rates of consumption of toddy, a local made alcohol in the rural areas of Telangana and has a status of high cultural acceptance, consumed on daily basis [4]. People

start consuming toddy early in their life sometimes as early as in childhood, usually initiated by the family members or relatives. It is hypothesised that probably most of the people in this part of the country who regularly consume toddy lack specific precipitating and maintaining factors for their dependence pattern of alcohol drinking.

Coping has broadly defined by lazarus (1991) [5] as "cognitive and behavioral efforts to manage specific external and internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of a person. Identification of coping mechanisms used by persons can help them recognize or bolster their coping resources which in turn can help them minimize the impact of change and stress in their lives. Various studies found that relapse rates for addiction are alarmingly high. And found to be approximately 50% to 90% among adults regardless of type of treatment or addictive subject (Annis and Davis, 1988a, Hunt, Barnett, Branch 1971) [6, 7].

In a study done by Pickens, Hatsukami, Spices and Svikis (1985) [8] they discovered a 44% relapse rate during first year following treatment among their samples of adult alcoholics, with the frequency for relapse peaking at 6 months post treatment. Hence identification of these coping mechanisms are important to prevent relapse. Adolesence is a critical age for the development of coping behaviors and responses. As adolesencents experience new pressures and experiment with methods of adjustment, they may develop inappropriate and or destructive methods of coping.

Philip J. Micheles, et al. (1999) [9] has studied coping mechanisms characteristic of alcohol women and non-alcoholic controls. Alcoholic women were significantly more likely to favor maladaptive styles of coping, while nonalcoholic women employed significantly more problemsolving and emotion based coping strategies. Neither race nor no age differences significantly influenced the types of coping utilized by these women. The profile of coping strategies utilized by the alcoholic group was found to be consistent with a poor quality of life and compounding problems.

Fjolvar Darri Rafnsson, et al. (2006) [10] in this study investigated the relationships of coping strategies, drinking motives, and stressful life events (Major, daily positive, and daily negative) on emotional and behavioural problems, and academic functioning among a sample of 1251 Icelandic youth with a mean age of 18.9 years. Coping motives for drinking predicted both alcohol use and alcohol problems. Emotion – focused coping was a strong predictor of depressed affect, and task oriented coping was related inversely to emotional and behavioural problems.

In order to have impact on relapse rates in alcohol dependent individual, clinician must device multimodal treatment programs that address different etiological factors and combine different theoretical orientations. Alcohol dependence must be conceptualized with in a theoretical model that incorporates peer, family, intra and inter personal factors. It requires a systemic study of identifying risk factors and coping styles with alcohol dependence syndrome.

With above background the present study was designed to examine the socio demographic profile, clinical profile and coping mechanisms in alcohol dependent patients who were coming to the psychiatric outpatient department in a tertiary hospital.

# **Objectives**

- To study the socio demographic and clinical profile of alcohol dependence patients
- To identify the coping mechanisms used by alcohol dependent patients.

#### Materials and methods

# Study design

A cross sectional study conducted at Institute of mental health, Hyderabad. A consecutive sample of 100 Alcohol Dependence Syndrome patients attending outpatient were selected. Inclusion and exclusion criteria were assessed. Informed consent in writing was obtained before patients were included in the study. On first contact with the study subjects, a questionnaire the administered which collected socio demographic characteristics and alcohol dependence characteristics like of age of initiation, duration of drinking, frequency of attempts to abstain and total duration of abstinence followed by a detailed physical examination to assess the presence of coexisting physical complications. Positive findings and deficits were recorded and the diagnosis was confirmed by using ICD-10. In addition, the Severity of Alcohol Dependence Questionnaire (SADQ) was administered to assess the severity of alcohol consumption in the recent past coping check list was administered to identify the different coping mechanisms.

#### **Inclusion criteria**

- Patients between 18 and 65 years, either gender.
- Those fulfilling the ICD-10 criteria of alcohol dependence syndrome.
- Subjects who were physical and mentally fit and willing to give informed consent.
- Those who were abstinent for at least one month.

#### **Exclusion criteria**

 Those who were taking psychoactive substance or any medication, which can produce cognitive and other psychological defect other than nicotine and caffeine.

- Patients with organic mental disorders.
- Participants who were still taking alcohol or not abstinent for at least of one month.

# Statistical analysis

Statistical analysis was done using statistical package for the social sciences (SPSS) for windows version 19. Quantitative data was analyzed using percentages and bar graphs; Qualitative data was analyzed using chi-squared test p value <0.05 was considered significant.

# **Results and Discussion**

**Table - 1** shows that Majority of the subjects were young adults with a mean age of 42 years, were illiterates, married, were employed, belonged to rural background and from lower socio-economic status.

<u>Table - 1</u>: Socio-demographic details of patients.

Socio-demographi	N =100	
Age	15-30	22
	30-45	48
	>45	30
Sex	Male	65
	Female	35
Religion	Hindu	92
	Muslim	3
	Christian	5
Marital status	Married	82
	Un married	11
	widowed	7
Background	Rural	71
	urban	29
Socioeconomic	Upper	1
status	Upper middle	9
	Lower middle	20
	Upper lower	47
	lower	23
Employment	Employed	54
	unemployed	46
Education	Illiterate	49
	Up to 5 <sup>th</sup> std	26
	6 <sup>th</sup> to 10 <sup>th</sup> std	18
	>10 <sup>th</sup> std	7

**Table - 2:** Age of initiation of alcohol.

Age of initiation (years)	N	Mean age of initiation
5-10	3	19.53 years
11-15	18	
16-20	37	
21-25	34	
26-30	7	
31-35	1	

**Table - 3:** Duration of drinking.

<b>Duration</b> of	N	Mean duration of
drinking (Years)		drinking
0-10	13	22.41 years
11-20	40	
21-30	23	
31-40	13	
41-50	11	

**Table - 4:** Frequency of abstinence.

Frequency of abstinence	N
0 times	17
1-2 times	63
3-5 times	20

**Table - 5:** Duration of abstinence.

Duration of abstinence	N	Mean duration of abstinenece
0 months	18	6.45 months
1-2 months	31	
3-12 months	40	
>12 months	11	

<u>**Table - 6:**</u> Severity of alcohol dependence.

Severity of alcohol dependence	N
Mild	48
Moderate	42
Severe	10
Total	100

#### Age

The mean age of the ADS patients was 41.94 years, This was comparable with the Epidemiological Catchment Area (ECA) Study [4] which showed that lifetime prevalence rates for alcoholism tended to peak between ages of 30-44 years and Clarke W [11] reported heavy drinking most frequently among those between 18-30 years of age and lowest percentage of heavy drinking for those above 50 years of age.

#### Sex

In the sample 35 patients were female and 65 % were male. The large US based epidemiological studies done by Hasin, et al. [12], in 2000, from the NESARC study and that of Kessler, et al. [13], in 1997 from the NCS study show higher rates of alcohol dependence in women, 52% and 51% respectively. The reason for this relatively lower prevalence might be cultural prohibitions and less liberalization of women in India than in western countries. However the prevalence much higher than studies done in other parts of India where it is less than 5% as studied by Issac, et al. [14].

### Religion

In the current study majority of the study population were Hindus (92%) followed by minorities i.e., Christians (5%) and Muslims (3%). This distribution was expected as Chandrashekar, et al. noted in his study that alcohol consumption rates were substantially higher among Hindus than among either Muslims or Jains, who rarely consumed alcoholic beverages [15].

#### **Marital status**

The distribution of marital status showed that majority of the sample, i.e., 82% were married, while 11% unmarried and 7% widowed. The findings were observed by Chandrashekar, et al. [15] in 1998, who found that 67% were married and 33% were unmarried. This higher proportion of married alcohol dependents in the current study might be due to changes in the traditional family structure, a weakening of informal cultural and religious controls on alcoholic consumption in recent years in India. Alcohol breaks the ties within families becoming involved in overtly hostile relationship with parents, siblings, peers. They were not able to cope with the unexpected difficulties of married life and those whose marriages were currently on the verge of dissolution (but formal separation has not taken place), had marriages that were marked by severe and usually frequent quarrels.

# **Back ground**

In the current study 29% of study population is from urban background and 71% are from rural background, which is expected as the hospital is a government setting, where majority of patients coming from rural areas.

#### Socio-economic status

In present study the majority i.e., 70% belonged to lower socio economic status as per modified Kuppuswamy classification as shown in table 6. It was expected as the majority of the sample belong to illiterates (49%), background (71%). In the current study no significant differences were found in drinking patterns in various socio-economic strata. In the mid town Manhattan study, Langner & Michael [16] found an inverse relation between alcohol problems and socio economic status, with rates for those in the lowest socio economic group approximately three times greater than those in the highest one. The current study and all the above studies indicate that alcohol dependence cuts across all socio economic strata.

# Family type

In present study the majority i.e., 71% live as nuclear family and 29% as extended family. The distribution is similar to a study done by A.K. Vohra, et al. in 30 patients [17].

# **Employment status**

In the current study 54% were employed and 46% were unemployed in past 6 months. This high rate of unemployment might be explained by fact that 27% of them are aged above 45 years who are more likely to be unemployed compared to younger age groups. The unemployed may also be drinking due to boredom or stress.

# **Education level**

In the current sample there were 49% illiterates and 52% were literate but only 7% of total study group could clear 10<sup>th</sup> standard. Similar rates were found in a study conducted in the rural areas of Tamil Nadu by Chandrashekar [15], 26%-50% of the males in that rural area were illiterates. Literate alcohol dependent individuals are more likely to be knowledgeable about

alcohol related problems and seek treatment. They are more likely to have easier access to treatment facilities.

**Table - 2** shows 58% of the study population initiated drinking alcohol at an early age i.e., less than 21 years. Mean age of initiation of drinking is 19.53 years. Orford & Hawker [18] studied 59 alcoholics in whom the mean age was 45 years and the mean age of drinking is invariably between 15-25 years. The Sakalawara study [19] supports the fact that alcohol use starts in the formative years of early adult life, with the factors involved in initiation being peer group pressure and the social desire for exploring new stimulation and novelty.

**Table - 3** shows majority of the study group, 40% has been drinking for 11-20 years and 23% of the group has been drinking for 21-30 years. Only 13% of the group were drinking for less than 10 years and similar proportions were drinking for 31-40years and 41-50 years. Mean duration of drinking is 22.41years.

17% of the study population never had intentions towards alcohol abstinence. In the current study, as depicted in Table - 4, 20% of the sample made more than two attempts to abstain indicating good motivation. 63% of the sample made up to two attempts to abstain from drinking. Rehabilitative services concentrate on those who want to give up, and facilitate their abstinence. On interviewing the patients, they reported that abstinence was due to religious reasons or more often health reasons perhaps implying that alcoholics are sensitive to and aware of the problems caused by alcohol. They are able to discriminate between their experiences while drinking and while being abstinent, indicating good insight which must be utilized to educate the patient regarding harmful effects of alcohol and encourage complete abstinence.

**Table - 5** shows mean duration of abstinence was 6.45 months. 30% of the sample of the current study could abstain from alcohol for not

more than 2 months implying higher chance of relapse in these patients. 18% of the study group never abstained from alcohol probably due to lack of awareness of its harmful effects. 51% of the study sample could abstain from alcohol for more than 2 months but majority of them (40% of study sample) could not continue abstinence for more than 12 months ending up in relapse. The total duration of abstinence indicates degree of motivation and effort that alcohol dependent individuals exercise. Only 11% of the sample who abstained for more than a year had displayed maximum motivation to remain abstinent. It would be interesting to study the factors which differentiate the never abstinence group from those who had attempted to abstain as these factors will shed light on the phenomenon of abstinence.

Table - 6 shows that only 10% of the study population had severe alcohol dependence according to SADQ scale. Excessive consumption of alcohol is not only an indication of severity of alcoholism but also other issues like medical, occupational, legal, family, social psychological problems. In contrast distribution of Severity of Alcohol Dependence using SAD-Q score in patients with Alcohol Dependence Syndrome was studied by Risal A & Tharoor H [20] where they found that 62.7% of their study group were part of the "severe alcohol dependence" group.

It is speculated that low scores in severity of alcohol dependence in the current study may be attributed to typical pattern of alcohol use in most of the sample population where they usually consume one or two bottles of toddy every day night as a regular habit, usually accepted by the family members and many a times along with them. Also, given the fact that the study was conducted in a economically backward, the poor financial reasons might play a role in some cases leading to less severe dependence.

**Table - 7** and **Table - 8** shows, the patients with higher age group and unemployed had

significantly more severity of alcohol dependence. No significant difference was observed, when background and education of patients compared with severity of alcohol dependence and also significant difference was

not seen when sex of the patients and their socioeconomic status compared with age of initiation, duration of drinking, severity of dependence.

<u>Table - 7:</u> Comparison of age of the patients with severity of alcohol dependence.

		Severity of dependence			Total	P value
		Mild	Moderate	Severe		
Λαο	15 - 30 years	12	9	1	22	
Age	30 - 45 years	27	14	7	48	0.04
	> 45 years	9	19	2	30	
Total		48	42	10	100	

**Table – 8:** Comparison of employment status of the patients with severity of dependence.

		Severity of dependence			Total	P value
Employment		Mild	Moderate	Severe		0.001
	Employed	35	16	3	54	
	Unemployed	13	26	7	46	0.001
Total		48	42	10	100	

**Table - 9:** The coping check list.

	N	Mean	Std. Deviation	Std Error mean
CCL Problem solving	100	6.14	1.65	0.16
CCL Positive distraction	100	4.84	2.30	0.23
CCL Negative distraction	100	2.62	1.39	0.13
CCL Acceptance	100	5.65	1.81	0.18
CCL Religion	100	3.21	2.07	0.20
CCL Denial	100	3.42	2.03	0.20
CCL Social support	100	3.98	1.29	0.12

**Table - 9** depicts mean scores of coping strategies used by study population, the result indicate that most common coping methods used are emotion focused (positive distraction, negative distraction, acceptance, denial, religion); whereas problem focused, emotion and problem focused are used less.

Philip J Michels, et al. (1999) [9] has studied coping strategies in alcoholic women compared to controls and found that alcoholic women favor maladaptive coping styles than problem solving coping strategies. Avoidant coping, associated with increased incidence of alcohol related problems was found in previous research

(Fromme and Rivet. 1994, Park, et al. 2004) [21, 22]. Present study supports previous studies.

# Limitations

- The study was limited to outpatient population in hospital setting; hence results cannot be generalized to community setting.
- The size of the sample may be less.
- Being a hospital based study; results may not be generalized to the alcohol users in the community.
- Being a cross sectional study, cause effect relationship could not be established.

#### Conclusion

It was found in the current study that majority of the subjects were young adults with a mean age of 42 years, were illiterates, married, were employed, belonged to rural background and from lower socio-economic status. They started drinking very early in their life, drank for long periods. Majority of the sample had mild severity of alcohol dependence. Unemployment could be a risk factor or conversely be the effect of high levels of alcohol dependence. Higher the severity of dependence, and longer the duration of drinking all significantly increase the likelihood of associated psychiatric co-morbidities. In this study, coping mechanisms used by majority of the alcohol dependent patients are emotion focused, in that negative distractibility is more, hence identification of these coping mechanisms which are used by them for regular alcohol consumption need to identified and should be incorporated in to treatment strategies for effective management and to prevent future relapses.

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