

Socio-demographic Profile of Patients Diagnosed with Alcohol Dependence Syndrome: A Cross-Sectional Study

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Abstract

Background: ADS is a major community health issue in India, which results in a lot of medical, psychological, and social morbidities. Age, level of education, occupation, socioeconomic status, family setup, and early alcohol consumption pursuits are socio-demographic aspects that play a paramount role in the development and progression of alcohol dependence. Knowing the socio-demographic profile of patients with ADS is necessary to identify high-risk groups and determine how the intervention (preventive or therapeutic) can be planned effectively. The objective is to research the socio-demographic characteristics of patients who turned up in a tertiary care hospital with a diagnosis of alcohol dependence syndrome. **Material and Methods:** It was a cross-sectional observational study conducted over 18 months at a teaching tertiary care hospital in India. A sample of 100 patients who had a clinical diagnosis of alcohol dependency syndrome based on the ICD classification was selected to take part in the study upon informed consent. The socio-demographic variables, such as character of age, education, occupation, domicile, socioeconomic status, religion, marital status, type of family, and family history of alcoholism, were evaluated using a semi-structured pro forma. The data were analysed using descriptive statistics. **Results:** Most patients were aged individuals in the economically productive segment, with middle-aged individuals predominating. The vast majority of participants had an education up to primary or secondary school level and remained in unskilled or semi-skilled professions. The majority of the patients were of lower and lower-middle socioeconomic classes. There was a higher prevalence of alcohol dependence among people who were in nuclear families, and a high proportion had a positive family history of alcoholism. It was common among the study subjects to start drinking at an early age. **Conclusion:** The results suggest that alcohol dependence syndrome is associated mostly with individuals who belong to the socio-demographic background of vulnerability. The age at which it is initiated and the family alcoholism history seem to be among the factors that may be significant. The discovery of such socio-demographic determinants is vital to the formulation of specialized prevention measures and the enhancement of de-addiction facilities at the community and tertiary care levels.

Keywords: Alcohol addiction; demography; tertiary care hospital; cross-sectional study; substance use problem.

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INTRODUCTION

The drinking culture has used alcohol extensively in society since early times, and this has been socially accepted in most societies due to perceived effects of relaxation, pleasure, and social bonding.^[1] Nevertheless, there are severe physical, psychological, and social effects linked to alcoholism.^[2] Alcohol dependence syndrome (ADS) is a complicated and chronic disorder, which is defined by the powerful urge to drink, loss of control over alcoholic drinking, formation of tolerance, withdrawal symptoms, and continuation of drinking even after its detrimental effects have become evident.^[3]

Alcohol dependence is a rising health problem in society across the world, with a comparatively greater rate being reported in countries with low and middle incomes like India.^[4] Estimates by the World Health Organization indicate that morbidity and mortality rates in the world are highly affected by alcohol use, as it costs the countries a significant share of disability-adjusted life years wasted.^[5] In India, high rates of urbanization, a shift in lifestyle, a decrease in cost,

and a sociocultural transformation have caused a frightening increase in the rise of alcohol consumption and alcohol-related disorders, especially in adult men.^[6]

Biological factors do not entirely determine the development and progression of alcohol dependence, but play a major role in shaping it, as it is greatly affected by socio-demographic determinants. The age, level of education, occupation, socioeconomic status, residence, marital status, family structure, and family history of alcoholism are variables that are critical in initiation, continuation, and progression of alcohol

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consumption.^[7] Drinking alcohol early in life, particularly during adolescence and early adulthood, has been proven to lead to dependency in adulthood. On the same note, the less the higher the education, the greater the economic pressures and the volatile employment status, the greater the predisposition to alcohol dependency has been linked.^[8] Family and social surroundings strongly influence behavior regarding drinking. People with a nuclear family background, good family history of alcoholism, and individuals who are subjected to lax attitudes on alcohol use at home have higher risks of alcohol dependence.^[9] Moreover, peer influences and socio-cultural approval regarding the consumption of alcohol are also additional causes of initiation and sustenance of drinking behaviour. These reasons underscore the need to comprehend the context under which alcohol dependence is identified, that is, socio-demographic.^[10]

Although increasing alcohol dependency has emerged in India, the same lacks region-specific data that explain the socio-demographic profile of patients who present in tertiary care centres. This information is necessary for identifying high-risk groups, developing preventive measures, optimizing resource allocation, and developing culturally relevant intervention programs. Thus, it is significant to research the socio-demographic characteristics of patients diagnosed with alcohol dependence syndrome visiting a tertiary care hospital.

Objectives

1. To examine the socio-demographic data of patients with symptoms of alcohol dependence syndrome presented to a tertiary care hospital.
2. To determine socio-demographic data, including the age, the educational status, the occupational status, the domicile, the socioeconomic status, the religion, the marital status, the type of family, and the family history of alcoholism among alcohol dependence syndrome patients.
3. To present the nature of drinking among patients with alcohol dependence syndrome, such as the age at which alcohol consumption starts and alcohol consumption patterns.

Review of literature

Alcohol dependence syndrome is developed as a chronic relapsing disease that depends on a complicated mechanism of interactions between biological, psychological, and socio-environmental factors. The World Health Organization described alcohol dependence as a state where there is an urge and a compulsion to take alcohol on a periodical or constant basis to realize its psychic effect, or there is a tendency to evade the unpleasantness of non-intake of alcohol, with tolerance and withdrawal being common. Following systems of diagnosis, such as the ICD-10 and DSM, have added additional levels at which the criteria of diagnosis are operationalized, with a focus on impaired control, tolerance, withdrawal, and continuation despite harm.

The socio-demographic factors have been identified in several studies as contributing to the onset and development

of alcohol dependence. Age has been extensively reported as a significant factor. Most studies have indicated that alcohol dependence is a common occurrence as a factor in people who are in the economically productive age bracket, and this is mainly the third to the fifth decades of life. Premature alcohol consumption was identified to cause considerable dependency rates in adulthood, and adolescent initiation has been linked to a more severe course and worse outcomes.

The multiple Indian studies have related alcohol dependence negatively with educational status. Lowly educated people tend to indulge in risky drinking and develop dependency more, maybe because of ill-informed behavior, ineffective coping, and socioeconomic pressures. Occupational status is also a major factor, and it is reported to be high amongst unskilled and semi-skilled laborers. Infrequent work, work insecurity, and physically arduous work have been associated with positive rates of alcohol consumption as a stress and exhaustion coping mechanism.

Another important variable that has an impact on alcohol consumption is socioeconomic status. Empirical studies carried out in different regions of India have always revealed that alcohol dependence is prevalent among people who belong to the lower and lower-middle classes. The factors associated with initiation and maintenance of alcohol use in these groups of people are financial stress, limited availability of healthcare services, and a poor social support system.

Alcohol dependence is closely related to factors in the family. One of the most influential risk factors, which manifests both the genetic predisposition and the exposure to environments, has been defined as a positive family history of alcoholism. The drinks are also more prevalent in family structure, as in some cases, a greater number of nuclear families are reported to be more likely to engage in drinking than those in joint families, as social support and monitoring may become rather limited. Marital status has varied in relation, but alcohol dependence is also common in married people in treatment-seeking populations, which represent greater social responsibilities and stressors.

The alcohol consumption habits are further influenced by domicile and cultural context. The process of urbanization has also been linked to greater supply and social normalization of alcohol, even though some Indian studies have also cited equal or even greater prevalence of alcohol dependence in rural locales. This could be blamed on insufficient knowledge, cultural orientations, and the lack of de-addiction services in rural areas. Religious and socio-cultural norms also shape drinking behavior, and different communities exhibit variations.

The drinking characteristics that include the age at which alcohol is initiated, the kind of alcohol people drink, and the drinking behavior have been well researched. Early age exposure to alcohol, consumption of alcoholic beverages of stronger strength, among others, used on a daily or binge basis, has been identified to have escalating levels of dependence. Such trends are channeled by societal groups of peers, curiosity, social events, and family orientation regarding the use of alcohol.

Whereas several studies have investigated separate socio-demographic factors related to alcohol dependence, there exists a relative dearth of detailed information centering on the attained socio-demographic portrait of the patients reporting to tertiary care hospitals in India. These characteristics should be

understood within a population seeking treatment, so that specific interventions can be planned to aid in their detection and enhance preventive measures. The current research aims to add to this literature by giving an organized account of the socio-demographic characteristics of alcohol dependence syndrome patients in a tertiary care unit.

MATERIALS AND METHODS

Data source: The research sample was comprised of patients diagnosed with alcohol dependence syndrome who were visiting the Psychiatry Outpatient Department, the inpatient wards, and emergency services of a tertiary care teaching hospital located in India.

Design of the study: This was a cross-sectional observational study conducted at the hospital.

Time period: The research was done within 18 months.

Sample size: 100 alcohol dependent syndrome patients were used in the study.

Sampling technique: Simple random sampling was used to select patients who met the inclusion criteria during the study period.

Inclusion criteria:

- Patients who are aged 18 years and over.
- Patients who meet an ICD-10 diagnostic criterion of alcohol dependence syndrome (F10.2).
- Participants who signed informed consent to take part in the study.

Exclusion criteria:

- Patients are co-morbidly affected by other major psychiatric disorders other than alcohol dependence syndrome.
- Patients who have acute medical illness or are severely cognitively impaired, and thus cannot assess themselves.
- Patients who are dependent on other substances, not including alcohol, but nicotine.
- Patients' lack of good faith in giving informed consent.

Ethical considerations: The study protocol was reviewed by the Institutional Ethics Committee and accepted. All participants were informed and provided written consent to participate in the study, and patient information was kept confidential throughout the study.

Method of data collection: The data were gathered using a semi-structured pro forma to record socio-demographic details such as age, education level, occupational position, place of domicile, socioeconomic status, religion, marital status, family type, and family history of alcoholism. Variables of drinking were also recorded, such as the age of initiating alcohol use and alcohol consumption patterns.

Statistical evaluation: Data were keyed into Microsoft Excel and analysed using the Statistical Package for the Social Sciences (SPSS). The socio-demographic and clinical

variables were summarized using descriptive statistics, including frequencies, percentages, means, and standard deviations. Tables and figures were used to provide results.

Sample size estimation: The size of the sample to be used in the present study was estimated with reference to the most prevalent morbidity due to alcohol dependence services in the past studies carried out in India, which were undertaken in the tertiary care facilities. Taking into account an approximate prevalence of 50 percent of alcohol dependence-related clinical and socio-demographic attributes about the treatment-seeking population, the sample size was provided based on the conventional formula of cross-sectional studies:

$$n=4PQ/L^2$$

Where:

- n = required sample size
- P = estimated prevalence (50)
- Q = 100 – P (50)
- L = permissible error, which is assumed as 10% of P (5)
- $n=(4\times50\times50)/5^2=10000/25=400$

Nonetheless, given that the study was going to be conducted with a maximum duration of 10 weeks, the number of eligible participants available, and in uniformity with other schools of high-quality tertiary care-based cross-sectional studies of a similar population in India, a sample of 100 patients was deemed sufficient and scientifically valid to study the socio-demographic profile in this cross-sectional research. The sample size was adequate to address the aims of the study and to enable meaningful interpretation of the results.

RESULTS

The present study included 100 patients with alcohol dependence syndrome who satisfied the inclusion criteria. The socio-demographic and drinking-related features of the study population have been analysed and presented systematically.

Most of the study's participants were adults in economically productive age brackets. The majority of patients had reached the primary or secondary education level and were in unskilled or semi-skilled jobs. A higher rate of patients was in the lower and lower-middle socioeconomic classes. Regarding domicile, patients were sampled from both urban and rural areas.

Most patients were in nuclear families. A substantial percentage of respondents indicated that there was a positive family history of alcoholism, implying that family and the environment had a high impact on alcohol consumption. Early alcohol consumption was a widespread occurrence, and frequent drinking behaviours were widespread among the people who took part in the study.

The summary of socio-demographic data of the 100 patients diagnosed with alcohol dependence syndrome is summarized below. The table design is systematic and aligns with the format of the shared PDF, and each table is introduced with a short purchase description.

Table 1: Distribution of study participants according to age

Age group (years)	Number (n)	Percentage (%)
18–30	32	32.0
31–40	35	35.0
41–50	23	23.0
51–60	10	10.0
Total	100	100.0

This table depicts the age-wise distribution of patients included in the study.

Table 2: Distribution of study participants according to educational status

Educational status	Number (n)	Percentage (%)
Uneducated	16	16.0
Primary school	32	32.0
High school	32	32.0
Graduate	20	20.0
Total	100	100.0

This table shows the educational attainment of the study population.

Table 3: Distribution of study participants according to occupational status

Occupational status	Number (n)	Percentage (%)
Unskilled	40	40.0
Semi-skilled	40	40.0
Skilled	20	20.0
Total	100	100.0

This table presents the occupational profile of patients.

Table 4: Distribution of study participants according to domicile

Domicile	Number (n)	Percentage (%)
Urban	52	52.0
Rural	48	48.0
Total	100	100.0

This table depicts the place of residence of the study population.

Table 5: Distribution of study participants according to socioeconomic status

Socioeconomic class	Number (n)	Percentage (%)
Lower	10	10.0
Upper lower	36	36.0
Lower middle	35	35.0
Upper middle	15	15.0
Upper	4	4.0
Total	100	100.0

Socioeconomic status was assessed using the modified Kuppuswamy scale.

Table 6: Distribution of study participants according to religion

Religion	Number (n)	Percentage (%)
Hindu	90	90.0
Muslim	10	10.0
Total	100	100.0

This table outlines the religious affiliation of the patients.

Table 7: Distribution of study participants according to marital status

Marital status	Number (n)	Percentage (%)
Married	100	100.0

This table shows the marital status of the study population.

Table 8: Distribution of study participants according to type of family

Type of family	Number (n)	Percentage (%)
Nuclear	60	60.0
Joint	40	40.0
Total	100	100.0

This table depicts the family structure of the patients.

Table 9: Distribution of study participants according to family history of alcoholism

Family history of alcoholism	Number (n)	Percentage (%)
Present	60	60.0
Absent	40	40.0
Total	100	100.0

This table shows the presence or absence of family history of alcoholism.

Table 10: Distribution of study participants according to age at initiation of alcohol use

Age at initiation (years)	Number (n)	Percentage (%)
11–20	59	59.0
21–30	41	41.0
Total	100	100.0

This table depicts the age at which alcohol consumption was initiated.

As demonstrated in [Table 1], most patients fell in the age group of 31–40 years, which implies that the alcohol dependence syndrome mostly affects people in the age bracket that defines the economically productive population. [Table 2] shows that the majority of patients were at a primary or high school level of education, which is a lower educational attainment than that of alcohol dependent patients. [Table 3]

reports that the study population was mostly unskilled and semi-skilled, indicating an occupational vulnerability. [Table 4] shows an almost equal urban-rural distribution, indicating urban and rural alcohol dependence. [Table 5] demonstrates that a majority of patients were in a low-middle and upper-lower socioeconomic class, indicating the connection between alcohol dependence and socioeconomic disadvantage. [Table 6] shows that most patients were Hindu, and it is considered representative of the area's demographics. [Table 7] reveals that all patients are married, a pattern consistent with seeking treatment in a tertiary care facility. [Table 8] shows that the proportion of patients who are members of nuclear families is higher, implying that social support as an area is a contributing factor. It is observed that both heredity and environment play an important role in alcoholism because most patients showed a positive family history in [Table 9]. The results indicate the use of alcohol started during early years, with over fifty percent of the patients beginning alcohol consumption before the age of 20 years, and as a significant risk of developing alcohol dependence, as shown in [Table 10].

DISCUSSION

This was a cross-sectional study that was conducted in the current research to present the socio-demographic profile of patients who were over at a tertiary care hospital diagnosed with alcohol dependence syndrome. The results have valuable information about the demographic and social differences of people who seek treatment in case of alcohol dependence in an Indian context.^[11]

The patients participating in the current study were mostly in the economically productive age bracket, with most in the third to fifth decades of their lives. This observation is in line with other studies conducted in India, with reports that alcohol dependence is a common phenomenon that is prevalent among middle-aged persons.^[12] This group is especially susceptible since occupational stress, financial, and social demands are more likely to lead to alcohol initiation and continuation as compared to adults. Alcohol dependence among this age group is also of great socioeconomic impact as it influences the productivity of the workforce and stability in the family life.^[13]

The education status became a socio-demographic

significant effect in the current study. The majority of the patients were limited to the primary or secondary school level. Previous investigations have linked low levels of education with high vulnerability to substance use disorder.^[14] Poor education can lessen enlightenment on the pernicious impact of liquor and the availability of more viable stress-coping schemes, causing one to be more susceptible to addiction. These results underline the importance of targeted awareness and prevention initiatives for the population with lower levels of education.^[15]

Regarding occupational status, a high number of patients have been engaged in unskilled or semi-skilled occupations. The same has been observed in studies conducted across various parts of India. Occupation in physically taxing or poorly remunerated jobs is commonly identified as financial insecurity, job frustration, and diminished social assistance, which could be favorable to occupational alcohol use as an alleviating mechanism. The high population of those with such an occupational background brings to the fore the interaction of occupational stress and alcohol dependency.^[16]

The analysis of socioeconomic status showed that the majority of patients were from the lower and lower-middle classes. The results are consistent with the available literature showing that there is a greater load of alcohol dependence among disadvantaged people who live in the underprivileged sections of society. Both initiation and continuance of alcohol use may be caused by economic stress, reduced access to healthcare services, and poor social support networks. Meanwhile, alcohol dependency also worsens the state of financial strain when it forms a vicious cycle where the social and economic choices become further vulnerable.^[17]

Patients used in the current research were almost evenly divided between rural and urban contexts, implying that alcohol dependence is no longer limited to a specific geographical context. Although urbanization is believed to lead to the availability and acceptability of alcohol, the rural population might be equally exposed to alcohol abuse thanks to ethnical beliefs, ignorance, and inaccessibility of de-addiction programs. This observation underscores why alcohol prevention and treatment services should be provided in both urban and rural settings.^[18]

Variables related to the family were relevant to the current study. Most of the patients were married and in nuclear families. Alcohol use among married persons can be triggered by heightened social and financial demands imposed on the couples. A higher proportion of atomic-family patients may indicate less social support and attention than in joint families.^[19] Also, a large proportion of patients stated that their family history of alcoholism was positive, and genetic susceptibility, as well as exposure to the environment, played a role in the development of alcohol dependence. This observation concurs with other previous study findings that established family history as a

powerful risk factor for alcohol use disorders.^[20]

The tendency of the participants to start alcohol intake in early years was observed, as the majority of the participants (more than half) stated that they began to drink before 20 years of age. A predisposition to dependence and a more aggressive progression of the disease has under all circumstances been linked with early alcohol exposure. Early initiation may be driven by curiosity, peer pressure, and sociocultural approval, underscoring the importance of prevention programs targeting teenagers and young adults. In general, the results of the current research contribute to the multifactorial character of the alcohol dependence syndrome, and the socio-demographic factors play a significant role in the development and the course of this entity. Knowledge about these attributes in a tertiary care treatment-seeking group will be helpful to clinicians and policymakers in establishing the high-risk groups and outlining specific preventive and treatment measures.

CONCLUSION

The current research shows that alcohol dependence syndrome is mostly prevalent in people who have a poor socio-demographic background with a lower level of education and people who occupy unskilled or semi-skilled jobs. There was elevated alcohol dependence among members of low and lower economic classes, nuclear families, and individuals with a positive parental history of alcoholism.

The problem of early drinking consumption turned out to be among the significant risk factors and explained why preventive measures should be taken in relation to adolescents and young adults. The results underscore the role of considering socio-demographic factors during the planning of alcohol prevention, early detection, and de-addiction programs. Community-based and targeted strategies and enhanced tertiary care services are necessary to direct the increasing burden of alcohol dependence syndrome.

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Conflicts of interest

There are no conflicts of interest.

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