

# A Retrospective Study on the Socio Demographic Details of Patients Presenting with Alcohol Withdrawal Syndrome in a Tertiary Care Hospital

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**Abstract:** Alcohol is a socially accepted drug, which means that there is way more accessibility to consume it as opposed to most other addictive substances. But one should not forget that though it is socially acceptable, it can still cause severe deterioration in physical and mental health and also in social relations, hence having severe implications on one's holistic well being in life. **Results:** All participants were males with mean age of 39 years (SD = 5.5 years). There seems to be a correlation between alcohol withdrawal syndrome and occupation, level of education, income level, work timing, age, marital status. **Discussion:** There seems to be an urgent need for intervention in curbing the level of alcohol consumption especially among the less educated and poor sections of society, this can be done through family support, bringing more awareness in the work place of these individuals. The government should not subsidize the sale of alcohol and should invest in alcohol deaddiction and rehabilitation centres.

**Keywords:** Alcohol Withdrawal Dependence

## 1. Introduction

Alcohol dependence is a state in which the body requires some amount of alcohol for normal functioning. This is because alcohol acts as a CNS depressant by activating the inhibitory neurotransmitter GABA. Due to regular alcohol consumption, the brain is constantly in a state of depression and hence when alcohol is suddenly withdrawn from a dependent individual, it leads to a state of hyperexcitation.

This results in features of alcohol withdrawal syndrome such as tremors, nausea, agitation, confusion, seizures and hallucinations with the most extreme form being delirium tremens, all of which is due to the free flow of excitatory neurotransmitters in the brain in the absence of inhibitory neurotransmitters like GABA. This can lead to a person suffering both physically and mentally when he is suddenly weaned off alcohol. This results in most people reverting back to drinking alcohol to cope up with the withdrawal symptoms. But it is important to manage these patients in a safe environment such as a hospital or rehabilitation center where they can be given drugs such as chlordiazepoxide or diazepam to help them cope with these symptoms

### Aim and objectives of the study:

- To study the socio - demographic correlates of patients diagnosed with alcohol withdrawal seizures
- To elucidate possible risk association between correlates and alcohol withdrawal seizures

### Need for research:

This study aims to establish the socio - demographic details of the people suffering from Alcohol Withdrawal Syndrome (AWS) so that more interventions from government and other healthcare organizations can be aimed at targeting the vulnerable groups and ensuring that AWS is prevented. It can also help medical practitioners identify such vulnerable

groups during their practice and ensure that proper treatment and awareness is created in these people by educating them about Alcohol withdrawal and the ill effects of alcohol.

## 2. Methodology

After obtaining permission from the IRB, the study was conducted. The charts of patients diagnosed with Alcohol withdrawal seizures were reviewed for the past one year.

The charts were retrieved after screening for the above diagnosis from the emergency register, male medicine ward register, male neurology ward register and male psychiatry ward register.

The hospital numbers of these patients are identified and accordingly the charts are obtained from MRD and reviewed

### Descriptive statistics:

Frequency and percentage distribution was used to analyse the socio demographic variables.

### Inferential statistics:

Chi - square test was used to find the association between categorical variable

Inclusion criteria: Chart review of patients diagnosed with alcohol withdrawal seizures.

Exclusion criteria: Charts with incomplete data

## 3. Results

Results show that the mean age of the male developing AWS was 39 years. The study only included men due to the socioeconomic barriers preventing women from accessing alcohol in India. Most people developing alcohol withdrawal

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syndrome were from nuclear families (93%), and the majority (59%) of people developing AWS is in rural areas, but this could be due to the proximity of the hospital to such areas. Most of them are from family size less than 5 members. An interesting finding is that most people at the risk of developing AWS are in the annual income category of more than 50K or 60K INR, indicating that those from very poor backgrounds tend to not consume alcohol on a regular basis probably due to financial reasons. Most men are married and are only educated up to primary school level. (48%) Skilled workers and those working in the morning shift are at higher risk of developing AWS.

#### Socio - demographics characteristics

Variables	Results
<b>Socio - Demographics</b>	
Age (years)	Mean=39 years SD=5.5 years
<b>Type of Family</b>	
Nuclear	93%
Joint	7%
<b>Household location or setting</b>	
Rural	59%
Urban	41%
<b>Family size</b>	
	Mean=4; SD=1
<5	66%
≥5	34%
<b>Annual household income, (Indian Rupee)</b>	
	Mean =91, 928; SD=1, 03, 892
<50000	12 (12%)
50000 - 60000	41 (41%)
>60000	46 (46%)
<b>Marital Status</b>	
Married	83%
Unmarried	17%

<b>Educational Background</b>	
Primary (1 <sup>st</sup> - 5 <sup>th</sup> )	48%
Middle (6 <sup>th</sup> - 8 <sup>th</sup> )	14%
High school (9 <sup>th</sup> - 10 <sup>th</sup> )	11%
Intermediate (11 <sup>th</sup> - 12 <sup>th</sup> ) or equivalent	18%
Graduate or Postgraduate	9%
<b>Occupation</b>	
Skilled worker	62%
Unskilled worker	38%
<b>Shift of work</b>	
Morning	60%
Evening	7%
Night	15%
Alternate	7%
Day	11%

#### 4. Discussion

Alcohol dependence is on the rise in many parts of the world. Our study was done to evaluate the correlation between alcohol withdrawal syndrome and the socio demographic variables in that population. Our study was conducted in Saveetha Medical College Hospital.

From the results it is clear that AWS is more common in people of lower educational status. This could be due to the lack of educational awareness in this group. It is also interesting to note that those from very low income backgrounds are less likely to be dependent on alcohol as

they may lack access due to lack of income. But past studies have shown that people from lower socio economic status are more likely to develop AWS. In our study, greater educational awareness and a lack of income were factors that prevented individuals from consuming too much alcohol.

There were several limitations associated with our study. First it included smaller sample size, and the study design was retrospective. This limits establishing causality and can only describe associations between the various variables and alcohol dependence. Further the study was limited to one geographical location so the results of the study cannot be generalized. Also the study included only males so the findings of our study may not be applicable to females. Study didn't included confounding factors like family history of alcohol consumption and childhood environment and their consideration in future studies will give deeper insight of the issue.

#### 5. Conclusion

There seems to be a urgent need to intervene as those with less education and are unskilled are at a higher risk. There should be a family centered approach to help these patients tackle their dependency on alcohol and the family must be educated on how to respond in case a patient develops AWS. There must also be educational campaigns to bring more awareness in the workplace so that employers have a better understanding of how to deal with employees developing AWS and that immediate care is necessary.

The government must play a important role in bringing more awareness about AWS and the potential dangers of alcohol on physical and mental health. Subsidizing alcohol in the form of TASMACHOP shops must also be reduced as making alcohol expensive might decrease the consumption of alcohol and hence reduce the incidence of AWS.

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