# A Study to Assess the Prevalence of Anxiety among Alcohol Dependence in Selected Hospitals in Aizawl, Mizoram

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**Abstract**: *Anxiety and other psychiatric comorbidities are often linked to Alcohol dependency, a chronic illness. The purpose of this study was to determine the prevalence of anxiety in patients with Alcohol dependence and investigate any associations between these conditions and sociodemographic factors. A non-experimental research design was employed for this study at selected hospitals in Aizawl, Mizoram. A non-probability purposive sampling technique was used to gather a sample of 100 alcohol-dependent patients from both the Inpatient (IPD) and Outpatient Departments (OPD). A semi-structured sociodemographic questionnaire was used in conjunction with standardized instruments, the Generalized Anxiety Disorder 7-item scale (GAD-7). The data were analysed with SPSS version 20.0, applying frequency distributions and Chi-square tests to determine associations. The findings showed that mild anxiety was the most prevalent, reported by 40% of participants, and Chi-square analysis revealed a statistical significance between anxiety and family type(p=0.037). Regular screening and integrated treatment approaches that address substance abuse and mental health issues are crucial, as the results show that anxiety is prevalent among alcohol-dependent individuals.*

**Keywords:** Alcohol dependence, Anxiety Disorders, Prevalence, Psychiatric comorbidity, Mental health

## 1. Introduction

Alcohol use disorder (AUD), another name for alcoholism, is a general term for any alcohol consumption that causes physical or mental health issues. All bodily systems can be impacted by alcohol consumption, but the brain, heart, liver, pancreas, and immune system are especially affected. Among other illnesses, this can lead to liver failure, Wernicke-Korsakoff syndrome, mental illness, an irregular heartbeat, and an elevated risk of cancer. It is neither normal nor healthy to live in a state of continual fear, hopelessness, or worthlessness as the discussion over alcohol prohibitions spreads throughout India. As a youngster, adolescent, or adult, this is true regardless of your gender. As a youngster, adolescent, or adult, this is true regardless of the gender. There may be an underlying clinical problem that needs to be treated if these depressive sensations, worries, and anxieties continue, interfere with day-to-day activities, and/or are excessive for any triggering event [1]

For centuries, alcohol has been used extensively in various cultures as a hallucinogenic substance that can lead to dependence. Alcohol abuse has serious social and economic repercussions and contributes to a high illness burden (Knowledge Action Portal on NCDs, n.d.). Alcohol addiction or dependence is categorized as a mental, behavioral, or neurodevelopmental illness resulting from substance use in the ICD-11. It is typified by a strong internal need to drink, which impairs self-control over consumption and causes a change in priorities where drinking becomes more important than other obligations and activities. Important diagnostic markers are also physiological characteristics like tolerance and withdrawal symptoms. Alcohol abuse can also have negative effects on other individuals, including strangers, friends, family, and coworkers[3]

Anxiety occurring among individuals with alcohol dependence (AUD) is a serious issue with broad ramifications. Alcohol is frequently used by people with anxiety as a kind of self-medication to momentarily reduce their symptoms.

### 1.1. Statement of the Problem

"A Study to Assess the Prevalence of Anxiety among Alcohol dependence in selected hospitals in Aizawl, Mizoram."

### 1.2. Objectives of the study
- To assess the prevalence of anxiety among alcohol dependence.
- To discern the association between anxiety and socio-demographic variables among alcohol dependence.

## 2. Review of Literature

In the study "Alcohol Consumption Among the Women of Northeast India: The Relationship Between the Socioeconomic Status of the States and the Percentage of Female Population Drinking Alcohol," by Hussain (2021) investigated the ways in which various socioeconomic indicators affect alcohol consumption among women in the northeastern Indian states who are between the ages of 15 and 50. The researcher examined the correlation between the prevalence of female alcohol intake and female literacy, per capita income, unemployment, and labor participation using

data from the NFHS-4, Census 2011, and government sources. The only element that showed a meaningful correlation, according to the findings, was per capita income; states with lower income levels reported greater rates of female alcohol use. Unemployment rates, literacy, and workforce engagement all indicated a negative correlation with alcohol use, although these were not statistically significant. Overall, the study comes to the conclusion that women's alcohol consumption may be decreased by economic growth as well as advancements in women's access to education and work possibilities. This emphasizes the necessity of development-focused policies that consider regional differences within Northeast India [4]

According to Debnath et al. (2025), the increasing incidence of alcohol abuse among youth, especially students, is concerning given the global concern over the effects of alcohol intake on public health. Their study looked at the prevalence of alcohol use disorder (AUD) in medical students and how it related to socioeconomic characteristics, anxiety, and depression. With a sample size of 425 based on AUD prevalence estimates, a 4% margin of error, and a 15% nonresponse rate, the authors carried out a cross-sectional study at a medical college in New Delhi in June 2023. Simple random sampling was used to choose participants from the MBBS enrollment list, and self-administered questionnaires utilizing proven screening instruments such the PHQ-9, GAD-7, AUDIT-C, and CAGE were used for assessment. STATA 18 was used for statistical analysis, and 95% confidence intervals were provided along with the prevalence of AUD. Chi-square tests were used to examine relationships between AUD and related variables, and multivariate logistic regression (P < 0.05) was used to include significant variables (P < 0.2) from univariate analysis. According to the survey, which received responses from 413 students, the prevalence rates of anxiety, depression, and AUD were 24.2%, 31.5%, and 13.6%, respectively. Significant correlations between AUD and gender, present living situation, tobacco usage, and anxiety were found by both univariate and multivariate regression. According to Debnath et al., the study shows alarmingly high rates of AUD, depression, and anxiety among New Delhi medical students, highlighting the significant impact that variables like gender, living circumstances, tobacco use, and anxiety have in the development of AUD[2]

According to Joseph et al. (2024), the use of various survey techniques and measurement instruments causes significant variance in the epidemiology of alcohol use disorders (AUDs). Their review addressed this by contrasting pooled prevalence estimates from non-AUDIT instruments with those obtained from the Alcohol Use Disorders Identification Test (AUDIT). PsycINFO, Web of Science, PubMed, Scopus, Ovid, and Google Scholar were all thoroughly searched in order to find community-based prevalence studies that were published between 2000 and 2020. Publication bias was examined, pertinent data was retrieved, pooled prevalence rates were computed, and methodological quality was rated. A total of 21 research with 73,997 participants from different Indian states showed that the overall prevalence of AUDs was 12.5%. The combined prevalence, as determined by AUDIT, was 12.4%. Among these, alcohol dependence (AUDIT ≥20) accounted for 2.3%, while hazardous and harmful alcohol use (AUDIT 8-19) accounted for 8.6%. A pooled prevalence of 14.2% was determined using non-AUDIT techniques. Overall, the results show that about one in twelve Indians fit the criteria for alcohol use disorders (AUDs), with notable regional differences in alcohol consumption trends. The high prevalence emphasizes the necessity of a thorough national policy that takes regional variations in alcohol consumption into account[5]

## 3. Methodology

### 3.1 Research approach

This investigation will employ a quantitative methodology. The methodical gathering of numerical data and its subsequent analysis to produce unbiased conclusions are characteristics of quantitative research. It allows the researcher to calculate averages, identify trends, and evaluate correlations between variables.

Here, the researcher will focus on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.

### 3.2 Research design

In this study, in order to meet the objectives of the study, A non-experimental survey research design was adopted to assess the prevalence of anxiety among individuals with alcohol dependence.

### 3.3 Setting of the study

The present study was carried out in two selected hospitals in Aizawl.

### 3.4 Population

The population comprised individuals diagnosed with alcohol dependence, from the selected hospitals in Aizawl, representing the broader group from which the study participants were drawn.

### 3.5 Sample

The sample consisted of adult male and female participants above 18 years of age who were diagnosed with alcohol dependence, and who met the inclusion criteria established by the researcher.

### 3.6 Sample size

The sample size for the present study consisted of 100 alcohol dependents from selected hospitals in Aizawl (both IPD &OPD)

### 3.7 Sampling technique

Samples were selected using a non-probability purposive sampling technique.

## 3.8 Sampling criteria

The study included the following inclusion and exclusion criteria:

**Inclusion criteria:**
- Patients who are above the age of 18 years old.
- Patients diagnosed with alcohol dependency.
- Patients who are willing to participate.

**Exclusion criteria:**
- Patients who are below 18 years of age.
- Patients who are critically ill.

## 3.9 Variables

- **Independent variable**: Socio-demographic variables (age, gender, marital status, education, occupation, family type, duration of alcohol use)
- **Dependent variable**: Level of anxiety (GAD-7 score)
- **Demographic variables**: In this study, demographic variables are Age, Gender, Marital status, Education, Occupation, Family type, and Duration of Alcohol use

## 3.10 Development of tool

For the purpose of data collection, a structured socio-demographic questionnaire and the Generalised Anxiety Disorder 7-item scale (GAD-7) were used.

## 3.11 Reliability of tool

Using Cronbach's alpha, the study instruments' dependability was evaluated. The internal consistency score of $\alpha$ =.852 indicated acceptable reliability for use in the study sample when all components were analyzed, including demographic characteristics, the Generalized Anxiety Disorder 7-item scale (GAD-7).

## 3.12 Ethical consideration

The following measures were taken for addressing ethical issues and establishment of ethical considerations:
- Ethical clearance to conduct the study was obtained from the Institutional Ethics Committee, RIPANS on 25th February 2025.
- The investigator obtained permission from the Principal of the institution, RIPANS and subsequently from the respected hospitals
- The nature and purpose of the study were explained to the selected participants, and written or verbal consent was obtained prior to data collection.
- Confidentiality of the information provided by the participants was strictly maintained.
- Participants were informed that they had the right to withdraw from the study at any point without any consequences.
- The present paper is part of a larger study that examined anxiety and depression among individuals with alcohol dependence.

## 3.13 Data Collection Procedure

After getting approval from RIPANS Ethical Committee, main data collection was done from 26th August 2025 to 6th September 2025. A total of 100 patients from OPD, IPD, Male and Female Medical Wards from ZMC&H and Kulikawn Hospital, Aizawl who met the inclusion criteria were selected and seated comfortably. After initial interaction, the investigator introduced herself and explained the purpose of the study to the participants. Written or verbal informed consent was obtained prior to participation. Data were collected using two tools: the socio-demographic questionnaire and a standardized tool, GAD-7. The tools were administered to the participants in a quiet and comfortable environment. The investigator provided clarification for any doubts raised by the participants regarding the questions. The data collection process took approximately 5-10 minutes individually. After completion, the investigator collected the filled tools from the participants. Number of samples collected were usually 7-10 individuals per day.

## 3.14 Plan for data analysis

The investigator analyzed the data based on the objectives of the study using both descriptive and inferential statistics. Frequency and percentage distribution were employed to describe the socio-demographic variables and to present the prevalence of anxiety among patients with alcohol dependence. To examine associations, the Chi-square test was applied to determine the relationship between the levels of anxiety and socio-demographic variables. All analyses were carried out using the Statistical Package for the Social Sciences (SPSS) version 20.0.

## 4. Results

The collected data were tabulated, analyzed and interpreted by using descriptive and inferential statistics. The data are organized and presented under the following headings:

**Section I: Frequency and percentage distribution of socio-demographic variables of participants.**

**Table 1:** Frequency and percentage distribution of Socio Demographic variables, n=100

| Variables | Categories | Frequency (n) | Percentage (%) |
|---|---|---|---|
| Age in years | 18-27 years | 21 | 21.0 |
| | 28-37 years | 40 | 40.0 |
| | 38-47 years | 26 | 26.0 |
| | 48-57 years | 11 | 11.0 |
| | Above 57 years | 2 | 2.0 |
| | **Total** | 100 | 100.0 |
| Gender | Female | 21 | 21.0 |
| | Male | 79 | 79.0 |
| | **Total** | 100 | 100.0 |
| Marital Status | Single | 35 | 35.0 |
| | Married | 50 | 50.0 |
| | Divorced | 12 | 12.0 |
| | Widowed | 3 | 3.0 |
| | **Total** | 100 | 100.0 |
| Education | Primary | 2 | 2.0 |
| | Middle | 9 | 9.0 |

| | | | |
|---|---|---|---|
| | High School | 55 | 55.0 |
| | Higher Secondary School | 21 | 21.0 |
| | Graduate | 11 | 11.0 |
| | Post graduate | 2 | 2.0 |
| | **Total** | **100** | **100.0** |
| Occupation | Daily wage labourer | 28 | 28.0 |
| | Private | 26 | 26.0 |
| | Government | 14 | 14.0 |
| | Homemaker | 2 | 2.0 |
| | Unemployed | 30 | 30.0 |
| | **Total** | **100** | **100.0** |
| Family Type | Nuclear | 63 | 63.0 |
| | Joint | 37 | 37.0 |
| | **Total** | **100** | **100.0** |
| Duration of alcohol use | 1–5 years | 28 | 28.0 |
| | 6–10 years | 37 | 37.0 |
| | 11–15 years | 21 | 21.0 |
| | 16–20 years | 7 | 7.0 |
| | More than 20 years | 7 | 7.0 |
| | **Total** | **100** | **100.0** |

The analysis in Table 1 shows that 40 percent of respondents were between the ages of 28 - 37, typically considered the most productive and socially active stage of life. During this period, individuals often face significant personal, professional, and financial responsibilities, which may lead to increased stress and coping challenges. Consequently, some may resort to alcohol consumption as a means of stress relief, social bonding, or emotional escape. Followed by 26 percent who were between the ages of 38 - 47, which may represent individuals who have developed habitual drinking patterns over time, possibly due to prolonged exposure to occupational stress or social drinking culture. 21 percent were between the ages of 18 - 27, the relatively lower percentages in younger adults may reflect that although experimentation with alcohol often begins in early adulthood, dependence tends to develop later after sustained consumption. 11 percent who were between the ages of 48 - 57, the low prevalence among older adults (48 years and above) could be due to declining health, lifestyle changes, or mortality among heavy drinkers before reaching advanced age. And just 2 percent who were older than 57. This finding emphasizes that alcohol dependence is most common among people in their late 20s to late 30s, which is the productive stage of life.

Regarding gender, 79 percent of the participants were male and 21 percent were female, reflecting the general trend that alcohol dependence is more common among men, which may be influenced by socio-cultural norms and greater social acceptability of alcohol consumption among males. Considering marital status, half of the participants were married (50 percent), while 35 percent were single, 12

percent divorced, and 3 percent widowed. The predominance of married individuals indicates that alcohol dependence not only affects single or socially isolated persons but also has significant consequences for family relationships.

In terms of education, 55 percent of the participants had completed high school, 21 percent higher secondary school, 11 percent were graduates, 9 percent had middle school education, and only 2 percent each had postgraduate and primary education. This distribution suggests that alcohol dependence is found across all levels of education, but is most common among those with secondary-level education. Individuals in this group may have greater exposure to social networks that encourage drinking or may experience job-related and economic stress with limited coping resources. The relatively lower prevalence among highly educated groups might be attributed to better awareness of health risks and access to healthier coping mechanisms.

Regarding occupation, 30 percent of participants were unemployed, 28 percent were daily wage laborers, 26 percent were engaged in private jobs, 14 percent were government employees, and only 2 percent were homemakers. The higher prevalence among unemployed and daily wage workers reflects the association between economic instability and alcohol dependence. Unemployment and irregular income can contribute to psychological stress, frustration, and feelings of helplessness, which may drive individuals toward alcohol use as a coping strategy.

Family type analysis revealed that 63 percent belonged to nuclear families and 37 percent to joint families, indicating that alcohol dependence is more common in nuclear family structures where extended support and supervision may be limited.

Finally, with respect to duration of alcohol use, 37 percent of the participants reported drinking for 6-10 years, 28 percent for 1-5 years, 21 percent for 11-15 years, and 7 percent each for 16-20 years and more than 20 years. This shows that a majority of alcohol-dependent individuals had been consuming alcohol for a prolonged period, with nearly two-thirds using it for more than six years. This prolonged duration highlights the chronic and progressive nature of alcohol dependence, where continued use over time reinforces tolerance and dependency.

**Section II: Frequency and percentage distribution of participants based on the level of anxiety as measured by GAD-7**

**Table 2:** Frequency and Percentage Distribution of Anxiety level (GAD-7) across Socio-Demographic Variables, n=100

| Variables | | No to Low Risk | | Mild | | Moderate | | Severe | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | | n | % | n | % | n | % | n | % | (n) |
| Age (years) | 18-27 | 4 | 19.0% | 10 | 47.6% | 4 | 19.0% | 3 | 14.3% | 21 |
| | 28-37 | 8 | 20.0% | 17 | 42.5% | 11 | 27.5% | 4 | 10.0% | 40 |
| | 38-47 | 6 | 23.1% | 9 | 34.6% | 10 | 38.5% | 1 | 3.8% | 26 |
| | 48-57 | 3 | 27.3% | 3 | 27.3% | 5 | 45.5% | 0 | 0.0% | 11 |
| | >57 | 0 | 0.0% | 1 | 50.0% | 1 | 50.0% | 0 | 0.0% | 2 |
| Gender | Female | 7 | 33.3% | 10 | 47.6% | 4 | 19.0% | 0 | 0.0% | 21 |
| | Male | 14 | 17.7% | 30 | 38.0% | 27 | 34.2% | 8 | 10.1% | 79 |

| Category | Subcategory | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| Marital Status | Single | 5 | 14.3% | 15 | 42.9% | 12 | 34.3% | 3 | 8.6% | 35 |
| | Married | 13 | 26.0% | 18 | 36.0% | 15 | 30.0% | 4 | 8.0% | 50 |
| | Divorced | 1 | 8.3% | 6 | 50.0% | 4 | 33.3% | 1 | 8.3% | 12 |
| | Widowed | 2 | 66.7% | 1 | 33.3% | 0 | 0.0% | 0 | 0.0% | 3 |
| Education | Primary | 1 | 50.0% | 0 | 0.0% | 1 | 50.0% | 0 | 0.0% | 2 |
| | Middle | 2 | 22.2% | 4 | 44.4% | 2 | 22.2% | 1 | 11.1% | 9 |
| | High School | 12 | 21.8% | 24 | 43.6% | 16 | 29.1% | 3 | 5.5% | 55 |
| | Higher Secondary School | 4 | 19.0% | 8 | 38.1% | 6 | 28.6% | 3 | 14.3% | 21 |
| | Graduate | 2 | 18.2% | 4 | 36.4% | 4 | 36.4% | 1 | 9.1% | 11 |
| | Postgraduate | 0 | 0.0% | 0 | 0.0% | 2 | 100.0% | 0 | 0.0% | 2 |
| Occupation | Daily wage | 4 | 14.3% | 9 | 32.1% | 12 | 42.9% | 3 | 10.7% | 28 |
| | Private | 5 | 19.2% | 9 | 34.6% | 9 | 34.6% | 3 | 11.5% | 26 |
| | Government | 5 | 35.7% | 5 | 35.7% | 4 | 28.6% | 0 | 0.0% | 14 |
| | Homemaker | 1 | 50.0% | 1 | 50.0% | 0 | 0.0% | 0 | 0.0% | 2 |
| | Unemployed | 6 | 20.0% | 16 | 53.3% | 6 | 20.0% | 2 | 6.7% | 30 |
| Family type | Nuclear | 16 | 25.4% | 23 | 36.5% | 16 | 25.4% | 8 | 12.7% | 63 |
| | Joint | 5 | 13.5% | 17 | 45.9% | 15 | 40.5% | 0 | 0.0% | 37 |
| Duration of alcohol use | 1-5 yrs | 7 | 25.0% | 13 | 46.4% | 4 | 14.3% | 4 | 14.3% | 28 |
| | 6-10 yrs | 8 | 21.6% | 15 | 40.5% | 11 | 29.7% | 3 | 8.1% | 37 |
| | 11-15 yrs | 2 | 9.5% | 9 | 42.9% | 10 | 47.6% | 0 | 0.0% | 21 |
| | 16-20 yrs | 2 | 28.6% | 1 | 14.3% | 3 | 42.9% | 1 | 14.3% | 7 |
| | >20 yrs | 2 | 28.6% | 2 | 28.6% | 3 | 42.9% | 0 | 0.0% | 7 |
| | Total | 21 | 21.0% | 40 | 40.0% | 31 | 31.0% | 8 | 8.0% | 100 |

The analysis in Table 2 shows that the majority of respondents aged 28-37 years had mild anxiety (42.5%) followed by moderate anxiety (27.5%). In the 38-47 years group, most were in the moderate category (38.5%), whereas those in the 48-57 years group reported a higher proportion of moderate anxiety (45.5%). Among participants aged 18-27 years, mild anxiety (47.6%) predominated, while in the above 57 years group, responses were equally distributed between mild and moderate (50% each). These results suggest that middle adulthood (28-47 years) is the age range with the greatest prevalence of clinically relevant anxiety, whereas younger and older groups showed relatively fewer severe cases. This may be due to increased life stressors during these years, such as career pressures, family responsibilities, and financial burdens. Younger adults may still be in the experimental or social drinking phase, while older adults might have developed coping mechanisms or reduced exposure to occupational stress.

Among the 100 participants, females exhibited a higher proportion of mild anxiety (47.6%) compared to males (38.0%), while males demonstrated greater representation in moderate (34.2%) and severe anxiety (10.1%) categories. Notably, none of the females reported severe anxiety. These findings suggest that while mild anxiety is prevalent in both genders, males are more likely to experience higher levels of severity. Possible explanations include differences in coping mechanisms, emotional expression, and societal expectations-men may suppress emotions or resort to alcohol use as a means of coping with psychological distress, leading to more intense anxiety symptoms.

Regarding marital status, married participants formed the largest group, with 36% exhibiting mild anxiety and 30% showing moderate anxiety, suggesting that while anxiety is common, it is generally mild among married individuals. Single respondents had nearly balanced distributions of mild (42.9%) and moderate (34.3%) anxiety, reflecting the stress associated with social isolation or instability in personal life. Divorced individuals showed a concentration in mild (50%) and moderate (33.3%) anxiety, possibly due to emotional distress and disrupted social support following marital breakdown. Interestingly, widowed participants mostly fell within the no-to-low risk category (66.7%), suggesting that widowhood, although emotionally challenging, may not be as closely linked with ongoing anxiety as marital instability or separation.

In education, it is found that high school graduates represented the largest group, with 43.6% reporting mild anxiety and 29.1% moderate anxiety. Participants with higher secondary education also reported considerable levels of mild (38.1%) and moderate (28.6%) anxiety. Graduates reported relatively even spread across categories, while postgraduates were mostly clustered in moderate anxiety (100%). These results suggest that educational attainment does not necessarily shield individuals from anxiety, but those with lower levels of education (primary and middle) reported lower severity compared to higher education groups.

Occupation reveals that daily wage laborers reported the highest levels of anxiety, with 42.9% experiencing mild anxiety and 32.1% moderate anxiety. Private employees also showed mild anxiety predominance (34.6%), while government workers were split between no/low risk (35.7%) and mild (35.7%). Unemployed participants exhibited higher levels of mild (53.3%) and moderate anxiety (20%). This indicates that unstable employment situations, particularly daily wage labor and unemployment, may be associated with greater anxiety severity compared to secure government jobs.

Family type indicates that participants from nuclear families reported higher mild (36.5%) and moderate (25.4%) anxiety levels compared to those from joint families, where mild (45.9%) and moderate (40.5%) anxiety were dominant. Severe anxiety was reported only among participants from nuclear families (12.7%). This suggests that joint families

may have a buffering effect, suggesting a possible protective role of joint family support.

Duration of alcohol use demonstrates that among those with 6-10 years of alcohol use, mild (40.5%) and moderate (29.7%) anxiety were dominant. Participants with 1-5 years of use also reported high proportions of mild anxiety (46.4%). In the 11-15 years group, moderate anxiety (47.6%) was more frequent, whereas in the 16–20 years group, moderate and severe anxiety were both present (42.9% and 14.3%, respectively). Those with more than 20 years of alcohol use had a relatively even distribution across mild and moderate categories. These findings indicate that prolonged duration of alcohol dependence is associated with more severe forms of anxiety, with a gradual escalation in severity as years of dependence increase.

**Section III: Association between levels of anxiety and socio-demographic variables**

**Table 3:** Association between levels of GAD-7 severity and Socio Demographic variables using chi-square test, n=100

| Variables | $\chi^2$ | df | p-value |
|---|---|---|---|
| Age(years) | 7.193 | 12 | 0.845 |
| Gender | 5.663 | 3 | 0.129 |
| Marital Status | 7.192 | 9 | 0.617 |
| Education | 8.869 | 15 | 0.884 |
| Occupation | 10.175 | 12 | 0.601 |
| Family type | 8.509 | 3 | 0.037** |
| Duration of alcohol use | 12.658 | 12 | 0.394 |

**\*\*p<0.05 level of significance**

The chi-square analysis in Table3 revealed no statistically significant association between anxiety severity and age ($\chi^2$ = 7.193, df = 12, p = 0.845), gender ($\chi^2$ = 5.663, df = 3, p = 0.129), marital status ($\chi^2$ = 7.192, df = 9, p = 0.617), education ($\chi^2$ = 8.869, df = 15, p = 0.884), occupation ($\chi^2$ = 10.175, df = 12, p = 0.601), or duration of alcohol use ($\chi^2$ = 12.658, df = 12, p = 0.394). These findings indicate that anxiety severity among alcohol-dependent individuals was not significantly influenced by these socio-demographic variables in the present study.

However, a statistically significant association was observed between anxiety severity and family type ($\chi^2$ = 8.509, df = 3, p = 0.037). Participants from nuclear families reported higher levels of severe anxiety compared to those from joint families, suggesting that family structure may play an important role in influencing anxiety levels. The presence of extended family support in joint family systems may offer a protective effect against severe anxiety, whereas individuals in nuclear families may experience greater emotional and psychosocial stress.

Overall, the findings indicate that family type was the only socio-demographic variable significantly associated with anxiety severity, while all other variables showed no significant relationship.

## 5. Discussion

The present study revealed that the majority of participants (40%) belonged to the age group of 28-37 years, followed by 38-47 years (26%), 18-27 years (21%), 48-57 years (11%), and only 2% were above 57 years. Mild anxiety was found to be the most prevalent level of anxiety, affecting 40% of the alcohol-dependent participants. The predominance of mild anxiety suggests that a substantial proportion of individuals with alcohol dependence experience anxiety symptoms that may not reach severe levels but still require early identification and intervention.

A statistically significant association was observed between anxiety severity and family type (p = 0.037), indicating that the level of anxiety varied significantly according to the family structure of the participants. This finding highlights the potential influence of family environment on anxiety among individuals with alcohol dependence.

**The results of this study are supported by the following research:**

Debnath et al. (2025) reported that the majority of alcohol-dependent individuals belonged to the young adult age group of 20–35 years, indicating a higher vulnerability to alcohol dependence during early adulthood. This age distribution is comparable to the present findings, where a substantial proportion of participants were in the young adult age range [2]. Ravikanth and Sultan (2020), in a study conducted among alcohol-dependent patients in rural South India, found that 33% of participants had co-occurring psychiatric disorders, with anxiety emerging as one of the most prevalent comorbid conditions. These findings align with the present study, which identified mild anxiety as the most common anxiety severity among individuals with alcohol dependence [6]. Furthermore, Mathur et al. (2022), in a cross-sectional study among 90 alcohol-dependent patients in Uttar Pradesh, India, observed significantly higher anxiety scores among individuals from nuclear families compared to those from joint or mixed family settings, supporting the present study's finding of a significant association between anxiety severity and family type[7].

## 6. Conclusion

The present study provides important insights into the prevalence of anxiety among individuals with alcohol dependence in selected hospitals in Aizawl. The findings indicate that anxiety is a common psychological comorbidity in this population, with mild anxiety emerging as the most prevalent level, while severe anxiety was comparatively less frequent. A higher proportion of anxiety symptoms was observed among participants aged 28-47 years and among male patients, suggesting possible age- and gender-related trends, although these associations were not statistically significant.

Notably, the study identified a statistically significant association between anxiety severity and family type, with individuals from nuclear families experiencing higher levels of severe anxiety compared to those from joint families. This highlights the potential influence of family structure and social support on anxiety among alcohol-dependent individuals. Overall, the findings underscore the need for

routine screening, early identification, and family-focused psychosocial interventions to address anxiety in patients with alcohol dependence and to improve mental health outcomes in this vulnerable population.

## 7. Recommendations

On the basis of the study findings, the following recommendations have been made:

- The study may be conducted using a longitudinal design to explore changes in anxiety over time.
- The study may be conducted after interventions, such as counselling or rehabilitation, to evaluate changes in anxiety levels.
- Future studies could include multiple healthcare settings to enhance generalizability.

## References

[1] National Institute on Alcohol Abuse and Alcoholism (NIAAA). Alcohol's effects on the body. Bethesda (MD): NIAAA; n.d. [cited 2025 Aug 19]. Available from: https://www.niaaa.nih.gov/alcohols-effects-health/alcohols-effects-body

[2] Debnath A, Verma A, Gupta P, Jindal S. Prevalence of alcohol use disorder among medical students in New Delhi: a cross-sectional study. Indian J Community Med. 2025;50(1):43–47. doi:10.4103/ijcm.ijcm_596_23

[3] Australian Government Department of Health. Diagnostic criteria for alcohol dependence. Canberra: Australian Government; n.d. [cited 2024 May 2]. Available from: https://alcoholtreatmentguidelines.com.au/resources/appendix-3-diagnostic-criteria-for-alcohol-dependence

[4] Hussain S. Alcohol consumption among the women of Northeast India: the relationship between the socioeconomic status of the states and the percentage of female population drinking alcohol. Psychol Educ J. 2021;58(2):5954–5956. doi:10.17762/pae.v58i2.3070

[5] Joseph J, Varghese A, Vijay VR, Grover S, Sharma S, Dhandapani M, et al. The prevalence of alcohol use disorders using alcohol use disorders identification test (AUDIT) in the Indian setting: a systematic review and meta-analysis. J Ethn Subst Abuse. 2024;23(1):2–20. doi:10.1080/15332640.2022.2056105

[6] Ravikanth T, Sultan S. The prevalence of psychiatric comorbidity and its relationship to the severity of alcohol dependence in the population of rural South India. Middle East Curr Psychiatry. 2020;27(1):1. doi:10.1186/s43045-019-0010-y

[7] Mathur P, Pawar SK, Sengupta N, Bhargava R. Demographic and socio-economic factors associated with anxiety and depression in alcohol dependent patients. J Clin Diagn Res. 2022;16(4):VC01–VC05.

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