

## Original Research

### To assess the co-morbidity of depression and disability in people with alcoholism

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#### ABSTRACT:

**Aim:** The aim of the present study to assess the co-morbidity of depression and disability in people with alcoholism.

**Methods:** This research comprised 100 patients aged 18 and above who satisfied the criteria for alcohol dependency syndrome according to ICD-10 and had an informant accessible. Patients were evaluated for depression using ICD-10 criteria during clinical interviews, and severity was measured using the HAM-D rating scale (HAM-D score: 0-7 = normal, 8-16 = mild depression, 17-23 = moderate depression, 24 and above = severe depression). The WHODAS 2.0 rating scale was used to measure disability. The WHODAS 2.0 scale was selected because it has previously been used to assess impairment in alcohol dependency syndrome research. **Results:** Depression was shown to be prevalent in 83 percent of alcoholism patients. The mild depression (12%), moderate depression (29%), and severe depression (22%). The WHO DAS 2.0 Scale was used to measure disability. It was discovered that impairment exists in 89 percent of the sample. Life activities (30 percent), which comprise both family and job activities, were the most impacted among the individual areas, followed by engagement in society (29 percent). In terms of severity, the majority of the patients (35 patients) had moderate to severe impairment, 33 patients had mild disability, 20 patients had mild disability, and 1 patient had extreme disability. **Conclusion:** Three-fourths of people with ADS suffer from depression. ADS is also linked to higher degrees of impairment, regardless of whether or not depression is present.

**Keywords:** Alcohol dependence syndrome, Depression, Disability

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#### INTRODUCTION

According to epidemiological research, 76.3 million (7.63 percent) of the world's two billion alcohol consumers have at least one problem induced by their habit. Regular alcohol usage has various detrimental implications. Among the physical side effects include hepatic cirrhosis, neoplasia, gastritis, esophageal varices, pancreatitis, and diabetic mellitus. Psychiatric consequences include increased rates of mood and/or anxiety disorder co morbidity, which is linked to difficulties adhering to treatment and worse prognoses.<sup>1-3</sup> Alcohol use disorders (AUDs) cause 5 million fatalities per year.<sup>4</sup> AUDs also impose a large economic burden on society, with direct and indirect expenses surpassing 2% of the GDP.<sup>5</sup> Despite these severe implications, it is believed that 78 percent of AUD patients go untreated.<sup>6</sup> The number of alcohol drinkers in India is believed to be more than sixty million, and this figure has risen in recent years.<sup>7</sup> Alcohol use disorders (AUDs) are a

serious public health issue in India, and they are likely the most frequent mental condition in the general population. Individuals with AUDs who have co-morbid mental disorders exacerbate the situation by raising the load on the health-care system. Furthermore, concomitant mental illnesses in people with alcoholism are linked to longer hospital stays, worse treatment results, higher relapse rates, suicide, homelessness, and a negative influence on family.<sup>8</sup> A number of major epidemiological studies have shown a high but widely varying frequency of concomitant mental problems in people with AUDs. The Epidemiologic Catchment Area Study found a 44 percent incidence of co-morbid mental condition in those with AUDs.<sup>9</sup> Individuals with a AUD had a 12-month prevalence of 29.2 percent for mood (affective) disorders, which included major depressive disorder (27.9 percent) and bipolar disorder (1.9 percent), and a prevalence of 36.9 percent for anxiety disorders, which included panic

disorder (3.9 percent), PTSD (7.7 percent), and generalised anxiety disorder (11.6 percent) in the National Comorbidity Study (NCS).<sup>10</sup> Furthermore, some studies have shown that co-morbid mental problems are more frequent in AUD patients referred for treatment than in the general population<sup>11</sup>, however other investigations produced contradicting results. According to a French hospital-based research, 42.12 percent of 330 AUD patients satisfied the diagnostic criteria for another mental condition. Comorbid psychiatric illnesses included mood disorders (30.6%), anxiety disorders (5.5%), psychosis (4.6%), and dementia (1.5%).<sup>12</sup> Similarly, in a Spanish sample of 2300 AUD patients, 42.2 percent had multiple disorders (matching DSM IVTR criteria), with mood and anxiety disorders being the most common.<sup>13</sup> In contrast to the preceding, Canada observed a lower frequency of concomitant mental problems in individuals with AUD of 18.5 percent.<sup>14</sup>

## METHODS AND MATERIALS

After receiving clearance from the protocol review committee and the institutional ethics committee, this cross-sectional observational research was carried out at the Department of Psychiatry. This research comprised 100 patients aged 18 and above who satisfied the criteria for alcohol dependency syndrome according to ICD-10 and had an informant accessible. Patients with acute and severe physical

illnesses, pre-existing psychological illnesses, uncooperative individuals, and those who refuse to provide permission were excluded from the research.

## METHODOLOGY

100 Patients who satisfied the ICD-10 criteria for alcohol dependency syndrome and were visiting a psychiatric department and met the specified inclusion and exclusion criteria were chosen for the research. After discussing the research, participants provided informed permission and sociodemographic information using a semi-structured proforma prepared in the department of psychiatry. Patients were evaluated for depression using ICD-10 criteria during clinical interviews, and severity was measured using the HAM-D rating scale (HAM-D score: 0-7 = normal, 8-16 = mild depression, 17-23 = moderate depression, 24 and above = severe depression). The WHODAS 2.0 rating scale was used to measure disability. The WHODAS 2.0 scale was selected because it has previously been used to assess impairment in alcohol dependency syndrome research.<sup>15</sup>

## STATISTICAL ANALYSIS

SPSS version 24.0 was used for statistical analysis. Mann-Whitney The U test was employed, and the threshold of significance was set at 0.05.

## RESULTS

Table 1 shows the patients' ages. The majority of patients (52%) were between the ages of 25 -35, followed by 35-45 (23%), under 25 (18%), and over 45 (18%). (9 percent ). The patients were all men (100 percent).

**Table 1: Age of the patients**

Age(years)	Number	Percentage
Below 25	18	18
25-35	52	52
35-45	23	23
Above 45	9	9

Depression was shown to be prevalent in 83 percent of alcoholism patients. Table 2 shows that mild depression (12%), moderate depression (29%), and severe depression (22%).

**Table 2: Type of depression**

Type of depression	Number	Percentage
Normal	17	17
Mild	20	20
Moderate	29	29
Severity	12	12
Very severe	22	22

The WHO DAS 2.0 Scale was used to measure disability. It was discovered that impairment exists in 89 percent of the sample. Life activities (30 percent), which comprise both family and job activities, were the most impacted among the individual areas, followed by engagement in society (29 percent ). Table 3.

**Table 3: Disability**

	Number	Percentage
Understanding and communication	11	11
Getting around	10	10
Self care	7	7
Getting along with people	13	13

<b>Life activities</b>	30	30
<b>Participation in society</b>	29	29

In terms of severity, the majority of the patients (35 patients) had moderate to severe impairment, 33 patients had mild disability, 20 patients had mild disability, and 1 patient had extreme disability.

The Mann-Whitney U test was used to analyse the correlation between patients with alcohol dependency

**Table 4: Patients with alcohol dependence syndrome with co-morbid depression correlated with disability (ads+ depression versus disability).**

	<b>Number</b>	<b>Mean±SD</b>	<b>p-value</b>
Ads + Depression	83	21.39±2.58	<0.0001
Disability	89	98.89±4.61	

The Mann-whitney U test was used to investigate the relationship between individuals with alcohol dependency syndrome who did not have depression and their handicap. The p-value discovered between

**Table 5: Patients with alcohol dependence syndrome without co-morbid depression correlated with disability (ADS-depression versus disability)**

	<b>n</b>	<b>Median</b>	<b>p-value</b>
Ads - depression	17	6.12±1.11	<0.0001
Disability	11	57.88±3.47	

syndrome and comorbid depression and their impairment. The p-value between alcohol dependent patients with depression and their disability was determined to be < 0.0001, which was significant. Table 4 displays the findings.

alcohol-dependent individuals without depression and their impairment was < 0.0001, which was significant. Table 5 displays the findings.

## DISCUSSION

Over the last two decades, there has been a greater awareness of dual diagnosis, which is defined as a mental condition coexisting with a drug use problem, which may lead to diagnostic ambiguity and treatment issues. Due to its evident influence on clinical severity, dual diagnosis is a subject of considerable study. According to several experts, the characteristics of multiple diagnoses include "chronicity" and "treatment resistance," and most patients are more sensitive to experiencing disability of varied dimensions than those with a single condition. It has been proposed that AUD may imitate or exacerbate almost all psychopathological symptoms.<sup>16,17</sup>

Table 1 shows the patients' ages. The majority of patients (52%) were between the ages of 25 and 35, followed by 35-45 (23%), under 25 (18%), and over 45 (18%). (9 percent). The patients were all men (100 percent). Depression affects 5-17 percent of the overall population.<sup>18</sup> In people suffering from alcoholism, it ranged from 25% to 70%.<sup>19</sup> In this research, we discovered that the prevalence of depression in alcoholic patients was 83 percent, which is somewhat higher than earlier studies, which reported a frequency of 25-70 percent.<sup>20,21</sup> In terms of severity, mild depression (12%), moderate depression (29%), and severe depression (22%), were more prevalent.

The prevalence of impairment was shown to be 89%. Life activities (30 percent), which comprise both family and job activities, were the most impacted among the individual areas, followed by engagement in society (29 percent). Similar findings were

reported in a research done by Balhara YP et al., who discovered the greatest impairment in the areas of engagement in society, home, and work-related activities.<sup>15</sup> We evaluated the prevalence of disability in alcohol-dependent individuals with and without depression in this research. There was a significant relationship between alcohol use and disability, both with and without depression. These data imply that alcoholism is linked to impairment regardless of whether or not depression is present. Our research has certain limitations. Because the sample size is tiny, the findings cannot be generalised to the broader population. Because this research was done on a hospital-based population, Berkson bias may be present. The majority of the population were Hindus, and the whole research sample consisted of solely men, which may have influenced the findings.

## CONCLUSION

Three-fourths of people with ADS suffer from depression. ADS is also linked to higher degrees of impairment, regardless of whether or not depression is present.

## REFERENCES

1. Donadon MF, Osório FL. Personality traits and psychiatric comorbidities in alcohol dependence. *Braz J Med Biol Res.*2016; 49: e5036.
2. Boden JM, Fergusson DM. Alcohol and depression. *Addiction.*2011; 106: 906–914.
3. Morley KC, Baillie A, Sannibale C, Teesson M, Haber PS. Integrated cares for comorbid alcohol dependence and anxiety and/or depressive disorder: Study protocol for an assessor-blind, randomized controlled trial. *Addict Sci Clin Pract.*2013; 8: 19.

4. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet*.2013; 382: 1575–1586.
5. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, et al. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*.2009; 373: 2223–2233.
6. Kohn R, Saxena S, Levav I, Saraceno B. The treatment gap in mental health care. *Bull World Health Organ*.2004; 82: 858–866.
7. Subir KD, Balakrishnan V, Vasudevan DM. Alcohol: Its health and social impact in India. *Natl Med J India*.2006; 19: 94-99.
8. Alves H, Kessler F, Rattoc LRC. Comorbidity: Alcohol use and other psychiatric disorders. *Rev Bras Psiquiatr*.2004; 26: 51-53.
9. Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, et al. Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study. *JAMA*.1990; 264: 2511–2518.
10. Kessler RC, Crum RM, Warner LA, Nelson CB, Schulenberg J, et al. Lifetime co-occurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorders in the National Comorbidity Survey. *Arch Gen Psychiatry*.1997; 54: 313–321.
11. Weaver T, Madden P, Charles V, Stimson G, Renton A, et al. Comorbidity of substance misuse and mental illness in community mental health and substance misuse services. *Br J Psychiatry*.2007;183: 304–313.
12. Nubukpo P, Girard M, Sengelen JM, Bonnefond S, Varnoux A, et al. A prospective hospital study of alcohol use disorders, comorbid psychiatric conditions and withdrawal prognosis. *Ann Gen Psychiatry*.2016; 15: 22.
13. Pereiro C, Pino C, Flórez G, Arrojo M, Becoña E, et al. Psychiatric Comorbidity in Patients from the Addictive Disorders Assistance Units of Galicia: The COPSIAD Study. *PLoS ONE*.2013; 8: e66451.
14. Rush B, Koegl J. Prevalence and profile of people with co-occurring mental and substance use disorders within a comprehensive mental health system. *Can J Psychiatry*.2008;53: 810–821.
15. Balhara YP, Singh S, Modak T, Sarkar S. A crosssectional study to assess disability and its correlates among treatment seeking individuals with alcohol use disorders. *Indian J Psychol Med* 2017;39:40-5
16. Chukwujekwu CD. Commentary on the comorbidity of alcohol use disorder and depression among patients attending a tertiary hospital in the Niger Delta Region of Nigeria. *J Addict Res Ther*.2017; 8: 3.
17. Klimkiewicz A, Klimkiewicz J, Jakubczyk A, Kieres-Salomoński I, Wojnar M . Comorbidity of alcohol dependence with other psychiatric disorders. Part II. Pathogenesis and treatment. *Psychiatr Pol*.2015; 49: 277–294.
18. Rihmer Z, Angst A. Mood Disorders: Epidemiology. In: Sadock BJ, Sadock VA, eds. *Comprehensive Textbook of Psychiatry*. 8th edition. Baltimore: Lippincott Williams & Wilkins; 2004
19. Penick C, Powell B J, Liskow B I, Jackson J O, Nickel E J. The stability of coexisting psychiatric syndromes in alcoholic men after one year. *J Stud Alcohol Drugs* 1988;49(05):395.
20. Conner K R, Pinquart M, Gamble S A. Meta-analysis of depression and substance use among individuals with alcohol use disorders. *J Subst Abuse Treat* 2009;37(2):127–37.
21. World Health Organisation. WHO disability assessment schedule 2.0 (WHODAS 2.0). Geneva: World Health Organisation; 2014