

An Observational Study to Assess if Depression and Disability are Co-Morbid in People with Alcoholism.

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Received: 04-06-2021 / Revised: 02-07-2021 / Accepted: 28-07-2021

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Conflict of interest: Nil

Abstract

Aim: The aim of the present study to determine the co-morbidity of depression and disability in patients with alcohol dependence syndrome. **Methods:** This cross-sectional observational study was conducted in the Department of Psychiatry, Jannayak Karpoori Thakur Medical College and Hospital (JNKTMCH), Madhepura, Bihar, India for 10 months. 100 Patients of age 18 years and above, who met the criteria for alcohol dependence syndrome according to ICD- 10 and having informant available. Patients were screened for depression through clinical interview using ICD-10 criteria and severity was assessed using HAM-D rating scale (Score on HAM-D: 0-7 is normal, 8-16 is mild depression, 17-23 is moderate depression, 24 and above is severe depression). Disability was assessed using WHODAS 2.0 rating scale. **Results:** The prevalence of depression in alcohol dependence patients was found to be 82%. In terms of severity (11%), Moderate (31%) and very severe depression (21%) was more common. Among the individual domains, life activities (32%), which include both household and work activities was most affected, followed by participation in the society (28%). p-value between alcohol dependant patients without depression and their disability was found to be <0.0001 which was significant. In terms of severity, most of the patients had moderate (40%) to severe (35%), mild (23%), and extreme (2%), disability. Correlation was assessed between patients with alcohol dependence syndrome with co morbid depression and their disability using Mann- Whitney U test.p-value between alcohol dependant patients with depression and their disability was found to be <0.0001 which was significant. Disability was assessed using WHO DAS 2.0 Scale. It was found that disability is present in 91% of the sample. **Conclusion:** Alcohol abuse leads to negative impact on social, occupational and economic aspects of an individual, leading to impairment of various role functions, ultimately contributing to poor QoL. Furthermore, psychiatric co morbidity in alcohol dependence leads to more impairment in QoL.

Key words: Comorbidity, QoL, Alcohol Dependence.

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Introduction

Alcohol abuse has been recognised as a major public health concern. It is directly or indirectly related to more than 200 diseases and contributed to 6% of global mortality in 2013[1]. Apart from medical morbidity, impact of alcohol in society and individual's quality of life (QoL) are well marked. It has variably been ascribed as a contributing factor to physical accidents, violence, aggression, absenteeism, as well as high degree of deterioration in psychological wellbeing and social life[2]. Alcohol use has been found to have an elevated risk of comorbidity with other mental disorders (30–75%), which significantly exceeds the prevalence rate of mental diseases in the general population (15–20%)[3,4]. A number of Indian studies conducted on inpatients have shown strong associations between alcohol dependence with other substance abuse, mood and anxiety disorders, personality disorders with prevalence ranging from 16% to as high as 90%[5-8]. As alcohol dependence is being increasingly recognised as chronic relapsing illness, QoL assessment have been often used as secondary outcome measure as well as to measure individual's wellbeing, contentment and ability to function in different domains[9]. WHO defines QoL as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns[10]. Three areas have been defined as relevant to QoL in connection with alcohol addiction[11]: the 'clinical condition', where the amount of alcohol consumed and the level of addiction are the determining factors; 'addiction-specific problems', where the viewpoint of the addicted individual is fundamental; and the 'general functions' associated with social relations and environmental support. Earliest studies assessing QoL in alcohol dependence reported a lower QoL in those who used alcohol[12], more so in those with high

frequency and binge drinking pattern[13]. Romeis et al., in their study on twins concluded that differences in health-related QoL between alcohol and non-alcohol consuming groups were due to co-variation from physical and psychiatric problems, drug and nicotine dependence, marital status, income, and severity[14]. Apart from certain socio-demographic factors, presence of psychiatric comorbidity have been found to contribute significantly to lowering QoL in alcohol dependence[15]. There have been few studies from India highlighting the poor QoL in alcohol dependence[16,17], however, there is lack of literature on the relation between comorbidities and their influence on QoL in alcohol dependence syndrome in Indian settings[18].

Material and methods

This cross-sectional observational study was conducted in the Department of Psychiatry, Jan Nayak Karpoori Thakur Medical College and Hospital (JNKTMCH), Madhepura, Bihar, India for 10 months, after taking the approval of the protocol review committee and institutional ethics committee.

Inclusion criteria

100 Patients of age 18 years and above, who met the criteria for alcohol dependence syndrome according to ICD-10 and having informant available.

Exclusion Criteria

Patients with Acute and severe physical illness already diagnosed psychiatric illness, Uncooperative persons and those who do not give consent to take part in the study.

Methodology

100 Patients meeting criteria for alcohol dependence syndrome according to ICD-10, attending psychiatry department who met the fixed inclusion and exclusion criteria were selected for the study. After explaining about the study, informed

consent was taken from the participants and sociodemographic details were taken using a semi-structured proforma developed in the department of psychiatry. Patients were screened for depression through clinical interview using ICD-10 criteria and severity was assessed using HAM-D rating scale (Score on HAM-D: 0-7 is normal, 8-16 is mild depression, 17-23 is moderate depression, 24 and above is severe depression). Disability was assessed using WHODAS 2.0 rating scale. WHODAS 2.0 scale was chosen because it has been used in previous studies to measure disability in alcohol dependence syndrome[19].

Statistical analysis

The results were analysed using SPSS version 21. Data were analysed in the form of mean and standard deviation for the continuous variables and frequency and percentage for the categorical variables. Mann-Whitney U test was used and the level of significance was set at p value <0.05.

Results

The sociodemographic profile of the patients shows in table 1. All of the patients were Males (100%). Majority of the subjects were married (78%) and studied up to secondary education (41%), belonged to Hindu religion (80%), low socioeconomic status (66%) and belonged to rural background (80%). Most common occupation was semiskilled (50%) and unskilled (29%).

Table 1: Demographic profile of the patients

Parameters	Number of patients 100	Percentage
Age(years)		
Below 30	18	18
30-40	52	52
40-50	23	23
Above 50	9	9
Religion		
Hindu	80	80
Christian	8	8
Muslim	12	12
Education		
Illiterate	27	27
Primary	27	27
Secondary	41	41
Graduate	5	5
SES		
Lower	66	66
Middle	31	31
Upper	3	3
Marital Status		
Unmarried	5	5
Married	78	78
Separated	5	5
Divorced	5	5
Widower	7	7
Family type		
Nuclear	85	85

Joint	15	15
Employmentstatus		
Unemployed	10	10
Unskilled	29	29
Semiskilled	50	50
Skilled	11	11

The prevalence of depression in alcohol dependence patients was found to be 82%. In terms of severity (11%), Moderate (31%) and very severe depression (21%) was more common table 2.

Table 2: Type of depression

Type of depression	Number	Percentage
Normal	18	18
Mild	19	19
Moderate	31	31
Severity	11	11
Very severe	21	21

Disability was assessed using WHO DAS 2.0 Scale. It was found that disability is present in 91% of the sample. Among the individual domains, life activities (32%), which include both household and work activities was most affected, followed by participation in the society(28%). table 3.

Table 3: Disability

	Number	Percentage
Understanding and communication	9	9
Getting around	11	11
Self-care	8	8
Getting along with people	12	12
Life activities	32	32
Participation in society	28	28

In terms of severity, most of the patients had moderate (40%) to severe (35%), mild (23%), and extreme (2%), disability.

Correlation was assessed between patients with alcohol dependence syndrome with comorbid depression and their disability using Mann- Whitney U test.p-value

between alcohol dependent patients with depression and their disability was found to be <0.0001 which was significant. The results are shown in table 4.

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

	N	Mean	SD	p-value
Ads + Depression	87	19.77	5.61	<0.0001
Disability	87	99.87	26.87	

Correlation was assessed between patients with alcohol dependence syndrome without depression, with their disability using Mann- whitney U test. p-value between alcohol dependent patients without depression and their disability was found to be <0.0001 which

was significant. The results are shown in table 5.

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

	n	Median	SD	p-value
Ads – depression	13	5.55	3.12	<0.0001
Disability	13	55.5	28.12	

Discussion

In our study, the sociodemographic profile of the patients shows in table 1. All of the patients were Males (100%). Majority of the subjects were married (78%) and studied up to secondary education (41%), belonged to Hindu religion (80%), low socioeconomic status (66%) and belonged to rural background (80%). Most common occupation was semiskilled (50%) and unskilled (29%).

The prevalence of depression in general population is 5-17% [20]. Whereas in patients with alcohol dependence it was 25%-70% [21]. In this study, we found that prevalence of depression in alcohol dependant patients to be 82% which is a little higher to the previous studies, who found a prevalence of 25-70% [21,22]. In terms of severity (11%), Moderate (31%) and very severe depression (21%) was more common.

The prevalence of disability was found to be 91%. WHODAS 2.0 reveals most impairment in the domains of life activities (32%), which include both household and work activities, followed by participation in the society (28%). Similar results were obtained in the study conducted by Balhara YP et al., and they found most impairment in the domains of participation in the society, household, and work-related activities [23].

In this study, we compared the prevalence of disability in alcohol dependant patients with depression and without depression. Significant association was found between alcohol dependence and disability, both with and without depression. These

findings suggest that alcohol dependence is related to disability irrespective of the presence or absence of depression.

Our study had certain limitations. Sample size is small and therefore results cannot be extrapolated to general population. Berkson bias can also be present as this study was conducted on hospital-based population. Majority of the population were Hindus and the entire study sample contained only males and this can affect the results.

Conclusion

Alcohol abuse leads to negative impact on social, occupational and economic aspects of an individual, leading to impairment of various role functions, ultimately contributing to poor QoL. Furthermore, psychiatric comorbidity in alcohol dependence leads to more impairment in QoL. The assessment of alcohol dependence with psychiatric co-morbidity must consider different aspects of QoL, which has been impaired and management strategies must aim to address this in certain way, only then a holistic approach to management of alcohol dependence could be put into practice.

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