To Assess the Patterns and Severity of Alcohol Dependence Syndrome Patients and Burden on Care Givers of Alcohol Dependence Syndrome Patients

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Abstract—*Alcohol dependence is amongst the most burdensome of all classes of diseases due to its high prevalence and chronicity, early age of onset, and its resulting serious impairment. The global burden due to alcohol misuse is significant in terms of morbidity and mortality and it leads to disrupting factors in family life owing to the patients' illness. It includes measurable effects such as economic burden, caregiver's loss of work, social and leisure activities, household disruptions such as child care restriction on relationships within and outside the family. The problem of Alcohol Dependence remains unsolved and it is increasing day by day and need to be solved with appropriate awareness. Methods: A prospective study was conducted over a period of 6 months in Psychiatry department of a tertiary care Hospital, Pune. Patients of age above 18 years, meeting criteria for alcohol dependence as per ICD-10 were enrolled into study. Severity of ADS patients was assessed with the use of AUDIT and burden on care givers of ADS patients was assessed with the use of BAS. Followed to this patient awareness and education was conducted for the patient and patient care givers.*

Result*: Total of 30 patients included in the study, the young age group were majorly (60%) involved, whereas the middle-age group was 33.66% and olderones were 3.33%. The AUDIT data was found to be 100% patients were almost certainly dependent. The BAS findings were 66.66% moderate burden, 26.66% were mild burden and 6.66% were severe burden. There was significant effect in reducing the addiction, family burden and economic burden and improving social image and patients' awareness.*
Conclusion: It is observed that the problems of Alcohol Abuse is increasing day by day it is important to study all the aspects of ADS on a large scale and help the patient, the care givers and society by formulating effective interventions. The interventions can be performed by pharmacists and can bring the 'social transformation through dynamic education' to patients and caregivers.

Keywords*: ADS (Alcohol Dependence Syndrome), AUDIT (Alcohol Use Disorders Identification Test), BAS (Burden Assessment Scale), and ICD (International Classification of Disease).*

1. INTRODUCTION

The definition of harmful alcohol use in this guideline is that of WHOs ICD, 10th revision – a pattern of psychoactive substance use that is causing damage to health. Damage may be physical (e.g., hepatitis) or mental (e.g., depressive episodes secondary to heavy alcohol intake). Harmful use commonly, but not invariably, has adverse social consequences; social consequences in themselves, however, are not sufficient to justify a diagnosis of harmful use [1].

Alcohol Abuse or Alcohol Dependence is a major health problem in INDIA and world at large. For the past 30-40 years alcohol consumption has increased tremendously. The problem of alcoholism until a few decades was considered moral problem and a sing of social irresponsibility. After introduction of prohibition, it was reined as an illegal act. Recent scholars considered it as more complicated chronic and immensely costlydisease than atype of deviant behaviour. It may cause physical, psychological, social, marital, legal and medical problems [2].

Burden is defined as presence of problems, difficulties or adverse events which affects the life (lives) of the psychiatric patient's significant others [3]. Alcohol ranks high as a cause of disease burden. This burden includes physical disorder and injuries. Alcohol imposes a high economic cost on society [4].Individual who were alcohol dependant report high prevalence rates for becoming involved in arguments while drinking, job related and problems with spouse or someone they were living with when drinking [5].

WHO ranked Alcohol Dependence as nine among ten medical disorders causing morbidity in world based on results from the third generation epidemiological studies and is widely used in Asian countries [6].

According to WHO [7], alcohol use disorders accounted for 1.4 % of the global disease burden. Globally, alcohol consumption causes 3.2 % of deaths (1.8 million) and 4 % of the DALYs lost (58.3 million). The WHO also stated that there are causal relationships between alcohol consumption and more than 60 types of disease and injury [8].

WHOs AUDIT is very reliable and simple screening tool which is sensitive to early detection of risky and high risk (or hazardous and harmful) drinking. BAS scale is standardized for the Indian population. It measure subjective and objective burden.

2. NEED OF THE STUDY

The global burden due to alcohol misuse is significant in terms of morbidity and mortality.It is mainly associated with disability, effects on quality of life and psychological health of the patient and also on the care givers. This adds to the economic burden of the family and alters the structure and function of the patient itself and the family members.

The problems of Alcohol Dependence remains unsolved and it is increasing day by day and need to be solved with appropriate awareness.Hence, it is important to study all the aspects of ADS and help the patient, the care givers and society by formulating effective intervention

3. OBJECTIVES

To assess the various patterns of socio-demographic, clinical variables, co-morbidity, psychosocial, intervention and treatment associated with ADS patients. To assess the severity of ADS patients with the use of AUDIT. To assess the burden on care givers of ADS patients with the use of BAS.

4. METHODOLOGY

The study was carried out in Psychiatry Department of Bharati Hospital and Research Center, Dhankawadi, Pune, Tertiary Care Hospital. It was a Prospective observational study, approved by Ethics Committee of Bharati Medical College, Pune (BVDU/MC/14).The Study was conducted for 6 months. In this study there were 30 patients of either sex were included after taking written informed consent. The data collection form was prepared and used which includes patient as well as medication related information. The patients were counseled for knowledge enhancement and awareness. Further follow ups and counseling was done on patient visits for their review or telephonically.

Study criteria

Inclusion

Patients of age above 18 years.Meet criteria for alcohol dependence as per ICD-10.As the patient will be conscious and oriented clinical withdrawal assessment will be followed.Patient voluntarily participation will be considered with Informed Consent Form.

Exclusion:

Have a history of seizure or epilepsy.Have a history of hepatic encephalopathy, ascites, diabetes or renal disease.Have clinically significant psychiatric co-morbidity.Females who are pregnant or nursing.Patients unwilling to be the part of the study.

5. RESULTS

The Results were calculated using simple mathematical calculations to bring up the percentage in the study. The percentage were derived from the objective findings. The patients involved in study were 30. Variations in socio-demographic characteristics were calculated by percentage. Severity of patient's condition and their improvement were also calculated. Alcohol withdrawal been calculated in few patients are also described. The burden on caregivers and burdensome improvement were also classified.

Table 1: Socio-demographic characteristics in patient population

Patients Characteristics	Number of Patients	Percentage %
Gender		
Male (M)	30	100 %
Female (F)	0	0 %
Age (Years)		
Young Age Group (18-40)	18	60 %
Middle Age Group (41-60)	11	33.66 %
Elderly Age Group (>60)	1	3.33 %
Education Status		
Primary	8	26.66 %
Secondary	8	26.66 %
Higher secondary	3	10 %
Under graduate	10	33.33 %
Illiterate	1	3.33 %
Marital Status		
Married	24	80 %
Unmarried	2	6.66 %
Separated	4	13.33 %
Employment Status		
Self-employed	8	26.66 %
Employed	15	50 %
Unemployed	6	20 %
Retired	1	3.33 %
Place of Resident		
Rural	3	10 %
Urban	27	90 %
Social Habits		
Smoker	2	6.66 %
Tobacco Chewer	6	20 %
Smoker and Tobacco Chewer	3	10 %
Tobacco Chewer and Drugs Abuse	1	3.33 %
None	18	60 %

Table 1 describes the socio-demographic characteristics of the patients where gender, age, education status, marital status, employment status, place of resident and social habits (substance abuse) were considered. Alcohol was the common substance abuse in social habits. The findings were, the patient's involved were 100% male. The young age group were majorly (60%) involved, whereas the middle-age group was 33.66% and older ones were 3.33%. From the sample size, 96.66% were literate in which under graduate were 33.33%, primary and secondary education were 26.66%, respectively, higher secondary education was 10%, and 3.33% were illiterate. 80% of the total sample size were married, 13.33% were separated because of alcohol abuse and 6.66% were unmarried. The employment status observed were 50% employed, 26.66 self-employed, 20% unemployed and 3.33% were retired. The 90% of the patients were from urban residence and 10% from rural residence. Social habits vary from person to person and here alcohol was the common factor. The patients with alcoholic habits were 60%. Alcohol with other substances included tobacco chewer 20%, smoking and tobacco chewing 10%, smokers 6.66%, tobacco chewer and drug abuse were 3.33%, respectively. Here, alcohol abusers excluding other factors were calculated as 'none' population. It was done to assess the various patterns of ADS patients and their variations.

Table 2: Severity of Withdrawal according to CIWA-Ar Scores

CIWA-Ar Score	Frequency	Percentage %
Mild (8-15)	3	10 %
Moderate (16-24)	1	3.33 %
Severe (25-67)	1	3.33 %
Total	5	16.66 %

Table 3: Considerations of Severity Improvement using AUDIT Follow-up

AUDIT Score	Baseline follow-up	Follow-up	Improvement (%)
Low-risk (0-7)			
Risky (8-15)			
High-risk (16-19)		3	10 %
Almost certainly dependant (>20)	30	27	

Table 4: Considerations of Burden Improvement using BAS Follow-up

BAS Score	Baseline follow-up	Follow-up	Improvement (%)
Mild (16-25)	8		
Moderate (26-36)	20	21	3.33 %
Severe (37-46)	2	1	
Very Severe (>46)			

Table 3 were the considerations of severity improvement using AUDIT follow-up. Here, the initial AUDIT score is correlated with the follow-up using AUDIT. Both the scores were correlated and calculated. The improvement in the severity of ADS patients were found to be 10%. Table 4 were the considerations of burden improvement using BAS follow-up. Here, the initially assessed BAS score is correlated with the follow-up using BAS. Both the scores were correlated and calculated. The improvement in the burdensome on caregivers of ADS patients were found to be 3.33%.

6. DISCUSSION

Description of socio-demographic and clinical variables of the sample:

Study regarding variation in marital status showed that majority of samples were married(80%) and is comparable to study by Chandrasekaranet al[9] 2001 in which 86.1% were married.Ghulam et al(1996)[10] in Rajasthan observed that up to 45% of the labour class was involved in heavy drinking. The study on burden and impact of alcohol by Gururaj et al(2006a)[11] showed the great use of alcohol among those who belonged to primary education group(85%). The data from NFHS 3[12] 2007 revealed that a majority of alcohol users were illiterate and belonged to the poorer sections of society.

Burden and disability in Alcohol Dependence:

In a study Bhowmicket al[13] reported that the presence of individual with alcohol or drug dependence in the family affects various aspects of family like leisure time activities, family and social relationships and finances. In this study, the caregivers routine and caregivers strategy was affected more in urban group then in rural group which is similar to our study.Drummond et al[5] in their study also found the strong positive correlation between problems and dependence. Pattern of burden:

Chakrabarti et al, in their study found that disruption in family routine, family leisure, family interaction and financial burden to be burdensome in ADS. Many studies have implicated patients "difficult behaviour" as a factor causing burden [14]. These findings are similar to our studies.

Spouses and burden:Majority of the caregivers were spouses. Burden was found to be significantly higher if there were marital problems. These held true especially in ADS patients. Targum et al, reported, marital discord to be predictive of burden in caregivers of patients with ADS.

Psychological distress in caregivers:Caregivers of patients with ADS were more likely to develop a psychiatric illness. Although majority of caregivers in the study complained of symptoms of anxiety and depression, only 17% were found to have a clinical diagnosable psychiatry illness. These finding were similar to other studies [15].

7. CONCLUSION

The present study confirms that the pharmacist provided patient counseling is effective in improving patients' knowledge towards the disease which also encourage patient to attend the follow-up schedule regularly. At the end of the study significant improvement was seen in patients' clinical condition which signifies that there was significant reduction in alcohol consumption. Hence the reduction in severity of patients' clinical condition and the reduced burden on care givers of the patients. This study also concluded that pharmacist involvement or need is very important ininterventions that can bring the 'social transformation through dynamic education' to patients and caregivers. Yet the problems of alcohol abuse remain unsolved.

8. LIMITATIONS

Duration of study was for a small period i.e., only 6 months.

Sample size of the study was small i.e., 30 patients.

No admission of female patients in hospital for ADS.

Unwillingness of patients on telephonic follow-up.

9. FUTURE DIRECTIONS

Study could be conducted on large sample size.

Promoting community activity to educate people about the alcohol misuse and its variables.

Education and lessons to caregivers should be conducted for betterment of patients care and avoidance of alcohol abuse.

Encouragement to pharmacists to be considered as they play vital with their knowledge and expertise.

More similar studies must be conducted to ensure the provision of safe profile and quality of life to patients.

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