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# OUTCOME OF ALCOHOL DEPENDENCE, DISABILITY AND BURDEN ON CARE GIVERS IN THE SOCIETY

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#### ABSTRACT

Alcohol dependence is a maladaptive pattern of substance use for period, which is characterized by tolerance, withdrawal symptoms, loss of control and craving. Burden on caregivers and disability in patients having Alcohol dependence has not received attention in research so far. This study measures the burden on caregivers and disability in patients having ADS. They were administered proforma to elicit socio-demographic details, Prasad's socioeconomic status scale. Burden Assessment Schedule (BAS), Indian Disability Evaluation and Assessment Scale (IDEAS) and Severity of Alcohol dependence was measured by Short Alcohol Dependence Data (SADD) Questionnaire. The burden and disability was assessed in this group. Burden experienced during the episode was significantly more during the episode than one month before the episode. There was significantly more burden during mixed episode than during manic and depressive episode. Burden was more in severe alcohol dependent patients than in mild and moderate dependent patients. Disability was significantly more in severe alcohol dependence than in moderate and mild dependence. There was no significant difference in the burden experienced by the caregivers of patients having ADS, alcohol induced psychosis and delirium tremorns. Burden experienced by the caregivers of the patients having severe dependence was significantly more than the caregivers of low and moderate alcohol dependence group. The global disability was more in severe dependence group than in moderate and low dependence group.

KEYWORDS: Burden; Disability; Alcohol Dependence Syndrome

### INTRODUCTION

Mental and Behavioral disorder are common, affecting more than 25% of all people at sometime during their lives. These are present at any point of time in about 10% of adult population. One in four families is likely to have at least one member with mental or behavioral disorder.<sup>1</sup>

Alcohol dependence is a maladaptive pattern of substance use for period 12 month which is characterized by tolerance, withdrawal symptoms, loss of control and craving.<sup>2</sup> Burden is defined as presence of problems, difficulties or adverse events which affect the life (lives) of the psychiatric patients' significant to others.

Families of patients with mental illness face stigmatization, long-term economical and emotional burden of taking care of the patient. Illness in the patient has impact on the work, social relationship and leisure activities of family members. This evokes different feelings in the family members, which can have impact on the course and prognosis of the illness.<sup>1</sup>

Over the past several decades, evidence has been accumulating that mood disorder imposes substantial societal burdens.<sup>3</sup> Alcohol ranks high as a cause of disease burden. The global burden of disease project, estimates alcohol to be responsible for 1.5% of all deaths and 3.5% of the total DALY's. This burden includes physical disorder & injuries.

In alcohol dependent individuals the number of legal, interpersonal, familial and job related problems reported were higher than those who were not alcohol dependent.<sup>4</sup>

Individuals who were alcohol dependent 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.<sup>5</sup> In one Indian study where it was found that the main area of functioning significantly influenced were interpersonal relations.<sup>6</sup>

### Aims and objective

- To assess the Burden on caregivers of patients having Alcohol dependence

- To assess the Disability in Patients having Alcohol Dependence

### **MATERIALS & METHODS**

Consecutive patients attending the Psychiatry OPDs of a hospital, diagnosed Alcohol dependence according to DSM IV criteria who meet the inclusion criteria and did not get excluded were included in the study. Study was carried out as per Institutional Ethical committee clearance tracking No. VMKVMC/IEC/12/61.

Inclusion criteria: Age between 18 -60 years; both sexes; Duration of illness at least 2 years. Exclusion criteria: Concomitant mental retardation; Concomitant physical illness; Concomitant personality disorder; Concomitant other psychiatric illness.

Written informed consent was taken from the patients or from the caregivers depending on their ability to give consent, following an explanation about the nature and the purpose of the study in the language in which the patient could understand. Sociodemographic details were recorded on the self designed proforma.

The primary family care-giver was one who met at least three of the following criteria.

- Is a spouse, parent or spouse equivalent.
- Has the most frequent contact with the patient.
- Helps to support the patient financially.
- Has most frequently been collateral in the patient's treatment
- Is contacted by treatment staff in case of emergency Burden assessment scale<sup>7</sup> (BAS) was administered in its modified form to asses the burden on caregivers of ADS. Indian Disability and Evaluation Scale<sup>7</sup> (IDEAS) in its modified form was administered to care givers. Severity of alcohol dependence was assessed using Short Alcohol Dependence Data (SADD) Questionnaire.<sup>7</sup>

### **RESULTS**

Table 1; SOCIODEMOGRAPHIC FACTORS IN ALCOHOL DEPENDENTS

Vari	ADS n = 33	
Age	$37.76 \pm 7.84$	
Sex	Male	30
	Female	3
Place	Rural	19
	Urban	14
Religion	Hindu	30
	Muslim	3
Education	No education	9
	Upto 10	18
	Above 10	6
Occupation	Housewives	3 (9.09%)
-	Skilled job	8 (24.2%)
	Unskilled job	20 (60.6%)
	Unemployed	2 (6.06%)
Type of family	Nuclear	23
	Joint	10
Marital status	Unmarried	4 (12.12%)
	Married	28 (84.84%)
	Separated / Divorced	1 (3.03%)
Socioeconomic status	High	7
	Middle	8
	Low	18

(Figures in parenthesis are percentages)

Table 2: SOCIODEMOGRAPHIC FACTORS OF CAREGIVERS OF ALCOHOL DEPENDENTS

Vari	Variables Age (yrs)	
Age		
Sex	Male	3
	Female	30
Education	No education	21
	Upto 10	6
	Above 10	6
Marital status	Married	30 (90.9)
	Unmarried	3 (9.09%)
Occupation	Unemployed	3 (9.09%)
	Housewives	18 (54.5%)
	Skilled	2 (6.06%)
	Unskilled	10 (30.30%)
Relation	Spouse	25
	Others	8

(Figures in parenthesis are percentages)

Table 3: BURDEN IN Alcohol Dependence Syndrome

Variable	ADS
	n = 33
Spouse related	$9.24 \pm 2.28$
Physical and mental health	$12.88 \pm 3.88$
External support	$8.79 \pm 2.96$
Caregivers routine	$9.52 \pm 2.76$
Support of patient	$8 \pm 2.32$
Taking responsibility	$7.64 \pm 1.92$
Other relation	$5.58 \pm 1.92$
Patients behavior	$8.09 \pm 1.94$
Caregivers strategy	$8.03 \pm 2.31$
Total	$77.27 \pm 16.46$

Table 4: COMPARISON OF BURDEN IN ALCOHOL DEPENDENCE, ALCOHOL INDUCED PSYCHOSIS, AND DELERIUM TREMENS.

Variable	ADS n=23	Alcohol induced psychosis N=3	Delirium tremens n=6	Statistical analysis df=2,30 p<0.05
Spouse related	$9.04 \pm 2.23$	$10.33 \pm 2.08$	$9.42 \pm 2.69$	F = 0.44 NS
Physical and mental health	$12.56 \pm 3.77$	$15.66 \pm 1.52$	12.71 ± 4.78	F = 0.85 NS
External support	$8.73 \pm 2.92$	$10.66 \pm 4.04$	$8.14 \pm 2.73$	F = 0.77 NS
Caregivers routine	$9.13 \pm 2.63$	12 ± 1.73	9.71 ± 3.25	F = 1.5 NS
Support of patient	8 ± 2.31	8 ± 4	8 ±1.9	F = 0 NS
Taking responsibility	$7.34 \pm 1.94$	$7.66 \pm 2.51$	$8.57 \pm 1.51$	F = 1.10 NS
Other relation	5.43 ± 2	$6.33 \pm 3.05$	5.71 ± 1.25	F = 0.30 NS
Patients behavior	$7.82 \pm 2.10$	$9.66 \pm 0.57$	$8.42 \pm 2.62$	F = 1.42 NS
Caregivers strategy	$7.73 \pm 2.2$	$9.66 \pm 2.51$	$8.28 \pm 2.62$	F = 0.78 NS
Total	$75.08 \pm 15.9$	$9.0 \pm 21.166$	79 ± 16.28	F = 1.14 NS

(Bonferoni is not significant)

Table 5: COMPARISON OF BURDEN BASED ON SEVERITY OF ALCOHOL DEPENDENCE

Variable	Low n = 3	Moderate n = 12	Severe n = 18	Statistical analysis df=2,30 Sig
Spouse related	$6.66 \pm 3.05$	$9.08 \pm 2.60$	9.77 ± 1.66	F=2.7* NS
Physical and mental health	$11.33 \pm 2.52$	11.75 ± 4.57	$13.89 \pm 3.41$	F = 1.39 NS
External support	$10.66 \pm 0.58$	$7.75 \pm 2.70$	$9.16 \pm 3.18$	F = 1.55 NS
Caregivers routine	$6.33 \pm 0.58$	$8.58 \pm 2.74$	$10.66 \pm 2.37$	F = 5.4 Sig*,**
Support of patient	$5.33 \pm 2.30$	$7.16 \pm 2.16$	9 ± 1.91	$F = 5.75$ $\operatorname{Sig}^{*,**}$
Taking responsibility	$5.66 \pm 2.08$	$6.83 \pm 1.33$	$8.5 \pm 1.82$	F = 5.8 Sig *,**,***
Other relation	$4.66 \pm 2.08$	$5.25 \pm 1.95$	$5.94 \pm 1.89$	F = 0.83 NS
Patients behavior	$8.66 \pm 0.58$	$7.41 \pm 2.77$	$8.44 \pm 1.78$	F = 1.17 NS
Caregivers strategy	$7 \pm 1.73$	$7.41 \pm 2.54$	$8.61 \pm 2.17$	F = 1.31 NS
Total	$66.33 \pm 1.8$	$70.25 \pm 17.4$	$83.77 \pm 13.81$	F = 3.7 Sig

<sup>\*</sup>The difference between Low dependence group and Moderate dependence group is significant

Table 6; DISABILITY IN Alcohol Dependence Syndrome

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Items	ADS		
	n = 33		
Self care	$1.15 \pm 1.04$		
Interpersonal activities	1.08 ±0.90		
Communication and	0		
understanding			
Work	2.45± 1.46		
Duration of illness	$3.48\pm0.48$		
score			
Global disability score	8.15± 3.21		

<sup>\*\*</sup> The difference between Moderate dependence group and Severe dependence group is significant

\*\*\* The difference between Low dependence group and Severe dependence group is significant

Table 7: COMPARISON OF DISABILITY IN BPAD GROUP AND ONE MONTH PRIOR TO THE EPISODE

Items	Current episode n = 30	1 month prior to episode n = 30	Statistical analysis df=29 p<0.05	CI 95%
Self care	$2.28 \pm 1.04$	$0.41 \pm 0.54$	t = 9.3 Sig	1.45 – 2.27
Interpersonal activities	$2.56 \pm 0.92$	$0.73 \pm 0.78$	t = 11.29 Sig	1.5 – 2.1
Communication and understanding	$1.33 \pm 1.25$	$0.23 \pm 0.52$	t = 4.69 Sig	0.6 – 1.57
Work	$3.64 \pm 0.90$	$0.97 \pm 1.2$	t = 9.90 Sig	2.12 – 3.22
Duration of illness score	$2.93 \pm 0.83$	$2.93 \pm 0.83$	t = 0 NS	1.47 – 2.46
Global disability score	$12.64 \pm 3.24$	$5.07 \pm 2.87$	t = 12.79 Sig	6.36 – 8.79

(Paired t test)

Table 8: COMPARISON OF DISABILITY IN PATIENTS HAVING ADS, ALCOHOL INDUCED PSYCHOSIS AND DELERIUM TREMENS

Items	ADS n = 23	Alcohol induces psychosis n = 3	Delirium Tremens n = 7	Statistical analysis df=2,30
Self care	$1.08 \pm 0.84$	1.2 ± 1.37	$1.32 \pm 0.82$	F = 0.21 NS
Interpersonal activities	$1.03 \pm 0.89$	1.2 ± 1.11	$1.2 \pm 0.98$	F = 0.12 NS
Communication and understanding	0	0	0	0
Work	$2.19 \pm 1.41$	$2.26 \pm 2.05$	$3.4 \pm 1.12$	F = 2.0 NS
Duration of illness score	$3.34 \pm 0.88$	$3.66 \pm 0.57$	$3.85 \pm 0.37$	F = 1.2 NS
Global disability score	$7.64 \pm 3.23$	$8.93 \pm 4.30$	$9.5 \pm 2.63$	F = 1.0 NS

#### DISCUSSION

Alcohol Dependence Syndrome had more male patients. There were more female caregivers in ADS.

### **Burden and Disability in Alcohol Dependence**

The caregivers of alcohol dependent patients experienced it as a burden. About 18% of the caregivers experienced it as mild burden, 36% - moderate burden, 39% - severe burden, 6% - very severe burden The burden was experienced more in the following domains-physical and mental health, spouse related, caregivers routine, external support, patients behavior, caregivers strategy. However Tripathi et al<sup>8</sup> 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. The perceived and experienced stress and its consequences depend on the degree of tolerance and acceptance of the behavior of individual with alcohol or drug dependence by the family members.

In this study the caregivers routine and caregivers strategy was affected more in urban group than in rural group and this difference was found to be statistically significant. The caregivers of the patients above 25 years experienced more burden in spouse related domain .There was no difference in the burden perceived by the caregivers of nuclear and joint family .No difference was found in the burden perceived by the different socioeconomic groups. This could not be compared with other studies as there is paucity of literature in this area.

In this study ADS was found to be disabling to the patients. Work was affected more, followed by self care and interpersonal activities. Communication and understanding was not affected in this study. Chaudhury et al<sup>6</sup> has reported that the main area of functioning significantly influenced by alcohol use was interpersonal relations. The others components which bear a weak positive correlation were communication and work.

In this study self care domain and interpersonal activities were affected more in urban patients than in rural patients and this was found to be statistically significant, the disability experienced by the urban patients was more than rural patients and this was found to be statistically significant. There is paucity of literature in this area

Interpersonal activities was affected more in patients in nuclear family than in joint family and this difference was found to be statistically significant. There was no difference in disability experienced by the patients depending on their age. There is paucity of literature in this area.

In this study there was positive correlation between Disability of patients and Burden on caregivers, Severity of Alcohol dependence and Burden on caregivers, Severity of Alcohol dependence and disability of patients. Drummond et al<sup>5</sup> in their study also found the strong positive correlation between problems and dependence.

### **CONCLUSION**

The duration of illness was significantly more in ADS group. There was no difference in burden on the caregivers of ADS group. Caregivers' routine was affected of ADS group. There was no significant difference in the burden experienced by the caregivers of patients having ADS, alcohol induced psychosis and delirium tremorns. Burden experienced by the caregivers of the patients having severe dependence was significantly more than the caregivers of low and moderate alcohol dependence group. Caregivers' routine, support of the patient, taking responsibility was affected more in caregivers of severe dependence group.

There was significantly more disability in ADS patients, the items affected were self care, interpersonal activities, communication and understanding and work. Interpersonal activities was affected significantly more than female ADS patients and there was no difference in the global disability.

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The disability was significantly more during the episode than one month before the episode.

There is no difference in disability experienced by patients having ADS, alcohol induced psychosis and ADS having delirium tremens. The global disability was more in severe dependence group than in moderate and low dependence group. There was positive correlation between disability of patients and burden on caregivers, Severity of Alcohol dependence and Burden on caregivers, Severity of Alcohol dependence and disability of patients.

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