

Burden Borne by the Primary Caregivers of Patients Seeking Treatment for Alcohol and Opioid Dependence

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Abstract

Background: Alcoholism and opioid dependence is a major threat to the individual as well as the society and the maximum burden of the illness is borne by the family.

Aim: The study is aimed at assessing the pattern of burden on the caregivers of alcohol dependent patients and at assessing the relationship between the severity of dependence and the burden on caregivers.

Materials and Methods: Cross-sectional descriptive study conducted in the Department of Psychiatry at Institute of human behaviour and Allied Sciences. A cross-sectional assessment was done in 60 patients with alcohol and opioid dependence and their caregivers. The severity of dependence and the pattern of burden on caregivers were assessed.

Results: The study demonstrates that caregivers of alcohol dependent patients reported significant objective burden and subjective burden. Furthermore, the severity of alcohol dependence and the domains of burden such as financial burden, disruption of family interaction, and disruption of family routine activities were positively correlated with high level of significance.

Conclusion: The current study has illustrated that all the caregivers experienced significant amount of burden which has to be addressed for better treatment outcome of the patients.

Keywords: Alcohol Dependence Syndrome, Caregiver Burden, Severity of Dependence, World Health Organization Quality of Life Brief Scale (WHOQOL-BREF)

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Introduction

Alcohol dependence is a maladaptive pattern of substance use for a period of 12 months, which is characterized by tolerance, withdrawal symptoms, loss of control, and craving. Burden is defined as the presence of problems, difficulties, or adverse events which affect the life (lives) of the psychiatric patient's significant

others. Objective burden is used to identify anything that occurs as a disrupting factor in family life owing to the patient's illness while subjective burden refers to the feeling that a burden is being carried in a subjective sense. The present study aimed to study the pattern and level of burden borne by the primary caregivers of patients

seeking treatment for alcohol and opioid dependence and the quality of life of caregivers along with the correlation of the two with the severity of the dependence in patients. This will enable better understanding of the population of caregivers which will in turn, have a direct effect on the long-term treatment of the patients of substance dependence.

There have been several studies done about the level of caregiver burden but considering the subjective nature of burden, it is also desirable to assess it through Qualitative Research Methodology e.g. In Depth Interview which has not been studied adequately in the past. The studies about caregiver burden and quality of life of caregivers of opioid dependence syndrome are limited. Also, there is less number of studies which compare these variables with the severity of dependence in the patients. This study will give a comparison & correlations of these variables among the two groups of subjects which has not been studied extensively. This study will thus contribute to information that can support the planning of interventions in the clinical practice, aiming to minimize the individual and collective damage caused by alcohol and opioid dependence not only on the patients but also on the caregivers, who have been largely neglected till now.

Materials and Methods

Universe of study: The universe of the study was the primary caregivers of all patients with Alcohol Dependence Syndrome and Opioid Dependence Syndrome.

Study design: The study was a cross sectional study involving the primary caregivers of the patients with Alcohol Dependence Syndrome and those with Opioid Dependence Syndrome attending the Outpatient Department of Drug Abuse Treatment and Rehabilitation Centre of IHBAS.

Study population: The primary caregivers of the patients who have been diagnosed with Alcohol Dependence Syndrome and Opioid Dependence Syndrome attending the Outpatient Department of Drug Abuse Treatment and Rehabilitation Centre of Institute of Human Behaviour and Allied Sciences (IHBAS) - A tertiary care hospital based teaching institute dealing with mental health, behavioural and neurosciences.

Sample size and collection: 30 patients, each of Alcohol Dependence Syndrome and Opioid Dependence Syndrome along with their primary caregivers attending OPD of Drug Abuse Treatment and Rehabilitation Centre of Institute of Human Behaviour and Allied Sciences (IHBAS) were included. Sample size was calculated on the basis of feasibility aspects considering the total duration available for data collection was 9 months.

Sampling method: The first two patients registered in every DATRC OPD diagnosed with Alcohol Dependence Syndrome or Opioid Dependence Syndrome fulfilling the inclusion and exclusion criteria, along with their caregivers meeting the inclusion and exclusion criteria were included in the study.

Dependent variables: The caregiver burden in the primary caregivers of the patients of the two groups. The quality of life (QOL) of the primary care givers of the patients of the two group.

Independent variables: The severity of Alcohol and Opioid dependence in the patients. The various socio demographic aspects of the primary caregivers and the patients including the age, education, socio economic status, etc

Inclusion criteria for patients: Patients between the age group of 20 to 60 years, attending the OPD of Drug Abuse Treatment and Rehabilitation Centre of IHBAS who were diagnosed as case of

alcohol dependence syndrome and Opioid Dependence Syndrome as per ICD 10 (DCR) Not in a state of acute intoxication or severe withdrawal state. Availability of caregiver for interview. Willing to give consent to be a part of the study

Inclusion criteria for primary caregivers: Primary caregiver of patients of Alcohol Dependence Syndrome and Opioid Dependence Syndrome diagnosed as per the ICD 10 – DCR(4) criteria, who is above the age of 18 yrs and who meet the following criteria: Is a parent, spouse, sibling or offspring of the patient. Living with the patient for at least one year. Who has most frequently been collateral in patients' treatment. Willing to give consent to be a part of the study

Exclusion criteria for patients: Not willing to give consent to be a part of the study. Presence of other drug dependence except nicotine. Presence of any other syndromal psychiatric illness in the patient which will interfere with the assessment procedure. Presence of any severe chronic medical illness in the patient not related to alcohol and opioid dependence.

Exclusion criteria for primary caregivers: Not willing to give consent for the study. Presence of any syndromal psychiatric illness which may interfere with the assessment procedure. Presence of any other chronic medical illness which may interfere with the assessment procedure.

Instruments to be Used in the Study

Semi-structured proforma: To assess socio-demographic variables of the patient and the caregivers.

International statistical classification of diseases and related health problems: 10th revision, version Diagnostic Criteria for Research (ICD-10, DCR) for diagnosing alcohol dependence syndrome and opioid dependence syndrome in the patients.

General health questionnaire: (Hindi version) given by Goldberg & Hiller in 1972 was used to screen the primary caregivers for any psychological distress or psychiatric morbidity. The General Health Questionnaire 12 item version is rated on a 4-point scale. It rates the severity of symptoms of psychological distress over the past week and has been used in diverse cultural settings. Though it is a brief version of GHQ28, research has shown that it does not impair its sensitivity or specificity. The Hindi version of the GHQ12 standardized in India was employed in this study. The English version has a Cronbach's alpha of 0.90. The Cronbach's alpha and the split half reliability for the Hindi version were 0.88 and 0.91 respectively

Burden Assessment Schedule Caregiver's burden was assessed with Burden Assessment Schedule (BAS) a structured instrument with forty items. Each item is rated on a three-point scale (not at all, to some extent and very much). The items of the schedule are categorized under nine domains such as spouse-related factor, physical and mental health, external support, caregiver's routine, support of patient, taking responsibility, other relations, patients behavior and caregiver strategy. This schedule measures both subjective as well as objective burden adequately. During the development of the instrument, the inter-rater reliability between the interviewers was good with a 'kappa' value of 0.80. Face, content and criterion validity has been established by authors during the development of instrument. The criterion validity was established by comparing the new instrument with the family burden interview schedule (FBIS). Correlation between the two instruments was found to be good for most of the items and ranged between 0.71 and 0.82.

World Health Organization Brief Quality of Life questionnaire (WHO-QOL BREF): (The WHO-QOL Group,

1998) The WHOQOL-BREF item scale was used to study the quality of life. The World Health Organization Quality of Life Brief Scale Contains 26 items, which constitutes 4 domains- physical health, psychological health, social relationship and environment. The 26 items of WHOQOL BREF were extracted from 100 items of WHOQOL100 after validation and reliability studies. The scale is comparable across cultures. WHO-QOL-BREF should be self-administered if respondents have sufficient ability otherwise, interviewer-assisted or interview-administered forms are used. A time frame of two weeks is indicated in the assessment. The WHO-QOL-BREF produces a quality-of-life profile. Four domain scores are derived from the questionnaire. Assessment with this instrument reveals raw scores for each domain of QOL, raw scores can be converted to transformed or final scores for each domain using a designed table. The transformed scores can be rated on a 4-20 scale or 0-100 scale. Domain scores are scaled in a positive direction (i.e. higher scores denote higher quality of life). In the current study 0-100 scale was used for the assessing QOL of caregivers. The instrument has good inter and intra rater reliability. Domain scores produced by the WHO-QOL-BREF have been shown to correlate at around 0.9 with the WHOQOL-100 domain scores, and hence provide an excellent alternative to the assessment of domain profile using WHO-QOL-100.

The Addiction Severity Index: The ASI is a semi-structured instrument used in face-to-face interviews conducted by clinicians, researchers or trained technicians which was developed by McLellan, Lubrosky, Woody and O'Brien (1980) The ASI covers the following areas: medical, employment/support, drug and alcohol use, legal, family/social, and psychiatric. The ASI obtains lifetime information about problem behaviors, as well as problems within the previous 30 days. Clients are asked about their history in each area, to respond to how much they were bothered by difficulties, and how important is the need for treatment in each of the six areas of problem functioning. Questions address either lifetime data or functioning over the last 30 days. The responses to questions concerning how bothersome a problem has been or how important the need for treatment is are designated as Patient Severity Rating (PSR). The instrument is administered by a trained interviewer who provides the Interviewer Severity Rating (ISR) for each problem area in response to the interviewee's answers to questions. Additionally, composite scores (CSs) can be derived from the information. CSs are recommended for outcome studies and for comparing scales within the instrument. The ASI has been translated into nine languages and is one of the most widely used assessment instruments in substance abuse treatment. The ASI has been shown to be reliable and valid.

Observation Chart

Table 1: Sociodemographic characteristics of patients

Patient's Variable	Illness				t test value	p-value
	ODS (n=30)		ADS (n=30)			
	Mean	SD	Mean	SD		
Age(in years)	1.47	7.96	36.10	8.26	2.21	0.31
Variable	Subgroups	Illness		X2	df	p value
		ODS (n=30)	ADS (n=30)			
		Frequency (%)	Frequency (%)			

Gender	Male	30(100.00)	30(100.00)	-	-	-
	Female	0 (0.00)	0 (0.00)			
	Total	30 (100)	30 (100)			
Education	Illiterate/Primary/Middle	13(43.30)	17(56.70)	1.067	1	0.302
	High/Sr.Sec/Graduate	17(56.70)	13(43.30)			
	Total	30(100)	30(100)			
Occupation	Employed	04(13.30)	20(66.70)	17.77	1	0.00**
	Unemployed	26(86.70)	10(33.33)			
	Total	30 (100)	30 (100)			
Marital status	Married	20(66.70)	25(83.3)	2.22	1	0.136
	Unmarried / Separated/Divorced	10(33.33)	5(16.70)			
	Total	30(100)	30 (100)			
Type of family	Nuclear	20(66.70)	19(63.30)	.073	1	0.78
	Joint, Extended nuclear	10(33.33)	11(36.70)			
	Total	30 (100)	30 (100)			
Socioeconomic status	High socioeconomic status	02(6.70)	0(0.00)	2.45	2	0.293
	Middle socioeconomic status	09(30.00)	12(40.00)			
	Low socioeconomic status	19(63.30)	18(60.00)			
	Total	30(100)	30(100)			
Domicile	Rural	08(26.70)	01(3.30)	6.40	1	0.011*
	Urban	22(73.3)	29(96.7)			
	Total	30(100)	30(100)			

*p < 0.05 **p < 0.01

Table 2: Sociodemographic characteristics of primary caregiver

Caregivers' Variable	Illness				t value	p-value	
	ODS (n=30)		ADS (n=30)				
	Mean	SD	Mean	SD			
Age (in years)	38.27	10.51	38.07	11.16	0.071	0.943	
Variable	Subgroups		Illness		X ²	df	p value
			ODS (n=30)	ADS (n=30)			
			Frequency (%)	Frequency (%)			
Gender	Male		05(16.70)	03(10.00)	0.57	1	0.44
	Female		25 (83.30)	27 (90.00)			
	Total		30 (100)	30 (100)			
Educational level	Illiterate/Primary/Middle		20(66.70)	20(66.70)	0.00	1	1.00
	High/Sr.Sec/Graduate		10(33.33)	10(33.33)			
	Total		30(100)	30(100)			
Occupation	Employed		10(33.33)	03(10.00)	4.81	1	0.028*
	Unemployed		20(66.70)	27 (90.00)			
	Total		30 (100)	30 (100)			
Relation with	Siblings		01(3.30)	01(3.30)	2.14	3	0.543
	Father		03(10.0)	02(6.70)			

patient	Mother	08(26.7)	04(13.3)			
	Spouse	18(60.0)	23(76.7)			
	Total	30(100)	30(100)			

*p <0.05 **p < 0.01

Table 3: Caregiver burden in ods and ads groups

BAS Scores	Illness				t-value	p-value
	ODS (n=30)		ADS (n=30)			
	Mean	SD	Mean	SD		
Spouse Related	7.80	5.07	9.43	4.59	1.30	0.196
Physical & Mental Health	10.67	1.63	11.50	2.27	1.63	0.108
External Support	9.67	1.32	9.70	1.60	0.088	0.930
Caregiver Routine	8.83	1.34	8.80	1.42	0.093	0.926
Support of Patient	7.33	1.21	6.53	1.46	2.312	.024
Taking Responsibility	9.83	1.56	9.20	1.35	1.685	0.097
Other Relations	5.97	0.81	6.67	1.18	2.674	0.010
Patient's Behaviour	9.47	1.25	9.67	0.99	0.685	0.496
Caregiver Strategy	8.40	1.25	9.17	1.12	2.507	0.015
BAS Total	77.87	9.51	81.07	7.54	1.4430	0.154

*p <0.05 **p < 0.01

Table 4: Quality of life in caregivers of ods/ads group

Domains	Illness				t-value	p-value
	ODS (n=30)		ADS (n=30)			
	Mean	SD	Mean	SD		
QOL- DOMAIN1 PHYSICAL HEALTH	51.0	12.6	47.33	9.05	1.255	0.214
QOL- DOMAIN2 PSYCHOLOGICAL HEALTH	51.9	39.24	54.50	06.12	1.285	0.204
QOL -DOMAIN3 SOCIAL RELATIONS	59.3	15.50	60.20	10.48	0.259	0.797
QOL -DOMAIN4 ENVIRONMENTAL	51.46	13.22	42.10	10.93	2.99	0.004**

*p <0.05 **p < 0.01

Table 5: Problem Domains

Problem domains	Coefficient	P (2 Tail)
Medical status	0.099	0.603
Employment status	.454*	0.012*
Alcohol use	.513**	0.004**
Legal status	0.012	0.95
Family /social relationship	0.321	0.084
Psychological status	0.223	0.236

*p <0.05 **p < 0.01

Table 6: Relationship between quality of life (total) and each problem areas of addiction severity index (asi), (subjective severity) (n=30) for ads

		Composite Scores of ASI						Spearman' correlation
QOLDOMAINS-Transformed Scores (0-100)		Medical	Employment	Alcohol Use	Legal	Family	Psychological	
PHYSICAL HEALTH	Correlation Coefficient	-0.157	-0.303	-.367*	-0.367	-.418*	-.410*	1
	Sig. (2-tailed)	0.406	0.104	0.046	0.05	0.021	0.024	.
PSYCHOLOGICAL HEALTH	Correlation Coefficient	-0.196	-0.049	-0.207	0.059	-0.217	-0.233	1
	Sig. (2-tailed)	0.3	0.796	0.273	0.76	0.25	0.216	
SOCIAL RELATIONS	Correlation Coefficient	0.056	-0.321	-0.021	-0.014	-0.046	-.403*	1
	Sig. (2-tailed)	0.767	0.084	0.912	0.944	0.808	0.027	
ENVIRONMENTAL	Correlation Coefficient	-0.115	-.390*	-0.32	0.03	-0.275	-0.335	1
	Sig. (2-tailed)	0.545	0.033	0.085	0.878	0.142	0.07	

*p < 0.05

**p < 0.01

Results

The socio-demographic characteristics of the caregivers of both ODS and ADS groups involved in the study are shown in Table 2.1 and 2.2. The mean age of primary caregivers in both the groups were similar i.e. for caregivers of ODS it came out to be 37.27% while for the caregivers of ADS groups, it was 37.07%. While 90 % of the caregivers of ADS groups were females, the caregivers of ODS group also showed similar results with 83% of them being females. Education qualification of both the groups were similar with most of them in both the groups, ODS and ADS being illiterate or educated only upto middle school,(66.70%) and only 33.30% educated beyond high school.

Statistically significant difference was found in the employment status of the caregivers of the two groups with 66.00

%of the caregivers of ODS group being unemployed while 90% of the caregivers of ADS being unemployed. (p= 0.00). While 76.7%of the caregivers of the patients of ADS were spouses of the patients, 13.3% were mothers. In ODS group, 60 %were spouses and 26.7% were the mothers.

The relationship between the level of burden and the addiction severity was calculated by using Spearman's coefficient .for this calculation, the total score of the burden was compared with the composite scores of the addiction severity index in various items. In the ODS group, Very significant correlation was found between the severity of drug use and the level of burden (p=0.00) Also significant correlation was found between level of burden and the legal status of the patient.(p=0.12).No significant correlation

was found between the level of burden and the composite scores of medical status, ($p=0.09$), employment status($p=0.84$), family status ($p=0.47$) and psychological status($p=0.25$)

Similarly, the total scores of burden assessment schedule were compared with the ASI composite scores ADS group. In this group, statistically significant correlation was found between the burden with the alcohol use, ($p=0.00$) and the employment status($p=0.012$). No statistically significant correlation was found in the other scores of medical statuses ($p=0.603$), legal status ($p=0.95$), family relationships, ($p=0.08$) and psychological status($p=0.23$)

The correlation between the severity of addiction with the quality of life was calculated. For this purpose, the correlation between the composite scores of addiction severity index and the various domains of WHOQOL BREF were analyzed using Spearman's coefficients correlation. The severity of the addiction is negatively correlated to the quality of life in all the domains, higher the addiction severity composite score, lower is the quality of life.

In ADS group, higher negative correlation was found between the physical health domain of quality of life with the domains of psychological status (-0.41 , $p=0.02$), family and social relationship (-0.41 , $p=0.02$), alcohol use (-0.30 , $p=0.04$), legal status (-0.36) and the employment status (-0.30). Though statistically significant correlation was found only in the domains of alcohol use, family and social relationships (0.32), and the psychological status (-0.40 , $p=0.02$)

The social domain of QOL, is highly correlated with the employment status (-0.32) and the psychological status. (-0.40 , $p=0.02$). the environment domain of quality of life is found to be highly correlated to the employment status (-0.39 , $p=0.03$), and the psychological status -

(0.33 , $p=0.07$). The domain of the psychological health was found to be closely related to psychological status on ASI, (-0.23) and the family and social relationship (-0.21) and the alcohol use (-0.20). Relationship between Quality of Life (total) and each problem areas of Addiction Severity Index (ASI), (subjective severity) ($n=30$) for ODS

Statistical analysis: The data obtained during the study was entered in the data base computer programme and was analysed using the Statistical Package for Social Sciences (SPSS) version 17.0. Pearson chi-square (for categorical variables) and independent-t test (for continuous data) were used to compare the sociodemographic and clinical characteristics of two groups. To compare the burden scores on BAS and quality of scores on WHO-QOL BREF in two groups independent-t test was used. To examine the correlation between the addiction severity and the burden of care and the quality of life of the two groups, spearman's correlation test was used, considering the sample size.

Discussion

Family is the key resource in the care of patients including those with mental illness in India. This has been attributed to the Indian tradition of inter-dependence, and the concern of close relatives in adversity, as also to the paucity of mental health professionals. The family caregivers are those who provide care to other family members who need supervision or assistance in illness or disability or those who provide unpaid care to the family members with special needs. An illness adversely affects the individual as well as those around in terms of physical, emotional, and financial distress, and social and occupational dysfunction. This leads to problems, difficulties or adverse events which impact the lives of the significant others. This adverse impact has been described as burden. Burden is said to

be largely determined by family environment in terms of coping styles of different family members and their tolerance of the patients' aberrant behaviour.

Even though substance abuse is well recognized as a complex biopsychosocial phenomenon, substance dependence is considered as a 'family disease'. A substance dependent person in the family affects almost all aspects of family life, e.g., interpersonal and social relationships, leisure time activities, and finances. Substance dependence invariably increases conflicts, negatively affects family members, and burdens the families. The psychological and behavioural impact on others is often far greater than on the substance dependent family member. Yet, because of the historical emphasis on substance dependence as an individual's problem, the study of family's problems has been relatively neglected. Consequently, systematic research on substance dependence related burden among the family members is very limited.

Alcoholism is a major threat to the individual as well as the society and the maximum burden of the illness is borne by the family. The study by Vaishnavi R et al is aimed at assessing the pattern of burden on the caregivers of alcohol dependent patients and at assessing the relationship between the severity of dependence and the burden on caregivers. A cross-sectional assessment was done in 200 patients with alcohol dependence and their caregivers. The severity of dependence and the pattern of burden on caregivers were assessed. The data thus collected was analyzed using SPSS version 20. Results. The study demonstrates that caregivers of alcohol dependent patients reported significant objective burden and subjective burden. Furthermore, the severity of alcohol dependence and the domains of burden such as financial burden, disruption of family interaction, and disruption of family routine activities were positively

correlated with high level of significance. The current study has illustrated that all the caregivers experienced significant amount of burden which has to be addressed for better treatment outcome of the patients. A study similar to above was done by Goit BK et al who studied burden and quality of life among primary caregiver of alcohol dependence syndrome. [1,2]

Swaroopachary RS et al compared the amount of burden among the caregivers with the severity of alcohol dependence in patients. Severity of Alcohol Dependence Questionnaire is used to determine the severity of their condition in alcohol-dependent patients. Caregivers were administered Family Burden Interview Schedule to assess the burden experienced by them. The diagnosis of alcohol dependence syndrome is made in accordance to the ICD-10 criteria. Severe burden is more seen in females, unemployed, in families where domestic violence is present. They concluded that more severe is the dependence, more is the amount of burden experienced by the caregivers. Similar study in north-eastern India was done by Sen SK et al. [3,4]

Minich LM et al studied caregiver burden and alcohol use in a community sample. It is important to examine the particular aspects of caregiver burden that most influence alcohol use. Rospenda KM et al did a mail survey was conducted using a representative sample of 998 employed Chicago residents who provided informal care for at least one person. Ordinary least squares regression models were computed to examine the relationship between caregiver burden and drinking outcomes. Findings suggest that caregivers who experience social and emotional burdens related to caregiving are at risk for problematic alcohol use and warrant attention from health care and mental health service professionals. [5]

Kadam KS et al studied brewing caregiver burden. Alcohol dependence is a growing problem in India. A substance dependent person in the family affects almost all aspects of family life. There is a surprising scarcity of studies on impact of alcohol dependence on caregivers. The study assessed the sociodemographic profile of primary caregivers of patients diagnosed with alcohol use disorder. The study further examined the association between various variables of sociodemographic factors, alcohol usage, and caregiver burden. The prevalence of moderate-to-severe caregiver burden was obtained as 78.75% among the primary caregivers. There was a positive correlation between caregiver burden and the quantity of alcohol consumed, monthly alcohol expenditure, and years of marriage. The association between caregiver burden and various sociodemographic variables were not found to be statistically significant. There is the prevalence of moderate-to-severe caregiver burden among primary caregivers of patients of alcohol use disorder. Addressing the quantity of alcohol and expenditure incurred on alcohol consumption with focus on caregiver psychoeducation will have significant implications in the rehabilitation of patients with alcohol use disorder. [6]

In a study from India, Mattoo SK et al studied family burden with substance dependence. The present study aimed to assess the pattern of burden borne by the family caregivers of men with alcohol and opioid dependence. A cross-sectional study was conducted with ICD-10 diagnosed substance dependence subjects and their family caregivers attending a de-addiction centre at a multispecialty teaching hospital in north India. Family Burden Interview Schedule was used to assess the pattern of burden borne by the family caregivers of 120 men with alcohol and/or opioid dependence. A substance dependent person in the family affects

almost all aspects of family life. This leads to problems, difficulties or adverse events which impact the lives of family members and causes enormous burden on family caregivers. [7]

Use of alcohol has been one of the major sources of recreation and stress relievers to date and it is one of the most abused substances in the world due to its free availability. The cost that a spouses incur in terms of economic hardships, social isolation and physical strain can be referred to as Spouse Burden. Spouses play an important role inpatient's support and treatment and with a study like this there might be a better understanding of the problem. A descriptive, cross-Sectional hospital-based study was done in 62 patients by Gautam SC, Bhattarai Y et al who met the diagnostic criteria for Alcohol Dependence Syndrome (ICD-10 DCR) and consents were taken from required personnel. Males were the primary alcohol abusers (87%). 51.6% of the patients were unemployed and the rest 48.4% was still employed whereas 51.6% of the spouses were employed and the rest 48.4% unemployed. 51.6% of the patients were illiterate whereas majority of the spouses were literate (67.7%). There is a significant severity of burden of alcohol dependence syndrome in spouses and this verity of dependence is positively correlated with spouse burden. Financial, spouse routine, spouse interaction, physical and mental health of other members of the family were significantly affected with increase in dependence. [8]

Lamichhane N et al studied family burden in substance dependence syndrome. Nebhinani N et al studied family burden in injecting versus noninjecting opioid users. A substance-dependent person in the family affects almost all aspects of family life that also impact the lives of the significant others and causes enormous burden. Family Burden interview schedule was used to assess the pattern of burden borne by the family caregivers. The IDU

group was characterized by older age, longer duration of substance dependence, greater subjective and objective family burden in all the areas compared to NIDU group, and single status and unemployment were associated with severe objective burden. The family burden was associated neither with age, education, or duration of dependence of the patients, nor with family size, type of caregiver or caregiver's education in either group. All caregivers reported a moderate or severe burden, which indicates the significance and need for further work in this area. [9,10]

Substance dependence is well recognized as a complex biopsychosocial phenomenon. Complications arising out of it not only impairs life of substance-dependent patient but also causes enormous burden on their caregivers. Shekhawat BS et al described caregiver burden on wives of substance-dependent husbands and its correlates at a tertiary care centre in Northern India. The study was conducted to assess and compare the quantum of burden on wives of alcohol and heroin-dependent patients and also to determine the correlation between sociodemographic factors and caregiver burden. Wives of both alcohol and heroin dependent patients had moderate-to-high burden of caregiving, those of heroin dependent patients perceived more burden in the factors of "impact on marital relationship," "appreciation of caregiving," "impact on relation with others," and overall burden as compared to wives of alcohol-dependent patients. Significant negative correlation was found between "impact on marital relationship," "appreciation of caregiving," and "impact on relation with others" scores and patients' education status as well as between "appreciation of caregiving" score and wives' age where higher score denotes more burden. It was concluded that significant burden exists on wives of substance-dependent patients; thus,

management plans must be devised aiming not only patients but also wives so as to reduce burden. [11]

In our study higher objective and subjective burden was found in low income and rural subjects. Rural location invariably reduces work and income opportunities. The low-income group was more burdened in terms of finances, disruption of family routine and family interaction, as well as mental health of family members. Higher disruption of family interaction was seen in singles while significant disruption of family leisure was seen in subjects in opioid groups and in extended families. Higher disruption of family interaction might be a common factor for the subject remaining single as also his family caregiver perceiving greater burden. Rural subjects staying in extended families with higher family history/risk of substance dependence reflects a combined effect of family environment and its impact on health of the family members. [12]

We found more disruption of family leisure in singles in comparison to the earlier study from our centre that reported married subjects to be more burdened especially for domains of finance, disruption of family routine, effects on mental and physical health. That study also reported higher burden being associated with severe dependence while such an association was not determined in the present study. Also, that study reported the rural population to be more burdened for financial domain, and disruption of family leisure was reported more in married, elderly and female caregivers.

Conclusion

Substance abuse impacts the functioning of the family and the society, and the families of substance abusers experience considerable burden of care. The study of family burden in substance dependence assumes importance because the profile of the associated factors can both influence

the outcome of the problem and be useful in designing and planning interventions to help the families cope with substance dependence.

The traditional family in India is the joint family. It is a group with several family subunits living in separate rooms of the same house. Substance abuse related family burden is important for India and other developing countries because joint family is a more common pattern. Also, it assumes greater relevance because of the needed emphasis on developing community mental health services under the primary health care and community participation. The aim is to focus not only on the treatment of the patients, but also to meet the needs of the caregivers.

In conclusion, our study showed that substance dependence was associated with substantial burden for the family members, more for subjective and objective burdens in rural location with low income, and more for alcohol+opioid dependence group followed by opioid dependence group. These findings may suggest directions for future research in this area.

Declarations:

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Code availability: Not applicable

Consent to participate: Consent taken

Ethical Consideration: There are no ethical conflicts related to this study.

Consent for publication: Consent taken

What this Study Add to Existing Knowledge: Compared to opioid and alcohol+opioid dependence groups, more often the alcohol dependence group was older, married, currently working, having a higher income and with the wife as a caregiver. Family burden was moderate or severe in 95-100 per cent cases in all three

groups and more for 'disruption of family routine', 'financial burden', 'disruption of family interactions' and 'disruption of family leisure'. Family burden was associated with low income and rural location. It was associated neither with age, education or duration of dependence of the patients, nor with family size, type of caregiver or caregiver's education and occupation. Almost all (95-100%) caregivers reported a moderate or severe burden, which indicates the gravity of the situation and the need for further work in this area.

Limitations Our study had several limitations. The sample size was small and recruited from a tertiary care centre; hence the findings could not be generalized to other treatment centres. As per our centre's usual client profile all patients were men. Assessments of burden were cross-sectional and non-blind, and all information was obtained from a single-family caregiver. Assessment of subjective burden was global, and several mediators such as coping, appraisal, expressed emotions and social support were not assessed. Future research should be conducted in a large sample with prospective design, to further study the exact effects of substance and other mediators such as family type, coping and social support on the family burden.

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