PSYCHIATRIC MORBIDITY AND MARITAL QUALITY AMONG WIVES OF PATIENTS WITH ALCOHOL DEPENDENCE SYNDROME

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ABSTRACT: BACKGROUND: Alcohol Dependence syndrome (ADS) is one of the most common psychiatric disorders that has deleterious consequences not only on the patient with ADS but also hampers social, financial, and legal matters of his family hence could be considered as a disorder of the family. Spouses of patients with ADS, a key member of such dysfunctional family system, are most vulnerable to have significant psychiatric disorders like adjustment disorders, mood disorders, anxiety disorders and psychosocial problems. Hence we have undertaken this study in order to understand and address such issues which is largely neglected in psychiatric research. **AIMS AND OBJECTIVES:** To assess the severity of alcohol dependence & its adverse effect on families, the prevalence and pattern of psychiatric morbidity and marital quality in spouses of men with ADS and to explore the association between them. MATERIALS AND METHODS: 60 spouses of males with ADS according to Diagnostic and Statistical Manual of Mental Disorders- IV (DSM IV-TR) Criteria were screened for psychiatric morbidity using General Health Questionnaire and the presence of specific psychiatric disorders using Structured Clinical Interview for DSM-IV AXIS-I & AXIS-II (SCID-I & SCID-II). Severity of alcohol dependence in males and its adverse consequences was assessed using Short Alcohol Dependence Data and Drinkers Inventory of Consequences, respectively. Marital quality was assessed using the marital quality scale. Data obtained was analyzed statistically. **RESULTS:** High prevalence of Psychiatric morbidity (63.33%) among spouses of alcohol dependent men, with majority having Axis I diagnosis of Major Depression (35%), Anxiety and Adjustment Disorder. None of them had personality disorders on SCID II. Psychiatric morbidity, poor marital quality in spouses and high alcohol dependence in their husbands and its adverse consequences were found to be significantly correlated with each other and their association was robust particularly Impulse Control, Interpersonal and Social Responsibility were most affected. **CONCLUSION:** Spouses of alcohol dependent men have high Psychiatric morbidity and low Marital Quality. Addressing these issues will be beneficial as spouses are known to play an important role in the treatment of ADS.

KEYWORDS: Spouses of Alcohol Dependent Males, Psychiatric Morbidity, Marital Quality.

INTRODUCTION: Alcohol is a potent drug that causes both acute and chronic changes in almost all neurochemical systems. Heavy consumption is the major public health concern in most of the countries results in untold misery to the individual by affecting physical, psychological and social disabilities. According to World Health Organization (WHO), Alcohol Use Disorders account for 1.4% of global disease burden, 3.2% deaths (1.8 million) and 4% loss of disability adjusted life years (58.3 million).¹

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33% Indian population consumes alcohol (second largest in the world) and 20% of disability-adjusted life years are lost because of poor health status, marked nutritional deficiencies and high prevalence of alcohol addiction.^{2, 3}

The Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV TR) has defined dependence as a cluster of cognitive, behavioral and physiological symptoms indicating that the individual continues use of the substance despite significant substance-related problems. There is a pattern of repeated self-administration that can result in tolerance, withdrawal and compulsive drug taking behavior.⁴

NEED FOR THE STUDY: Alcohol abuse and dependence are associated with multiple life problems. The spouses of males with ADS are core members of this dysfunctional family system and problems such as family conflicts, domestic violence which can be physical, verbal or sexual and poverty caused by husbands' alcohol use result in significant psychiatric disorders like adjustment, mood and anxiety disorders, medical morbidity and psychosocial problems in their spouses.⁵ Their mental health is very crucial for their husbands, children and family harmony. There are many research reports on the maladaptive coping skills, personality characteristics, poor quality of marital life, psychological distress, economic burden and codependence of wives of persons with alcohol use disorders.⁶ However, the psychiatric morbidity in wives of patients with ADS is a largely neglected area in psychiatric research. Understanding and addressing the mental health issues of spouses of alcoholics will not only decrease their burden, improve their coping skills and overall quality-of-life, but is also likely to have a bearing on the treatment and outcome of alcoholics hence we have undertaken this study.⁷

AIMS: To study the prevalence of psychiatric morbidity among spouses of males with ADS.

OBJECTIVES OF STUDY:

- 1. To Estimate the frequency and pattern of Psychiatric Disorders in spouses of males with ADS.
- 2. To assess the Severity of Alcohol Dependence & adverse effect of alcohol on families of alcohol dependent in sense of health, social and financial matters related to it.
- 3. To review the degree and to explore association between Psychiatric Morbidity, Marital Quality and severity of Alcohol Dependence.

MATERIALS AND METHODS:

STUDY DESIGN: Cross Sectional Observational Study. **SAMPLING METHOD:** Simple Random Sampling. **STUDY DURATION:** January 2013 to July 2014 [18 months].

INCLUSION CRITERIA: 60 spouses of male patients who fulfill the criteria for ADS according to DSM IV-TR, who were aged 18 years and above, reporting to out-patient department, Department of Psychiatry, Medical College were included in the present study. The study was

approved by Hospital Ethics Review Board. Informed consent was obtained from the index patients as well as their spouses.

EXCLUSION CRITERIA: Physical and psychiatric disorders in the patient which are not related to alcohol use and wives of patients not consenting were excluded.

TOOLS FOR ASSESSMENT:

- 1) Sociodemographic Profile and Case Record Sheet.⁸
- 2) DSM IV-TR criteria for diagnosis of ADS.⁴
- 3) Socio economic status Scale (Kuppuswamys' SESS).⁹
- 4) Dukes General Health Questionnaire-17 item version.¹⁰
- 5) Structured Clinical Interview for DSM-IV AXIS-I & II (SCID-I & SCID-II).¹¹
- 6) Short Alcohol Dependence Data (SADD)¹²
- 7) Drinker Inventory of Consequences (DrInC)¹³
- 8) Marital Quality Scale (Shah A. 1991).¹⁴

DESCRIPTION OF THE TOOLS:

- **1) Sociodemographic Profile and Case Record Sheet: -** It is used to record Sociodemographic data with general, systemic and mental status examination.
- 2) DSM-IV TR Criteria for ADS: A maladaptive pattern of alcohol use, leading to clinically significant impairment or distress, as manifested by 3 (or more) of the following, occurring at any time in the same 12-month period: (1) Tolerance; (2) Withdrawal; (3) Alcohol is used in larger amounts or over a longer period than was intended; (4) A persistent desire or unsuccessful efforts to cut down or control alcohol use; (5) a great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects; (6) Important social, occupational, or recreational activities are given up or reduced because of alcohol use; (7) Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
- **3)** Socio economic status Scale SESS (Kuppuswamys' SESS): It is one of the most important social determinants of health and disease in which composite score of education and occupation of the head of the family along with monthly income of the family, which yields a score of 3-29. This scale classifies the study populations into high, middle, and low SES.
- 4) Dukes General Health Questionnaire (GHQ): A 17-item generic questionnaire instrument designed to measure adult self-reported functional health status quantitatively during a one-week time window. There are 11 scales. Six scales (i.e., physical health, mental health, social health, general health, perceived health, self-esteem) with high scores indicating better health and five scales (i.e., anxiety, depression, anxiety-depression, pain disability) with high scores indicating greater dysfunction.

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- **5) SCID-I** is a diagnostic exam that determines DSM-IV Axis I disorders (major mental disorders) and **SCID-II** determines Axis II disorders (personality disorders). There are at least 700 published studies in which the SCID was the diagnostic instrument used.
- 6) Short Alcohol Dependence Data (SADD): It measures the present state of dependence and is sensitive across the full range of dependence and changes occurring over time. It has 15 items with four possible responses, scored as 0-3. The maximum score is 45 and dependence is categorized based on scores, into low (0-9), moderate

(10-19) and high (>19) dependence.

7) Drinkers Inventory of Consequences (DrInC) is a scale devised to assess the consequences of drinking in five domains viz., physical, intrapersonal, interpersonal, impulse control and social responsibility and 50 items with four possible responses, which are scored as 0-3. Higher total scores or in each of its domains indicate greater negative consequences. We have used the version which considers consequences in past 1 year.

METHOD OF DATA COLLECTION:

- 1) Male alcoholic patients reporting to out-patient department, Department of Psychiatry, at medical college were assessed for ADS based on DSM IV criteria and socioeconomic status using Kuppuswamys' SESS.
- 2) Consenting spouses were screened on General Health Questionnaire to detect the presence of psychiatric illness.
- 3) Those spouses identified as probable cases on GHQ were further assessed for the presence of specific psychiatric disorders using SCID-I & SCID-II.
- 4) Severity of alcohol dependence and associated problems were examined using SADD & DrInC Scales, respectively.
- 5) The marital quality among spouses was assessed using Marital Quality Scale.

RESULTS: 67 spouses of males with ADS were enrolled for the present study but 7 patients refused to complete the questionnaire & psychometric scales, thus Data obtained from remaining 60 patients was analyzed statistically using Statistical Package for Social Sciences (SPSS) software. Descriptive statistics (range, mean, standard deviation) for quantitative variables and category frequency counts and percentages for qualitative variables were computed. The independent sample (Student's) t-test for unpaired data was employed to compare mean values and modified degrees of freedom. A 'p' value of less than 0.05 was considered statistically significant. The Chi-square test was used to compare frequency distributions; Correlations were performed using Pearson's product moment correlation-coefficient to test the strength between quantitative variables.

SI.	Variables	Alcohol	Spouses of Men		
No.	Variables	Dependent Males	with ADS		
1	Age (years): Range	28 - 56	24 – 51		
	Mean ± SD	40.30 (± 7.945)	36.67 (± 7.972)		
2	Education: Graduate	3 (5%)	2 (3.3%)		
	High School	3 (5%)	21 (35%)		
	Intermediate	8 (13.3%)	7 (11.6%)		
	Mid School	15 (25%)	14 (23.3%)		
	Primary	11 (18.3%)	10 (16.6%)		
	Illiterate	20 (33.3%)	6 (10%)		
3	Occupation: Professional	2 (3.3%)	1 (1.6%)		
	Semi-Professional	1 (1.6%)	2 (3.3%)		
	Clerical	5 (8.3%)	1 (1.6%)		
	Skilled	3 (5%)	3 (5%)		
	Semi-Skilled	6 (10%)	4 (6.6%)		
	Unskilled	33 (55%)	11 (18.3%)		
	Unemployed	10 (16.6%)	38 (63.3%)		
4	Domicile	Urban	10 (16.6%)		
		Semi-Urban	9 (15%)		
		Rural	41 (68.3%)		
5	Kuppuswamys' SESS: I	Upper Class	1 (1.6%)		
	II	Middle Class	8 (13.3%)		
	III	Lower Middle class	7 (11.6%)		
	IV	Upper lower Class	39 (65%)		
	V	Lower Class	5 (8.3%)		
C	Duration of Alcohol	Range = 3 - 30			
0	Dependence	Mean \pm SD = 17.48 \pm 7.6			
7	Duration of Marital Life	Range = $4 - 31$			
		Mean \pm SD = 17.20 \pm 8.07			
	Table 1: Socio-dem	ographic characteristics	s of		
	alcohol dependen	t men and their spouse	25		

	PSYCHIATRIC DISORDERS	Spouses of Alcohol Dependent Males			
SI. No		GHQ (screening test) No. of	SCID-I & SCID-II No. of cases (Percent)		
1	PRESENT	43 (71.66 %)	38 (63.33 %)		
2 ABSENT		17 (28.33 %)	22 (36.67 %)		
TOTAL		FOTAL 60 (100 %) 60 (1			
Table 2: Prevalence of Psychiatric Disorders among Spouses of males with ADS on GHQ and SCID-I & SCID-II					

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As shown in Table 2, there has been a high degree of correlation between screening test (GHQ) positivity and the presence of Axis I & II diagnosis (on SCID I & II) in spouses of alcoholics studied.

SI.			Spouses of Alcohol Dependent Males		
No.		PSTCHIATRIC DISORDERS	No. of cases	Percent (%)	
Ι		DEPRESSIVE DISORDERS	21	35 %	
	1	Dysthymic disorder	13	21.67 %	
	2	Major Depressive Disorder	8	13.33 %	
		1.1 Mild	5	8.33 %	
		1.2 Moderate	2	3.33 %	
		1.3 Severe without psychotic features	1	1.67 %	
II	ANXIETY DISORDERS		9	15 %	
	1	Panic disorder (Without Agoraphobia)	5	8.33 %	
	2 Generalized Anxiety Disorder		2	3.33 %	
	3 Specific Phobia		2	3.33 %	
III		ADJUSTMENT DISORDERS	8	13.33 %	
	1	With depressed mood	5	8.33 %	
	2	With mixed anxiety & depressed mood	3	5 %	
IV		AXIS II	00	0 %	
	•	TOTAL	60	100	
		Table 3: Distribution of Psychiatric Disord	ders in Spouses of ma	les with ADS	

Table 3 shows the profile of psychiatric diagnoses on SCID I which indicates predominant presence of Depressive disorders in 21 (35 %) patients, out of which majority had Dysthymia and MDD. Nearly equal number of patients of Anxiety Disorders and Adjustment Disorders were present. None of the spouses had a positive diagnosis of personality disorders on SCID II.



Pie diagram showing Psychiatric Disorders in Spouses of males with ADS

ci	SADD	Soverity of alcohol	Alcohol dependent males		
No. scores dependence		No of cases	Percent		
		dependence	N = 60	(%)	
1)	1 – 9	Low Dependence	7	11.67%	
2)	10 – 19	Moderate Dependence	25	41.67%	
3)	20 – 45	High Dependence	28	46.67%	
		Range	4 - 4	5	
Mean ±SD			20.45 ± 9.356		
Table 4: Data regarding SADD scores in alcohol dependent males					

Table 4 shows the data regarding severity of alcohol dependence on SADD in males with ADS suggesting a significant dependence. Almost equal numbers of patients were found in the moderate and high dependence range.

DOMAINS	Alcohol dependent males No of cases (N = 60)			
	Range	Mean ± SD		
DrInC Total	23 - 41	33.97 ± 5.09		
1. Physical	2 - 8	6.03 ± 1.615		
2. Inter Personal	3 - 8	7.05 ± 1.126		
3. Intrapersonal	1 - 9	4.75 ± 2.176		
4. Impulse Control	6 - 12	9.73 ± 1.726		
5. Social Responsibility	4 - 7	6.40 ± 0.785		
Table 5: Data regarding scores on Drinkers Inventory of Consequences (DrInC) in alcohol dependent males				

Table 5 shows the data regarding adverse consequences of alcohol dependence measured by DrInC scores into five domains suggesting that the Impulse Control, Interpersonal and Social Responsibility were most affected followed by physical problems and Intrapersonal domains.

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SI.	Alcohol o	Spouses of Alcohol Dependent Males			
No.	SADD scores Severity of alcohol dependence		MQS Mean ± SD		
1) 2) 3)	1 - 9 10 - 19 20 - 45	Low Dependence Moderate Dependence High Dependence	85.57 ± 16.339 151.04 ± 32.098 150.39 ± 43.337		
	Ra Mea	66 - 196 143.1 ± 41.837			
Table 6: Correlation between Marital Quality on MQS in spouses and severity of dependence on SADD scores in patients with ADS					

As seen in Table 6, majority of spouses had higher scores on MQS indicating poor quality of marital life. Almost equal mean scores on MQS were obtained in patients with moderate and high dependence on SADD indicating that severity of alcohol dependence correlated strongly with poor marital quality. Pearson Correlation = 0.50^{**} Sig. (2-tailed) = 0.00 [Correlation is significant at the 0.01 level (2-tailed)]

Variables	SCID I Negative (n=22)		SCID I Positive (n=38)		t	df	Ρ
Duration of Alcohol Dependence	9.64	4.726	22.03	4.796	9.694	58	0.000
Severity of Alcohol Dependence	14.73	7.018	23.76	8.994	4.048	58	0.000
DrInC TOTAL	29.05	4.259	36.82	2.884	8.417	58	0.000
Physical	4.82	1.593	6.74	1.155	5.384	58	0.000
Inter Personal	6.50	1.300	7.37	.883	3.078	58	0.003
Intrapersonal	3.18	1.790	5.66	1.849	5.056	58	0.000
Impulse Control	8.36	1.136	10.53	1.502	5.847	58	0.000
Social Responsibility	6.18	0.907	6.53	0.687	1.661	58	0.102
Marital quality	92.18	16.681	172.58	14.11	19.886	58	0.000
Table 7: Association of psychiatric morbidity in spouses (SCID I Diagnosis) with Duration and Severity of alcohol dependence (SADD), its adverse consequences (DrInC) and Marital Ouality (MOS)							

Table 7 shows statistically significant positive association of Duration and severity of alcohol dependence, all 5 domains of adverse consequences of alcohol and marital quality with psychiatric morbidity in spouses based on SCID I positivity.

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DISCUSSION:

A. PSYCHIATRIC MORBIDITY: FREQUENCY AND NATURE: In the present study, the prevalence of psychiatric disorders among spouses of alcohol dependent men was 63.33 %. Majority of them received an Axis I diagnosis on SCID I and the most common diagnosis being Depressive Disorder in 35% patients which included Dysthymia and MDD, followed by Anxiety Disorder in 15 % which included Panic disorder (Without Agoraphobia), Generalized Anxiety Disorder and Specific Phobia. Adjustment Disorders were present in 13.33% patients. None of the spouses had personality disorders on SCID II. Very few Indian studies have specifically examined the presence of psychiatric morbidity in spouses.¹⁵ The high rates of mood and anxiety disorders and low rates of personality disorders are in agreement with western literatures^{16, 17} but substance abuse among spouses commonly reported in western literature is not found in the current study.^{18, 19}

CORRELATION BETWEEN GHQ POSITIVITY AND THE PRESENCE OF AXIS I DIAGNOSIS: Out of 60 patients, 43 (71.66 %) were GHQ positive and 38 (63.33 %) patients had at least one psychiatric diagnosis on SCID-I & II, thus the tool is highly sensitive in identifying psychiatric morbidity.

RELATIONSHIP WITH SOCIO-DEMOGRAPHIC AND CLINICAL VARIABLES: Psychiatric Illnesses were more prevalent in spouses of age group 31 to 50 years; from rural area; Educated up to higher secondary level; Unemployed; belonging to Upper Lower Class and were married for more than 21 years.

B. CHARACTERISTICS OF ALCOHOL DEPENDENCE: Majority of patients 26 (43.33 %) were alcohol dependent for more than 21 years and association between psychiatric disorders among spouses and duration of alcohol dependence in males was highly significant statistically as seen in many Western studies and few Indian studies.^{17,20}

Scores on the SADD ranged from 4 to 45, with a mean score of 20.45 ± 9.356 , indicating significant dependence. On DrInC, the Impulse Control, Interpersonal and Social Responsibility were most affected followed by physical problems and Intrapersonal domains. 22 % alcohol dependent males had physical complications in the form of gastritis, hematemesis and malena; 35 % had neuropsychiatric complications which included peripheral neuropathy, delirium, seizures, ideas of infidelity, mood symptoms and sexual dysfunction. Most of them had occupational distress and economic problems as well.²¹

C. QUALITY OF MARITAL LIFE: Majority spouses with psychiatric illness had higher scores on MQS indicating poor quality of marital life which was statistically significant, similar findings have been observed in western studies.²²

The severity of alcohol dependence in males strongly correlated with poor marital quality in spouses as mean scores on MQS were high in moderate to severe dependence on SADD. Also there was statistically significant positive correlation of duration of alcohol dependence, marital quality and all 5 domains of DrInC and also their association was robust.²³ Greater the Duration of

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alcohol dependence, Greater is the severity of problems consequent to alcohol dependence in all the domains of DrInC, greater was the scores on MQS indicating poor quality of marital life among spouses who scored positive on GHQ and SCID I.^{24, 25}

CONCLUSIONS: The present study concludes that the spouses of patients with ADS have significant psychiatric morbidity with majority having Axis I diagnosis of Major Depression, Anxiety and Adjustment Disorder. There was significant association of psychiatric morbidity with age, domicile, education, occupation, socio-economic status, and duration of marital life and husband's alcohol dependence. Duration and severity of alcohol dependence, high adverse consequences of alcoholism, poor marital quality and psychiatric morbidity in spouses were significantly correlated with each other and their association was robust particularly in impulse control, interpersonal and social responsibility domains.

IMPLICATIONS OF THE STUDY: The findings of the present study draw attention to the fact that the psychiatric morbidity among spouses of men with ADS is considerable and need to be addressed as a part of alcohol treatment programs to improve outcomes not only for the dependent individuals but also for women's own health.

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