

## Original Article

# Psychological Impact on Spouses of Alcohol Dependence Patients in Puducherry

Harisundar Mohanasundaram<sup>1</sup>, Harsh Avinash Thappa<sup>2</sup>, Vinoth Krishna Dass<sup>3</sup>,  
Vinayagamorthy Venugopal<sup>4</sup>, Arun Selvaraj<sup>5</sup>

**How to cite this article:**

Harisundar Mohanasundaram, Harsh Avinash Thappa, Vinoth Krishna Dass et al. / Psychological Impact on Spouses of Alcohol Dependence Patients in Puducherry. / Indian J Law Hum Behav 2021;7(1):9-16.

**Author Affiliation:**

<sup>1</sup>Consultant Psychiatrist, Visranthi Mental Health Centre, Trichy 620018, Tamil Nadu, India, <sup>2</sup>Senior Resident, <sup>3</sup>Associate Professor, <sup>5</sup>Professor and Head, Department of Psychiatry, <sup>4</sup>Associate Professor, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India.

**Corresponding Author:**

**Vinoth Krishna Dass**, Associate Professor, Department of Psychiatry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India.

**Email:** [vinothkrishnass@gmail.com](mailto:vinothkrishnass@gmail.com)

**Abstract**

**Background:** Alcohol can have adverse effects not only on the individual's physical and mental health but also social wellbeing. Many studies on problems in people consuming alcohol have been done, but only few studies have been done with regard to the impact on spouses.

**Objectives:** To study the socio-demographic factors and psychological impact of spouse of patients with alcohol dependence syndrome and to study the psychological impact on spouse of alcoholic dependence patients with severity of alcohol use.

**Methods:** The study was conducted in the Department of Psychiatry in a tertiary care centre in Puducherry of 18 months' duration. 202 female spouses of alcohol dependent husbands were assessed using the tools HAM-D, HAM- A, PSS and AUDIT scale. All analysis was done using SPSS Software version 16, Chi-square and Pearson's correlation coefficient test.

**Results:** Majority of the study participants were 99(49%) were 35-44 years of age. 26(36.1%) subjects whose husbands scored high on audit and 46(47.4%) subjects whose husbands scored very high on Audit had severe to very severe depression. 26(78.8%) subjects whose husbands reported moderate scores on Audit had mild anxiety, while 43(44.3%) subjects reported very high scores on Audit had moderate to severe anxiety. 54 (55.7%) subjects whose husbands had very high Audit scores reported moderate levels of perceived stress.

**Conclusion:** Significant association was found between spouse of alcoholics with features like depression, anxiety, and stress and the severity of alcohol use in the husband. Hence, the treatment should address the psychological problems in spouse while treating the alcohol dependence in their husband to get a better outcome

**Keywords:** Alcohol dependence; Psychological impact; Problem in spouse.

**Introduction**

A major health problem around the globe is alcoholism, ranking as the fifth most common risk factor for disease, disability, and death throughout the world. Many studies on problems in people consuming alcohol has been done, only few studies

have been done on the impact on spouses.<sup>1</sup>

The problems associated with alcoholics are centred primarily within the family focus and the maximum impact is seen on the spouse because of the intimate nature of the relationship. Spouses play an important role in forming the treatment protocol for the concerned alcoholics. For this reason, it is

very important to study about the mental makeup, functioning, and coping behaviour associated with the wives of the alcoholics. Alcoholism can have a serious negative impact on marriage and families. It has a severe destructive path with potential consequences that can last for lifetime. Most the impact is on the spouse and children, and little attention have been given to them so far.<sup>2</sup> Even though, a significant number of cases have already been studied very few have been brought into public awareness.

Alcoholism is considered to be an ongoing stressor not only for the individual but also for the whole family.<sup>3</sup> Spouses bear the highest amount of risk owing to the intimate nature of the relationship and constant exposure to the alcoholic's behaviour. The wives of the alcoholic husbands are subjected various forms of stressors due to the husband's alcohol dependence. Many of them seek assistance to cope with the impact of husband's drinking. There was significant correlation with the coping components and alcohol related problems.<sup>4</sup>

With the psychological wellbeing compromised, interfering with the coping efficiency<sup>4</sup> of the spouses as well as affecting their functional capability as a homemaker and thereby impacting their family harmony.<sup>5</sup> So in order to bring about effective treatment for the alcoholics, it is essential to understand and address the mental health issues of spouses of alcoholics.<sup>6</sup> The purpose of this study was to attempt to study particular aspects of the wives of the alcoholic's mental status and compare it with that of the normal population through interviews and questionnaires. Also, priority was given for addressing the personality traits and neurosis among the wives of the alcoholic patients.

## Methods

It was a cross-sectional study conducted in the Department of Psychiatry, a tertiary care centre in Puducherry of 18 months' duration. The subjects of this study were 202 female Spouses of Alcohol dependence patients attending the de-addiction clinic and meeting the inclusion criteria. The present study included the consenting non-alcoholic female spouses of known alcoholic dependent patients. The respondents belonging to age group of 24-49 were included in the study. These alcoholic dependent patients were fulfilling the criteria for alcohol dependence according to ICD 10 criteria. Subjects with any other diagnosed psychiatric disorder or other co-morbid conditions (Diabetes mellitus, hypertension, renal disease

and cardiovascular disease) were excluded from the study. Pregnant women were also excluded from the study. After obtaining informed consent, a pre-designed questionnaire was administered to collect the data. Appropriate permissions to use the questionnaires were obtained from the concerned copyright holders wherever applicable. The questionnaire covered the information on socio-demographic information psychiatric parameters like stress by Perceived Stress Scale, anxiety by Hamilton Anxiety Rating Scale, depression by Hamilton Depression Rating scale and severity of alcohol by Audit scale were assessed.

The approval from the institutional ethics committee was obtained before the conduct of the study. Data analysis was done using the help of IBM SPSS software version 16. All values were expressed in Mean (Standard deviation). Mean association between variables was analysed using chi-square test. Correlation between parameters was done using Pearson's correlation coefficient test. Pvalue <0.05 was considered statistically significant. All Analysis was done using Statistical Package for the Social Science (SPSS) version 16.

## Results

This study included 202 female spouses between the ages of 24 and 49 years. Majority of the study participants 99 (49%) were 35-44 years of age. 122 (60.3%) were educated up to middle school, 142 (70.3%) were employed, while 60(29.7%) were home-maker/ housewives by occupation. Most study participants, 167(82.7%) belonged to a nuclear family, while 35(17.3%) participants were part of a joint family. 104(51.5%) participants had more than 2 children, while 98(48.5%) had not more than 2 children in their families. 106(52.5%) participants accepted having been physically abused by their male counterparts sometime during their marital relationship, while 96(47.5%) denied having been physically abused at any time during marriage, either under or while not under the influence of alcohol. Of the alcoholic male counterparts assessed for the duration of alcohol use, about 90 participants (44.5%) had consumed alcohol for duration of 20 years or more, while 83(41.1%) had a duration of alcohol consumption between 10 and 19 years. Only about 29(14.4%) had duration of alcohol use between 5 and 9 years. Severity of Alcohol use Disorder was assessed in the male counterparts using Audit scale and it was noted that 97(48%) were very high scoring, 72(35.6%) were high scoring, and 33(16.3%) were moderate scoring.

**Table 1:** Association between depression among subjects and other study parameters, (N=202).

Characteristics	Depression status based on HAMD score, n (%) <sup>^</sup>				p value <sup>#</sup>
	Normal	Mild	Moderate	Severe & very severe	
<b>Age category in years</b>					
24-34	8 (11.4)	15 (21.4)	9 (12.9)	38 (54.3)	
35-44	15 (15.2)	27 (27.3)	28 (28.3)	29 (29.3)	0.02*
45-50	7 (21.2)	9 (27.3)	9 (27.3)	8 (24.2)	
<b>Education</b>					
Illiterate	5 (17.9)	9 (32.1)	9 (32.1)	5 (17.9)	0.02*
Up to middle school	20 (16.4)	33 (27)	18 (14.8)	51 (41.8)	
Middle school & above	5 (9.6)	9 (17.3)	19 (36.5)	19 (36.5)	
<b>Occupation</b>					
Employed	20 (14.1)	33 (23.2)	34 (23.9)	55 (38.7)	0.66
Home maker	10 (16.7)	18 (30)	12 (20)	20 (33.3)	
<b>Socio-economic status</b>					
Upper-middle	0	6 (37.5)	3 (18.8)	7 (43.8)	
Middle	5 (11.9)	4 (9.5)	16 (38.1)	17 (40.5)	0.06
Lower-middle	23 (17.8)	35 (27.1)	25 (19.4)	46 (35.7)	
Lower	2 (13.3)	6 (40)	2 (13.3)	5 (33.3)	
<b>Family type</b>					
Nuclear	30 (18)	39 (2.4)	32 (19.2)	66 (39.5)	0.002*
Joint	0	12 (34.3)	14 (40)	9 (25.7)	
<b>Children in family</b>					
1-2	13 (13.3)	30 (30.6)	22 (22.4)	33 (33.7)	0.37
>2	17 (16.3)	21 (20.2)	24 (23.1)	42 (40.4)	
<b>Physical abuse</b>					
No	11 (11.5)	29 (30.2)	20 (20.8)	36 (37.5)	0.32
Yes	19 (17.9)	22 (20.8)	26 (24.5)	39 (36.8)	
<b>Alcohol duration \$</b>					
5-9	4 (13.8)	15 (51.7)	4 (13.8)	6 (20.7)	
10-19	9 (10.8)	26 (31.3)	21 (25.3)	27 (32.5)	<0.001*
≥ 20	17 (18.9)	10 (11.1)	21 (23.3)	42 (46.7)	
<b>Alcohol use disorder@</b>					
Moderate	15 (45.5)	8 (24.2)	7 (21.2)	3 (9.1)	
High	7 (9.7)	23 (31.9)	16 (22.2)	26 (36.1)	<0.001*
Very high	8 (8.2)	20 (20.6)	23 (23.7)	46 (47.4)	

**Note:** # p value based on Chi-square test; \*statistically significant ( $p < 0.05$ ); \$,@:Details pertaining to husbands of study subjects, @-based on audit score, ^Row %.

Association was made between the various socio-demographic and alcohol use related parameters and Depression among the study participants assessed using the HAM-D scale. 38 (54.3%) participants between the age group of 24-34 years and 29 (29.3%) subjects between 35-44 years had severe and very severe HAM-D scores. Level of education had a statistically significant association with the severity of depressive symptoms. Association between Occupation and Severity of depression was not found to be statistically significant. Although socio-

economic status had an association with the severity of depression, it was not found to be statistically significant. When comparing the type of family with the severity of depressive symptoms, it was noted that 66 (39.5) subjects with nuclear family had severe to very severe depression, while 14 (40%) subjects residing in joint families had moderate depressive symptomatology. Association between the family type and the severity of depression was statistically significant. 36 (37.5%) of subject who denied physical abuse and 39 (36.8%) of subjects

with history of being physically abused by their husbands had severe to very severe depression. There was no significant association noted between history of physical abuse and depression status. Duration of alcohol use in alcohol patients strongly correlated with the severity of depressive symptoms in their spouses. 15 (51.7%) of spouses of alcoholics with 5-9 years of alcohol use were noted to have mild depressive symptoms, 27 (32.5%) spouses of alcoholics with 10-19 years of alcohol use and 42 (46.7%) of spouses of alcoholics

with more than 20 years of alcohol use had severe to very severe depressive scores. The association between duration of alcohol use and severity of depressive scores in their wives was found to be statistically significant. Strong association was also noted between the Audit scores of alcohol users and depression in their spouses. 26 (36.1%) subjects whose husbands scored high on Audit and 46 (47.4%) subjects whose husbands scored very high on Audit had severe to very severe depression. The association between Audit scores and severity of depression was found to be statistically significant.(Table 1)

**Table 2:** Association between anxiety among subjects and other study parameters, (N=202).

Characteristics	n (%) <sup>^</sup>	Anxiety status based on HAMA score, n (%) <sup>^^</sup>			p value <sup>#</sup>
		Mild	Moderate - severe	Very severe	
<b>Age category in years</b>					
24-34	70 (34.7)	32 (45.7)	25 (35.7)	13 (18.6)	0.07
35-44	99 (49)	52 (52.5)	41 (41.4)	6 (6.1)	
45-50	33 (16.3)	16 (48.5)	10 (30.3)	7 (21.2)	
<b>Education</b>					
Illiterate	28 (13.9)	11 (39.3)	10 (35.7)	7 (25)	0.08
Up to middle school	122 (60.4)	68 (55.7)	41 (33.6)	13 (10.7)	
Middle school & above	52 (25.7)	21 (40.4)	25 (48.1)	6 (11.5)	
<b>Occupation</b>					
Employed	142 (70.3)	74 (52.1)	53 (37.3)	15 (10.6)	0.26
Home maker	60 (29.7)	26 (43.3)	23 (38.3)	11 (18.3)	
<b>Socio-economic status</b>					
Upper-middle	16 (7.9)	9 (56.3)	7 (43.8)	-	0.42
Middle	42 (20.8)	24 (57.1)	14 (33.3)	4 (9.5)	
Lower-middle	129 (63.9)	62 (48.1)	47 (36.4)	20 (15.5)	
Lower	15 (7.4)	5 (33.3)	8 (53.3)	2 (13.3)	
<b>Family type</b>					
Nuclear	167 (82.7)	86 (51.5)	64 (38.3)	17 (10.2)	0.04*
Joint	35 (17.3)	14 (40)	12 (34.3)	9 (25.7)	
<b>Children in family</b>					
1-2	98 (48.5)	46 (46.9)	40 (40.8)	12 (12.2)	0.66
>2	104 (51.5)	54 (51.9)	36 (34.6)	14 (13.5)	
<b>Physical abuse</b>					
No	96 (47.5)	56 (58.3)	36 (37.5)	4 (4.2)	0.001*
Yes	104 (52.5)	44 (41.5)	40 (37.7)	22 (20.8)	
<b>Alcohol duration<sup>§</sup></b>					
5-9	29 (14.4)	12 (41.4)	15 (51.7)	2 (6.9)	0.002*
10-19	83 (41.1)	54 (65.1)	19 (22.9)	10 (12)	
≥ 20	90 (44.6)	34 (37.8)	42 (46.7)	14 (15.6)	
<b>Alcohol use disorder<sup>@</sup></b>					
Moderate	33 (16.3)	26 (78.8)	5 (15.2)	2 (6.1)	0.001*
High	72 (35.6)	29 (40.3)	28 (38.9)	15 (20.8)	
Very high	97 (48)	45 (46.4)	43 (44.3)	9 (9.3)	

**Note:** # p value based on Chi-square test; \* statistically significant ( $p < 0.05$ ); \$, @:Details pertaining to husbands of study subjects, @-based on audit score, ^Column %, ^^Row percentage.

In table 2, 32 (45.7%) subjects between the ages 24-34 years, 52 (52.5%) subjects aged between 35 and 44 years and 16 (48.5%) between the ages 45-50 years had mild anxiety based on HAM-A scores. The association between age and severity of anxiety was not statistically significant. 86 (51.7%) subject having a nuclear family and 14 (40%) subjects residing in a joint family had mild anxiety symptomatology. Also, the association between the family type and Anxiety status was noted to be statistically significant. There was statistically significant association between history of physical abuse and severity of anxiety. 56 (58.3%) subjects with no history of physical abuse and 44 (41.5%) subjects with history of physical abuse reported mild anxiety, while 4 (4.2%) subjects with

no physical abuse and 22 (20.8%) subjects with physical abuse reported having very severe anxiety symptoms. Duration of alcohol use in husbands also significantly correlated with the severity of anxiety symptoms; 54 (65.1%) spouses of alcoholics with duration 10-19 years reported having mild anxiety symptoms, while 42 (46.7%) spouses of alcoholics with duration 20 years or more report moderate to severe anxiety scores. Statistically significant correlation was also noted between Audit scores in alcohol users and severity of anxiety in their wives. 26 (78.8%) subjects whose husbands reported moderate scores on Audit had mild anxiety, while 43 (44.3%) subjects whose subjects reported very high scores on Audit had moderate to severe anxiety.

**Table 3:** Association between perceived stress among subjects and other study parameters, (N=202).

Characteristics	Stress status based on PSS score, n (%) <sup>^</sup>			p value <sup>#</sup>
	Mild	Moderate	Severe	
<b>Age category in years</b>				
24-34	18 (25.7)	28 (40)	24 (34.3)	
35-44	18 (18.2)	62 (62.6)	19 (19.2)	0.004*
45-50	10 (30.3)	21 (63.6)	2 (6.1)	
<b>Education</b>				
Illiterate	5 (17.9)	18 (64.3)	5 (17.9)	
Up to middle school	32 (26.2)	63 (51.6)	27 (22.1)	0.59
Middle school & above	9 (17.3)	30 (57.7)	13 (25)	
<b>Occupation</b>				
Employed	35 (24.6)	79 (55.6)	28 (19.7)	0.34
Home maker	11 (18.3)	32 (53.3)	17 (28.3)	
<b>Socio-economic status</b>				
Upper-middle	6 (37.5)	10 (62.5)	0	
Middle	10 (23.8)	27 (64.3)	5 (11.9)	0.004*
Lower-middle	30 (23.3)	61 (47.3)	38 (29.5)	
Lower	0	13 (86.7)	2 (13.3)	
<b>Family type</b>				
Nuclear	44 (26.3)	88 (52.7)	35 (21)	0.03*
Joint	2 (5.7)	23 (65.7)	10 (28.6)	
<b>Children in family</b>				
1-2	28 (28.6)	44 (44.9)	26 (26.5)	0.02*
>2	18 (17.3)	67 (64.4)	19 (18.3)	
<b>Physical abuse</b>				
No	21 (21.9)	54 (56.3)	21 (21.9)	0.93
Yes	25 (23.6)	57 (53.8)	24 (22.6)	
<b>Alcohol duration<sup>§</sup></b>				
5-9	8 (27.6)	18 (62.1)	3 (10.3)	
10-19	28 (33.7)	41 (49.4)	14 (16.9)	0.002*
≥ 20	10 (11.1)	52 (57.8)	28 (31.1)	
<b>Alcohol use disorder<sup>@</sup></b>				
Moderate	20 (60.6)	9 (27.3)	4 (12.1)	
High	12 (16.7)	48 (66.7)	12 (16.7)	0.001*
Very high	14 (14.4)	54 (55.7)	29 (29.9)	

**Note:** # p value based on Chi-square test; \* statistically significant (p<0.05); \$,@: Details pertaining to husbands of study subjects, @-based on audit score, ^Row %.

In correlation with Perceived Stress scale, 28 (40%) subjects between ages 24-34 years, 62 (62.6%) subjects between 35-44 years and 21 (63.6%) between 45-50 years perceived moderate levels of stress and the association of perceived stress with age was noted to be statistically significant. When comparing socio-economic status (SES) of the subjects with perceived stress, 10 (62.5%) in upper middle SES, 27 (64.3%) in middle SES and 13 (86.7%) subjects in the lower SES described having perceived moderate levels of stress and this association was found to be statistically significant. 88 (52.7%) subjects with nuclear families and 23 (65.7%) subjects residing in joint families described perceiving moderate levels of stress and this association between family type and perceived stress was found to be statistically significant. There was also a statistically significant association noted between number of children in the family and the perceived stress with 44 (44.9%) subjects with 1-2 children and 67 (64.9%) subjects with more than 2 children having moderate levels of stress. Duration of alcohol use in husbands has been found to have statistically significant correlation with the level of perceived stress in their wives. 18 (62.1%) spouses of alcoholics with 5-9 years of alcohol use, 41 (49.4%) spouses of alcoholics with duration of use between 10 and 19 years and 52 (57.8%) spouses of alcoholics with duration of 20 years describe moderate levels of perceived stress. Levels of perceived stress were noted to be greater with longer duration of alcohol use.

Severity of Alcohol use, assessed using Audit score in alcohol users was also found to have a statistically significant association with the level of perceived stress by their female counterparts. 20(60.6%) subjects whose husbands reported moderate scores on Audit had mild stress, while 48 (66.7%) subjects whose husbands had high Audit score and 54 (55.7%) subjects whose husbands had very high Audit score reported moderate levels of perceived stress. (Table 3).

**Table 4:** Correlation between HAMD, HAMA, PSS of wives of alcoholic husband and Audit scores among husbands of study participants, (N=202).

Correlated variables	Correlation coefficient	p value#
HAMD vs HAMA	0.37	<0.001*
HAMD vs PSS	0.16	0.03*
HAMD vs Audit	0.55	<0.001*
HAMA vs PSS	0.32	<0.001*
HAMA vs Audit	0.51	<0.001*
PSS vs Audit	0.51	<0.001*

**Note:** # p value based Pearson's correlation coefficient test; \* statistically significant ( $p < 0.05$ ).

Correlation between HAM-D, HAM-A, PSS of wives of alcoholic husband and Audit scores among husbands of study participants was done to determine the strength and significance of correlation between the various scales used. A poor yet statistically significant correlation was obtained while comparing HAM-D with HAM-A scores in the female spouses of alcoholic patients. Moderate but statistically significant correlation was noted when comparing HAM-D, HAM-A and PSS of spouses of alcoholics with Audit scores of the alcohol dependent individuals themselves. A poor yet statistically significant correlation was found when comparing HAM-A with PSS in these spouses. There was very poor correlation noted while comparing the HAM-D scores with PSS scores in the female spouses which was not statistically significant. (Table 4)

## Discussion

Various studies including those by Surya et al 15 Premrajan et al 16 and Trivedi et al 17 have reported varying range of prevalence of alcohol use disorders in Puducherry ranging from 3.6 to 61.7 per thousand population. The varying rates are probably attributable to the difference in the tools used including the definition of alcoholism used in their study. These prevalence rates were an important reason behind taking up this study. We found out that most of the psychological disorders like stress, anxiety, depression were more common among the spouses of alcoholics. The study of Moos et al showed that the spouses of alcohol dependent individuals experience psychological distress, health problems and behavioural problems. They had elevated levels of depression, anxiety and psychosomatic complaints and utilized increased medical resources.

In our study, the mean age of sample group was found to be 36.25 years (SD+ 6.42). The study from Bangalore by Kishore et al, 18 showed the mean age of sample size 32.4 years. A finding which is nearly similar to our studies.

Subramanian et al 19 had reported that factors such as caste, education and standard of living also independently influence alcohol use in India. In our study, income, educational status and occupation were found to have association with alcohol use pattern and impact on spouses. In our study, majority of spouses of alcohol dependent patients were employed 140 (70.3%) and housewives 60 (29.7%). Our study reveals that 28 (13%) of them were illiterate, 122 (60.3%) were educated up to

Primary school level and 52 (25.7) had middle school level and above. Only 10% had education beyond high school level and 5% were graduates. In the study by Baqul et al, 20 similar findings were noted. Financial problems are common in unemployed population and this will in turn increase the psychological impact on spouse. In our study, difference in perceived stress score between skilled, semiskilled and unemployed group was statistically significant. In our study population, the influence of occupation and income over the psychological impacts was absent, but stress was found to be high and there was significant difference in stress seen between different skilled workers.

In the study population, 15 (7.4%) were from the income group of Rs.1866 to 5546 and that constituted minority percentage among those with income. The influence of income over the depression and anxiety features was not seen in our study. Stress, on the other hand was found to be inversely associated with income and there was a significant difference in stress seen between different skilled workers. Increased stress levels were seen in groups with low income.

The major psychological parameter impacted in our study were depression and anxiety. Majority of the spouses (36.1%) had severe depressive features and had association with duration of alcohol dependence and severity of alcohol use from Audit scores data. There was statistically significant difference between Hamilton rating scale for depression (HAM-D) and severity of alcohol use. This is in concordance with the study done by Tyagi et al 21 which had similar findings with depressive features. Suicidal tendencies were present in spouses of alcoholics and these were resisted when children were present. As the husband became more alcohol dependent, the psychological impact on spouse's anxiety, stress and depression was more common and this finding was statistically significant.

As per Hamilton rating scale for anxiety (HAM-A), 50% cases had mild anxiety, 36.2% had moderate while 13.8% had severe scoring in our study. This was in concordance with the study by Miller et al. 22 The response to the stress differ from person to person, which could explain the difference among the wives of alcohol dependent patients. Some wives avoided stress-related information to minimize the experience of emotional arousal. Some others deal with stress by reducing uncertainty in threat situations. There was a strong statistical relation between anxiety

scores and duration of alcohol use and severity of alcohol use in husband. Anxiety features do not worsen with the duration of alcohol dependence as the level of tolerance and coping skills in spouses of chronic alcoholics improve.

Using perceived stress scale (PSS), stress levels were measured in our cases. Sixty percent of subjects had high stress levels, while 17.5% had average stress levels. Only 7.5% had severe stress levels. This is in concordance with the study conducted by Nanjundaswamy et al 23 in which found that wives of alcohol dependent patients had increased levels of perceived stress. Avoidance, discord, fearful withdrawal and sexual withdrawal were some of the common coping components identified.

There was statistical significance and correlation between domestic violence and physical abuse. This had direct association with Audit scores. Aggressive behaviors and intimate partner violence has been noted commonly in alcoholics. Spouses of alcoholics have been reported being subjected to a negative, critical, hostile environment which is eventually passed on to their children. Thus it is evident from the study that the family of an alcoholic shows dysfunctionality and poor adaptation. 24 Another study by Johnson 25 in 2001 revealed that heavy drinking could contribute to increased risk of violence against female spouses due to its disinhibiting effect on cognition and perceptions. This is in concordance with our study findings.

### **Limitations of the study**

The results of the study cannot be generalised as this study was conducted in a hospital based de-addiction ward. A Prospective or case control study might have explained the causation in a better manner.

### **Conclusion & Recommendation**

There was a strong association and statistically significant relationship between psychological parameters such as depression, anxiety and stress levels with the severity of alcohol use. Age, education, occupation, number of children, socio-economic status and duration of alcohol dependence in husband play a vital role in psychological impact on spouses. Based on the outcome of this study we recommend that spouses of the Alcohol dependant patients are also screened for any psychological issues. The understanding of the mental health status of the spouses of the alcoholics is of utmost

importance, which can help in the early detection of psychological disorders and intervene at the early stage.

**Conflict of Interest:** NIL

**Funding:** NIL

## References

1. Kaur D, Ajinkya S. Psychological impact of adult alcoholism on spouses and children. *Medical Journal of Dr. DY Patil University*. 2014 Mar 1;7(2):124.
2. Tiwari R, Srivastava AS, Kaushik SS. Presumptive stressful life events among spouse of alcoholics. *Indian Journal of Social Science Research*. 2010 Mar;7(1):41-6.
3. Steinglass P. The impact of alcoholism on the family. Relationship between degree of alcoholism and psychiatric symptomatology. *Journal of Studies on Alcohol*. 1981 Mar;42(3):288-303.
4. Chandrasekaran R, Chitralka V. Patterns and determinants of coping behaviour of wives of alcoholics. *Indian journal of psychiatry*. 1998 Jan;40(1):30.
5. Suman LN, Nagalakshmi SV. Family interaction patterns in alcoholic families. *NIMHANS Journal*. 1995 Jan 1;13(1):47-52.
6. McCrady BS, Stout R, Noel N, Abrams D, Nelson HF. Effectiveness of three types of spouse involved behavioral alcoholism treatment. *British Journal of Addiction*. 1991 Nov;86(11):1415-24.
7. Hamilton M. A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry*. 1960 Feb;23(1):56.
8. Hamilton M. *Handbook of Psychiatric Measures*. Washington: American Psychiatric Association; 2000.526-9.
9. Hamilton MA. The assessment of anxiety states by rating. *British Journal of Medical Psychology*. 1959 ;32(1):50-5.
10. Maier W, Buller R, Philipp M, Heuser I. The Hamilton Anxiety Scale: reliability, validity and sensitivity to change in anxiety and depressive disorders. *Journal of affective disorders*. 1988;14(1):61-8.
11. Saunders JB, Aasland OG, Babor TF, De La Fuente JR, Grant M. Development of the alcohol use disorders identification test (Audit): WHO collaborative project on early detection of persons with harmful alcohol consumption II. *Addiction*. 1993 ;88(6):791-804.
12. World Health Organization. Problems related to alcohol consumption, Report of a WHO Expert Committee. Tech. Report Series 650, Geneva, WHO 1990.
13. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior*. 1983 Dec 1:385-96.
14. Cohen S. Perceived stress in a probability sample of the United States. *The social psychology of health: Claremont Symposium on Applied Social Psychology*. Newbury Park: Sage;1988.
15. Surya NC, Datta SP, Krishna GR, Sundaram D, Kutty J. Mental morbidity in Pondicherry. *Transaction-4, Bangalore: All India Institute of Mental Health*. 1964:50-61.
16. Premarajan KC, Danabalan M, Chandrasekar R, Srinivasa DK. Prevalence of psychiatry morbidity in an urban community of Pondicherry. *Indian Journal of Psychiatry*. 1993 ;35(2):99.
17. Trivedi S, Chandrashekar R, Venugopalan M. An epidemiologic study of psychiatric morbidity in rural area of Pondicherry. In: Abstracts 41st annual Conference of Indian Psychiatric Society 1988.
18. Kishor M, Pandit LV, Raguram R. Psychiatric morbidity and marital satisfaction among spouses of men with alcohol dependence. *Indian Journal of Psychiatry*. 2013 Oct;55(4):360.
19. Subramanian SV, Nandy S, Irving M, Gordon D, Smith GD. Role of socioeconomic markers and state prohibition policy in predicting alcohol consumption among men and women in India: a multilevel statistical analysis. *Bulletin of the World Health Organization*. 2005; 83:829-36.
20. Baqul K, Deshmukh S, Baqul M, Deshmukh P. Psychiatric morbidity and marital quality among wives of patients with alcohol dependence syndrome. *Journal of Evidence based Medicine and Healthcare* 2015; 2(22): 3284-95.
21. Tyagi A, Mehta S. 'I drink, you suffer': impact of partner's alcohol consumption on spouse. *Sri Lanka Journal of Psychiatry*. 2013 Dec 29;4(2).
22. Miller WR, Meyers RJ, Tonigan JS. Engaging the unmotivated in treatment for alcohol problems: a comparison of three strategies for intervention through family members. *Journal of Consulting and Clinical Psychology*. 1999 Oct;67(5):688.
23. Nanjundaswamy M, Sreedevi PA, Gangadharaiah HM, Viswanath B, Benegal V. 2754-Title: a study to assess the stress, coping strategies and domestic violence in wives of alcohol dependent individuals. *European Psychiatry*. 2013;28(S1):1.
24. Orford J, Oppenheimer E, Egert S, Hensman C. The role of excessive drinking in alcoholism complicated marriages: A study of stability and change over a one-year period. *International Journal of the Addictions*. 1977 Jan 1;12(4):471-95.
25. Johnson H. Contrasting views of the role of alcohol in cases of wife assault. *Journal of interpersonal violence*. 2001 Jan;16(1):54-72