ABSTRACT

Substance abuse is regular consumption of large amounts of substance (alcohol or drugs) that are harmful to themselves or others. More than half of substance abuse patients are diagnosed with a psychiatric diagnosis - major depression, personality disorder, anxiety disorders, and dysthymia. Among other substance or drugs, alcohol is the most frequently abused drug. Alcoholism is one of the major problems in this country and the world in general. This problem is affecting not only the person who is consuming alcohol it also affects all other people who are living around him. The spouses of the alcoholics are mostly affected. Stress has a negative impact on ones mental and physical health. The purpose of the study was to analyze the level of stress among wives of alcoholics and wives of non-alcoholics. For this, a non-experimental, comparative study was designed with 70 wives (35 wives of alcoholics and 35 wives of non-alcoholics) chosen by using non probability convenience sampling technique. This study was conducted in a Government hospital at Chennai, Tamil Nadu. Age, number of children, occupation, and monthly income, history of domestic violence and duration of alcohol consumption are the demographic variables studied. Sheldon Cohen perceived stress scale was used to assess the level of stress. Data collected from the wives was analyzed using statistical techniques. The conceptual frame work used in the study was based on Betty Newmann system theory. The above study reveals that there is an association...
between level of stress and domestic violence and duration of alcohol consumption. The present study also shows that there is severe stress level in wives facing with domestic violence and husband excessive alcohol consumption shows severe stress in wives.

Keywords: Alcoholism; substance abuse; addiction; stress; domestic violence.

1. INTRODUCTION

A Japanese proverb says - First the man takes the drink, then the drink takes the drink, then the drink takes the man. Alcoholism is chronic, liberal and often fatal disease. It is a primary disorder and not a symptom of other disease or emotional problems. In addition to this ingestion of alcohol his whole family down. Substance abuse disorders, especially alcohol, are a matter of concern around the world. It has a strong impact on individual health, familial and social consequences, criminal and legal problems, and the effects on the national productivity and economy. Nimesh G Desai, (1988) states that to completely wipe out or to minimize the usage of any kind of substance addiction, strategies covering many fields need to be designed [1].

Alcoholism has been a global health and social problem. Claimed to be one of the global risk factors, accounting for 1.5% of all deaths in the world and 3.5% of disability adjusted life years and 4.0% of global burden of disease, alcoholism is a huge challenge to any society even now [2].

The continuous use of alcohol to the point of causing damage to the individual, society or both is known as Alcoholism [3]. Physical and psychological illness of alcoholism is connected to disrupted family role, decreased family communication, the problem of excessive alcohol consumption is a major cause of public health concern both in urban and rural areas. It is the third leading mental health problem in the world today. Apart from affecting the physical and mental health of the individual consuming it, it largely affects his family in more than one way making alcohol-related family disruption a serious, complex and pervasive social problem [4]. Majority of the alcohol addicts belong to the male gender in our country. The reason for consumption maybe to overcome stress (caused due to familial, financial and psychological problems) but instead it turns out to become a vicious cycle which further stresses and burdens the individual and his family. Alcoholism seems to further decrease a persons self esteem and confidence [5]. In the words of Raymond Chandler, an alcoholic, a real alcoholic, is not the same man at all. You cant predict anything about him for sure except that he will be someone you never met before. Recent developments and high paid jobs have in turn made consumption of alcohol a social pride. This raises concerns about the health and the social consequences of excessive drinking [6]. This addiction may affect people of any age group, social back ground or religion. Very often alcoholism affects highly educated people. Often the consumer does not feel that he is addicted [7].

The Prevalence of Alcohol use is still considerable in India according to the studies done across the country with a National household survey of drug use showing the prevalence of alcoholism to be 7 to 75% in different states [8]. Alcohol addiction or dependence is a more serious disorder and involves excessive or maladaptive use of alcohol. Any individual with 3 or more criteria given by the ICD 10 is considered as ADS (Alcohol Dependence Syndrome).

1. Tolerance changes (need for more to achieve desired effect, or achieving effect with lesser amounts of alcohol).
2. With drawl symptoms following a reduction or cessation of drinking.
3. Drinking more alcohol or drinking.
4. Drinking more alcohol or drinking over a longer period of time than intended.
5. Inability to cut down or stop.
6. Spending a great deal of time drinking or reoccurring from its effects,
7. Giving up impotent social occupational or recreational activities.
8. Continuing to drink knowing alcohol use has caused or worsened problems.

International classification disorder (1992).

Married individuals in which one or both spouses of alcoholic report higher levels of marital distress [9]. Effective communication is necessary for a successful marriage. But alcoholism is often linked with aggressive communication – through anger and indifference thereby affecting a good marriage and creating tension. As alcoholics are not able to do their daily chores, the complete burden on running the family falls on the spouse which increases their stress level enormously [6] and increases
feelings of hatred, self-pity, avoidance of social contacts, exhaustion – both physically and mentally. This also affects the family financially and finally may lead to divorce [9]. Based on this, the present study was designed to evaluate the stress levels among wives of alcoholics and non-alcoholics.

2. METHODOLOGY

2.1 Research Design

2.1.1 Setting of the study

The present study was conducted in a Government Hospital in Chennai. From here we selected psychiatric outpatient department (OPD) where wives of alcoholics patients come to the clinic and male medical ward where patients with no history of alcoholism were admitted along with their wives.

2.2 Population

In this study Population consists of wives of alcoholics who are visiting to psychiatric OPD along with their alcoholic husbands and wives of non alcoholics who are staying along with their husband in male medical ward.

2.3 Sample and Sampling Technique

Non probability convenience sampling technique was selected for this study. OPD wives who are all available were selected as study participants.

2.4 Sample Size

35 wives of alcoholics and 35 wives of non alcoholics

2.5 Criteria for Sample Selection

2.5.1 Inclusive criteria

- Wives whose husbands met with ICD 10 criteria of alcoholic dependence syndrome.
- Wives of whose husbands with no history of alcoholism.
- Wives who knows Tamil, English.
- Wives who are willing to participate.

2.5.2 Exclusive criteria

- Wives who are not willing to participate.
- Wives who selected for pilot study.

2.6 Description of the Tool

2.6.1 Demographic variables

For wives of alcoholics: Age, type of family, duration of marital life, number of children, monthly income, occupation, educational status, religion, area of living, history of domestic violence, duration of alcohol consumption.

For wives of non alcoholics: age, type of family, duration of marital life, number of children, monthly income, occupation, educational status, religion, area of living

Sheldon Cohen perceived stress scale – the 14 items perceived stress scale is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in ones life are appraised as stressful. It is a modified stress scale it can be used by anyone. In this scale 7 items are positively stated for those items reversing the score of the negative items. Those items are 4,5,6,7,9,10 and 13 items. Information collected by using interview technique [10].

2.7 Pilot Study

Pilot study conducted from 3-1-2012 to 8-12-2012. Formal permission was obtained from the medical superintendent of the Government hospital, Chennai. 10 samples were selected for pilot study 5 wives of alcoholic and 5 wives of non-alcoholics. A brief introduction about self and study was given to the wives and informed verbal consent obtained and the confidentiality of the response is maintained. Result of the pilot study shows p value=0.009 as p value <0.05 there is a significant difference in level of stress between wives of alcoholics and wives of non-alcoholics.

2.8 Data Collection Procedure

The data collection was planned for only four weeks i.e. from 15-12-12 to 15-1-13. Time schedule was planned from 10am to 4pm everyday minimum 5-6 members per day. Everyday demographic information was collected using the tool with demographic variables questionnaire through interview method, followed by the Sheldon Cohen perceived stress scale analysis, we assessed the stress level in both wives of alcoholics and wives of non-alcoholics.
2.9 Statistical Analysis

Mean and standard deviation used to assess the level of stress. Chi-square test used to associate the level of stress with their selected demographic data.

3. RESULTS

Table 1. Distribution of wives of alcoholics and wives of non-alcoholics according to socio demographic variables

Table 1.1. Distribution of wives according to age

| S. no | Demographic variables | Wives of alcoholics (n=35) | Wives of non alcoholics (n=35) |
|-------|-----------------------|-----------------------------|-------------------------------|
|       | Frequency | Percentage | Frequency | Percentage |
| 1.    |           |            |           |            |
|       | Age       |            |            |            |
| a) 20-30 years | 8         | 22.86%     | 15         | 42.85%     |
| b) 31-40 years | 22        | 62.86%     | 13         | 37.14%     |
| c) 41-50 years | 5         | 14.28%     | 5          | 14.28%     |
| d) 51 and above | 0         | 0.00%      | 2          | 5.71%      |

Fig. 1. Distribution of wives according to age

The data presented in this Table 1.1 shows the distribution of samples according to their age. The maximum number of wives of alcoholics 62.86% is from the age group of 31-40 years, 22.86% are in the age group of 20-30 years and 14.28% of wives are in the age group of 41-50 years and none of them found to be 51 and above. The maximum numbers of wives of non alcoholics 42.85% in the age group of 20-30 years, 37.14% of wives are in the age group of 31-40 years, 14.28% are in the age group of 41-50 years and 5.71% are in the age group 51 and above.

Table 1.2. Distribution of wives according type of family

| S. no | Demographic variables | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|-----------------------|-----------------------------|-------------------------------|
|       | Frequency | Percentage | Frequency | Percentage |
| 2.    | Type of family       |            |            |            |
| a) Nuclear       | 24         | 68.57%     | 23         | 65.71%     |
| b) Joint          | 11         | 31.42%     | 12         | 34.28%     |
The data presented in this Table 1.2 shows the distribution of samples according type of family. The maximum number of wives of alcoholics 68.57% is from nuclear family, 31.42% are belongs to joint family. The maximum number of wives of non-alcoholics 65.71% is belongs to nuclear family and 34.28% belongs to joint family.

Table 1.3. Distribution of wives according duration of marital life

| S. no | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|-----------------------|---------------------------|-------------------------------|
|       |                       | Frequency | Percentage | Frequency | Percentage |
| 3.    | Duration of marital life |           |             |           |             |
|       | a) 0-5 years          | 8         | 22.86%     | 10        | 28.57%     |
|       | b) 6-10 years         | 12        | 34.28%     | 9         | 25.71%     |
|       | c) 11 and above       | 15        | 42.86%     | 16        | 45.71%     |
The data presented in the Table 1.3 shows that majority of the wives of alcoholics 42.86% were 11 and above of duration of marital life, 34.28% were of 6-10 years, 22.86% wives were of 0-5 years. Wives of non alcoholics majority 45.71% were of 11 and above duration of marital life, 28.57% were of 0-5 years of duration of marital life, 25.71% were of 6-10 years of duration of marital life.

### Table 1.4. Distribution of wives according to number of children

| S. no | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|------------------------|---------------------------|--------------------------------|
|       |                        | Frequency | Percentage | Frequency | Percentage |
| 4.    | Number of children     |           |            |           |            |
| a)    | No children            | 4         | 11.43%     | 7         | 20%        |
| b)    | 1                      | 6         | 17.14%     | 4         | 11.73%     |
| c)    | 2                      | 15        | 42.86%     | 12        | 34.28%     |
| d)    | 3 and above            | 10        | 28.57%     | 12        | 34.28%     |

The data presented in the Table 1.4 shows distribution of wives according to number of children in wives of alcoholics 42.86% having 2 children, 28.57% having 3 and more childrens, 17.14% having 1 child, 11.43% not having children and in wives of non alcoholics 34.28% having 2 children, 34.28% having 3 and above children, 20% wives not having children, 11.73% having only one child.

### Table 1.5. Distribution of wives according to monthly income

| S. no | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|------------------------|---------------------------|--------------------------------|
|       |                        | Frequency | Percentage | Frequency | Percentage |
| 5.    | Monthly income         |           |            |           |            |
| a)    | <3000rs                | 5         | 14.28%     | 13        | 37.14%     |
| b)    | 3001-5000rs            | 14        | 40%        | 10        | 28.57%     |
| c)    | 5001-7000rs            | 12        | 34.28%     | 5         | 14.28%     |
| d)    | 7001 and above         | 4         | 11.43%     | 7         | 20%        |
The data presented in the Table 1.5 shows the distribution of wives of alcoholics based on monthly income. 14 wives earning 3000-5000rs, 12 earning 5001-7000rs, 5 earning <3000rs, 4 earning 7001 and above and in wives of non-alcoholics, 13 earning <3000rs, 10 earning 3000rs – 5000rs, 7 earning 7001 and above, 5 earning 5001-7000rs.

### Table 1.6. Distribution of wives according to occupation

| S. No | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|-----------------------|---------------------------|-------------------------------|
|       |                       | Frequency | Percentage | Frequency | Percentage |
| 6.    | Occupation            |            |            |            |            |
|       | a) government employee | 1          | 2.86%      | 3          | 8.57%      |
|       | b) agriculture        | 4          | 11.43%     | 8          | 22.86%     |
|       | c) collie             | 16         | 45.7%      | 6          | 17.14%     |
|       | d) house wife         | 14         | 40%        | 18         | 51.43%     |
Table 1.6 shows the distribution of wives based on occupation in wives of alcoholics 16 are colly, 14 are house wifes, 4 are agriculture, 1 government employee and in wives of non alcoholics 18 are house wifes, 8 agricultures, 6 are colly and 3 government employee.

Table 1.7 shows the distribution of wives based on their educational status in wives of alcoholics 11 are primary educated, 10 illiterates, 8 are secondary educators, 5 completed higher secondary education and 1 is degree holder and in wives of non alcoholics 13 illiterates, 9 are primary educators, 6 degree holder, 4 are secondary educators and 3 completed higher secondary education.

**Table 1.7. Distribution of wives according to educational status**

| S. no | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|-----------------------|---------------------------|-------------------------------|
|       | Frequency | Percentage | Frequency | Percentage |
| 7.    | Educational status |             |             |
| a) illiterate | 10 | 28.57% | 13 | 37.14% |
| b) primary education | 11 | 31.42% | 9 | 25.71% |
| c) secondary education | 8 | 22.86% | 4 | 11.4% |
| d) higher secondary education | 5 | 14.28% | 3 | 8.57% |
| e) degree | 1 | 2.86% | 6 | 17.14% |

**Fig. 7. Distribution of wives according to educational status**

**Table 1.8. Distribution of wives according to religion**

| S. no | Demographic variables | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|-------|-----------------------|---------------------------|-------------------------------|
|       | Frequency | Percentage | Frequency | Percentage |
| 8.    | Religion |             |             |
| a) Hindu | 21 | 60% | 25 | 71.43% |
| b) Muslim | 5 | 14.28% | 9 | 25.71% |
| c) Christian | 9 | 25.71% | 1 | 2.857% |
| d) other | 0 | 0.00% | 0 | 0.00% |
Table 1.8 shows distribution of wives based on religion among wives of alcoholics 21 Hindus, 9 Christians, 5 Muslims and in wives of non alcoholics 25 are Hindus, 9 Muslims, 1 Christian.

### Table 1.9. Distribution of wives according to area of living

| S. no | Demographic variables | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|------------------------|----------------------------|---------------------------------|
|       |                        | Frequency | Percentage | Frequency | Percentage |
| 9.    | Area of living         |           |            |           |            |
|       | a) rural               | 21        | 60%        | 25        | 71.43%     |
|       | b) urban               | 14        | 40%        | 10        | 28.57%     |

Fig. 8. Distribution of wives according to religion

Fig. 9. Distribution of wives according to area of living
Table 1.9 shows the distribution of wives based on area of living among wives of alcoholics: 21 wives are living in rural areas, 14 in urban areas and in wives of non alcoholics: 25 in rural and 10 in urban areas.

Table 1.10 shows distribution of wives based on history of domestic violence among wives of alcoholics: 15 are facing domestic violence and 20 not facing and in wives of non alcoholics: 32 were not facing and 3 are facing domestic violence.

Table 1.11 shows the distribution of wives of alcoholics based on duration of husbands alcohol consumption: 37.14% are drinking > 7 years, 34.28% drinking 1-3 years, 22.86% are drinking 4-6 years and 5.71% are drinking < 1 year.

Table 1.10. Distribution of wives according to history of domestic violence

| S. no | Demographic variables          | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|-------------------------------|---------------------------|-------------------------------|
|       |                               | Frequency  | Percentage | Frequency  | Percentage |
| 10.   | History of domestic violence  |             |            |             |            |
|       | a) present                    | 15          | 42.86%     | 3           | 8.57%      |
|       | b) absent                     | 20          | 57.14%     | 32          | 91.43%     |

Fig. 10. Distribution of wives according to history of domestic violence

Table 1.11. Distribution of wives according to duration of husbands alcohol consumption

| S. no | Demographic variables       | Wives of alcoholics (n=35) |
|-------|-------------------------------|----------------------------|
|       |                               | Frequency  | Percentage |
| 11.   | Duration of alcoholic consumption |             |            |
|       | a) < 1 year                   | 2           | 5.71%      |
|       | b) 1-3 years                  | 12          | 34.28%     |
|       | c) 4-6 years                  | 8           | 22.86%     |
|       | d) > 7 years                  | 13          | 37.14%     |
Table 1.12. Distribution of wives according to nature of work

| S. no | Demographic variables | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|-----------------------|---------------------------|-------------------------------|
|       |                       | Frequency | Percentage | Frequency | Percentage |
| 12.   | Nature of work        |           |            |           |            |
|       | a) Sedentary worker   | 15        | 42.86%     | 21        | 60%        |
|       | b) Moderate worker    | 12        | 34.28%     | 9         | 25.71%     |
|       | c) Heavy worker       | 8         | 22.86%     | 5         | 14.28%     |

Fig. 11. Distribution of wives according to husbands alcohol consumption

Fig. 12. Distribution of wives according to nature of work
Table 1.12 shows the distribution of wives based on nature of work among wives of alcoholics 15 are sedentary worker, 12 moderate workers, 8 are heavy worker and in wives of non alcoholics 21 are sedentary worker, 12 moderate worker and 8 are heavy worker.

Table 2 shows level of stress in wives of alcoholics that majority 24(68.57%) were facing moderate stress, 10(28.57%) were facing severe stress, 1(2.85%) were facing mild stress and in wives of non alcoholics majority 15 (42.85%) were facing no stress, 14(40%) were facing no stress, 6 (17.14%) were facing moderate stress.

Table 3 reveals that the obtained mean score of wives of alcoholics is 38.3 and in wives of non alcoholics it is 18.2, the mean difference of wives of alcoholics is 19.57 and mean difference of wives of non alcoholics is 19.45. The obtained t value is 11.2 and p value is 0.001 as p value is < 0.05 the study statistically significant.

Table 2. Assess the level of stress in both wives of alcoholics and wives of non alcoholics.

|                     | No stress | %    | Mild stress | %    | Moderate Stress | %  | Severe Stress | %    |
|---------------------|-----------|------|-------------|------|-----------------|----|---------------|------|
| Wives of alcoholics | 0         | 0.00%| 1           | 2.85%| 24              | 68.57% | 10            | 28.57% |
| Wives of non alcoholics | 14 | 40%  | 15          | 42.85%| 6               | 17.14% | 0             | 0.00%  |

Fig. 13. Distributions of wives based on level of stress

Table 3. Comparison of stress level scores among wives of alcoholics and wives of non-alcoholics

| Group                | Mean scores | Mean difference | t-value | df  | p-value |
|----------------------|-------------|-----------------|---------|-----|---------|
| Wives of alcoholics  | 38.3        | 19.57           | 11.2    | 68  | 0.0001  |
| Wives of non alcoholics | 18.2    | 19.45           |         |     |         |
Fig. 14. Distributions of wives based on mean score and mean difference of level of stress

Association between levels of stress with the selected demographic variable of wives of alcoholics:

Table 4.1. Association between Age and level of stress

| Age       | NO | Mean | SD  | Median< | Median > | Chi-square Value | Result     |
|-----------|----|------|-----|---------|----------|------------------|------------|
| 20-30 yrs | 8  | 38.5 | 45.5| 5       | 3        | 0.92             | Not significant |
| 31-40 yrs | 22 | 38.63| 137.1| 11      | 9        |                  |            |
| 41-50 yrs | 5  | 36   | 24.3| 3       | 2        |                  |            |
| 51 and more | - | -    | -   | -       | -        |                  |            |

Fig. 15. Association between Age and level of stress
Table 4.1 represents the mean level of stress in wives of alcoholics for the age group of 31-40 years is 38.64, 20-30 years is 38.5, and 41-50 yrs is 36 and 51 and more no one present. The Chi-Square 0.09 shows that there is no relationship between Age and level of stress in wives of alcoholics.

Table 4.2 represents the mean level of stress in wives of alcoholics for the Type of family Mean value 38.45 are joint family, 38.08 are nuclear family. The chi square value 0.50 shows no significant association between levels of stress to the nature of family.

Table 4.3 represents mean values 40.4 are 6-10 years of marital life, 37.6 are 0-5 years, and 36.73 are 11 above years. The chi square value 0.71 shows that no significant association between levels of stress to the duration of marital life.

Table 4.2. Association between Type of family and level of stress

| Type of family | No | mean | SD | Median< | Median > | Chi-square Value | Result  |
|----------------|----|------|----|---------|----------|------------------|---------|
| Nuclear        | 24 | 38.08| 148.05 | 13       | 11       | 0.50             | Not     |
| Joint          | 11 | 38.45| 65  | 6       | 5        |                  |         |

Fig. 16. Association between Type of family and level of stress

Table 4.3. Association between Marital Life and level of stress

| Marital life | No | Mean | SD  | Median< | Median > | Chi-square Value | Result  |
|--------------|----|------|-----|---------|----------|------------------|---------|
| 0-5 yrs      | 8  | 37.6 | 44.5| 4       | 4        |                  |         |
| 6-10 yrs     | 12 | 40.4 | 75.14| 6      | 6        | 0.71             | Not     |
| 11 and above| 15 | 36.73| 86.9 | 8       | 7        |                  | significant |
Table 4.4. Association between Number of children and level of stress

| No. of children | No. | Mean  | SD  | Median< | Median > | Chi-square Value | Result     |
|-----------------|-----|-------|-----|---------|----------|------------------|------------|
| No children     | 4   | 36.25 | 18.38 | 2       | 2        | 0.63             | Not significant |
| One             | 6   | 35.6  | 30.14 | 3       | 3        |                  |             |
| Two             | 15  | 37.8  | 89.4  | 8       | 7        |                  |             |
| 3 and more      | 10  | 37.1  | 56.4  | 7       | 3        |                  |             |

Fig. 17. Association between Marital Life and level of stress

Fig. 18. Association between Number of children and level of stress
Table 4.4 represents mean values 37.8 are having one child, 37.1 are having 3 and more children, 36.25 are not having children, and 35.6 are having one child. The chi-square value 0.63 of the wives of alcoholics level of stress with the number of children shows no significant association.

Table 4.5 represents mean values 42.2 are earning < 3000rs, 39 earning < 7001 and above, 38.5 earning < 3001 to 7000rs and 35.8 earning < 5001 to 7000rs. The chi-square value 0.04 of the wives of alcoholics level of stress with the number of children shows significant association.

Table 4.6 represents the mean level of stress in wives of alcoholics for occupation shows 42 in government, 37.75 agriculture, 38.87 colly and 37.28 are house wives. The Chi-Square 0.06 shows that there is significant relationship between occupation and level of stress in wives of alcoholics.

### Table 4.5. Association between Monthly income and level of stress

| Monthly income | No | Mean  | SD    | Median< | Median > | Chi-square Value | Result   |
|----------------|----|-------|-------|---------|----------|------------------|----------|
| <3000          | 5  | 42.2  | 28.53 | 3       | 2        | 0.04             | Significant |
| 3001-5000      | 14 | 38.5  | 84.75 | 9       | 5        |                  |          |
| 5001-7000      | 12 | 35.8  | 66.62 | 8       | 4        |                  |          |
| 7001 and above | 4  | 39    | 19.7  | 2       | 2        |                  |          |

Fig. 19. Association between Monthly income and level of stress

### Table 4.6. Association between Occupation and level of stress

| Occupation    | No | Mean  | SD    | Median< | Median > | Chi-square Value | Result |
|---------------|----|-------|-------|---------|----------|------------------|--------|
| Government    | 1  | 42    | 0     | 1       | 0        |                  |        |
| Agriculture   | 4  | 37.75 | 19.14 | 3       | 1        |                  | Not    |
| Colly         | 16 | 38.87 | 98.56 | 11      | 5        | 0.06             | significant |
| House wife    | 14 | 37.28 | 81.93 | 8       | 6        |                  |        |
Fig. 20. Association between Occupation and level of stress

Table 4.7. Association between Educational status and level of stress

| Educational status       | No  | Mean | Sd   | Median < | Median > | Chi square Value | Result     |
|--------------------------|-----|------|------|----------|----------|------------------|------------|
| Illiterate               | 10  | 37.7 | 57.35| 5        | 5        | 0.09             | Not significant |
| Primary education        | 11  | 37.36| 63.15| 6        | 5        |                  |            |
| Secondary education      | 8   | 36.57| 44.05| 4        | 4        | 0.09             | Not significant |
| Higher secondary education degree | 5   | 42   | 28.39| 3        | 2        |                  |            |
|                          | 1   | 42   | 0    | 1        | 1        |                  |            |

Fig. 21. Association between Educational status and level of stress
Table 4.7 represents the mean level of stress in wives of alcoholics for educational status 42 degree, 42 higher secondary educations, 37.7 illiterate, 37.56 primary educations and 36.57 secondary educations. The Chi-Square 0.09 shows that there is no significant relationship between educational status and level of stress in wives of alcoholics.

Table 4.7 represents the mean level of stress in wives of alcoholics for religion 39 Christian, 36.9 Hindus and 34.2 Muslims. The Chi-Square 0.019 shows that there is significant relationship between religion and level of stress in wives of alcoholics.

Table 4.7 represents the mean level of stress in wives of alcoholics for 38.2 rural and 38.19 urban. The Chi-Square 0.2 shows that there is no significant relationship between area of living and level of stress in wives of alcoholics.

### Table 4.8. Association between religion and level of stress

| Religion | No | Mean  | SD   | Median< | Median > | Chi-square Value | Result  |
|----------|----|-------|------|---------|----------|------------------|---------|
| Hindu    | 21 | 36.90 | 124.7| 11      | 10       | 0.019            | Significant |
| Muslim   | 5  | 34.2  | 23.12| 3       | 2        |                  |         |
| Christian| 9  | 39    | 57.80| 6       | 3        |                  |         |
| Other    | -  | -     | -    | -       | -        |                  |         |

### Fig. 22. Association between religion and level of stress

### Table 4.9. Association between area of living and level of stress

| Area of living | No | Mean  | SD   | Median< | Median > | Chi-square Value | Result    |
|----------------|----|-------|------|---------|----------|------------------|-----------|
| Urban          | 21 | 38.19 | 126.8| 14      | 7        |                  | Not       |
| Rural          | 14 | 38.2  | 0.10 | 8       | 6        | 0.2              | Significant |
Fig. 23. Association between area of living and level of stress

Table 4.10. Association between history of domestic violence and level of stress

| History of domestic violence | No | Mean | SD  | <median | Median > | Chi-square | Result |
|------------------------------|----|------|-----|---------|----------|------------|--------|
| Present                      | 15 | 41.6 | 24.6| 9       | 6        | 0.03       | Significant |
| Absent                       | 20 | 35.6 | 114.3| 10      | 10       | 0.03       |         |

Fig. 24. Association between history of domestic violence and level of stress
Table 4.10 represents the mean level of stress in wives of alcoholics for history of domestic violence 41.6 present and 35.6 absent. The Chi-Square 0.03 shows that there is significant relationship between history of domestic violence and level of stress in wives of alcoholics.

Table 4.11 represents the mean level of stress in wives of alcoholics for duration of husbands alcohol consumption 39.75 4-6 years, 39 > 7 years, 37.16 1-3 years and 33 < 3 years. The Chi-Square 0.01 shows that there is significant relationship between duration of husbands alcohol consumption and level of stress in wives of alcoholics.

Table 4.12 represents the mean level of stress in wives of alcoholics for nature of work 41.75 hard works, 37.53 sedentary and 36.6 moderate works. The Chi-Square 0.34 shows that there is no significant relationship between nature of work and level of stress in wives of alcoholics.

**Table 4.11. Association between duration of husbands alcohol consumption and level of stress**

| Duration of husbands alcohol consumption | No | Mean | SD  | Median< | Median > | Chi-square Value | Result  |
|-----------------------------------------|----|------|-----|---------|----------|-----------------|---------|
| < 1 yr                                   | 2  | 33   | 5.57| 1       | 1        | 0.01            | Significant |
| 1-3 yr                                   | 12 | 37.16| 69.09| 7       | 5        |                 |          |
| 4-6 yr                                   | 8  | 39.75| 53.75| 4       | 4        |                 |          |
| > 7 yr                                   | 13 | 39   | 79.10| 7       | 6        |                 |          |

**Fig. 25. Association between duration of husbands alcohol consumption and level of stress**

**Table 4.12. Association between Nature of work and level of stress**

| Nature of work | No  | Mean | SD  | Median< | Median > | Chi-square Value | Result       |
|----------------|-----|------|-----|---------|----------|-----------------|--------------|
| Sedentary      | 15  | 37.53| 88.82| 8       | 7        | 0.34            | Not significant |
| Moderate       | 12  | 36.6 | 68.17| 7       | 5        |                 |              |
| Hard work      | 8   | 41.75| 49.3 | 4       | 4        |                 |              |
Fig. 26. Association between Nature of work and level of stress

Table 5. Assess demographic variable of wives of alcoholics and their association with stress

| S. no | Variables                        | X2 value | p value   | Level of significance |
|-------|----------------------------------|----------|-----------|-----------------------|
| 1.    | Age                              | 0.92     | p>0.05    | Not significant       |
| 2.    | Type of family                   | 0.50     | p>0.05    | Not significant       |
| 3.    | Duration of marital life         | 0.71     | p>0.05    | Not significant       |
| 4.    | No of children                   | 0.63     | p>0.05    | Not significant       |
| 5.    | Monthly income                   | 0.04     | P<0.05    | Significant           |
| 6.    | Occupation                       | 0.06     | p>0.05    | Not significant       |
| 7.    | Educational status               | 0.09     | p>0.05    | Not significant       |
| 8.    | Religion                         | 0.019    | P<0.05    | Significant           |
| 9.    | Area of living                   | 0.2      | p>0.05    | Not significant       |
| 10.   | History of domestic violence     | 0.03     | P<0.05    | Significant           |
| 11.   | Duration of husband alcoholic consumption | 0.001 | P<0.05 | Significant |
| 12.   | Nature of work                   | 0.34     | p>0.05    | Not significant       |

4. DISCUSSION

The purpose of the study was to assess the level of stress in wives of alcoholics and in wives of non-alcoholics. This comparative study will tell us if we there is a significant difference in the stress of the wives of alcoholics and non-alcoholics.

The frequency and percentage distribution of demographic variable in wives of alcoholics showed that majority of wives 22 (62.86%) belongs to the age group of 31-40 years, majority of wives 24 (68.57%) belongs to nuclear family, majority of wives 15 (42.86%) belongs to 11 years and above years of duration of marital life, majority of wives 15 (42.86%) having two children, majority of wives 14 (40%) were earning 3001 to 5000rs per month, majority of wives 16 (45.7%) working as cooly, majority of wives 11 (31.42%) were studied up to primary education, majority of wives 21 (60%) belongs to Hindu religion, majority of wives 21 (60%) were living in rural areas, majority of wives 20 (57.14%) were facing domestic violence, majority of husbands 13 (37.14%) were consuming alcohol more than 7 years, majority of wives 15 (42.86%) were sedentary workers.

The frequency and percentage distribution of demographic variable in wives of non-alcoholics
showed that majority of wives 15(42.85%) belongs to the age group of 20-30 years, majority of wives 23(65.71%) belongs to nuclear family, majority of wives 16(45.71%) belongs to 11 years and above years of duration of marital life, majority of wives 12(34.28%) having two children and equal number of wives having 3 and above number of children, majority of wives 13(37.14%) were earning < 3000rs per month, majority of wives 18(51.43%)were house wife, majority of wives 13(37.14%) were illiterate, majority of wives 25(71.43%) belongs to Hindu religion, majority of wives 25(71.43%) were living in rural areas, majority of wives 32( 91.43%) were not facing domestic violence, majority of wives 21(60%) were sedentary workers.

The study showed that majority 24(68.57%) of wives of alcoholics were facing moderate stress and in wives of non-alcoholics majority 15(42.85%) were facing mild stress. These findings correlate well with the studies conducted by Saraswathi et.al (2010) who concluded saying there is a significant high level of stress scores in wives of alcoholics than in wives of non alcoholics [11]. Similarly, Revathi,E (2007) stated that majority of wives experienced mild to severe psychological stress and social burden in wives of alcoholics than in wives of non alcoholics [12]. In a study done in Canada, 90% of the female spouses of alcoholics exhibited high level of stress [13].

The study result showed that the obtained mean score of wives of alcoholics is 38.3 and in wives of non alcoholics it is 11.2, the mean difference of wives of alcoholics is 19.57 and mean difference of wives of non alcoholics is 19.45. The obtained value is 11.2 and p value is 0.0001 as p value is < 0.05 the study statistically significant. In Hanumanahalli village, Kolar district, Karnataka, a significant difference between stress level score of wives of alcoholics and wives of non alcoholics was reported [14]. In Japan, the wives of alcoholics had health problems - genital disease, cardio vascular problems and psychometric disorders like stress, anxiety [15]. Over consumption of alcohol has a stronger association with partner violence than with non-partner violence may be a matter of access, with partners having more contact and thus more opportunities for violent encounters.

The chi-square value 0.001 shows that there is significant association between levels of stress with history of domestic violence. The chi-square value 0.001 shows that there is a significant association between levels of stress with history of domestic violence. In Salem, significant high level of domestic violence and suicidal risk was reported in the wives of alcoholics [16]. In accordance with the present study, it was reported that excessive partner alcohol use increased the risk of mental disorders in wives like depression, anxiety, stress [17]. In wives of alcohol dependent males versus abstainers/ social drinker wives in urban slum areas in north ward Mumbai, it is shown that there was a significant higher abuse in wives of an illiterate husband and the abuse was higher in illiterate and unemployed women [18]. Wives with higher level of domestic violence showed higher level of stress [19]. The aim of study was to assess empirically suicide risk and domestic violence of the wives of alcoholics and nonalcoholic. Retroactive design was used to portion local violence and suicide risk of the wives of alcoholics and non-alcoholics by using suitable psychological scales.

The present study shows that there is severe stress level in wives facing with domestic violence and husband excessive alcohol consumption shows severe stress in wives. Families of alcoholics experience guilt, shame, resentment, insecurity, delinquency, financial troubles, isolation, fear and violence. Women whose partner frequently or always consumed alcohol before having sex faced risks of domestic violence almost five times higher than those whose partners never drank. The impact of alcohol dependence on marital functioning and the psycho-social development of the members are the challenged problems to research. Among all the family members of alcoholic wives will face more problems. The wife of an alcoholic usually becomes exhausted and may go through a variety of stressful experience and emotional responses like feelings of guilt, hurt, hopelessness, etc.

5. CONCLUSION

The present study shows that there is severe stress level in wives facing with domestic violence and husband excessive alcohol consumption shows severe stress in wives. In future, the study can be replicated on a large sample in different rural or urban slum area.

CONSENT

A brief introduction about self and study was given to the wives and informed verbal consent
obtained and the confidentiality of the response is maintained.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle4.com/review-history/73603