Assess the Stress Level among Spouses of Alcoholics and Spouses of Non-Alcoholics in a Hospital at Avadi, Chennai

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Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

ABSTRACT

The addiction leads to the usage of unconscious purposive abused substances like alcohol and these harms to the self, family and society also. Most of the abuse substances result in mental instability such as depression, major personality disorder, anxiety disorders and dysthymia. The alcoholism is the predominant abused compound and makes very harder life in India and throughout worldwide. Among them, their spouses are most affected beings than any others and they face severe negative impacts on mental and physical health. The present study aimed to analyses the stress created and the successive management in alcoholic spouses compared to the wives of non-alcoholics. The non-experimental, comparative study was includes totally, 70 women (alcoholic and non-alcoholic spouse, 35 each) using non-possibility convenient sampling method at a government hospital, Chennai, Tamil Nadu. The analysis was done using geographical, demographical variations and stress was assessed based on the Sheldon Cohen parameters. The data was collected and statistically evaluated. The study was framed based on Betty Newman system theory. The study also showed that the spouses of alcoholics faced severe stress level due to domestic violence. This study also showed that they need adequate medical and psychological care from society.
Keywords: Addiction; stress level; alcoholism domestic violence.

1. INTRODUCTION
Chronic abuse of alcohol adapted to broad-minded and regularly fatal disease. It’s primary factor for severe emotional and personal disorder. It has many negative impacts on health, familial, social concerns related with the criminal and legal problems. It has direct divesting effects on productivity and economy of the nation. The complete wipe of the addiction of any type of materials need a strong planned and designed strategies from every corner of the problem. The alcoholism resulted in many familial consequences and severe psychological impacts on the family members. Spouses of the alcoholics are the primary victims that prone for such severe attacks. Globally, 40% of people have not attained full drug effects for clearing any diseases due to alcoholism. The 3.5% people are disabled and 15% of the death caused by consuming alcohols [1,2]. Apart from, the physiologically problems, the alcohol had high impacts on the mental stability of the individual and the severe addiction results in more complicated disorders [3,4]. The alcoholism found in most of the males than the females in our country. Since, they are most vulnerable for a kind of stresses including financial, familial and psychological origin. It also reduce the self-esteem and confidence of the individuals [5]. Due to modernization of the life style, the alcoholism become as a social pride and the excessive drinking could be a cause of starting point for a number of social evils [6]. The people irrespective of the age, region, socio economic backgrounds become severely addicted with alcohol without knowing about their self [7]. The alcohol prevalence varies within 7 to 75% in different Indian states [8]. The alcoholic married individuals’ maximally reveal their distress on each other than the non-alcoholic ones [9]. This resulted in aggressive behavior in communications and become a complete burden for the spouses [6]. The mental disability due to the stress and the aggressiveness lead to the psychological depression, hate, self-misfortune evasion of public associates, tiredness – both physically and mentally [9].The current study aimed to analyses the stress levels found in companions of alcoholics and non-alcoholics.

2. METHODOLOGY
2.1 Setting of the Study
The present study was conducted in Government Hospital in Chennai. Seventy patients (spouse of alcoholics and non-alcoholics. 35 each) were selected for the study from outpatient department and inpatient ward from the hospital.

The samples were selected using Non-likelihood accessibility sampling technique. ICD 10 criteria were followed for selection of the participants. Knowing Tamil or English were used as the inclusion criteria. The women with any kind of psychiatric problems, not-willing women were excluded from the study. The questions were based on the age, educational status, and type of family, monthly income, occupation, number of children, religion, duration of marital life, area of living, history of domestic violence and duration of alcohol consumption. The Sheldon Cohen superficial stress scale—14 items observed stress scale is the most widely used psychological instrument for measuring the perception of stress. Prescription modified stress scale it may be used by everyone. 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 [10,11]. The study was designed from the results obtained from the pilot study and both were approved by the Medical Superintendent. Standard deviation and Mean used to assess the level of stress. Chi-square test used to associate the level of stress with their selected demographic data.

3. RESULTS AND DISCUSSION
The most of the participants (62.86%) were in 31-40 years age followed by group, aged between 20-30 years (22.86%). The participants above 40 years were few among (4.28%) them.

The 68.57% of the study participants were from nuclear family and 31.42% were living in the joint family. Non-alcoholic spouse, 65.71% from nuclear family and 34.28% of them were belonged to joint family.

42.86% were living since 11 and above years with their husbands and 6-10 years (22.86%), the data represented in Table 4 and Fig. 3.

42.86% of alcoholic wives had 2 children and 28.57% had 3 or more children. 20% of them were without any children. The income of the participants was showed in Table 5.
Table 1. Socio demographic variables of the participants

| S.no | Variation in population | Wives of alcoholic's (n=35) | Wives of non-alcoholic's (n=35) |
|------|--------------------------|-----------------------------|---------------------------------|
|      |                          | Frequency | Percentage (%) | Frequency | Percentage (%) |
| 1.   | AGE (Years)              |           |                |           |                |
|      | 20-30                    | 9         | 24.86          | 16        | 42.85          |
|      | 31-40                    | 22        | 62.86          | 13        | 37.14          |
|      | 41-50                    | 5         | 14.28          | 5         | 14.28          |
|      | 51 and above             | 0         | 0.00           | 2         | 5.71           |

![Chart Title](image)

Fig. 1. Age-wise details of the study participants

Table 2. Family-wise distributions of the participants

| S.no | Variation in population | Wives of alcoholic's(n=35) | Wives of non-alcoholic's(n=35) |
|------|--------------------------|-----------------------------|--------------------------------|
|      |                          | Frequency | Percentage (%) | Frequency | Percentage (%) |
| 2.   | Family type              |           |                |           |                |
|      | Nuclear                  | 24        | 68.57          | 23        | 65.71          |
|      | Joint                    | 11        | 31.42          | 12        | 34.28          |

![Fig. 2. Family-based distribution](image)
Table 3. Marital lives (in years)

| S. No | Duration of Marital Life (years) | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|---------------------------------|---------------------------|-------------------------------|
|       | Frequency                       | Percentage (%)             | Frequency                     | Percentage (%) |
| 3.    | 0-5                             | 8                         | 10                            | 28.57          |
|       | 6-10                            | 12                        | 9                             | 25.71          |
|       | 11 and above                    | 15                        | 16                            | 45.71          |

Fig. 3. Type of family in participants

Table 4. Number of children in the studied participants

| S. NO | Number of Children | Wives of alcoholics (n=35) | Wives of non-alcoholics (n=35) |
|-------|--------------------|---------------------------|-------------------------------|
|       | Frequency          | Percentage (%)            | Frequency                     | Percentage (%) |
| 4.    | No children        | 4                         | 7                             | 20             |
|       | 1                  | 6                         | 4                             | 11.73          |
|       | 2                  | 15                        | 12                            | 34.28          |
|       | 3 and above        | 10                        | 12                            | 34.28          |

Fig. 4. Allotment of wives based on children
Table 5. Details of the monthly income of the study participants

| S.NO | Monthly Income     | Wives of alcoholics(n=35) | Wives of non-alcoholics(n=35) |
|------|--------------------|----------------------------|-------------------------------|
|      |                    | Frequency | Percentage (%) | Frequency | Percentage (%) |
| 5.   | <3000rs            | 5         | 14.28          | 13        | 37.14          |
| 3001-5000rs | 14         | 40         | 10              | 28.57     |
| 5001-7000rs | 12         | 34.28      | 5               | 14.28     |
| 7001 and above | 4         | 11.43      | 7               | 20        |

Fig. 5. Details of monthly income

Table 6. 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    | 22 | 38.63| 137.1|11       | 9        |       |            |
| 41-50    | 5  | 36   | 24.3| 3       | 2        |       |            |
| 51 and more| -  |      |     | -       | -        |       |            |

Fig. 6. Association between age and level of stress
The results showed that the age group between the 31-40 years of women felt higher level of the stress due their alcoholic husbands Table 7.

The present study also analyzed for the family level stress in the wives of alcoholics (Table 8). No significant association between levels of stress to the nature of family using chi square value 0.50.

The stress level increased with children in alcoholic families (Table 9) but, the relationship was not statistically significant (chi square value 0.71).

Table 7. Accession between type of family and level of stress

| Type of family | No | Mean | SD  | Median< | Median > | Chi-square |
|----------------|----|------|-----|---------|----------|------------|
| Nuclear        | 24 | 38.08| 148.05| 13      | 11       | 0.50       |
| Joint          | 11 | 38.45| 65   | 6       | 5        |            |

The chi-square value 0.63 of the wives of alcoholic's level of stress with the number of children shows no significant association. The present study aimed to evaluate the stress level felt by the wives of the alcoholics compared to the non-alcoholic patients in Psychiatric outpatient department of the Government Hospital. The study showed that the majority of the women in alcoholic family faced severe stress than their opponents. This is correlated with the previous study carried by the Saraswathi et.al (2010) and related previous studies [11-13].

Table 8. Connotation between marital life and level of stress

| Marital life | No | Mean | SD  | Median< | Median > | Chi-square |
|--------------|----|------|-----|---------|----------|------------|
| 0-5 yrs      | 8  | 37.6 | 44.5| 4       | 4        | 0.71       |
| 6-10 yrs     | 12 | 40.4 | 75.14| 6       | 6        |            |
| 11 and above | 15 | 36.73| 86.9 | 8       | 7        |            |
Fig. 8. Association between marital life and level of stress

Table 9. Association between number of children and level of stress

| No.ofchildren | 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 | 7        | 7        |                  |              |
| 3 and more    | 10 | 37.1 | 56.4 | 7        | 3        |                  |              |

Fig. 9. Relationship between children and stress level in alcoholic families
Table 10. Monthly income Vs. 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. 10. Monthly income Vs. level of stress

Fig. 11. Occupation vs. level of stress
The stress level on alcoholic family members was associated with the religion they were followed. The Chi-Square 0.09 shows that there is no significant relationship between educational status and level of stress in wives of alcoholics. Similarly, Breathe (2007) also showed that the most of the wives due to alcoholism, prone for trivial psychological stress and social burden [13] and similar to a study conducted in Canada [14]. Our study showed a clear difference in stress level between the alcoholic and non-alcoholic spouses and correlated with the previous study, conducted in Hanumanahalli village of Karaka state, India [15]. Our study also revealed that they had a number of physiological disorders such as genital disease, cardiovascular problems and psychometric disorders like stress, anxiety. This report was similar to the study conducted in Japan. This also revealed that the occurrence of familial and social violence due to alcoholism [16-19]. Families of alcoholics were suffered from financial troubles, anxiety, experience guilt, distress, insecurity, delinquency, resentment, shame, isolation and violence.

4. CONCLUSION

The present showed that the need of adequate psychological counseling to the spouses of the alcoholics, since, they face severe stress due to familial violence.

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

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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