## LEVEL OF STRESS AMONG THE PARENTS OF ALCOHOLIC ADOLESCENTS IN SLUM AREASOF BHUBANESWAR, ODISHA.

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#### Abstract

Objectives: To determine the level of stress among parents of alcoholic adolescents. Factors affecting the level of stress among parents of alcoholic adolescents.

Methods: A non-experimental survey research approach was used to collect the data in the interview method. Snowball sampling technique was used to select 350 samples. The study was conducted in slum areas of Bhubaneswar, Odisha. The tool was consisting of two parts one is socio-demographic data tool and the other one is the perceived stress scale by Sheldon Cohen which was used for assessing the stress level of parents ofalcoholic adolescents.

Results: The mean ageof alcoholic Adolescent 15.3 years and Father 40 years and Mother 38 years. 64 \% of adolescents, $54 \%$ fathers and $36 \%$ Mothers were studying above $10^{\text {th }}$ standard. $87 \%$ of households were Nuclear family and $91 \%$ of parents were having 1-2 children. Hindu population $83 \%$ followed by Muslim population with $13 \%$. Schedule tribe was $11.4 \%$ and the schedule caste was 21.4\%. Age and high Income had a significant association with father's stress level( The odds ratio to have a stress for Age group up to 40 with above 40 years is 1.9 (1.2-3.1) and the $P$ is <0.01, for Income group comparing the low-Income group to high, is 0.6 (0.4-0.9) and $p$ is 0.02 and for schedule caste and tribe comparing with Others its shows a significant association for stress of father odds 0.15 (0.1-0.2), $p=<0.01$. Hence Age and high Income has a significant association with stress and Others category in Caste have a protecting factor for stress. ). Mothers who were working in the formal sector were more prone to get stress than those who were working in the non-formal sector with 2.1 (1.1-3.2) and the $P$ was 0.01.


Conclusion: This study results revealed that $51 \%$ of fathers were in stress and $41 \%$ of mothers were in stress those who are having alcoholic adolescents.

Keywords: Stress, alcoholic adolescent, parents of alcoholic adolescent

## Introduction

Alcoholism is one of the biggest health problems which is seen in all over the world. ${ }^{1}$ Excessive alcohol consumption is a major cause of public health concern both in urban and rural areas because of the behavioral problems of the alcoholic adolescent which are raised along with the problems which are illegal to do. Use of alcohol is the alarming sing when it is particularly used by the adolescent. ${ }^{2}$ Addiction is a problem for the family members. It is a major source of stress for them. And also family disturbances and disruptions related to alcoholism are very serious and pervasive problem. ${ }^{3}$ Alcoholism gives rise to violence, disrupted family roles, lack of family communication and physical as well as psychological illness. The members of the family are at confusion and concern is clustered around an alcoholic. ${ }^{4}$

When one of the family members is actively involved in using the substance, the family members suffer a lot financially, sometimes the substance might be alcohol or other kinds of drugs. In most of the families, the person who used to involve in the substance abuse most of the time steals from the family, it is might be happening because the substance is high in cost. The family members also suffer a lot when they try to assist the substance abuser for the treatment. ${ }^{5}$ Alcoholism is a chronic problem, usually a progressive kind of disease in which a person craves alcohol and drinks without being affected by repeated alcohol-related problems which gradually affects seriously the lives of the family members and to the alcoholic too. ${ }^{6}$ In the mid-nineteenth and early 20th century the literature review gave us a moralistic view. The alcoholics were considered as villains and families considered as victims. ${ }^{7}$

Alcoholism is a very commonly seen problem in India irrespective of the rural community or an urban community of India. ${ }^{8}$ The prevalence rate of alcohol use is found differently in different studies but it comes between $23 \%$ to $74 \%$ particularly in males and the prevalence rate for females is $24 \%$ to $48 \%$. In 2005 the approximately 62.5 million peoples were using alcohol in India. Among them $17.4 \%$ (10.6 million) had alcoholic disorder. And out of the total admission, $20 \%$ to $30 \%$ admission done for problems related to alcoholism in all hospitals. ${ }^{9}$ As per a Union Ministry of Social Justice and Empowerment report the title
"magnitude of Substance Use in India - 2019", among the 36 states and UTs in the country Odisha identified as $17^{\text {th }}$ top alcohol-consuming state. ${ }^{10}$

The persons when drinks often with a high amount then that affects his family relationship, and family relationship disturbances means that includes brothers and sisters relationships, and also with other family members relationships gets affected by this, they may become distressed as a result of the alcoholic person's complex and disruptive behaviors which is a result of heavy drinking. It seen in some cases, if a brother or a sister is taking drugs then the siblings are making then as a role model for them to use drugs. This might happens because of the influence of the alcoholic family member and maybe the ones providing access to substances. ${ }^{11}$ The caregivers of the substance abuse adolescents are identified as in more stress by the researchers.The caregivers also sufferfrom stress associated problems such as mental and emotional stress as well as bodily stress like high blood pressure, headache, stomach ulcers, and bowel diseases and many others .the caregivers also experience depressions, anxiety, and panic disorders. In this way, the stress level of the parents of alcoholic adolescent is parallels with the caregivers of individuals with other kinds of disease conditions like HIV/AIDS, traumatic head injury, paralysis and Alzheimer's disease etc. ${ }^{5,12}$

## Materialsand methods

Research has been conducted in 5 slums Bhubaneswar City Odisha. A non-experimental survey research approach was used to collect the data in the interview method. Keeping in view of the objectives of the study the research design for the present study was descriptive. Snowball sampling technique was used to select 350 samples. The sample size has been calculated by using $4 \mathrm{PQ} / \mathrm{D}^{2}$ where $\mathrm{P}=30$ and $\mathrm{D}=20$. The Inclusion Criteria of the study is, an adolescent having drinking habits and aged between $10-19$. We have excluded those adolescents without parents and unable to communicate. The refusal rate was $5 \%$. And consent has been taken from their parents for Interview. The tool was consisting of two parts one was socio-demographic data tool and the other one was perceived stress scale by Sheldon Cohen which was used for assessing the stress level of parents of alcoholic adolescents. We have used score pattern to assign people with stress and No stress( More than 20 score is for Stress present ).

## Study Variables

Age has been reported as continuous later classified into two variables by using the median. Education has been categorized into two groups' up to High school (0-10th) and Above High School. Inoccupation Private and Government jobs have been classified as formal sector jobs and others have been categorized asNon Formalsectors. Religion has not been used in further analysis because the sample cover predominantly is the Hindu population. Monthly Income has been taken instead of Yearly expenditure or Income to avoid recall bias.

## Results:

Table 1. Sample Profile of Study Population.

$$
\mathrm{N}=350
$$

| Age of Adolescent |  | Occupation of Father |  |
| :---: | :---: | :---: | :---: |
| Mean | 15.3 (14.4-16.3) | Formal Sector Job | 4.2\% |
| Median | 15 | No Formal Sector Job | 95.8\% |
| Range | 10 to 19 |  |  |
| Age of the Father |  | Type Of Family |  |
| Mean | $\begin{aligned} & \text { 41.1 (39.7-42.9 } \\ & \hline \end{aligned}$ | Joint | 12.9\% |
| Median | 40 | Nuclear | 87.1\% |
| Range | 36 to 45 |  |  |
| Age of the Mother |  | Religion |  |
| Mean | $\begin{gathered} 38.8 \text { (37.5- } \\ 40.1) \\ \hline \end{gathered}$ | Hindu | 81.4\% |
| Median | 40 | Muslim | 12.9 \% |
| Range | 32 to 45 | Christian | 1.4 \% |
| Fathers Education |  | Sikh | 4.3 \% |
| Up to High school | 45.7\% | Caste |  |
| Above High school | 54.3\% | ST | 11.4 \% |
| Mother Education |  | SC | 21.4\% |
| Up to High school | 64.3\% | OBC | 31.4 \% |
| Above High school | 35.7\% | Others | 35.8\% |
| Education of Adolescent |  | Monthly Income (Quintile) |  |
| Up to High school | 35.7\% | Q1 (Poorest) | 27.1\% |
| Above High school | 64.3\% | Q2 (Poor) | 21.4\% |
| Children |  | Q3 (Middle) | 11.4\% |
| Up to 2 | 320 (91.4\%) | Q4 (Rich) | 20\% |
| Above 2 | 30 (80.6\%) | Q5 (Richest ) | 20\% |
| Occupation of Father |  | Income Group |  |
| Formal Sector Job | 14.3\% | Low (Up to 13000) | 50\% |


| No Formal Sector Job | $85.7 \%$ | High (Below 13000) | $50 \%$ |
| :--- | :--- | :--- | :--- |

Table 1 shows a sample profile of the study. Where age has been shown as numeric as well as in category. The mean age for Adolescents is 15.3 (14.4-16.3) years and the median age is 15 years. The median age of Father is 40 and 38 for Mother but the age category has been generating by using 40 as a cutoff point. In the study $64 \%$ of adolescents have been studying above $10^{\text {th }}$ standard, among fathers is $54 \%$ and $36 \%$ among Mothers. $87 \%$ household is a Nuclear family with $91 \%$ of parents with having 1-2 offspring. Sample predominantly dominated by the Hindu population $83 \%$ followed by the Muslim population with $13 \%$. Schedule tribe is $11.4 \%$ and the schedule caste is $21.4 \%$. We generated Quintiles of Monthly Income of Household and also categorized into two groups by median.

## Chart $1 \& 2$ is a graphical presentation of Likart scale on Stress questionnaire.



Chart 1: Describes about Father Response on stress-related questions on a Likert scale.


## Chart 2: Describes about Mother Response on stress-related questions in a Likert scale

Table 2 explains factors for mental illness and Stress like age, income, Occupation, Family size, Education and caste were analyzed for significance. The odds ratio to have a stress for Age group up to 40 with above 40 years is 1.9 (1.2-3.1) and the P is $<0.01 \mathrm{a}$, for Income group comparing the low-Income group to high, is $0.6(0.4-0.9)$ and $p$ is 0.02 and for schedule caste and tribe comparing with Others its shows a significant association for stress of father odds 0.15 (0.1-0.2), $\mathrm{p}=<0.01$. Hence Age and high Income has a significant association with stress and Others category in Caste have a protecting factor for stress.

Table 3 explains The odds ratio to have stress among mothers from schedule caste and tribe then others are $0.08(0.04-0.15)$ and the P is $<0.01$ and for occupation, formal sector employees are more prone to have stress then non-formal sector with 2.1 (1.1-3.2) and the P is 0.01 . We have used score pattern to assign people with stress and No stress ( More then 20 score is for Stress present ). We have found $51 \%$ of fathers with stress and $41 \%$ mothers with stress.

Table 2. Other Factors that effecting Stress among parents of Alcoholic Adolescent fathers.

| Stress Level of Father |  | Stress <br> Present <br> ( $\mathrm{N}=180$ ) | Stress Absent ( $\mathrm{N}=170$ ) | Chi-sq | Odds Ratio | P- <br> value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Upto 40 Years | 115 (59\%) | 80 (41\%) | 10.03 | 1.9 (1.2-3.1) | 0.01 |
|  | Above 40 Years | 65 (41.9\%) | 90 (58.1\%) |  |  |  |
| Children | Upto 2 | 165 (51.6\%) | $\begin{aligned} & 155 \\ & (48.4 \%) \end{aligned}$ | 0.27 | 1.1 (0.5-2.2) | 0.51 |
|  | Above 2 | 150 (50\%) | 170 (50\%) |  |  |  |
|  | Low Income | 80 (45.7\%) | 95 (54.3\%) | 4.57 | 0.6 (0.4-0.9) | 0.02 |
| Income | High Income | 100 (57.1\%) | 75 (42.9\%) |  |  |  |
| Caste | Schedule Cate and Tribe | 26 (22.6\%) | 89 (77.4\%) | 56.95 | 0.15 (0.1-0.2) | < 0.01 |
|  | Others | 154 (65.5\%) | 81 (34.5\%) |  |  |  |
| Family Type | Nuclear | 20 (44.4\%) | 25 (55.6\%) |  | $\begin{gathered} 0.72(0.3- \\ 1.3) \\ \hline \end{gathered}$ | 0.19 |
|  | Joint | 160 (52.5\%) | $\begin{aligned} & 145 \\ & (47.5 \%) \end{aligned}$ | 1.01 |  |  |
| Occupation | Formal Sector | 25 (50\%) | 25 (50\%) | 0.48 | 0.93 (0.5-1.7 | 0.47 |
|  | No Formal Sector | 155 (51.7\%) | $\begin{aligned} & 145 \\ & (48.3 \%) \end{aligned}$ |  |  |  |
| Education | Upto High School | 125 (55.6\%) | $\begin{aligned} & 100 \\ & (44.4 \%) \end{aligned}$ | 2.29 | 1.5 (0.1-2.4) | 0.23 |
|  | Above High School | 55 (44\%) | 70 (56\%) |  |  |  |

Table 3. Other Factors that effecting Stress among parents of Alcoholic Adolescent Mothers.

| Stress Level of Mother |  | Stress <br> Present <br> ( $\mathrm{N}=145$ ) | Stress <br> Absent $(\mathrm{N}=205)$ | $\begin{aligned} & \text { Chi- } \\ & \text { sq } \\ & \hline \end{aligned}$ | Odds Ratio | Pvalue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Upto 40 Years | 115 (43.4\%) | 150 (56.6\%) | 1.74 | 1.4 (0.8-2.3) | 0.16 |
|  | Above 40 Years | 30 (35.3\%) | 55 (64.7\%) |  |  |  |
| Children | Upto 2 | 135 (42.2\%) | 185 (57.8\%) | 0.86 | 1.5 (0.6-3.2) | 0.29 |
|  | Above 2 | 10 (33.3) | 20 (66.7) |  |  |  |
| Income | Low Income | 80 (45.7\%) | 95 (54.3\%) | 2.64 | 1.4 (0.9-2.1) | 0.06 |
|  | High Income | 65 (37.1\%) | 110 (62.9\%) |  |  |  |
| Caste | Schedule Cate and Tribe | 11 (9.6\%) | 104 (90.4\%) | 71.6 | $\begin{gathered} 0.08(0.04- \\ 0.15) \\ \hline \end{gathered}$ | < 0.01 |
|  | Others | 134 (57\%) | 101 (43\%) |  |  |  |
| Family Type | Nuclear | 15 (33.3\%) | 30 (66.7\%) | 1.39 | 0.67 (0.34-1.3) | 0.154 |
|  | Joint | 130 (42.6\%) | 175 (57.4\%) |  |  |  |
| Occupation | Formal Sector | 90 (50\%) | 90 (50\%) | 11.22 | 2.1 (1.1-3.2) | <0.01 |


|  | No Formal Sector | $55(32.4 \%)$ | $115(67.6 \%)$ |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Upto High School | $75(46.9 \%)$ | $85(53.1 \%)$ |  |  |  |
| Education | Above High School | $70(36.8 \%)$ | $120(63.2 \%)$ | 3.6 | $1.5(0.9-2.3)$ | 0.31 |

## Discussion

The mean age for Adolescents is 15.3 (14.4-16.3) years and the median age is 15 years. The median age of Father is 40 and 38 for Mother but the age category has been generating by using 40 as a cutoff point. In this study $64 \%$ of adolescents have been studying above $10^{\text {th }}$ standard, among fathers is $54 \%$ and $36 \%$ among Mothers. $87 \%$ household is Nuclear family with $91 \%$ of parents with having 1-2 offspring's. Sample predominantly dominated by the Hindu population $83 \%$ followed by the Muslim population with $13 \%$. Schedule tribe is $11.4 \%$ and the schedule caste is $21.4 \%$. We generated Quintiles of Monthly Income of Household and also categorized into two groups by median.

This present study revealed that the odds ratio to have a stress for Age group up to 40 with above 40 years is 1.9 (1.2-3.1) and the P is $<0.01 \mathrm{a}$, for Income group comparing low-Income group to high is $0.6(0.4-0.9)$ and p is 0.02 and for schedule caste and tribe comparing with Others its shows a significant association for stress of father odds 0.15 (0.1-0.2), $\mathrm{p}=<0.01$. Hence Age and high Income has a significant association with stress and Others category in Caste have a protecting factor for stress.The odds ratio to have stress among mothers from schedule caste and tribe then others are $0.08(0.04-0.15)$ and the P is $<0.01$ and for occupation, formal sector employees are more prone to have stress then non-formal sector with 2.1 (1.1-3.2) and the P is 0.01. We have found $51 \%$ of fathers with stress and $41 \%$ mothers with stress.There are limited studies related to the present study.

## Conclusion

The findings of the study revealed thatage and high Income has a significant association with stress and Others category in Caste have a protecting factor for stress. We have found $51 \%$ of fathers with stress and $41 \%$ mothers with stress.

## Funding: Self

Ethical statement: Taken from the Institutional Ethics Committee, SUM Nursing College, SOA University, Bhubaneswar.

## Conflict of interest: Nil

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