Study to assess the prevalence of risk factors of substance abuse among Adolescents and to seek it association with selected factors in selected schools of U.P

Shikha Malik
KGMU College of Nursing,
King George's Medical University, Lucknow, India.

Abstract

Background: Children are an important asset for future of a nation. About 1.2 billion adolescents aged between 10 and 19 years of age, 16 per cent of the world’s population. More than half of all adolescents globally live in Asia. Substance abuse is now increasingly seen in school-going children, earlier it was only limited to street children.

Objective: To assess the prevalence of risk factors of substance abuse among adolescents, to determine the association of prevalence of risk factors of substance abuse among adolescents with selected factor.

Methods: Research design selected for study was descriptive survey design. 220 adolescents selected by Purposive sampling technique from selected higher secondary school between 15 and 18 years of age. Structured questionnaire was used to obtain data from the respondents on socio-demographic characteristics and risk factors of substance abuse. The data was analyzed using descriptive and inferential statistics.

Results- Majority of population comes under ‘moderate’ level of prevalence. It was found that personal stress as the first ranked risk factor of substance abuse among the all risk factors. Gender distribution of substance abuse among male were higher as compare with female. There were significant associations found between selected factors-gender, family income, family history of substance abuse and area of residence with the prevalence of risk factors of substance abuse.

Conclusion: The need of the hour is to educate and counsel young children and adolescents and create awareness among the public regarding substance abuse.

Keywords: Substance abuse, Adolescents, Prevalence, Risk factors.

I. INTRODUCTION

The childhood and adolescent years are important developing years of life during which the child get academic, cognitive, social and life skills. Any substance abuse at this age is likely to impede with the normal child development and may have a lasting influence on the future life. [1] As a result of early initiation of substance abuse not only the child is likely to affected, but the family and society as a whole are also affected. Thus, this topic is a matter of concern. [2,3] Recent times have evidence a gradual increase in substance use among adolescents; with more people begin substance use from younger age. The problem is seen across all socioeconomic groups, from urban and rural areas among street child to school going children. Uses of multiple substance and unfamiliar drugs also being documented.[4] Early initiation of substance use is usually associated more serious effect on health, education, familial or social relationships. Substance use may lead to interrupt in studies and even terminate out of school, behavioral problems and may also cause relationship difficulties. Early initiation of substance abuse may also lead to anti-social behaviors e.g. lying, stealing, pick pocketing etc and other high risk behaviors (e.g. driving under influence, violence).[5,6]

OBJECTIVES

1. To assess the prevalence of risk factors of substance abuse among senior secondary school children
2. To determine the association of prevalence of risk factors of substance abuse among senior secondary school children with selected factor

II. METHODOLOGY

2.1 Setting:
The present study was conducted in selected schools of Meerut, Uttar Pradesh.

2.2 Population:
The study population comprised of higher secondary school children between 15 and 18 years of age from the selected schools of Meerut, Uttar Pradesh.

2.3 Sample and sampling techniques:
Sample: Adolescents (15-18 years) from selected senior secondary school of U.P.
Sample size: 220
Sampling technique: purposive sampling
2.4 Research approach:
Quantitative research approach

2.5 Research design:
Descriptive survey design- Since the study intends to assess the prevalence of risk factors of substance abuse.

2.6 Variables:

*Attribute variables* - background factors such as the gender, education of parents, occupation of parents, family income, type of family and family history of substance abuse, place of stay, area of residence.

*Dependent variable:* Prevalence of risk factors of substance abuse among higher secondary school children.

2.7 Criteria for selecting sample:
Higher secondary school children of 15-18 years of age
Students who were willing to participate
Students who were present during pre test and post test.

2.8 Data collection tool and technique:
A structured questionnaire to assess the prevalence of risk factors of substance abuse includes 2 sections:

*Section I -* Socio- demographic data

*Section II-* comprises of 23 questions- consist of items seeking information on drug availability, peer group pressure, personal Stress and parental stress, personal attitude/ belief.

*Scoring:* Classifies the prevalence of risk factors of Substance Abuse into very high, high, moderate and low prevalence.

2.9 Data collection procedure
Study sample size was 220 of selected schools of 11 standard students. Higher secondary school children were provided with general information on the purpose of the study after obtaining consent. They were assured of confidentiality. Structured questionnaire was administered. Time taken to complete all procedures ranged from 30-40 minutes.

2.10 Data analysis
The data was planned to organise, tabulate, analyze and interpret by using both descriptive and inferential statistics.

Survey to assess the prevalence of risk factors of substance abuse among higher secondary school children

*Section I:* Findings related to frequency and percentage distribution of sample characteristics

*Section II:* Findings related to prevalence of risk factors of Substance Abuse among higher secondary school children in selected schools.

*Section III:* Findings related to association between prevalence of risk factors of Substance Abuse and selected factors

3. RESULTS

**Table 3.1:** Findings Related To Frequency and Percentage Distribution of Sample Characteristics

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Demographic characteristics</th>
<th>Total</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>a) 16years</td>
<td>12</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 17 years</td>
<td>50</td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) 18 years</td>
<td>158</td>
<td>72.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Female</td>
<td>107</td>
<td>48.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Male</td>
<td>113</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Education Of Father</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Primary school</td>
<td>8</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) High school</td>
<td>32</td>
<td>14.5</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.2 Findings Related To Prevalence of Risk Factors of Substance Abuse

<table>
<thead>
<tr>
<th>Prevalence &amp; scoring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low prevalence of risk factors (0-12)</td>
<td>30</td>
</tr>
<tr>
<td>Moderate prevalence of risk factors (12-23)</td>
<td>138</td>
</tr>
<tr>
<td>High prevalence of risk factors (24-35)</td>
<td>47</td>
</tr>
<tr>
<td>Very high prevalence of risk factors (36-47)</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3.2 show the prevalence of risk factors of Substance Abuse it shows that 2.3% of population has “very high” prevalence of risk factors and 21.3% of population had ‘high’ prevalence of risk factors of Substance Abuse. Majority of population comes under ‘moderate’ level of prevalence (62.9%) and 13.5% of population is of low prevalence.
Fig 1- Shows The Area Wise Distribution Of Risk Factors

Fig 1 shows that personnel stress (1.08) as the first ranked risk factor of substance abuse among the all risk factors Parental stress was found as next prevalent risk factors (0.13), personal attitude/ belief to substance abuse was found to be (0.09). Fig 3 shows the gender distribution of substance abuse.

Table 3.3 Frequency and percentage Distribution of Prevalence of Substance Abuse

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>22</td>
<td>10.4</td>
</tr>
<tr>
<td>Alcohol</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>Inhalants</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Cannabis</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Pharmaceutical sedatives</td>
<td>1</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

The data presented in the table 3.3 shows the prevalence of Substance Abuse among Higher Secondary School Children out of 220 sample 37 of them were involved in substance abuse and it shows that (10.4%) of the students were using tobacco (smoking/chewing) with a frequency of 22, (3.6%) of alcohol use (Beer, Wine, Hard Liquor, Desi Alcohol), (0.9%) of inhalants (Ink eraser fluid, Petrol, Glue, Iodex etc), (1.8%) of cannabis use (Bhang, Ganja) with frequency of 4 and pharmaceutical sedatives use (alprax) 0.4% with frequency of 1.

Table 3.4 Frequency and percentage Distribution of Prevalence of Substance Abuse among Male and Female

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 3.4 shows that out of 37 Adolescents frequency of male were 29 (78.37%) and female 8 (21.6%)

Section III

Table 3.5 Chi Square Value Showing the Association Between The Prevalence of Risk Factors Of Substance Abuse And Selected Demographic Factors

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sample Characteristics</th>
<th>df</th>
<th>Significant Chi Square Value/ table value</th>
<th>Chi Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender</td>
<td>3</td>
<td>7.815</td>
<td>9.419*</td>
</tr>
<tr>
<td>2.</td>
<td>Education of Father</td>
<td>12</td>
<td>21.026</td>
<td>15.699 NS</td>
</tr>
</tbody>
</table>
3. Education of mother
4. Occupation of father
5. Occupation of mother
6. Family Income (monthly) in rupees
7. Type of family
8. Family history Substance Abuse

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>12</td>
<td>21.0266</td>
</tr>
<tr>
<td>4</td>
<td>21.0266</td>
<td>16.681 NS</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>21.0266</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>24.996</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>12.592</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>7.815</td>
</tr>
</tbody>
</table>

*significant at the level of 0.05

NS- Not significant at the level of 0.05

Results of table 3.5 shows that there were significant associations found between selected factors – gender, family income, family history of substance abuse, area of residence with the prevalence of risk factors of substance abuse

IV. DISCUSSION

In the present study, substance abuse among the males and females, were comparable to the findings of studies by other authors, it was noted similar results with that of other studies. Therefore, Personal stress, acceptability among friends and easy availability of substances, has been the most common reason for continuation. These reasons have been cited even by other authors.

V. CONCLUSION

Drug abuse is a very common and major problem related to health and social concern. The beginning of drug abuse at early adolescence result in continuation of drug to the adulthood. Therefore, preventive approach is recommended to be planned. As most of the studies are either done on small scale on school children or street children, more studies are required to be done in India on substance abuse among adolescents to see the current scenario and to deal with this issue.

VI. ACKNOWLEDGEMENT

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**Conference papers**