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Original Research Article

# Study on the Pattern of Substance Use among Street Children of the Age Group of 10-18 Years in Guwahati City, Assam

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# ABSTRACT

**Introduction:** A large number of children live and work on the streets, a high proportion without any family support, particularly in the megacities of the developing world. It is estimated that more than 800000 street children exist in India. Guwahati, the Gateway of North east India has also been a part of this great hub of underprivileged street children for the recent years and substance use is increasing among them day by day.

**Materials and methods:** The present cross sectional study was conducted in different areas of greater Guwahati city, Assam from March, 2016 to August, 2016. Street children of the age group 10-18 years with substance use from areas near railway station, bus stands were interviewed with the help of pretested structured schedule and observation was done regarding the types and habits of substance use.

**Results:** Most of the street children (55%) with history of substance use belonged to the age group of 14-16 years. Gutkha was the most commonly used addictive substance (47.3%), followed by cigarette (39.5%). Majority of them (54.5%) were aware about ill effects of substance use.

**Conclusion:** Identification of root causes of the problem such as poverty and illiteracy are very much necessary to solve the problems of the street children. There should be provision of health and welfare services to street children with regard to health care, educational opportunities and employment. The government and non-government voluntary agencies should also come forward for rehabilitation of the street children.

*Keywords:* Street children, Substance use.

# **INTRODUCTION**

A large number of children live and work on the streets, a high proportion without any family support, particularly in the megacities of the developing world. According to UNICEF, there are about 100 to 150 million children growing up on the streets around the world and in India, it is about 8 Lakhs. <sup>[1]</sup> Because of the floating character of their lifestyle, accurate data on street children is difficult to estimate. They are constantly on the move, either in search of work or place to squat. <sup>[2]</sup> Street children in India face additional vulnerability because of their lack of access to nutritious food, sanitation and medical care. <sup>[3]</sup> Street children are vulnerable to substance use and criminal exploitation due to continuous exposure to the street and its associated life styles. World Health Organization (WHO) estimates that globally 25-90% of street children indulge in substance use. <sup>[4]</sup>

Guwahati, the gateway of North east India, has also been a part of this great hub of underprivileged street children for the recent years and substance use is increasing Pankaj Jyoti Barman et al. Study on the Pattern of Substance Use among Street Children of the Age Group of 10-18 Years in Guwahati City, Assam

among them day by day, due to rapid urbanization. They are at high risk of malnutrition, STD including HIV, Parasite infestation and skin diseases and criminal exploitation.

#### **MATERIALS AND METHODS**

The present cross sectional study was carried out in different areas of greater Guwahati city for a period of 6 months from March, 2016 to August, 2016. Initiation of the study was done in slum areas near Urban Health Center, Ulubari, which is field practice area under Department of Community Medicine, GMC to find out the street children and based on the information provided by them, the study was carried out in the nearby railway stations and bus stands. Total 338 street children were found from the study area and from them 220 street children fulfilling the inclusion criteria were taken for this study. For the purpose of the study, substance use was conceptualized as use of substances for a minimum period of continuous 6 months in their life. Only the substance users in the age group of 10-18 years who were willing to participate in the study were included. Non substance users, those who were not willing, those who did not belong to the age group of 10-18 years and those who were not local to the area were excluded from the study. Verbal informed consent was taken from each of the study subject explaining purpose and nature of the study. Privacy and confidentiality of personal information was maintained and results are presented in aggregate form without individual identification. Informations were recorded in Assamese and Hindi languages. The street children were interviewed using a predesigned and pretested semi structured schedule and observation was done regarding the types and habits of substance use. The findings of the study were tabulated and presented as percentage.

#### **RESULTS**

Table 1 shows distribution of the respondents as per their socio-economic characteristics, where among the substance users, 55% belonged to 14-16 years age group. Majority of them were illiterate (56.9%). Majority of them (55.5%) were living only in the street.

Table 2 shows association of different risk factors with substance use among the street children. History of substance use among peers was seen in 60.9% of the street children. History of substance use among parents was seen in 71.4% of the street children.

Table 3 shows distribution of respondents according to correlates of substance use. Among them, 47.3% reported use of Gutkha products and 39.5% were smoking cigarettes. Majority of the street children (44.1%) were using the substances for more than 2 years. Majority of them (55.9%) admitted that increased urge to use the addictive substances when they see the peers as the main reason for not quitting addiction. About 44.1% of the children spent Rs.31-50 daily in buying the addictive substances.

 
 Table 1: Distribution of respondents according to their sociodemographic characteristics

| Characteristics    | Number of children | Percentage |  |  |
|--------------------|--------------------|------------|--|--|
| Age group          |                    |            |  |  |
| 10-13 years        | 28                 | 12.7       |  |  |
| 14-16 years        | 121                | 55         |  |  |
| 17-18 years        | 71                 | 32.3       |  |  |
| Educational status |                    |            |  |  |
| Illiterate         | 125                | 56.9       |  |  |
| Primary school     | 79                 | 35.9       |  |  |
| Middle school      | 15                 | 6.8        |  |  |
| High school        | 1                  | 0.4        |  |  |
| Living status      |                    |            |  |  |
| Only on street     | 122                | 55.5       |  |  |
| On and off street  | 98                 | 44.5       |  |  |

Table 2: Distribution of respondents based on associated risk factors of substance use

| Risk factors                           | Response | Number of children | Percentage |
|--|----------|--------------------|------------|
| History of substance use among peers   | Yes      | 134                | 60.9       |
|  | No       | 86                 | 39.1       |
| History of substance use among parents | Yes      | 157                | 71.4       |
|  | No       | 63                 | 28.6       |

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| Characteristics                                 |  | Number of<br>children          | Percentage |
|---|--|--------------------------------|------------|
| Type of substance use*                          | Gutkha                                     | 104                            | 47.3       |
|   | Cigarette                                  | 87                             | 39.5       |
|   | Bidi                                       | 82                             | 37.3       |
|   | Dendrite                                   | 66                             | 30         |
|   | Alcohol                                    | 74                             | 33.6       |
|   | Bhang                                      | 47                             | 21.4       |
|   | Tobacco leaves                             | 38                             | 17.3       |
|   | Eras ex                                    | 19                             | 8.6        |
| Duration of use                                 | 6 months to 1 year                         | 66                             | 30         |
|   | 1 year to 2 years                          | 57                             | 25.9       |
|   | More than 2 years                          | 97                             | 44.1       |
| Reasons for substance use*                      | Feels happy, forget sorrows                | 124                            | 56.4       |
|   | Decreases hunger                           | 73                             | 33.2       |
|   | Boosts self confidence                     | 57                             | 25.9       |
|   | Relieves anger                             | 124<br>73<br>57<br>30<br>g 123 | 13.6       |
| Reasons for not quitting addiction              | Increased urge to use when peers are using | 123                            | 55.9       |
|   | Lack of will power                         | 80                             | 36.4       |
|   | Stress factor                              | 17                             | 7.7        |
| Amount of money spent daily in buying addictive | Rs. 1-20                                   | 58                             | 26.3       |
| substances                                      | Rs. 21-30                                  | 40                             | 18.2       |
|   | Rs. 31-50                                  | 97                             | 44.1       |
|   | More than Rs. 50                           | 25                             | 11.4       |

\*Multiple responses

| Table 4: Distribution | of respondents base | d on their awareness | regarding hazard | of substance use   |
|-----------------------|---------------------|----------------------|------------------|--------------------|
| Table 4. Distribution | n respondents base  | cu on men awareness  | regarting nazaru | s of substance use |

| Characteristics  | Number of children             | Percentage |      |
|--|--------------------------------|------------|------|
| Awareness of ill effects on health $(n=120)$                       | Health problems                | 65         | 29.5 |
|  | Increased chances of accidents | 34         | 15.4 |
|  | Behavioral changes             | 21         | 9.5  |
| Indulgence in risky behavior after taking the substance ( $n=65$ ) | Involve in fight               | 49         | 22.3 |
|  | Commit a crime                 | 8          | 3.6  |
|  | Sexual activity                | 8          | 3.6  |

Table 4 shows that 54.5% of the street children were aware of the ill effects of substance use. About 22.3% of them were involved in fight following use of substances.

# **DISCUSSION**

In the study, it is found that majority of the substance users among street children belong to the age group of 14-16 years (55%). The finding is similar to the study done by Baishali et al in 2007 at Kolkata city, where it was 50%. <sup>[5]</sup> Majority of the substance users is illiterate (56.9%). Illiteracy was found as 66.5% in street children in two other studies done by F Islam et al in Guwahati city in 2010 <sup>[6]</sup> and Abhay M. Gaidhane et al in Mumbai in 2007. <sup>[7]</sup> Peer influence is of great importance, as it is found that majority of the street children (60.9%) come to know about different types of addictive substances through their friends. The study done by Sharma et al <sup>[8]</sup> in 2012 also found that the

most common reason for indulgence into substance use was peer pressure.

In our study, it is found that Gutkha is the most common type of substance used (47.3%), followed by cigarette (39.5%). In a study of conducted by Benegal et al in 1998, it was reported that 76% smoked tobacco and 45.9% chewed tobacco. <sup>[9]</sup> In another study done by Adidela Praneeth Reddy et al in Andhra Pradesh in 2013, smoking tobacco users were most common (48.9%), followed by alcohol users ((40.6%). <sup>[10]</sup> It is observed that, the main reason for not quitting addiction is that they cannot stop the urge to use substances when peers are using it (55.9%), which is similar (56.8%) to the study done by Abhay M. Gaidhane in Mumbai.<sup>[7]</sup> In our study, it is found that 54.5% of the street children are aware of different ill effects of substance use, which is at par with the study done by Adidela Praneeth Reddy et al in Andhra Pradesh where it was found that 52.8% of the subjects were aware of ill effects of substance use. <sup>[10]</sup>

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# CONCLUSION

Substance use is alarmingly street children of increasing among Guwahati city. Identification of root causes of the problem such as poverty and illiteracy are very much necessary to solve the problems of the street children. Awareness raising campaign to increase the knowledge of the street children about different ill effects of substance use is an urgent need of present time. There should be provision of health and welfare services to street children with regard to health care, educational opportunities and employment. The government and non-government voluntary agencies should also come forward for rehabilitation of the street children.

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