

## **A STUDY OF DEMOGRAPHIC PROFILE AND SUBSTANCE ABUSE AMONG STREET CHILDREN IN BANGALORE**

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### **ABSTRACT**

The Street children are those unfortunate children who basically have only intermittent contact with parents or family but live most of the time with other street children in the city streets or have been literally abandoned by the parents/relatives, found them selves on the street from the beginning because of family problems. **1 very limited literature has been reported by Indian context. In this aspect present study aims to know the** Demographic profile and Substance abuse in Street Children below 18 years in Bangalore City. A cross sectional survey based study conducted street children in shelter homes (day care and residential), Gilgal Trust, Sparsh trust, Bosco shelter homes in Shivajinagar and K.R. Market, Bangalore during the accrual period Dec. 2011 to Nov. 2013. **A total** 100 street children were considered for the study. Direct Interview and focus group interview conducted in two consecutive intervals. The secondary data obtained from WHO structured questionnaires and pretested proforma, different parameters were considered for drug usage like - risk factors for substance abuse and religion were added from Deepti Pagare et al 4 and Poonam R. Naik 7 study because these are important to collect additional information from street children Substance abuse was more common among male children, 85% of them belongs to Hindu religion. Thirty five percent of the children had never been to school. Sixty three percent of the children worked with part time jobs. The most common risk factor for substance abuse was peer pressure. Seventy two percent of the children were inhalant users followed by tobacco (67%), alcohol (17%) and cannabis (6%). Mean age of substance abuse was 10years and earliest age of initiation of substance abuse was 8years. Many children were practicing multiple substance abuse. Frequency of usage of drugs was 20 or more days in a month. Prevalence of substance abuse was common with street children. Significant association was found with peer pressure and substance abuse. Substance abuse was started as early as 8 years. Most common substances used by street children are inhalants and tobacco and frequency of usage of these substances was also high.

**KEYWORDS:** Cannabis, WHO, Substance Abuse, Demographic

### **INTRODUCTION**

Street children are those unfortunate children who basically have only intermittent contact with parents or family but live most of the time with other street children in the city streets or have been literally abandoned by the parents / relatives, found themselves on the street from the beginning because of family problems. 1 Those who have run away from home can further be separated into, those who have an unpleasant and or traumatic home environment and those who experience family problems, which they are unable to solve and ultimately their tolerance level has been far exceeded, leading to the drastic decision to leave their family. 1 A very rough estimate would place the number of street children in the city of Bangalore at around 80000. About 60 children land up at the bus-station alone every day, having run away from home. Some children live with their parents in urban slums. Anecdotal and experimental data had suggested

that there was a significantly high rate of abuse among this population. However planning of drug abuse prevention services was hampered by the absence of reliable information. So providing epidemiological data on drug abuse among street children of Bangalore is essential to devise effective preventive strategies against substance use. The present study aims to know the demographic profile and Substance abuse in Street Children below 18 years in Bangalore City.

## **MATERIALS AND METHODS**

A Cross sectional study was conducted in Street children in shelters homes (day care and residential), Gilgal trust, Sparsh trust, Bosco shelter homes in Shivajinagar, and K.R. market, Bangalore whose immediate concerns are survival and shelter, during the study period Dec. 2011 to Nov. 2013. Total 100 street children with substance abuse were considered for the study. Pretested and administered WHO - drug usage questionnaire was used to obtain the primary data. The content of information and questions were asked in the local language and information was collected from street children. Two additional questions about risk factors for substance use and religion were added from Deepti Pagare et al 4 and Poonam R. Naik for added more information pertaining to drug abuse usage. Written consent was obtained from all children's, parents or guardian.

### **Inclusion Criteria**

- Children who are detached from their families and live in shelter homes (daycares and residential).
- Only children with substance abuse were included in the study.

### **Exclusion Criteria**

- Not willing to be included in the study.
- Children who live with their families on the street.

## **STATISTICAL METHODS**

Collected data were analyzed by using SAS-16.50 version, Univariate analysis; chi-square and Spearman rank correlation coefficient were used to test the hypothesis.

## **RESULTS**

A total of 100 respondents were recruited with written consent, the incidence rate of male comprises 96% and female were 4%. The Males were predominantly practicing substance abuse when compared to female children. Children in the early adolescence period (33%) were predominantly involved in substance abuse followed by middle adolescence (25%). The children 10 years old or less (23%) and 17 to 18 year old children (19%). The Mean age of initiation of substance abuse was 10 year and earliest age of Initiation was 8 years IQR -6-10 years. Majority of children belonging to Hindu religion were practicing substance abuse as compared to 10% of Muslim children and 5% Christian children. Thirty-five children had never been to school, 46% of children drop out from their studies before 5th standard, 14% of drop from studies before 8th standard, 5% of children dropped out from studies before 10th standard respectively. And none of the children studied beyond 10<sup>th</sup> standard. In the past 12 months 99% of children were not attending school only 1% of children were part time students. Thirty six percent of the children were not worked on a paid job and 63 % of the children worked on part time job. The only one percent of the children worked on fulltime job. Those who have not worked and were involved in begging or stealing activities. The Major risk factor for substance was peer pressure (55%),

followed was maltreatment at home (11%), runaway from home without obvious reasons (9%), death of the mother (7%), substance use in the in the family (7%), death of the father (5%), domestic violence (4%), presence of step parents (2%). Multiple factors are encompasses the substances and drug abuse such as maltreatment at home, death of father and mother, domestic violence -children to runaway from their homes and live their life on street, unsupervised by caretakers. Other major factors were influence the begging is peer pressure succumbing to substance abuse. Most common substance being abused was inhalants (72%), followed by tobacco (67%), alcohol (17%), and cannabis (6%). The children were practicing multiple substance usage also. The impotent Initiation of tobacco, the maximum age between 10 years or less (58.20%), followed by 11-12 years (26.85%), 13-14 years (11.94%) and 15-16 years (2.98%). Mean age of initiation of tobacco was  $11.15 \pm 3.14$  years and the earliest age of initiation of tobacco was 8 years. The initiation of alcohol abuse was maximum in the age group 10 year or less (35.29%), followed by 13-14 years (29.41%), 15-16years (23.42%) and 11-12 years (11.76%). The mean age of initiation of alcohol was  $13.98 \pm 2.68$  years and earliest age of initiation of alcohol was 8 years. Children in the age group between 11-12 years, 15-16 years were 33.33% and children in the age group of 10 years or less, 13- 14 years were 16.66% each at the time of initiation of cannabis with mean age of initiation of cannabis was  $11.31 \pm 4.68$  years and earliest age of initiation of cannabis was less than 10 years. Inhalants initiation is apparently more the maximum age group between 10 years or less (54.16%) with lower age group between 15-16 years (8.33%) and almost uniform in the age group were found between 11-12 years (18.05%), 13-14 years (19.44%). The mean age of initiation of inhalants was  $14.36 \pm 1.48$  years and earliest age of initiation of inhalants was 8 years. Among children with tobacco abuse 66 continued to use tobacco, 17 children with alcohol 15 children continued to use alcohol, 6 children with cannabis 4 children continued to use cannabis and out of 72 children with inhalants, 71 children continued to use inhalants in the past 12 months. Only very fewer number of children stopped for using substances in the past 12 months period of time .Reluctantly In the past 30 days one child willing to stopped using alcohol and another child has stopped using inhalant. The frequency of usage of substances in the past 30 days revealed that, the usage of substance for more than 20 days was maximum with inhalants(82.55%), followed by alcohol (42.85%) and cannabis (40%). Usage of substances in 6-19 days for inhalants was 11.42%, alcohol (14.28%), cannabis (40%) and also usage of substances in 1-5 days for inhalants was 5.71%, alcohol (42.85%), cannabis (20%). The many children were practicing multiple substance abuses. Most common combination of inhalants and tobacco was practiced by 39 children followed by tobacco and alcohol (16), alcohol and inhalants (13), inhalants, tobacco and alcohol (11). Out of 6 children of cannabis abuse in our study 4 children were practicing tobacco, alcohol and inhalants along with cannabis.

## DISCUSSIONS

The Female children were less in our study, this is partly because of the most of the participating organizations in the study had a greater street presence among boys and most of the female children will never run away from home in spite of problems due to social reasons. Vivek Benegal et al 3 study found prevalence of 81.9% in males and 18.1% in females. Atanu ghosh 5 study found prevalence of 76.2% in males and 23.8% in females. In our study children only from the shelter homes are included whereas in other two studies children from the street were also included. Similar study reported by Poonam R. Naik et al 7 it was showed that 63.54% are male children and 36.46% are female children and

This is because in this study children from two shelter homes for street children were selected, one was exclusively for female children and other was for both male and female children. In our study mean age of substance abuse was 10 years and earliest age of substance initiation was 8 years. This is in accordance with the studies done by Poonam

R. Naik et al 7 which found mean age of substance abuse for males 11.3 years and 8.8 years for females and Agnihotri P14 who found mean age of substance abuse was  $11.3 \pm 1.7$  years. In our study substance abuse was more common among children belonging to Hindu community (85%). This is in comparable with the study conducted by Poonam R. Naik et al 7 which found the substance abuse among Hindu (66.3%), Muslim children are less in our study compared to Poonam R. Naik et al 7 and Agnihotri P,14 this is because most of the children are migrated from places around Bangalore. Children dropped out before 5th standard in Atanu Ghosh5 study was 66.9% which is high compared to our study whereas in Vivek Benegal et al 6 study children drop out before 5th standard (47.2%) and dropped out before 8th standard (13.9%) is comparable with our study. Children never been to school and dropped out from school may mingle with other children on the street, without parental care and supervision indulge in substance abuse. Different prevalence rate was reported by Vivek Benegal et al 6 as 41.7% of children were unemployed, 38.9% part time employed, 19.4 % were full time employed. Children with full time job are less in our study, this may be due to strict enforcement of child labor Act in recent years. Commonest cause of substance abuse in our study was peer pressure (55%) followed by maltreatment at home (11%). Maltreatment at home along with peer pressure exposes children to stressful life on streets, which accompanied by lack of parental care and supervision and easy access to intoxicating substances conducive for indulging in substance abuse. Maltreatment at home is less in our study compared to Deepthi Pagare et al 4 because nowadays parents are aware of adverse events of child abuse like committing suicide etc. In Poonam R. Naik et al 7 study peer pressure as the cause for substance abuse in 73.9% of children is comparable with our study. In Malhotra et al 13 study most common reason for initiation of tobacco was peer pressure (94.1%), because the study was exclusively about tobacco abuse. In our study inhalants are the most common substance used by children. Seventy two percent of children were practicing inhalants abuse. In Vivek Benegal et al, 3 inhalants use was 48% among children and in Atanu Ghosh 5 study inhalants use was 62% among children comparable with our study. In Poonam R. Naik7 study inhalant users are only 20.8% not comparable with our study. Low cost, easy availability is the reason for early initiation and more prevalence for inhalants abuse. Tobacco was the second most common substance abuse in our study which is comparable with Atanu Ghosh 5 and Poonam R. Naik et al 7 study. In Sarangi et al 10 study the most common substance being abused was Gutkha (91.7%). In Dharamsingh et al 2 study 92% use Gutkha, 65.5% tobacco, 35.5% smoking. In Malhotra et al 13 study 60.9% of children smoking and 64.55% consuming smokeless form of tobacco. Availability of various forms of tobacco like beedi, cigarette, gutka, etc, is the reason for early initiation and more prevalence for inhalants abuse. Alcohol abuse in our study was 17%. Alcohol usage is less in street children due its high cost. Higher prevalence of alcohol use was found in Vivek Benegal et al 3 study at 42.1 %. In Poonam R. Naik et al 7 study prevalence of alcohol use was 37.7% in boys. In Sarangi et al 10 study prevalence of alcohol users was 14.7%. Alcohol users were lower in Dharam singh et al 12 at 01%. Cannabis users were 6% in our study. Cannabis abuse was uncommon in street children because it is not easily available. Cannabis usage in Athanu Ghosh 5 study was 34.1% in males. Poonam R. Naik et al, 7 Sarangi et al, 10 Dharam singh et al 12 have not reported any children with cannabis abuse. Prevalence of multiple substance abuses was high in our study. Combination of Inhalants and tobacco was more commonly practiced combination of substances. Multiple substance abuse among street children was reported in other studies like Vivek Benegal et al, 3 Deepthi Pagare et al, 4 Poonam R Naik.7

## CONCLUSIONS

The Male street children is predominantly practicing substance abuse and majority of children belong to Hindu religion and their sustained in part time paid jobs. The Most common risk factor for substance abuse is peer pressure followed by maltreatment at home. The Mean and earliest age of substance abuse is between 8-10 years respectively. Most

communist substances usage would be Inhalants and significant relation was found to be inhalant users and younger age group between 10 years old or less. The Tobacco abuse was the second most common substance abuse onset of age at 10 years old or less. Only 6% of the children were involved in cannabis abuse over a past 20 days or more in a month. The present study can help to policy makers for intervention of new guidelines to prevent or curb the

### **LIMITATIONS OF THE STUDY**

The present study was conducted among street children in shelter homes only

### **RECOMMENDATIONS**

The most common reason for substance abuse was peer pressure followed by maltreatment at home, so parents and children should be educated through mass media regarding the substance abuse. School drop outs and never been to school, among children with substance abuse was high, so remedial measures to be taken by the concerned authorities to prevent school drop outs. More legal restrictions should be imposed on selling of substances to children.

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