

Protecting Children from Substance Abuse: A Critical Need for Meaningful Achievement of Millennium Development Goals.

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Introduction

The problem of substance abuse has become a global public health concern and is fast assuming alarming proportions not only in developed countries but also in developing countries. It has received greater attention in recent times, not much due to the novelty or magnitude of the problem itself, but more due to the changing trends in the usage, particularly in children, adolescents and youth. Substance abuse creates a huge hindrance for survival, protection, growth and development of healthy children, which is fundamental for improving quality of life. Protecting children from substance abuse has to be considered the most essential and urgent need for creating a 'World fit for Children' and for a meaningful achievement of the 'Millennium Development Goals'.

This paper looks at the extent, patterns and trends of substance abuse problem among children in India, primarily through review of studies and also substantiates it with the field based observations by linking personal experience of working with marginalized children. The paper will also discuss the existing challenges in addressing the substance abuse problem among children in India. It also emphasizes the need to focus beyond the bio-medical and behavioral modification approach based intervention while addressing the substance abuse problem, especially among the marginalized children. It also suggests a comprehensive model for substance abuse intervention which is holistic, multidisciplinary and child centered, that would address the full spectrum of determinants in the complex Indian context. Finally the paper concludes by highlighting the importance of protecting children from substance abuse for ensuring the rights of the child and for meaningful achievement of Millennium Development Goals.

Extent, Trends and Patterns of Substance Abuse among Children in India.

Substance abuse remains critical problems in most countries and is associated with several social and economic consequences. This assumes greater relevance in developing countries like India which is already burdened with inadequate health-care facilities (Tripathi B.M, et al 1999). In 2002, the use of Alcohol and Illicit drugs was estimated to contribute 4% of the disease burden in the 15-29 yrs age group in low and middle income countries (WHO, 2002). A more recent report titled "Extent, Patterns and Trends of Drug Abuse in India - National Survey" by the United Nations Office on Drug and Crime (UNODC), put the figures at two million opiate-users, 8.7 million cannabis-users and 62.5 million alcohol users of whom between 17 and 20 per cent

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were dependent users(Sethi A, 2006). WHO estimates that globally 25 to 90 % of children and adolescents indulge in substance abuse (WHO, 1997).

According to the 2001 Census, India is estimated to have more than 449 million children below the age of 18 out of which 35 million children are in need of care and protection. A large proportion of these children suffer in the quagmire of apathy and alienation, suffering from the worst forms of deprivation and abject poverty and are victims of various forms of exploitation and abuse. Substance abuse is one of the most serious problems among these children.

One of the Delhi Based NGO called Prayas Institute of Juvenile Justice conducted a Nation wide survey to study the situation of child abuse in India. The study was spread across 13 states of India including Delhi, Rajasthan, Madhya Pradesh, West Bengal, Mizoram, Kerala, Andhra Pradesh, Gujarat, Bihar, Uttar Pradesh, Assam, Maharashtra and Goa. The study covered 12,447 children from different socio-economic strata and nearly 2342 young adults and 23,494 adults in both rural and urban areas. They found that 32.1% children, below the age of 18, have tasted alcohol, bhang, ganja, heroin or other form of narcotics. It reveals also that 70.3% of those children have been first exposed to one or the other form of drugs by their friends and relatives and 11.7% by their parents (Prayas, 2007). Apart from this survey there are no major surveys covering a huge number of child population. Over the last fifteen years there has been several numbers of micro studies. Media has also been focusing on this issue. A brief summary of selected studies to show the prevalence of substance abuse across different strata of children all over India is presented in Table: 1.

It is significant from these studies that the children are important victims of substance abuse problem in India. Substance abuse problem affects all categories of children who live in tribal, rural and urban India. However there are some slight variations like in the enormity of the issues, like the higher prevalence rate among the street based and slum based children compared to school going children. The studies also show that the prevalence of substance abuse is higher among boys compared to girls and also the prevalence of use of substances among urban children are high compared to the rural children. Most of the children getting into substance abuse were in the adolescent age group, which is a crucial period for exploring new things in life. The age of onset for using substances is quite early among the marginalized children compared to school going children. Benegal et al, (1998) showed in their study that, street based children start off with tobacco use when they are 10-11 yrs when they are little older they graduate to use inhalants. By the time they are 13 yrs old the use of inhalants tapers off and they start experimenting with alcohol and illicit drugs like cannabis, brown sugar etc.

TABLE-1- PREVALENCE AND TYPE OF SUBSTANCE USED BY CHILDREN IN INDIA

S.No	Author and Year	Place	Setting	Age Group	Total sample		Key Finding
					Boys	Girls	
1	Kapoor SK, et al (1995)	Haryana	School and college	NA	1130	256	The prevalence in males was 14.2% compared to 2.3% in females. The prevalence of current smokers was 7.1% Smokeless tobacco use was nonexistent. Similarly there were no rural-urban differences.
2	S.Krishnamurthy etal (1997)	TamilNadu, Gujarat Bangalore, Karnataka	Urban slum and rural area	NA	NA	NA	Tobacco chewing/applying (44% boys, 63% girls) or using snuff (51% boys, 64% girls). Nearly 50% of rural children, boys more than girls, experiment with tobacco, mostly as snuff (nashyna, chhinkni) even by 10 years of age; (ii) Snuff use decreases, while smoking and chewing increase with age;
3	Benegal et al, (1998)	Bangalore	Street	7 to 20 yrs	N=281 (81.90% boys)		Erasex (solution) (11.28%), Adhesives (2.0%), paints and Thinners (1.5%), Petrol (9.1%), smoking tobacco (76%), Chewing Tobacco(45.9%), cannabis (15.7%),and Opiods (2%)
4	Patel S et al (1998)	Baroda	School	14-17 yrs	964	38	38 out of 964 students reported to be smoking, using smokeless tobacco, alcohol and cannabis.
5	Karmakar, T (1998)	Calcutta	Street	NA	2416	NA	Out of the total sample, 39.3% were substance abusers among whom 54.2% females were addicted to depressants and 42% males were addicted to cannabis.
6	Singh et al (2001)	Ludhiana,	School	15-16 yrs	N=100		68% ever used alcohol (at least once)
7	Kapil et al (2005)	New Delhi	School	10-18 yrs	2387	1816	Among boys prevalence of use of alcohol:1.4% betel leaf:10.9%, Tobacco:2.1% and among girls prevalence of use of alcohol:1.6% betel leaf: 7.9% Tobacco:1.1%.overall chewing betel leaf is very high (10.2%) among the respondents.
8	Pagare et al (2003)	Delhi	Observation home	6-16 yrs	115		57.4 % indulged in substance use anytime in their life. The different type of substances consumed were Tobacco44.4%, Inhalants 24.3%, Alcohol 21.8% and Cannabis 26.4%
9	Singh, G et al (2005)	Patna, Bihar	School	10-12 yrs	1027	599	16.6% were found to be ever users. The prevalence of current use of tobacco use among boys (6%) and Girls (3.2%).Smokeless tobacco use was higher than that of smoking.
10	Singh,V et al (2006)	Jaipur	School	13-18yrs	2866	939	2.1% (59 boys) 1.7% girls (16 girls) current use of Tobacco.
11	Juyal.R.et al(2006)	Dehradun	School	14-17 yrs	684	410	642 students (58.7%) were found to be ever users, while 343 (31.3%) were regular users. The prevalence of substance use was higher in urban students (37.9%) as compared to rural students .The substance use was significantly high among the male students (45.8%) as compared to the female students (7.3%).

12	Ahamad lone etal (2006)	Jammu Kashmir Rural	Village community	50% were in 11-20 yrs	N=5000 males from 50 village		The average onset for substance use was 10.1 yrs. The most common pharmaceutical drugs used were codeine (n=20), pentazocine (n=18), diazepam (n=12), alprozolam (n=5) and buprenorphine (n=3).
13	Nanda,S, et al (2006)	Orissa	Tribal community	10-19yrs	-	93	77% were addicted to Khaini, Gutka, 68% with fermented fruits , 31% to mohuli, 24% to salpa
14	Asian Age (2006)	Children working in 8 Railway platforms from New Delhi to Bhopal	Street based	71.3% less than 14 yrs	607	77 girls	40% were between 11-14 yrs. 45 % of the children were addicted to some drugs. Observed that the most popular substance taken by children wandering throughout the railway track is Solution (correction fluid) pored on a cloth piece and sniffed. Other popular drugs are Charas, Ganja, Smack, liquor, cigarette, Gutka and rubber adhesive, it was discovered.
15	Malhotra,C etal (2007)	Delhi	Observation home	13-17 yrs	34	-	Qualitative study: Children described different types of substances used by them were smokeless and smoke tobacco products: gutka, khaini, kuber, beedi, cigarrete. Canabis: bhang, charas, ganja Volatile substances:glue, spirit, petrol and shoe polish. Drugs: Morphine, fortwin, avil, phenargan, codiene syrup, proxivon, iodex, heroin, atypical products: dried tail of lizard, snake oil and sting of wasp.
16	CHETNA(2007)	Migrant children from Bihar, UP and Rajasthan	Urban community based	8-18 yrs	63	-	73% are drug addicts 47 percent of the children were addicted to at least three or more drugs. Correction fluid is the most commonly used drug among the children. Most of them sniff the solution. The children begin tasting drugs by using gutka, then move on to correction fluid, smack and ganja.
17	Tiwari,P (2007)	Delhi	Observation home	6-16yrs	400	-	Prevalence of tobacco smoking 26%, alcohol 16.7% chew tobacco -8.5% and drugs(bhang, charas:8.25%)History of sexual abuse, suicide-depression, -10% attempted once and 1% 2-3 times.
18	Saluja etal (2007)	Chandigarh	Clinic	7-18 yrs	N=85 with complete records		76.2% opiods, heroin 36.5%, cough syrup 12.9%, tobacco 6.0% , inhalant: 4.7% and 21.2% involved in high risk behavior have sexual intercourse.
19	Ahmad etal (2007)	Aligarh	School (rural and urban)	10-19 yrs	N=410 (205-rural and 205 urban)		Substance abuse was minimum (4.8%) in the 10-13 yrs age group, followed by (18.7%) in the 14-15 yrs age group and maximum (20.9%) in the 16-19 yrs age group. The rising trend of substance abuse with age is highly significant.
20	Gururaj, G etal (2007)	Karnataka	School from 12 districts (urban and rural)	13-15yrs	N=4110		Current tobacco use was predominantly a male feature and use of smokeless variety predominated (transitional Kamataka (8.2%); metropolis (6.8%); rural (3.4%). One third of current tobacco users (30.8%) purchased tobacco product in a store and one-fifth used it at home. smokeless tobacco were more compared to smoke tobacco among the boys and girls.

21	Sarang et al, 2008	Sambalpur, Orissa	Urban Slum	10-15 yrs	297	205	Substance abuse was prevalent among 49.5% boys and 34.6% girls. Types of substance abused were Gutkha (91.7%), powdered tobacco (71.1%), tobacco toothpaste (Gudakhu) (63.8%), smoking (26.6%), and alcohol (14.7%).
22	Gaidhane, et al (2008)	Bombay	Street based	12-18yrs	163	-	132 (80.98%) were substance abusers; 52 (31.9%) had been sexually abused and 87 (53.3%) had been physically abused. Almost three-quarters (70 %) of all substance users wanted to quit and about 40% had tried to quit.
23	Harish V Nair (2008)	New Delhi	Observation Home	6-16 yrs	244	-	About 51.28 per cent of the juveniles with positive history of substance abuse are suffering from withdrawal symptoms, which included pain, aches, dizziness, depression and insomnia.
24	Majira, JP et al (2008)	East District of Sikkim	School	13-15yrs	517	495	42.1% boys and 17.0% girls used tobacco. Cigarette smoking was more fashionable among boys (28.6%) and smokeless tobacco use was common amongst the girls (11.9%).
25	Tsering, D and Pal, R (2008)	West Bengal	School	13 to 15 yrs	N=462		Overall prevalence was 9.61%; the prevalence among urban and rural students was 11.05% and 8.61%, respectively. Tobacco use among males (urban = 11.35% and rural = 15.04%) was higher than that among females (urban = 9.68% and rural 0.90%).
NA_ means information not available.							

The studies show that the school going children are using mostly tobacco and alcohol, where as the out of school children especially the street based, slum based and child laborers are at a risk of experimenting with most dangerous substances both licit as well as illicit in nature. Ahmad et al (2007) showed in his study the rising trend of substance use with age was significant.

From these studies we could see that most of the children are using tobacco products, alcohol and inhalants. Alcohol, tobacco and inhalants are described as gateway drugs, which supposedly causes its users to move on to harder drugs (Meyers and Petty, 2008) In case of street children and migrants children it was observed they usually start with tobacco products then get into inhalants, alcohol and move onto harder drugs like ganja, charas, heroin, opioids etc (Benegal V et al 1998; Malhotra C 2007, CHETNA, 2007) . All the gate way drugs are easily available to the children. Moreover they are not ‘illegal’ and very less recognition that these substances can cause severe addiction. There is a common misconception is that something is not a drug unless it is illegal.

Whatever type of substances children indulge in, it creates a huge hindrance for survival, protection, growth and for their healthy development. On regular use of any of these substances, the body develops tolerance for it. Tolerance refers to the condition where the user needs more and more of the drugs to experience the same effect. Smaller quantities that were sufficient earlier are no longer effective and the user is forced to increase the amount of drug intake. This increased amount of consumption, eventually leads to psychological and physical

dependence. Psychological dependence is a state characterized by emotional and mental preoccupation with the effects of the substances and a persistent craving for it. As psychological dependence develops the user gets mentally hooked onto the drug. When physical dependence develops, the user's body becomes totally dependent on the drug. With prolonged use, the body becomes so used to functioning, under the influence of the drug that it is able to function normally only if the drug is present (Ranganathan S, et al, 2008). When physical and psychological dependence increases they are get into a phase of chronic addiction.

Addiction is the only disease where the victim does not fully realize the enormity of the problem. The stigma associated with drug use, the guilt and shame resulting from inappropriate use and the lack of awareness about the impact of drugs on their health and behavior— all these lead to a denial of the problem of addiction. Addiction to substance abuse especially among the vulnerable children can directly contribute to high risk lifestyle. As noted by Benegal et al (1998) and Tiwari P (2007) in their study, these children get into illegal activities like gambling, drug peddling, pick pocketing, stealing, fighting, rape and self directed aggression causing self harm to slash themselves with sharp objects especially when they are intoxicated. Some of the children reported to undergo severe depression and attempt suicide. Another important finding Benegal's study is that the children or forced into or paid for or offered drugs in exchange for sex. There was nexus between street children and commercial sex workers, many of whom abused drugs or alcohol. Children are made to act as pimps or go between in exchange of money, drugs and shelter and sexual favours. Children who get into substance abuse problem are easily prone to delinquent behavior and anti-social activities. They can also easily become victim of HIV/ AIDS and other sexually transmitted infections, when they involve in unprotected sex under the influence of substance.

From the studies reviewed, we come to know that children mainly use six categories of substances:

- A) Stimulant: These drugs, excites or speed up the central nervous system. Both smoke and smokeless forms of tobacco products belong to this category.
- B) Volatile Solvents: These are most cheaply available drugs particularly for the street based children. Correction Fluid, paint, thinners, petrol and glue are the commonest forms abused. The correction fluid is highly used by the street based children ,it contains a lethal chemical called toluene
- C) Depressant: These substances depress or slow down the function of the central nervous system. All type of alcohol products belong to this category. Usually the children tend to use the cheapest forms liked brewed liquor, beer etc
- D) Cannabinoid: Cannabis drugs are made from Indian hemp plant- Cannabis sativa. This plant has mind altering properties. The main products under this category are Bhang, Charas and Ganja. These substances are

illegal. Street based and slum based children are used for peddling these drugs by mafias sometimes. Significant number of street children found to be addicted to these drugs.

E) Narcotics: 'Narco' means 'to deaden' or benumb. The narcotic products have the property of numbing and thus relieving pain. Narcotics of natural origin (eg.opium, morphine, codeine), semi synthetic (eg.heroin) are referred to as opiates. The synthetic narcotics known as opioids (eg. Buprenorphine). A significant number of street children get addicted to narcotic substances like heroin, opioids and codeine.

F) Prescription Drugs: It has become a common phenomenon, due to easy availability of these pharmaceutical drugs; it is purchased and used by children. Cough syrups, pain killers and sleeping pills are commonly abused by children.

Table -2 describes the types of substances abused by the children, the immediate intoxication effects and the adverse health consequences it can create. As shown in the table that all the substances creates a short term euphoric feeling, a sense of pleasure and relaxation. These short term effects may hinder the user to perceive the long term consequences. However, with more regular use tolerance and need for using substances regularly develops this creates several health problems. The health consequences are quite severe; these substances act as a slow poison which kills a person as the quantity and period of intake of substances increases.

Table-2 TYPES OF SUBSTANCES ABUSED, THE IMMEDIATE INTOXICATION EFFECTS AND THE ADVERSE HEALTH CONSEQUENCES FOR THE CHILDREN

Name of the drug	classification	commercial and street names	Route of intake	Intoxication effects (short term)	Adverse health consequences
Tobacco (Nicotine)	Stimulant	smoking and smokless Tobacco-beedi, cigarettes, snuff, nashyna, chhinkni, gutka, khaini, hukka kuber, pan parag, chutta , podi, nasim powder etc	They are consumed by smoking cigarettes, pipes, or cigars or by chewing smokeless tobacco, sniffing through nose.	Heightened feeling of well being , relaxation and euphoria , a sense of super abundant energy, increased speech and motor activity, suppression of appetite, increase wakefulness that masks the feeling of fatigueless	Chronic sleep problems, agitation, tremors , poor appetite , high blood pressure, lung and respiratory damage, muscle wasting, peptic ulcer, cancer, impotence cardio vascular diseases and moderate to severe depression
Inhalants	Volatile solvents	Solvents -paint, varnish thinners, gasoline, glue, correction fluid, erasex, solution, petrol, spirit, shoe polish, rubber adhesive, markers, nail polish remover etc	They may be breathed in through the nose ("sniffing") or through the mouth ("huffing").	Euphoria(a dream like state), clouded thinking, slurred speech, loss of motor coordination, nausea, vomiting, loss of inhibition, hallucinations in the case of 50% of abusers.	Rashes or sores around the mouth or nose, red or runny nose or frequent nosebleeds,, cramps, weight loss often accompanied by decreased appetite, restlessness ,anxiety, irritable behavior, muscle weakness, depression, suicidal tendencies, inability to concentrate , confused state , headaches, persistent cough, tremors, gradual memory impairment, permanent damage to cardiovascular and nervous systems, liver , kidney, lungs , brain that can result in unconsciousness and sudden death can occur irregular cardiac activity (tachy cardia -increased heart beat)or suffocation.

Alcohol	Depressant	Beer, whisky, rum, brandy, wine, pattai, sarayam, arrack, Kallu, mandhu, gudumba etc	taken orally	Lower inhibitions, create mild feelings of well being, dilates blood vessels in the limbs causing body to relax, feeling sedated, poor motor coordination, sense of disorientation and confusion, impaired concentration and judgment , blurred vision, slurred speech nausea, , vomiting, headaches, when continuous drink can result in unconsciousness.	Wernike-korsakoff syndrome (disorientation , peripheral nerve damage, loss of muscular coordination and horizontal rapid eye movements) , Alcohol dementia (disturbances in thought and memory), alcoholic psychosis, chronic sleep problems, digestive system disorders, gastritis, peptic ulcer, Pancreatitis, liver diseases, malnutrition, hormonal disorders, severe depression, suicidal tendencies, heart disease, muscle wasting, cancer, tremors, and sexual dysfunction
Cannabis	Cannabinoid	Bhang, Charas, Ganja, hash, hasish	Ganja and Charas is usually smoked through pipe or hand rolled cigarette and Bhang is brewed with milk and drunk.	Mild euphoria followed by a dreamy state of relaxation, lowering of inhibitions, spontaneous laughter, increased auditory and visual acuity, sense of smell , touch is often enhanced, altered sense of time perception ,disturbed thought patterns , poor concentration, nausea, dizziness and vomiting	Amotivational syndrome (may loose interest in all his work, cannot focus or remain goal oriented, , suffer from acute psychotic episodes -confusion, delusion, hallucination, disorientation and paranoid symptoms may occur, sterility, respiratory infections like bronchitis, asthma, sinusitis, reduces immunity by impairing a component of the white blood cell defense system and also increases the risk of cancer.

Heroin	Narcotics	smack, brown sugar, dope	Injected, inhaled and chased	Short lived state of euphoria during which time , hunger and pain are not felt, mental clouding impairment of intellectual process, drowsiness, apathy, sedated feeling, decreased physical activity, itchy skin, inability to concentrate and constipation	Mood instability, reduced libido, constriction of pupils which affects night vision, respiratory impairments, stomach cramps, excruciating pain in the bones and muscles , depression, suicidal tendencies, menstrual irregularity in case of women and risk of acquiring HIV and Hepatitis while injecting infected needles, sudden death.
Codeine, Iodex, Avil, Proxyphene , Proxyvon, Fortwin, Morphine, Nitrazepam	Prescription Drugs	Cough syrup, sleeping pills , pain reliever , pain balm	Taken orally, injected, taken along with other soft drugs	Lack of hunger and pain, nausea, sedated feeling, apathy	Mood instability, reduced libido, constipation, respiratory impairments, physical deterioration, coma, over dose can cause convulsions and death.

Source: 1. Ranganathan, S et al (2008) Drug Addiction :Identification and Initial Motivation-A Field Guide for Service Providers and Trainers, T.T.Ranganathan Clinical research Foundation, Chennai.

2. Kaur and Gulati (2007) Drug Abuse: Trends and Issues, paper presented in International Marketing Conference on Marketing and Society, 8-10 April, 2007.

3. Drug of abuse Classification and Effects Available at <http://www.addictionindia.org>

Challenges in Addressing Substance Abuse Problem among Children in India

Substance abuse is a growing menace affecting children from all segments of the society. The problem causes an additional burden in the lives of the children living in vulnerable conditions. There are several challenges involved in addressing this problem especially in the case of marginalized and vulnerable children in India. The substance abuse problem in their case, cannot be viewed in isolation as it is intertwined with other health and social problems, such as those related to discrimination, stigmatization, unprotected and unwanted sexual behavior and violence.(GOI, WHO , UNDP , NACO , 1996).

Being neglected by the family, as their parents lack resources to provide protection and care, many share the burden of the family at a very young age. The children are forced to work for very long hours and suffer from excessive fatigue, and remain susceptible to infectious disease due to poor nutritional status. Stunted growth is common among these children.(Gowri RA and Manjusha CH, 2003). They engage in work that are too demanding to their size and strength, causing irreversible damage to their physical and physiological development, resulting in permanent disabilities, with serious consequences for their adult lives. They are subjected to all kinds of occupational hazards and diseases. They are extremely vulnerable because of their growing bodies, their lower threshold for toxics and their lesser ability to respond effectively to hazards. Added to these, when they consume harmful substances it affects their immunity and causes serious health hazard. These children are constantly denied of prospects to live healthy and creative lives.

Then there are social-legal challenges that they face. Children and adolescents who live on their own in the streets are also detained illegally, beaten and tortured by the employers, police and the society to extract maximum labour out of them. Rag picking, shoe shining, working as coolies, working in shops and restaurants, road side vending, cleaning and washing utensils in *kalayana mandapam* are some of the works they take up for their survival. These children work for long hours in these occupations which are termed 'honest' work. When there are no means for an honest living, they sometimes engage in petty theft, drug trafficking, prostitution and other 'dishonest' or criminal activities. Yet there have been very few attempts to examine the causes of such activities and to rehabilitate them.

These vulnerable children are also easy targets for police atrocities. The authorities forcibly remove these children from the streets, often to incarcerate them, and sometimes chased away through violent measures. Gross abuses are often quietly sanctioned against them. There are reports of street children being beaten, tortured and even murdered by police (HRW, 1996). Children and adolescents who have been physically maltreated are more likely to use substances (Joseph TF, et al 2005; Tiwari P, 2007) These marginalized children not only under physical mal treatment; they also undergo severe emotional abuse and sexual exploitation(Banerjee SR, 2001; Pagare D, et al 2005). They face several challenges in their day to day life regarding food, safety, employment, shelter and medical care and go through pain, violence and stress everyday.

They start taking drugs to overcome their loneliness and to escape their harsh realities in life.(Karmakar T, et al, 1998) The predominant reasons cited by the children for intake of drugs in one the study is to overcome homesickness, to cope up with hard weather conditions, to over the pain of exploitation, and sexual abuse and the compulsion to spend money (Asian Age, 2006). Using drugs also numbs their hunger pangs when food is not available to satisfy their hunger (Paniker R, 1998). So the substance abuse problem in marginalized children in India cannot be solely treated as a medical problem, while dealing with the problem it requires an in depth understanding to deal with its social and economic determinants.

Programmes and Interventions

India has been signatory to all International Conventions and has set up necessary legislative structures and other structures to fight drug menace as well as protection of child rights. India has also brought out some measures in enforcement, legal and judicial systems to protect children from substance abuse (Refer Box:1 for Constitutional Guarantees for child protection against substance abuse in India). Despite the commitments to International Conventions, the Constitution providing for most important rights, a national policy, several laws and schemes for Child Protection, there has been lack of seriousness with regard to these implementing at the ground level.

BOX:1: Constitutional Guarantees for child protection against substance abuse in India

Article 33 of the **UNCRC** provides children with the right to protection from the use of drugs, and from being involved in their production or distribution.

"States Parties shall take all appropriate measures, including legislative, administrative, social and educational measures, to protect children from the illicit use of narcotic drugs and psychotropic substances as defined in the relevant international treaties, and to prevent the use of children in the illicit production and trafficking of such substances

The Narcotic Drugs and Psychotropic Substances Act, 1985

This act declares illegal the production, possession, transportation, purchase and sale of any narcotic drugs or psychotropic substances and makes the person, addict/trafficker liable for punishment.

Use or threat of use of violence or arms by the offender, *use of minors for the commission of offence*, commission of the offence in an educational institution or social service facility are some of the grounds for higher punishment.

- The Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988

Under this law, people who use children for drug trafficking can be booked as abettors or conspirators to the act.

- Juvenile Justice (Care and Protection of Children) Act, 2000

Section 2 (d) includes in the definition of a 'child in need of care and protection' children vulnerable to or likely to be inducted into drug abuse or drug trafficking.

Source: Drug abuse among Children, Child Line India, <http://www.childlineindia.org.in/cr-drug-abuse.htm>.

Since 1991 WHO has made serious initiatives to launch street children projects in 8 countries with the aim of improving health, welfare and quality of life among children, especially those who live on the streets. WHO has been keen to strengthen the research capacity in developing and transitional countries to develop an evidence base for effective policy and programming on drug abuse prevention among vulnerable children and youth (Rey, DM, 2000).

A National Master Plan for substance abuse was evolved in 1994 which focuses on the, establishment of treatment and rehabilitation centres, training of primary care doctors and other personnel in substance abuse. This plan also ensured collaboration with non-governmental organisations to carry out education and awareness building programmes. There are currently about 359 counseling centres for substance abuse prevention in India. The government also finances more than 50 NGOs, which are engaged in substance abuse prevention activities (Child Line India, 2008). But most of these NGO's are private run and they specifically cater to adults who are addicted to substance abuse.

Though there are initiatives and programmatic interventions from governmental and non governmental agencies regarding drug abuse in general, very few of these interventions address the problem of substance abuse among children. Many NGO's are engaged in creating awareness on substance abuse prevention for children. But very few specialized facilities for children exist to deal with substance induced problems of children. These facilities are less child friendly as they are mostly attached to Psychiatric and Pediatric departments of various medical colleges and other special institutions. These also differ in their structure, functioning, and in the available therapeutic facilities, and are mostly situated in urban areas. There are practically no facilities available in the rural areas to help children suffering from substance abuse. Very few NGO's in India have explored new initiatives to address substance abuse problem among the street children.² However, with the limited resources these NGOs can contribute only little. The Government has greater responsibility to pool in resources to implement large scale programmes to address this serious problem.

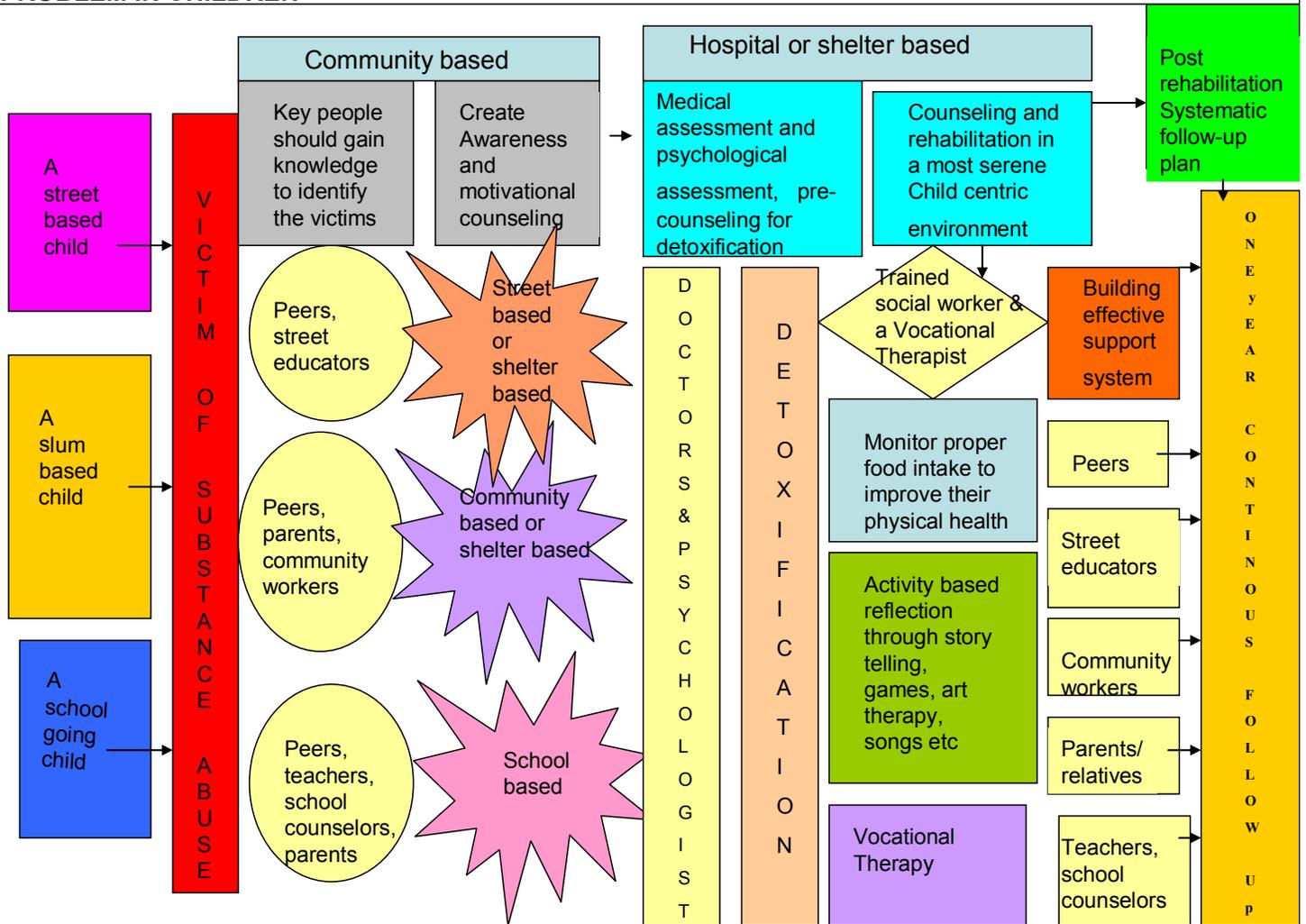
² SUPPORT and SHELTER Don Bosco in Mumbai has developed residential based rehabilitation programme for street children and homeless youth to give up their drug habit and reduce risk behavior through a process of detoxification, rehabilitation and mainstreaming. Their information can be accessed from their web site <http://www.supportstreetchildren.org> and <http://www.shelterdonbosco.org>. There is a Bangalore based NGO called SAATHI also developed a Camp based methodology where they also rehabilitate children with substance abuse problem but their programme is not exclusively designed for this purpose. Their objective is more towards home placement of the child. Their information can be accessed from <http://www.sathi-india.org>.

A Comprehensive Model for Substance Abuse Intervention among the Children in India

Most of the children start using substance to satisfy their curiosity or to have fun with their peers without knowing its future consequences. In case of the street based and slum based children the studies have shown that substance abuse plays a functional role in their daily lives. They start using substances to escape and reduce stress, daily problems as well as serving cure for their emotional and physical pain. It also mainly serves as a recreation role and consolation for lack of access or absence of support systems and services. These children lack financial resources and guidance to seek help at right time to get out of the problem. Timely help and appropriate intervention programmes can protect lives of many children.

The current intervention programmes to deal with substance abuse problems among children lack comprehensiveness in its approach. Many prevention programme limits itself with creating mass sensitization about the issue without adequate follow-up measures. Treating children afflicted with substance abuse mostly based on the bio-medical and behavioral modification approach. They also lack child centric approach. While addressing the substance abuse problem, especially among the marginalized children, there need to be holistic, multidisciplinary and child centered programmes that would address the full spectrum of determinants in the complex Indian context. A comprehensive model for substance abuse intervention among the children in India is presented in Figure :1.

Figure : 1 A COMPREHENSIVE INTERVENTION MODEL TO DEAL WITH SUBSTANCE ABUSE PROBLEM IN CHILDREN



It is an arduous task to identify children who are addicted to substance abuse. When children get into substance abuse problem, they remain secretive about their behavior, fearing their parents and elders. Until there are manifest impacts on their health or involvement in unwanted violent behavior or accidents caused under the influence of substances, no one will know their substance abuse habits. While in the case of children on streets, who are cut off from the family system and school system their problem could be even more serious.

The first challenge is to identify the children who have become victims of substance abuse. For this community based intervention programme needs to be implemented. This community intervention programme should be participatory in nature, where all those who are closely associated with children at personal as well as professional level are involved. Until those who are closely associated with the children understand the

substance abuse problem and related symptoms, it is quite difficult to trace the children, as the children are quite inhibited to seek help on their own.

The community based programme can be designed as per the needs of the specific child population. For instance, in the case of street children or slum children, one has to reach out to their community where they are prominent. Innovative strategies like street play methods can be used to create awareness. In case of schools A regular substance abuse awareness programme can be organized by school teachers or the school counselors in their own premises. The overall aim of the community based programme should not be limited to create sensitization for parents, school, community and peers on the issues of substance abuse problems and its consequences. It should be followed by tracing the children who are into substance use/abuse and start early intervention programmes, which increase the chances of early prevention of substance abuse.

Motivating the children to undergo treatment to quit the substance abuse may not be a simple task, particularly in the case of street children. Regular contacts with them on the streets, motivating them through peers, organizing motivation camps combined with counseling, providing them with clear information and communication about consequences and benefits of recovery, are of prime importance. Once the children with substance abuse problems are identified, they require professional help to recover from it. They need to undergo short term or long term treatments, depending on the severity of the substance abuse problem.

The treatment strategy to deal with substance abuse problems in children and adolescents should be different from dealing with adults. The professionals should empathetically assess the needs of the children and ensure that every stage of the programme is child centric. Conscious effort should be taken to create conducive child friendly atmosphere. Particularly the physical environment of the treatment centre should be non-threatening and not too 'hospital like' to avoid the child feeling that s/he is a 'patient'. Every person who deals with the child should be understanding and non judgmental. This will help the child to trust, open up, accept the treatment and discuss the problem freely.

After the medical assessment, detoxification is the first step in the treatment of substance abuse. Abruptly stopping substances can result in withdrawal symptoms and can be physically dangerous to one's health. Detoxification is the process of safely getting out of the drugs under medical supervision. After detoxification, the person may become stable as the craving for intake of drugs is reduced and the body slowly regains its normal condition. Once the person is stable, psychological assessment has to be carried out to rule out any associated mental health problems.

Many times the treatment approach is limited to this level with the short counseling session without dealing with the complexities of related problems in life of the substance abused child. It is very important that the treatment approach should not limit itself to mere bio-medical nature of intervention or using counseling strategies to modify or change the behavior of the children. Even while counseling a child, the traditional counseling approach only through 'talking' and listening' will not help, because children are often withdrawn, scared as they undergo confusions of guilt and fear. Rather than forcing an emotionally withdrawn child for a conversion, one has to adopt innovative methods to help the child to express through art, story telling, music, drama, writing etc. The treatment process should be participatory and reflective in nature. The medical treatment should be combined with self exploration, self expression as well as training them on life skills, vocational skills, academic skills, coping up strategies, sports, recreation etc; and all these should become part of therapeutic process.

To carry out this comprehensive treatment process one requires a multidisciplinary team. A team that comprises of medical doctor, nursing professional, child psychologist, counselor, social worker and vocational therapist would be ideal to contribute their professional skills to implement a substance abuse prevention programme for children. The medical and mental health professionals may limit their role to medical, psychological assessment and detoxification. The role of social worker is very crucial after this stage to assess the impact of substance abuse at various facets of life; especially, social, familial, educational, life skills, financial and behavioral deterioration that has occurred as a result of substance abuse. The social worker also takes the responsibility to identify the appropriate support system for the child as this would play a key role in the pre and post rehabilitation process. The social worker along with the child and the support systems should plan remedial measures for the process of recovery.

Support systems like peers, parents, well wishers, community workers, teachers or any one who has genuine interest and concern about the welfare of the child should be integrated as part of the pre and post rehabilitation process. Particularly, the social workers and peers form an important support system in case of children rescued from streets and those who lack total support of family systems. These children may require a long term care in the institutional setting because the complexities of their problems are higher as they constantly face the hostility of the society and miss other protective mechanism when compared to those children living with stable support systems. Teaching life skills, vocational skills, occupational skills should constitute an important part of rehabilitation process especially for the marginalized children who are school drop outs and who cannot get

back to mainstream education. The role of vocational therapist is vital to teach the vocational skills to eventually help these children to lead a normal life back in the society.

While reintegrating the 'street child' back to their family in the post rehabilitation process, the social worker needs to counsel the family members to make them understand about the factors that forced the children to come on to streets and how they developed they got into the problem of substance abuse. They need to be told not to victimize or demoralize the child's behavior.

For those who underwent treatment for substance abuse, recovery remains a life long process. The chance of falling back to substance abuse or getting relapsed is quite high. To prevent this, consistent monitoring and guidance from the support systems and follow-up through continuous contact by the counselor/ social worker at-least for a year is crucial and vital for better recovery of the child.

Protecting Children from Substance abuse-A critical need to achieve Millennium Development Goals

The problem of substance abuse among children poses grave challenges to the achievement of United Nations' Millennium Development Goals. Many of the MDG directly or indirectly deal with protection of children, such as targets to reduce child mortality, maternal mortality, increasing enrollment at primary education level, reducing extreme level of poverty-to check others.(United Nations, 2008). In the above discussion we saw many children who become victims of substance abuse also lack opportunity to acquire skills to progress in life when they face serious health consequences. These children get into vicious cycle of exploitation, poverty and poor health. This situations challenge to achieve the MDG1 which aims at eradication of extreme poverty and hunger.

We understand that most of these children affected by substance abuse were illiterates and were school drop outs. When they continue to take substances and in the absence of early intervention measures to protect them or to rehabilitate them, they would remain as school dropouts without acquiring further skills to progress in their life. The school children who get into substance abuse can face serious impact on their studies to have decrease interest in studies, drop in grades, negative and violent behavior, truancy, frequent absenteeism and may become drop outs. in schools In that case, there will be definite failure to meet the MDG which aims for primary education for all children by 2015.(MDG-2) .

MDG-4 aims at reduction of child mortality and MDG -6 aims at combating HIV /AIDS, Malaria and other diseases. A combination of high risk behavior to engage in sexual activities and consuming harmful substances

under the influence of intoxication has direct implications for their cognitive and physical development. The child who is a victim of substance abuse continuously faces the risk of acquiring HIV and other diseases too.

Children with out social and familial protection are vulnerable for sexual abuse as such. This is exacerbated under the influence of drugs. Studies also show that the street children engage in high risk sexual behavior at a very young age under the influence of substance. In both the case the risk of acquiring HIV or any other sexually transmitted infections is very high. Moreover absence of family members to provide adequate care and as well as social exclusion that denies them proper access to medical care can increase the chance for these children to become chronically ill and face early mortality.

Apart from these, girl children who are affected by substance abuse have higher chance of getting sexually abused and the risk of becoming pregnant. When a young girl who is 12-14 yrs old becomes pregnant there is also an increased risk that she may die in childbirth or during pregnancy. MDG 5 is aimed at the improvement of maternal health and reducing the maternal mortality rate by three quarters by 2015. Pregnant women of all ages are at risk, but young girls living on the streets are even more so.

There is increased focus on prevention of infant and child mortality (under five), even in the MDG goals. Protection of children health should be viewed as a continuum throughout their growth period. There is no record to show the magnitude of morbidity and the mortality of the children affected by substance abuse.

Overall the substance use in children and adolescents can harm the healthy development of the body, brain, and behavior (Toumbourou JW, et al 2007). Often children cannot see the link between their actions and consequences, this put them into high risk of getting into multiple problems. There is thus an obvious need to target this special group in order to reverse this trend. Preventive efforts in children and adolescents will directly result in the reduction in substance use in adult populations, as the majority of adult drug users begin some form of drug use while still in their teens. The powerful influences of habit and addiction, made greater by their extended length of drug use, are more likely to make them resistant to cessation interventions at the later age (Sharan P, 2006). There is a clear need for comprehensive early intervention programme to protect the children from substance abuse and to prevent them getting into the cycle of poverty, disease, crime and addiction.

For the meaningful achievement of Millennium Development Goals, we need to ensure that every child right has to be protected and we must continue to reaffirm that we are determined to translate all the rights to specifically protect children from substance abuse menace into their daily lives. Understanding the issue of

substance abuse problem holistically and plan appropriate actions to intervene as early as possible is very crucial to create a 'fit world' for children and to restore their rights for protection from substance abuse. Until children are protected from substance abuse and appropriate 'child centric' rehabilitation measures are implemented, it will not be easy for many children in India to regain their capabilities to achieve their fullest human potential which is very important to achieve the Millennium Development Goals.

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