

# Latest Trends of Substance Abuse among Teenagers: An Original Research Study at a Tertiary Health Care Centre in Northern India

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## Abstract

**Introduction and Purpose:** The current situation of drug abuse and dependence in the adolescent age group is becoming a global hazard and also in India. Many studies have revealed various risk factors which are usually responsible for drug abuse in children of substance abusers, peer pressure, especially depressed and suicidal teens and sometimes peer pressure. Hence in this study, we tried to estimate the extent, pattern, and trends of drug abuse among adolescents at a tertiary health care in Northern India.

**Materials and Methods:** This study was a survey-based study conducted after approval of the ethical committee at Shri Guru Ram Rai Institute of Medical and Health Sciences and Attached Hospital in Dehra Dun, Uttarakhand in the department of psychiatry in Indoor Patient Department as well as in De-addiction center and it was conducted under the guidance of Department of Forensic Medicine and Toxicology.

**Results:** In our study out of 50 cases 47 (94%) individuals were male. Most frequently abused substance by adolescents was Tobacco (36%) followed by Cannabis-derived substances such as Charas, Ganja (22%). In this study, the most common age group for substance abuse was 16–18 years (40%) and about 62% of the subjects initiated before 15 years of age.

**Conclusion:** The authors suggest that the availability of such substances should be totally prohibited by stringent laws. Furthermore, counseling centers and call centers for teenagers who wish to confess and give up such substance abuse. If such steps are taken then the future of India will be in safe and secure hands.

**Key words:** Adolescents, Cannabis, Drug addiction, Opioids, Peer pressure, Substance abuse

## INTRODUCTION

Substance abuse as identified is a process of misuse of the various substances and drugs in various ways. Currently, the substance abusers are using a substance that is easily available such as pain killer ointments, thinners, cough syrups, and glue. Consumption of diverse substances has been in existence in India for many centuries since

antiquity. Indian religious text (Vedas), mention Somras and considered Cannabis as sacred plants and referred to it as “sources of happiness,” “joy giver” and “liberator.”<sup>[1]</sup> It is said that Indian farmers gave it to their oxen to provide them strength to plough the fields. Many Sadhus or ascetics still use this drug to experience hallucination and a sense of timelessness and bhang drinking is well established social custom in many parts of East and North India.<sup>[1]</sup> The current situation of drug abuse and dependence in adolescent age group is becoming a global hazard and is also reaching at an alarming position in India. This increase is partially attributed to the aging baby boomer population who has had more exposure to drugs, alcohol and tobacco from a younger age, which is reported to be a risk factor for use and abuse of these substances in later years.<sup>[2,3]</sup> Many researchers in other countries have tried exhaustive

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research regarding this problem. Recently, such researches have also been initiated in our developing country, but very few researchers in North India have addressed this health hazard. Substance abuse needs to be addressed instantly because of shifting trends in the prevalence of substance use and the rising magnitude of the problem. Recently India has seen a drastic rise in adolescents who abuse drugs who are future of this country. Many studies have revealed various risk factors which are usually responsible for drug abuse in children of substance abusers, peer pressure, adolescents who are victims of physical, sexual, or psychological abuse, adolescents with mental health problems, especially depressed and suicidal teens and sometimes peer pressure. Hence in this study, we tried to estimate the extent, pattern, and trends of drug abuse among adolescents at a tertiary health care in Northern India

### MATERIALS AND METHODS

The project was found to confirm the institutional ethics committee regulations and was approved. This study was a survey-based study conducted at Shri Guru Ram Rai Institute of Medical and Health Sciences and Attached Hospital, a tertiary Health care center in Dehra Dun, Uttarakhand (Northern India) in the department of psychiatry in Indoor Patient Department as well as in De-addiction center and it was conducted under the guidance of Department of Forensic Medicine and Toxicology. The subjected population consists of 50 people both male and female of the age group between 13 and 19 years. Individual with only one substance abuse was included in the study. Individuals with multiple substance abuses were excluded from the study. A semi-structured proforma/questionnaire (annexure) was used to record age group, education, religion, gender, and locality of their subjects of the study.

#### Clinical and Substance Use Profile

This included the types of predominantly used substance, duration of dependence (onset marked from the year in which the patient first used the drug), treatments, and the other substances used. This profile also included list of different drugs used, frequency of drug abuse, and the form in which substance was taken.

### OBSERVATION AND RESULT

In our study out of 50 cases, 47 (94%) individuals were male. Education clearly seems to play a very important role in modeling our lives as our study found out that 39 (78%) individuals were uneducated. Our studies also depicted the fact very well. According to our study, the most common abused substance by adolescents was Tobacco (36%)

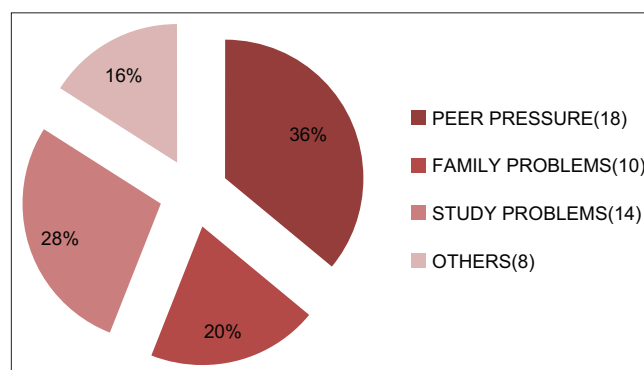
followed by Cannabis-derived substances such as Charas, Ganja (22%). Alcohol as substance abuse was found in 12% of individuals [Table 1].

The aim of the study was to identify the cause behind the high incidence of drug abuse among teenagers. Males (96%) were observed to be the significant part of the study group. We observed two major factors played a key role in it Peer pressure (36%) and Study problems (28%) [Figure 1]. 86% of individuals were from nuclear families.

Our studies prominently depicted the fact that females were less involved in drug abuse as compared to men (96%). Education also clearly was an important role in modeling of our lives. Our studies also depicted the same fact very well as we clearly observe that educated teenagers were only 22% and remaining 78% were uneducated. Our studies also indicated that the individuals from higher-income group were majority (64%). In our study, the most common age group for substance abuse was 16–18 years (40%) followed by the age group 13–15 years (32%). The most abused substance in the age group 16–18 years was Tobacco (20%). Ten out of 11 individuals with cannabis as substance abuse were below 18 years of age. Alcohol as a substance of abuse was seen exclusively above 16 years of age with the majority of cases above 18 years (4 out of 6 individuals) [Table 2].

**Table 1: Distribution of subjects according to substance abuse**

List of drugs	No. patients using this drug (n=50)	Percentage
Tobacco	18	36%
Cannabis Derived Substances	11	22%
Alcohol	06	12%
Smack (Heroin)	05	10%
Cocaine	02	04%
Opioids and its derivatives	01	02%
Volatile substances	04	08%
Vicks/Cough Syrup	03	06%
Total	50	100%



**Figure 1: Reasons for starting using drugs**

In our study, the individuals were almost equally distributed in between urban (48%) and rural localities (52%). In our study, we found that out of 25 individuals who were using Opioids, Alcohol and Cannabis Derived Substances 21 individuals were from urban Back ground, where as substances such as tobacco and volatile substance were more common in Rural Background [Figure 2].

In the current study, it was found that the individuals initiated substance abuse at quite young age. About 62% of the subjects initiated before 15 years of age with about majority from 13 to 15 years of age group (46%). The youngest age to initiate the substance was found out to be as young as 8 years [Table 3].

## DISCUSSION

The latest trends and various studies show that in recent years abuse of substances have increased many folds in teenagers and young adults. Many studies have been aimed towards young adults and college students but very scarce studies have been done for teenagers only. In this study, we tried to analyze various spectrum of drugs used and its relation with the various socio-demographic factors.

In this study, we analyzed 50 cases which were involved in only single substance abuse. The study like many other studies<sup>[4,6-8]</sup> revealed that the males were the most affected individuals but these findings were against the study conducted by Kushwaha *et al.*<sup>[5]</sup> and Ahmad *et al.*<sup>[14]</sup> The subjects with tobacco abuse were majority (36%) which were in consonance with study done by Ahmed *et al.*<sup>[6]</sup> at Department of Community Medicine, Jawaharlal

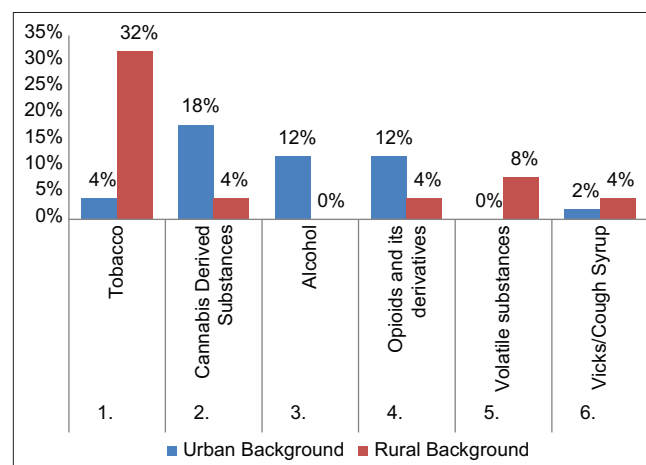
Nehru medical college and Dhawan *et al.*<sup>[9]</sup> at National Drug Dependence Treatment Centre, All India Institute of Medical Sciences. Tobacco can be used as chewable (Gutkha, Khaini, Zarda) and can also be smoked (cigarettes and Cigars). The high prevalence of tobacco can be due to its easy availability at every street corner at very low prices, even as low as Rs. 1 which can be easily procured by lower socio-economic status individuals. Cigarettes and Cigars are usually considered as a status symbol by urban teenagers. It is also considered as a way of rebelling and showing independence. Another alarming result was consumption of cannabis derived substances (such as charas, ganja, hasish, marijuana) by teenagers with 22% of the total cases. It is also known as “weed” in youngster’s urban slang nowadays. Recent trends show that the use of cannabis is in increasing trend. According to a study the youngsters now days prefer Cannabis-derived substances over alcohol and tobacco.<sup>[10]</sup> There are estimated 31 million users of Cannabis in India according to WHO. The individuals from the age group of 10–17 years are around 2.8 lakhs.<sup>[11]</sup> These statistics indicate the growing menace in the form of cannabis abuse all over India. Our state is also suffering from the same peril. The increasing trend in our state can be due to easy and illegal availability of cannabis as growing of cannabis for only industrial purpose has been legalized in our state.<sup>[12]</sup> The urban population as compared to rural population in our study was more involved in cannabis-derived substance abuse as its trend is increasing in the urban class and is popularly known as “smoking up” and rave parties. Another important finding in our study was the use of opium and its derivatives with about 8 cases who were mostly 18 or 19 years of age (10%). It might indicate that procurement of opium and its derivatives is easier for the older age group rather than the younger age group as no individual was from 13 to 15 years. Underage drinking is now a global problem and our state is also has not escaped from the same. Although only 12% of the total of the study population was involved

**Table 2: Distribution of subjects according to age group**

List of drugs	13–15 years	16–18 years	Above 18 years	Total
Tobacco	05 10%	10 20%	03 06%	18 (36%)
Cannabis Derived Substances	06 12%	04 08%	01 02%	11 (22%)
Opioids and its derivatives)	00 00%	03 06%	05 10%	08 (16%)
Alcohol	00 00%	02 04%	04 08%	06 (12%)
Volatile substances	03 06%	01 02%	00 00%	04 (8%)
Vicks/Cough Syrup	02 04%	01 02%	00 00%	03 (06%)
Total	16 32%	20 40%	14 28%	50 (100%)

**Table 3: Distribution of subjects according to age of initiation of abuse**

Age group	No. of Subjects (Percentage)
Before 12 years	08 16%
13–15 years	23 46%
16–18 years	12 24%
Above 18 years	07 14%
Total	50 100%



**Figure 2: Distribution of subjects according to rural/urban background**

in alcohol abuse these statistics indicate the problem of underage drinking in our state. The age group which was more involved in alcohol abuse was above 15 years which was similar to study done by Mahanta.<sup>[13]</sup> Other abused substances (8%) were volatile substances such as thinner, whitener, glue-sniffing which were almost exclusively seen in the age group of 13–15 years (3 of 4 cases) and exclusively in rural background. It indicates that lower socio-economic status and younger age is most vulnerable as younger subjects from rural background does not have easy accesses of money therefore, they are forced to have suck easy and cheap options such as thinner and glue. Majority of subjects involved started the abuse due to peer pressure which was similar to study done by Ahmed *et al.*<sup>[6]</sup> but were against the study conducted by Saluja *et al.*<sup>[4]</sup> and where curiosity was the major reason.

Another finding in our study was that alcohol, opium, cannabis, and their derivatives were almost strictly were seen in urban subjects. This can be due to the easy availability and better socio-economic status of the urban background. The substance of abuse like tobacco and volatile substances were seen in rural population. Most individuals of the study group initiate substance abuse in between 13 and 15 years. It can be attributed to the reason of onset of puberty and also the current young generation often wants to try new experiences, especially ones that they think are thrilling or daring or rebellious.

## CONCLUSION

Substance abuse in young age has come to notice in recent times and is of a major concern. Teenage phase of life is a very important period as it lays the road map for the rest of the life which might be blemished by substance abuse. Hence to solve this problem one needs to acknowledge the problem and prepare a proper policy for its eradication. Drug addiction, however, can be treated with treatment medications and psychological treatment, prevention is a major goal in adolescents with programs such as providing normative education and capability enhancement.<sup>[15]</sup> It is the duty of every common citizen and not only the duty of the state government to take a step forward. The authors suggest that the availability of such substances should be

totally prohibited by stringent laws. Furthermore, counseling centers and call centers for teenagers who wish to confess and give up such substance abuse. If such steps are taken then the future of India will be in safe and secure hands.

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