

Study Of Prevalence & Pattern Of Substance Abuse Among Teenage Students (13 To 19 Years Of Age) Of Schools And Colleges In & Around Visakhapatnam

^{1*}Dr M. Hema Sundar Rao, ¹Dr Satya Sree Devineni, ²Dr A V Subhash

(Assistant Professor, Department of Pediatrics, GVP IHC & MT, Visakhapatnam, AP)

(Assistant Professor, Department of Pediatrics, NRI Institute of Medical Sciences, Visakhapatnam, AP)

(Associate Professor, Department of Dentistry, GVP IHC & MT, Visakhapatnam, AP)

Corresponding author: ^{1*}Dr M. Hema Sundar Rao

Abstract A teenager, or teen, is a young person whose age falls within the range from thirteen through nineteen (13–19).¹ According to 2011 population census of India, 170 million are in their teens constituting 14% of the country's population.² As they stand at the crossroads between childhood and adulthood, so do societies at large – the crossroads between losing out on the potential of a generation or nurturing them to transform society. The present study done with the objectives To study the prevalence of substance use, To study the pattern of various substances use. **Methods:** A community based cross sectional study was done in teenagers in schools and colleges in and around Visakhapatnam, Andhra Pradesh, during the period of November 2017 to April 2019. Selected schools and colleges in Visakhapatnam which we chose government and private educational institutes randomly, and permission was obtained from the respective heads of institutions prior to the test. We informed their right to refuse test. **Results:** In the present study, a total of 2500 students were analyzed. In the present study, 70% students were from government institutions and the rest 30% belonged to private institutions. 47% of urban students were using beer followed by toddy (14%) and tobacco (3.7%). In our study toddy was commonly abused drug in government institutes (68%) followed by beer (8.4%). In private institutes toddy (52%) is the most commonly used followed by beer (24%) and tobacco (2.5%).

Key Words: Prevalence, Drug Abuse, Teenage Students

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I. Introduction

A teenager, or teen, is a young person whose age falls within the range from thirteen through nineteen (13–19).¹ According to 2011 population census of India, 170 million are in their teens constituting 14% of the country's population.² As they stand at the crossroads between childhood and adulthood, so do societies at large – the crossroads between losing out on the potential of a generation or nurturing them to transform society. Being a teenager and raising a teenager are individually, and collectively, enormous challenges. For many teens, illicit substance use and abuse become part of the landscape of their teenage years.

Substance abuse is one of the serious problems affecting youth in the world. The increasing problem of substance abuse and dependence has drawn both public and scientific attention to be focused. Although the present knowledge concerning substance abuse and dependence is far from complete, investigating them as maladaptive patterns of adjustment to life's demands rather than as moral deficiencies is leading to rapid progress in both understanding and treatment of substance abuse.

Although most adolescents who use drugs do not progress to become drug abusers or drug addicts in adulthood, drug use in adolescence is a very risky proposition. Even small degrees of substance abuse (for example, alcohol, tobacco, and inhalants) can have negative consequences.

The epidemic of substance abuse in young generation has assumed alarming dimensions in India. Changing cultural values, increasing economic stress and dwindling supportive bonds are leading to initiation into substance use.

Typically, school and relationships, notably family relationships, are among the life areas that are most influenced by drug use and abuse. One of the most telling signs of a teen's increasing involvement with drugs is when drug use becomes part of the teen's daily life. Preoccupation with drugs can crowd out previously important activities, and the manner in which the teen views him or herself may change in unrealistic and inaccurate directions.

Friendship groups may change, sometimes dramatically, and relationships with family members can become more distant or conflict. Further bad signs include more frequent use or use of greater amounts of a certain drug, or use of more dangerous drugs, such as cocaine, amphetamines, or heroin.

Substance abuse and dependence may occur at any age, but seem to be most common during adolescence and young adulthood. Though research in this area is sparse on Indian population, a number of studies have been reported in other countries especially United States of America and Europe.

Even though there are some studies in India quoting prevalence of substance abuse among adolescents in rural and urban areas, current study was taken to compare prevalence and pattern of substance abuse among teenagers in rural, urban and tribal areas as there is a paucity of studies comparing prevalence in all these three areas.

Objectives

1. To study the prevalence of substance use.
2. To study the pattern of various substances use.

II. Materials and Methods

A community based cross sectional study was done in teenagers in schools and colleges in and around Visakhapatnam, Andhra Pradesh, during the period of November 2017 to April 2019. Selected schools and colleges in three regions urban in which we chose government and private educational institutes randomly, and permission was obtained from the respective heads of institutions prior to the test. We informed their right to refuse test. After explaining the test procedure, ensuring confidentiality of participants, a pretested close-ended anonymous self-administered questionnaire (In Telugu and English) relating to pattern, frequency and correlates of substance use was given to the participants.

This study was conducted in five schools and three colleges in Visakhapatnam. Prior to the study a pilot study was conducted in Private school, Visakhapatnam to test the operational feasibility of questionnaire and test procedure.

Sample size : 2500
 Study design : Cross-sectional study.
 Study subjects : Teenagers between 13 to 19 years.
 Inclusion criteria: School and College children between 13 to 19 years.
 Exclusion criteria: Age below 13 years and above 19 years.
 After the test, questionnaire was collected, data processed and entered into Microsoft Excel and statistical analysis done with SPSS v 21 software.

III. Results

Table-1: showing the Age wise distribution of the sample size.

AREA/AGE	POSITIVE	NEGATIVE	TOTAL	
U R B A N	13	367(96)	10(2.6)	383(15)
	14	404(97)	3(0.7)	417(16.5)
	15	419(98)	4(0.9)	429(17)
	16	483(96)	7(1.3)	504(20)
	17	353(98)	4(1)	363(14)
	18	223(94)	0(0)	238(9.4)
	19	176(95)	4(2.1)	188(7.4)

Table 2: Institute wise Distribution of Students

Institution	Number (%)
Government	1752(70%)
Private	748(30%)
Total	2500(100%)

Table 3: Age wise pattern of substance abuse in urban area

SUBSTANCE/ AGE SUBSTANCE	13	14	15	16	17	18	19	TOTAL
NOT SPECIFIED	19	5	6	9	4	0	0	43(33)
ALCOHOL	0	0	0	0	0	0	0	0
BEER	5	6	8	8	10	10	13	60(47)
BEEDI	0	0	0	0	0	0	0	0

KHAINI	0	0	0	0	0	0	0	0
BEER+ KHAINI	0	0	0	0	0	0	0	0
BRANDI	0	0	0	0	0	0	0	0
CIGARETTE	0	0	1	1	1	1	1	5(3.7)
TODDY	0	0	3	5	5	3	3	19(14)
TODDY+BEER	0	0	0	0	0	0	0	0
TODDY+ARAK	0	0	0	0	0	0	0	0
ARAK	0	0	0	0	0	0	0	0
TOBACCO	0	0	1	1	1	1	1	5(3.7)
BEER+ARAK	0	0	0	0	0	1	0	1(0.7)
TOTAL	6(3.8)	11(8)	19(14)	24(19)	21(15)	16(13)	21(16)	129

IV. Discussion

The literature review will provide a comprehensive overview of the various definitions related to substance abuse, list of commonly abused substances, their side effects, causes of substance abuse and management of substance abuse and prevention.

Substance abuse is one of the most common causes of preventable human deaths worldwide. Alcohol and tobacco are most commonly used substances in India and throughout the world. Other substances that can be used are Ganja (Cannabis), Cocaine, Inhalants, Hallucinogens, Sedatives, Tranquilizers and intravenous drugs.^{18,19}

Teenage is the most susceptible population to initiate substance use in India³. This is because teenagers are easily influenced by peer pressure, sibling pressure, substance use by parents, easy availability and cheap cost, colorful and attractive packaging of such substances, lucrative advertisements through mass media by celebrities and lack of awareness regarding consequences of substance use on health.^{16,17} According to estimates of the World Health Organization, there are about 2 billion people worldwide consuming alcohol beverages and 76.3 million are diagnosed with alcohol related disorders in 1990. Globally alcohol consumption causes 3.2 % of overall human deaths.⁴ Worldwide 5 % of all human deaths were in the age group of 15 to 29 attributed to alcohol use.⁵

A study of 300 street child laborers in slums of Surat in 1993⁶ showed that 135 (45%) used substances. The substances used were smoking tobacco, followed by chewable tobacco, snuff, cannabis and opioids. Injecting drug use⁷ is also becoming apparent among street children as are inhalants.⁸

The Global Youth Tobacco Survey⁹ in 2006 showed that 3.8% of students smoke and 11.9% currently used smokeless tobacco. Tobacco as a gateway to other drugs of abuse has been the topic of a symposium.^{10,15}

A study in the Andamans¹¹ (2008) shows that onset of regular use of alcohol in late childhood and early adolescence is associated with the highest rates of consumption in adult life, compared to later onset of drinking. Results from 2010 Monitoring the Future survey show that 48.2% of 12th graders report having used an illicit drug at some point in their lives. In the 30 days prior to the survey, 41.2% of 12th graders had consumed alcohol and 19.2% of 12th graders had smoked tobacco cigarettes. In 2009 in the United States about 21% of high school students have taken prescription drugs without a prescription.^{12,13}

V. Conclusion

In our study, substance use was high in government institutes compared to private institute, because of high risk taking behaviour, though they were aware of harmful effects of substance use. School health education programmes should be emphasised regularly to improve their positive attitude to refrain from substance use. In our study, as movies and media were found to be major factors influencing substance use, promotion and projection of substance use should be curbed in them.

Though media plays a major role in imparting knowledge in this study, whether it be pro or anti substance use, it should emphasise on shaping of positive attitude of teenagers.

Users with positive attitude should be regularly counselled and motivated towards quitting. "Attitudes are not taught but caught." Teenage is the most vulnerable and liable to get influenced and carried away by the surroundings like movies, media and peer pressure, so shaping the attitude of the children and promoting the healthy lifestyle including constructive behaviour is essential in the formative years of life.

In order to prevent teenagers from tobacco abuse, they can be assessed regularly by tobacco and standardised psychological rating scales such as CAGE(cut down, annoyed, guilty and eye opener), teen addiction severity index and Fagerstroms' test for nicotine dependence.

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