

## Research Article

# Substance abuse among male adolescents in northern India

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## ABSTRACT

**Background:** The rising burden of substance abuse among adolescents is a major public health challenge worldwide. The present study was undertaken to find out the prevalence of substance abuse among adolescents in Kanpur.

**Methods:** This community based, cross-sectional study was conducted in among 539 male adolescents in the age group 10-18 years using simple random sampling. A pre-tested and pre-designed schedule was used to collect the relevant information after taking informed consent. The data was analyzed using SPSS software.

**Results:** Substance abuse was found among 15.02% male adolescents. Smoking was prevalent among 10.95%, alcohol was used by 3.34% and other drugs were used by 0.75% male adolescents. There was an increase in prevalence of substance abuse with the increase in age.

**Conclusions:** It is important to strengthen health education on substance abuse among the adolescents age group through mass media and school health programs.

**Keywords:** Substance abuse, Adolescents

## INTRODUCTION

Adolescence period is very crucial since these are formative years in life of an individual when major physical, psychological and behavioural changes take place.<sup>1</sup> Substance use among adolescents occurs on a spectrum; from experimentation to dependence. Experimentation with alcohol and drugs during adolescence is common. Alcohol is the biggest culprit in this regard. Adolescents have access to it at parties, can obtain it from older friends who are of legal age to buy it, or may simply raid their parents' liquor cabinets.<sup>2</sup>

Despite the facts, that the harmful effects of tobacco chewing and smoking are widely known, many young people start smoking during adolescence, largely because they believe that smoking will boost their social acceptability and image.<sup>3</sup>

There is little information about pattern of substance abuse among adolescents in North India. With this

background the present study was undertaken to find out the prevalence of substance abuse of adolescents of Kanpur district.

## METHODS

The present one year cross-sectional study was conducted in the department of paediatrics, L.L.R. Associated Hospitals, G.S.V.M. Medical College, Kanpur after taking permission from the institutional ethical committee. The male adolescents in the age group of 10-18 years residing in different urban and rural areas of Kanpur were included. A verbal consent was obtained from the teacher(s) or parent(s) or guardian(s) for the interview. The respondents were interviewed in small batches not exceeding 40 per day.

Age was determined from the register of the school, from which date of birth was noted. In home visits, relevant data was obtained from their parents. Detailed information about frequency and pattern of substance

abuse was collected. All the adolescents who admitted that they smoked were classified as smokers. Those who smoked at least once per day were termed regular smokers. Those who smoked at least once a week were termed as occasional smokers. Those who smoked even less frequently like once in a month or so, were called experimental smoker. Similar criteria were used for alcohol and other drug users. After interview, necessary health education and counseling was given to the adolescents.

SPSS software was used for statistical analysis.

## RESULTS

Substance abuse was found among 81 (15.02%) of 539 males surveyed.

Smoking was prevalent among 10.95% male adolescents. Alcohol was used by 3.34% and other drugs were used by 0.75% male adolescents (Table 1).

There was an increase in prevalence of substance abuse with the increase in age (Table 2).

**Table 1: Prevalence of substance abuse among adolescents.**

Substance abuse	No. of adolescents	Percentage
Smoking	59	10.95
Alcohol	18	3.34
Other drugs	4	0.75
Total	81	15.03

**Table 2: Age wise distribution of substance abusers.**

Age (Years)	Substance abuse	
	No.	%
12-14	15	18.52
14-16	27	33.33
16-18	39	48.15
Total	81	100.00

Nearly 64.41% were regular smokers, while 25.42% and 10.17% were occasional and experimental smokers respectively. Majority of alcohol drinkers (61.11%) were experimental while other drugs were used by few male adolescents occasionally or experimentally.

**Table 3: Frequency of use of various substances.**

Substances	No. of male adolescents	Regular		Occasional		Experimental	
		No.	%	No.	%	No.	%
Smoking	59	38	64.41	15	25.45	6	10.17
Alcohol	18	0	0	7	38.89	11	61.11
Other drugs	4	0	0	2	50.00	2	50.00
Total	81	38	64.91	24	29.63	19	23.46

## DISCUSSION

Substance abuse was found among 15.02% male adolescents in this study. Smoking was prevalent among 10.95% of adolescents in this study which is similar to the Global Youth Tobacco Survey conducted in Delhi, India which reported that one in 10 students (10%) had ever used tobacco in any form.<sup>4</sup> Higher prevalence (41.1%) has been reported in a study conducted among 1225 school going children in Chennai city.<sup>5</sup> In a survey conducted at Pune, 11.6% of high school boys and 18.06% of intermediate boys and 3.66% of high school girls and 5.56% of intermediate girls expressed that they were not averse to pick up smoking as a habit in due course of time.<sup>6</sup>

Alcohol was used by 3.34%. Similar findings have been reported by a study conducted among school going male adolescents of Aligarh where 3.8% were taking alcohol.<sup>7</sup> Among 12<sup>th</sup> graders in 2011, 22% reported having five or

more drinks in a row on at least one occasion in the two weeks prior to the survey (binge drinking) in America.<sup>8</sup>

This study revealed that 64.41% were regular smokers, while 25.42% and 10.17% were occasional and experimental smokers respectively. In a previous study conducted among adolescents at New Delhi, 3.6% of boys and 1.3% of girls admitted smoking more than once in the last one month.<sup>9</sup>

Nearly 61.11% of alcohol drinkers were experimental while 38.89 % were occasional alcoholics in this study. This is similar to the study conducted by Singh et al, who reported 30.1% of boys and 26.8% of girls admitted to having tried alcohol at least once and the proportion of children having consumed alcohol in the past 6 months was 28.3% for boys and 26% for girls.<sup>9</sup>

There was an increase in prevalence of substance abuse with the increase in age. This can be attributed to the fact that the initiation of substance abuse is experimental but

with the passage of time it becomes habitual and dependence develops. In a study conducted among adolescents at Dehradun, 80.2% substance abusers expressed their desire to quit the habit.

Efforts directed towards health education at schools and community will have a positive impact in substance abuse prevention among adolescents.

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