



RESEARCH ARTICLE

SUBSTANCE ABUSE: TRENDS AMONG UNIVERSITY STUDENTS IN DELHI –NCR

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ABSTRACT

**Introduction:** The epidemic of substance abuse is fast growing in the young population of India. University students, staying away from home are easily introduced to such habits which they find difficult to quit. **Methods:** A 14 Item questionnaire was constructed using three domains: Screening for Substance Abuse (socio-demographic and personal) and Reasons for Substance Abuse were distributed to students of a university in Delhi NCR. **Results:** A total of 512 students were screened out of which 215 (42%) were smokers predominantly of age group (18-21). Most of the smokers were found to be hostlers. Many of them were smokers who were consuming cigarettes 157 (73.02%) among other forms of smoking. It was seen that 124 (57.7%) were also alcoholic in addition to smoking. Majority of the drug abusers were Marijuana users followed by Char as users. Pleasurable experience 73 (46.5%) is emerged as major reason for smoking. **Conclusion:** Use of both regulatory and educational approach are indicated to reduce the menace of substance abuse amongst students, which is on the rise.

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INTRODUCTION

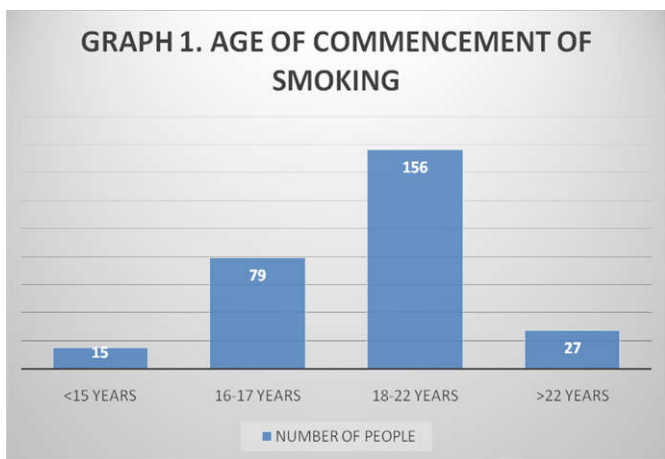
It is a well known fact that Drug abuse and narcotic addiction are acknowledged problems all over the world having both social, medical and psychological implications affecting a wide range of the population from all socioeconomic classes, and equally affecting both genders. In fact, innumerable deaths occurring per year are due to this menace which could have been entirely controlled if proper attention had been paid on the younger population (aged 15-25 years) through proper education and counseling in schools and colleges they attend.

Our society, in recent years has been plagued by the menace of substance abuse (tobacco, alcohol and drugs) especially in the younger generation aged less than 15 years (Narain et al., 2011). The prevalence of substance abuse varies throughout the country, ranging from lowest of 13.9% in Punjab to the highest of 49.4% in Mizoram and it should be noted that these patterns have the ability to explode over time (Rani et al., 2003; Murthy et al., 2010; Kumar, 2000). There is considerable evidence available to state that both licit and illicit substance use cause serious public health problems in the Indian population burdening the already overburdened health care sector. Hence, this study aims to assess the prevalence of substance abuse and the subsequent intentions to quit amongst students attending a University situated in Delhi NCR.

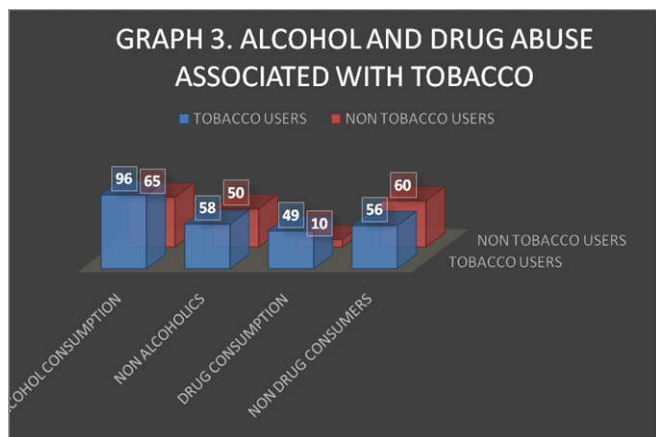
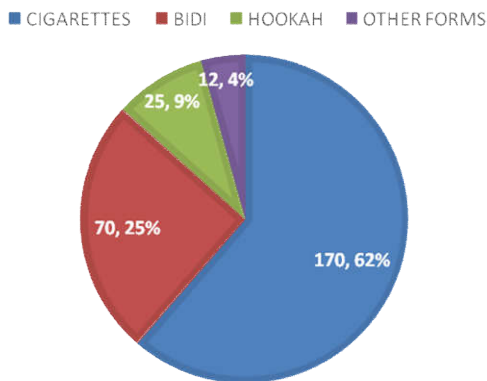
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## MATERIALS AND METHODS

The collection of data was done from the time period of 1<sup>st</sup> September 2014 to 30<sup>th</sup> November 2014 through a pre-tested and pre-validated questionnaire. A total of 530 questionnaires were distributed amongst the university students of Delhi NCR. The questionnaire consisted of 14 questions that assessed various aspects regarding tobacco, alcohol, drug abuse and intentions to quit amongst the students. Participation in the study was voluntary and anybody who did not wish to be a part of the study was excluded. Statistical Analysis was done using the Chi Square test. Data was tabulated and subsequently analysed using SPSS Version 21.0 (IBM Corp, 2012). An Ethical clearance was obtained from the institution where the study was being conducted (name withheld on University's request).



GRAPH 2. DIFFERENT TYPES OF TOBACCO CONSUMED BY THE POPULATION



## RESULTS

Of the 530 questionnaires distributed among the students studying in a University in Delhi NCR, 512 students adequately filled & returned the questionnaires (response rate 96.7%). The study comprised of a total of 359 males and 153 female belonging to different age groups (Table 1). Upon assessing the level of tobacco abuse across different age groups, it was found out that (30.6% n=157) were smokers while (69.4% n=355) were non smokers. Most of the students who were into smoking belonged to the age group of 18-21 years (60% n=94). After this age group, it was found out that the young generation aged less than 18 years (students who had just joined the university and still were 17 years of age and a few months away from their 18<sup>th</sup> birthday which implies an early onset of smoking) had the second highest number of smokers (30% n=47) which is quite alarming (Table 2). The data revealed that out of 157 students who were smokers were predominantly hostellers (58.6%, n=92). The subjects who are living with their Parents/ Local Guardian showed a less prevalence of smoking with only (6.4% n=15) of the population being smokers (Table3). Age at which they started smoking, most of the responses belonged to the age group of less than 18 years (53.5% n=90) (Graph 1.)

Table 1. Characteristics of the study population

Age	Male	Female	Total
<18 years	53	52	105
18-21 years	187	20	207
21-25 years	68	44	112
>25 years	51	37	88
Total	359	153	512

Table 2. Tobacco use prevalence and age related smoking habit amongst the population.

AGE RELATED SMOKING HABIT (N)			
Age	Smoker	Non Smoker	Total
<18 years	47	58	105
18-21 years	94	113	207
21-25 years	10	102	112
>25 years	6	82	88
Total	157	355	512

Table 3. Tobacco use prevalence and association with living arrangement amongst the population.

LIVING ARRANGEMENT AND SMOKING HABIT (N)			
Arrangement	Smokers	Non smokers	Total
Hosteller	92	167	259
Living with family/guardian	15	129	144
Living all alone	50	59	109

Table 4. Reasons for starting smoking amongst the population.  
\*Some percentages do not total 100 because of rounding

Reasons for smoking	Number	%
Pleasurable experience	73	46.5
Adds to intimacy in social gathering	12	7.6
Friends demand / Peer pressure	24	15.3
Socializing	15	9.6
Habit	10	6.4
Helps to deal with pressure	6	3.8
Time availability and boredom	4	2.5
Social status	6	3.8
Any other	7	4.5

The use of cigarettes was the highest amongst students (61% n=101) followed by hookah (22% n=36) and bidi (7% n=12) (Graph 2). In terms of different adverse habits associated with smoking, statistics revealed that 69 students (43.9%) out of 157 smokers were alcoholics and (15.3% n=24) were non-alcoholics out of 355 non-smokers as they did not consume any tobacco related product or alcohol. We observed a significant association between tobacco and alcohol use amongst students ( $p=0.02$ ) (Graph 3). Amongst the 67 drug users, 57 (85%) people consumed tobacco as compared to 10 (15%) of non drug, non tobacco consumers. No significant difference was seen amongst drug use associated with tobacco (Graph 3). The main reasons to take up smoking in the first place by students had been Pleasurable experience 73 (46.5%), followed by it "adding to intimacy" in social gatherings & peer pressure (Table 4)

## DISCUSSION

The use of Tobacco, Alcohol and Drugs is being a major risk factor to many diseases. In spite of this being known to the students, it is very alarming to observe that university going students in Delhi NCR are habituated to these substances. The high prevalence (30.66%) rate of smoking is in line to the findings of various authors who quoted that smoking in India to be 28.5% and 30.6% respectively (Rani *et al.*, 2003; Jindal *et al.*, 2006). Living arrangements of the students was considered as an important factor to determine their smoking habits as, students living alone or in hostels had a greater prevalence of smoking due to "no restrictions" imposed over them as compared to students who lived with their Parents/ Local Guardians who provide a "smoke-free environment" in their homes as observed in similar studies (Wechsler *et al.*, 2001; Jones *et al.*, 1992; Sidani *et al.*, 2013). Also, the fear of getting caught by their parents/ Local guardians leads to a lesser prevalence of smoking in such populations. In this study, the majority of smokers belonged to the age group of 18-21 years (59.9%); followed by the age group of less than 18 years (30%). It is an alarming issue as this is the time when the students are particularly in school and become dependent on tobacco and other substances and later find it difficult to quit the habit (Little, 2000; True *et al.*, 1999; Tyndale, 2003).

This is a grim picture as the prevalence of tobacco uptake varies from 1.9% in Delhi to 75.3% in Mizoram leading to various serious health consequences (Kumar, 2006; Bhojani *et al.*, 2009). The main reasons to take up smoking in the first place by students had been "Pleasurable experience", followed by it "adding to intimacy" in social gatherings & peer pressure. This is in agreement to certain authors who state that, the peers especially in younger population form an important part and they tend to do things that help them socialize with them (Kotwal *et al.*, 2005; Sasco *et al.*, 1988). This may be one of the reasons, that a knowledge based tobacco cessation program may not be entirely successful as it is equally important to include, educate and motivate the peers to quit the habit as a whole (Kotwal *et al.*, 2005). Amongst the various forms of smoked tobacco product used, cigarette was the most common, followed by bidi, hookah and other forms. It has been generally found that prevalence of bidi consumption is higher in rural areas and cigarette consumption is seen more in urban areas (Rani *et al.*, 2003; Jindal *et al.*, 2006). The prevalence of substance abuse & alcohol dependence in the present study was reported as alcoholism in 144 (28%) students and drug dependence in 67 (13%) students.

It is low as compared to a similar study comparing tobacco smoking, alcohol and drug abuse patients and found out that 89.6% of the alcohol abusers and 90% of the drug users reported smoking cigarettes (Burling, 1988). In the year 2004, a systematic effort was made through the National household survey of drug use which found that 21.4% of the population consumed alcohol and cannabis, which is termed as "Bhaang" and "Charas" in India is consumed by 3% of the population (Ray, 2004). In Uttar Pradesh, a prevalence of 22.8 per 1000 were dependent on alcohol or drugs was reported in Lucknow alone, a prevalence of 18.55 per 1000 was reported (Dube, 1971; Thacore, 1972). The results of this study indicate a steep rise in the use of alcohol and drugs among students. In our study, it was observed that the probability of alcohol intake increases with increasing amounts of tobacco smoked which is in conjunction with the various studies<sup>22,23</sup>. It was also observed that Nicotine dependence is more likely to exist among students consuming alcohol than among non-alcoholics. This finding is synonymous with the study done by Hashimoto *et al.* (2001). Under-reporting of data and social desirability bias are the common limitations that might have crept in the study.

## Conclusion

This study reports a high percentage of tobacco and alcohol abuse among university students. Most of the students picked up the habit in their adolescence years, i.e. while they were in school. More studies need to be done to assess the nature of substance abuse in the present population and emphasis on prevention strategies now needs to be focused in schools to prevent further abuse of these substances. This shall in turn, help us reduce the burden of various diseases that occur as a result of substance abuse and provide a much healthier, and abuse free youth in the country.

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