Research Paper

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Substance Abuse Among Future Physicians

Medical Science

KEYWORDS : Substance Abuse, Medical Students, Hostel, High Risk Population

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ABSTRACT

Background: Substance abuse assumes a special significance among medical students as they have a potential role in treating and counselling the patients of substance abuse in the future.

Objective: To study the pattern of substance abuse and the factors influencing its use. Material and Methods: A self-administered questionnaire as a research tool was used Results: Out of 250 students, 120 boys reported substance abuse. Most common reason for substance abuse was curiosity (61.6%). The majority felt that the use of these substances would not have ill effects. 45% of abusers tried to quit addiction by gradually decreasing the use.

Conclusions: It was observed that the number of students using these substances increased with an increase in their seniority. Though, many of the users had tried to quit these substances, they had failed due to what they described in their own words as `lack of will power'.

INTRODUCTION:

Historically, humans have always explored the use of various substances that will alter brain function and in turn their physical abilities and behavior. Why is this? There are many reasons why some may want to temporarily lose control over their behavior. In understanding this loss the most important issues are the frequency, the amount, the intensity and the repetitiveness of use. In addition our competitive world promotes the search for a performance edge which frequently leads to many problems. As the scale of each of these points enlarges so do the physical and emotional problems that may ensue.

Substance abuse is now recognized as a major problem among medical students and doctors. Substance abuse assumes a special significance among the medical students as they are the future medical practitioners and have a potential role in implementation of preventive aspects as well as diagnosis, treatment and rehabilitation of substance abuse related disorders in the society. Studies conducted in other cities have shown that substance abuse is more prevalent in students staying in hostel. [1,2]

Substance use among medical students could impact on the conduct, safety and efficiency of future doctors. Despite serious medico-legal, ethical and political ramifications, there is little research on the subject, especially from the Indian subcontinent. We aimed to explore the patterns of substance use among a sample of medical students. The present survey was conducted to gather information on the frequency and type of substance abuse, contributory factors and the attitude towards substance abuse among the medical students staying in hostel. Such surveys will also help us in devising effective educational programmes for preventing the development of substance abuse disorder in this high-risk population.

MATERIALS AND METHODS:

The present cross-sectional survey was conducted among the undergraduate medical college students staying in the hostel during 2011. Stratified sampling was done by selecting randomly 50 students from each academic year including interns.

A pre-tested questionnaire was prepared; including information on sociodemographic characteristics (age, sex, type of family, native place and academic year,), pattern of substance abuse (type, frequency and age of onset) and attitude towards substance abuse (reasons for using, perceived ill effects and attempts to quit).

The substance abuse was operationally defined as follows:

(i) Never used – I have never used the substance.
(ii) Experimental users – I have not used the substance on a regular basis but have tried it once.
(iii) Occasional users – I used the substance few times in a year.
(iv) Frequent users – I used the substance few times in a month.
(v) Regular users – I used the substance few times a week.
(vi) Daily users – I used the substance almost daily.
(vii) Life time user-Includes users and those who have experimented with it.

The collected data were analyzed with the help of computer software for statistical analysis (SPSS ver. 20) and appropriate tests were applied.

FINDINGS

Table 1: Distribution of substance abuse among study population

Total no. of students	Substance abuse	
	Yes	No
250	120 (48%)	130 (52%)

The study population consisted of 250 students. The age range was 19–25 years. The mean age was 20.57 years. Out of 250 students 120 (48%) students admitted about the substance abuse

Table 2: Type and frequency of substance use

	Alcohol	Smoking tobacco	Smokeless tobacco	Other Stimulant
Never used	142 56.8%	174 69.6%	214 85.6%	5 2%
Experimental users	20 8%	2 0.8%	2 0.8%	4 1.6%
Occasional users	34 13.6%	13 5.2%	5 2%	0
Frequent users	33 13.2%	22 8.8%	4 1.6%	0
Regular users	21 8.4%	39 15.6%	25 10%	0
life time users	108 43.2%	76 30.4%	36 14.4%	1 0.4%

Out of 250 students, 108 (43.2%) reported to have used alcohol, 76 (30.4%) had smoked tobacco and 36 (14.4%) had tried smokeless tobacco at least once in their lifetime. Only 1 (0.4%) student accepted that he had experimented with stimulant.

Table 3: Academic year wise distribution of substance abuse among medical students

Academic yr	1st yr	2nd yr	3rd yr	4th yr	Internship
Substance abuse	11	19	22	32	36
Alcohol	8	18	20	28	34
Smoking tobacco	6	10	14	20	26
Smokeless tobacco	4	5	5	9	13

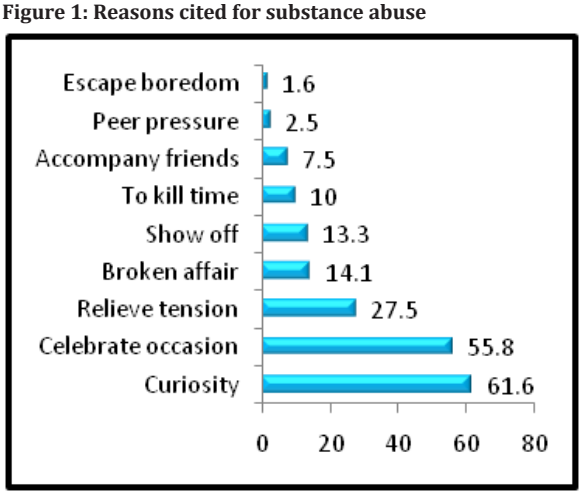
It is observed from table 3 that the risk of substance abuse increased with an increase in seniority and was significantly greater in final year MBBS students and interns.

Table 4: Place wise distribution of substance abuse among medical students

Place	Users (N = 120)
Rural	54 (45%)
Urban	66 (55%)

Majority of substance abusers belong to urban area (55%) while 45% students belong to rural area.

Figure 1: Reasons cited for substance abuse



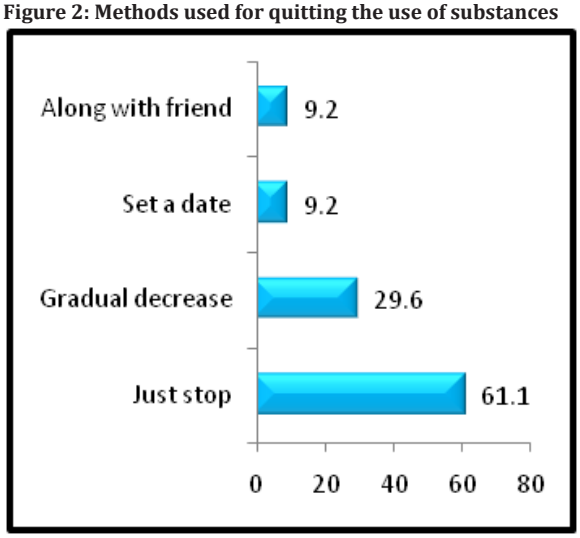
The students cited a variety of reasons for using these substances. The most common ones included `for curiosity' (61.6%), `for celebrating some occasion' (55.8%) and `for relieving the tension' (27.5%).

Table 5: Reasons for attempts at quitting the use of substances

Reasons for quitting	Number of students
Do not enjoy	21 (38.8)
Family pressure	15 (27.7)
Effects on health	11 (20.3)
Cost	4 (7.4)
Peer pressure	2 (3.7)
Messiness	1 (1.8)

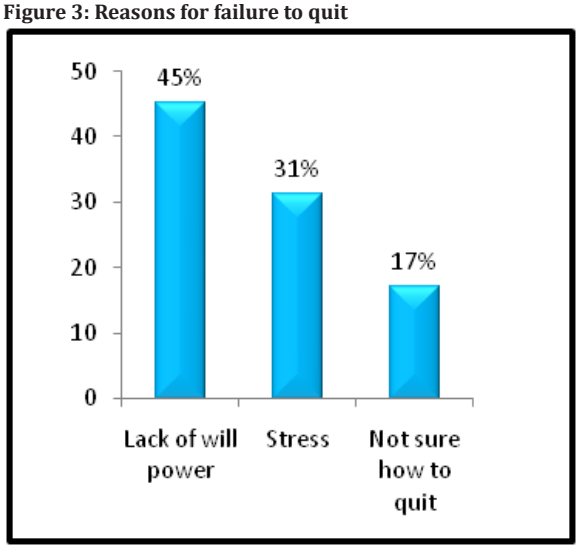
Out of the 120 students, grouped as `users', 54 had made some attempts at quitting the use of these substances. They wanted to quit as some of them did not enjoy it (38.8%) and some were pressurized by family members (27.7%) while some were worried about the effect of these substances on their health (20.3%).

Figure 2: Methods used for quitting the use of substances



Majority (61.1%) of them had tried to quit the use by just stopping it, while 29.6% quit the substance abuse by gradually decrease the use of these substances.

Figure 3: Reasons for failure to quit



Lack of will power (45%) was the most common reason for failure to quit the substance abuse, followed by stress (31%) and unawareness about how to quit (17%).

DISCUSSION

Almost half of medical students (48%) reported a lifetime use of substances.

In a study on substance abuse in medical students, the reported rate of substance use at least once in their lifetime was found to be 56.1 %, while in a study by R.V.Zulfikarali, G.K.Vankar 32.5% students had used at least one psychoactive substance during their lifetime, as opposed to 48% in the present study.[2, 3]

In the present study, use of alcohol was found to be in 43.2% as compared to 41.5% (V.K. Jagnany et al) 89 % (Webb et al, 1996), 57.8 % (Ponnudurai et al, 1984), and 58.4 % (Singh, 1979) in other similar studies.[3,4,5,6]

Cigarette smoking was found to be in 30.4% students in the current study, while 30 % (Melani et al, 2000), 11% (Hussain et al, 1995), and 30.8% (Tandon et al, 1990) in other studies.[7,8,9]

Most cited reason for substance abuse is curiosity (61.1%) fol-

lowed by celebrate an occasion while R. V. Zulfikar et al mention in their study that just for experiment followed by feeling good were the most common reason for substance abuse.[2]

CONCLUSIONS

In the present study 48% students reported substance abuse. There is wide variation in frequency of substance abuse. Risk of substance abuse increased with an increase in seniority and was significantly greater in final year MBBS students and interns. The risk was also found to be greater in students coming from urban area. The most common reason for using these substances is `for curiosity'.

More than 2/3rd of the students (67%) did not perceive any ill effects of substance abuse. Most common reason for quitting is 'do not enjoy' followed by 'family pressure'. Most of them failed in their attempts to quit due to `lack of will power'.

RECOMMENDATIONS:

Proper guidance, psychiatric counselling and active involvement of 1st MBBS students in rehabilitation of persons suffering from substance abuse disorders.

Preventive and Social medicine subject should be implemented right from 1st year to internship, by active involvement of students in various community based activities so that we would be able to create the doctors with empathy towards society.

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