

## Knowledge, Attitude and Practice regarding smoking among medical students

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**Background:** Tobacco smoking is a risk factor for many disease and cancers and one of the leading causes of death. Smoking is rampant among medical students all over the world. This study has been aimed at studying the knowledge, attitude and practice regarding smoking and awareness of smoking related legislation among medical students. **Materials and Methods:** A cross sectional study was carried out among the medical students in a Medical college. All students given consent were interviewed using a pre-designed and pretested questionnaire at a convenient time. Study and confidentiality aspects were explained to the students. Data were collected regarding knowledge, attitude and practice of smoking. **Results:** Prevalence of smoking was 18% among male students and nil among female students. Mean age of starting smoking was 18 years. 68% were daily smoker, and smoke 10 or fewer cigarettes daily. 44% got influenced by friends in initiating smoking. 63% smoker have smoker in friends or family. 36% of smokers have habit of alcohol consumption associated with smoking. 32% did not aware of legislation related to smoking. 20% students are aware that smoking is banned in educational institution. **Conclusion:** Students are trying to quite the smoking, support from friends and family could contribute significantly in helping them. Awareness regarding legislation related to smoking should be incorporated in students counseling activities.

**Keywords:** Smoking, Medical students, Legislation, Alcoholism

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## Introduction

Tobacco kills 1 person every 6 seconds [1] but it rarely makes headlines. Smoking is a risk factor for 6 leading causes of death [2]. Richard Peto in his study in 1994 found that average loss of life for all cigarette smoker was about 8 years and for those who died were 16 years [3]. A 3 inch cigarette can lessen your life by 3 minute. Smoking statistics according to WHO indicate more than a billion smokers till May 2010 [4].

Among one billion Indians, about 300 million adults use tobacco in various forms (47% of men and 14% of women use tobacco in India). Each year nearly one million people die of tobacco related morbidity in India and thousands of million exchequers is wasted [5]. According to WHO, mortality statistics have predicted a 10 fold rise in 21st century compared to 100 million lives lost to smoking in the previous century. Tax increase by 10 % worldwide can prevent a minimum of 10 million tobacco related deaths [2].

In spite of this, we have not succeeded in rendering effective precautionary measures against smoking. Tobacco companies have long targeted youth as "replacement smokers" to take succeed those who quit or die. The industry knows that addicting youth is its future. Although anyone who uses tobacco can become addicted to nicotine, people who do not start smoking before age 21 are unlikely to ever begin [6].

Smoking is rampant among medical students all over the world. Without proficient preventive measures the numbers are steadily rising in countries like India. In a study across 15 medical colleges lifetime prevalence of cigarette smoking in medical students was reported to be 28.2%. Over one fourth (27.2%) of medical students initiated daily cigarette smoking before age 15 [4].

The ever demanding medical curriculum along with increasing career competition contributes to anxiety making medical students vulnerable to smoking. However medical students as future healthcare providers have to be torchbearers of a healthy lifestyle. Ideally they have to practice what they preach. In 2003, India passed an act banning smoking in public places.

The ministry of health and family welfare is now focusing on measures to ensure effective implementation and enforcement of this act.

This study has been aimed at studying the knowledge, attitude and practice regarding smoking and awareness of smoking related legislation among medical students.

## Materials and Methods

A cross sectional study was carried out among the medical students in Deccan college of Medical Sciences from August 2015 to October 2015 for a period of 3 month. Students spanning the entire M.B.B.S course and consenting to participate in the study were included as study population. Newly joined first year students were not included in study as they were just one month old in medical college at the time of study.

Study was approved by ethical committee of institute. All students given consent were interviewed using a pre-designed and pretested questionnaire at a convenient time. Study and confidentiality aspects were explained to the students. Data were collected regarding knowledge, attitude and practice of smoking. Data were entered in excel and analyzed by SPSS version 11 and graph pad.

## Results

Total 404 students participated in study 138 were male and 266 were female. Mean age of male participants was 20.2 (SD=1.66) and female 20.09 (SD=1.71). All 25 smoker were male while among female there were no smoker (table 1). Mean age of starting smoking was 18 years (SD=2.69). 1 smoker was in 3rd semester, 6 in 5th semester, 7 in 7th semester and 11 were in 9th semester.

68% were daily smoker, 12 % occasionally smoker. (table 2). 68% smoke 10 or less cigarette daily, 24% smoke 11-20 cigarette daily, and 8% smoke more than 30 cigarette daily. (table 3). 44% got influenced by friends in initiating smoking, 16% by stress of studies and 20% by movies and others (table 4). 56% of smoker said they smoke for relaxing effect, and 24% smoke for better concentration. (table 5). 32% smoker refrain smoking in forbidden places while 60% do not refrain and 8% did not responded to the question. 36% of smoker have habit of alcohol consumption associated with smoking.

31% drugs and 20% pan, tobacco and gutkha consumption. (table 6). 95% smoker tried to quite the smoking. 63% smoker have smoker in friends or family.

85% smokers don't mind smoking while 15% mind it. 88% smoker said they will advise smoker to quit it. 68% students are aware of legislation related to smoking while 32% did not aware of it.

20% students are aware that smoking is banned in educational institution, 15% aware that it is banned in cinema hall, 14% aware that it is banned at bus stops and railway stations, 15% aware that it is banned in public transport and only 31 % aware that smoking is banned at all of these sites.(table7)

**Table-1: Smoking status of medical students (n=404)**

Smoking status	Males	Percentage	Females	Percentage
Smoker	25	18.11%	0	0%
Non Smoker	113	81.89%	266	100%
Total	138	100%	266	100%

**Table-2: Distribution of medical students according to frequency of smoking (n=25)**

Frequency among smokers	Responses	Percentage
Daily	17	68%
Occasionally	3	12%
Non response	5	20%
Total	25	100%

**Table-3: Distribution of smokers according no of cigarettes smoked (n=25)**

No of cigarettes smoked	Responses	Percentage
10 or less	17	68%
11-20	6	24%
21-30	0	0%
> 30	2	8%

**Table-4: Distribution of smokers according to influence in initiating smoking(n=25)**

Reasons	Responses	Percentage
Influence of friends	11	44%
Influence of others (like movie stars etc	3	12%
Stress of studies	4	16%
others	2	8%
No response	4	16%
Total	25	100%

**Table-5: Distribution of smokers according to reasons for smoking (n=25)**

Reason for smoking	Responses	Percentage
For relaxing effect	14	56%
For better concentration	6	24%
Other	4	16%
No response	1	4%
Total	25	100%

**Table- 6: Distribution of smokers according to habits associated with smoking (n=25)**

Habits associated with smoking	
Alcohol	36.84%
Drugs	31.57%
Pan chewing	10.52%
Tobacco chewing	5.26%
Ghutka	5.26%

**Table-7: Awareness of places where smoking is banned (n=404)**

Banned places	
( 1= Educational institutions)	20.63%
(2= Cinema halls)	15.21%
(3= Bus stops & Railway stations)	14.30%
(4= Public transports)	15.81%
(5= Pubs and bars)	1.35%
(6= All of the above)	31.62%
(7=None of the above)	1.05%

## Discussion

The aim of this study was to study the knowledge, attitude and practice regarding smoking and awareness of smoking related legislation among medical students. There were 25 smokers (18%) among male students only while all female were non smoker, mean age of starting smoking was 18 years. Sailesh Mohan et al in a study in Kerala, India came out with results of prevalence of smoking as 14.1% in medical students [7].

Ranjeeta Kumari in her study on the" Use of Tobacco Among Male Medical Students in Lucknow" came out with reports of smokers constituting 25.2% [8]. Zhouei et al in a study shows that the smoking rate among Shanghai medical students was 21.42% for male student [9]. In a study by Khuder SA, 61% smokers started smoking before 18 years of age [6]. Age at initiation of smoking is a significant factor for continuation and heavy smoking.

Men who started smoking before 16 years of age has two times risk of not quitting smoking compare to those who started at a later age. The relationship between young age at starting and high number of cigarettes smoked per day further stresses the importance of age at starting smoking on subsequent health consequences [10]. In this study 68% were daily smoker. In a Turkish study daily smoking rates among males were found to range from 35.0 to 56.9% [11].

Our study found that 44% got influenced by friends in initiating smoking, 16% by stress of studies and 20% by movies and others. Ranjeeta Kumari in her study revealed that tobacco use is mostly initiated due to peer pressure (78%). The other important factors responsible were curiosity and the effect of family members [8]. In this study 56% of smoker said they smoke for relaxing effect. Medical

Students having strenuous schedules and burdened with their academics are more likely to be overstressed. The response of more than half of participants answering the reason for continuing smoking as to relax is evident here. This study shows us that alcohol accounted most for adverse habits associated with smoking but drugs were equally used by medical students. This indicates the vulnerability of medical students to these habits.

In this study 95% smokers tried to quite the smoking. Kerala study [7] found that only 16% of medical students had attempted to quit while Turkish study [11] found that 22.4% of medical students who smoke were not interested in quitting. This study found that 1/3rd students are not aware of legislation related to smoking. Almost of all the students who were smokers tried to quit smoking. This shows the willingness of the smokers to quit and also their failure in cessation of smoking.

## Conclusion

Students are trying to quite the smoking, support from friends and family could contribute significantly in helping them. Awareness regarding legislation related to smoking should be incorporated in students counseling activities. These findings emphasize the need for prevention programme targeted to young age. Handing over an addiction free society in inheritance to later generations is the need of the hour and urgent efforts should be aimed towards prevention of smoking.

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