

Study of determinants of Smoking Habit among Medical Students

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Abstract

Cigarette smoking, a major risk behaviour adversely affecting public health, has reached epidemic proportions. The objective of the present study was to study the determinants of Smoking Habit among Medical Students. A cross sectional study among 300 randomly selected medical students (including 37 girl students), was carried out in a medical college during July-August 2008. Out of the 300 students, 117(39 %) were smokers. There was a significant association between the smoking habits of parents and their wards. There was a significant association between peer pressure and smoking behaviour. There was a highly significant correlation between alcohol and smoking behaviour. Measures such as advocacy and societal norms, addressing these factors rather than isolated health education on the ill effects of smoking, will check the rising trend of young smokers in developing countries.

Key words: *Determinants, smoking habit, medical students*

Introduction

Cigarette smoking, a major risk behaviour adversely affecting public health, has reached epidemic proportions. Having crossed its peak in developed countries, the tobacco menace is showing an upward trend in developing countries. Smoking and health are intimately related and thus, smoking among future health care personnel such as medical students is an important issue. Years of research in developed countries has identified certain factors that commonly play a role in initiation of tobacco use. These include exposure to tobacco marketing efforts, role modeling by parents/other adults, peer pressure, collateral addiction to other drugs, inadequate knowledge about injurious effects of tobacco use, etc. Medical students are generally in the age group 17-25 years. This is the time when lifestyle patterns, both healthy and unhealthy, are formed. Moreover, as future doctors, they are the role models for the others in regard to smoking habits. WHO has

included prevalence of tobacco use among subgroups such as physicians, nurses, other health workers, etc. among the indicators which should be monitored by each country.^[1] Against this background the present study was carried out to find out the prevalence and determinants of smoking habit among medical students.

Material and Methods

A cross sectional study among 300 randomly selected medical students (including 37 girl students), was carried out in a medical college during July-August 2008. The participants were administered a self administered structured questionnaire recommended by WHO ^[1], (suitably adapted after pre-testing), on smoking habits. Anonymity and confidentiality was assured. The following criteria were used to further classify the intensity of smoking.^[2]

Non smoker - one who has never smoked

Occasional smoker - one who smokes less than once a week, on special occasions or has only puffed a few times

Regular smoker - one who smokes daily

Parental tobacco use was defined as habit of smoking tobacco by either or both parents. Peer pressure was decided by response to questions such as, a) whether the respondent faced persuasion of close friends to

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smoke, (b) as an imitation of the habit of close friends, or (c) to impress close friends.

Affirmative answer to any of these was taken as peer pressure.

RESULTS

Table 1 shows the prevalence of smoking. Out of the 300 students, 183 (61%) were non-smokers. The remaining 117(39 %) were smokers, out of which 81 (27 %) were regular smokers, and 36 (12 %) were occasional smokers. All 37 female students were non-smokers.

Table 1: Prevalence of smoking among medical students(n=300)

Smoking Habit	Number	Percentage
Smoking daily	81	27
Occasional smoker	36	12
Non smoker	183	61
Total	300	100

Table 2 shows duration of smoking among smokers. Out of the 117 smokers, 37 (31.62%) were smoking for 1-4 years, 43 (36.75 %) for past 6 months to 1 year, 29(24.79 %) for a period of less than 6months.

Table 2: Duration of smoking among smokers (n=117)

Duration of smoking	Number	Percentage
< 6 month	29	24.79
6 month-1 yr	43	36.75
1-4 yr	37	31.62
5-10 yr	6	5.13
> 10 yr	2	1.71
Total	117	100

Table 3 shows the number of cigarettes smoked per day. Of the 117 smokers, 63 (53.85 %) smoked less than 5 cigarettes, 39 (33.33%) smoked 5-9 cigarettes, 12 (10.26 %) smoked 10-20 and 3 (2.56 %) smoked more than 20 cigarettes a day.

Table 3: No of cigarettes smoked daily by smokers (n=117)

No of cigarettes	Number	Percentage
< 5	63	53.85
5-9	39	33.33
10-20	12	10.26
> 20	3	2.56
Total	117	100

Table 4 shows the prevalence of parental smoking. Out of the 300 respondents, 103 (34.33%) reported history of parental smoking, out of which 24 % were regular smokers and 10.33 % of parents were occasional smokers.

Table 4: Prevalence of parental smoking (n=300)

Parental smoking habit	Number	Percentage
Smokers daily	24	24
Occasional smoker	31	10.33
Non smoker	197	65.67
Total	300	100

Table 5 shows the influence of parental smoking on smoking behaviour of medical student. There was a significant association between the smoking habits of parents and their wards. Out of the smokers, 45.30 % reported smoking in their parents, while out of the non-smokers only 27.32 % reported parental smoking. (Chi sq = 10.23, df =1, p < 0.05)

Table 5: Influence of parental smoking on the smoking habit of the ward (n=300)

	Ward smoker	Ward non smoker	Total
Parent smoker	53(45.30)	50(27.32)	103(34.33)
Parent non smoker	64(54.70)	133(72.68)	197(65.67)
Total	117(100)	183(100)	300(100)

Chi sq = 10.23, df = 1, p < 0.05

Table 6 shows the influence of peer pressure on smoking habit. There was a significant association between peer pressure and smoking behaviour. 67.52 % of the smokers stated peer pressure to smoke compared to 14.75 % of non-smokers. (Chi sq=86.97, df=1, $p < 0.0001$)

Table 6: Influence of peer pressure on smoking habit (n=300)

Peer pressure	Student smoker	Student non smoker	Total
Present	79(67.52)	27(14.75)	106(35.33)
Absent	38(32.48)	156(85.25)	194(64.67)
Total	117(100)	183(100)	300(100)

Chi sq = 86.97, df = 1, $p < 0.0001$

Table 7 shows association between alcohol and smoking. There was a highly significant correlation between alcohol and smoking behaviour. 65.81 % of the smokers also took alcohol, compared to only 25.14 % of the non-smokers. (Chi square = 48.81, df = 1, $p < 0.0001$).

Table 7: Association of alcohol with smoking (n=300)

Alcohol Habit	Smoker	Non smoker	Total
Present	77(65.81)	46(25.14)	123(41)
Absent	40(34.19)	137(74.86)	177(59)
Total	117(100)	183(100)	300(100)

Chi sq = 48.81, df = 1, $p < 0.0001$

Similarly table 8 shows that smoking was significantly associated with use of other addictive drugs. 27% of the smokers gave history of having tried other addictive drugs compared to only 3.7% of the non-smokers (Chi square = 20.22, df=1, $p < 0.0001$).

Table 8: Association of smoking with other drugs (n=300)

H/o of other drugs	Smoker	Non smoker	Total
Present	34(29.06)	17(09.29)	51(17)
Absent	83(70.94)	166(90.71)	249(83)
Total	117(100)	183(100)	300(100)

Chi sq = 19.77, df = 1, $p < 0.0001$

Discussion

The prevalence of smoking at 39 % in the present study is more or less similar to a study carried out on military recruits among whom the prevalence of smoking was found to be 43%.^[2] However, no generalization of the study findings is recommended, this being a highly selective group. Mere awareness of the hazards of smoking is overwhelmed by other social factors such as parental smoking, peer pressure, and use of other drugs. In the present study, these were significant determinants of smoking behaviour. Similar trends have been reported earlier in literature.^[2,3,4,5]

Because of these important social factors, the traditional 'Preventive Model' of health education, whereby the individual is persuaded to take responsible decisions, i.e. to adopt behaviours (based on correct knowledge) which will prevent disease, does not appear to work satisfactorily among the youth.^[6] Evans^[7] identified peers, parents, and the media as major sources of pressure and in response attempted to familiarize young people with these pressures and with ways of dealing with them. McAlister and others^[8,9] developed these ideas further and added the use of peer leaders as educators, activities to increase social commitment not to smoke, and the role-playing of situations that needed resistance to social pressure. A number of studies in the West have reported significant results using these approaches.^[10,11]

Conclusion

The present study findings emphasize that methods of focusing on social determinants of smoking are urgently required in our country to successfully bring down the prevalence of smoking among young people. The study has brought out that there is high prevalence of smoking among medical students who ought to be aware of the hazards of smoking - in spite of this knowledge - they have been pushed into the habit of smoking by parental smoking behaviour, peer pressure and lure of other drugs. Measures such as advocacy and societal norms, addressing these factors rather than isolated health education on the ill effects of smoking, will check the rising trend of young smokers in developing countries.

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