

Original article

Smoking habits of medical students in a private medical college of Bangladesh

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Abstract

Objective: To assess trends of smoking and the relation between smoking behavior of under graduate medical students and their attitudes towards smoking and treatment of tobacco dependence. **Methodology:** Data was collected from the medical students of Rajshahi Islami Bank Medical College, Bangladesh. A total of 200 male students completed the anonymous questionnaire. Response rate was 80.0%. **Results:** Of the respondents 20% and 80% were regular smokers and non-smokers respectively. Only 32.50% of the regular smokers smoke less than ten cigarettes, 30.0% smoke ten to twenty cigarettes whereas, 37.50% smoke more than 20 cigarettes per day. 25% started smoking at nineteen years of age, 22.5% started before this age and 27.5% and 25.0% started at twenty and twenty one years of ages respectively 70% started smoking just for pleasure. Only 29.72% smoke light cigarettes whereas 33.78% and 36.48% smoke medium and heavy cigarettes respectively. Almost 75% smokers agreed with the fact that smoking is harmful to health and 45% realized that their cigarette smoke bother others and again 70% of smokers have attempted to quit smoking but failed and 42.5% still wanted to quit smoking. About 55% of smokers complained that they suffer from chronic cough, 60% were lacking concentration in their studies and 45% felt that they were short of memory. **Conclusions:** Attitudes of smokers were significantly different on most items of tobacco, but knowledge of tobacco problem in the undergraduate medical students was not sufficient. Teaching about tobacco and related issues remains essential in the under graduate medical course.

Key words: Smoking, hazardous, cigarette, students, medical education, curriculum.

Introduction

Many surveys throughout the world have evaluated the smoking behaviors, beliefs, and attitudes of medical students towards smoking. It is a public health problem that does not spare the medical profession as well. Studies have shown that smokers rationalize smoking by self-exempting beliefs.¹ Tobacco represents the single most preventable cause of disease and death in the world today.² There were an estimated three million deaths annually at the end of the 20th century and it has been estimated that this will rise to more than 10 million by 2030.² Cancer is one of the major tobacco-related causes of disease and death, and has the high male incidence rates in the world for both oropharyngeal and lung cancer.² Studies are needed to ascertain factors affecting the decision to smoke and to identify possible early adopters of a non-smoking culture in Medical colleges of Bangladesh and actions on a societal level

are urgently needed to change social norms regarding smoking habits of the future doctors.

Knowledge about the harmful influence of cigarette smoking on health is common in the society. However, it is the role of health care personnel to promote lifestyle without smoking. If healthcare professionals are to play a role in reducing death and disease from tobacco related cancers, it is necessary to assess the attitudes and behaviors among healthcare professional students.² Success of campaigns against smoking depend on the way the health care personnel are trained because tobacco companies are focusing their interests in less developed countries.³ Menezes et al⁴ wrote that a regular smoker was defined as someone who smokes one or more cigarettes a day at least for one month; former smokers were the ones who used to smoke in the past but not at the moment.

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There is an almost universally held view that doctors can have a significant impact on reducing smoking levels⁵. They further express the need of Knowledge on morbidity and mortality associated with smoking, intervention strategies, effectiveness, and cessation practices; anticipated clinical behavior related to smoking; and attitudes towards medical practitioner involvement in smoking cessation. Physicians can play a key role in promoting abstinence from tobacco, if they themselves are not smoking. Brenner and Scharrer ⁶ stress that efforts are needed to reduce smoking among future physicians. Fakhfakh et al ⁷ conducted a similar study to evaluate the knowledge and awareness of medical students about their responsibility for health education and prevention. There is little information concerning the smoking habits of medical students, even though they are the physicians of the future. Thus, the objectives of this study were to determine the prevalence of smoking in medical students at Rajshahi Islami Bank Medical College, Bangladesh and to assess their attitudes and knowledge in the face of the smoking problem.

Methodology

A survey using a self-reported questionnaire was conducted amongst medical students Rajshahi Islami Bank Medical College, Bangladesh during the period July 2010- March 2011. A questionnaire was designed specifically for this study and contained ¹⁴ variables (Table-I & II) on health condition and prevalence, knowledge and attitudes towards smoking. In this study 250 male students were invited to participate. The data was collected using the above mentioned questionnaire.

The following factors were analyzed: age and causes of first attempt of smoking, frequency of tobacco smoking; students' behaviors connected with tobacco smoking and the knowledge of the consequences. Their health conditions regarding chronic cough, lack of memory and lack of concentration were also compared. However 80% responded to the questionnaire, whereas 20% did not show any interest. Therefore the present study was restricted to 200 students and eventually was subject to analysis and ex-smokers were included as non-smokers.

Statistical Analysis: SPSS statistical package version 16.0 program for windows was used to perform data analysis. Chi-square test was used to compare between the numbers of cigarettes smokers with the health complaints. It is assumed that the data was statistically significant when P<0.05.

Results

This was a preliminary study to know the students' perception about prevalence, knowledge and attitude towards smoking. The overall response rate among students was 80%. The results were worked out using descriptive statistics. Of the respondents 20% and 80% were regular smokers and non-smokers respectively. Only 32.50 % of the regular smokers smoke less than ten cigarettes, 30.0 % smoke ten to twenty cigarettes whereas, 37.50% smoke more than 20 cigarettes per day. 25% started smoking at nineteen years of age, 22.5% started before this age and 27.5% and 25.0 % started at twenty and twenty one years of ages respectively. 70% started smoking just for pleasure. Only 29.72% smoke light cigarettes whereas 33.78% and 36.48% smoke medium and heavy cigarettes respectively. Almost 75% smokers agreed with the fact that smoking is harmful to health and 45% realized that their cigarette smoke bother others and again 70% of smokers have attempted to quit smoking but failed and 42.5% still wanted to quit smoking. About 55% of smokers complained that they suffer from chronic cough, 60% were lacking concentration in their studies and 45% felt that they were short of memory.

Smoke	Yes	No	
	20%	80%	
If Yes			
No of cigarettes per day	<10 32.5%	10-20 30%	>20 37.5%
Age of start smoking	< 19 yrs 25%	< 20 yrs. 27.5%	<21 yrs 25%
Type of cigarettes	Light 29.72%	Medium 33.78%	Heavy 36.48%
Initiating factor	For pleasure 70%	For fun 30%	

Table-I: General consideration regarding smoking in the medical students (n=200)

Three different parameters of health complaints were compared with the number of cigarettes smoke per day and a significant difference was noticed in the health complaints for lack of concentration and lack of memory of those who smoke more than 20 cigarettes per day with those who smoke less than 10 cigarettes per day (Table-II).

Health complaints	< 10 cigs	<20 cigs	> 20 cigs	P values
Chronic cough	80%	76%	73%	<0.567
Lack of concentration	22%	48%	51%	<0.023
Lack of memory	22%	56%	82%	<0.0001

Table II: Percentages of health complaints compared with no. of cigarettes smoke per day (n=200)

Discussion

Cigarette smoking has reached the proportion of a global epidemic with particularly devastating consequences in the developing countries. Learning of epidemiological aspects of smoking in youngsters, especially medical students, is of great importance for the whole community. It is a cause for concern that a large number of students start smoking after they enter the medical college. One of the reasons for this is the lack of concern about smoking as a health problem within medical college. The smoking habits of medical students are affected by the same phenomena that affect those of the general public, such as the influence of socio cultural factors, and the increasingly broader age range of initiation.⁸ The prevalence of smoking among medical students with respect to other populations is probably low due to the fact that, in general, these students have better health habits than the general public, and/or the reasons that led them to study medical science also make them disinclined to smoke.

In the West, the effectiveness of smoking cessation programs is well established but the smoking cessation programs in the East are rare.⁹ Smokers tend to ignore the unpleasant smell of cigarettes as compared with ex-smokers and non-smokers.¹⁰ Everyone is generally concerned with the smell of cigarettes. Medical students believe that the anti-tobacco policy is ineffective, mainly because the instructions are not obeyed, and there are too few actions promoting lifestyle without a cigarette.¹¹ Medical education is the factor which affects the decision about non smoking. It is necessary to develop specific prevention programs for medical students because they will play an important public health role in the future in reducing the prevalence of tobacco consumption.¹² Spangler et al¹³ has documented that most medical schools inadequately teach tobacco intervention skills. Recruited students claimed that it is essential to teach them how to prevent smoking. Therefore increased efforts to promote tobacco education and intervention among medical students are necessary.

This study revealed that every fifth student smoke cigarettes. This coincides with the facts by Kuznar et al,¹⁴ who believe that anti-tobacco prevention should be started very early-before the age of 10 and continued up to the age of 21. Special attention should be taken at the age of 18 years as this time was found to be especially dangerous for development of addic-

tion. However, effective training methods for tobacco intervention in undergraduate medical education are needed. Piko¹⁵ quotes that the high frequency of smoking among medical students suggests that they themselves are unable to cope with avoiding the dangers of smoking. Similarly, Melani et al,¹⁶ documented that targeted and continuous training about smoking prevention should be mandatory in medical colleges. Kawakami¹⁷ supports our results, by stating that the awareness of the harmful effects of smoking and intention to perform smoking intervention in the future doctors seemed unsatisfactory among medical students. There is a need for an increasing emphasis on smoking-related attitude formation amongst medical students.

In this study most medical students reported knowing the health hazards of tobacco and believed that smoking should be restricted in hospitals. The best way to discourage smoking is by approaching children and adolescents, since most people start smoking in their teenage years. This age group must recognize the harmful effects of smoking. Igic¹⁸ stresses the need for banning advertising and other promotional activities of tobacco producers, as well as smoking in hospitals, workplaces, restaurants, and public transportation is a very strong weapon against smoking. Because smoking as a risk factor is preventable, it is necessary to conduct rigorous preventive measures, including educational programs and various legal actions, such as restrictions on the purchase of tobacco products by teenagers and creation of smoke-free areas.¹⁸ According to Soltani and Bchir,¹⁹ most of the students feel that they were not sufficiently prepared for caring for smokers and desired specific training. These findings suggest that medical college authorities should design and implement appropriate basic training aimed at better preparing medical students for their role in prevention of smoking. There is a need to provide comprehensive tobacco use prevention programs amongst medical students²⁰.

In this study most students recognize the adverse health effects of smoking and the importance of their professional role in promoting smoking cessation. This discrepancy supports the idea that training in nicotine addiction and smoking cessation techniques will help medical students to develop the skills and confidence needed to successfully intervene with their future patients.²¹ Therefore it is believed that by positive smoking cessation knowledge and skills,

changes can readily be achieved. However, specific smoking cessation training is needed in the medical college of Bangladesh to develop appropriate skills and strategies in the future clinicians. Interestingly in this study, when the numbers of cigarettes smoke per day were related to the health complaints by these students, it was observed that those, who smoke more than twenty cigarettes per day, had complaints of lack of concentration and memory, 'P' values 0.023 and 0.0001 respectively. Therefore, further investigations are needed to ascertain the causes of these health problems, and to investigate that either nicotine causes these problems or something else.

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