

SMOKING PATTERNS

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ABSTRACT... **Objective:** To determine the smoking patterns of medical students of 4th year MBBS. **Design:** A cross-sectional survey. **Setting:** Lahore Medical and Dental College (LMDC), Lahore, Pakistan. **Period :** From November to December 2006. **Methodology:** The 50 medical students of 4th year MBBS, who were current smokers. A structured questionnaire was used to collect the data. Descriptive statistics was determined in terms of percentages. **Results:** In present study, 48% students started smoking between 14-17 years of age, 34% started to smoke between ages 18-21 years and 18% of them had been smoking for past 4-6 yrs. Main reason to commence smoking included curiosity (27%), need to look glamorous (22%), peer pressure (16%) and stress relieving (10%). When probed about numbers of cigarettes smoked daily, the response of majority was that 32% of students admitted to smoking 1-5 cigarettes, similar number admitted to smoking 6-10 cigarettes, and 30% of students smoked more than 20 cigarettes. Among the respondents, 41% had a brother who was a smoker and 37% had a father who was a smoker. More than half the respondents (58%) said that their parents were unaware of their smoking habit. Regarding awareness about the medical hazards of smoking, 31% of students named cancer, 29% mentioned heart disease, 18% were familiar with COPD and only 7% referred to stroke. The main concerns of respondents regarding smoking were fear of being discovered by their parents (22%), psychological dependence (20%) and physical dependence (18%). Only 50% of students tried to quit smoking, using hypnosis and substitutes like nicotine gum and nicotine patches. **Conclusion:** Tobacco smoking among medical students is alarming. These findings not only raise concerns for the future health of our medical students but also their credibility and effectiveness as health promoters for population at large.

Key words: Medical students, smoking patterns, risks.

INTRODUCTION

Tobacco use is projected to cause nearly 450 million deaths worldwide during the next 50 years. Tobacco smoke contains an estimated 4,800 compounds. Based on a classification system by the International Agency for Research on Cancer, cigarette smoke contains 11 known human carcinogens and 7 probable human carcinogens¹.

The World Health Organization (WHO), CDC, and the Canadian Public Health Association (CPHA) developed

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the Global Health Professionals Survey (GHPS) to collect data on tobacco use among health-profession students in all WHO member states. This report summarized the findings from the GHPS Pilot Study, which consisted of 16 surveys conducted in 10 countries among third-year students in four health-profession disciplines (dentistry, medicine, nursing, and pharmacy) in 2005. The findings indicated that current cigarette smoking among these students was higher than 20% in seven of the 10 countries surveyed². In the USA, 16% medical students were smokers³. Similar data from developing countries are scanty, though tobacco abuse has crossed its peak in developed countries, and it is now showing an upwards trend in these countries⁴. WHO has included the prevalence of tobacco use among subgroups such as physicians, other health care workers as one of the indicators which should be monitored by each country⁵. Smoking rates in medical students varies from country to country but a general trend noted was that it was lower in developed countries than developing countries⁶. Similar data from developing countries are scanty. As part of a world survey regarding tobacco use in 15 medical schools of nine Asian countries the prevalence of daily smoking in males ranged from 4% in first year to 11% in final year., with considerable variations between countries. The rates were very low in women⁷.

In a study done in Saudia Arabia it was found that smoking still constituted a major problem in spite of their knowledge of its hazards. Prevalence of regular smoking among students was 17.5%⁸. A study conducted in Egypt also showed a smoking rate of 17.5% among medical students. The awareness of harmful effects of smoking and knowledge about the causal role of tobacco in the development of specific diseases were deficient⁹. In a similar study in Pakistan, the prevalence of smoking was 33%. The highest frequency of smoking was seen in college going male students belonging to 21-25 years while among the female smokers, majority were graduates, in the age group 26-30 years. The age at first onset of smoking was between 15-25 years, and in a majority, it was introduced by friends. Although most students knew that smoking was hazardous for health and many of them did make an attempt to quit, but very few were able to get rid of this addiction¹⁰.

A similar survey in Pakistan made among medical students randomly selected from classes at the Aga Khan University, Karachi, Pakistan noted that that around 14% of respondents were current smokers (22% male and 4% females). A majority of students recognized the dangers associated with active as well as passive smoking although only 55% of current smokers planned to quit in the near future¹¹. Another Pakistani study revealed that 11% of students are current smokers. The incidence of smoking was greater among male students than females (17% versus 4%). There was an increased awareness of harmful effects of smoking among medical students. Almost all thought that passive smoking was injurious to health¹².

A similar survey conducted in Ziauddin Medical University in Pakistan also concluded that smoking was more prevalent among males (26%) as compared to female students (2%)¹³.

The present study was conducted to assess the smoking pattern of 4th year MBBS students, in a medical college in Lahore.

METHODOLOGY

A cross-sectional survey was conducted among 50 medical students of 4th year MBBS who were current smokers. Current smoker was defined as a person who smokes any amount of tobacco either regularly or occasionally¹¹. The survey was conducted between November and December, 2006 at Lahore Medical and Dental College, Lahore. Respondent's confidentiality was maintained. A structured questionnaire was used to collect information on variables like age at which smoking was commenced, reason for smoking, numbers of cigarettes smoked per day, awareness about the medical hazards of smoking, main concerns of students on smoking and ways of quitting to smoke. Descriptive statistics were determined in terms of percentages.

RESULTS

As seen in figure 1, more than half of the study group has been smoking since last 4 to 6 years. Forty two percent of students were recent smokers who started smoking since less than 1 year to 3 years.

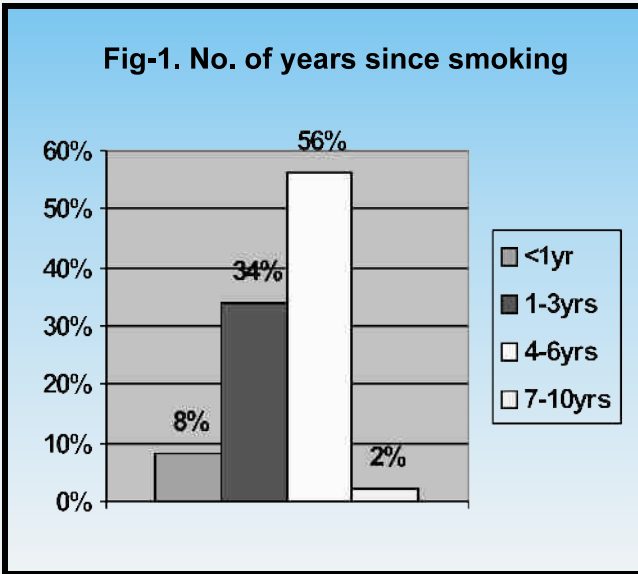
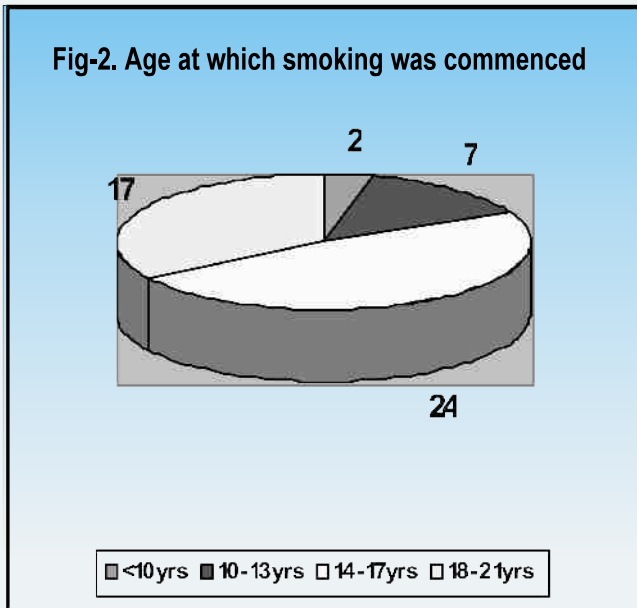


Figure 2 depicts the age at which smoking was commenced. Forty eight percent of students had started to smoke between 14-17 years of age while 34% of them started to smoke between ages 18-21 years.



As represented in Table I, main reasons to commence smoking included curiosity (27%), need to look glamorous (22%), peer pressure (16%) and stress relieving (10%).

Reason	No of pts	%age
Out of curiosity	14	28%
Wanted to look glamorous	11	22%
Wanted to impress others	5	10%
Peer pressure	8	16%
Stress reliever	5	10%
Due to depression	3	6%
Feeling independent	2	4%
Others	2	4%

On questioning as to the number of cigarettes students smoked daily, 32% of students admitted to smoking 1-5 cigarettes, and similar number admitted to smoking 6-10 cigarettes, 2% of students were smoking 11-14 cigarettes, 4% were smoking 15-19 cigarettes and 30% of students were smoking more than 20 cigarettes.

When asked whether any member of their family were smokers, 41% had a smoker brother 37% said their father was a smoker.

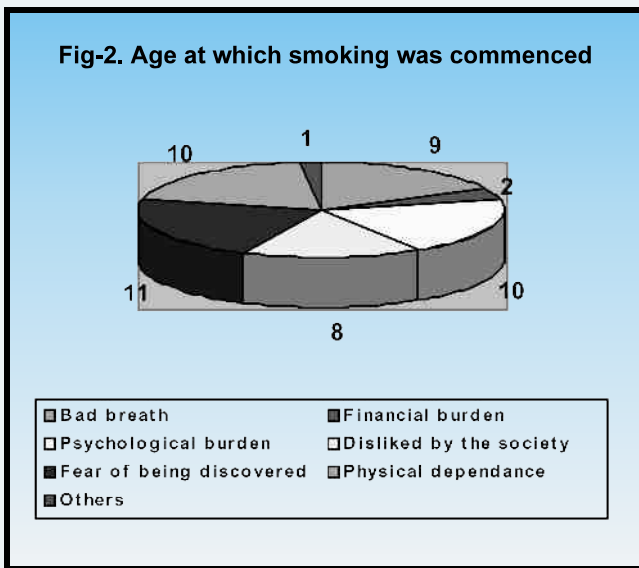
When students were asked whether their parents were aware of their smoking, 48 students responded, out of them 58% said that their parents were unaware and 38% said that their parents knew about their smoking habit.

Health hazards	No. of pts	%age
Cancers	18	36%
Heart Disease	15	30%
COPD	9	18%
Stroke	4	8%
Impotence	3	6%
Peripheral vascular disease	2	4%
Others	1	2%

Table II elaborates on students' awareness of the

medical hazards of smoking. It was observed that 31% of students were aware of cancer risks, and only 29% were aware of the heart disease risk associated with smoking.

Figure 3 highlights that when students' awareness was assessed about implications of smoking, the views of majority were constant fear of being discovered by their parent (22%), concern about the psychological dependence (20%) and physical dependence of tobacco (18%) and that smoking was disliked by the people in the society (15%).



In the present survey, only 25 students (50%) tried to quit smoking, by using hypnosis, nicotine gums and nicotine patches.

DISCUSSION

In the present study, 48% of students started smoking around 14 to 17 years of age, and 34% of them started smoking between ages 18 to 21 yrs. Exploring other similar studies it was noted that in Pakistan, the mean age of medical students who were smokers to be around 18 yrs¹¹, in Saudi Arabia, it was noted that 72% of students started smoking after 18 years of age⁹ and in USA, majority of smokers started smoking before age 20¹⁴.

Most of smokers 28 (58%) in the present study were smoking for the past 4-6 years. This was different from a

study done in India, where it was established that most of students were smoking for the past 1-4 years⁴.

When we asked students about the reasons for smoking, curiosity (28%) and desire to look glamorous (22%) were quoted as the main motivation. This is similar to a study done in Saudi Arabia, where curiosity was the main reason students started smoking, followed by the desire to show off, and peer pressure. Friends were the main source of the first cigarette, followed by parents⁸. In India however a similar study showed peer pressure was the main reason for initiation of smoking among medical students.⁴ In Turkey, a similar survey revealed stress as a major factor that drove medical students to smoking¹⁵. In another study done in Saudi Arabia it was shown that most of smokers started smoking due to influence of friends and were smoking for relaxation and recreation¹⁶.

In our study it was found out that majority of the students (32%) were smoking 1-5 cigarettes per day & other (32%) were smoking 6-10 cigarettes per day. This is in contrast to similar study done in India where it was shown that most students (33.7%) were smoking less than 5 cigarettes per day⁴.

In the present study, 42% of students who were smokers had a brother who was also a smoker and in 38% of smokers had a parent who was also a smoker. In another similar study it was noted that peers, parents and media were the major sources of social pressures that led young people to smoking¹⁷. In another study done in Pakistan it was noted that 38% of parents were current smokers and another 21% were ex smokers¹¹. In India 52% of medical students who were smoking reported history of parental smoking⁴. Among the respondents, 58% of students said that their parents were unaware of their smoking habit. Our study also showed that smokers were under constant fear of being discovered by the family.

Now smoking is by far the largest preventable cause of death in the world¹⁸. The list of diseases caused by smoking has been expanded to include abdominal aortic aneurysm, acute myeloid leukemia, cataract, cervical cancer, kidney cancer, pancreatic cancer, pneumonia, periodontitis, and stomach cancer. These are in addition

to diseases previously known to be caused by smoking, including bladder, esophageal, laryngeal, lung, oral, and throat cancers; chronic lung diseases; coronary heart and cardiovascular diseases; as well as reproductive effects and sudden infant death syndrome¹⁹. Regarding awareness among students about hazards of smoking in the present study, it was observed that 32% of students were aware of cancer risks, and 30% were aware of the heart disease risk associated with smoking. In Pakistan, a similar study showed that among medical students, the awareness of lung cancer associated with smoking was 100%¹². Similar studies done in Australia, Japan and USA concluded that most of the students did not know about other life threatening hazards of smoking like coronary heart disease, hypertension, Peripheral vascular Diseases, Cirrhosis, Bladder Cancer. The knowledge in medical students about coronary heart disease in Australia was 30% in Japan 8% and in USA 45%. Similarly the knowledge in medical students about peripheral vascular disease varied globally, as it was 13% in Australia, 9% in Japan and 13% in USA. The bladder cancer risk awareness was 3% in Australia, 1% in Japan and 3% in USA. The awareness of oral cancer was also no better and ranged from 27% in Australia, 16% in Japan, and 74% in USA respectively²⁰.

Quitting smoking has immediate as well as long-term benefits, reducing risks for diseases caused by smoking improving health in general. Decades of research tell us that clinicians can have an important impact on their patients' likelihood of achieving cessation. A meta-analysis of 29 studies determined that patients who received a tobacco cessation intervention from a non physician clinician or a physician clinician were almost twice as likely to quit compared with patients who did not receive such an intervention. The use of Self-help materials was only slightly better than no clinician¹⁹. It has been shown that even brief and simple advice from health professionals can substantially decrease smoking cessation rates. A physician who is inhaling smoke and at the same time encouraging his patients to quit smoking has less credibility²¹. In our present study half of the respondents had tried to quit and most of the them had tried nicotine gum for quitting. This is similar to another similar study done in Pakistan in which 55% if the medical students had tried to quit smoking. The main

reason for quitting was health concerns¹¹. In an another similar study done in Australia, Japan ,USA, Ex USSR it was noted that 33-82% of smokers had made at least one serious attempt to stop smoking²⁰.

CONCLUSION

Tobacco smoking among medical students is alarming. These findings not only raise concerns for the future health of our medical students but also their credibility and effectiveness as health promoters for population at large.

RECOMMENDATIONS

Based on the observations of the present study, it is recommended that there should be establishment of a course on the pathology of tobacco smoking and the integration of education and prevention within the medical curriculum. There is a need to increase awareness among smokers about tobacco related health hazards. There should be promotion and easy availability of tobacco substitutes for those who wish to stop smoking.

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