

Smoking away the M.B.B.S.?

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It is said that smoking is the most preventable cause of human death, and a dangerous habit that creates risks not only for the smoker but for nonsmokers as well [1]. According to the World Health Organization, active smoking is responsible for 5.1 million and passive smoking for an additional 600,000 deaths [2]. Thus, not only are active smokers at increased risk of mortality, passive smoking or second-hand smoking is also placing a significant number of nonsmokers at increased risk of mortality [11].

A cigarette consists of various chemicals, which when consumed either in high doses or at low doses, but on a regular basis, can be toxic. Examples of such chemicals include nicotine, carbon monoxide and tar along with heavy metals and several carcinogens like nitrosamines, aromatic amines and polycyclic hydrocarbons. Thus, around 2000 to 4000 different noxious chemicals are released when a single cigarette is lit [1]. The adverse effects of these chemicals include systemic cancers, peripheral vascular disease, cerebrovascular disease, emphysema, chronic bronchitis and chronic obstructive pulmonary disease [1].

To curb the rise in smoking, efforts by the Pakistani government have been sporadic and lacked a long-term strategy. As a result, smoking is still prevalent in the younger age group including university and, unfortunately, medical students [15] [5] [16].

According to one survey of 10 different universities in Karachi in 2008, at least 23% (31% male and 6% female) students were regular smokers [3].

Surveys of medical schools in Pakistan found a similar proportion of active smokers. For example, of the 264 medical students at Ziauddin Medical College, Karachi, Pakistan (95 males and 169 females), 26% of the males and 1.7% of the females were occasional or regular smokers [4]. Similarly, of the 654 medical students (396 males and 258 females) at King Edward Medical University, Lahore, Pakistan, 16.5% of the males and 2.4% of the females were active smokers [5]. Such a high prevalence of smoking amongst medical students may exist due to a knowledge

gap about the detrimental and harmful effects of smoking and benefits of smoking cessation. Indeed, studies have found a varying degree of knowledge gap in medical students [12] [13] [14]. The mean \pm SD age of smoking initiation for medical students is 17.4 ± 2.4 years for males and 19 ± 1.4 years for females in Pakistan [4]. As this is about the age when students enter medical school in many Asian countries, including Pakistan, it is likely that a majority acquire this habit when they start their medical training. The number of medical students who smoke continues to increase throughout their undergraduate education. A survey of 15 medical schools from nine Asian countries in 1992 found that the prevalence of regular smoking in male medical students increased from 4% in first year to 11% in the final year [6].

As leaders of the healthcare team, physicians have a duty to promote health and treat diseases through sound, educated, and scientific methods. Physicians can be strong advocates for smoking cessation by using their strong and trustable images to win over smokers [17]. However, such advice will ring hollow if coming from a physician who is also a smoker. Why would a chain smoker, who has recently developed a heart condition, listen to a doctor's advice against smoking if the doctor himself smokes? In fact, studies have shown that patients of a smoking physician are less likely to stop smoking as compared to patients of a nonsmoking physician [18].

Several studies have found that stress, peer pressure, media influence, and domestic environment are important factors responsible for initiation and continuation of smoking by medical students [5] [6]. It is the responsibility of medical schools to develop programs to curtail the habit of smoking amongst their students. These programs should aim to promote smoking cessation and to curb the adoption of smoking by nonsmokers. Medical schools should encourage primary care physicians, especially university faculty members, to advise students on various methods proven to aid individuals in quitting

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smoking [7]. Medical schools should also provide self-help materials for smoking cessation, which are basically comprehensive behavioral programs that do not require attendance at treatment sessions (in person or via telephone). Such programs can take the form of written materials, computerized programs, or audio-visual programs [8]. These self-help materials have contributed to smoking cessation rates between 7% and 27% after six months [7]. A study from Australia has shown that young quitters (aged 18-30) primarily preferred unassisted methods of quitting such as going “cold turkey” (quitting outright) [10]. Moreover, self-help materials are likely to be more affordable and convenient for students. To curb the adoption of smoking by nonsmokers, medical schools should encourage students to participate in recreational activities, especially those involving physical exertion by providing them with gymnasiums, and facilities for football, cricket, and other sports. Provision of such facilities will not only help nonsmokers to avoid taking up smoking as a habit, but it is also likely to help current smokers in quitting smoking. Participation in regular physical activity has proven to be extremely effective in helping people quit smoking [9].

Although many medical schools, along with the government in Pakistan (Prohibition of Smoking and Protection of Non-Smokers Health Ordinance 2002/Anti-smoking Ordinance 2002), have taken an initiative to stamp out smoking, especially smoking by individuals in the student age bracket, they have not maintained it or continued it in an intensive manner. The success of an active intervention will require dedication, determination, and commitment from all the stakeholders.

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