Tobacco and Smoking: A Problem of the Modern Global Village

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Smoking still remains the most important cause of preventable death in numerous countries worldwide including the United States [1]. According to the World Health Organization (WHO), there are one billion smokers living in the world and they smoke ~six trillion cigarettes yearly [2]. Tobacco causes five million deaths yearly through direct exposure and 600,000 deaths yearly due to second hand smoke [3]. Although tobacco consumption is increasing globally, several high and upper-middle income countries have seen a decrease in its consumption [3]. An example is the United States where smoking prevalence for males decreased between 1996 and 2012 by 1.3% per year, from 27.3% to 22.2% and for females by 1.4% per year, from 22.2% to 17.9% [4].

Tobacco determines numerous comorbidities such as chronic cardiac, liver and respiratory diseases, diabetes, tuberculosis, rheumatoid arthritis and tumors and affects virtually every organ in the body through numerous mechanisms such as oxidative stress, impairing the immune system, generating higher levels of chronic inflammation, and so on [5-8].

Although the most common cancer in women is breast cancer (232,340 new cases in the United States in 2013, 39,620 deaths in the United States in 2013) and prostate cancer in men (235,590 new cases in the United States in 2013, 29720 deaths in the United States in 2013), lung cancer, which presents a direct association with smoking, has the highest mortality of all cancers, both in males and females (228,190 new cases in total in the United States in 2013, 159,489 deaths in total in the United States in 2013) [6, 9, 10].

As discussed in an editorial published in this journal, student smoking still remains a big problem and even in medical schools between 16.5-31% of male students and 2.4-6% of female students from Pakistan smoke; percentages similar to those discovered in studies from other Asian countries [10]. My own research (unpublished data) shows that up to 46.8% of the Romanian medical students are smokers (15.3% are occasional smokers) and 34.6% of Romanian non-medical students are smokers (8.4% are occasional smokers). According to a national survey done in Romania, the problem is even bigger with 62.6% of students have smoked at least once, 49% have smoked within last year, 41.2% have smoked in the last month and 33.4% being daily smokers [11]. In Europe, 45% of students have smoked at least once during their lifetime and 28% have smoked during the last year [12].

These data show that the incidence of smoking is similar between most countries that have been surveyed so far (with the exception of the big difference between male and female students in some countries such as Pakistan [9]) and that tobacco consumption in universities represents a big problem worldwide [11-13].

Smoking cessation, similar to other types of treatments for abuse and dependence, works best when psychotherapy is combined with pharmacotherapy [14]. The drugs currently employed in the pharmacotherapy of nicotine dependence are bupropion, varenicline and nicotine replacement therapy [15]. The main psychotherapeutic approaches include the 12 steps program and the mutual support programs [14].

However, smoking cessation is notoriously plagued by low rates of success, which have led authors such as Vahidi et al to study the factors that affect successful smoking cessation [16]. This problem was studied before, different authors showed that tobacco addiction levels, patient's concerns of comorbidities, female sex and being in a relationship or being married increase the likelihood of cessation or, at least, determine a partial reduction in the number of cigarettes smoked or of days during which the patient smokes [17-19]. The results from the study of Vahidi et al confirm these findings and show that, at least in Iran, family and peer-pressure represent a small factor in the patient's decision while the physician's advice represents one of the most important factors [16].

All the cited studies have shown that smoking has become a worldwide problem with more similarities than differences between countries, either in Asia or in Europe or the United States, and that it needs to be treated with a unitary psychopharmacological and psychotherapeutic approach with patient at its center.

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