

President's Page

Smoking

IOANNIS E. KALLIKAZAROS

Cardiology Department, Hippokration Hospital, Athens, Greece



Smoking is a very old habit that was initially widespread among the natives of Central America. The Spanish brought smoking to Europe, together with the cultivation of tobacco, in the 16th century. It rapidly became popular and spread all over the world. The unfavourable effects of smoking on the body were not known at first. Since 1950, however, it has been proven that smoking is closely linked with the occurrence of various cardiovascular diseases, and also causes chronic bronchitis and lung cancer.¹ Today, we know that smoking causes at least 25 life-threatening illnesses or groups of illnesses, and is a major risk factor for eight of the 16 main causes of death in individuals aged over 65 years.

The harmful effect of smoking is due to the large number of toxic substances found in tobacco. Some of these are already present in the tobacco plant, but most are produced in the burning tip of the cigarette, where the temperature is 950°C. More than 4000 different substances have been detected in tobacco smoke, either in gaseous form or as microscopic particles. These include nicotine, as well as more than 250 known carcinogenic substances (polycyclic aromatic hydrocarbons, heterocyclic hydrocarbons, n-nitrosamines, aromatic amines, aldehydes, volatile carcinogenic compounds, inorganic compounds, radioactive elements). The three main substances on which medical research interest has been focused, because of their effect on human health, are nicotine, tar, and carbon monoxide. Detailed chemical analysis of the mixture from a burning cigarette has shown that it contains the following components: 8% nicotine particles, 59% nitrogen, 14% carbon dioxide, 3% carbon monoxide, 13% oxygen, 2% other gases, and 1% water vapour. It also contains tar, water, and around 500 other harmful substances, most of which are carcinogenic. Nicotine is addictive, but not carcinogenic, while smoking cigarettes with lower levels of tar and

nicotine does not offer any safety in terms of health.²

The rapid spread of the smoking habit all over the planet is still one of the greatest threats to public health, killing around 6 million people every year: more than 5 million deaths are the result of active smoking, while more than 600,000 are the result of passive smoking.³ Every six minutes one of our fellow human beings dies from smoking, accounting for one adult death out of ten.

Given the long interval of many years between starting smoking and its effects on health, the epidemic of smoking-related diseases is just beginning. Thus, while smoking caused 100 million deaths during the 20th century, it is predicted that during the 21st century the number will reach 1 billion. Deaths from smoking will increase to more than 8 million per year by 2030. More than 80% of those deaths will occur in low- or medium-income countries.

Among active smokers, more than half will die from some smoking-related illness. Active smokers are three times more likely to die before the age of 60-70 years than are non-smokers. It has been estimated that smokers lose at least a decade from their life expectancy compared with people who have never smoked. Moreover, stopping smoking before the age of 40 reduces the risk of smoking-related death by 90%.⁴ Smokers who die prematurely deprive their families of income, increase the cost of health care, and slow the economic development of their communities.

But even passive smoking is also a confirmed risk factor for cardiovascular, respiratory, and other systemic diseases. Passive smoking is the habit that fills restaurants, offices, and other closed spaces with smoke. In neonates it causes sudden death. In pregnant women it causes low birth weight. Almost half of all children regularly breathe smoke-polluted air in public places. More than 40% of children have at least one smoking parent. In 2004, children made up 28% of the deaths due to passive smoking.

Every one of us has the right to breathe smoke-free air. Anti-smoking laws protect the health of non-smokers, are popular, do not damage businesses, and push smokers to give up smoking. More than 1 billion, or 16% of the population of the Earth, are protected by clear anti-smoking legislation. Unfortunately, the recent application of such legislation in Greece has had grotesque results. We are hoping for a strengthening of the controls by the Ministry of Health, so that the “not guilty” can be protected.

Furthermore, active smokers need assistance in their attempts to stop smoking. Studies have shown that very few people understand the health risks from smoking. For example, a registry in 2009 in China revealed that only 38% of smokers were aware that smoking causes coronary artery disease and only 27% knew that it causes strokes. Most of those smokers who are aware of the risks of smoking would like to quit the habit. However, only five in 100 smokers are able to give up smoking without help. Psychological support and medication can double the chance of success.⁵ Unfortunately, organised national smoking cessation services, with full or partial insurance coverage, are only available in 21 countries, representing just 15% of the world’s population.

Anti-smoking advertisements and graphic warnings on cigarette packets reduce the number of children who start smoking and increase the number of smokers who quit. Such strategies can lead to a reduction in the prevalence of smoking by an average of 7%, with some countries showing a decrease of up to 16%.

Taxation of tobacco products is the most effective method of reducing smoking, especially in young people and poor populations. A tax increase that leads to a 10% rise in cigarette prices reduces smoking by 4-8%, depending on a country’s socioeconomic level.

In Greece, a very high percentage of adult men (63%) and women (41%) are active smokers, while 16% of 13-15 year-olds smoke. Both the Greek legislature and the health care authorities have become concerned about this in recent years, but the response from the population has been poor. There is still a long road ahead of us to raise people’s consciousness.

All around the country a large number of state hospitals have functioning centres for smoking cessation,⁶ where doctors and psychologists provide useful information about ways of quitting, counselling support, as well as nicotine replacement therapy or medication when necessary.

Apart from laws, taxes, counselling, and medication, everyone needs to become aware that smoking is **seriously damaging to the health**. Towards this end, it is very encouraging to see the anti-smoking campaign entitled “If you stop, nothing can stop you.” This Europe-

wide campaign was launched in June 2011 by the European Commissioner for Health and Consumer Policy, John Dalli. The campaign promotes the positive benefits of not smoking, which include better health, a better social life, more money, and a better quality of life overall. It offers smokers practical assistance aimed at changing their behaviour, using the pioneering digital guidance platform “iCoach”,⁷ with free access available in all the official languages of the European Union. The campaign is being developed through platforms and activities especially popular with the public, such as Facebook and YouTube. So far, more than 400,000 people have signed up and it is estimated that 30% of those have succeeded in giving up smoking. In Greece, too, data on the effectiveness of the campaign are encouraging, since the Greek campaign page on Facebook has more than 80,000 friends.

I will close this article by urging all those concerned to take the decision to give up smoking. The health benefits are many:

- Twenty minutes after the last cigarette, blood pressure returns to normal and the heart’s pulse rate is regularised.
- Eight hours after the last cigarette, the levels of carbon monoxide in the blood return to normal and blood oxygen increases.
- Twenty-four hours after the last cigarette, the senses of taste and smell improve.
- Seventy-two hours after the last cigarette, breathing becomes easier because the air pathways in the lungs relax.
- Two months after the last cigarette, blood circulation improves, and exercise capacity increases spectacularly, while pulmonary function increases by up to 30%.
- Five years after the last cigarette, the risk of sudden death from cardiac arrest is reduced by almost half.
- Ten years after the last cigarette, the precancerous cells that were created by smoking have been replaced by normal ones, while the risk of occurrence of lung cancer, heart disease, and stroke, is almost the same as in those people who have never smoked at all!

References

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