Smoking and health: physician responsibility. A statement of the Joint Committee on Smoking and Health. American College of Chest Physicians. American Thoracic Society. Asia Pacific Society of Respirology. Canadian Thoracic Society. European Respiratory Society, and International Union Against Tuberculosis and Lung Disease

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Smoking and Health: Physician Responsibility

A Statement of the Joint Committee on Smoking and Health*

American College of Chest Physicians; American Thoracic Society; Asia Pacific Society of Respirology; Canadian Thoracic Society; European Respiratory Society; and International Union Against Tuberculosis and Lung Disease

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Tobacco use, particularly cigarette smoking, is widely recognized by the medical community and the general public as a major public health problem. Physicians and medical organizations share a public health duty to address this problem. Physicians and their professional organizations must contribute effectively to measures undertaken to deal with cigarette smoking. The issues involved are complex and affect medical practice in a number of ways. The following statement developed by six international organizations—the American College of Chest Physicians, the American Thoracic Society, the European Respiratory Society, the Asia Pacific Society of Respirology, the Canadian Thoracic Society, and the International Union Against Tuberculosis and Lung Disease—is intended to state the physician's responsibilities both to patients and to the community with regard to these general issues.

Smoking and Public Health

The Smoker

Tobacco use is the single most important preventable risk to human health in developed countries and an important cause of premature death worldwide. In countries which report deaths attributable to smoking (representing about one third of the world's population), annual deaths from smoking numbered about 1.7 million in 1985, with an estimated 2.1 million in 1995 (and hence about 21 million in the decade 1990 to 1999: 5 to 6 million in the European Community, 5 to 6 million in the United States, 5 million in former USSR, 3 million in Eastern Europe, and 2 million elsewhere). More than half of these deaths occur in people 35 to 69 years of age. During the 1990s, tobacco will cause about 30% of all deaths in people aged 35 to 69 years in developed countries (making it the largest single cause of premature death) plus about 15% of all deaths at older ages.[1] In addition, increasing incidence of smoking in the developing world is likely to lead to a new epidemic of smoking-related disease.

Smoking contributes to the onset of many diseases, and is thought to account for 87% of deaths in lung cancer, 82% in COPD, 21% in coronary heart disease (CHD), and 18% in stroke cases.[2] Therefore, once addicted to nicotine, the smoker faces an unacceptably increased risk of respiratory, neoplastic, and cardiovascular disorders. Even without overt pulmonary symptoms, the smoker has a chronic inflammatory disease of the lower airways with an accelerated decline in lung function.

The Nonsmoker

Risk from tobacco smoke is not limited to the smoker. It has been estimated that exposure to environmental tobacco smoke (ETS) increases the risk of lung cancer by about 30% (about 3,000 cases a year in the United States).[3] Infants and nonsmoking children who are chronically exposed to *in utero* and environmental tobacco smoke have an increased risk of respiratory diseases, malignancy, and other health problems that result in increased hospitalizations and days lost from school.[4] Nonsmoking adults who are exposed also have more respiratory symptoms that are likely to contribute to work absenteeism due to illness.

Smoking Cessation

Smoking cessation has immediate and substantial health benefits, both symptomatically and pathophysiologically, and dramatically reduces the risk of most smoking-related diseases.[2] One year after quitting, the risk of CHD decreases by 50%, and within 15 years the relative risk of dying from CHD for an ex-smoker approaches that of a lifetime nonsmoker.[5] The relative risks of developing lung cancer, COPD, and stroke also decrease, but more slowly. Ten to 14 years after smoking cessation, the risk of mortality from cancer

Members of the Joint Committee on Smoking and Health; Chairman—Stephen I. Rennard, MD, FCCP. ACCP—Stephen I. Rennard, MD, FCCP; James Snell, MD, FCCP; Alfred Soffer, MD, FCCP; Jack Henningfield, PhD; Nancy Rigotti, MD. ATS—Scott Weiss, MD, FCCP; Jonathan M. Samet, MD. APSR—Ann Woolcock, MD, FCCP. CTS—Morley Lertzman, MD, FCCP. ERS—Paolo Paoletti, MD, FCCP; Claudio Donner, MD, FCCP; John Moxham, MD. IUATLD—Nils Billo, MD, MPH.

decreases to nearly that of people who have never smoked.[6] Smoking cessation shows a beneficial effect on pulmonary function, particularly in younger subjects, and the rate of decline among former smokers returns to that of never-smokers.[7] Recent evidence shows that ceasing before the age of 35 years is of greater benefit than ceasing at a later time.[8]

Nicotine Addiction

The nicotine in tobacco products is highly addictive.[9,10] A greater percentage of casual users graduate to addictive patterns of use than occurs with cocaine, morphine, or alcohol-containing substances.[10,11] Regular use of tobacco products is commonly associated with difficulty in achieving and sustaining abstinence, even when advised strongly by health professionals. Nicotine is the addicting agent in tobacco products and is present in sufficient quantities in all commercially available tobacco products to cause and sustain addiction in children and adults.[12] All tobacco products are addictive; however, cigarettes appear to maximize the addictive potential of nicotine by requiring the user to inhale smoke into the lungs, thereby resulting in extremely concentrated doses of nicotine being rapidly transmitted to the brain.[10,13]

Physician-Patient Relationship

Each physician is expected by the public, the medical profession, and by each of his or her patients to prevent disease when possible, and to give the best available treatment once disease is present. This imposes upon all physicians the duty to ask each of their patients whether they smoke and to provide proper information and counseling based on that history. Patients who are nonsmokers should receive positive reinforcement for decreasing their risk of smoking-related disease. A smoking patient requires a more detailed history of why and how much he or she smokes, whether there have been efforts to quit, any respiratory symptoms or disease from smoking, and a search for other risk factors which might increase the chance for that patient to develop cardiovascular disease, obstructive lung disease, or lung cancer. Frank discussion of personal health risks, the benefits of smoking cessation, and available methods to assist in stopping smoking are mandatory elements of high-quality care for every patient.

Pediatricians, obstetricians, and family practitioners have a special opportunity to influence the health of both young parents and children. Education of pregnant women regarding harmful effects of smoking on themselves and their fetuses, and the risk of lower respiratory tract illness and symptoms in children growing up with smoking parents may help motivate women to stop smoking before becoming severely addicted. Pediatricians and family practitioners should initiate counseling of children regarding harmful effects of smoking when the children are old enough to understand.

Physicians and Smoking Cessation

Physicians should explain to every smoking patient the medical risks associated with smoking and the reduction in risk associated with smoking cessation. Physicians should encourage abstinence and prescribe and follow-up on the use of specific smoking cessation programs and strategies such as self-help, behavioral, or pharmacologic approaches. A variety of behavioral programs have been developed, and the physician should be able to utilize effectively locally available resources.

Pharmacologic approaches to smoking cessation are currently based on nicotine replacement, and the physician should be cognizant of these approaches as well. Nicotine replacement during early abstinence helps to relieve symptoms of withdrawal and can increase quit rates.[14] Nicotine delivered as a medication may also be addictive. However, the addiction potential of currently available medications appears related to their nicotine dosing characteristics. Thus, nicotine-delivering transdermal medications and polacrilex gum appear to be of minimal addiction potential. Other systems in development, such as nasal sprays and vapor inhalers, may be of greater addiction potential but would still be expected to be lower in addictiveness and toxicity than tobacco products, which appear to optimize the addictive effects of nicotine through their dosing and sensory characteristics.

Physician as Role Model

Current and future physicians should be "exemplars" to their patients and communities. The physician should act as a role model by not smoking and by creating a smoke-free environment in his or her office. Despite evidence on the negative health consequences, cigarette smoking is still highly prevalent among physicians in some countries.[15] While smoking rates among physicians often reflect general population smoking rates, in most countries doctors smoke much less than the general population. Reduction of physician smoking is important, as the tutors of the people in matters of health have a responsibility to present a proper image. No suggestion should ever be made, particularly by physician behavior, that smoking is not dangerous; therefore, physicians should not smoke in front of patients. Medical organizations should adopt active policies to establish physicians as role models with regard to smoking and health. Smoking prohibition in hospitals and in all structures associated with health care should be mandatory, and such policies should be strongly supported by medical associations.

Medical Education

Students in medicine and other professionals (technicians, nurses, etc.) must be taught from the first years of study about the negative effects of smoking, the addictive properties of nicotine, and how to help their future patients avoid smoking if possible and to quit smoking if needed.

Smoking Prevention

There is near universal agreement that those who start to smoke in the teenage years are the most likely candidates for eventual nicotine dependence. Disease prevention thus begins by educating the young person. Obviously, therefore, cigarette advertising should not be directed to these younger age groups.

Unfortunately (and despite their pious disclaimers) the tobacco industry persists in preparing shrewd strategies to "entrap" the young smoker. Cartoon characters vie for the youngster's interest along with alternate techniques of publishing pictures of young vigorous, handsome, athletic men and women who find a particular brand of cigarette the most refreshing. This insidious indoctrination is worldwide and should be opposed by individual physicians and by medical organizations.

Social Action

Many communities have recognized the social implication of smoking and have, therefore, enacted public policy and legislation. The goals of these policies are as follows: (1) to prevent the initiation of smoking and the development of nicotine addiction; (2) to encourage the cessation of tobacco use among those who already smoke cigarettes or use other tobacco products; and (3) to protect nonsmokers. Such policy includes the following: (1) taxes on cigarettes; (2) restrictions on advertising; (3) restriction of cigarette sales to children and teenagers; (4) prohibition of smoking in specified public places; (5) assurances that smoke-free environments will be available in workplaces; (6) regulation of content and packaging of tobacco products; (7) public education; (8) promotion of smoking cessation services; (9) assistance for tobacco farmers; (10) restriction of international trade in tobacco; (11) health warnings on cigarette packages; and (12) abolition of "kiddie" packages of cigarettes. Such legislative issues are complex and involve balancing the rights and privileges of various heterogenous groups. Physicians have a special role in these considerations. In addition to their role as citizens, physicians are leaders with regard to any issue affecting public health. Physicians should, therefore, be aware that public policy regarding smoking can be an effective instrument of public health, and they have a responsibility to participate effectively in public debate, both as individuals and as members of medical organizations.

Increase Tobacco Excise Taxes

Taxation of cigarettes is a special form of legislative remedy, and one of the most effective public policy approaches to smoking. Increases in the price of tobacco products have been demonstrated to reduce tobacco consumption among existing smokers and decrease the proportion of young people who begin to smoke. Taxation designed to decrease consumption should be strongly supported. Usually this will involve using the tax system to ensure that tobacco prices are both high and steadily rising at a rate faster than inflation of prices and earnings. Studies suggest that price increases of a given percentage above inflation result in falls in consumption of about half that percentage. A 10% real price increase will typically result in a reduction in consumption of about 5%.

Most governments use the funds raised by tobacco excise taxes for general revenue. Governments should not fund routine services at the expense of public health. Alternative uses for such funds could include specific tobacco prevention and education programs, including mass media campaigns, smoking cessation efforts among the poor, and helping tobacco farmers convert to other crops.

Such fiscal policies raise a number of important questions. A high price policy raises the possibility of smuggling, and institution of appropriate control measures may be needed. A high price policy has also been criticized as an unfair penalty upon the poor. It is the physician's role to recognize and proselytize any perceived penalty in terms of health risks associated with cigarette smoking.

Prohibit All Forms of Tobacco Advertising and Promotion

The weight of evidence indicates that tobacco advertising and promotion increases tobacco consumption and encourages children to start to smoke. All forms of tobacco advertising and promotion should be prohibited. This should include such promotional efforts as the tobacco industry sponsorship of sporting events where the products or company logo is displayed and there is a distribution of free cigarettes or coupon offers.

Stop Children's Access to Tobacco Products

Almost 90% of smokers start to smoke before age 18. Hence, young people are becoming addicted to nicotine before they may have acquired the judgment to make a fully informed choice about tobacco use. Laws that ban the sale of tobacco products to minors should require the annual licensing of tobacco vendors and make licenses contingent on demonstrated compliance with the law. Because vending machines are also a source of tobacco products for children, the sale of cigarettes in vending machines should be banned.

Prohibit Smoking in Public Places and Workplaces

To protect nonsmokers from the documented health hazards of involuntary tobacco smoke, smoking should be banned in all public places, including all forms of public transportation, sports arenas and other public facilities, all workplaces, and all restaurants.

Regulate the Content and Packaging of Tobacco Products

Tobacco products contain nicotine, which has been demonstrated to be a highly addictive drug. Therefore, the content and packaging of tobacco products should be subject to regulation by appropriate agencies. Tobacco product packages should carry adequate health information about the hazards of tobacco use and the addictive potential of nicotine. Existing warning labels on tobacco products and advertising should be expanded to include a specific warning about addiction to nicotine.

Increase the Amount and Effectiveness of Public Education About Tobacco

Because of the amount and pervasiveness of tobacco advertising, the general population is exposed to powerful and misleading prosmoking messages. The visibility of public education about tobacco, the addictiveness of nicotine, and the importance and methods of smoking cessation should be increased.

Increase the Availability and Coverage of Smoking Cessation Services

Although smoking cessation clearly benefits health, smoking cessation services (including behavioral counseling and nicotine replacement therapy) are inadequately covered by many existing health insurers. Effective smoking cessation techniques, including behavior counseling and medication, should be covered by both public and private health insurers.

Assist Tobacco Farmers in Switching to Other Crops

Governments should reduce support for tobacco farming and offer incentives to tobacco farmers to switch to other crops.

Regulate International Trade in Tobacco Products

International trade policy should not be used to promote tobacco sales.

Conclusions

Tobacco use, particularly cigarette smoking, is a major cause of preventable disease and premature death worldwide. Both smokers and nonsmokers exposed to environmental tobacco smoke are at risk. Cessation of smoking reduces risks. Although the addicting properties of nicotine can make cessation difficult, both medical interventions aimed at helping smokers quit, and social policies aimed at control of cigarette smoking can have significant benefits. Physicians should play an active role in control of smoking by ensuring that counselling and pharmacologic therapy must be available for the individual smoker. Physicians should also participate in the public debate regarding smoking both individually and through medical organizations. As smoking represents a threat to the public health, physicians must take a strong and active role seeking its control.

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