

C. COMMENTARY ON THE GLOBAL EPIDEMIC OF TOBACCO, A MANUFACTURED DISEASE. WHAT IT LOOKS LIKE TODAY AND WHAT'S TO COME

Abstract: An estimated 1.2 billion citizens of the world are smokers. In developing countries, half the males smoke. WHO projects a global smoking population of 1.6 billion by the end of the next two decades. Collectively, today the world's smokers annually consume nearly 1,000 cigarettes for every man, woman and child on the planet. Almost 5 million people die as a result of smoking, half during their productive working years, with half occurring in developing countries. Two decades hence, tobacco products will kill an estimated 10 million people every year, 70% of them in the world's poor nations. During the 20th century, smoking killed 100 million people. Without significant public health progress, cigarettes will claim the lives of an estimated one billion during the 21st century. Progress can be achieved, however, through the adoption and enforcement of effective tobacco control policies. Such policies are embedded in the Framework Convention on Tobacco Control, the world's first international health treaty. They include protecting nonsmokers from the hazards of secondhand smoke in all indoor workplaces and public places, banning tobacco advertising and sponsorship, raising tobacco taxes and eliminating the smuggling of untaxed cigarettes. The future health of the world's population rests on the success that will be achieved in global tobacco control. (*Ethn Dis.* 2007;17[Suppl 3]:S3-10-S3-12)

Key Words: Tobacco, Cancer

From the University of Michigan School of Public Health, Ann Arbor, Michigan.

Kenneth E. Warner, PhD

PATTERNS OF CIGARETTE SMOKING AND ASSOCIATED MORTALITY

Cigarette smoking is a remarkably prevalent behavior around the world. Currently, nearly a billion men smoke, as do a quarter of a billion women or 1.2 billion people altogether.¹ Thirty-five percent of males in developed countries are smokers, as are 22% of women. In developing countries, half the males smoke (including some 300 million in China alone), while the smoking rate among women is much lower (9%).¹ Of great concern, however, is the fact that the smoking rate for females in the world's poorer nations is growing. Considering projected population growth, WHO estimates a global smoking population of 1.6 billion by the end of the next two decades.¹

Collectively, the world's smokers consume approximately 5.5 trillion cigarettes per year or nearly 1,000 for every man, woman and child on the planet.¹ The toll is enormous. Currently, according to the World Health Organization, close to 5 million people annually succumb to diseases caused by smoking, half of them during the productive working years of ages 35–69, with half of the deaths occurring in developing countries. This huge figure pales in comparison, however, with WHO's estimate for the toll two decades hence, when the smoking epidemic will have "matured" within the developing world – smokers will have been smoking long enough and intensively enough for smoking to wreak its maximal damage. At that time, barring major changes in smoking trends, tobacco products will kill 10 million citizens in the world every year, 70% of them in the world's poor nations.^{2,3}

During the 20th century, smoking claimed the lives of a phenomenal 100 million people. However, without significant public health progress, that figure will increase to one billion human beings during the 21st century. Among them will be millions of nonsmokers, the victims of passive or involuntary smoking, the inhalation of smoke from the cigarettes of others. Passive smoking increases the risk of death from lung cancer and heart disease by 20–30%.⁴

Smoking patterns vary significantly by region, with male-female differences in prevalence rates being far smaller in Europe and the Americas, for example, than they are in Asia and the Middle East. Still, patterns diverge among countries within regions, as is seen in Table 1, which presents male and female smoking rates in 18 Arab countries. The predominant pattern is one of substantial male smoking and very little smoking by women. However, in two of the countries, Lebanon and Yemen, nearly a third of women are smokers. The high rates of smoking among children in countries throughout the world, with male-female differences in prevalence far smaller than in the adult population are of greatest concern.⁵

THE FUTURE OF GLOBAL TOBACCO CONTROL

In many of the developed nations of the world, education about the dangers of smoking emerged 40 years ago. Over subsequent decades, tobacco control policies emerged to the point that, today, roughly a dozen countries ban smoking in all workplaces, including all bars and restaurants. Many more are certain to follow over the next decade. The impact has been substantial and

Table 1. Smoking prevalence in Arab countries

Country	Male (%)	Female (%)
Algeria	44	7
Bahrain	24	6
Djibouti	58	5
Egypt	35	2
Iran	27	3
Iraq	40	5
Jordan	48	10
Kuwait	30	2
Lebanon	46	35
Morocco	35	2
Oman	16	2
Qatar	37	1
Saudi Arabia	22	1
Sudan	24	1
Syria	51	10
Tunisia	62	8
UAE	18	<1
Yemen	60	29

Source: Mackay and Ericksen, 2002.¹

profound, with smoking converted from a common, highly public, sociable behavior to one that is increasingly rare and increasingly viewed as anti-social behavior. Control of the tobacco epidemic in the developed world is one of the great public health success stories of the past half century.⁶

The same is not the case in the developing world. With smoking on the rise in many countries, where knowledge of its hazards is limited and policies discouraging smoking are a rarity, the purveyors of cigarettes have found fertile ground for expanding their markets and their profits. A handful of poor nations are implementing serious tobacco control measures (eg, India and South Africa), but the norm is to ignore smoking as one of the “small, affordable pleasures” for the globe’s impoverished peoples.

This is likely to change in the coming years. On February 27, 2005 an unprecedented international health treaty, the Framework Convention on Tobacco Control (FCTC), took effect.⁷ According to Article 3 of the treaty, its purpose is “[T]o protect...future generations...by providing a framework for tobacco control measures...to reduce continually and substantially the preva-

lence of tobacco use...” Negotiated over a three-year period, the treaty has been ratified by 125 countries (as of April 12, 2006) that are now parties to its multiple tobacco control provisions.⁸ Among others, these include the following policy mandates:⁹

- Adoption of “effective measures” to protect nonsmokers from the hazards of secondhand smoke in all indoor workplaces and public places.
- Banning all tobacco advertising and sponsorship, direct and indirect, within 5 years, save for those countries in which national law prohibits banning commercial speech.
- Consideration of health objectives in setting tobacco taxes (with the treaty’s noting that higher prices discourage tobacco consumption).
- Implementation of rotating health warning labels covering at least 30% of the fronts and backs of all cigarette packs.
- Prohibition of sales to minors, distribution of free samples and sale of “loosies” (single cigarettes).

As well, the treaty calls for product regulation (tobacco products being among the few consumer products currently subjected to virtually no

product regulation throughout the world) and measures to reduce cigarette smuggling (cigarettes constituting the most widely smuggled legal product of any); in recent years, it has been estimated that fully 30% of all legally exported cigarettes were never imported legally anywhere.¹⁰ Legal procedures to diminishing the toll of tobacco, including product liability lawsuits, are also encouraged in the treaty.

CONCLUSIONS

The degree to which participating nations will effectively implement the provisions of the FCTC remains to be seen, as does the ultimate impact of implementation on smoking and its disease sequelae. Nevertheless, it seems safe to conclude that the existence of this internationally binding treaty and the genuine enthusiasm for it in many countries will moderate the future growth in the world’s tobacco disease pandemic. Particularly, in many countries in Africa, in which poverty has limited the spread of intensive smoking thus far, and in countries in Asia and in the Arab world, where social convention has produced low, but growing smoking rates among women, the potential to short-circuit much of that pandemic is significant. For the foreseeable future, tobacco use is likely to grow, the world’s best efforts notwithstanding, and the mortality burden of tobacco will grow too. But making even a sizable dent in this enormous burden would represent a public health achievement of prodigious proportions. Public health professionals around the world will invest heavily in global tobacco control and eagerly await the outcome of their efforts.

REFERENCES

1. Mackay J, Eriksen M. *The Tobacco Atlas*. Geneva: World Health Organization; 2002.
2. Peto R, Lopez AD. Future worldwide health effects of current smoking patterns. In: Koop CE, Pearson CE, Schwarz MR, eds. *Critical*

TOBACCO AND HEALTH - Warner

- Issues in Global Health*. San Francisco: Jossey-Bass; 2001:154–161.
- Ezzati M, Lopez AD. Smoking and oral tobacco use. In: Ezzati M, Lopez AD, Rodgers A, Murray CJL, eds. *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Major Risk Factors*. Geneva: World Health Organization; 2004.
 - US Dept. of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.
 - Global Youth Tobacco Survey. World Health Organization and Centers for Disease Control and Prevention. 2005. Available at: <http://www.cdc.gov/tobacco/Global/GYTS.htm>. Last accessed June 23, 2006.
 - Centers for Disease Control and Prevention. Ten Great Public Health Achievements – United States, 1900–1999. *Morb Mortal Wkly Rep*. 1999;48(12):241–243. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm>. Last accessed June 23, 2006.
 - Roemer R, Taylor A, Lariviere J. Origins of the WHO Framework Convention on Tobacco Control. *AJPH*. 2005;95(6):936–938.
 - World Health Organization. Updated status of the WHO Framework Convention on Tobacco Control, 2006. Available at: <http://www.who.int/tobacco/framework/countrylist/en/>. Last accessed June 23, 2006.
 - Framework Convention Alliance for Tobacco Control. 2006. Available at: <http://www.ftc.org>. Last accessed June 23, 2006.
 - Joossens L, Chaloupka FJ, Merriman D, Yurekli A. Issues in the smuggling of tobacco products. In: Jha P, Chaloupka FJ, eds. *Tobacco Control in Developing Countries*. London: Oxford University Press; 2000:393–406.