Global Tobacco Problem Getting Worse, Not Better

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Scope of the Problem

Tobacco use is responsible for one in three cancer-related deaths.¹ Thanks to 50 years of aggressive public education efforts, tobacco use is declining in most industrialized countries. As a result of this decline and the associated reduction in tobacco-related diseases in the industrialized world, many commentators in the United States have argued that the tobacco problem is going away. Unfortunately, this is not the case. Worldwide, tobacco consumption is actually increasing, driven in part by population growth and economic development in China, India, Indonesia, and parts of Africa and the Middle East. Unless aggressive steps are taken now to change current tobacco consumption trends, the number of deaths resulting from tobacco-related cancers will increase markedly in the next few decades. Most of the predicted deaths resulting from tobacco (approximately 70%) are expected to occur in the developing world, which is the least equipped to provide cancer care to patients.^{1,2(p322-331),3} Why? Is this because of poor infrastructure, a lack of resources, or physician shortages?

WHO estimates that there are now approximately 1.3 billion smokers in the world, and 84% of them reside in the developing world.⁴ Yet cancers caused by smoking take several decades to develop, so it will be many more years before the full adverse effects of tobacco are felt. Tobacco use has been linked to not only lung, bronchial, tracheal, esophageal, and oral cancers, but also bladder, kidney, larynx, pancreas, and stomach cancers. Each year, approximately 11 million new cancer cases are diagnosed globally, and 7 million deaths are attributed to it; this number exceeds the total number of deaths resulting from AIDS, tuberculosis, and malaria combined.⁵ How many deaths occur in the developing world versus Western/industrialized nations?

Largely because of increased use of tobacco in the developing world, the global burden of cancer is projected to increase dramatically in the next few years. WHO estimates that there will be 15 million new cancer cases diagnosed annually by the year 2020, and the annual death toll will exceed 12 million people, which would be more than a 50% increase from the current annual death toll.⁶ More than 70% of these deaths will occur in developing countries, where resources are limited, and patients often lack access to optimal treatment.⁵ These projections clearly demonstrate that tobacco-related cancer is a major, preventable global public health problem,

and urgent action is needed to address this epidemic.¹⁰ Although US tobacco factories measure production in billions of cigarettes, new Chinese factories are capable of producing trillions of cigarettes. Today, because of effective, ongoing measures in several developed countries, the target of the tobacco industry is the developing world. Thus, there also is a critical need to implement effective actions in countries in which tobacco consumption is still low (Table 1).

In response to this crisis, the WHO Framework Convention on Tobacco Control (FCTC), an international tobacco control treaty, was negotiated and became effective in February 2005. Currently, 160 nations, with 83.5% of the world's population, have ratified the treaty, which obligates them to implement a series of policy measures intended to reduce tobacco use (Table 1). Although the United States has signed the treaty, it has not been ratified by the Senate.⁷

The policies included in the WHO FCTC were selected on the basis of scientific evidence. In the foreword of the treaty, the WHO FCTC is described as "an evidence-based treaty that reaffirms the right of all people to the highest standard of health."⁸ However, as the FCTC continues with its critical implementation phase in the next 5 years, and as nations that have ratified the treaty decide what specific policies will be implemented to meet their treaty obligations, it will become increasingly important that scientific evidence continue to guide the adoption of policies that will work effectively.

There is already evidence that the tobacco industry is working to undermine the FCTC by encouraging countries to adopt policies that, although compliant with the FCTC, are suboptimal. To ensure that they achieve their goals, governments will frequently need to modify or change their policies. It cannot be assumed that tobacco control policies that have been effective in countries with more resources will be similarly effective and appropriate when implemented in low- and middle-income countries. As in clinical medicine, good public health practice demands that rigorously evaluated evidence guide the adoption of new tobacco control interventions. Thus, in the next few years, amassing a strong body of evidence from a methodologically sound evaluation of FCTC policies will be critical. This can then be used to guide governmental policymakers in the future. Another important action that must be disseminated and promoted at the global level is the World Cancer Declaration 2008; this is a call to action from the global cancer community to have a tool to help cancer advocates bring the growing cancer crisis to the attention of health policymakers at national, regional, and global levels.^{8a}

Table 1. Key Policy Provisions of the WHO Framework Convention on Tobacco Control

FCTC Article No. ⁸	Policy
6	Price and tax measures to reduce demand
8	Protection from exposure to tobacco smoke
9	Regulation of the contents of tobacco products
10	Regulation of tobacco product disclosures
11	Controls on packaging and labeling of tobacco products
12	Programs of education, communication, training, and public awareness
13	Bans on tobacco advertising, promotion, and sponsorship
14	Programs to promote and assist tobacco cessation, and prevent and treat tobacco dependence
15	Elimination of illicit trade in tobacco products
16	Measures to prevent the sale and promotion of tobacco to young people
17	Provision for support for alternative crops to tobacco
20	Provision for an epidemiologic monitoring system
22	Cooperation among the parties to promote the transfer of technical and scientific expertise on surveillance and evaluation

Abbreviation: FCTC, Framework Convention on Tobacco Control.

Success Stories

Many nations involved with the FCTC have been successful in implementing tobacco control policies in recent years, and sharing some examples will be useful to help guide other countries on how to respond to the growing tobacco epidemic. Of particular note are Thailand and Uruguay. In Thailand, policies have been implemented that ban all print, radio, and television advertising of tobacco.^{9(p29)} In addition, graphic pictorial health warnings are mandated to cover 50% of tobacco packaging.^{2(p325), 9(p254)} Smoking prevalence decreased in Thailand from 60% in 1991 to 35% in 2006; this decline is largely attributable to tobacco control policies, including tobacco taxes and advertising bans (Fig 1).¹⁰

In 2006, Uruguay became the first nation in the Americas to ban smoking in public places and places of work.⁹ Eighty percent of Uruguayans supported the smoking ban, including 66% of Uruguayan smokers. With wide public support for the ban, enforcement in Uruguay has been largely successful.^{9(p32)} Uruguayan President Tabare Vazquez, an oncologist, has been influential in supporting the enactment of proven tobacco control policies in that nation. In addition to public and workplace bans on smoking, Uruguay has also implemented graphic pictorial warnings on tobacco packaging, many of which draw attention to the harm caused by secondhand smoke, which has further strengthened public support for tobacco control laws.¹¹

What Can We Learn From These Success Stories?

As suggested in the 2008 WHO MPOWER report, although many smoking bans are currently in place around the globe, and some can be enforced even with limited resources, many people remain at risk from secondhand smoke, especially in densely populated nations that lack public smoking bans or fail to enforce them.^{9(p52)}

Pushing the International Tobacco Cessation Agenda Forward: ASCO's Role

In its 2003 statement entitled "Tobacco Control: Reducing Cancer Incidence and Saving Lives," ASCO reaffirmed its commitment to cancer prevention and its support for the elimination of tobacco products.¹² In that statement, ASCO asserted its support for policy measures to enhance global tobacco control, including urging the United States to sign the FCTC and calling for a halt to the promotion of tobacco products by the US Government.¹²

There are significant differences internationally concerning the role of professional societies in addressing tobacco control. These differences may make certain ASCO approaches less immediately relevant to non-US audiences, but may also present opportunities for ASCO to raise awareness of different approaches. ASCO can help disseminate

Figure 1. Covered tobacco display in Thailand.

information on tobacco cessation to its international members, work to bring oncologists into contact with tobacco control advocates internationally, and help bridge the divide between US and non-US oncologists in how they approach tobacco control.

Getting Involved

The aggressive tobacco control policies promoted through the WHO FCTC have tremendous potential to address the global tobacco epidemic, and to reduce and ultimately prevent tobacco-related cancers and associated deaths, particularly in the developing world. Oncologists in the United States and all over the world have an opportunity to support the implementation of proven tobacco control policies. The dedicated involvement of a few can have a huge impact on saving lives by preventing tobacco-related cancers.

Oncologists concerned about the growing global tobacco epidemic can contact their US state and congressional representatives to show their support of policy initiatives such as those recommended in this article. To learn how to get involved, contact ASCO's Legislative Action Center (<http://capwiz.com/asco/home>).

Role of Non-US ASCO Members

ASCO's international membership includes approximately 8,000 oncologists around the world, and they should be

committed to place cancer on the development agenda of their respective countries; to increase efforts to reduce tobacco consumption by encouraging governments to fully implement and enforce the FCTC; and to involve all major stakeholder groups in the development or updating of national cancer control policies.

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The views or opinions expressed in this article are those of the authors and should not be construed as representing the official views of the Departments of the Army, Navy, or Defense.

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References

1. Danaei G, Vander Hoorn S, Lopez AD, et al: Causes of cancer in the world: Comparative risk assessment of nine behavioural and environmental risk factors. *Lancet* 366:1784-1793, 2005
2. Cummings KM, O'Connor RJ: Tobacco-harm minimisation, in Hegggenhoughen K, Quah S (eds): *International Encyclopedia of Public Health* (vol 6). San Diego, CA, Academic Press, 2008, pp 322-331
3. Ezzati M, Lopez AD: Estimates of global mortality attributable to smoking in 2000. *Lancet* 362:847-852, 2003
4. World Health Organization: The Millennium Development Goals and Tobacco Control. http://www.who.int/tobacco/research/economics/publications/mdg_book/en/index.html
5. Sener SF, Grey N: The global burden of cancer. *J Surg Oncol* 92:1-3, 2005
6. World Health Organization: Global cancer rates could increase by 50% to 15 million by 2020. <http://www.who.int/mediacentre/news/releases/2003/pr27/en/>
7. The Framework Convention Alliance for Tobacco Control: Bulletin COP3 issue 85. <http://www.fctc.org>
8. The Framework Convention Alliance for Tobacco Control: Treaty foreword. http://fctc.org/index.php?option=com_content&view=article&id=21&Itemid=27
- 8a. International Union Against Cancer: World Cancer Declaration 2008. http://www.uicc.org/index.php?option=com_content&task=view&id=14227&Itemid=35
9. World Health Organization: WHO report on the global tobacco epidemic 2008: The MPOWER package. Geneva, Switzerland, World Health Organization, 2008
10. Levy DT, Benjakul S, Ross H, et al: The role of tobacco control policies in reducing smoking and deaths in a middle income nation: Results from the Thailand SimSmoke simulation model. *Tob Control* 17:53-59, 2008
11. World Health Organization: List of World No Tobacco Day awardees—2006. <http://www.who.int/tobacco/communications/events/wntd/2006/awards/en/index.html>
12. ASCO Policy Statement Update: Tobacco Control: Reducing Cancer Incidence and Saving Lives—Adopted May 23, 2003. *J Clin Oncol* 21:1-10, 2003

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